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Olin Corporation

Wilmington, Massachusetts Facility

Supplemental Phase II Report

Volume V

June 1997

Prepared by:

ABB Environmental Services, Inc.

Geomega

PTI Environmental Services

SMITH Technology Corporation

Olin Corporation

Wilmington, MA

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SMITH

DATA VALIDATION REPORT
TARGET COMPOUND LIST VOLATILES
OLIN CORPORATION
SURFACE SOIL SAMPLES

INTRODUCTION

This data review report addresses the volatile data from the December 16, 1996 surface soil sampling event at the Olin Corporation's Wilmington, Massachusetts Facility. This review is of work order number B2743 which consisted of 19 surface soil samples for the target compound list volatiles. All samples in this report were analyzed by IEA Corporation in Monroe, Connecticut, according to the United States Environmental Protection Agency (EPA) *"Test Methods for Evaluating Solid Waste Physical/Chemical Methods"* (SW-846) Method 8260 for target compound list volatiles.

Data deliverables were reported following the EPA Contract Laboratory Program (CLP) Statement of Work (SOW) for volatiles. The findings in this report are based upon a review of sample data and of quality control (QC) specified by the individual analytical methods and provided by the laboratory. The quality assurance review was performed according to EPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis (data validation guidelines), November 1988, where applicable to Method 8260.

The support documentation in Appendix A of this report summarizes the specifics of this review. Appendix A also provides the sample results as reported by the laboratory. The data summary lists all compounds that were analyzed. Analytical problems are outlined in the following Findings/Qualifiers Section. Other issues which were identified which did not warrant qualification are detailed in the Notes Section.

FINDINGS/QUALIFIERS

This data validation report addresses the 16 surface soil samples analyzed for the TCL volatile analysis of IEA Corporation work order number B2743. The data were evaluated for the following parameters:

* data completeness
* holding times
* GC/MS Tuning
  calibrations
  blanks

* surrogate recoveries
* matrix spike/matrix spike duplicate results
* internal standard performance
* compound identification

* All criteria were met for this parameter.

\+ All criteria were met for this parameter; however, this parameter is discussed in the Notes Section of this report.

The data summary table provided at the end of this report summarizes the following data qualifications:

1. The positive results for acetone and methylene chloride are negated due to method blank contamination. The reported concentrations have been changed to reflect adjusted quantitation limits.

2. Due to an initial calibration percent relative standard deviation (%RSD) of greater than 50%, the following results are estimated:

   - quantitation limits for chloroethane and 2-hexanone in all samples

   - positive results and quantitation limits for 2,4,4-trimethyl-1-pentene in all samples

3. Due to a continuing calibration greater than 25%, the positive results for acetone in samples CNTR POND/DR-4 (962743B-02), CNTR POND/DR-5 (962743B-03), CNTR POND/DR-6 (962743B-04), CNTR WETLAND/A8-1 (962743B-12), CNTR WETLAND/A8-2 (962743B-13), CNTR WETLAND/A8-3 (962743B-14), CNTR WETLAND/A8-4 (962743B-15), CNTR WETLAND/A9-1 (962743B-16), CNTR WETLAND/A9-2 (962743B-17), and CNTR WETLAND/A9-4 (962743B-19) are estimated. It is further noted that all positive results for acetone are previously blank qualified.

4. Due to a continuing calibration %D greater than 50%, quantitation limits for carbon disulfide are estimated in samples CNTR WETLAND/A8-1 (962743B-12), CNTR WETLAND/A8-2 (962743B-13), CNTR WETLAND/A8-3 (962743B-14), CNTR WETLAND/A8-4 (962743B-15), CNTR WETLAND/A9-1 (962743B-16), CNTR WETLAND/A9-2 (962743B-17), CNTR WETLAND/A9-3 (962743B-18), and CNTR WETLAND/A9-4 (962743B-19).

5. All sample results identified at concentrations less than the reporting limits are estimated.

SMITH

NOTES

The following item was noted during the validation review which did not impact results or necessitate further qualification of data:

1. There are transcription errors noted on the laboratory reported Form Is. The reviewer-corrected Form Is are included in Appendix A of this report.

SUMMARY

This review has identified exceeded initial calibration %RSDs and continuing calibration %Ds, method blank contamination, and transcription errors as areas of concern. The reported data are usable as qualified on the data summary table For specifics relating to this review, see the attached documentation in Appendix A

SMITH

QUALIFIER CODES - VOLATILES

U - The compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit. Because the qualified compound was present in the associated blank(s) at a similar concentration it is not considered to be present in the sample. The qualified quantitation limit has been elevated to either the sample concentration or the method quantitation limit, whichever is higher.

J - The associated numerical value is an estimated concentration.

UJ - The compound was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

DATA SUMMARY - TCL VOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	TCL Volatiles/ SW-846 Method 8240

Soil samples in ug/Kg

Aqueous samples in ug/L

	Sample description or location	CNTR POND DR -3		CNTR POND DR -4		CNTR POND DR -5		CNTR POND DR -6		CNTR POND DR -7		CNTR POND DR -8		CNTR POND DR -9		O/S CNTR POND A8-1		O/S CNTR POND A8-2		O/S CNTR POND A8-3	
	Sample number	962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
	Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
	% Moisture	25%		64%		25%		31%		62%		26%		15%		21%		22%		22%	
	Dilution factor	1		1		1		1		1		1		1		1		1		1	
	Sampling Date	12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96	
CRQL	Comments																				
10	chloromethane																				
10	bromomethane																				
10	vinyl chloride																				
10	chloroethane		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
5	methylene chloride																				
10	acetone	31	U	61	U	6	U	11	U	61	U	7	U	15	U			17	U	9	U
5	carbon disulfide																				
5	1,1-dichloroethene																				
5	1,1-dichloroethane																				
5	1,2 dichloroethene (total)																				
5	chloroform																				
5	1,2-dichloroethane																				
10	2-butanone																				
5	1,1,1-trichloroethane							2	J					2	J	11		16			
10	carbon tetrachloride																				

B2743V.XLS

QA Scientist M. Kudlecky Date 2/24/97

DATA SUMMARY - TCL VOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	TCL Volatiles/ SW-846 Method 8240

Soil samples in ug/Kg

Aqueous samples in ug/L

	Sample description or location	CNTR POND DR.-3		CNTR POND DR.-4		CNTR POND DR.-5		CNTR POND DR.-6		CNTR POND DR -7		CNTR POND DR -8		CNTR POND DR -9		O/S CNTR POND A8-1		O/S CNTR POND A8-2		O/S CNTR POND A8-3	
	Sample number	962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
5	bromodichloromethane																				
5	1,2-dichloropropane																				
5	cis-1,3-dichloropropene																				
5	trichloroethene																				
5	dibromochloromethane																				
5	1,1,2-trichloroethane																				
5	benzene																				
5	trans-1,3-dichloropropene																				
5	bromoform																				
10	4-methyl-2-pentanone																				
10	2-hexanone		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
5	tetrachloroethene																				
5	1,1,2,2-tetrachloroethane																				
5	toluene			5	J																
5	chlorobenzene																				
5	ethylbenzene																				
5	styrene																				
5	xylene (total)																				
10	2,4,4-trimethyl-1-pentene		UJ	14	J		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
5	2,4,4-trimethyl-2-pentene																				
5	vinyl actetate																				

B2743V.XLS

QA Scientist M. Kudlesky Date 2/24/97

DATA SUMMARY - TCL VOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	TCL Volatiles/ SW-846 Method 8240

Soil samples in ug/Kg

Aqueous samples in ug/L

	Sample description or location	O/S CNTR POND A8-4	CNTR WETLAND A8-1	CNTR WETLAND A8-2	CNTR WETLAND A8-3	CNTR WETLAND A8-4	CNTR WETLAND A9-1	CNTR WETLAND A9-2	CNTR WETLAND A9-3	CNTR WETLAND A9-4
	Sample number	962743B-11	962743B-12	962743B-13	962743B-14	962743B-15	962743B-16	962743B-17	962743B-18	962743B-19
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	% Moisture	22%	23%	21%	24%	27%	52%	25%	25%	26%
	Dilution factor	1	1	1	1	1	1	1	1	1
	Sampling Date	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
CRQL	Comments									
10	chloromethane									
10	bromomethane									
10	vinyl chloride									
10	chloroethane	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
5	methylene chloride		7 U	4 U	5 U	5 U	8 U	5 U		4 U
10	acetone	9 U	15 U	54 U	18 U	12 U	22 U	13 U		26 U
5	carbon disulfide		UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
5	1,1-dichloroethene									
5	1,1-dichloroethane									
5	1,2-dichloroethene (total)									
5	chloroform									
5	1,2-dichloroethane									
10	2-butanone									
5	1,1,1-trichloroethane	6	13						71	
10	carbon tetrachloride									

B2743V.XLS

QA Scientist M. Kudlesky Date 2/24/97

DATA SUMMARY - TCL VOLATILE ORGANIC COMPOUNDS

Site Name: Olin
Project Number: 00-7074-0102
Sampling Date(s): 12/16/96

Soil samples in ug/Kg
Aqueous samples in ug/L

Laboratory: IEA
Case/Order #: B2743
Fraction/Method: TCL Volatiles/ SW-846 Method 8240

	Sample description or location	O/S CNTR POND A8-4	CNTR WETLAND A8-1	CNTR WETLAND A8-2	CNTR WETLAND A8-3	CNTR WETLAND A8-4	CNTR WETLAND A9-1	CNTR WETLAND A9-2	CNTR WETLAND A9-3	CNTR WETLAND A9-4	
	Sample number	962743B-11	962743B-12	962743B-13	962743B-14	962743B-15	962743B-16	962743B-17	962743B-18	962743B-19	
5	bromodichloromethane										
5	1,2-dichloropropane										
5	cis-1,3-dichloropropene										
5	trichloroethene										
5	dibromochloromethane								7		
5	1,1,2-trichloroethane										
5	benzene										
5	trans-1,3-dichloropropene										
5	bromoform										
10	4-methyl-2-pentanone										
10	2-hexanone	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	
5	tetrachloroethene										
5	1,1,2,2-tetrachloroethane										
5	toluene		0.6 J								
5	chlorobenzene										
5	ethylbenzene										
5	styrene										
5	xylene (total)										
10	2,4,4-trimethyl-1-pentene	UJ	UJ	UJ	UJ	2 J	UJ	UJ	UJ	UJ	
5	2,4,4-trimethyl-2-pentene										
5	vinyl actetate										

B2743V.XLS

QA Scientist M. Lindlesky Date 2/24/97

SMITH

DATA VALIDATION REPORT
TARGET COMPOUND LIST SEMIVOLATILES
OLIN CORPORATION
SURFACE SOIL SAMPLES

INTRODUCTION

This data review report addresses the semivolatile data from the December 16, 1996 surface soil sampling event at the Olin Corporation's Wilmington, Massachusetts Facility. This review is of work order number B2743 which consisted of 16 surface soil samples for the target compound list semivolatiles. All samples in this report were analyzed by IEA Corporation in Monroe, Connecticut, according to the United States Environmental Protection Agency (EPA) *"Test Methods for Evaluating Solid Waste Physical/Chemical Methods"* (SW-846) Method 8270 for target compound list semivolatiles.

Data deliverables were reported following the EPA Contract Laboratory Program (CLP) Statement of Work (SOW) for semivolatiles. The findings in this report are based upon a review of sample data and of quality control (QC) specified by the individual analytical methods and provided by the laboratory. The quality assurance review was performed according to EPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis (data validation guidelines), November 1988, where applicable to Method 8270.

The support documentation in Appendix B of this report summarizes the specifics of this review. Appendix B also provides the sample results as reported by the laboratory. The data summary lists all compounds that were analyzed. Analytical problems are outlined in the following Findings/Qualifiers Section. Other issues which were identified which did not warrant qualification are detailed in the Notes Section.

FINDINGS/QUALIFIERS

This data validation report addresses the 16 surface soil samples analyzed for the TCL semivolatile analysis of IEA Corporation work order number B2743. The data were evaluated for the following parameters:

* data completeness
  holding times
* GC/MS Tuning
  calibrations
  blanks

+ surrogate recoveries
+ matrix spike/matrix spike duplicate results
* laboratory control sample results
* internal standard performance
* compound identification

* All criteria were met for this parameter.
\+ All criteria were met for this parameter; however, this parameter is discussed in the Notes Section of this report.

The data summary table provided at the end of this report summarizes the following data qualifications:

1. The diethylphthalate result is negated in sample CNTR WETLAND A8-3 (962743B-14) due to method blank contamination. The reported concentration has been changed to reflect an adjusted quantitation limit.

2. Positive results for di-n-butylphthalate in all samples except sample O/S CNTR PND A8-4 (962743B-11) are negated due to method blank contamination. The reported concentrations have been changed to reflect adjusted quantitation limits.

3. All sample results identified at concentrations less than the reporting limits are estimated.

NOTES

The following items were noted during the validation review which did not impact results or necessitate further qualification of data:

1. All surface soil samples exceeded the analytical holding times specified for aqueous matrices in Clean Water Act (40 CFR 136) which is referenced in the Region I data validation guidance Since the analytical holding times specified for soil samples in the analytical method were met, no data are qualified.

2. Sample CNTR WETLAND A8-1 (962743B-12) exhibited 0% surrogate recoveries due to a dilution factor of 400. Surrogate recovery results could not be evaluated for sample 962743B-12.

3. The matrix spike/matrix spike duplicate (MS/MSD) samples exceeded accuracy and precision criteria for 4-nitrophenol and acenaphthene. CNTR POND DR-8 (962743B-06MSD) exhibited a percent recovery above the acceptance limit for 4-nitrophenol. The MS/MSD pair exhibited relative percent differences (RPDs) above the acceptance limits for 4-nitrophenol and acenaphthene Since these compounds were not detected in the unspiked samples, no qualification is necessary.

SUMMARY

This review has identified exceeded analytical holding times and laboratory blank contamination as areas of concern. The reported data are usable as qualified on the data summary table. For specifics relating to this review, see the attached documentation in Appendix B.

SMITH

QUALIFIER CODES - SEMIVOLATILES

U - The compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit. Because the qualified compound was present in the associated blank(s) at a similar concentration it is not considered to be present in the sample. The qualified quantitation limit has been elevated to either the sample concentration or the method quantitation limit, whichever is higher.

J - The associated numerical value is an estimated concentration.

UJ - The compound was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	CLP Semivolatiles/ SOW 3/90

Soil samples in ug/Kg

Aqueous samples in ug/L

		Sample description	CNTR POND	CNTR POND	CNTR POND	CNTR POND	CNTR POND	CNTR POND	CNTR POND	O/S CNTR PND	O/S CNTR PND	O/S CNTR PND
		or location	DR -3	DR.-4	DR.-5	DR.-6	DR.-7	DR -8	DR.-9	A8-1	A8-2	A8-3
		Sample number	962743B-01	962743B-02	962743B-03	962743B-04	962743B-05	962743B-06	962743B-07	962743B-08	962743B-09	962743B-10
		Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		% Moisture	31%	50%	46%	21%	53%	21%	16%	26%	34%	34%
		Dilution factor	2	1	1	1	1	1	1	1	1	1
		Sample volume	30g	30g	30g	30g	30g	30g	30g	30g	30g	30g
AQ CRQL	SOIL CRQL	Sampling Date	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
		Comments										
10	330	phenol										
10	330	bis(2-chloroethyl)ether										
10	330	2-chlorophenol										
10	330	1,3-dichlorobenzene										
10	330	1,4-dichlorobenzene										
10	330	benzyl alcohol										
10	330	1,2-dichlorobenzene										
10	330	2-methylphenol										
10	330	2,2'-oxybis(1-chloropropane)										
10	330	4-methylphenol										
10	330	N-nitroso-di-n-propylamine										
10	330	hexachloroethane										
10	330	nitrobenzene										
10	330	isophorone										
10	330	2-nitrophenol										
10	330	2,4-dimethylphenol										
10	330	benzoic acid		260 J	290 J						10 J	

B2743SV.XLS

QA Scientist M. Kudlerzy Date 2/24/97

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	CLP Semivolatiles/ SOW 3/90

Soil samples in ug/Kg

Aqueous samples in ug/L

		Sample description or location	CNTR POND DR -3	CNTR POND DR.-4	CNTR POND DR.-5	CNTR POND DR.-6	CNTR POND DR.-7	CNTR POND DR.-8	CNTR POND DR.-9	O/S CNTR PND A8-1	O/S CNTR PND A8-2	O/S CNTR PND A8-3
		Sample number	962743B-01	962743B-02	962743B-03	962743B-04	962743B-05	962743B-06	962743B-07	962743B-08	962743B-09	962743B-10
10	330	bis(2-chloroethoxy)methane										
10	330	2,4-dichlorophenol										
10	330	1,2,4-trichlorobenzene										
10	330	naphthalene										
10	330	4-chloroaniline										
10	330	hexachlorobutadiene										
10	330	4-chloro-3-methylphenol										
10	330	2-methylnaphthalene										
10	330	hexachlorocyclopentadiene										
10	330	2,4,6-trichlorophenol										
25	800	2,4,5-trichlorophenol										
10	330	2-chloronaphthalene										
25	800	2-nitroaniline										
10	330	dimethylphthalate										
10	330	acenaphthylene		66 J								
10	330	2,6-dinitrotoluene										
25	800	3-nitroaniline										
10	330	acenaphthene										
25	800	2,4-dinitrophenol										
25	800	4-nitrophenol										
10	330	dibenzofuran										
10	330	2,4-dinitrotoluene										
10	330	diethylphthalate										
10	330	4-chlorophenyl-phenylether										

B2743SV.XLS

QA Scientist M. Kudlosky Date 2/24/97

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	CLP Semivolatiles/ SOW 3/90

Soil samples in ug/Kg

Aqueous samples in ug/L

		Sample description or location	CNTR POND DR.-3		CNTR POND DR.-4		CNTR POND DR.-5		CNTR POND DR.-6		CNTR POND DR.-7		CNTR POND DR -8		CNTR POND DR -9		O/S CNTR PND A8-1		O/S CNTR PND A8-2		O/S CNTR PND A8-3	
		Sample number	962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
10	330	fluorene																				
25	800	4-nitroaniline																				
25	800	4,6-dinitro-2-methylphenol																				
10	330	n-nitrosodiphenylamine																				
10	330	4-bromophenyl-phenylether																				
10	330	hexachlorobenzene																				
25	800	pentachlorophenol																				
10	330	phenanthrene			120	J																
10	330	anthracene			57	J																
10	330	di-n-butylphthalate							37	U			44	U	43	U			46	U		
10	330	fluoranthene			98	J													56	J		
10	330	pyrene			68	J													48	J		
10	330	butylbenzylphthalate																				
10	330	3,3'-dichlorobenzidine																				
10	330	benzo(a)anthracene																				
10	330	chrysene																				
10	330	bis(2-ethylhexyl)phthalate	5300		1100		220	J	130	J	540	J	720		90	J						
10	330	di-n-octylphthalate																				
10	330	benzo(b)fluoranthene																	46	J		
10	330	benzo(k)fluoranthene																	36	J		
10	330	benzo(a)pyrene																				
10	330	indeno(1,2,3-cd)pyrene																				
10	330	dibenz(a,h)anthracene																				
10	330	benzo(g,h,i)-perylene																				

B2743SV.XLS

QA Scientist M. Kudlenky Date 2/24/97

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	CLP Semivolatiles/ SOW 3/90

Soil samples in ug/Kg

Aqueous samples in ug/L

AQ CRQL	SOIL CRQL	Sample description or location	O/S CNTR PND A8-4	CNTR WETLAND A8-1	CNTR WETLAND A8-2	CNTR WETLAND A8-3	CNTR WETLAND A8-4	CNTR WETLAND A9 (composite)			
		Sample number	962743B-11	962743B-12	962743B-13	962743B-14	962743B-15	962743B-20			
		Matrix	Soil	Soil	Soil	Soil	Soil	Soil			
		% Moisture	24%	17%	41%	24%	24%	43%			
		Dilution factor	5	400	1	1	1	1			
		Sample volume	30g	30g	30g	30g	30g	30g			
		Sampling Date	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96			
		Comments									
10	330	phenol									
10	330	bis(2-chloroethyl)ether									
10	330	2-chlorophenol									
10	330	1,3-dichlorobenzene									
10	330	1,4-dichlorobenzene									
10	330	benzyl alcohol									
10	330	1,2-dichlorobenzene									
10	330	2-methylphenol									
10	330	2,2'-oxybis(1-chloropropane)									
10	330	4-methylphenol									
10	330	N-nitroso-di-n-propylamine									
10	330	hexachloroethane									
10	330	nitrobenzene									
10	330	isophorone									
10	330	2-nitrophenol									
10	330	2,4-dimethylphenol									
10	330	benzoic acid	1800 J			70 J					

B2743SV.XLS

QA Scientist M. Kudlesky Date 2/24/97

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	CLP Semivolatiles/ SOW 3/90

Soil samples in ug/Kg

Aqueous samples in ug/L

		Sample description or location	O/S CNTR PND A8-4	CNTR WETLAND A8-1	CNTR WETLAND A8-2	CNTR WETLAND A8-3	CNTR WETLAND A8-4	CNTR WETLAND A9 (composite)				
		Sample number	962743B-11	962743B-12	962743B-13	962743B-14	962743B-15	962743B-20				
10	330	bis(2-chloroethoxy)methane										
10	330	2,4-dichlorophenol										
10	330	1,2,4-trichlorobenzene	250 J									
10	330	naphthalene		530000								
10	330	4-chloroaniline										
10	330	hexachlorobutadiene										
10	330	4-chloro-3-methylphenol										
10	330	2-methylnaphthalene		560000								
10	330	hexachlorocyclopentadiene										
10	330	2,4,6-trichlorophenol										
25	800	2,4,5-trichlorophenol										
10	330	2-chloronaphthalene										
25	800	2-nitroaniline										
10	330	dimethylphthalate										
10	330	acenaphthylene		420000								
10	330	2,6-dinitrotoluene										
25	800	3-nitroaniline										
10	330	acenaphthene		170000								
25	800	2,4-dinitrophenol										
25	800	4-nitrophenol										
10	330	dibenzofuran		39000 J								
10	330	2,4-dinitrotoluene										
10	330	diethylphthalate				21 U						
10	330	4-chlorophenyl-phenylether										

B2743SV.XLS

QA Scientist M. Kuddesday Date 2/24/97

DATA SUMMARY - TCL SEMIVOLATILE ORGANIC COMPOUNDS

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Soil samples in ug/Kg	Case/Order # B2743
Sampling Date(s)	12/16/96	Aqueous samples in ug/L	Fraction/Method CLP Semivolatiles/ SOW 3/90

		Sample description or location	O/S CNTR PND A8-4		CNTR WETLAND A8-1		CNTR WETLAND A8-2		CNTR WETLAND A8-3		CNTR WETLAND A8-4		CNTR WETLAND A9 (composite)							
		Sample number	962743B-11		962743B-12		962743B-13		962743B-14		962743B-15		962743B-20							
10	330	fluorene			430000															
25	800	4-nitroaniline																		
25	800	4,6-dinitro-2-methylphenol																		
10	330	n-nitrosodiphenylamine	550	J																
10	330	4-bromophenyl-phenylether																		
10	330	hexachlorobenzene																		
25	800	pentachlorophenol																		
10	330	phenanthrene	160	J	1000000				30	J										
10	330	anthracene			290000				11	J										
10	330	di-n-butylphthalate	1400						40	U	40	U	65	U						
10	330	fluoranthene			410000				27	J										
10	330	pyrene	120	J	320000				24	J										
10	330	butylbenzylphthalate																		
10	330	3,3'-dichlorobenzidine																		
10	330	benzo(a)anthracene			140000	J			15	J										
10	330	chrysene			150000	J			15	J										
10	330	bis(2-ethylhexyl)phthalate	22000				130	J	90	J			110	J						
10	330	di-n-octylphthalate							12	J										
10	330	benzo(b)fluoranthene			44000	J														
10	330	benzo(k)fluoranthene			66000	J														
10	330	benzo(a)pyrene			100000	J														
10	330	indeno(1,2,3-cd)pyrene			24000	J														
10	330	dibenz(a,h)anthracene																		
10	330	benzo(g,h,i)-perylene			29000	J														

B2743SV.XLS

QA Scientist M. Kudlesky Date 7/24/97

SMITH

DATA VALIDATION REPORT
TARGET COMPOUND LIST PESTICIDES
OLIN CORPORATION
SURFACE SOIL SAMPLES

INTRODUCTION

This data review report addresses the pesticides data from the December 16, 1996 surface soil sampling event at the Olin Corporation's Wilmington, Massachusetts Facility. This review is of work order number B2743 which consisted of 16 surface soil samples for the target compound list pesticides. All samples in this report were analyzed by IEA Corporation in Monroe, Connecticut, according to the United States Environmental Protection Agency (EPA) *"Test Methods for Evaluating Solid Waste Physical/Chemical Methods"* (SW-846) Method 8081 for target compound list pesticides.

Data deliverables were reported following the EPA Contract Laboratory Program (CLP) Statement of Work (SOW) for pesticides. The findings in this report are based upon a review of sample data and of quality control (QC) specified by the individual analytical methods and provided by the laboratory. The quality assurance review was performed according to EPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis (data validation guidelines), November 1988, where applicable to Method 8081.

The support documentation in Appendix C of this report summarizes the specifics of this review. Appendix C also provides the sample results as reported by the laboratory. The data summary lists all compounds that were analyzed. Analytical problems are outlined in the following Findings/Qualifiers Section. Other issues which were identified which did not warrant qualification are detailed in the Notes Section.

FINDINGS/QUALIFIERS

This data validation report addresses the 16 surface soil samples analyzed for the TCL pesticides analysis of IEA Corporation work order number B2743. The data were evaluated for the following parameters:

* data completeness
* holding times
  compound degradation
  initial and continuing calibrations

SMITH

* blanks
+ surrogate recoveries
  matrix spike/matrix spike duplicate results
* laboratory control sample results
  compound quantitation and identification

* All criteria were met for this parameter.

\+ All criteria were met for this parameter; however, this parameter is discussed in the Notes Section of this report.

The data summary table provided at the end of this report summarizes the following data qualifications:

1. The positive results for 4,4'-DDD, 4,4'-DDE and/or 4,4'-DDT in samples CNTR POND/DR-3 (962743B-01), CNTR POND/DR-5 (962743B-03), CNTR POND/DR-8 (962743B-06), O/S CNTR POND/A8-1 (962743B-08), O/S CNTR POND/A8-2 (962743B-09), O/S CNTR POND/A8-3 (962743B-10), O/S CNTR POND/A8-4 (962743B-11), CNTR WETLND/A8-2 (962743B-13), CNTR WETLND/A8-3 (962743B-14), CNTR WETLND/A8-4 (962743B-15), and CNTR WETLND/A9-COMP (962743B-20) are estimated due to 4,4'-DDT degradation exceeding 20 percent (%).

2. The quantitation limits for alpha-BHC and beta-BHC in samples CNTR WETLND/A8-3 (962743B-14) and CNTR WETLND/A8-4 (962743B-15) are estimated due to on-scale interference.

3. The positive result for lindane in sample O/S CNTR POND/A8-4 (962743B-11) is estimated because the area count for lindane in the sample exceeded the area count of the high concentration standard. The sample should have been reanalyzed at a dilution for a more accurate result.

4. The positive results for alpha-BHC and lindane in sample CNTR WETLND/A8-2 (962743B-13) and the positive results for endosulfan I and gamma-chlordane in sample CNTR WETLND/A9-COMP (962743B-20) are estimated with a biased high tendency due to poor peak integration.

5. Due to a low matrix spike recovery for lindane in CNTR POND /DR-8 (962743B-06MS), the positive result for lindane in the unspiked sample 962743B-06 is estimated.

6. Region I requires only the positive results to be estimated when the continuing calibration standards do not meet the percent difference (%D) criteria of 15 percent (%). However, when the response of the system drops off, certain compounds may not be detected at the reported quantitation limit. Due to the response of the system dropping off, the continuing calibrations standards are exhibiting a greater than 15 % difference from the initial calibration standards. Therefore, the positive results and/or quantitation limits for endosulfan sulfate, 4,4'-DDT, methoxychlor, endrin ketone, and gamma-chlordane in all samples in this case are estimated.

7. All sample results identified at concentrations less than the quantitation limits are estimated.

NOTES

The following items were noted during the validation review which did not impact results or necessitate further qualification of data:

1. Some of the samples exhibited concentrations below one-tenth of the quantitation limit for some compounds. The laboratory confirmed the identification of these compounds on a secondary column. Although these compounds confirmed on a second column, the presence of these target compounds is considered presumptive due to the low peak areas. The values should not have been reported by the laboratory at such low concentrations. Since there are no Region I guidance for this issue, no qualification was applied to the data.

2. According to SW-846, all target analytes identified on the primary column must be confirmed with a secondary column. Quantitation for all confirmed target analytes can be performed using a single column. Also, SW-846 does not require that the difference between the concentrations of the two columns be calculated or the lower of the two concentrations reported. The laboratory quantitated and reported all positive results in all samples from the primary column only. Therefore, the lower concentration of the two columns was not necessarily reported and the difference between the two concentrations was not calculated.

3. Region I requires estimation of sample results and quantitation limits if the initial calibration standards do not meet a percent relative standard deviation (%RSD) of 10 %. However, the samples were analyzed by the laboratory following SW-846 Method 8081. The laboratory met the initial %RSD criteria required by SW-846.

4. According to SW-846, the laboratory is not required to achieve 60% or better resolution of all compounds prior to analysis. Therefore, the laboratory did not analyze a resolution check standard to verify resolution prior to analysis. Consequently, endosulfan II and 4,4'-DDD tend to elute at the same retention time on the primary column used by the laboratory. Therefore, when the primary column exhibited the presence of either 4,4'-DDD or endosulfan II, the laboratory carefully evaluated the peak for the proper identification. The retention time of the peak on the primary column and the compound identification of 4,4'-DDD or endosulfan II on the secondary column were used to evaluate the correct identification of the peak.

5. According to the case narrative, a few compounds in the samples and the continuing calibration standards exhibited a shift from their established retention time window (RTW). The compounds were either identified manually by the analyst or by the computer software program. However, endrin ketone was not identified by the laboratory in the degradation check standard analyzed 1/16/97 at 3:59. Endrin ketone was only outside the established RTW by 0.01 seconds. The reviewer identified the presence of endrin ketone and corrected the Form 7D to reflect the proper percent breakdown for endrin. The correct breakdown for endrin is 16.9%. No qualification is necessary since it is within the 20 % criteria.

SUMMARY

This review has identified continuing calibration variability, poor integration, on-scale interferences, and a matrix spike poor accuracy result as areas of concern. The reported data are usable as qualified on the data summary table. For specifics relating to this review, see the attached documentation in Appendix C.

SMITH

QUALIFIER CODES - PESTICIDES

J - The associated numerical value is an estimated concentration.

UJ - The compound was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

DATA SUMMARY - TCL PESTICIDE ORGANIC COMPOUNDS

Site Name	Olin Mass	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	TCL Pesticides/SW-846 Method 8081

Soil samples in ug/Kg

Aqueous samples in ug/L

AQ CRQL	SOIL CRQL	Sample description or location	CNTR. POND DR-3		CNTR. POND DR-4		CNTR. POND DR-5		CNTR. POND DR-6		CNTR. POND DR-7		CNTR. POND DR-8		CNTR. POND DR-9		O/S CNTR. POND A8-1		O/S CNTR. POND A8-2		O/S CNTR. POND A8-3	
		Sample number	962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
		Matrix	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		% Moisture	52%		50%		47%		20%		50%		21%		50%		25%		34%		26%	
		Dilution factor	1		1		1		1		1		1		1		1		1		1	
		Sampling Date	12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96	
		Extraction Date	12/19/96		12/19/96		12/19/96		12/19/96		12/19/96		12/19/96		12/19/96		12/19/96		12/19/96		12/19/96	
		Analysis Date	1/15/97		1/14/97		1/14/97		1/14/97		1/14/97		1/14/97		1/8/97		1/14/97		1/14/97		1/14/97	
		Time Analyzed	21:20		14:13		14:52		15:31		16:11		22:00		19:36		17:29		18:20		19:04	
		Instrument ID	HP58905A		HP58905A		HP58905A		HP58905A		HP58905A		HP58905A		HP58905A		HP58905A		HP58905A		HP58905A	
		Comments																				
0.05	1.7	alpha-BHC																			0.20	J
0.05	1.7	beta-BHC																	0.13	J		
0.05	1.7	delta-BHC					1.5	J														
0.05	1.7	lindane	6.1						1.4	J			6.1	J								
0.05	1.7	heptachlor			0.40	J					0.34	J										
0.05	1.7	aldrin			0.11	J																
0.05	1.7	heptachlor epoxide																	0.078	J		
0.05	1.7	endosulfan I																				
0.10	3.3	dieldrin					2.0	J									0.99	J	1.7	J	1.3	J
0.10	3.3	4,4'-DDE	2.6	J			1.2	J									2.3	J	1.4	J	0.53	J
0.10	3.3	endrin																				
0.10	3.3	endosulfan II																				
0.10	3.3	4,4'-DDD	1.3	J													0.15	J				
0.10	3.3	endosulfan sulfate		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ

B2743PST.XLS

QA Scientist Danielle Beauby Date 2/21/97

DATA SUMMARY - TCL PESTICIDE ORGANIC COMPOUNDS

Site Name	Olin Mass	Laboratory	IEA
Project Number	00-7074-0102	Soil samples in ug/Kg	Case/Order # B2743
Sampling Date(s)	12/16/96	Aqueous samples in ug/L	Fraction/Method TCL Pesticides/SW-846 Method 8081

		Sample description or location	CNTR. POND DR-3		CNTR POND DR-4		CNTR. POND DR-5		CNTR. POND DR-6		CNTR. POND DR-7		CNTR. POND DR-8		CNTR. POND DR-9		O/S CNTR. POND A8-1		O/S CNTR. POND A8-2		O/S CNTR. POND A8-3	
		Sample number	962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
0.10	3.3	4,4'-DDT	12	J		UJ	2.9	J		UJ		UJ	4.9	J		UJ	2.2	J	1.4	J	2.3	J
0.50	17.0	methoxychlor		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
0.10	3.3	endrin ketone	3.1	J		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
0.10	3.3	endrin aldehyde																				
0.05	1.7	alpha chlordane																				
0.05	1.7	gamma chlordane		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
5.0	170.0	toxaphene																				

B2743PST.XLS

QA Scientist Danielle Reardy Date 2/21/97

DATA SUMMARY - TCL PESTICIDE/PCB ORGANIC COMPOUNDS

Site Name	Olin Mass	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
Sampling Date(s)	12/16/96	Fraction/Method	TCL Pesticides/SW-846 Method 8081

Soil samples in ug/Kg

Aqueous samples in ug/L

AQ CRQL	SOIL CRQL	Sample description or location	O/S CNTR POND A8-4	CNTR. WETLND A8-1	CNTR WETLND A8-2	CNTR. WETLND A8-3	CNTR WETLND A8-4	CNTR. WETLND A9 COMP				
		Sample number	962743B-11	962743B-12	962743B-13	962743B-14	962743B-15	962743B-20				
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
		% Moisture	25%	21%	41%	22%	24%	43%				
		Dilution factor	1	1	1	1	1	1				
		Sampling Date	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96				
		Extraction Date	12/19/96	12/19/96	12/19/96	12/19/96	12/19/96	12/19/96				
		Analysis Date	1/15/97	1/15/97	1/15/97	1/15/97	1/15/97	1/15/97				
		Time Analyzed	22:40	18:01	18:41	19:21	20:01	20:40				
		Instrument ID	HP58905A	HP58905A	HP58905A	HP58905A	HP58905A	HP58905A				
		Comments										
0.05	1.7	alpha-BHC			1.1 J	UJ	UJ					
0.05	1.7	beta-BHC				UJ	UJ					
0.05	1.7	delta-BHC										
0.05	1.7	lindane	64 J	0.21 J	0.92 J			5.2				
0.05	1.7	heptachlor										
0.05	1.7	aldrin						1.9 J				
0.05	1.7	heptachlor epoxide										
0.05	1.7	endosulfan I						2.1 J				
0.10	3.3	dieldrin	12			1.3 J						
0.10	3.3	4,4'-DDE			0.89 J	0.69 J	0.64 J	1.6 J				
0.10	3.3	endrin										
0.10	3.3	endosulfan II										
0.10	3.3	4,4'-DDD	8.4 J					0.50 J				
0.10	3.3	endosulfan sulfate	UJ	UJ	UJ	UJ	UJ	UJ				

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QA Scientist Danielle Beasley Date 2/21/97

DATA SUMMARY - TCL PESTICIDE/PCB ORGANIC COMPOUNDS

Site Name	Olin Mass	Laboratory	IEA
Project Number	00-7074-0102	Soil samples in ug/Kg	Case/Order # B2743
Sampling Date(s)	12/16/96	Aqueous samples in ug/L	Fraction/Method TCL Pesticides/SW-846 Method 8081

		Sample description or location	O/S CNTR. POND A8-4		CNTR. WETLND A8-1		CNTR. WETLND A8-2		CNTR. WETLND A8-3		CNTR WETLND A8-4		CNTR. WETLND A9 COMP							
		Sample number	962743B-11		962743B-12		962743B-13		962743B-14		962743B-15		962743B-20							
0.10	3.3	4,4'-DDT	40	J		UJ	1.7	J	1.6	J	2.4	J	3.0	J						
0.50	17.0	methoxychlor		UJ		UJ		UJ		UJ		UJ		UJ						
0.10	3.3	endrin ketone		UJ		UJ		UJ		UJ		UJ		UJ						
0.10	3.3	endrin aldehyde																		
0.05	1.7	alpha chlordane																		
0.05	1.7	gamma chlordane		UJ		UJ		UJ		UJ		UJ	5.2	J						
5.0	170.0	toxaphene																		

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QA Scientist Danielle Beasley Date 2/21/97

SMITH

DATA REVIEW REPORT
METALS
OLIN CORPORATION
SURFACE SOIL SAMPLES

INTRODUCTION

This data review report addresses the metals data from the December 16, 1996 surface soil sampling event at the Olin Corporation's Wilmington, Massachusetts Facility. This review is of work order number B2743 which consisted of 5 surface soil samples analyzed for target analyte list (TAL) metals and 11 surface soil samples analyzed for chromium. All samples in this report were analyzed by IEA Corporation in Monroe, Connecticut, according to the United States Environmental Protection Agency (EPA) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Method 6010 for all analytes except mercury, which was analyzed by Method 7471.

Data deliverables were reported following the United States Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Inorganic Analysis. The quality assurance review was prepared according to EPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analysis (data validation guidelines), June 1988, where applicable to SW-846 methodologies. The findings in this report are based upon a general review of the raw data (where applicable), analytical holding times, calibration results, standards performed at the CLP contract required detection limits (CRDL), blank analysis results, interference check sample results, laboratory control sample results, laboratory and field duplicate results, matrix spike results, serial dilutions, detection limits, and a general review of the CLP-style forms provided.

The support documentation in Appendix D of this report summarizes the specifics of this review. Appendix D also provides the sample results as reported by the laboratory. The data summary table lists all metals that were analyzed. Analytical problems are outlined in the following Findings/Qualifiers Section. Issues that arose which did not warrant qualification are detailed in the Notes Section.

this data were not CLP analyses, this standard represents system performance at or near the concentration of the CRDL. It was the reviewer's professional judgment to qualify data which were out of the CRDL standard criteria specified in the Region I data validation guidelines. As a result, the following data are qualified:

- The percent recovery (%R) was high for the CRDL standard associated with all arsenic results. Therefore, all positive results for arsenic are estimated. Because the recovery was high, the non-detect results were not estimated.

- The %R was low for the CRDL standard associated with all thallium results. Therefore, all thallium detection limits are estimated

3. The following sample results are estimated due to matrix spike %R outliers:

   - All detection limits for silver are rejected because the matrix spike recovery was less than 30%.

   - The positive results and detection limits for thallium are estimated due to a low matrix spike %R.

   - The positive results for mercury and selenium are estimated due to a high matrix spike %R.

NOTES

The following items were noted during the review that do not necessitate qualification of data:

1. Several of the sample results on the Form 1s were reported to varying significant digits. The laboratory was contacted on February 24, 1997 and indicated that only two significant digits should be reported on the Form 1s. The reviewer-corrected Form 1s are included in Appendix D.

2. There were no field duplicates associated with this data package.

3. There were transcription errors on the Form 1s and Form 5s. Corrections are made on the reviewer annotated forms included in Appendix D of this report.

SMITH

SUMMARY

This review has identified field blank contamination, CRDL standard %Rs, and matrix spike %Rs as areas of concern. The data are acceptable as reported on the summary tables. For specifics relating to this review, see the attached documentation in Appendix D.

SMITH

QUALIFIER CODES

U - The material was analyzed for, but not detected above the level of the associated value.

J - The associated value is an estimated quantity.

UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

R - The material was analyzed, however the associated value is unusable.

[ ] - Denotes a reported result above the instrument detection limit, but below the CRDL.

DATA SUMMARY - TAL INORGANIC ANALYTES

Site Name: Olin
Project Number: 00-7074-0102
ampling Date(s): 12/16/96
Laboratory: IEA
Case/Order #: B2743
Field Duplicates: No Field Duplicates

[x] Solid mg/kg
[ ] Liquid ug/l

Sample location or description			CNTR POND DR.-3		CNTR POND DR.-4		CNTR POND DR -5		CNTR POND DR.-6		CNTR POND DR -7		CNTR POND DR.-8		CNTR POND DR -9		O/S CNTRPN A8-1		O/S CNTRPN A8-2		O/S CNTRPN A8-3	
Sample number			962743B-01		962743B-02		962743B-03		962743B-04		962743B-05		962743B-06		962743B-07		962743B-08		962743B-09		962743B-10	
Sampling date			12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96	
% SOLIDs	P	F	68.8		50.8		49.5		79.8		49 6		81 0		83.2		76 2		66.0		76.8	
Aluminum	x		NR		NR		NR		NR		NR		2100		2500		1700		NR		NR	
Antimony	x		NR		NR		NR		NR		NR								NR		NR	
Arsenic	x		NR		NR		NR		NR		NR				2.2	J	3.8	J	NR		NR	
Barium	x		NR		NR		NR		NR		NR		[4.6]		[6.2]		[3.6]		NR		NR	
Beryllium	x		NR		NR		NR		NR		NR								NR		NR	
Cadmium	x		NR		NR		NR		NR		NR								NR		NR	
Calcium	x		NR		NR		NR		NR		NR		21000		[930]		[91]		NR		NR	
Chromium	x		270		17		210		34		23		47		10		2.6		4.5		520	
Cobalt	x		NR		NR		NR		NR		NR		[0.42]		[1.4]				NR		NR	
Copper	x		NR		NR		NR		NR		NR		[1.6]		[2.9]		[2.8]		NR		NR	
Iron	x		NR		NR		NR		NR		NR		1200		2600		2800		NR		NR	
Lead	x		NR		NR		NR		NR		NR		4.8		2.3		22		NR		NR	
Magnesium	x		NR		NR		NR		NR		NR		[290]		[900]		[63]		NR		NR	
Manganese	x		NR		NR		NR		NR		NR		7.8		32		3.9		NR		NR	
Mercury			NR		NR		NR		NR		NR				0.09	J	0.18	J	NR		NR	
Nickel	x		NR		NR		NR		NR		NR		[1.5]		[4.7]		[0.96]		NR		NR	
Potassium	x		NR		NR		NR		NR		NR		[80]		[240]		[57]		NR		NR	
Selenium	x		NR		NR		NR		NR		NR						1.1	J	NR		NR	
Silver	x		NR		NR		NR		NR		NR			R		R		R	NR		NR	
Sodium	x		NR		NR		NR		NR		NR		[82]		[70]	U	[66]	U	NR		NR	
Thallium	x		NR		NR		NR		NR		NR			UJ		UJ		UJ	NR		NR	
Vanadium	x		NR		NR		NR		NR		NR		[5.3]		[4.8]		15		NR		NR	
Zinc	x		NR		NR		NR		NR		NR		6.0		12		10		NR		NR	

P = ICP Analysis F=Furnace Analysis NR=Not reported.

* = Instrument detection limits (IDLs) are provided on the Form 10s in Appendix D. These values are corrected for exact sample weights, volumes, and dilutions to obtain sample-specific values.

DATA SUMMARY - TAL INORGANIC ANALYTES

Site Name	Olin	Laboratory	IEA
Project Number	00-7074-0102	Case/Order #	B2743
ampling Date(s)	12/16/96	Field Duplicates	No Field Duplicates

[X] Solid mg/kg

[ ] Liquid ug/l

Sample location or description			O/S CNTRPN A8-4		CNTRWETLN A8-1		CNTRWETLN A8-2		CNTRWETLN A8-3		CNTRWETLN A8-4		CNTRWETLN A9 (CO									
Sample number			962743B-11		962743B-12		962743B-13		962743B-14		962743B-15		962743B-20									
Sampling date			12/16/96		12/16/96		12/16/96		12/16/96		12/16/96		12/16/96									
% SOLIDs	P	F	75.9		84.3		62.0		77.5		77.5		55.1									
Aluminum	x		NR		NR		NR		NR		2400		2400									
Antimony	x		NR		NR		NR		NR													
Arsenic	x		NR		NR		NR		NR		3.0	J	3.0	J								
Barium	x		NR		NR		NR		NR		[10]		[20]									
Beryllium	x		NR		NR		NR		NR													
Cadmium	x		NR		NR		NR		NR													
Calcium	x		NR		NR		NR		NR		[340]		[470]									
Chromium	x		20		4.2		25		4.3		34		38									
Cobalt	x		NR		NR		NR		NR		[1.1]		[1.4]									
Copper	x		NR		NR		NR		NR		[1.1]		[6.0]									
Iron	x		NR		NR		NR		NR		2900		2400									
Lead	x		NR		NR		NR		NR		6 3		17									
Magnesium	x		NR		NR		NR		NR		[510]		[130]									
Manganese	x		NR		NR		NR		NR		18		6.8									
Mercury			NR		NR		NR		NR													
Nickel	x		NR		NR		NR		NR		[2.3]		[3.9]									
Potassium	x		NR		NR		NR		NR		[120]		[87]									
Selenium	x		NR		NR		NR		NR													
Silver	x		NR		NR		NR		NR			R		R								
Sodium	x		NR		NR		NR		NR		[73]	U	[120]									
Thallium	x		NR		NR		NR		NR			UJ		UJ								
Vanadium	x		NR		NR		NR		NR		[7.1]		[6.4]									
Zinc	x		NR		NR		NR		NR		11		15									

P = ICP Analysis F=Furnace Analysis NR=Not reported.

* = Instrument detection limits (IDLs) are provided on the Form 10s in Appendix D. These values are corrected for exact sample weights, volumes, and dilutions to obtain sample-specific values.

SMITH

DATA REVIEW REPORT
AMMONIA AND SULFATE
OLIN CORPORATION
SURFACE SOIL SAMPLES

INTRODUCTION

This data review report addresses the wet chemistry data from the December 16, 1996 surface soil sampling event at the Olin Corporation's Wilmington, Massachusetts Facility. This review is of work order number B2743 which consisted of 16 surface soil samples analyzed for ammonia and sulfate. All samples in this report were analyzed by IEA Corporation in Monroe, Connecticut, according to the United States Environmental Protection Agency (EPA) Methods for Chemical Analysis of Water and Wastes (MCAWW) Method 350.2 for ammonia and Method 375.4 for sulfate and the laboratory's Standard Operating Procedures (SOPs) which reference the United States Environmental Protection Agency (EPA) Methods for Chemical Analysis of Water and Wastes (MCAWW) and Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985 (SM).

The findings in this report are based upon a review of sample data and of quality control (QC) specified by the individual analytical methods and laboratory SOPs. The quality assurance review was prepared according to EPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analysis (data validation guidelines), June 1988, where applicable to the above-reference methods for ammonia and sulfate.

The support documentation in Appendix E of this report summarizes the specifics of this review. Appendix E also provides the sample results as reported by the laboratory. Analytical problems are outlined in the following Findings/Qualifiers Section. Issues that arose which did not warrant qualification are detailed in the Notes Section.

SMITH

FINDINGS/QUALIFIERS

This data validation report addresses IEA Corporation's (IEA) work order number B2743 which contains 16 surface soil samples for ammonia and sulfate. The surface soil data were evaluated for the following parameters:

* data completeness
* holding times
* data calibration verification
* laboratory blank analysis
+ field blank analysis
  matrix spike recoveries
* laboratory duplicates
+ field duplicates
* laboratory control sample results
* detection limit results
+ sample results

* All criteria were met for this parameter.
\+ All criteria were met for this parameter; however, this parameter is discussed in the Notes Section of this report.

Data review qualifiers are annotated on the laboratory's Wet Chem Analysis Data Sheets (Form 1s) included in Appendix E of this report. The qualifiers were based on the following information:

- All positive results and detection limits for sulfate are estimated due to a low matrix spike percent recovery (%R).

SMITH

NOTES

The following items were noted during the validation review that did not impact results or necessitate further qualification of data:

1. There were transcription errors on the Form 1s and the Form 4A. Corrections are annotated on the forms included in Appendix E.

2. There were no field duplicates associated with this data package.

3. The field blank associated with the samples in this data package was provided in IEA work order number C2743. A copy of the Form 1 for this field blank is included in Appendix E. No qualification of the ammonia or sulfate sample results was required based on the field blank results.

SUMMARY

This review has identified a matrix spike %R as an area of concern. The reported data are usable as qualified on the Form 1s. For specifics relating to this review, see the attached documentation in Appendix E.

SMITH

QUALIFIER CODES

J - The associated value is an estimated quantity

SMITH

APPENDIX A

Volatile/Semivolatile Data Validation Summary — SMTH

SMTH Project Name:	Olin	**Case No./SDG:**	R2743
SMTH Project No.:	0070740102	**Sampling Date(s):**	12/16/96
Project Manager:	Bruce Cushing	**Reviewed By:**	Danielle Leavitt
Laboratory:	IEA	**Completion Date:**	2/20/97

Fraction Reviewed: [X] VOLATILE ORGANICS [ ] SEMIVOLATILE ORGANICS

Compound List: [X] TCL [ ] Priority Pollutant [ ] Appendix IX [ ] Other

Method: [ ] CLP SOW ____ [ ] 40 CFR 136 Method ____ [X] SW-846 Method 8260 [ ] Other

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept/	FYI/	qualify	comments
Holding Times	✓	✓		w/in 14 days SW846 criteria and Region 5 guidance for soils (RB) 4/24/97
GC/MS Tuning	✓	✓		no outliers
Initial Calibrations		✓	✓	outliers qualify
Continuing Calibrations		✓	✓	outliers qualify
Blank Analysis Results		✓	✓	compds present qualify all results, for MeCl2 & Acetone related.
System Monitoring/Surrogate Results	✓	✓		NO OUTLIERS
MS/MSD Results	✓	✓		No outliers
Field Duplicate Results		✓		NA
Internal Standard Areas/RT	✓	✓		No outliers
Target Compound Identification				
TIC Identification		✓		NO TIC summary provided
Quantitation/Detection Limits		✓		limits & identification verified
System Performance		✓		overall looks good
Overall Assessment of Data		✓	✓	usable as qualified
Other:				

General Comments: _____

NA - Not applicable
NR - Not reviewed

QA Scientist Danielle Leavitt Date 2/19/97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 003i

CNTR POND DR.-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2653

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	31	
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2653

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

0037

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >E2683

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 64 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	28	U
74-83-9	Bromomethane	28	U
75-01-4	Vinyl Chloride	28	U
75-00-3	Chloroethane	28	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	101 ~~60~~	D 1mL 2/21/97
75-15-0	Carbon Disulfide	14	U
108-05-4	Vinyl Acetate	28	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	28	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	28	U
591-78-6	2-Hexanone	28	U
127-18-4	Tetrachloroethene	14	U
108-88-3	Toluene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U
	2,4,4-Trimethyl-1-pentene	14	

FORM I VOA "Error" DML 2/21/97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2683

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 64 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	14	U

0045

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-5

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2684

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	6	J
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

0046

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-5

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2684

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 0051

CNTR POND DR.-6

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-04

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2685

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 31 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	11	J
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	14	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-6

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-04

Sample wt/vol: 5 (g/mL) G Lab File ID: >R2685

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 31 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
0155

CNTR POND DR.-7

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-05

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2655

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 62 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	26	U
74-83-9	Bromomethane	26	U
75-01-4	Vinyl Chloride	26	U
75-00-3	Chloroethane	26	U
75-09-2	Methylene Chloride	13	U
67-64-1	Acetone	U ~~62~~	
75-15-0	Carbon Disulfide	13	U
108-05-4	Vinyl Acetate	26	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	26	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	26	U
591-78-6	2-Hexanone	26	U
127-18-4	Tetrachloroethene	13	U
108-88-3	Toluene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U
	2,4,4-Trimethyl-1-pentene	13	U

(•) DML 2/21/97

(•) Tersor DML 2/4/97

0059

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-7

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-05

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2655

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 62 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	13	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-8

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2656

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 26 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	7	~~B~~
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	14	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

Stet

positive result @ the diluted dilution but DML 2/12/97

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
0059

CNTR POND DR.-8

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >L2656

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 26 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-9

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B27[illegible]

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-07

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2657

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 15 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	12	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0071

CNTR POND DR.-9

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-07

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2657

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 15 Date Analyzed: 12/22/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0077

O/S CNTR PND A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2696

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 21 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2696

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 21 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2697

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	16	
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743E SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2697

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-10

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2699

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B [illegible] SAS No.: [illegible]

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-10

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2699

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2[illegible]

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-11

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2700

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-11

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2700

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 22 Date Analyzed: 12/24/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2706

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 23 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	~~6~~ 7	B
67-64-1	Acetone	15	B
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	.6	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

DMC 2/21/97

FORM I VOA (•) Terror DMC 2/21/97

0104

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2706

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 23 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-13

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2707

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 21 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	4	JB
67-64-1	Acetone	54	B
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

0113

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-13

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2707

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 21 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-14

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2708

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 24 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	5	JB
67-64-1	Acetone	18	B
75-15-0	Carbon Disulfide	6	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
	2,4,4-Trimethyl-1-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

0120
EPA SAMPLE NO.

CNTR WETLND-A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-14

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2708

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 24 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 27438 SAS No.: _____ SDG No.: B2[illegible]

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-15

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2709

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 27 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	5	JB
67-64-1	Acetone	12	JB
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	14	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	2	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-15

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2709

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 27 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

0134

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-16

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2710

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 52 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	21	U
74-83-9	Bromomethane	21	U
75-01-4	Vinyl Chloride	21	U
75-00-3	Chloroethane	21	U
75-09-2	Methylene Chloride	8	JB
67-64-1	Acetone	22	B
75-15-0	Carbon Disulfide	10	U
108-05-4	Vinyl Acetate	21	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	21	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	21	U
591-78-6	2-Hexanone	21	U
127-18-4	Tetrachloroethene	10	U
108-88-3	Toluene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U
	2,4,4-Trimethyl-1-pentene	10	U

0135

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-16

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2710

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 52 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	10	U

0141

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-17

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2711

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	5 ~~4~~	JB
67-64-1	Acetone	13	B
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

⊙ DMC 2/10/

FORM I VOA ⊙ Terror DMC 2/21/97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-17

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2711

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

0146

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-18

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2725

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/27/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	13	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	71	
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

0143

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-18

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2725

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 25 Date Analyzed: 12/27/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0155

CNTR WETLND-A9-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B27[illegible]

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-19

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2713

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 26 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	4	JB
67-64-1	Acetone	26	B
75-15-0	Carbon Disulfide	7	U
108-05-4	Vinyl Acetate	14	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
108-88-3	Toluene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
	2,4,4-Trimethyl-1-pentene	7	U

0156

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A9-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-19

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2713

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. 26 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	2,4,4-Trimethyl-2-pentene	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 0216

VBLKBY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: VBLKBY

Sample wt/vol: 5 (g/mL) G Lab File ID: >B2705

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. 0 Date Analyzed: 12/26/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	10	U	
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	2	J	X10 =20
67-64-1	Acetone	6	J	X10 =60
75-15-0	Carbon Disulfide	5	U	
108-05-4	Vinyl Acetate	10	U	
75-35-4	1,1-Dichloroethene	5	U	
75-34-3	1,1-Dichloroethane	5	U	
540-59-0	1,2-Dichloroethene (total)	5	U	
67-66-3	Chloroform	5	U	
107-06-2	1,2-Dichloroethane	5	U	
78-93-3	2-Butanone	10	U	
71-55-6	1,1,1-Trichloroethane	5	U	
56-23-5	Carbon Tetrachloride	5	U	
75-27-4	Bromodichloromethane	5	U	
78-87-5	1,2-Dichloropropane	5	U	
10061-01-5	cis-1,3-Dichloropropene	5	U	
79-01-6	Trichloroethene	5	U	
124-48-1	Dibromochloromethane	5	U	
79-00-5	1,1,2-Trichloroethane	5	U	
71-43-2	Benzene	5	U	
10061-02-6	trans-1,3-Dichloropropene	5	U	
75-25-2	Bromoform	5	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	U	
127-18-4	Tetrachloroethene	5	U	
108-88-3	Toluene	5	U	
79-34-5	1,1,2,2-Tetrachloroethane	5	U	
108-90-7	Chlorobenzene	5	U	
100-41-4	Ethylbenzene	5	U	
100-42-5	Styrene	5	U	
1330-20-7	Xylene (total)	5	U	
	2,4,4-Trimethyl-1-pentene	5	U	

(*) all positive results for $MeCl_2$ + Acetone negated DML 2/21/97

FORM I VOA

0130

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 962743C-15

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D6959

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. _____ Date Analyzed: 12/29/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

From different SDG.
No Impact (NK) 2/24/97

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	.6	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
108-05-4	Vinyl Acetate	10	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U
	2,4,4-Trimethyl-1-pentene	5	U

All MEC Hits in Assoc Samples Negated due to meth. Blank (NK) 2/24/97

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 962743C-15

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D6959

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. _____ Date Analyzed: 12/29/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

From different SDG. No Impa
MK 2/24/97

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	2,4,4-Trimethyl-2-pentene	5	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 0141

FIELD BLANK #2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 962743C-17

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D6961

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. _____ Date Analyzed: 12/29/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

From different SDG. NO Impact NK 2/24/9

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5 U
108-05-4	Vinyl Acetate	10 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
540-59-0	1,2-Dichloroethene (total)	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
75-27-4	Bromodichloromethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-02-6	trans-1,3-Dichloropropene	5 U
75-25-2	Bromoform	5 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
79-34-5	1,1,2,2-Tetrachloroethane	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
1330-20-7	Xylene (total)	5 U
	2,4,4-Trimethyl-1-pentene	5 U

0142

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK #2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 962743C-17

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D6961

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: not dec. _____ Date Analyzed: 12/29/96

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	2,4,4-Trimethyl-2-pentene	5	U

From different SDG. No Impact. WK 2/24/97

FORM I VOA

Holding Time Worksheet for Volatiles Analysis

Smth

Preserved: YES

Laboratory Sample ID	Field ID		Matrix	Date Sampled	Date Analyzed	40 CFR 136 Analysis Holding Time Satisfied		Action
						Y	N	
962743b-01	CNTR POND	DR.-3	Soil	12/16/97	12/22/96	X		
962743B-02	CNTR POND	DR.-4	Soil	12/16/96	12/24/96	X		
962743B-03	CNTR POND	DR -5	Soil	12/16/96	12/24/96	X		
962743B-04	CNTR POND	DR.-6	Soil	12/16/96	12/24/96	X		
962743B-05	CNTR POND	DR.-7	Soil	12/16/96	12/22/96	X		
962743B-06	CNTR POND	DR.-8	Soil	12/16/96	12/22/96	X		
962743B-07	CNTR POND	DR -9	Soil	12/16/96	12/22/96	X		
962743B-08	O/S CNTR POND	A8-1	Soil	12/16/96	12/24/96	X		
962743B-09	O/S CNTR POND	A8-2	Soil	12/16/96	12/24/96	X		
962743B-10	O/S CNTR POND	A8-3	Soil	12/16/96	12/24/96	X		
962743B-11	O/S CNTR POND	A8-4	Soil	12/16/96	12/24/96	X		
962743B-12	CNTR WETLAND	A8-1	Soil	12/16/96	12/26/96	X		
962743B-13	CNTR WETLAND	A8-2	Soil	12/16/96	12/26/96	X		
962743B-14	CNTR WETLAND	A8-3	Soil	12/16/96	12/26/96	X		
962743B-15	CNTR WETLAND	A8-4	Soil	12/16/96	12/26/96	X		
962743B-16	CNTR WETLAND	A9-1	Soil	12/16/96	12/26/96	X		
962743B-17	CNTR WETLAND	A9-2	Soil	12/16/96	12/26/96	X		
962743B-18	CNTR WETLAND	A9-3	Soil	12/16/96	12/27/96	X		
962743B-19	CNTR WETLAND	A9-4	Soil	12/16/96	12/26/96	X		

B2743V.XLS

QA Scientist Danielle Beauty Date 2/19/97

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

NO. 27438

JOB #:

CLIENT: ELIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

| | | |

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 3 OF 14 | NO. V/C 7/63A

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	TESTS: EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	Ammonia Sulfate PST-TCL BNA-TCL Met-MIS	EPH/VPH Ammonia Sulfate PST-TCL BNA-TCL Met-TAL				GENERAL REMARKS
	BOTTLE TYPE AND PRESERVATIVE					GL250	SEPTA60	GL250		GL 250				
	FIELD FILTERED - CIRCLE Y or N					Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS
1	CNTR POND DR.-6	12/16/96 / 1310	SO		N	2	1	BC-1						
2	CNTR POND DR.-7	12/16/96 / 1335	SO		N	2	1	BC-4						
3	CNTR POND DR.-8	12/16/96 / 1250	SO		N	2 RAM	1	2 RAM		2 BC				
4	CNTR POND DR.-9	12/16/96 / 1320	SO		N	2 RAM	1	2 RAM		2 BC 7				
5	O/S CNTR PND A8-1	12/16/96 / 1210	SO		N		1	1	BC-X		Passed Rad Screen 12/17/96 3°C			
6	O/S CNTR PND A8-2	12/16/96 / 1200	SO		N		1	1 RAM	1	BC-9				
7	O/S CNTR PND A8-3	12/16/96 / 1140	SO		N		1	1 RAM	1	BC				
8	O/S CNTR PND A8-4	12/16/96 / 1440	SO		N		1	1 RAM	1	1, 11				
9	CNTR WETLND-A8-1	12/16/96 / 1450	SO		N		1	1 RAM	1	B12				
10	CNTR WETLND-A8-2	12/16/96 / 1520	SO		N	1 RAM	1	1 RAM RAM	1	B13				

MATRIX CODES

AIR	S	SOIL	
AQUEOUS	SL	SLUDGE	
COMPLEX	W	WIPE	
DRUM WASTE	O	OTHER	
OIL	FB	FIELD BLANK	
	TB	TRIP BLANK	

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Damiani	12/10/96 16[illegible]	Russell Mehalick	12/15/96 0810
SIGNATURE		SIGNATURE	
SAMPLES ~~COLLECTED BY~~ Relinquished by: Russell Mehalick	DATE / TIME 12/16/96 1750	RECEIVED IN LAB BY: CP Damiani	DATE / TIME 12/17/96 1100
SIGNATURE Russell Mehalick		SIGNATURE	

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

LABORATORY COPY

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 4 OF 14 | NO. P7[illegible]

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO | DUE DATE

	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	TESTS: EPH/VPH, AMMONIA, SULFATE, PST-TCL, BNA-TCL, MET-MISC	VOA-MISC, VOA-TCL	MET-TAL, AMMONIA, PST-TCL, SULFATE, BNA-TCL	AMMONIA, PST-TCL, SULFATE, BNA-TCL, MET-MISC	EPH/VPH, Ammonia, Sulfate, PST-TCL, BNA-TCL, Met-TAL				GENERAL REMARKS
						BOTTLE TYPE AND PRESERVATIVE								
						GL250	SEPTA60	GL250	GL250					
						FIELD FILTERED - CIRCLE Y or N								SAMPLE REMARKS
1	CNTR WETLND-A8-3	12/16/96 / 1535	SO		N	2 ~~1~~ RAM	1			2 RAM	BH			
2	CNTR WETLND-A8-4	12/16/96 / 1505	SO		N	RAM ~~1~~	1			2	BH			
3	CNTR WETLND-A9-1	12/16/96 / 1110	SO		N		BH 1	1						Comp in lab all parameters but VOA'S
4	CNTR WETLND-A9-2	12/16/96 / 1100	SO		N	~~1~~	BH 1	1						
5	CNTR WETLND-A9-3	12/16/96 / 1045	SO		N	2 RAM	1		~~1~~ RAM	2		Passed Rad Screen		
6	CNTR WETLND-A9-4	12/16/96 / 1130	SO		N	2 RAM	BH 1		~~1~~ RAM	2		~~1~~ 12/17/96		
7	AREA 1-1	12/15/96 / 1425	SO		N		1	1						Comp in lab all parameters but VOA'S (cont.)
8	AREA 1-2	12/15/96 / 1415	SO		N		1	1						
9	AREA 1-3	12/15/96 / 1445	SO		N		1	1						
10	AREA 1-4	12/15/96 / 1435	SO		N		1	1						

MATRIX CODES

- AIR
- AQUEOUS
- COMPLEX
- DRUM WASTE
- OIL
- S - SOIL
- SL - SLUDGE
- W - WIPE
- O - OTHER
- FB - FIELD BLANK
- TB - TRIP BLANK

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
C.P. Damiani	12/10/96 1600	Russell Mehalick	12/15/96 / 0810
SIGNATURE		SIGNATURE	
		Russell Mehalick	
SAMPLES COLLECTED BY Relinquished by	DATE / TIME	RECEIVED IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	C.P. Damiani	12/17/96 1100
SIGNATURE		SIGNATURE	
Russell Mehalick			

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

LABORATORY COPY

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB940 BFB Injection Date:12/20/96

Instrument ID: HP5995B BFB Injection Time:1536

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.8
75	30.0 - 60.0% of mass 95	43.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.7 (7.6)1
176	95.0 - 101.0% of mass 174	73.7 (98.4)1
177	5.0 - 9.0% of mass 176	5.5 (7.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	>B2622	12/20/96	1619
02	VSTD020	VSTD020	>B2623	12/20/96	1657
03	VSTD050	VSTD050	>B2624	12/20/96	1735
04	VSTD100	VSTD100	>B2625	12/20/96	1813
05	VSTD200	VSTD200	>B2626	12/20/96	1850
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB943 BFB Injection Date:12/22/96

Instrument ID: HP5995B BFB Injection Time:1007

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.1
75	30.0 - 60.0% of mass 95	45.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	85.2
175	5.0 - 9.0% of mass 174	6.4 (7.5)1
176	95.0 - 101.0% of mass 174	83.7 (98.3)1
177	5.0 - 9.0% of mass 176	6.0 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>B2644	12/22/96	1042
02	VBLKBU	VBLKBU	>B2646	12/22/96	1248
03	R POND DR.-3	962743B-01	>B2653	12/22/96	1738
04	R POND DR.-7	962743B-05	>B2655	12/22/96	1853
05	R POND DR.-8	962743B-06	>B2656	12/22/96	1931
06	R POND DR.-9	962743B-07	>B2657	12/22/96	2009
07					
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB945 BFB Injection Date:12/23/96

Instrument ID: HP5995B BFB Injection Time:1853

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	40.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	79.0
175	5.0 - 9.0% of mass 174	5.7 (7.2)1
176	95.0 - 101.0% of mass 174	75.8 (96.0)1
177	5.0 - 9.0% of mass 176	5.2 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>B2677	12/23/96	1939
02	VBLKBW	VBLKBW	>B2678	12/23/96	2052
03	R POND DR.-4	962743B-02	>B2683	12/24/96	0039
04	R POND DR.-5	962743B-03	>B2684	12/24/96	0116
05	R POND DR.-6	962743B-04	>B2685	12/24/96	0154
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB947 BFB Injection Date:12/24/96

Instrument ID: HP5995B BFB Injection Time:0929

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	38.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	1.0 (1.3)1
174	Greater than 50% of mass 95	79.5
175	5.0 - 9.0% of mass 174	5.4 (6.7)1
176	95.0 - 101.0% of mass 174	77.5 (97.5)1
177	5.0 - 9.0% of mass 176	6.1 (7.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>B2688	12/24/96	1012
02	VBLKBX	VBLKBX	>B2689	12/24/96	1132
03	NTR PND A8-1	962743B-08	>B2696	12/24/96	1620
04	NTR PND A8-2	962743B-09	>B2697	12/24/96	1658
05	NTR PND A8-3	962743B-10	>B2699	12/24/96	1813
06	NTR PND A8-4	962743B-11	>B2700	12/24/96	1851
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

0924

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB950 BFB Injection Date:12/26/96

Instrument ID: HP5995B BFB Injection Time:0835

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	46.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	80.6
175	5.0 - 9.0% of mass 174	5.5 (6.8)1
176	95.0 - 101.0% of mass 174	78.4 (97.3)1
177	5.0 - 9.0% of mass 176	5.3 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>B2704	12/26/96	0910
02	VBLKBY	VBLKBY	>B2705	12/26/96	1024
03	WETLND-A8-1	962743B-12	>B2706	12/26/96	1131
04	WETLND-A8-2	962743B-13	>B2707	12/26/96	1209
05	WETLND-A8-3	962743B-14	>B2708	12/26/96	1247
06	WETLND-A8-4	962743B-15	>B2709	12/26/96	1324
07	WETLND-A9-1	962743B-16	>B2710	12/26/96	1402
08	WETLND-A9-2	962743B-17	>B2711	12/26/96	1439
09	WETLND-A9-4	962743B-19	>B2713	12/26/96	1554
10	POND DR.-8MS	962743B-06MS	>B2714	12/26/96	1632
11	OND DR.-8MSD	962743B-06MSD	>B2715	12/26/96	1709
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FORM V VOA

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

0025

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Lab File ID: >BB952 BFB Injection Date:12/27/96

Instrument ID: HP5995B BFB Injection Time:0840

GC Column: 007-624 ID: 0.53 Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.0
75	30.0 - 60.0% of mass 95	44.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	82.6
175	5.0 - 9.0% of mass 174	6.2 (7.5)1
176	95.0 - 101.0% of mass 174	81.6 (98.8)1
177	5.0 - 9.0% of mass 176	5.2 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	>B2723	12/27/96	0914
02	VBLKBZ	VBLKBZ	>B2724	12/27/96	1036
03	WETLND-A9-3	962743B-18	>B2725	12/27/96	1141
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FORM V VOA

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Calibration Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

LAB FILE ID: RRF10 = >B2622 RRF20 = >B2623
RRF50 = >B2624 RRF100= >B2625 RRF200= >B2626

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane *	1.460	1.478	1.418	1.217	1.013	1.297	16.7 *
Bromomethane	1.374	1.403	1.212	0.887	0.621	1.099	30.7
Vinyl Chloride *	1.597	1.636	1.413	1.116	0.966	1.346	21.9 *
Chloroethane	1.292	0.228	1.429	1.039	0.576	0.913	55.0
Methylene Chloride	1.943	1.772	1.633	1.291	0.934	1.515	26.6
Acetone	1.153	0.969	0.852	1.190	0.880	0.989	13.2
Carbon Disulfide	4.676	4.665	4.481	3.541	0.510	3.579	49.6
1,1-Dichloroethene *	1.433	1.368	1.281	0.854	0.910	1.189	20.3 *
1,1-Dichloroethane *	3.122	3.129	3.164	3.188	3.295	3.176	2.2 *
1,2-Dichloroethene (total)	1.602	1.605	1.525	1.461	1.325	1.504	7.7
Chloroform *	3.231	3.250	3.163	3.090	3.172	3.181	2.0 *
1,2-Dichloroethane *	2.843	2.836	2.748	2.735	2.749	2.782	1.9 *
2-Butanone	0.746	0.777	0.942	1.744	1.925	1.227	45.9
1,1,1-Trichloroethane	0.493	0.484	0.482	0.452	0.422	0.467	6.3
Carbon Tetrachloride	0.424	0.416	0.417	0.381	0.357	0.399	7.2
Bromodichloromethane	0.469	0.476	0.465	0.453	0.460	0.465	1.9
1,2-Dichloropropane	0.351	0.330	0.340	0.342	0.359	0.344	3.2
cis-1,3-dichloropropene	0.531	0.534	0.543	0.523	0.545	0.535	1.7
Trichloroethene	0.366	0.362	0.335	0.337	0.340	0.348	4.2
Dibromochloromethane	0.376	0.385	0.394	0.380	0.400	0.387	2.6
1,1,2-Trichloroethane	0.293	0.294	0.303	0.321	0.323	0.307	4.7
Benzene	1.040	1.023	1.043	1.029	1.052	1.037	1.1
trans-1,3-Dichloropropene	0.498	0.489	0.492	0.518	0.534	0.506	3.8
Bromoform *	0.324	0.299	0.322	0.330	0.336	0.322	4.4 *
4-Methyl-2-Pentanone	0.389	0.470	0.557	0.877	0.984	0.655	39.8
2-Hexanone	0.071	0.173	0.306	0.609	0.752	0.382	75.7
Tetrachloroethene	0.478	0.456	0.430	0.478	0.478	0.464	4.6
1,1,2,2-Tetrachloroethane *	0.625	0.617	0.593	0.757	0.779	0.674	12.9 *
Toluene *	1.726	1.636	1.623	1.636	1.630	1.650	2.6 *
Chlorobenzene *	1.109	1.114	1.029	1.055	0.995	1.060	4.8 *
Ethylbenzene *	0.560	0.554	0.562	0.549	0.521	0.549	3.0 *
Styrene	1.124	1.111	1.112	1.125	1.034	1.101	3.5
Xylene (total)	0.670	0.676	0.656	0.622	0.577	0.640	6.4
2,4,4-Trimethyl-1-pentene	4.921	4.924	5.078	5.059	0.147	4.026	53.9
2,4,4-Trimethyl-2-pentene	3.330	3.503	3.431	3.328	1.666	3.052	25.5
Vinyl Acetate	0.749	0.750	0.848	0.869	0.900	0.823	8.5

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

(+) %RSD over 30% positive results "J", %RSD 50% quantitation limits "UJ"

FORM VI VOA

DMC 2/20/97

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

b Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Calibration Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

LAB FILE ID: RRF10 = >B2622 RRF20 = >B2623
RRF50 = >B2624 RRF100= >B2625 RRF200= >B2626

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Toluene-d8	1.435	1.336	1.329	1.304	1.327	1.346	3.8
Bromofluorobenzene	0.898	0.866	0.825	0.762	0.705	0.811	9.6
1,2-Dichloroethane-d4	2.395	2.307	2.235	2.259	2.216	2.282	3.1

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

0184

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: ____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/22/96 Time: 1042

Lab File ID: >B2644 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.297	1.461	0.300	12.6	
Bromomethane	1.099	1.284		16.8	
Vinyl Chloride	1.346	1.451		7.8	25.0
Chloroethane	0.913	1.272		39.3	
Methylene Chloride	1.515	1.501		-0.9	
Acetone	0.989	0.818		-17.3	
Carbon Disulfide	3.579	4.488		25.4	
1,1-Dichloroethene	1.189	1.277		7.4	25.0
1,1-Dichloroethane	3.176	3.081	0.3[illegible]	-3.0	
1,2-Dichloroethene (total)	1.504	1.552		3.3	
Chloroform	3.181	3.100		-2.6	25.0
1,2-Dichloroethane	2.782	2.762		-0.7	
2-Butanone	1.227	1.105		-9.9	
1,1,1-Trichloroethane	0.467	0.482		3.2	
Carbon Tetrachloride	0.399	0.416		4.3	
Bromodichloromethane	0.465	0.456		-1.9	
1,2-Dichloropropane	0.344	0.318		-7.6	25.0
trans-1,3-Dichloropropene	0.506	0.506		0.0	
Trichloroethene	0.348	0.348		0.0	
Dibromochloromethane	0.387	0.382		-1.3	
1,1,2-Trichloroethane	0.307	0.288		-6.2	
Benzene	1.037	0.959		-7.5	
cis-1,3-Dichloropropene	0.535	0.523		-2.2	
Bromoform	0.322	0.338	0.250	5.0	
2-Hexanone	0.382	0.367		-3.9	
4-Methyl-2-Pentanone	0.655	0.659		0.6	
Tetrachloroethene	0.464	0.450		-3.0	
1,1,2,2-Tetrachloroethane	0.674	0.694	0.300	3.0	
Toluene	1.650	1.656		0.4	25.0
Chlorobenzene	1.060	1.099	0.300	3.7	
Ethylbenzene	0.549	0.553		0.7	25.0
Styrene	1.101	1.142		3.7	
Xylene (total)	0.640	0.654		2.2	
2,4,4-Trimethyl-1-pentene	4.026	4.952		23.0	
2,4,4-Trimethyl-2-pentene	3.052	3.437		12.6	
Vinyl Acetate	0.823	0.736		-10.6	

All other compounds must meet a minimum RRF of 0.010.

⊕ %DS gtr than 25% positive results "J", gtr than 50% quantitation limits "UJ"
No positive = no impact DML 2/21/97

FORM VII VOA

DML 2/10/97

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/22/96 Time: 1042

Lab File ID: >B2644 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene	0.811	0.868		7.0	
Toluene-d8	1.346	1.319		-2.0	
1,2-Dichloroethane-d4	2.282	2.250		-1.4	

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

0190

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/23/96 Time: 1939

Lab File ID: >B2677 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.297	1.188	0.300	-8.4	
Bromomethane	1.099	1.166		6.1	
Vinyl Chloride	1.346	1.259		-6.5	25.0
Chloroethane	0.913	1.151		26.1	
Methylene Chloride	1.515	1.426		-5.9	
Acetone	0.989	0.714		-27.8	
Carbon Disulfide	3.579	4.988		39.4	
1,1-Dichloroethene	1.189	1.217		2.4	25.0
1,1-Dichloroethane	3.176	2.794	0.300	-12.0	
1,2-Dichloroethene (total)	1.504	1.468		-2.4	
Chloroform	3.181	2.928		-8.0	25.0
1,2-Dichloroethane	2.782	2.687		-3.4	
2-Butanone	1.227	1.036		-15.6	
1,1,1-Trichloroethane	0.467	0.460		-1.5	
Carbon Tetrachloride	0.399	0.402		0.8	
Bromodichloromethane	0.465	0.471		1.3	
1,2-Dichloropropane	0.344	0.326		-5.2	25.0
trans-1,3-Dichloropropene	0.506	0.495		-2.2	
Trichloroethene	0.348	0.334		-4.0	
Dibromochloromethane	0.387	0.390		0.8	
1,1,2-Trichloroethane	0.307	0.282		-8.1	
Benzene	1.037	1.009		-2.7	
cis-1,3-Dichloropropene	0.535	0.508		-5.0	
Bromoform	0.322	0.326	0.250	1.2	
2-Hexanone	0.382	0.347		-9.2	
4-Methyl-2-Pentanone	0.655	0.602		-8.1	
Tetrachloroethene	0.464	0.450		-3.0	
1,1,2,2-Tetrachloroethane	0.674	0.671	0.300	-0.4	
Toluene	1.650	1.635		-0.9	25.0
Chlorobenzene	1.060	1.073	0.300	1.2	
Ethylbenzene	0.549	0.544		-0.9	25.0
Styrene	1.101	1.132		2.8	
Xylene (total)	0.640	0.637		-0.5	
2,4,4-Trimethyl-1-pentene	4.026	4.765		18.4	
2,4,4-Trimethyl-2-pentene	3.052	3.243		6.3	
Vinyl Acetate	0.823	0.806		-2.1	

(+) No hits
(+) + results
(+) No hits

All other compounds must meet a minimum RRF of 0.010.

(+) %DS gtr than 25%, positive results "J", gtr than 50% quantitation limits "U"
Acetone 'J' on 962743B-02, 03, 04

DML 2/21/97

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

0191

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/23/96 Time: 1939

Lab File ID: >B2677 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene	0.811	0.849		4.7	
Toluene-d8	1.346	1.297		-3.6	
1,2-Dichloroethane-d4	2.282	2.164		-5.2	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/24/96 Time: 1012

Lab File ID: >B2688 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	1.297	1.270	0.300	-2.1		
Bromomethane	1.099	1.151		4.7		
Vinyl Chloride	1.346	1.402		4.2	25.0	
Chloroethane	0.913	1.205		32.0		(+) - no limits
Methylene Chloride	1.515	1.434		-5.4		
Acetone	0.989	0.808		-18.3		
Carbon Disulfide	3.579	5.298		48.0		(+) no limits
1,1-Dichloroethene	1.189	1.236		4.0	25.0	
1,1-Dichloroethane	3.176	2.958	0.300	-6.9		
1,2-Dichloroethene (total)	1.504	1.484		-1.3		
Chloroform	3.181	2.939		-7.6	25.0	
1,2-Dichloroethane	2.782	2.726		-2.0		
2-Butanone	1.227	1.154		-6.0		
1,1,1-Trichloroethane	0.467	0.449		-3.8		
Carbon Tetrachloride	0.399	0.387		-3.0		
Bromodichloromethane	0.465	0.463		-0.4		
1,2-Dichloropropane	0.344	0.328		-4.6	25.0	
trans-1,3-Dichloropropene	0.506	0.508		0.4		
Trichloroethene	0.348	0.342		-1.7		
Dibromochloromethane	0.387	0.392		1.3		
1,1,2-Trichloroethane	0.307	0.294		-4.2		
Benzene	1.037	0.984		-5.1		
cis-1,3-Dichloropropene	0.535	0.512		-4.3		
Bromoform	0.322	0.339	0.250	5.3		
2-Hexanone	0.382	0.386		1.0		
4-Methyl-2-Pentanone	0.655	0.688		5.0		
Tetrachloroethene	0.464	0.430		-7.3		
1,1,2,2-Tetrachloroethane	0.674	0.692	0.300	2.7		
Toluene	1.650	1.593		-3.4	25.0	
Chlorobenzene	1.060	1.071	0.300	1.0		
Ethylbenzene	0.549	0.526		-4.2	25.0	
Styrene	1.101	1.122		1.9		
Xylene (total)	0.640	0.630		-1.6		
2,4,4-Trimethyl-1-pentene	4.026	4.764		18.3		
2,4,4-Trimethyl-2-pentene	3.052	3.364		10.2		
Vinyl Acetate	0.823	0.791		-3.9		

All other compounds must meet a minimum RRF of 0.010.

(+ %D) is gtr than 25% positive results "J", gtr than 50% quantitation limit "UJ"
No positive results = No impact
JML 2/21/97

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/24/96 Time: 1012

Lab File ID: >B2688 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene	0.811	0.851		4.9	
Toluene-d8	1.346	1.288		-4.3	
1,2-Dichloroethane-d4	2.282	2.208		-3.2	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/26/96 Time: 0910

Lab File ID: >B2704 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	1.297	1.385	0.300	6.8		
Bromomethane	1.099	1.322		20.3		
Vinyl Chloride	1.346	1.453		8.0	25.0	
Chloroethane	0.913	1.320		44.6		(+) no data
Methylene Chloride	1.515	1.588		4.8		
Acetone	0.989	0.678		-31.4		(+) + results
Carbon Disulfide	3.579	5.800		62.0		(+) No data, ALL
1,1-Dichloroethene	1.189	1.376		15.7	25.0	
1,1-Dichloroethane	3.176	3.041	0.200	-4.2		
1,2-Dichloroethene (total)	1.504	1.608		6.9		
Chloroform	3.181	3.182		0.0	25.0	
1,2-Dichloroethane	2.782	2.804		0.8		
2-Butanone	1.227	0.893		-27.2		(+) No data
1,1,1-Trichloroethane	0.467	0.493		5.6		
Carbon Tetrachloride	0.399	0.420		5.3		
Bromodichloromethane	0.465	0.499		7.3		
1,2-Dichloropropane	0.344	0.337		-2.0	25.0	
trans-1,3-Dichloropropene	0.506	0.544		7.5		
Trichloroethene	0.348	0.353		1.4		
Dibromochloromethane	0.387	0.408		5.4		
1,1,2-Trichloroethane	0.307	0.308		0.3		
Benzene	1.037	1.010		-2.6		
cis-1,3-Dichloropropene	0.535	0.530		-0.9		
Bromoform	0.322	0.339	0.250	5.3		
2-Hexanone	0.382	0.288		-24.6		
4-Methyl-2-Pentanone	0.655	0.522		-20.3		
Tetrachloroethene	0.464	0.446		-3.9		
1,1,2,2-Tetrachloroethane	0.674	0.608	0.300	-9.8		
Toluene	1.650	1.608		-2.5	25.0	
Chlorobenzene	1.060	1.062	0.300	0.2		
Ethylbenzene	0.549	0.538		-2.0	25.0	
Styrene	1.101	1.120		1.7		
Xylene (total)	0.640	0.657		2.7		
2,4,4-Trimethyl-1-pentene	4.026	5.036		25.1		(+) + result est due to I int
2,4,4-Trimethyl-2-pentene	3.052	3.524		15.5		
Vinyl Acetate	0.823	0.767		-6.8		

All other compounds must meet a minimum RRF of 0.010.

(+) %Ds gtr than 25% positive result "J", %Ds gtr than 50% quantitation limits "UJ"
462743B-12, 13, 14, 15, 16, 17 + 19 acetone "J" & carbon disulfide "UJ"

FORM VII VOA

DMC 2/21/97

7A
VOLATILE CONTINUING CALIBRATION CHECK

0203

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/26/96 Time: 0910

Lab File ID: >B2704 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene	0.811	0.822		1.4	
Toluene-d8	1.346	1.310		-2.7	
1,2-Dichloroethane-d4	2.282	2.252		-1.3	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

0203

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/27/96 Time: 0914

Lab File ID: >B2723 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	1.297	1.354	0.300	4.4		
Bromomethane	1.099	1.273		15.8		
Vinyl Chloride	1.346	1.477		9.7	25.0	
Chloroethane	0.913	1.296		41.9		+ NO Hits
Methylene Chloride	1.515	1.452		-4.2		
Acetone	0.989	0.695		-29.7		+ NO Hits in occ.
Carbon Disulfide	3.579	5.403		51.0		+ SLs
1,1-Dichloroethene	1.189	1.275		7.2	25.0	
1,1-Dichloroethane	3.176	3.054	0.300	-3.8		
1,2-Dichloroethene (total)	1.504	1.564		4.1		
Chloroform	3.181	3.116		-2.0	25.0	
1,2-Dichloroethane	2.782	2.783		0.0		
2-Butanone	1.227	0.898		-26.8		+ NO Hits
1,1,1-Trichloroethane	0.467	0.471		0.8		
Carbon Tetrachloride	0.399	0.405		1.5		
Bromodichloromethane	0.465	0.456		-1.9		
1,2-Dichloropropane	0.344	0.322		-6.4	25.0	
trans-1,3-Dichloropropene	0.506	0.500		-1.2		
Trichloroethene	0.348	0.335		-3.7		
Dibromochloromethane	0.387	0.373		-3.6		
1,1,2-Trichloroethane	0.307	0.267		-13.0		
Benzene	1.037	0.989		-4.6		
cis-1,3-Dichloropropene	0.535	0.511		-4.5		
Bromoform	0.322	0.321	0.250	-0.3		
2-Hexanone	0.382	0.273		-28.5		+ NO Hits
4-Methyl-2-Pentanone	0.655	0.526		-19.7		
Tetrachloroethene	0.464	0.438		-5.6		
1,1,2,2-Tetrachloroethane	0.674	0.601	0.300	-10.8		
Toluene	1.650	1.624		-1.6	25.0	
Chlorobenzene	1.060	1.059	0.300	-0.1		
Ethylbenzene	0.549	0.534		-2.7	25.0	
Styrene	1.101	1.085		-1.4		
Xylene (total)	0.640	0.624		-2.5		
2,4,4-Trimethyl-1-pentene	4.026	4.901		21.7		
2,4,4-Trimethyl-2-pentene	3.052	3.239		6.1		
Vinyl Acetate	0.823	0.727		-11.7		

All other compounds must meet a minimum RRF of 0.010.

+ %Ds gtr than 25% positive results "J", gtr than 50% quantitation limit "UJ"

962743 B18 carbon disulfide "UJ"

FORM VII VOA

DMC 2/21/97

7A
VOLATILE CONTINUING CALIBRATION CHECK

0209

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5995B Calibration Date: 12/27/96 Time: 0914

Lab File ID: >B2723 Init. Calib. Date(s): 12/20/96 _____

Heated Purge: (Y/N) Y Init. Calib. Times: 1619 1850

GC Column: 007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Bromofluorobenzene	0.811	0.836		3.1	
Toluene-d8	1.346	1.309		-2.8	
1,2-Dichloroethane-d4	2.282	2.245		-1.6	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA

SMITH

APPENDIX B

Volatile/Semivolatile Data Validation Summary — SMTH

SMTH Project Name:	Olin - Mass	Case No./SDG:	B2743
SMTH Project No.:	00-7074-0102	Sampling Date(s):	12/10/96
Project Manager:	B. Rushing	Reviewed By:	M. Kudlesky
Laboratory:	IEA	Completion Date:	2/20/97

Fraction Reviewed: [X] VOLATILE ORGANICS (error (MK) 2/20/97) [X] SEMIVOLATILE ORGANICS

Compound List: [X] TCL 2/88 [ ] Priority Pollutant [ ] Appendix IX [ ] Other

Method: [ ] CLP SOW____ [ ] 40 CFR 136 Method____ [X] SW-846 Method 8270 [ ] Other

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times		✓	✓ (MK 2/24/97)	~~Estimate all positive results and reanalyze all samples~~ (MK) 2/24/97 W/IN SW846 hold time
GC/MS Tuning	✓			
Initial Calibrations	✓			
Continuing Calibrations		✓	✓ (MK 2/24/97)	%D exceed accept limit. only CNTR POND DR.-8 MSD impacted. Does not affect samples
Blank Analysis Results			✓	Diethylphthalate & di-n-butylphthalate
System Monitoring/Surrogate Results		✓		CNTR Wetland-AB-1 surrogates diluted out due to 400x dilut
MS/MSD Results		✓		4-nitrophenol - MSD exhibited a high %R, Acenaphthene & 4-nitrophenol - high % RPD in sam
Field Duplicate Results		✓		No field dups in this SDG
Internal Standard Areas/RT	✓			
Target Compound Identification	✓			Review not req'd for Tier II. However, MS reviewed & OK
TIC Identification		✓		No TICs reported.
Quantitation/Detection Limits	✓			All detected compds reported & conc on Quant reports verified to Form I. Quantitations where not recalculated.
System Performance		✓		Not required for Tier II
Overall Assessment of Data	✓			
Other:				

General Comments: _____

NA - Not applicable
NR - Not reviewed

QA Scientist M. Kudlesky Date 2/20/97

0291

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-01

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9046

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 4.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	960	U
111-44-4	bis(2-Chloroethyl)ether	960	U
95-57-8	2-Chlorophenol	960	U
541-73-1	1,3-Dichlorobenzene	960	U
106-46-7	1,4-Dichlorobenzene	960	U
100-51-6	Benzyl alcohol	960	U
95-50-1	1,2-Dichlorobenzene	960	U
95-48-7	2-Methylphenol	960	U
108-60-1	2,2'-oxybis(1-Chloropropane)	960	U
106-44-5	4-Methylphenol	960	U
621-64-7	N-Nitroso-di-n-propylamine	960	U
67-72-1	Hexachloroethane	960	U
98-95-3	Nitrobenzene	960	U
78-59-1	Isophorone	960	U
88-75-5	2-Nitrophenol	960	U
105-67-9	2,4-Dimethylphenol	960	U
65-85-0	Benzoic acid	4600	U
111-91-1	Bis(2-Chloroethoxy)methane	960	U
120-83-2	2,4-Dichlorophenol	960	U
120-82-1	1,2,4-Trichlorobenzene	960	U
91-20-3	Naphthalene	960	U
106-47-8	4-Chloroaniline	960	U
87-68-3	Hexachlorobutadiene	960	U
59-50-7	4-Chloro-3-methylphenol	960	U
91-57-6	2-Methylnaphthalene	960	U
77-47-4	Hexachlorocyclopentadiene	960	U
88-06-2	2,4,6-Trichlorophenol	960	U
95-95-4	2,4,5-Trichlorophenol	4600	U
91-58-7	2-Chloronaphthalene	960	U
88-74-4	2-Nitroaniline	4600	U
131-11-3	Dimethylphthalate	960	U
208-96-8	Acenaphthylene	960	U
606-20-2	2,6-Dinitrotoluene	960	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 27438 SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-01

Sample wt/vol: 30 (g/mL) G Lab File ID: >C9046

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 4.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4600	U
83-32-9	Acenaphthene	960	U
51-28-5	2,4-Dinitrophenol	4600	U
100-02-7	4-Nitrophenol	4600	U
132-64-9	Dibenzofuran	960	U
121-14-2	2,4-Dinitrotoluene	960	U
84-66-2	Diethylphthalate	960	U
7005-72-3	4-Chlorophenyl-phenylether	960	U
86-73-7	Fluorene	960	U
100-01-6	4-Nitroaniline	4600	U
534-52-1	4,6-Dinitro-2-methylphenol	4600	U
86-30-6	N-Nitrosodiphenylamine (1)	960	U
101-55-3	4-Bromophenyl-phenylether	960	U
118-74-1	Hexachlorobenzene	960	U
87-86-5	Pentachlorophenol	4600	U
85-01-8	Phenanthrene	960	U
120-12-7	Anthracene	960	U
84-74-2	Di-n-butylphthalate	960	U
206-44-0	Fluoranthene	960	U
129-00-0	Pyrene	960	U
85-68-7	Butylbenzylphthalate	960	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)anthracene	960	U
218-01-9	Chrysene	960	U
117-81-7	bis(2-Ethylhexyl)phthalate	5300	
117-84-0	Di-n-octylphthalate	960	U
205-99-2	Benzo(b)fluoranthene	960	U
207-08-9	Benzo(k)fluoranthene	960	U
50-32-8	Benzo(a)pyrene	960	U
193-39-5	Indeno(1,2,3-cd)pyrene	960	U
53-70-3	Dibenzo(a,h)anthracene	960	U
191-24-2	Benzo(g,h,i)perylene	960	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0299

CNTR POND DR.-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9056

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 50 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
108-60-1	2,2'-oxybis(1-Chloropropane)	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-di-n-propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic acid	260	J
111-91-1	bis(2-Chloroethoxy)methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethylphthalate	660	U
208-96-8	Acenaphthylene	66	J
606-20-2	2,6-Dinitrotoluene	660	U

0300

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >03056

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 50 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	[redacted]	
84-74-2	Di-n-butylphthalate	660	U
206-44-0	Fluoranthene	98	J
129-00-0	Pyrene	68	J
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)anthracene	660	U
218-01-9	Chrysene	660	U
117-81-7	bis(2-Ethylhexyl)phthalate	1100	
117-84-0	Di-n-octylphthalate	660	U
205-99-2	Benzo(b)fluoranthene	660	U
207-08-9	Benzo(k)fluoranthene	660	U
50-32-8	Benzo(a)pyrene	660	U
193-39-5	Indeno(1,2,3-cd)pyrene	660	U
53-70-3	Dibenzo(a,h)anthracene	660	U
191-24-2	Benzo(g,h,i)perylene	660	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0310

CNTR POND DR.-5

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9048

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 46 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	610	U
111-44-4	bis(2-Chloroethyl)ether	610	U
95-57-8	2-Chlorophenol	610	U
541-73-1	1,3-Dichlorobenzene	610	U
106-46-7	1,4-Dichlorobenzene	610	U
100-51-6	Benzyl alcohol	610	U
95-50-1	1,2-Dichlorobenzene	610	U
95-48-7	2-Methylphenol	610	U
108-60-1	2,2'-oxybis(1-Chloropropane)	610	U
106-44-5	4-Methylphenol	610	U
621-64-7	N-Nitroso-di-n-propylamine	610	U
67-72-1	Hexachloroethane	610	U
98-95-3	Nitrobenzene	610	U
78-59-1	Isophorone	610	U
88-75-5	2-Nitrophenol	610	U
105-67-9	2,4-Dimethylphenol	610	U
65-85-0	Benzoic acid	290	J
111-91-1	bis(2-Chloroethoxy)methane	610	U
120-83-2	2,4-Dichlorophenol	610	U
120-82-1	1,2,4-Trichlorobenzene	610	U
91-20-3	Naphthalene	610	U
106-47-8	4-Chloroaniline	610	U
87-68-3	Hexachlorobutadiene	610	U
59-50-7	4-Chloro-3-methylphenol	610	U
91-57-6	2-Methylnaphthalene	610	U
77-47-4	Hexachlorocyclopentadiene	610	U
88-06-2	2,4,6-Trichlorophenol	610	U
95-95-4	2,4,5-Trichlorophenol	3000	U
91-58-7	2-Chloronaphthalene	610	U
88-74-4	2-Nitroaniline	3000	U
131-11-3	Dimethylphthalate	610	U
208-96-8	Acenaphthylene	610	U
606-20-2	2,6-Dinitrotoluene	610	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-5

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9048

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 46 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3000	U
83-32-9	Acenaphthene	610	U
51-28-5	2,4-Dinitrophenol	3000	U
100-02-7	4-Nitrophenol	3000	U
132-64-9	Dibenzofuran	610	U
121-14-2	2,4-Dinitrotoluene	610	U
84-66-2	Diethylphthalate	610	U
7005-72-3	4-Chlorophenyl-phenylether	610	U
86-73-7	Fluorene	610	U
100-01-6	4-Nitroaniline	3000	U
534-52-1	4,6-Dinitro-2-methylphenol	3000	U
86-30-6	N-Nitrosodiphenylamine (1)	610	U
101-55-3	4-Bromophenyl-phenylether	610	U
118-74-1	Hexachlorobenzene	610	U
87-86-5	Pentachlorophenol	3000	U
85-01-8	Phenanthrene	610	U
120-12-7	Anthracene	610	U
84-74-2	Di-n-butylphthalate	610	U
206-44-0	Fluoranthene	610	U
129-00-0	Pyrene	610	U
85-68-7	Butylbenzylphthalate	610	U
91-94-1	3,3'-Dichlorobenzidine	1200	U
56-55-3	Benzo(a)anthracene	610	U
218-01-9	Chrysene	610	U
117-81-7	bis(2-Ethylhexyl)phthalate	220	J
117-84-0	Di-n-octylphthalate	610	U
205-99-2	Benzo(b)fluoranthene	610	U
207-08-9	Benzo(k)fluoranthene	610	U
50-32-8	Benzo(a)pyrene	610	U
193-39-5	Indeno(1,2,3-cd)pyrene	610	U
53-70-3	Dibenzo(a,h)anthracene	610	U
191-24-2	Benzo(g,h,i)perylene	610	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0318

CNTR POND DR.-6

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9047

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
100-51-6	Benzyl alcohol	420	U
95-50-1	1,2-Dichlorobenzene	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
65-85-0	Benzoic acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	420	U
208-96-8	Acenaphthylene	420	U
606-20-2	2,6-Dinitrotoluene	420	U

0319

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-6

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9047

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	420	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
86-73-7	Fluorene	420	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
84-74-2	Di-n-butylphthalate	37	JB
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	840	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	130	J
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

0326

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-7

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-05

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9049

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 53 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	700	U
111-44-4	bis(2-Chloroethyl)ether	700	U
95-57-8	2-Chlorophenol	700	U
541-73-1	1,3-Dichlorobenzene	700	U
106-46-7	1,4-Dichlorobenzene	700	U
100-51-6	Benzyl alcohol	700	U
95-50-1	1,2-Dichlorobenzene	700	U
95-48-7	2-Methylphenol	700	U
108-60-1	2,2'-oxybis(1-Chloropropane)	700	U
106-44-5	4-Methylphenol	700	U
621-64-7	N-Nitroso-di-n-propylamine	700	U
67-72-1	Hexachloroethane	700	U
98-95-3	Nitrobenzene	700	U
78-59-1	Isophorone	700	U
88-75-5	2-Nitrophenol	700	U
105-67-9	2,4-Dimethylphenol	700	U
65-85-0	Benzoic acid	3400	U
111-91-1	bis(2-Chloroethoxy)methane	700	U
120-83-2	2,4-Dichlorophenol	700	U
120-82-1	1,2,4-Trichlorobenzene	700	U
91-20-3	Naphthalene	700	U
106-47-8	4-Chloroaniline	700	U
87-68-3	Hexachlorobutadiene	700	U
59-50-7	4-Chloro-3-methylphenol	700	U
91-57-6	2-Methylnaphthalene	700	U
77-47-4	Hexachlorocyclopentadiene	700	U
88-06-2	2,4,6-Trichlorophenol	700	U
95-95-4	2,4,5-Trichlorophenol	3400	U
91-58-7	2-Chloronaphthalene	700	U
88-74-4	2-Nitroaniline	3400	U
131-11-3	Dimethylphthalate	700	U
208-96-8	Acenaphthylene	700	U
606-20-2	2,6-Dinitrotoluene	700	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-7

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-05

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9049

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 53 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3400	U
83-32-9	Acenaphthene	700	U
51-28-5	2,4-Dinitrophenol	3400	U
100-02-7	4-Nitrophenol	3400	U
132-64-9	Dibenzofuran	700	U
121-14-2	2,4-Dinitrotoluene	700	U
84-66-2	Diethylphthalate	700	U
7005-72-3	4-Chlorophenyl-phenylether	700	U
86-73-7	Fluorene	700	U
100-01-6	4-Nitroaniline	3400	U
534-52-1	4,6-Dinitro-2-methylphenol	3400	U
86-30-6	N-Nitrosodiphenylamine (1)	700	U
101-55-3	4-Bromophenyl-phenylether	700	U
118-74-1	Hexachlorobenzene	700	U
87-86-5	Pentachlorophenol	3400	U
85-01-8	Phenanthrene	700	U
120-12-7	Anthracene	700	U
84-74-2	Di-n-butylphthalate	700	U
206-44-0	Fluoranthene	700	U
129-00-0	Pyrene	700	U
85-68-7	Butylbenzylphthalate	700	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)anthracene	700	U
218-01-9	Chrysene	700	U
117-81-7	bis(2-Ethylhexyl)phthalate	540	J
117-84-0	Di-n-octylphthalate	700	U
205-99-2	Benzo(b)fluoranthene	700	U
207-08-9	Benzo(k)fluoranthene	700	U
50-32-8	Benzo(a)pyrene	700	U
193-39-5	Indeno(1,2,3-cd)pyrene	700	U
53-70-3	Dibenzo(a,h)anthracene	700	U
191-24-2	Benzo(g,h,i)perylene	700	U

(1) - Cannot be separated from Diphenylamine

0334

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-8

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-06

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9050

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
100-51-6	Benzyl alcohol	420	U
95-50-1	1,2-Dichlorobenzene	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
65-85-0	Benzoic acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	420	U
208-96-8	Acenaphthylene	420	U
606-20-2	2,6-Dinitrotoluene	420	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-8

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-06

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9050

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	420	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
86-73-7	Fluorene	420	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
84-74-2	Di-n-butylphthalate	**44**	**JB**
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	840	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	**720**	
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-9

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-07

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9051

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
100-51-6	Benzyl alcohol	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
65-85-0	Benzoic acid	1900	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U

0343

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR POND DR.-9

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-07

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9051

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	390	U
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
84-74-2	Di-n-butylphthalate	43	JB
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	780	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	90	J
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

0350

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

O/S CNTR PND A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-08

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9052

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440	U
111-44-4	bis(2-Chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
100-51-6	Benzyl alcohol	440	U
95-50-1	1,2-Dichlorobenzene	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2'-oxybis(1-Chloropropane)	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
65-85-0	Benzoic acid	2200	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	2200	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	2200	U
131-11-3	Dimethylphthalate	440	U
208-96-8	Acenaphthylene	440	U
606-20-2	2,6-Dinitrotoluene	440	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-08

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9052

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2200	U
83-32-9	Acenaphthene	440	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	2200	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
86-73-7	Fluorene	440	U
100-01-6	4-Nitroaniline	2200	U
534-52-1	4,6-Dinitro-2-methylphenol	2200	U
86-30-6	N-Nitrosodiphenylamine (1)	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
87-86-5	Pentachlorophenol	2200	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	440	U
129-00-0	Pyrene	440	U
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	890	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	bis(2-Ethylhexyl)phthalate	440	U
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	U
191-24-2	Benzo(g,h,i)perylene	440	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0357

O/S CNTR PND A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-09

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9053

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500	U
111-44-4	bis(2-Chloroethyl)ether	500	U
95-57-8	2-Chlorophenol	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
100-51-6	Benzyl alcohol	500	U
95-50-1	1,2-Dichlorobenzene	500	U
95-48-7	2-Methylphenol	500	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500	U
106-44-5	4-Methylphenol	500	U
621-64-7	N-Nitroso-di-n-propylamine	500	U
67-72-1	Hexachloroethane	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethylphenol	500	U
65-85-0	Benzoic acid	210	J
111-91-1	bis(2-Chloroethoxy)methane	500	U
120-83-2	2,4-Dichlorophenol	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
59-50-7	4-Chloro-3-methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	500	U
208-96-8	Acenaphthylene	500	U
606-20-2	2,6-Dinitrotoluene	500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 0353

O/S CNTR PND A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-09

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9053

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	500	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
84-66-2	Diethylphthalate	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
86-73-7	Fluorene	500	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
84-74-2	Di-n-butylphthalate	46	JB
206-44-0	Fluoranthene	[redacted]	
129-00-0	Pyrene	[redacted]	
85-68-7	Butylbenzylphthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	1000	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
117-81-7	bis(2-Ethylhexyl)phthalate	500	U
117-84-0	Di-n-octylphthalate	500	U
205-99-2	Benzo(b)fluoranthene	46	J
207-08-9	Benzo(k)fluoranthene	36	J
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) - Cannot be separated from Diphenylamine

0367

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

O/S CNTR PND A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-10

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9054

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500	U
111-44-4	bis(2-Chloroethyl)ether	500	U
95-57-8	2-Chlorophenol	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
100-51-6	Benzyl alcohol	500	U
95-50-1	1,2-Dichlorobenzene	500	U
95-48-7	2-Methylphenol	500	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500	U
106-44-5	4-Methylphenol	500	U
621-64-7	N-Nitroso-di-n-propylamine	500	U
67-72-1	Hexachloroethane	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethylphenol	500	U
65-85-0	Benzoic acid	2400	U
111-91-1	bis(2-Chloroethoxy)methane	500	U
120-83-2	2,4-Dichlorophenol	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
59-50-7	4-Chloro-3-methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	500	U
208-96-8	Acenaphthylene	500	U
606-20-2	2,6-Dinitrotoluene	500	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No : B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-10

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9054

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/06/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	500	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
84-66-2	Diethylphthalate	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
86-73-7	Fluorene	500	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
84-74-2	Di-n-butylphthalate	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
85-68-7	Butylbenzylphthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	1000	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
117-81-7	bis(2-Ethylhexyl)phthalate	500	U
117-84-0	Di-n-octylphthalate	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-11

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9082

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4300	U
111-44-4	bis(2-Chloroethyl)ether	4300	U
95-57-8	2-Chlorophenol	4300	U
541-73-1	1,3-Dichlorobenzene	4300	U
106-46-7	1,4-Dichlorobenzene	4300	U
100-51-6	Benzyl alcohol	4300	U
95-50-1	1,2-Dichlorobenzene	4300	U
95-48-7	2-Methylphenol	4300	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4300	U
106-44-5	4-Methylphenol	4300	U
621-64-7	N-Nitroso-di-n-propylamine	4300	U
67-72-1	Hexachloroethane	4300	U
98-95-3	Nitrobenzene	4300	U
78-59-1	Isophorone	4300	U
88-75-5	2-Nitrophenol	4300	U
105-67-9	2,4-Dimethylphenol	4300	U
65-85-0	Benzoic acid	1800	J
111-91-1	bis(2-Chloroethoxy)methane	4300	U
120-83-2	2,4-Dichlorophenol	4300	U
120-82-1	1,2,4-Trichlorobenzene	250	J
91-20-3	Naphthalene	4300	U
106-47-8	4-Chloroaniline	4300	U
87-68-3	Hexachlorobutadiene	4300	U
59-50-7	4-Chloro-3-methylphenol	4300	U
91-57-6	2-Methylnaphthalene	4300	U
77-47-4	Hexachlorocyclopentadiene	4300	U
88-06-2	2,4,6-Trichlorophenol	4300	U
95-95-4	2,4,5-Trichlorophenol	21000	U
91-58-7	2-Chloronaphthalene	4300	U
88-74-4	2-Nitroaniline	21000	U
131-11-3	Dimethylphthalate	4300	U
208-96-8	Acenaphthylene	4300	U
606-20-2	2,6-Dinitrotoluene	4300	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-11

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9082

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/KG	Q
99-09-2	3-Nitroaniline	21000	U
83-32-9	Acenaphthene	4300	U
51-28-5	2,4-Dinitrophenol	21000	U
100-02-7	4-Nitrophenol	21000	U
132-64-9	Dibenzofuran	4300	U
121-14-2	2,4-Dinitrotoluene	4300	U
84-66-2	Diethylphthalate	4300	U
7005-72-3	4-Chlorophenyl-phenylether	4300	U
86-73-7	Fluorene	4300	U
100-01-6	4-Nitroaniline	21000	U
534-52-1	4,6-Dinitro-2-methylphenol	21000	U
86-30-6	N-Nitrosodiphenylamine (1)	550	J
101-55-3	4-Bromophenyl-phenylether	4300	U
118-74-1	Hexachlorobenzene	4300	U
87-86-5	Pentachlorophenol	21000	U
85-01-8	Phenanthrene	[redacted]	
120-12-7	Anthracene	4300	U
84-74-2	Di-n-butylphthalate	1400	JB
206-44-0	Fluoranthene	4300	U
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	4300	U
91-94-1	3,3'-Dichlorobenzidine	8700	U
56-55-3	Benzo(a)anthracene	4300	U
218-01-9	Chrysene	4300	U
117-81-7	bis(2-Ethylhexyl)phthalate	22000	
117-84-0	Di-n-octylphthalate	4300	U
205-99-2	Benzo(b)fluoranthene	4300	U
207-08-9	Benzo(k)fluoranthene	4300	U
50-32-8	Benzo(a)pyrene	4300	U
193-39-5	Indeno(1,2,3-cd)pyrene	4300	U
53-70-3	Dibenzo(a,h)anthracene	4300	U
191-24-2	Benzo(g,h,i)perylene	4300	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-12

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9070

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 400.0

GPC Cleanup: (Y/N) N pH: 5.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	160000	U
111-44-4	bis(2-Chloroethyl)ether	160000	U
95-57-8	2-Chlorophenol	160000	U
541-73-1	1,3-Dichlorobenzene	160000	U
106-46-7	1,4-Dichlorobenzene	160000	U
100-51-6	Benzyl alcohol	160000	U
95-50-1	1,2-Dichlorobenzene	160000	U
95-48-7	2-Methylphenol	160000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	160000	U
106-44-5	4-Methylphenol	160000	U
621-64-7	N-Nitroso-di-n-propylamine	160000	U
67-72-1	Hexachloroethane	160000	U
98-95-3	Nitrobenzene	160000	U
78-59-1	Isophorone	160000	U
88-75-5	2-Nitrophenol	160000	U
105-67-9	2,4-Dimethylphenol	160000	U
65-85-0	Benzoic acid	770000	U
111-91-1	bis(2-Chloroethoxy)methane	160000	U
120-83-2	2,4-Dichlorophenol	160000	U
120-82-1	1,2,4-Trichlorobenzene	160000	U
91-20-3	Naphthalene	**530000**	
106-47-8	4-Chloroaniline	160000	U
87-68-3	Hexachlorobutadiene	160000	U
59-50-7	4-Chloro-3-methylphenol	160000	U
91-57-6	2-Methylnaphthalene	**560000**	
77-47-4	Hexachlorocyclopentadiene	160000	U
88-06-2	2,4,6-Trichlorophenol	160000	U
95-95-4	2,4,5-Trichlorophenol	770000	U
91-58-7	2-Chloronaphthalene	160000	U
88-74-4	2-Nitroaniline	770000	U
131-11-3	Dimethylphthalate	160000	U
208-96-8	Acenaphthylene	**420000**	
606-20-2	2,6-Dinitrotoluene	160000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-1

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-12

Sample wt/vol: 30 (g/mL) G Lab File ID: >T9070

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 400.0

GPC Cleanup: (Y/N) N pH: 5.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/KG	Q
99-09-2	3-Nitroaniline	770000	U
83-32-9	Acenaphthene	170000	
51-28-5	2,4-Dinitrophenol	770000	U
100-02-7	4-Nitrophenol	770000	U
132-64-9	Dibenzofuran	39000	J
121-14-2	2,4-Dinitrotoluene	160000	U
84-66-2	Diethylphthalate	160000	U
7005-72-3	4-Chlorophenyl-phenylether	160000	U
86-73-7	Fluorene	430000	
100-01-6	4-Nitroaniline	770000	U
534-52-1	4,6-Dinitro-2-methylphenol	770000	U
86-30-6	N-Nitrosodiphenylamine (1)	160000	U
101-55-3	4-Bromophenyl-phenylether	160000	U
118-74-1	Hexachlorobenzene	160000	U
87-86-5	Pentachlorophenol	770000	U
85-01-8	Phenanthrene	1000000	
120-12-7	Anthracene	290000	
84-74-2	Di-n-butylphthalate	160000	U
206-44-0	Fluoranthene	410000	
129-00-0	Pyrene	320000	
85-68-7	Butylbenzylphthalate	160000	U
91-94-1	3,3'-Dichlorobenzidine	320000	U
56-55-3	Benzo(a)anthracene	140000	J
218-01-9	Chrysene	150000	J
117-81-7	bis(2-Ethylhexyl)phthalate	160000	U
117-84-0	Di-n-octylphthalate	160000	U
205-99-2	Benzo(b)fluoranthene	44000	J
207-08-9	Benzo(k)fluoranthene	66000	J
50-32-8	Benzo(a)pyrene	100000	J
193-39-5	Indeno(1,2,3-cd)pyrene	24000	J
53-70-3	Dibenzo(a,h)anthracene	160000	U
191-24-2	Benzo(g,h,i)perylene	29000	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
0101

CNTR WETLND-A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-13

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9083

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 41 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	560	U
111-44-4	bis(2-Chloroethyl)ether	560	U
95-57-8	2-Chlorophenol	560	U
541-73-1	1,3-Dichlorobenzene	560	U
106-46-7	1,4-Dichlorobenzene	560	U
100-51-6	Benzyl alcohol	560	U
95-50-1	1,2-Dichlorobenzene	560	U
95-48-7	2-Methylphenol	560	U
108-60-1	2,2'-oxybis(1-Chloropropane)	560	U
106-44-5	4-Methylphenol	560	U
621-64-7	N-Nitroso-di-n-propylamine	560	U
67-72-1	Hexachloroethane	560	U
98-95-3	Nitrobenzene	560	U
78-59-1	Isophorone	560	U
88-75-5	2-Nitrophenol	560	U
105-67-9	2,4-Dimethylphenol	560	U
65-85-0	Benzoic acid	2700	U
111-91-1	bis(2-Chloroethoxy)methane	560	U
120-83-2	2,4-Dichlorophenol	560	U
120-82-1	1,2,4-Trichlorobenzene	560	U
91-20-3	Naphthalene	560	U
106-47-8	4-Chloroaniline	560	U
87-68-3	Hexachlorobutadiene	560	U
59-50-7	4-Chloro-3-methylphenol	560	U
91-57-6	2-Methylnaphthalene	560	U
77-47-4	Hexachlorocyclopentadiene	560	U
88-06-2	2,4,6-Trichlorophenol	560	U
95-95-4	2,4,5-Trichlorophenol	2700	U
91-58-7	2-Chloronaphthalene	560	U
88-74-4	2-Nitroaniline	2700	U
131-11-3	Dimethylphthalate	560	U
208-96-8	Acenaphthylene	560	U
606-20-2	2,6-Dinitrotoluene	560	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-13

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9083

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 41 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2700	U
83-32-9	Acenaphthene	560	U
51-28-5	2,4-Dinitrophenol	2700	U
100-02-7	4-Nitrophenol	2700	U
132-64-9	Dibenzofuran	560	U
121-14-2	2,4-Dinitrotoluene	560	U
84-66-2	Diethylphthalate	560	U
7005-72-3	4-Chlorophenyl-phenylether	560	U
86-73-7	Fluorene	560	U
100-01-6	4-Nitroaniline	2700	U
534-52-1	4,6-Dinitro-2-methylphenol	2700	U
86-30-6	N-Nitrosodiphenylamine (1)	560	U
101-55-3	4-Bromophenyl-phenylether	560	U
118-74-1	Hexachlorobenzene	560	U
87-86-5	Pentachlorophenol	2700	U
85-01-8	Phenanthrene	560	U
120-12-7	Anthracene	560	U
84-74-2	Di-n-butylphthalate	560	U
206-44-0	Fluoranthene	560	U
129-00-0	Pyrene	560	U
85-68-7	Butylbenzylphthalate	560	U
91-94-1	3,3'-Dichlorobenzidine	1100	U
56-55-3	Benzo(a)anthracene	560	U
218-01-9	Chrysene	560	U
117-81-7	bis(2-Ethylhexyl)phthalate	130	J
117-84-0	Di-n-octylphthalate	560	U
205-99-2	Benzo(b)fluoranthene	560	U
207-08-9	Benzo(k)fluoranthene	560	U
50-32-8	Benzo(a)pyrene	560	U
193-39-5	Indeno(1,2,3-cd)pyrene	560	U
53-70-3	Dibenzo(a,h)anthracene	560	U
191-24-2	Benzo(g,h,i)perylene	560	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0429

CNTR WETLND-A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-14

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9084

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
100-51-6	Benzyl alcohol	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
65-85-0	Benzoic acid	70	J
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	2100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	2100	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument: HP58901A Sequence: A1502

Column: RTX-35 ID: .53 Date(s) Analyzed: 01/03/97 01/04/97

Compound	Retention Time of Standards					Mean RT	RT Windows	
	1	2	3	4	5		From	To
alpha-BHC	10.34	10.34	10.35	10.34	10.34	10.34	10.27	10.41
beta-BHC	11.74	11.74	11.74	11.74	11.74	11.74	11.69	11.79
delta-BHC	12.74	12.74	12.73	12.74	12.73	12.74	12.69	12.79
gamma-BHC (Lindane)	11.47	11.47	11.48	11.47	11.47	11.47	11.4	11.54
Heptachlor	12.56	12.56	12.57	12.56	12.56	12.56	12.49	12.63
Aldrin	13.48	13.47	13.47	13.47	13.47	13.47	13.42	13.52
Heptachlor epoxide	15	15	14.99	15	[illegible]	15	14.95	15.05
Endosulfan I	15.96	15.95	15.96	15.95	[illegible]	15.95	15.88	16.02
Dieldrin	16.75	16.75	16.75	16.74	[illegible]	16.75	16.68	16.82
4,4'-DDE	16.6	16.6	16.59	16.6	[illegible]	16.6	16.55	16.65
Endrin	17.63	17.63	17.63	17.63	17.63	17.63	17.58	17.68
Endosulfan II	18.13	18.12	18.12	18.12	18.12	18.12	18.07	18.17
4,4'-DDD	18.03	18.03	18.03	18.02	18.02	18.03	17.95	18.11
Endosulfan sulfate	19.33	19.33	19.33	19.33	19.32	19.33	19.28	19.38
4,4'-DDT	18.82	18.82	18.82	18.82	18.82	18.82	18.75	18.89
Methoxychlor	20.88	20.88	20.88	20.87	20.88	20.88	20.82	20.94
Endrin ketone	21.09	21.09	21.09	21.09	21.08	21.09	21.04	21.14
Endrin aldehyde	18.92	18.91	18.91	18.91	18.9	18.91	18.86	18.96
alpha-Chlordane	15.93	15.93	15.93	15.93	15.93	15.93	15.88	15.98
gamma-Chlordane	15.52	15.52	15.51	15.52	15.51	15.52	15.47	15.57
Isodrin	14.62	14.62	14.63	14.62	14.62	14.62	14.55	14.69
Chlorobenzilate	17.5	17.49	17.48	17.49	17.48	17.49	17.44	17.54
Tetrachloro-m-xylene	8.3	8.3	8.31	8.3	8.29	8.3	8.23	8.37
Decachlorobiphenyl	24.58	24.58	24.57	24.57	24.58	24.58	24.52	24.64

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

0673

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument: HP58905A Sequence: A5357

Column: DB-1701 ID: 0.53 Date(s) Analyzed: 01/13/97 01/14/97

Compound	Calibration Factors 1	2	3	4	5	Mean	%RSD
alpha-BHC	76151600	74368900	72883480	69530660	56578040	69902536	11.2
beta-BHC	48090600	39943300	37653400	33968160	31122510	38155594	17
delta-BHC	74106800	65677000	67814760	64978160	62663000	67047944	6.5
gamma-BHC (Lindane)	77175400	75072800	72229200	[illegible]	60316920	70516884	9.5
Heptachlor	61887200	58933800	55260040	51263280	49571350	55383134	9.3
Aldrin	70905600	64742800	64189120	60152140	55839970	63165566	8.9 ⊕
Heptachlor epoxide	73245000	65241300	63575440	59438140	55698140	63439204	10.4
Endosulfan I	64635600	62267300	59073080	56554760	53188810	59143910	7.6
Dieldrin	63767200	62237200	59472560	56171[illegible]	52436730	58817318	7.8
4,4'-DDE	62072000	56812400	57491500	54223[illegible]	50220320	56164034	7.8
Endrin	54752600	53232000	50525580	47554[illegible]	44294690	50072620	8.5 ⊕
Endosulfan II	59494000	53167300	52919440	50076540	46158520	52363120	9.3
4,4'-DDD	45416500	46848000	45922560	44011790	41385430	44716856	4.8
Endosulfan sulfate	45552300	40771650	40485220	37707990	35215095	39946451	9.7
4,4'-DDT	21842900	25444350	26721120	28190800	28952060	26230246	10.7 ⊕
Methoxychlor	10952860	11553670	11465840	10865186	9317698	10831051	8.3
Endrin ketone	46048700	42158350	41256360	38722390	35578525	40752863	9.6
Endrin aldehyde	47256400	41753250	40798640	38908410	35638405	40871021	10.4
alpha-Chlordane	72378000	65014200	63366960	59003860	55017600	62956124	10.4
gamma-Chlordane	73356600	64927700	63613120	59182660	55500170	63316050	10.6
Isodrin	59158000	56708200	54187800	50272400	47138800	53493040	9
Chlorobenzilate	4772420	4340540	4105124	3574776	3001570	3958886	17.4
Tetrachloro-m-xylene	70490800	67028900	60435240	56060780	51590770	61121298	12.7
Decachlorobiphenyl	36338000	32867900	30490040	29232140	26798885	31145397	11.7

⊕ compds must meet 10%RSD or calibration curves must be used for quantitation according to Region I guidance.
SW846 allows 20%RSD, compds acceptable as per SW846 criteria

FORM VI PEST-2
GC-8081:rev 1.0

6E

GC INITIAL CALIBRATION OF SINGLE & MULTI COMPONENT ANALYTES

0677

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument: HP58901A Sequence: A1502

Column: RTX-35 ID: 0.53 Date(s) Analyzed: 01/03/97 01/04/97

Compound	Calibration Factors						%RSD
	1	2	3	4	5	Mean	
alpha-BHC	30374000	30390600	30842120	34059980	35742180	32281776	7.6
beta-BHC	23862400	22689700	21569000	20914200	20896110	21986282	5.8
delta-BHC	21814600	19779500	19654480	19750000	21112820	20422284	4.8
gamma-BHC (Lindane)	31665400	31350200	30283840	[illegible]	33748240	31952352	4.2
Heptachlor	26288000	25438700	24277800	26082700	26996190	25816682	4
Aldrin	44422400	45512400	51150140	54776400	55911150	50355770	10.4
Heptachlor epoxide	38407000	37885700	40547560	42695000	45118970	40930886	7.4
Endosulfan I	33789400	34060500	36014120	38347760	39406010	36323562	6.9
Dieldrin	41492900	44234750	49562560	50988360	35262740	44307688	14.4
4,4'-DDE	42110100	43829200	48180400	50428800	41131415	45136129	8.9
Endrin	29534000	30864850	34782080	36859810	31303630	32668874	9.3
Endosulfan II	29748800	28159400	27916580	29319870	29229755	28874701	2.7
4,4'-DDD	31205500	30857750	31311220	30166980	31127280	30933746	1.5
Endosulfan sulfate	26199300	25206150	28309340	30166030	32862925	28548749	10.8
4,4'-DDT	15606800	16083800	17135080	17677090	18683880	17037330	7.2
Methoxychlor	7075500	7138170	6427848	6533776	6109861	6657031	6.6
Endrin ketone	20379300	19168600	19382060	19057130	20001800	19597778	2.9
Endrin aldehyde	30900100	27221750	27238080	27234520	27865380	28091966	5.7
alpha-Chlordane	45061800	44197000	46178760	48198470	51065460	46940284	5.8
gamma-Chlordane	44376000	44109500	46954160	49605980	52203270	47449782	7.3
Isodrin	38757600	38680900	41911120	44127480	44706660	41636752	6.9
Chlorobenzilate	6619480	6405160	5320764	4654742	4378579	5475745	18.4
Tetrachloro-m-xylene	46769800	46562700	47830200	49182800	49668470	48002794	2.9
Decachlorobiphenyl	37290900	36197500	37222340	37409140	36237590	36871494	1.6
Aroclor-1016	13344980	12616970	11783965	11321650	10546954	11922904	9.2
Aroclor-1260	15201100	13713370	13531045	13463462	13659546	13913705	5.2

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument ID: HP58905A Date(s) Analyzed: 01/13/97 01/14/97

GC Column: DB-1701 ID: .53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Technical Chlordane	0.00020	*1	9.50	9.45	9.55	15707500
		*2	9.93	9.88	9.98	
		*3	11.46	11.41	11.51	
		4	11.63	11.57	11.69	
		5	15.01	14.95	15.07	
Toxaphene	0.00050	*1	21.65	21.56	21.74	4988162
		*2	22.22	22.13	22.31	
		*3	22.78	22.70	22.86	
		4	23.86	23.77	23.95	
		5	24.24	24.16	24.32	

* Denotes required peaks

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument ID: HP58901A Date(s) Analyzed: 01/03/97 01/04/97

GC Column: RTX-35 ID: .53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Technical Chlordane	0.00020	*1	12.10	12.05	12.15	15385475
		*2	12.56	12.51	12.61	
		*3	14.00	13.95	14.05	
		4	15.52	15.47	15.57	
		5	15.93	15.88	15.98	
Toxaphene	0.00050	*1	17.35	17.30	17.40	5376462
		*2	18.29	18.24	18.34	
		*3	18.94	18.89	18.99	
		4	19.11	19.06	19.16	
		5	19.50	19.45	19.55	
Aroclor-1016	0.00020	*1	10.15	10.10	10.20	11922904
		*2	11.39	11.34	11.44	
		*3	12.54	12.49	12.59	
		4	12.95	12.90	13.00	
		5	13.29	13.24	13.34	
Aroclor-1221	0.00020	*1	9.13	9.08	9.18	7035220
		*2	9.53	9.48	9.58	
		*3	9.96	9.91	10.01	
		4	10.15	10.10	10.20	
		5	11.40	11.35	11.45	
Aroclor-1232	0.00010	*1	9.53	9.48	9.58	7352010
		*2	10.15	10.10	10.20	
		*3	11.39	11.34	11.44	
		4	12.55	12.50	12.60	
		5	14.27	14.22	14.32	
Aroclor-1242	0.00010	*1	10.15	10.10	10.20	9446070
		*2	11.39	11.34	11.44	
		*3	12.54	12.49	12.59	
		4	12.95	12.90	13.00	
		5	13.28	13.23	13.33	
Aroclor-1248	0.00010	*1	11.39	11.34	11.44	10763470
		*2	12.54	12.49	12.59	
		*3	13.47	13.42	13.52	
		4	14.27	14.22	14.32	
		5	14.61	14.56	14.66	
Aroclor-1254	0.00010	*1	15.38	15.33	15.43	15904370
		*2	15.68	15.63	15.73	
		*3	16.69	16.64	16.74	
		4	16.97	16.92	17.02	
		5	17.45	17.40	17.50	
Aroclor-1260	0.00020	*1	18.99	18.94	19.04	13913705
		*2	19.85	19.80	19.90	
		*3	20.06	20.01	20.11	
		4	20.30	20.25	20.35	
		5	21.38	21.33	21.43	

* Denotes required peaks

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

0690

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(IBS): IBS Date Analyzed : 01/15/97

Lab File ID: A5357040 Time Analyzed : 0008

Compound	RT	RT Window From	To	Break down	
Endrin	17.94	17.[illegible]	17.95	13.7	
4,4'-DDT	22.06	21.9[illegible]	22.10	36.9	* (+)

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to [illegible]%
Endrin breakdown must be less than or equal to 20.[illegible]%
Breakdown out of criteria if * printed

(+) estimated results
DMC 2/13/97

FORM VII PEST-1
GC-8081:rev 1.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(IBS): IBS Date Analyzed : 01/15/97

Lab File ID: A5357044 Time Analyzed : 1641

Compound	RT	RT Window From	RT Window To	Break down	
Endrin	17.90	17.83	17.95	6.8	
4,4'-DDT	22.05	21.98	22.10	0.0	

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 20.0%
Endrin breakdown must be less than or equal to 20.0%
Breakdown out of criteria if * printed

FORM VII PEST-1
GC-8081:rev 1.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(IBS): IBS Date Analyzed : 01/16/97

Lab File ID: A5357061 Time Analyzed : 0359

Compound	RT	RT Window From	RT Window To	Break down		
Endrin	17.97	17.83	17.95	16.9 ~~0.0~~		(F)
4,4'-DDT	22.09	21.98	22.10	47.1	*	(A)

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 20.0%
Endrin breakdown must be less than or equal to 20.0%
Breakdown out of criteria if * printed

DML
2/13/97

(F) see raw data to follow
(A) estimated results

FORM VII PEST-1
GC-8081:rev 1.0

IEA Pesticide Standard Report

ple Name : IBS
sult File : /DATA/LOOP/RESULT/A5357061.RES
Column Type : DB-1701 30 Meter,0.53mm ID
Instrument : HP58905A
Calculation : ExternalSTD
Run Time : 33.02 Mins. Injected on 0359 16Jan1997
Sequence File : /DATA/LOOP/SEQUENCE/A5357.SEQ
Subseq/Sample : 1/ 61 Bottle no. : 61

Report No :163.00
Inj. Vol. : 1 ul

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
NoReference

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	2.68		.147728	1071	BV	0.0000	
2	4.05		.090577	5131	BV	0.0000	
3	4.13		.074337	11330	VV	0.0000	
4	4.87		.088318	7703	BV	0.0000	
5	5.17		.078644	5198	PV	0.0000	
6	5.69		.075434	76416	PV	0.0000	
7	5.89		.083090	3098	VV	0.0000	
8	5.92		.047171	1251	VB	0.0000	
9	6.51	6.49	.063262	14783	BV	.0027	Tetrachloro-m-xylene
10	8.85		1.885777	25747	PV	0.0000	
11	11.80	11.82	1.451270	112447	PV	.0286	beta-BHC
12	12.26		.141282	15988	PV	0.0000	
13	13.31		1.119423	29497	VV	0.0000	
14	14.94		.781529	21336	PV	0.0000	
15	16.16		.244004	13327	PV	0.0000	
16	17.97		.184204	4415936	PV	0.0000	EndrinN 0.02 OUT OF RTW
17	21.27		.182093	742868	PV	0.0000	44'-DDD 0.02 OUT OF RTW
18	22.09	22.04	.142741	834189	VV	.0833	4,4'-DDT
19	26.14		.316751	896848	PV	0.0000	← E Ketone 0.01 OUT OF RTW
20	30.96		4.397795	27808896	VV	0.0000	
21	31.24		.522772	2834028	VV	0.0000	
22	32.05		.694546	1893480	VV	0.0000	
23	32.43		.463733	658456	VV	0.0000	

Total Area : 40429032 Total PPB : .115

Report Time : 0433 16Jan1997
Method : /DATA/LOOP/METHOD/A5357.MTH
Result File : /DATA/LOOP/RESULT/A5357061.RES

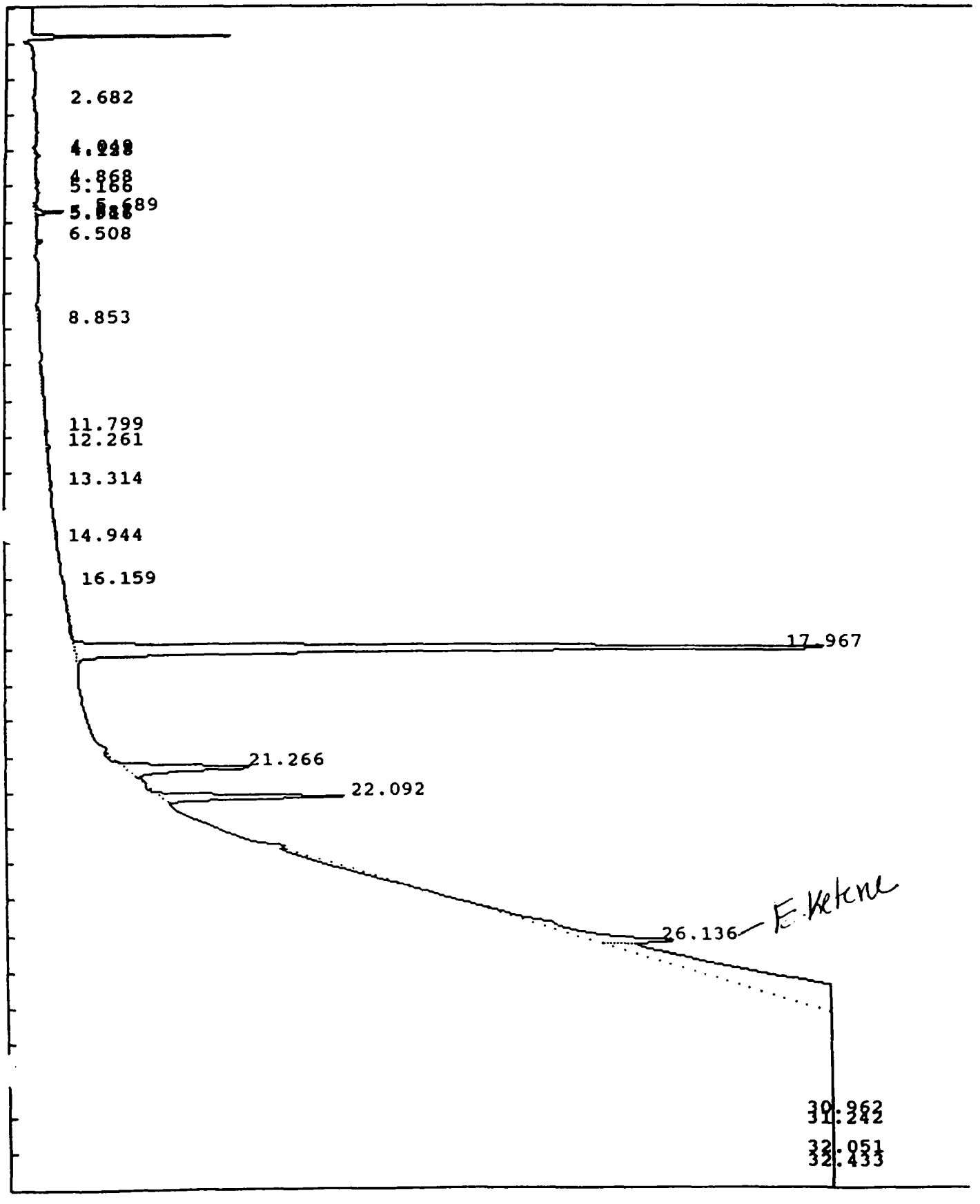
$$\%B_{Endrin} = \frac{\cancel{834}\ 896848}{896848 + 4415939} \times 100 = 16.9\ \%B$$

DMC 2/13/97

IEA Pesticide Standard Report

Sample Name : IBS
Result File :/DATA/LOOP/RESULT/A5357061.RES
Column Type : DB-1701 30-Meter,0.53mm ID

Inj on 0359 16Jan1997
INSTRUMENT: HP58905A
Inj. Vol. : 1 ul



7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/15/97

Lab File ID: A5357041 Time Analyzed : 0047

Sample No.(INDB): INDB3 Date Analyzed : 01/14/97

Lab File ID: A5357037 Time Analyzed : 2142

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
beta-BHC	11.81	11.77	11.87	.02136	0.025	-15
delta-BHC	12.74	12.69	12.83	.02305	0.025	-7.8
Aldrin	10.78	10.75	10.85	.02273	0.025	-9.1
Heptachlor epoxide	13.39	13.34	13.45	.02248	0.025	-10
4,4'-DDE	16.04	15.99	16.15	.0447	0.050	-11
Endosulfan II	21.08	21.01	21.21	.04398	0.050	-12
Endosulfan sulfate	24.58	24.54	24.66	.03952	0.050	-21*
Endrin ketone	26.05	26.03	26.13	.03591	0.050	-28*
Endrin aldehyde	23.16	23.14	23.24	.04358	0.050	-13
alpha-Chlordane	15.32	15.29	15.39	.02173	0.025	-13
gamma-Chlordane	15.02	15.00	15.10	.02032	0.025	-19*
Chlorobenzilate	20.22	20.21	20.31	.20373	0.250	-18*
Tetrachloro-m-xylene	6.47	6.44	6.54	.02307	0.025	-7.7
Decachlorobiphenyl	29.06	29.03	29.15	.04288	0.050	-14

+ estimated results
DML 2/13/97

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/15/97

Lab File ID: A5357045 Time Analyzed : 1721

Sample No.(INDB): INDB3 Date Analyzed : 01/15/97

Lab File ID: A5357043 Time Analyzed : 1534

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
beta-BHC	11.83	11.77	11.87	.0247	0.025	-1.2
delta-BHC	12.77	12.69	12.83	.02601	0.025	4.0
Aldrin	10.80	10.75	10.85	.02595	0.025	3.8
Heptachlor epoxide	13.42	13.34	13.48	.02496	0.025	-0.2
4,4'-DDE	16.08	15.99	16.15	.05031	0.050	0.6
Endosulfan II	21.13	21.01	21.21	.04859	0.050	-2.8
Endosulfan sulfate	24.60	24.54	24.66	.0469	0.050	-6.2
Endrin ketone	26.07	26.03	26.13	.04759	0.050	-4.8
Endrin aldehyde	23.19	23.14	23.24	.04834	0.050	-3.3
alpha-Chlordane	15.36	15.29	15.39	.02483	0.025	-0.7
gamma-Chlordane	15.07	15.00	15.10	.02126	0.025	-15
Chlorobenzilate	20.27	20.21	20.31	.25069	0.250	0.3
Tetrachloro-m-xylene	6.48	6.44	6.54	.02753	0.025	10.1
Decachlorobiphenyl	29.08	29.03	29.15	.05223	0.050	4.5

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: .53 (mm) Init. Calib Date(s): 01/13/97 01/14/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/16/97

Lab File ID: A5357062 Time Analyzed : 0439

Sample No.(INDA): INDA3 Date Analyzed : 01/16/97

Lab File ID: A5357059 Time Analyzed : 0239

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
alpha-BHC	8.43	8.36	8.46	.02522	0.025	0.9
gamma-BHC (Lindane)	9.40	9.32	9.42	.02417	0.025	-3.3
Heptachlor	9.99	9.90	10.00	.02268	0.025	-9.3
Endosulfan I	14.72	14.60	14.76	.02274	0.025	-9
Dieldrin	16.75	16.63	16.77	.04682	0.050	-6.4
Endrin	17.94	17.83	17.95	.04569	0.050	-8.6
4,4'-DDD	21.23	21.13	21.25	.05143	0.050	2.9
4,4'-DDT	22.07	21.98	22.10	.01552	0.050	-69* (+)
Methoxychlor	25.03	24.94	25.06	.08992	0.250	-64* (+)
Isodrin	12.25	12.16	12.26	.02446	0.025	-2.2
Tetrachloro-m-xylene	6.51	6.44	6.54	.02461	0.025	-1.6
Decachlorobiphenyl	29.13	29.03	29.15	.035	0.050	-30* (+)

(+) estimated results
DML 2/13/97

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: RTX-35 ID: .53 (mm) Init. Calib Date(s): 01/03/97 01/04/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/08/97

Lab File ID: A1502120 Time Analyzed : 1454

Sample No.(INDA): INDA3 Date Analyzed : 01/08/97

Lab File ID: A1502119 Time Analyzed : 1339

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
alpha-BHC	10.35	10.27	10.41	.03117	0.025	24.7*
gamma-BHC (Lindane)	11.48	11.40	11.54	.03032	0.025	21.3*
Heptachlor	12.57	12.49	12.63	.03174	0.025	27.0*
Endosulfan I	15.97	15.88	16.02	.01937	0.025	-22*
Dieldrin	16.76	16.68	16.82	.04648	0.050	-7
Endrin	17.64	17.58	17.68	.05346	0.050	6.9
4,4'-DDD	18.03	17.95	18.11	.05258	0.050	5.2
4,4'-DDT	18.83	18.75	18.89	.04443	0.050	-11
Methoxychlor	20.88	20.82	20.94	.35531	0.250	42.1*
Isodrin	14.63	14.55	14.69	.01942	0.025	-22*
Tetrachloro-m-xylene	8.30	8.23	8.37	.02076	0.025	-17*
Decachlorobiphenyl	24.59	24.52	24.64	.04127	0.050	-18*

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

0420

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR WETLND-A8-3

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-14

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9084

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/08/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2100	U
83-32-9	Acenaphthene	430	U
51-28-5	2,4-Dinitrophenol	2100	U
100-02-7	4-Nitrophenol	2100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	21	JB
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	2100	U
534-52-1	4,6-Dinitro-2-methylphenol	2100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	2100	U
85-01-8	Phenanthrene	30	J
120-12-7	Anthracene	11	J
84-74-2	Di-n-butylphthalate	40	JB
206-44-0	Fluoranthene	27	J
129-00-0	Pyrene	24	J
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	870	U
56-55-3	Benzo(a)anthracene	15	J
218-01-9	Chrysene	15	J
117-81-7	bis(2-Ethylhexyl)phthalate	90	J
117-84-0	Di-n-octylphthalate	12	J
205-99-2	Benzo(b)fluoranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-15

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9067

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
100-51-6	Benzyl alcohol	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
65-85-0	Benzoic acid	2100	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	2100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	2100	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-4

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-15

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9067

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2100	U
83-32-9	Acenaphthene	430	U
51-28-5	2,4-Dinitrophenol	2100	U
100-02-7	4-Nitrophenol	2100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	2100	U
534-52-1	4,6-Dinitro-2-methylphenol	2100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	2100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
84-74-2	Di-n-butylphthalate	40	JB
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	870	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	430	U
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)flucranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

0430

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR WETLND-A9(CO

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-20

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9068

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 43 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	580	U
111-44-4	bis(2-Chloroethyl)ether	580	U
95-57-8	2-Chlorophenol	580	U
541-73-1	1,3-Dichlorobenzene	580	U
106-46-7	1,4-Dichlorobenzene	580	U
100-51-6	Benzyl alcohol	580	U
95-50-1	1,2-Dichlorobenzene	580	U
95-48-7	2-Methylphenol	580	U
108-60-1	2,2'-oxybis(1-Chloropropane)	580	U
106-44-5	4-Methylphenol	580	U
621-64-7	N-Nitroso-di-n-propylamine	580	U
67-72-1	Hexachloroethane	580	U
98-95-3	Nitrobenzene	580	U
78-59-1	Isophorone	580	U
88-75-5	2-Nitrophenol	580	U
105-67-9	2,4-Dimethylphenol	580	U
65-85-0	Benzoic acid	2800	U
111-91-1	bis(2-Chloroethoxy)methane	580	U
120-83-2	2,4-Dichlorophenol	580	U
120-82-1	1,2,4-Trichlorobenzene	580	U
91-20-3	Naphthalene	580	U
106-47-8	4-Chloroaniline	580	U
87-68-3	Hexachlorobutadiene	580	U
59-50-7	4-Chloro-3-methylphenol	580	U
91-57-6	2-Methylnaphthalene	580	U
77-47-4	Hexachlorocyclopentadiene	580	U
88-06-2	2,4,6-Trichlorophenol	580	U
95-95-4	2,4,5-Trichlorophenol	2800	U
91-58-7	2-Chloronaphthalene	580	U
88-74-4	2-Nitroaniline	2800	U
131-11-3	Dimethylphthalate	580	U
208-96-8	Acenaphthylene	580	U
606-20-2	2,6-Dinitrotoluene	580	U

0431

EPA SAMPLE NO.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CNTR WETLND-A9(CO

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water) SOIL Lab Sample ID: 962743B-20

Sample wt/vol: 30 (g/mL) G Lab File ID: >J9068

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: 43 decanted: (Y/N) N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/07/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2800	U
83-32-9	Acenaphthene	580	U
51-28-5	2,4-Dinitrophenol	2800	U
100-02-7	4-Nitrophenol	2800	U
132-64-9	Dibenzofuran	580	U
121-14-2	2,4-Dinitrotoluene	580	U
84-66-2	Diethylphthalate	580	U
7005-72-3	4-Chlorophenyl-phenylether	580	U
86-73-7	Fluorene	580	U
100-01-6	4-Nitroaniline	2800	U
534-52-1	4,6-Dinitro-2-methylphenol	2800	U
86-30-6	N-Nitrosodiphenylamine (1)	580	U
101-55-3	4-Bromophenyl-phenylether	580	U
118-74-1	Hexachlorobenzene	580	U
87-86-5	Pentachlorophenol	2800	U
85-01-8	Phenanthrene	580	U
120-12-7	Anthracene	580	U
84-74-2	Di-n-butylphthalate	65	JB
206-44-0	Fluoranthene	580	U
129-00-0	Pyrene	580	U
85-68-7	Butylbenzylphthalate	580	U
91-94-1	3,3'-Dichlorobenzidine	1200	U
56-55-3	Benzo(a)anthracene	580	U
218-01-9	Chrysene	580	U
117-81-7	bis(2-Ethylhexyl)phthalate	190	J
117-84-0	Di-n-octylphthalate	580	U
205-99-2	Benzo(b)fluoranthene	580	U
207-08-9	Benzo(k)fluoranthene	580	U
50-32-8	Benzo(a)pyrene	580	U
193-39-5	Indeno(1,2,3-cd)pyrene	580	U
53-70-3	Dibenzo(a,h)anthracene	580	U
191-24-2	Benzo(g,h,i)perylene	580	U

(1) - Cannot be separated from Diphenylamine

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

0001A

7096-2743B
OLIN CORPORATION

Case Narrative

Metals - ICAP metals were determined using a JA61E trace ICAP; mercury was determined by the cold vapor technique utilizing the Thermo Jarrell Ash Model QS-1E mercury analyzer using guidance provided in SW846 according to the following Methods: ICAP-3050/6010; mercury-7471.

Three "N" flags resulted from spike analysis of sample CNTR POND DR.-8 for mercury, thallium, and selenium. Since the post-digestion spike recoveries were within the control limits, a matrix interference is not suspected.

One "E" flag resulted from serial dilution of sample CNTR POND DR.-8 for calcium. There is no apparent reason for this flag.

No other problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

Classical Chemistry - Listed below are the wet chemistry analyte methods and references for the samples analyzed in this SDG. Sulfate failed the controls for spike recovery analysis for sample CNTR POND DR-8 resulting in on N flag. No other analytical problems were encountered and all holding times were met.

Analyte	Method	Reference
Ammonia	350.2	1
Sulfate	375.4	1

References:

1. Methods of Chemical Analysis of Water and Wastes, EPA 600, 1983.
2. Test Methods for the Evaluation of Solid Waste, SW846, 3rd ed., 1986.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 8260. The instrumentation used was a Tekmar Dynamic Headspace Concentrator interfaced with a Hewlett-Packard Model 5995 GC/MS/DS.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550/8270A. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

The following samples required diluted analyses for target analyte quantitation:

SAMPLE	DILUTION
CNTR POND DR.-3	1:2
CNTR WETLAND-AB-1	1:400
O/S CNTR PND A8-4	1:5

Pesticides - Pesticide samples were extracted and analyzed by GC/ECD using guidance provided in Methods 3550/8081. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni^{63}).

All samples were extracted and concentrated without any apparent problems.

Surrogate percent recoveries were outside of QC limits in sample O/S CNTR POND A8-4 due to coelution with sample matrix.

The DB-1701 column was used as the primary column.

The RTX-35 column was used as the confirmation column.

Decachlorobiphenyl was lost in sample matrix in sample O/S CNTR POND A8-4 on the RTX-35 and DB-1701 columns.

The percent recoveries for spiking compounds delta-BHC and 4,4'-DDD were outside of QC limits in sample PBLK48QC. delta-BHC degraded in the spiking solution. The spike solution has since been re-prepped and the manufacturer contacted regarding the degradation of delta-BHC. Storage procedure of the solution has been changed as well as more frequent preparation of the standard. The percent recovery for 4,4'-DDD was elevated due to coelution with Endosulfan II on the DB-1701 column. Each compound was calculated as combined area.

The percent recovery for spiking compound gamma-BHC was outside of QC limits in sample CNTR POND DR.-8MS.

4,4'-DDT was outside of retention time windows in sample CNTR POND DR.-8 on the DB-1701 column.

Heptachlor, Dieldrin, Endrin, 4,4'-DDD, 4,4'-DDT and Decachlorobiphenyl were outside of retention time windows in sample CNTR POND DR.-8MS on the DB-1701 column.

Gamma-BHC, Aldrin, Heptachlor, Dieldrin, Endrin, 4,4'-DDD, and 4,4'-DDT were outside of retention time windows in sample CNTR POND DR.-8MSD on the DB-1701 column.

Dieldrin was outside of retention time windows in sample O/S CNTR PND A8-2 on the DB-1701 column.

Gamma-BHC and 4,4'-DDT were outside of retention time windows in sample O/S CNTR PND A8-4 on the DB-1701 column.

Gamma-BHC was over the curve range in sample O/S CNTR PND A8-4. This was not detected until data packaging and the sample was not reanalyzed at a dilution.

Endrin and 4,4'-DDD were outside of retention time windows in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. This retention time shift was taken into consideration when the data was reviewed for target compounds.

The client's samples repeatedly caused the ending standards to fail and 4,4'-DDT to have high breakdown. The client's samples were bracketed using a maximum of 10 samples, but the ending standards and breakdown checks still failed QC criteria.

The percent differences for compounds Endosulfan Sulfate, Endrin Ketone, and gamma-Chlordane were outside of QC limits in standard INDB3 analyzed at 21:42 on 1/14/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 00:08 on 1/15/97 on the DB-1701 column. These standards were the end bracketing standards for samples PBLK48, PBLK48QC, CNTR POND DR.-4, CNTR POND DR.-5, CNTR POND DR.-6, CNTR POND DR.-7, CNTR POND DR.-9, O/S CNTR PND A8-1, O/S CNTR PND A8-2, and O/S CNTR PND A8-3. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

The percent differences for compounds 4,4'-DDT, Methoxychlor and Decachlorobiphenyl were outside of QC limits in standard INDA3 analyzed at 02:39 on 1/16/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. These standards were the end bracketing standards for samples CNTR WETLND-A8-1, CNTR WETLND-A8-2, CNTR WETLND-A8-3, CNTR WETLND-A8-4, CNTR WETLND-A9 (COMP), CNTR POND DR.-3, CNTR POND DR.-8, O/S CNTR PND A8-4, CNTR PND DR.-8MS, and CNTR POND DR.-8MSD. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

Manual integrations were performed if required, and any affected peaks were designated with an "FF" on the area report in the column titled "Code". Manual integrations were initialed by the analyst that performed the integration.

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 22, 1997
Date

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

NO. P 27438

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE:

						MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	VOA-MISC VOA-TCL	PH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC						
						GL250	SEPTA60	GL250						
						Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	
11	H.H. OF SHW-64A	12/15/96 / 1345	SO		N	1	1	012						Composite 61A-64A
12	H.H. OF SHW-61B	12/15/96 / 1255	SO		N	1	1	014						Comp 61B
13	H.H. OF SHW-62B	12/15/96 / 1245	SO		N	1	1	015						61B prior to
14	H.H. OF SHW-63B	12/15/96 / 1235	SO		N	1	1	016						analysis
15	H.H. OF SHW-64B	12/15/96 / 1225	SO		N	1	1	017		Passed Red Screen				(except VOAs)
16	CHER POND DR.-1	12/16/96 / 1415	SO		N		1	2	019					
17	CHER POND DR.-2	12/16/96 / 1400	SO		N		1	2	020					
18	CHER POND DR.-3	12/16/96 / 1425 1409	SO		N		1	2	B01					
19	CHER POND DR.-4	12/16/96 / 1350	SO		N		1	2	B02					
20	CHER POND DR.-5	12/16/96 / 1235	SO		N		1	2	B03					

- AIR
- AQUEOUS
- COMPLEX
- DRUM WASTE
- OIL

S SOIL
SL SLUDGE
W WIPE
O OTHER
FB FIELD BLANK
TB TRIP BLANK

BOTTLES PREPARED BY	DATE / TIME	BOTTLES RECD BY	DATE / TIME
CP Dan-ag	12/10/96 1600	Russell Mehalick	12/15/96 0810
SIGNATURE		SIGNATURE	
		Russell Mehalick	
SAMPLES RELINQUISHED BY	DATE / TIME	RECEIVED IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	CP Dan-ag	12/17/96 11[illegible]
SIGNATURE		SIGNATURE	
Russell Mehalick			

☒ BOTTLES INTACT ☒ CUSTODY SEALS
☒ PRESERVED ☒ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

0000

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

NO. P7[illegible] 2743A

JOB #:

NT: OLIN CORPORATION

JECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	TESTS: EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	Ammonia Sulfate PST-TCL BNA-TCL Met-MIS	EPH/VPH Ammonia sulfate PST-TCL BNA-TCL Met-TAL				GENERAL REMARKS
	BOTTLE TYPE AND PRESERVATIVE					GL250	SEPTA60	GL250		GL 250				
	FIELD FILTERED - CIRCLE Y or N					Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS
1	CNTR POND DR.-6	12/16/96 / 1310	SO		N	2	1	BC-1						
2	CNTR POND DR.-7	12/16/96 / 1335	SO		N	2	1	BC-2						
3	CNTR POND DR.-8	12/16/96 / 1250	SO		N	2 RAM	1	2 RAM		2 BC-6				
4	CNTR POND DR.-9	12/16/96 / 1320	SO		N	2 RAM	1	2 RAM		2 BC-7				
5	O/S CNTR PND A8-1	12/16/96 / 1210	SO		N		1	1	BC-8					
6	O/S CNTR PND A8-2	12/16/96 / 1200	SO		N		1	RAM	1	BC-9				
7	O/S CNTR PND A8-3	12/16/96 / 1140	SO		N		1	RAM	1	BC				
8	O/S CNTR PND A8-4	12/16/96 / 1440	SO		N		1	RAM	1	[illegible]				
9	CNTR WETLND-A8-1	12/16/96 / 1450	SO		N		1	RAM	1	BC-12				
10	CNTR WETLND-A8-2	12/16/96 / 1520	SO		N	RAM	1	RAM RAM	1	BC13				

Passed Rad Screen
12/17/96 3[illegible]

MATRIX CODES

AIR	S	SOIL	
AQUEOUS	SL	SLUDGE	
COMPLEX	W	WIPE	
DRUM WASTE	O	OTHER	
OIL	FB	FIELD BLANK	
	TB	TRIP BLANK	

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Damiani	12/12/96 1600	Russell Mehalick	12/15/96 0810
SIGNATURE		SIGNATURE	
SAMPLES ~~COLLECTED BY~~ Relinquished by	DATE / TIME	RECEIVED IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	CP Damiani	12/17/96 1100
SIGNATURE Russell Mehalick		SIGNATURE	

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ PRESERVED
- ☒ CHILLED
- ☒ CUSTODY SEALS
- ☒ SEALS INTACT
- ☐ SEE REMARKS

LABORATORY COPY

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 4 OF 14 | NO. P/F [illegible]

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO | DUE DATE

	TESTS								GENERAL REMARKS
	EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	AMMONIA PST-TCL SULFATE BNA-TCL MET-MISC	EPH/VPH Ammonia sulfate PST-TCL BNA-TCL Met-TAL				
BOTTLE TYPE AND PRESERVATIVE	GL250	SEPTA60	GL250	GL250					
FIELD FILTERED - CIRCLE Y or N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS

#	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N								
1	CNTR WETLND-A8-3	12/16/96 / 1535	SO		N	2 RAM	1			2 RAM	BH1		
2	CNTR WETLND-A8-4	12/16/96 / 1505	SO		N	RAM	1			2	BH2		
3	CNTR WETLND-A9-1	12/16/96 / 1110	SO		N		1	1					
4	CNTR WETLND-A9-2	12/16/96 / 1100	SO		N		1	1					
5	CNTR WETLND-A9-3	12/16/96 / 1045	SO		N	2 RAM	1		RAM	2		Passed Rad Screen	
6	CNTR WETLND-A9-4	12/16/96 / 1130	SO		N	2 RAM	1		RAM	2		12/17/96	
7	AREA 1-1	12/15/96 / 1425	SO		N		1	1					
8	AREA 1-2	12/15/96 / 1415	SO		N		1	1					
9	AREA 1-3	12/15/96 / 1445	SO		N		1	1					
10	AREA 1-4	12/15/96 / 1435	SO		N		1	1					

Comp in lab all parameters but VOA's

Comp in lab all parameters but VOA's (cont.)

MATRIX CODES

- AIR
- AQUEOUS
- COMPLEX
- DRUM WASTE
- OIL
- S . SOIL
- SL . SLUDGE
- W . WIPE
- O . OTHER
- FB FIELD BLANK
- TB . TRIP BLANK

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Damiani	12/10/96 1600	Russell Mehalick	12/15/96 / 0810
SIGNATURE		SIGNATURE	
		Russell Mehalick	
SAMPLES CUSTODY Relinquished by	DATE / TIME	RECEIVED IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	CP Damiani	12/17/96 1100
SIGNATURE		SIGNATURE	
Russell Mehalick			

REMARKS ON SAMPLE RECEIPT

- ☑ BOTTLES INTACT
- ☑ PRESERVED
- ☑ CHILLED
- ☑ CUSTODY SEALS
- ☑ SEALS INTACT
- ☐ SEE REMARKS

LABORATORY COPY

Laboratory Sample ID	Field ID		Matrix	Date Sampled	Date Extracted	Date Analyzed	40 CFR 136 Extraction Holding Time Satisfied		40 CFR 136 Analysis Holding Time Satisfied		Action
							Yes	No	Yes	No	
962743B-01	NTR POND	DR -3	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-02	NTR POND	DR -4	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-03	NTR POND	DR -5	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-04	NTR POND	DR -6	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-05	NTR POND	DR -7	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-06	NTR POND	DR -8	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-07	NTR POND	DR -9	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-08	CNTR PND	A8-1	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-09	CNTR PND	A8-2	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-10	CNTR PND	A8-3	Soil	12/16/96	12/27/96	1/6/97		X	X		'J' all positive results and DL's
962743B-11	CNTR PND	A8-4	Soil	12/16/96	12/27/96	1/8/97		X	X		'J' all positive results and DL's
962743B-12	WETLAND	A8-1	Soil	12/16/96	12/27/96	1/7/97		X	X		'J' all positive results and DL's
962743B-13	WETLAND	A8-2	Soil	12/16/96	12/27/96	1/8/97		X	X		'J' all positive results and DL's
962743B-14	WETLAND	A8-3	Soil	12/16/96	12/27/96	1/8/97		X	X		'J' all positive results and DL's
962743B-15	WETLAND	A8-4	Soil	12/16/96	12/27/96	1/7/97		X	X		'J' all positive results and DL's
962743B-20	WETLAND	A9 (composit	Soil	12/16/96	12/27/96	1/7/97		X	X		'J' all positive results and DL's

within SW846 Method holding time (14 days)

B2743SV.XLS

QA Scientist M. Kudlacky Date 2/24/97

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

0475

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972J Calibration Date: 01/04/97 Time: 1554

Lab File ID: >J9007 Init. Calib. Date(s): 01/03/97 _____

Init. Calib. Times: 1818 1830

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.410	1.528		8.4	
2,4-Dinitrotoluene	0.429	0.419		-2.3	
Diethylphthalate	1.296	1.315		1.5	
4-Chlorophenyl-Phenyl Ether	0.573	0.616		7.5	
Fluorene	1.124	1.181		5.1	
4-Nitroaniline	0.272	0.258		-5.2	
4,6-Dinitro-2-methylphenol	0.170	0.170		0.0	
N-Nitrosodiphenylamine	0.525	0.587		11.8	30.0
4-Bromophenyl-phenylether	0.243	0.282		16.0	
Hexachlorobenzene	0.299	0.348		16.4	
Pentachlorophenol	0.177	0.174		-1.7	30.0
Phenanthrene	1.015	1.095		7.9	
Anthracene	1.052	1.150		9.3	
Di-n-butylphthalate	1.279	1.318		3.0	
Fluoranthene	1.015	0.995		-2.0	30.0
Pyrene	1.453	1.720		18.4	
Butylbenzylphthalate	0.672	0.656		-2.4	
3,3'-Dichlorobenzidine	0.256	0.190		[redacted]	— no mg
Benzo(a)anthracene	1.110	1.187		6.9	
Chrysene	1.024	1.102		7.6	
bis(2-Ethylhexyl)phthalate	0.884	0.835		-5.5	
Di-n-octylphthalate	1.289	1.274		-1.2	30.0
Benzo(b)fluoranthene	1.042	1.203		15.4	
Benzo(k)fluoranthene	1.022	1.122		9.8	
Benzo(a)pyrene	0.932	1.002		7.5	30.0
Indeno(1,2,3-cd)pyrene	1.324	1.538		16.2	
Dibenz(a,h)anthracene	1.099	1.268		15.4	
Benzo(g,h,i)perylene	1.035	1.156		11.7	
Nitrobenzene-D5	0.379	0.409		7.9	
2-Fluorobiphenyl	1.158	1.343		16.0	
Terphenyl-D14	1.040	1.244		19.6	
Phenol-D5	1.382	1.478		7.0	
2-Fluorophenol	1.148	1.226		6.8	
2,4,6-Tribromophenol	0.266	0.267		0.4	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972C Calibration Date: 01/16/97 Time: 1026

Lab File ID: >J9C43 Init. Calib. Date(s): 01/03/97 _____

Init. Calib. Times: 1515 1830

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.410	1.503		6.6	
2,4-Dinitrotoluene	0.429	0.423		-1.4	
Diethylphthalate	1.296	1.314		1.4	
4-Chlorophenyl-Phenyl Ether	0.573	0.618		7.8	
Fluorene	1.124	1.157		2.9	
4-Nitroaniline	0.272	0.245		-9.9	
4,6-Dinitro-2-methylphenol	0.170	0.189		11.2	
N-Nitrosodiphenylamine	0.525	0.582		10.8	30.0
4-Bromophenyl-phenylether	0.243	0.284		16.9	
Hexachlorobenzene	0.299	0.365		22.1	
Pentachlorophenol	0.177	0.199		12.4	30.0
Phenanthrene	1.015	1.086		7.0	
Anthracene	1.052	1.145		8.8	
Di-n-butylphthalate	1.279	1.292		1.0	
Fluoranthene	1.015	1.039		2.4	30.0
Pyrene	1.453	1.536		5.7	
Butylbenzylphthalate	0.672	0.685		1.9	
3,3'-Dichlorobenzidine	0.256	0.270		5.5	
Benzo(a)anthracene	1.110	1.196		7.8	
Chrysene	1.024	1.103		7.7	
bis(2-Ethylhexyl)phthalate	0.884	0.878		-0.7	
Di-n-octylphthalate	1.289	1.451		12.6	30.0
Benzo(b)fluoranthene	1.042	1.253		20.2	
Benzo(k)fluoranthene	1.022	1.166		14.1	
Benzo(a)pyrene	0.932	1.017		9.1	30.0
Indeno(1,2,3-cd)pyrene	1.324	0.953		[redacted]	
Dibenz(a,h)anthracene	1.099	0.809		[redacted]	
Benzo(g,h,i)perylene	1.035	0.675		[redacted]	
Nitrobenzene-D5	0.379	0.417		10.0	
2-Fluorobiphenyl	1.158	1.382		19.3	
Terphenyl-D14	1.040	1.048		0.8	
Phenol-D5	1.382	1.415		2.4	
2-Fluorophenol	1.148	1.213		5.7	
2,4,6-Tribromophenol	0.266	0.288		8.3	

NO IMP

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972C Calibration Date: 01/07/97 Time: 1006

Lab File ID: >C9058 Init. Calib. Date(s): 01/03/97 _____

Init. Calib. Times: 1513 1830

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.410	1.497		6.2	
2,4-Dinitrotoluene	0.429	0.459		7.0	
Diethylphthalate	1.296	1.455		12.3	
4-Chlorophenyl-Phenyl Ether	0.573	0.609		6.3	
Fluorene	1.124	1.180		5.0	
4-Nitroaniline	0.272	0.269		-1.1	
4,6-Dinitro-2-methylphenol	0.170	0.191		12.4	
N-Nitrosodiphenylamine	0.525	0.585		11.4	30.0
4-Bromophenyl-phenylether	0.243	0.278		14.4	
Hexachlorobenzene	0.299	0.338		13.0	
Pentachlorophenol	0.177	0.186		5.1	30.0
Phenanthrene	1.015	1.092		7.6	
Anthracene	1.052	1.139		8.3	
Di-n-butylphthalate	1.279	1.426		11.5	
Fluoranthene	1.015	1.002		-1.3	30.0
Pyrene	1.453	1.743		20.0	
Butylbenzylphthalate	0.672	0.816		21.4	
3,3'-Dichlorobenzidine	0.256	0.287		12.1	
Benzo(a)anthracene	1.110	1.237		11.4	
Chrysene	1.024	1.093		6.7	
bis(2-Ethylhexyl)phthalate	0.884	1.048		18.6	
Di-n-octylphthalate	1.289	1.666		[redacted]	30.0
Benzo(b)fluoranthene	1.042	1.179		13.1	
Benzo(k)fluoranthene	1.022	1.129		10.5	
Benzo(a)pyrene	0.932	1.018		9.2	30.0
Indeno(1,2,3-cd)pyrene	1.324	1.231		-7.0	
Dibenz(a,h)anthracene	1.099	1.027		-6.6	
Benzo(g,h,i)perylene	1.035	0.943		-8.9	
Nitrobenzene-D5	0.379	0.444		17.2	
2-Fluorobiphenyl	1.158	1.346		16.2	
Terphenyl-D14	1.040	1.262		21.3	
Phenol-D5	1.382	1.397		1.1	
2-Fluorophenol	1.148	1.214		5.8	
2,4,6-Tribromophenol	0.266	0.284		6.8	

-NO IMPACT

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

73

SEMIVOLATILE CONTINUING CALIBRATION CHECK

0591

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 27435 SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972J Calibration Date: 01 [illegible] 97 Time: 1201

Lab File ID: >J9077 Init. Calib. Date(s): 11 03/97 _____

Init. Calib. Times: 1515 1830

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.289	1.436		11.4	30.0
bis(2-Chloroethyl)ether	0.918	0.890		-3.0	
2-Chlorophenol	1.167	1.245		6.7	
1,3-Dichlorobenzene	1.308	1.475		12.8	
1,4-Dichlorobenzene	1.306	1.430		9.5	30.0
Benzyl alcohol	0.650	0.700		7.7	
1,2-Dichlorobenzene	1.196	1.293		8.1	
2-Methylphenol	0.983	0.949		-3.5	
2,2'-oxybis 1-Chloropropane)	0.928	1.099		18.4	
4-Methylphenol	1.075	1.106		2.9	
N-Nitroso-di-n-propylamine	0.872	0.865	[illegible]	-0.8	
Hexachloroethane	0.587	0.626		6.6	
Nitrobenzene	0.371	0.366		-1.4	
Isophorone	0.631	0.673		6.7	
2-Nitrophenol	0.191	0.213		11.5	30.0
2,4-Dimethylphenol	0.308	0.332		7.8	
Benzoic acid	0.160	0.133		-16.9	
bis(2-Chloroethoxy)methane	0.346	0.395		14.2	
2,4-Dichlorophenol	0.275	0.293		6.5	30.0
1,2,4-Trichlorobenzene	0.335	0.361		7.8	
Naphthalene	0.924	1.029		11.4	
4-Chloroaniline	0.360	0.314		-12.8	
Hexachlorobutadiene	0.184	0.191		3.8	30.0
4-Chloro-3-methylphenol	0.286	0.286		0.0	30.0
2-Methylnaphthalene	0.572	0.600		4.9	
Hexachlorocyclopentadiene	0.376	0.398	0.050	5.8	
2,4,6-Trichlorophenol	0.362	0.395		9.1	30.0
2,4,5-Trichlorophenol	0.381	0.414		8.7	
2-Chloronaphthalene	1.040	1.201		15.5	
2-Nitroaniline	0.363	0.350		-3.6	
Dimethylphthalate	1.271	1.278		0.6	
Acenaphthylene	1.641	1.856		13.1	
2,6-Dinitrotoluene	0.325	0.334		2.8	
3-Nitroaniline	0.265	0.239		-9.8	
Acenaphthene	0.996	1.107		11.1	30.0
2,4-Dinitrophenol	0.215	0.170	0.050	-20.9	
4-Nitrophenol	0.249	0.152	0.050	[illegible]	

NO imp

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5973D Calibration Date: 01/06/97 Time: 1201

Lab File ID: >J9077 Init. Calib. Date(s): 01/03/97 _____

Init. Calib. Times: 1815 1830

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.410	1.511		7.2	
2,4-Dinitrotoluene	0.429	0.402		-6.3	
Diethylphthalate	1.296	1.220		-5.9	
4-Chlorophenyl-Phenyl Ether	0.573	0.572		-0.2	
Fluorene	1.124	1.148		2.1	
4-Nitroaniline	0.272	0.249		-8.5	
4,6-Dinitro-2-methylphenol	0.170	0.173		1.8	
N-Nitrosodiphenylamine	0.525	0.602		14.7	30.0
4-Bromophenyl-phenylether	0.243	0.272		11.9	
Hexachlorobenzene	0.299	0.319		6.7	
Pentachlorophenol	0.177	0.157		-11.3	30.0
Phenanthrene	1.015	1.115		9.8	
Anthracene	1.052	1.172		11.4	
Di-n-butylphthalate	1.279	1.335		4.4	
Fluoranthene	1.015	0.997		-1.8	30.0
Pyrene	1.453	1.641		12.9	
Butylbenzylphthalate	0.672	0.747		11.2	
3,3'-Dichlorobenzidine	0.256	0.193		-24.6	
Benzo(a)anthracene	1.110	1.187		6.9	
Chrysene	1.024	1.128		10.2	
bis(2-Ethylhexyl)phthalate	0.884	0.999		13.0	
Di-n-octylphthalate	1.289	1.614		[redacted]	30.0
Benzo(b)fluoranthene	1.042	1.111		6.6	
Benzo(k)fluoranthene	1.022	1.220		19.4	
Benzo(a)pyrene	0.932	1.027		10.2	30.0
Indeno(1,2,3-cd)pyrene	1.324	1.310		-1.1	
Dibenz(a,h)anthracene	1.099	1.051		-4.4	
Benzo(g,h,i)perylene	1.035	1.089		5.2	
Nitrobenzene-D5	0.379	0.375		-1.1	
2-Fluorobiphenyl	1.158	1.338		15.5	
Terphenyl-D14	1.040	1.123		8.0	
Phenol-D5	1.382	1.481		7.2	
2-Fluorophenol	1.148	1.263		10.0	
2,4,6-Tribromophenol	0.266	0.213		-19.9	

No impact + result in 1627743B-14 [illegible] RQL

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

0510

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972J Calibration Date: 01/03/97 Time: 0813

Lab File ID: >J9085 Init. Calib. Date(s): 01/03/97 _____

Init. Calib. Times: 1515 1830

Assoc w/ CNTR 10/01 ok, -% MSD (AK)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.289	1.353		5.0	30.0
bis(2-Chloroethyl)ether	0.918	0.883		-3.8	
2-Chlorophenol	1.167	1.202		3.0	
1,3-Dichlorobenzene	1.308	1.470		12.4	
1,4-Dichlorobenzene	1.306	1.419		8.6	30.0
Benzyl alcohol	0.650	0.571		-12.2	
1,2-Dichlorobenzene	1.196	1.244		4.0	
2-Methylphenol	0.983	0.914		-7.0	
2,2'-oxybis (1-Chloropropane)	0.928	1.115		20.2	
4-Methylphenol	1.075	0.994		-7.5	
N-Nitroso-di-n-propylamine	0.872	0.814	[illegible]	-6.6	
Hexachloroethane	0.587	0.587		0.0	
Nitrobenzene	0.371	0.355		-4.3	
Isophorone	0.631	0.651		3.2	
2-Nitrophenol	0.191	0.204		6.8	30.0
2,4-Dimethylphenol	0.308	0.310		0.6	
Benzoic acid	0.160	0.091		[redacted]	
bis(2-Chloroethoxy)methane	0.346	0.393		13.6	
2,4-Dichlorophenol	0.275	0.262		-4.7	30.0
1,2,4-Trichlorobenzene	0.335	0.352		5.1	
Naphthalene	0.924	1.022		10.6	
4-Chloroaniline	0.360	0.294		-18.3	
Hexachlorobutadiene	0.184	0.177		-3.8	30.0
4-Chloro-3-methylphenol	0.286	0.222		-22.4	30.0
2-Methylnaphthalene	0.572	0.557		-2.6	
Hexachlorocyclopentadiene	0.376	0.308	0.050	-18.1	
2,4,6-Trichlorophenol	0.362	0.348		-3.9	30.0
2,4,5-Trichlorophenol	0.381	0.341		-10.5	
2-Chloronaphthalene	1.040	1.231		18.4	
2-Nitroaniline	0.363	0.312		-14.0	
Dimethylphthalate	1.271	1.307		2.8	
Acenaphthylene	1.641	1.843		12.3	
2,6-Dinitrotoluene	0.325	0.310		-4.6	
3-Nitroaniline	0.265	0.210		-20.8	
Acenaphthene	0.996	1.108		11.2	30.0
2,4-Dinitrophenol	0.215	0.070	0.050	[redacted]	
4-Nitrophenol	0.249	0.075	0.050	[redacted]	

No impact

-est QL

-est + result

All other compounds must meet a minimum RRF of 0.010.

FORM VII SV-1

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

0511

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Instrument ID: HP5972C Calibration Date: 01.[illegible] Time: 0813

Lab File ID: >C9085 Init. Calib. Date(s): 11 03/97 _____

Init. Calib. Times: 1515 1830

Assoc w/ CNTR Pond DR. - - [illegible]

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.410	1.470		4.3	
2,4-Dinitrotoluene	0.429	0.377		-12.1	
Diethylphthalate	1.296	1.191		-8.1	
4-Chlorophenyl-Phenyl Ether	0.573	0.542		-5.4	
Fluorene	1.124	1.096		-2.5	
4-Nitroaniline	0.272	0.217		-20.2	
4,6-Dinitro-2-methylphenol	0.170	0.132		-22.4	
N-Nitrosodiphenylamine	0.525	0.634		20.8	30.0
4-Bromophenyl-phenylether	0.243	0.268		10.3	
Hexachlorobenzene	0.299	0.315		5.4	
Pentachlorophenol	0.177	0.127		[redacted]	30.0
Phenanthrene	1.015	1.120		10.3	
Anthracene	1.052	1.178		12.0	
Di-n-butylphthalate	1.279	1.376		7.6	
Fluoranthene	1.015	1.020		0.5	30.0
Pyrene	1.453	1.265		-12.9	
Butylbenzylphthalate	0.672	0.630		-6.2	
3,3'-Dichlorobenzidine	0.256	0.308		20.3	
Benzo(a)anthracene	1.110	1.163		4.8	
Chrysene	1.024	1.120		9.4	
bis(2-Ethylhexyl)phthalate	0.884	0.890		0.7	
Di-n-octylphthalate	1.289	1.389		7.8	30.0
Benzo(b)fluoranthene	1.042	1.149		10.3	
Benzo(k)fluoranthene	1.022	1.185		15.9	
Benzo(a)pyrene	0.932	1.042		11.8	30.0
Indeno(1,2,3-cd)pyrene	1.324	0.876		[redacted]	
Dibenz(a,h)anthracene	1.099	0.679		[redacted]	
Benzo(g,h,i)perylene	1.035	0.629		[redacted]	
Nitrobenzene-D5	0.379	0.360		-5.0	
2-Fluorobiphenyl	1.158	1.406		21.4	
Terphenyl-D14	1.040	0.860		-17.3	
Phenol-D5	1.382	1.483		7.3	
2-Fluorophenol	1.148	1.328		15.7	
2,4,6-Tribromophenol	0.266	0.161		[redacted]	

est. + result

est. + results

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEJ

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water SOIL Lab Sample ID: SBLKEJ

Sample wt/vol: 30 (g/mL/G Lab File ID: >J9029

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N)N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/04/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: Y/N)N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEJ

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix: (soil/water SOIL Lab Sample ID: SBLKEJ

Sample wt/vol: 30 (g/mL)G Lab File ID: >J9029

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N)N Date Extracted: 12/27/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/04/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: Y/N)N pH:_____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	[redacted]	[redacted]	
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	[redacted]	[redacted]	
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

X 10 = 23
qualify
96-1434
14
"U"

X10 - 120
qualify
all pos-
results
except
C/S CNT
FND AB

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 0374

FIELD BLANK #2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 962743C-17

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >H2195

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 12/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/02/97 From different SDG.

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

NK 2/24/9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

UNvalidated Field Blank. Evaluated for impact to associated samples. All di-n-butylphthalate results are negated due to method blank contamination except O/S CNTR PND-A8-4. There is no impact on O/S CNTR PND-A8-4 due to this Field Blank

0374A

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK #2

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743C SAS No.: _____ SDG No.: ~~C274~~

Matrix: (soil/water) WATER Lab Sample ID: 962743C-17

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >H2195

Level: (low/med) LOW Date Received: 12/17/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 12/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/02/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

From different SDG

MK 2/24/97

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	<C .6	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Level: (low, med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLKEJ	74	64	63	69	67	61			0
02	SBLKEJFMS	71	63	73	64	66	69			0
03	R POND DR.-3	76	85	104	70	69	80			0
04	R POND DR.-6	90	82	106	74	73	73			0
05	R POND DR.-5	88	93	92	69	72	73			0
06	R POND DR.-7	79	82	85	65	66	70			0
07	R POND DR.-8	87	84	85	71	72	68			0
08	R POND DR.-9	82	80	94	72	71	66			0
09	NTR PND A8-1	63	66	58	50	53	53			0
10	NTR PND A8-2	63	68	53	51	54	57			0
11	NTR PND A8-3	68	75	68	55	57	59			0
12	R POND DR.-4	72	75	67	39	59	64			0
13	WETLND-A8-4	78	78	62	75	73	72			0
14	LND-A9(COMP)	61	65	50	61	59	58			0
15	WETLND-A8-1	0D	0D	0D	0D	0D	0D			0
16	POND DR.-8MS	78	78	52	64	67	69			0
17	NTR PND A8-4	68	84	61	54	72	71			0
18	WETLND-A8-2	80	80	64	68	67	58			0
19	WETLND-A8-3	78	79	58	70	69	65			0
20	OND DR.-8MSD	69	64	65	62	62	84			0
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 23-120)
S2 (FBP) = 2-Fluorobiphenyl 30-115)
S3 (TPH) = Terphenyl-d14 18-137)
S4 (PHL) = Phenol-d5 24-113)
S5 (2FP) = 2-Fluorophenol 25-121)
S6 (TBP) = 2,4,6-Tribromophenol 19-122)
S7 (2CP) = 2-Chlorophenol-d4 (-) (advisory)
S8 (DCB) = 1,2-Dichlorobenzene-d4 (-) (advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II SV-2

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix Spike - EPA Sample No.: CNTR POND DR.-8 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	4200	0	2800	67	26- 90
2-Chlorophenol	4200	0	3200	76	25-102
1,4-Dichlorobenzene	2100	0	1400	67	28-104
N-Nitroso-di-n-prop.(1)	2100	0	1700	81	41-126
1,2,4-Trichlorobenzene	2100	0	1500	71	38-107
4-Chloro-3-methylphenol	4200	0	3000	71	26-103
Acenaphthene	2100	0	1600	76	31-137
4-Nitrophenol	4200	0	3000	71	11-114
2,4-Dinitrotoluene	2100	0	1600	76	28- 89
Pentachlorophenol	4200	0	3500	83	17-109
Pyrene	2100	0	1000	48	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	4200	2600	62	8	35	26- 90
2-Chlorophenol	4200	3000	71	7	50	25-102
1,4-Dichlorobenzene	2100	1300	62	8	27	28-104
N-Nitroso-di-n-prop.(1)	2100	1800	86	6	38	41-126
1,2,4-Trichlorobenzene	2100	1200	57	22	23	38-107
4-Chloro-3-methylphenol	4200	3500	83	16	33	26-103
Acenaphthene	2100	1300	62	[redacted]	19	31-137
4-Nitrophenol	4200	5900	140*	[redacted]	50	11-114
2,4-Dinitrotoluene	2100	1700	81	6	47	28- 89
Pentachlorophenol	4200	3800	90	8	47	17-109
Pyrene	2100	1300	62	25	36	35-142

Assoc. compounds exhibited 69.9% D

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits.

RPD: 2 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: _____

3D

SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix Spike - EPA Sample No.: SBLKEJ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Phenol	1700	0	1200	70	5-112
bis(2-Chloroethyl)ether	1700	0	1100	65	12-158
2-Chlorophenol	1700	0	1400	82	23-134
1,3-Dichlorobenzene	1700	0	1000	59	01-172
1,4-Dichlorobenzene	1700	0	1000	59	20-124
Benzyl alcohol	1700	0	1300	76	8-132
1,2-Dichlorobenzene	1700	0	1000	59	32-129
2-Methylphenol	1700	0	1400	82	37-113
bis(2-Chloroisopropyl)ether	1700	0	1000	59	36-166
4-Methylphenol	1700	0	1400	82	32-108
N-Nitroso-di-n-propylamine	1700	0	1100	65	01-230
Hexachloroethane	1700	0	1000	59	40-113
Nitrobenzene	1700	0	1000	59	35-180
Isophorone	1700	0	940	55	21-196
2-Nitrophenol	1700	0	1200	70	29-182
2,4-Dimethylphenol	1700	0	1500	88	64-238
Benzoic acid	1700	0	1500	88	01-474
bis(2-Chloroethoxy)methane	1700	0	1100	65	33-184
2,4-Dichlorophenol	1700	0	1300	76	44-117
1,2,4-Trichlorobenzene	1700	0	920	54	44-142
Naphthalene	1700	0	920	54	21-133
4-Chloroaniline	1700	0	900	53	01-368
Hexachlorobutadiene	1700	0	1000	59	24-116
4-Chloro-3-methylphenol	1700	0	1400	82	22-147
2-Methylnaphthalene	1700	0	1200	70	36-112
Hexachlorocyclopentadiene	1700	0	890	52	01-74
2,4,6-Trichlorophenol	1700	0	1200	70	34-144
2,4,5-Trichlorophenol	1700	0	1200	70	45-129
2-Chloronaphthalene	1700	0	1100	65	60-118
2-Nitroaniline	1700	0	1300	76	61-138

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 0 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

3D
SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix Spike - EPA Sample No.: SBLKEJ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Dimethylphthalate	1700	0	1100	65	01-112
Acenaphthylene	1700	0	900	53	33-145
2,6-Dinitrotoluene	1700	0	1100	65	50-158
3-Nitroaniline	1700	0	1300	76	01-644
Acenaphthene	1700	0	1000	59	47-145
2,4-Dinitrophenol	1700	0	1600	94	01-191
4-Nitrophenol	1700	0	1300	76	01-132
Dibenzofuran	1700	0	1200	70	52-123
2,4-Dinitrotoluene	1700	0	1100	65	39-139
Diethylphthalate	1700	23	1200	69	01-114
4-Chlorophenyl-phenylether	1700	0	1000	59	25-158
Fluorene	1700	0	1100	65	59-121
4-Nitroaniline	1700	0	1300	76	5-194
4,6-Dinitro-2-methylphenol	1700	0	1400	82	01-181
N-Nitrosodiphenylamine (1)	3300	0	2400	73	11-169
4-Bromophenyl-phenylether	1700	0	1000	59	53-127
Hexachlorobenzene	1700	0	1100	65	01-152
Pentachlorophenol	1700	0	1400	82	14-176
Phenanthrene	1700	0	1100	65	54-120
Anthracene	1700	0	980	58	27-133
Di-n-butylphthalate	1700	12	1200	70	1-118
Fluoranthene	1700	0	1100	65	26-137
Pyrene	1700	0	1000	59	52-115
Butylbenzylphthalate	1700	0	1300	76	01-152
3,3'-Dichlorobenzidine	1700	0	970	57	01-262
Benzo(a)anthracene	1700	0	1100	65	33-143
Chrysene	1700	0	830	49	17-168
bis(2-Ethylhexyl)phthalate	1700	0	1300	76	8-158
Di-n-octylphthalate	1700	0	1100	65	4-146
Benzo(b)fluoranthene	1700	0	1000	59	24-159

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 0 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

3D

SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 2743B SAS No.: _____ SDG No.: B2743

Matrix Spike - EPA Sample No.: SBLKEJ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Benzo(k)fluoranthene	1700	0	950	56	11-162
Benzo(a)pyrene	1700	0	990	58	17-163
Indeno(1,2,3-cd)pyrene	1700	0	1100	65	01-171
Dibenzo(a,h)anthracene	1700	0	890	52	01-227
Benzo(g,h,i)perylene	1700	0	1100	65	01-219

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 0 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

SMITH

APPENDIX C

Pesticide/PCB Data Validation Summary

BCM Project Name: Olin Mass
BCM Project No.: 0070740102
Project Manager: Bruce Cushing
Laboratory: IEA

Case No./SDG B2743
Sampling Date(s): 12/15/96 - 12/16/96
Reviewed By: Danielle Beaubey
Completion Date: 2/ /97

Compound List: [X] TCL [ ] Priority Pollutant [ ] Appendix IX [ ] Other _____

Method: [ ] CLP SOW ____ [ ] 40 CFR 136 Method ____ [X] SW-846 Method 8081 [ ] Other _____

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times	✓	✓		all w/in
Instrument Performance	✓	✓		overall performance looks good
- Resolution Check		✓		NA
- PEM Check		✓	✓	continuing checks performed, no initial pem provided *B failed - estimated results
- TMX/DCB Retention Time	✓	✓		stable - 1 peak masked due to matrix interference
- Retention Time Windows	✓	✓		windows varied ±0.05 - ±0.10
Initial Calibrations	✓	✓		all compl met RSD criteria sw846
Continuing Calibrations		✓	✓	INDA or INDB analyzed - not both %D outliers estimated results
Blank Analysis Results	✓	✓		No target compds detected
Surrogate Recoveries	✓	✓		recoveries from one channel reported, one outlier due to matrix
MS/MSD Results		✓	✓	outlier present estimate pos result in unspiked sample
Field Duplicate Results		✓		NA
Target Compound Identification		✓		compds identified & verified
Quantitation/Detection Limits		✓	✓	quantitations from primary column results reported; all results reported below DL are estimated
Overall Assessment of Data				
Other:				

General Comments: DB1701 + RTX 35 columns; All results reported from DB1701

Case Narrative not provided

NA - Not applicable
NR - Not reviewed

QA Scientist Danielle Beaubey Date 2/13/97

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-3

Lab Code: IEACT Case No.: 2743B SDG No.: B274[illegible]

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-01

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357051

% Moisture: 52 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	3.5 U
319-85-7	beta-BHC	3.5 U
319-86-8	delta-BHC	3.5 U
58-89-9	gamma-BHC (Lindane)	[illegible]
76-44-8	Heptachlor	3.5 U
309-00-2	Aldrin	3.5 U
1024-57-3	Heptachlor Epoxide	3.5 U
959-98-8	Endosulfan I	3.5 U
60-57-1	Dieldrin	6.9 U
72-55-9	4,4'-DDE	[illegible]
72-20-8	Endrin	6.9 U
33213-65-9	Endosulfan II	6.9 U
72-54-8	4,4'-DDD	[illegible]
1031-07-8	Endosulfan Sulfate	6.9 U
50-29-3	4,4'-DDT	[illegible]
72-43-5	Methoxychlor	35 U
53494-70-5	Endrin ketone	[illegible]
7421-93-4	Endrin aldehyde	6.9 U
5103-71-9	alpha-Chlordane	3.5 U
5103-74-2	gamma-Chlordane	3.5 U
8001-35-2	Toxaphene	69 U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-4

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-02

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357028

% Moisture: 50 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.4	U
319-85-7	beta-BHC	3.4	U
319-86-8	delta-BHC	3.4	U
58-89-9	gamma-BHC (Lindane)	3.4	U
76-44-8	Heptachlor	[redacted]	U
309-00-2	Aldrin	[redacted]	
1024-57-3	Heptachlor Epoxide	3.4	U
959-98-8	Endosulfan I	3.4	U
60-57-1	Dieldrin	6.6	U
72-55-9	4,4'-DDE	6.6	U
72-20-8	Endrin	6.6	U
33213-65-9	Endosulfan II	6.6	U
72-54-8	4,4'-DDD	6.6	U
1031-07-8	Endosulfan Sulfate	6.6	U
50-29-3	4,4'-DDT	6.6	U
72-43-5	Methoxychlor	34	U
53494-70-5	Endrin ketone	6.6	U
7421-93-4	Endrin aldehyde	6.6	U
5103-71-9	alpha-Chlordane	3.4	U
5103-74-2	gamma-Chlordane	3.4	U
8001-35-2	Toxaphene	66	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-5

Lab Code: IEACT Case No.: 2743B SDG No.: P2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-03

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357029

% Moisture: 47 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.2	U
319-85-7	beta-BHC	3.2	U
319-86-8	delta-BHC	[redacted]	[redacted]
58-89-9	gamma-BHC (Lindane)	3.2	U
76-44-8	Heptachlor	3.2	U
309-00-2	Aldrin	3.2	U
1024-57-3	Heptachlor Epoxide	3.2	U
959-98-8	Endosulfan I	3.2	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	[redacted]
72-20-8	Endrin	6.2	U
33213-65-9	Endosulfan II	6.2	U
72-54-8	4,4'-DDD	6.2	U
1031-07-8	Endosulfan Sulfate	6.2	U
50-29-3	4,4'-DDT	[redacted]	[redacted]
72-43-5	Methoxychlor	32	U
53494-70-5	Endrin ketone	6.2	U
7421-93-4	Endrin aldehyde	6.2	U
5103-71-9	alpha-Chlordane	3.2	U
5103-74-2	gamma-Chlordane	3.2	U
8001-35-2	Toxaphene	62	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-6

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-04

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357030

% Moisture: 20 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	1.4	J
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor Epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan Sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	41	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-7

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-05

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357031

% Moisture: 50 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.4	U
319-85-7	beta-BHC	3.4	U
319-86-8	delta-BHC	3.4	U
58-89-9	gamma-BHC (Lindane)	3.4	U
76-44-8	Heptachlor	[illegible]	[illegible]
309-00-2	Aldrin	3.4	U
1024-57-3	Heptachlor Epoxide	3.4	U
959-98-8	Endosulfan I	3.4	U
60-57-1	Dieldrin	6.6	U
72-55-9	4,4'-DDE	6.6	U
72-20-8	Endrin	6.6	U
33213-65-9	Endosulfan II	6.6	U
72-54-8	4,4'-DDD	6.6	U
1031-07-8	Endosulfan Sulfate	6.6	U
50-29-3	4,4'-DDT	6.6	U
72-43-5	Methoxychlor	34	U
53494-70-5	Endrin ketone	6.6	U
7421-93-4	Endrin aldehyde	6.6	U
5103-71-9	alpha-Chlordane	3.4	U
5103-74-2	gamma-Chlordane	3.4	U
8001-35-2	Toxaphene	66	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-8

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-06

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357052

% Moisture: 21 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	[redacted]	
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor Epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan Sulfate	4.2	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	42	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-9

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-07

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357032

% Moisture: 16 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor Epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan Sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.9	U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	39	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-1

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-08

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357033

% Moisture: 25 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) __ pH: 3.4 Sulfur Cleanup: (Y/N) __

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor Epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	[redacted]	
1031-07-8	Endosulfan Sulfate	4.4	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	44	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-2

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-09

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357034

% Moisture: 34 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	[redacted]	J
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor Epoxide	[redacted]	
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	[redacted]	J
72-43-5	Methoxychlor	26	U
53494-70-5	Endrin ketone	5.0	U
7421-93-4	Endrin aldehyde	5.0	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	50	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-3

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-10

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357035

% Moisture: 26 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/14/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	[redacted]	[redacted]
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor Epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	4.4	U
1031-07-8	Endosulfan Sulfate	4.4	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	44	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-4

Lab Code: IEACT Case No.: 2743B SDG No.: E2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-11

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357053

% Moisture: 25 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	[redacted]	
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor Epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	[redacted]	
1031-07-8	Endosulfan Sulfate	4.4	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	44	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-1

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-12

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357046

% Moisture: 21 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	0.21	J
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor Epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan Sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	42	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-2

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-13

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357047

% Moisture: 41 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	[redacted]	[redacted]
319-85-7	beta-BHC	2.9	U
319-86-8	delta-BHC	2.9	U
58-89-9	gamma-BHC (Lindane)	[redacted]	[redacted]
76-44-8	Heptachlor	2.9	U
309-00-2	Aldrin	2.9	U
1024-57-3	Heptachlor Epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	5.6	U
72-55-9	4,4'-DDE	[redacted]	[redacted]
72-20-8	Endrin	5.6	U
33213-65-9	Endosulfan II	5.6	U
72-54-8	4,4'-DDD	5.6	U
1031-07-8	Endosulfan Sulfate	5.6	U
50-29-3	4,4'-DDT	[redacted]	[redacted]
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin ketone	5.6	U
7421-93-4	Endrin aldehyde	5.6	U
5103-71-9	alpha-Chlordane	2.9	U
5103-74-2	gamma-Chlordane	2.9	U
8001-35-2	Toxaphene	56	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-3

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-14

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357048

% Moisture: 22 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor Epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan Sulfate	4.2	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	42	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-4

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-15

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357049

% Moisture: 24 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor Epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan Sulfate	4.3	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	43	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A9(COMP)

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix: (soil/water): SOIL Lab Sample ID: 962743B-20

Sample wt/vol: 30 (g/ml) G Lab File ID: A5357050

% Moisture: 43 decanted: (Y/N) __ Date Received : 12/17/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/19/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/15/97

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.0	U
319-85-7	beta-BHC	3.0	U
319-86-8	delta-BHC	3.0	U
58-89-9	gamma-BHC (Lindane)	[redacted]	
76-44-8	Heptachlor	3.0	U
309-00-2	Aldrin	[redacted]	
1024-57-3	Heptachlor Epoxide	3.0	U
959-98-8	Endosulfan I	[redacted]	
60-57-1	Dieldrin	5.8	U
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	5.8	U
33213-65-9	Endosulfan II	5.8	U
72-54-8	4,4'-DDD	[redacted]	
1031-07-8	Endosulfan Sulfate	5.8	U
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	30	U
53494-70-5	Endrin ketone	5.8	U
7421-93-4	Endrin aldehyde	5.8	U
5103-71-9	alpha-Chlordane	3.0	U
5103-74-2	gamma-Chlordane	[redacted]	
8001-35-2	Toxaphene	58	U

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-3

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-01 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.39	9.32	9.42	6.1
	2	11.50	11.40	11.54	
4,4'-DDE	1	16.13	15.99	16.15	2.6
	2	16.65	16.55	16.65	
4,4'-DDD	1	21.21	21.13	21.25	1.3
	2	18.04	17.95	18.11	
4,4'-DDT	1	22.10	21.98	22.10	12.
	2	13.83	18.75	18.89	
Endrin ketone	1	26.07	26.03	26.13	3.1
	2	21.05	21.04	21.14	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-4

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-02 Date(s) Analyzed: 01/14/97 1/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
Heptachlor	1	9.97	9.[illegible]	10.00	0.40
	2	12.53	12.[illegible]	12.63	
Aldrin	1	10.77	10.[illegible]5	10.85	0.11
	2	13.49	13.[illegible]2	13.52	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-5

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-03 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
delta-BHC	1	12.72	12.69	12.83	1.5
	2	12.69	12.69	12.79	
Dieldrin	1	16.65	16.63	16.77	2.0
	2	16.76	16.63	16.82	
4,4'-DDE	1	16.02	15.99	16.15	1.2
	2	16.61	16.55	16.65	
4,4'-DDT	1	21.99	21.98	22.10	2.9
	2	18.84	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-6

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-04 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.41	9.[illegible]	9.42	1.4
	2	11.52	11.[illegible]	11.54	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-7

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-05 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
Heptachlor	1	9.98	9.90	10.00	0.34
	2	12.53	12.49	12.63	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR POND DR.-8

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-06 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.41	9.32	9.42	6.1
	2	11.50	11.40	11.54	
4,4'-DDT	1	22.12	21.98	22.10	4.9
	2	18.83	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-1

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-08 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
Dieldrin	1	16.71	16.63	16.77	0.99
	2	16.76	16.68	16.82	
4,4'-DDE	1	16.08	15.99	16.15	2.3
	2	16.60	16.55	16.65	
4,4'-DDD	1	21.13	21.13	21.25	0.15
	2	18.00	17.95	18.11	
4,4'-DDT	1	22.05	21.98	22.10	2.2
	2	18.83	18.75	18.89	

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PESTICIDE IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

0700

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-2

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-09 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
beta-BHC	1	11.77	11.77	11.87	0.13
	2	11.75	11.69	11.79	
Heptachlor Epoxide	1	13.45	13.34	13.48	0.078
	2	14.99	14.95	15.05	
Dieldrin	1	16.79	16.63	16.77	1.7
	2	16.76	16.68	16.82	
4,4'-DDE	1	16.13	15.99	16.15	1.4
	2	16.60	16.55	16.65	
4,4'-DDT	1	22.09	21.98	22.10	1.4
	2	18.83	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-3

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-10 Date(s) Analyzed: 01/14/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
alpha-BHC	1	8.43	8.36	8.46	0.20
	2	10.35	10.27	10.41	
Dieldrin	1	16.77	16.63	16.77	1.3
	2	16.77	16.68	16.82	
4,4'-DDE	1	16.12	15.99	16.15	0.53
	2	16.61	16.55	16.65	
4,4'-DDT	1	22.09	21.98	22.10	2.3
	2	16.84	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: O/S CNTR PND A8-4

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-11 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.46	9.32	9.42	64.
	2	11.53	11.40	11.54	
Dieldrin	1	16.70	16.63	16.77	12.
	2	16.76	16.68	16.82	
4,4'-DDD	1	21.24	21.13	21.25	8.4
	2	18.06	17.95	18.11	
4,4'-DDT	1	22.14	21.98	22.10	40.
	2	18.83	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-1

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-12 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.36	9.32	9.42	0.21
	2	11.50	11.40	11.54	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

0704

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-2

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962/43B-13 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
alpha-BHC	1	8.41	8.36	8.46	1.1
	2	10.34	10.27	10.41	
gamma-BHC (Lindane)	1	9.37	9.32	9.42	0.92
	2	11.48	11.40	11.54	
4,4'-DDE	1	16.06	15.99	16.15	0.89
	2	16.60	16.55	16.65	
4,4'-DDT	1	22.02	21.98	22.10	1.7
	2	18.83	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-3

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-14 Date(s) Analyzed: 01/15/97 01/08/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION
Dieldrin	1	16.70	16.63	16.77	1.3
	2	16.76	16.68	16.82	
4,4'-DDE	1	16.07	15.99	16.15	0.69
	2	16.60	16.55	16.65	
4,4'-DDT	1	22.04	21.98	22.10	1.6
	2	18.83	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

0703

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A8-4

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-15 Date(s) Analyzed: 01/15/97 01/09/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
4,4'-DDE	1	16.07	15.99	16.15	0.64
	2	16.60	16.55	16.65	
4,4'-DDT	1	22.04	21.98	22.10	2.4
	2	18.84	18.75	18.89	

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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

0707

Lab Name: IEA-CT Contract: _____ Client ID: CNTR WETLND-A9(COMP)

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Lab Sample ID : 962743B-20 Date(s) Analyzed: 01/15/97 01/09/97

Instrument ID (1): HP58905A Instrument ID (2): HP58901A

GC Column(1): DB-1701 0.53(mm) GC Column(2): RTX-35 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION
gamma-BHC (Lindane)	1	9.39	9.32	9.42	5.2
	2	11.50	11.40	11.54	
Aldrin	1	10.81	10.75	10.85	1.9
	2	13.46	13.42	13.52	
Endosulfan I	1	14.70	14.60	14.76	2.1
	2	15.93	15.88	16.02	
4,4'-DDE	1	16.13	15.99	16.15	1.6
	2	16.59	16.55	16.65	
4,4'-DDD	1	21.22	21.13	21.25	0.50
	2	18.01	17.95	18.11	
4,4'-DDT	1	22.10	21.98	22.10	3.0
	2	18.83	18.75	18.89	
gamma-Chlordane	1	15.09	15.00	15.10	5.2
	2	15.47	15.47	15.57	

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Holding Time Worksheet for Pesticide Analysis

Laboratory Sample ID	Field ID		Matrix	Date Sampled	Date Extracted	Date Analyzed	Time Analyzed	Instrument ID	40 CFR 136 Extraction Holding Time Satisfied		40 CFR 136 Analysis Holding Time Satisfied		Action
									Y	N	Y	N	
962743B-01	CNTR POND	DR-3	SOIL	12/16/96	12/19/96	1/15/97	21:20	HP58905A	X		X		
962743B-02	CNTR. POND	DR-4	SOIL	12/16/96	12/19/96	1/14/97	14:13	HP58905A	X		X		
962743B-03	CNTR. POND	DR-5	SOIL	12/16/96	12/19/96	1/14/97	14:52	HP58905A	X		X		
962743B-04	CNTR. POND	DR-6	SOIL	12/16/96	12/19/96	1/14/97	15:31	HP58905A	X		X		
962743B-05	CNTR. POND	DR-7	SOIL	12/16/96	12/19/96	1/14/97	16:11	HP58905A	X		X		
962743B-06	CNTR. POND	DR-8	SOIL	12/16/96	12/19/96	1/14/97	22:00	HP58905A	X		X		
962743B-07	CNTR POND	DR-9	SOIL	12/16/96	12/19/96	1/8/97	19:36	HP58905A	X		X		
962743B-08	O/S CNTR. POND	A8-1	SOIL	12/16/96	12/19/96	1/14/97	17:29	HP58905A	X		X		
962743B-09	O/S CNTR. POND	A8-2	SOIL	12/16/96	12/19/96	1/14/97	18:20	HP58905A	X		X		
962743B-10	O/S CNTR. POND	A8-3	SOIL	12/16/96	12/19/96	1/14/97	19:04	HP58905A	X		X		
962743B-11	O/S CNTR. POND	A8-4	SOIL	12/16/96	12/19/96	1/15/97	22:40	HP58905A	X		X		
962743B-12	CNTR. WETLND	A8-1	SOIL	12/16/96	12/19/96	1/15/97	18:01	HP58905A	X		X		
962743B-13	CNTR. WETLND	A8-2	SOIL	12/16/96	12/19/96	1/15/97	18:41	HP58905A	X		X		
962743B-14	CNTR. WETLND	A8-3	SOIL	12/16/96	12/19/96	1/15/97	19:21	HP58905A	X		X		
962743B-15	CNTR. WETLND	A8-4	SOIL	12/16/96	12/19/96	1/15/97	20:01	HP58905A	X		X		
962743B-20	CNTR WETLND	A9 COMP	SOIL	12/16/96	12/19/96	1/15/97	20:40	HP58905A	X		X		

B2743PST.XLS

QA Scientist Daniel Clearwater Date 2/13/97

2F
SOIL PESTICIDE SURROGATE RECOVERY

Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: 0.53 (mm)

	SAMPLE NO.	TCX %REC	#	DCB %REC	#	OTHER %REC	#	OTHER %REC	#	TOT OUT
01	PBLK48	76		92						0
02	PBLK48QC	69		88						0
03	CNTR POND DR.-4	60		73						0
04	CNTR POND DR.-5	69		87						0
05	CNTR POND DR.-6	66		80						0
06	CNTR POND DR.-7	58		55						0
07	CNTR POND DR.-9	70		68						0
08	O/S CNTR PND A8-1	52		50						0
09	O/S CNTR PND A8-2	60		58						0
10	O/S CNTR PND A8-3	63		63						0
11	CNTR WETLND-A8-1	69		90						0
12	CNTR WETLND-A8-2	75		110						0
13	CNTR WETLND-A8-3	68		85						0
14	CNTR WETLND-A8-4	68		92						0
15	CNTR WETLND-A9(COMP)	74		98						0
16	CNTR POND DR.-3	85		73						0
17	CNTR POND DR.-8	76		72						0
18	O/S CNTR PND A8-4	57		~~406~~ *						1 (+)
19	CNTR POND DR.-8MS	51		63						0
20	CNTR POND DR.-8MSD	68		70						0
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(47-150)
DCB = Decachlorobiphenyl	(41-149)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

(+) Matrix interference. peak selected out of RTW No qualification necessary DML 2/13/97

FORM II PEST-2
GC-8081:rev 1.0

3H
SOIL PESTICIDE QC CHECK RECOVERY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Sample No.: PBLK48

COMPOUND	SPIKE ADDED (G)	SPIKE CONCENTRATION (G)	% REC #	QC. LIMITS REC.
alpha-BHC	6.7	4.7	70	37-134
beta-BHC	6.7	5.3	80	17-147
delta-BHC	6.7	0.32	5 *	19-140
gamma-BHC	6.7	4.5	68	32-127
Heptachlor	6.7	5.2	78	34-111
Aldrin	6.7	4.8	72	42-122
Heptachlor Epoxide	6.7	5.1	76	37-142
Endosulfan I	6.7	5.1	76	45-153
Dieldrin	6.7	5.6	84	36-146
4,4'-DDE	6.7	5.0	75	30-145
Endrin	6.7	5.6	84	30-147
Endosulfan II	6.7	9.9	148	1-202
4,4'-DDD	6.7	12.	180 *	31-141
Endosulfan Sulfate	6.7	5.1	76	26-144
4,4'-DDT	6.7	5.0	75	25-160
Methoxychlor	27	23.	86	1-
Endrin Aldehyde	6.7	4.4	66	1-

Column to be used to flag recovery values with an asterisk

COMMENTS: _____

FORM III PEST-4
GC-8081:rev 1.0

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

'b Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Matrix Spike - Sample No.: CNTR POND DR.-8 Conc. Units : UG/KG

	SPIKE ADDED	SAMPLE CONC	MS CONC	MS %REC #	MSD CONC	MSD %REC #	%RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	21	6.1	15	42*	16.	47	11	50	46-127 (+)
Aldrin	21	0.0	12.	57	13.	62	8	43	34-132
Heptachlor	21	0.0	21.	100	22.	104	4	31	35-130
Dieldrin	42	0.0	19.	45	22.	52	14	38	31-134
Endrin	42	0.0	20.	47	23.	54	14	45	42-139
4,4'-DDT	42	4.9	20.	36	22.	40	10	50	23-134

(+) estimated positive result in unspiked sample
DMC 2/13/97

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

COMMENTS: _____

FORM III PEST-2
GC-8081:rev 1.0

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

067!

Lab Name: IEA-CT Contract: 1

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

Instrument: HP58905A Sequence: A5357

Column: DB-1701 ID: .53 Date(s) Analyzed: 01/13/97 01/14/97

Compound	Retention Time of Standards					Mean RT	RT Windows		
	1	2	3	4	5		From	To	
alpha-BHC	8.41	8.41	8.42	8.4	8.41	8.41	8.36	8.46	±0.05
beta-BHC	11.83	11.84	11.82	11.82	11.81	11.82	11.77	11.87	±0.05
delta-BHC	12.76	12.78	12.76	12.76	12.75	12.76	12.69	12.83	±0.07
gamma-BHC (Lindane)	9.37	9.38	9.38	9.36	[illegible]	9.37	9.32	9.42	±0.05
Heptachlor	9.95	9.96	9.96	9.94	[illegible]	9.95	9.9	10	±0.05
Aldrin	10.8	10.81	10.79	10.79	[illegible]	10.8	10.75	10.85	±0.05
Heptachlor epoxide	13.41	13.43	13.41	13.4	[illegible]	13.41	13.34	13.48	±0.07
Endosulfan I	14.67	14.7	14.68	14.66	[illegible]	14.68	14.6	14.76	±0.08
Dieldrin	16.69	16.73	16.71	16.69	[illegible]	16.7	16.63	16.77	±0.07
4,4'-DDE	16.07	16.09	16.06	16.06	[illegible]	16.07	15.99	16.15	±0.08
Endrin	17.87	17.92	17.9	17.87	[illegible]	17.89	17.83	17.95	±0.06
Endosulfan II	21.12	21.14	21.11	21.11	[illegible]	21.11	21.01	21.21	±0.10
4,4'-DDD	21.18	21.22	21.2	21.18	21.17	21.19	21.13	21.25	±0.06
Endosulfan sulfate	24.61	24.62	24.6	24.6	24.58	24.6	24.54	24.66	±0.06
4,4'-DDT	22.03	22.06	22.04	22.03	22.02	22.04	21.98	22.1	±0.06
Methoxychlor	25	25.01	25	25	24.98	25	24.94	25.06	±0.06
Endrin ketone	26.08	26.09	26.08	26.08	26.06	26.08	26.03	26.13	±0.05
Endrin aldehyde	23.19	23.21	23.19	23.19	[illegible]	23.19	23.14	23.24	±0.05
alpha-Chlordane	15.34	15.36	15.34	15.34	[illegible]	15.34	15.29	15.39	±0.05
gamma-Chlordane	15.05	15.07	15.04	15.05	[illegible]	15.05	15	15.1	±0.05
Isodrin	12.21	12.23	12.22	12.2	12.21	12.21	12.16	12.26	±0.05
Chlorobenzilate	20.27	20.29	20.26	20.26	[illegible]	20.26	20.21	20.31	±0.05
Tetrachloro-m-xylene	6.49	6.49	6.49	6.48	6.48	6.49	6.44	6.54	±0.05
Decachlorobiphenyl	29.09	29.1	29.09	29.08	[illegible]	29.09	29.03	29.15	±0.06

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: RTX-35 ID: .53 (mm) Init. Calib Date(s): 01/03/97 01/04/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/09/97

Lab File ID: A1502139 Time Analyzed : 0200

Sample No.(INDB): INDB3 Date Analyzed : 01/09/97

Lab File ID: A1502137 Time Analyzed : 0051

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
beta-BHC	11.74	11.69	11.79	.02375	0.025	-5
delta-BHC	12.74	12.69	12.79	.03682	0.025	47.3*
Aldrin	13.48	13.42	13.52	.021	0.025	-16*
Heptachlor epoxide	15.00	14.95	15.05	.02075	0.025	-17*
4,4'-DDE	16.60	16.55	16.65	.0426	0.050	-15
Endosulfan II	18.13	18.07	18.17	.05834	0.050	16.7*
Endosulfan sulfate	19.33	19.28	19.38	.05065	0.050	1.3
Endrin ketone	21.10	21.04	21.14	.14217	0.050	184.*
Endrin aldehyde	18.92	18.86	18.96	.04919	0.050	-1.6
alpha-Chlordane	15.94	15.88	15.98	.01938	0.025	-22*
gamma-Chlordane	15.52	15.47	15.57	.0194	0.025	-22*
Chlorobenzilate	17.49	17.44	17.54	.11096	0.250	-56*
Tetrachloro-m-xylene	8.30	8.23	8.37	.02047	0.025	-18*
Decachlorobiphenyl	24.59	24.52	24.64	.04238	0.050	-15

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: RTX-35 ID: .53 (mm) Init. Calib Date(s): 01/03/97 01/04/97

Sample No.(PIBLK): PIBLK Date Analyzed : 01/09/97

Lab File ID: A1502152 Time Analyzed : 0928

Sample No.(INDA): INDA3 Date Analyzed : 01/09/97

Lab File ID: A1502150 Time Analyzed : 0819

INDIVIDUAL MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	% DIFF
alpha-BHC	10.35	10.27	10.41	.0315	0.025	26.0*
gamma-BHC (Lindane)	11.48	11.40	11.54	.03101	0.025	24.0*
Heptachlor	12.57	12.49	12.63	.02983	0.025	19.3*
Endosulfan I	15.96	15.88	16.02	.02198	0.025	-12
Dieldrin	16.76	16.68	16.82	.04554	0.050	-8.9
Endrin	17.64	17.58	17.68	.05001	0.050	0.0
4,4'-DDD	18.04	17.95	18.11	.05608	0.050	12.2
4,4'-DDT	18.83	18.75	18.89	.04202	0.050	-16*
Methoxychlor	20.88	20.82	20.94	.57226	0.250	129.*
Isodrin	14.63	14.55	14.69	.02005	0.025	-20*
Tetrachloro-m-xylene	8.30	8.23	8.37	.02067	0.025	-17*
Decachlorobiphenyl	24.59	24.52	24.64	.04429	0.050	-11

QC LIMITS: RPD of amounts in the Individual Mixes must be +/- 15.0%.

8D
PESTICIDE ANALYTICAL SEQUENCE

0683

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: 0.53(mm) Init. Calib. Date(s): 01/13/97 01/14/97

Instrument ID: HP58905A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 6.49 DCB: 29.09

	SAMPLE NO.	LAB SAMPLE ID	DATE & TIME ANALYZED	TCX RT #	DCB RT #	
01	INDA1	INDA1	01/13/97 2138	6.49	29.09	
02	INDB1	INDB1	01/13/97 2218	6.49	29.09	
03	INDA2	INDA2	01/13/97 2258	6.49	29.10	
04	INDB2	INDB2	01/13/97 2338	6.50	29.09	
05	INDA3	INDA3	01/14/97 0017	6.49	29.09	
06	INDB3	INDB3	01/14/97 0057	6.49	29.08	
07	INDA4	INDA4	01/14/97 0137	6.48	29.08	
08	INDB4	INDB4	01/14/97 0217	6.48	29.08	
09	INDA5	INDA5	01/14/97 0257	6.48	29.08	
10	INDB5	INDB5	01/14/97 0337	6.47	29.07	
11	TCLR	TCLR	01/14/97 0416	6.47	29.06	
12	TOXAPH	TOXAPH	01/14/97 0456	6.47	29.06	
13	PIBLK	PIBLK	01/14/97 1215	6.47	29.05	
14	PBLK48	121996-B06	01/14/97 1255	6.48	29.07	
15	PBLK48QC	121996-B06	01/14/97 1334	6.47	29.07	
16	CNTR POND DR.-4	962743B-02	01/14/97 1413	6.47	29.06	
17	CNTR POND DR.-5	962743B-03	01/14/97 1452	6.48	29.07	
18	CNTR POND DR.-6	962743B-04	01/14/97 1531	6.47	29.08	
19	CNTR POND DR.-7	962743B-05	01/14/97 1611	6.48	29.08	
20	CNTR POND DR.-9	962743B-07	01/14/97 1650	6.48	29.09	
21	O/S CNTR PND A8-1	962743B-08	01/14/97 1729	6.48	29.09	
22	O/S CNTR PND A8-2	962743B-09	01/14/97 1820	6.52	29.13	
23	O/S CNTR PND A8-3	962743B-10	01/14/97 1904	6.50	29.12	
24	INDB3	INDB3	01/14/97 2142	6.47	29.06	⊕
25	IBS	IBS	01/15/97 0008	6.49	*	④
26	PIBLK	PIBLK	01/15/97 0047	6.49	29.10	
27	INDB3	INDB3	01/15/97 1534	6.48	29.08	
28	IBS	IBS	01/15/97 1641	6.49	*	
29	PIBLK	PIBLK	01/15/97 1721	6.49	29.09	
30	CNTR WETLND-A8-1	962743B-12	01/15/97 1801	6.48	29.08	
31	CNTR WETLND-A8-2	962743B-13	01/15/97 1841	6.48	29.08	
32	CNTR WETLND-A8-3	962743B-14	01/15/97 1921	6.48	29.09	

⊕ %D outliers - estimated results DML 2/13/97

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.06 MINUTES)

Column used to flag retention time values with a asterisk.
* Values outside of QC limits.

④ %Break down failed - estimated results.

page 1 of 2

FORM VIII PEST
GC-8081:rev 1.0

DML 2/13/97

8D.
PESTICIDE ANALYTICAL SEQUENCE

0690

Lab Name: IEA-CT Contract: _____

Lab Code: IEACT Case No.: 2743B SDG No.: B2743

GC Column: DB-1701 ID: 0.53(mm) Init. Calib. Date(s): 01/13/97 01/14/97

Instrument ID: HP58905A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 6.49 DCB: 29.09

	SAMPLE NO.	LAB SAMPLE ID	DATE & TIME ANALYZED	TCX RT #	DCB RT #
01	CNTR WETLND-A8-4	962743B-15	01/15/97 2001	6.49	29.10
02	CNTR WETLND-A9(COMP)	962743B-20	01/15/97 2040	6.51	29.13
03	CNTR POND DR.-3	962743B-01	01/15/97 2120	6.50	29.12
04	CNTR POND DR.-8	962743B-06	01/15/97 2200	6.53	29.15
05	O/S CNTR PND A8-4	962743B-11	01/15/97 2240	6.52	29.00 *
06	CNTR POND DR.-8MS	962743B-06	01/15/97 2320	6.52	29.15
07	CNTR POND DR.-8MSD	962743B-06	01/16/97 0000	6.52	29.14
08	INDA3	INDA3	01/16/97 0239	6.51	29.13
09	IBS	IBS	01/16/97 0359	6.51	*
10	PIBLK	PIBLK	01/16/97 0439	6.51	29.13
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.06 MINUTES)

(+) % Outliers estimated results

Column used to flag retention time values with a asterisk.
* Values outside of QC limits.

(▲) % Breakdown taken estimated, result

DMC 2/13/97

page 2 of 2

FORM VIII PEST
GC-8081:rev 1.0

IEA Pesticide Standard Report

mple Name : INDA5 Report No :104.11
sult File : /DATA/LOOP/RESULT/A5357011.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58905A
Calculation : ExternalSTD
Run Time : 33.00 Mins. Injected on 0257 14Jan1997
Sequence File : /DATA/LOOP/SEQUENCE/A5357.SEQ
Subseq/Sample : 1/ 11 Bottle no. : 11

% Dil-Fact
100.00

Run Status : EndOffBaseline
SignalOverload

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
1	4.14		.123747	42191	BV	0.0000	
2	4.35		.179275	16260	VV	0.0000	
3	4.66		.113102	14678	VV	0.0000	
4	4.84		.080794	11292	VV	0.0000	
5	4.92		.069004	6270	VV	0.0000	
6	5.13		.079220	6678	VV	0.0000	
7	5.34		.057081	21011	VV	0.0000	
8	5.66		.066914	50868	VV	0.0000	
9	6.48	6.49	.114765	5159077	VV	.9532	Tetrachloro-m-xylene
0	6.97		.182060	167171	VV	0.0000	
1	7.28		.100755	31925	VV	0.0000	
12	7.43		.120377	105959	VV	0.0000	
13	7.60		.143946	45205	VV	0.0000	
14	8.41	8.41	.096051	5657804	GV	.8750	alpha-BHC
15	8.62		.136009	266333	VV	0.0000	
16	9.09		.127711	51820	VV	0.0000	
17	9.37	9.37	.102405	6031692	GV	.9705	gamma-BHC (Lindane)
18	9.76		.098839	48890	VV	0.0000	
19	9.95	9.95	.089599	4957135	GV	.7747	Heptachlor
20	10.79	10.80	.105110	88814	VB	.0149	Aldrin
21	11.77		.218441	14061	BV	0.0000	
22	12.21	12.21	.121141	4713880	VB	4713880.00	Isodrin
23	14.07		.167876	10103	BV	0.0000	
24	14.67	14.67	.154331	5318881	PV	.5146	Endosulfan I
25	15.28		.173743	14373	VB	0.0000	
26	16.06	16.07	.211081	49671	BV	.0087	4,4'-DDE
27	16.69	16.69	.178955	10487346	GV	1.8324	Dieldrin
28	17.88	17.87	.196400	8858938	VV	1.7903	Endrin
29	18.79		.252475	29150	VB	0.0000	
30	20.02		.253814	18839	BB	0.0000	
31	21.17	21.18	.224705	8277086	BV	.4896	4,4'-DDD
32	22.02	22.03	.171507	5790412	VV	.5783	4,4'-DDT
33	22.52		.172233	561120	VV	0.0000	
34	23.18	23.19	.161955	125167	VV	.0122	Endrin aldehyde
35	23.39		.157458	238187	VV	0.0000	
6	23.77		.210864	51401	VV	0.0000	
37	24.12		.139260	10222	VV	0.0000	
38	24.98	25.00	.161479	9317698	GV	8.4128	Methoxychlor
39	25.42		.206457	277497	VB	0.0000	

0634

IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	PPB	Name
39	8.78		.059248	177802	VV	0.0000	
40	8.96		.112967	2270911	VV	0.0000	
41	9.06		.077984	858943	VV	0.0000	
42	9.25		.144541	~~2327892~~	~~VV~~	~~0.0000~~	
43	9.46		.186803	10157424	GV	0.0000	gamma-BHC
44	9.71		.121848	~~2029143~~	~~VV~~	0.0000	
45	9.86		.095286	1204537	VV	0.0000	
46	10.04		.109579	1797767	VV	0.0000	
47	10.12		.079984	1224890	VV	0.0000	
48	10.21		.091349	1286487	VV	0.0000	
49	10.35		.122260	1175809	VV	0.0000	
50	10.49		.114563	1009742	VV	0.0000	
51	10.61		.157591	672561	VV	0.0000	
52	10.85		.124113	522900	VV	0.0000	
53	11.03		.226542	976700	VV	0.0000	
54	11.45		.144742	112675	VV	0.0000	
55	11.63		.103289	83934	VB	0.0000	
56	11.82	11.82	.104141	397324	BV	3.3633	~~beta-BHC~~
57	11.97		.147146	211715	VV	0.0000	
58	12.14		.081037	43151	VV	0.0000	
59	12.39		.296671	2227189	VV	0.0000	
60	12.98		.147720	560232	VB	0.0000	
61	13.27		.083690	36347	BV	0.0000	
62	13.65		.305205	3701892	VV	0.0000	
63	14.12		.270742	2932373	VV	0.0000	
64	14.42		.262120	2190343	VV	0.0000	
65	14.89		.266872	2292695	VV	0.0000	
66	15.10	15.05	.197973	1238655	VV	41284384.0	~~gamma-Chlordane~~
67	15.36	15.34	.323237	1103301	VV	36773016.0	~~alpha-Chlordane~~
68	15.93		.311444	826133	VV	0.0000	
69	16.19		.215990	544623	VV	0.0000	
70	16.70	16.70	.412533	1627759	VV	9.4792	Dieldrin
71	17.45		.173171	77287	VV	0.0000	
72	18.13		.273681	137658	VV	0.0000	
73	18.63		.254936	1851013	VV	0.0000	
74	18.94		.366332	2334046	VV	0.0000	
75	19.76		.159040	38234	PV	0.0000	
76	20.25	20.26	.390018	983868	VV	32792324.0	~~Chlorobenzilate~~
77	20.83		.296548	422481	VV	0.0000	
78	21.24	21.19	.337786	841064	VV	1.6582	4,4'-DDD
79	21.50		.273474	898543	VV	0.0000	
80	21.90		.205760	936374	VV	0.0000	
81	22.14		.195350	2381791	VV	0.0000	4,4' ~~DDD~~ -DDT
82	22.67		.303833	835564	VV	0.0000	
83	22.93		.187607	323153	VV	0.0000	
84	23.18	23.19	.218843	267557	VV	.8714	~~Endrin aldehyde~~
85	23.34		.220215	236912	VV	0.0000	
86	23.75		.219252	323217	VV	0.0000	
87	24.02		.349723	1025971	VV	0.0000	
88	24.57	24.60	.311660	555503	VV	1.6895	~~Endosulfan sulfate~~
89	25.09		.186305	1152020	VV	0.0000	
90	25.32		.140087	5870522	VV	0.0000	
91	25.74		.177178	879519	VV	0.0000	
92	26.11	26.08	.261568	2469495	VB	7.1163	~~Endrin ketone~~
93	26.64		.171386	2283492	BV	0.0000	

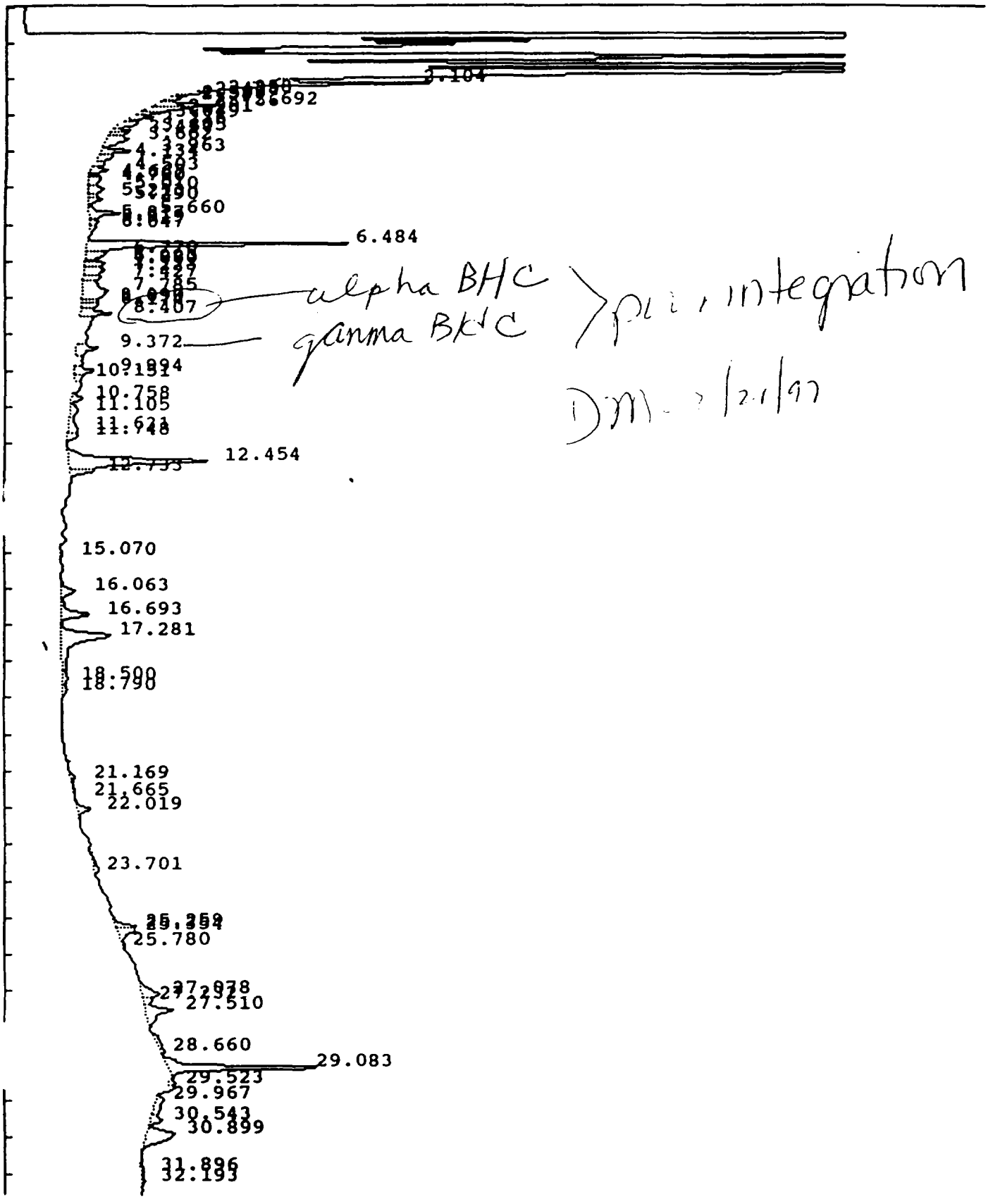
curve cannot above high std estimated result!

DMC 2/21/97

11/21/97

IEA Pesticide Standard Report

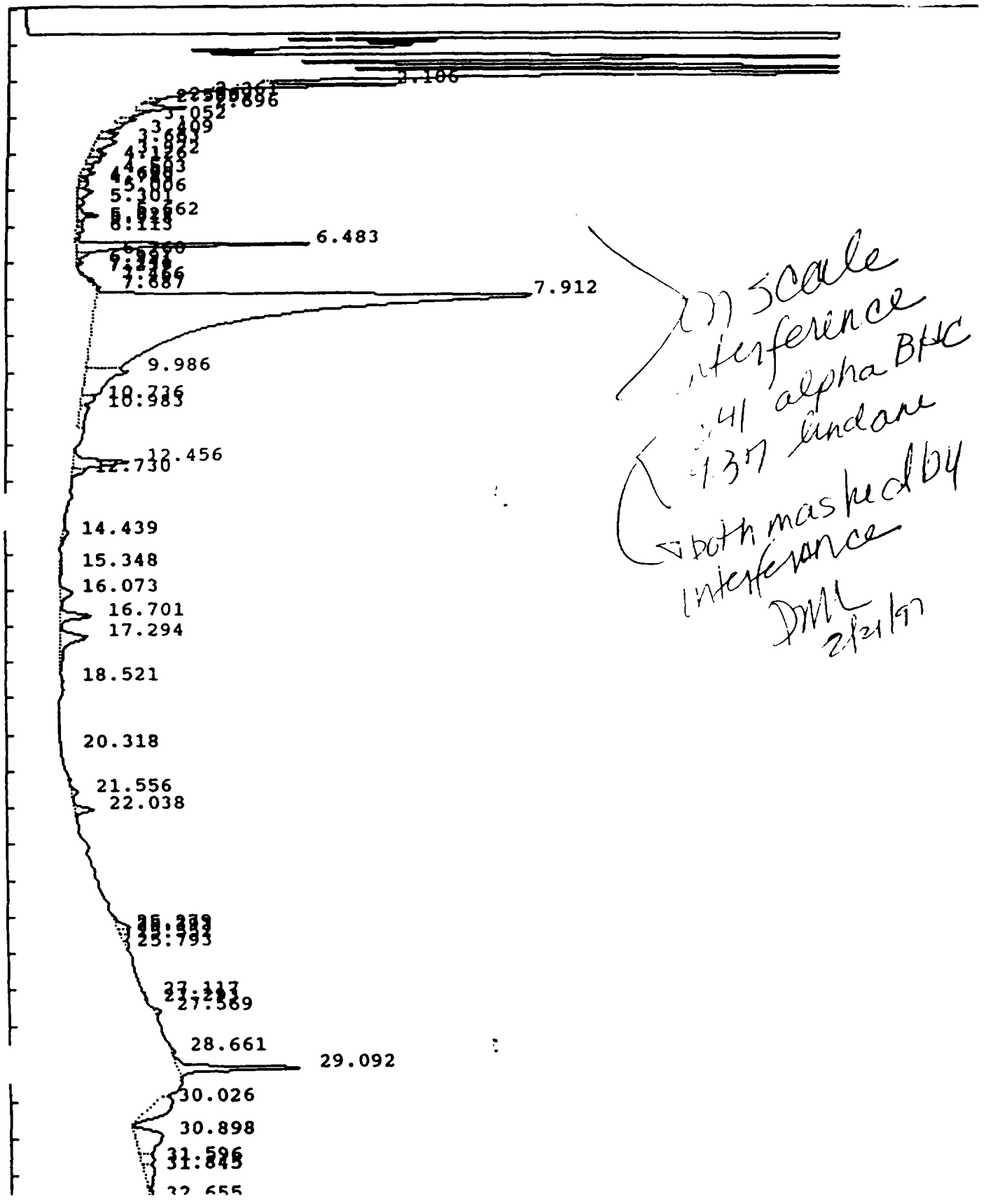
ple Name : 962743B-13 CNTR WETLND-A8-2 Inj on 1841 15Jan1997
esult File :/HP58905A/RESULT/A5357047.RES INSTRUMENT: HP58905A
olumn Type : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



pk integration
DM 1/21/97

IEA Pesticide Standard Report

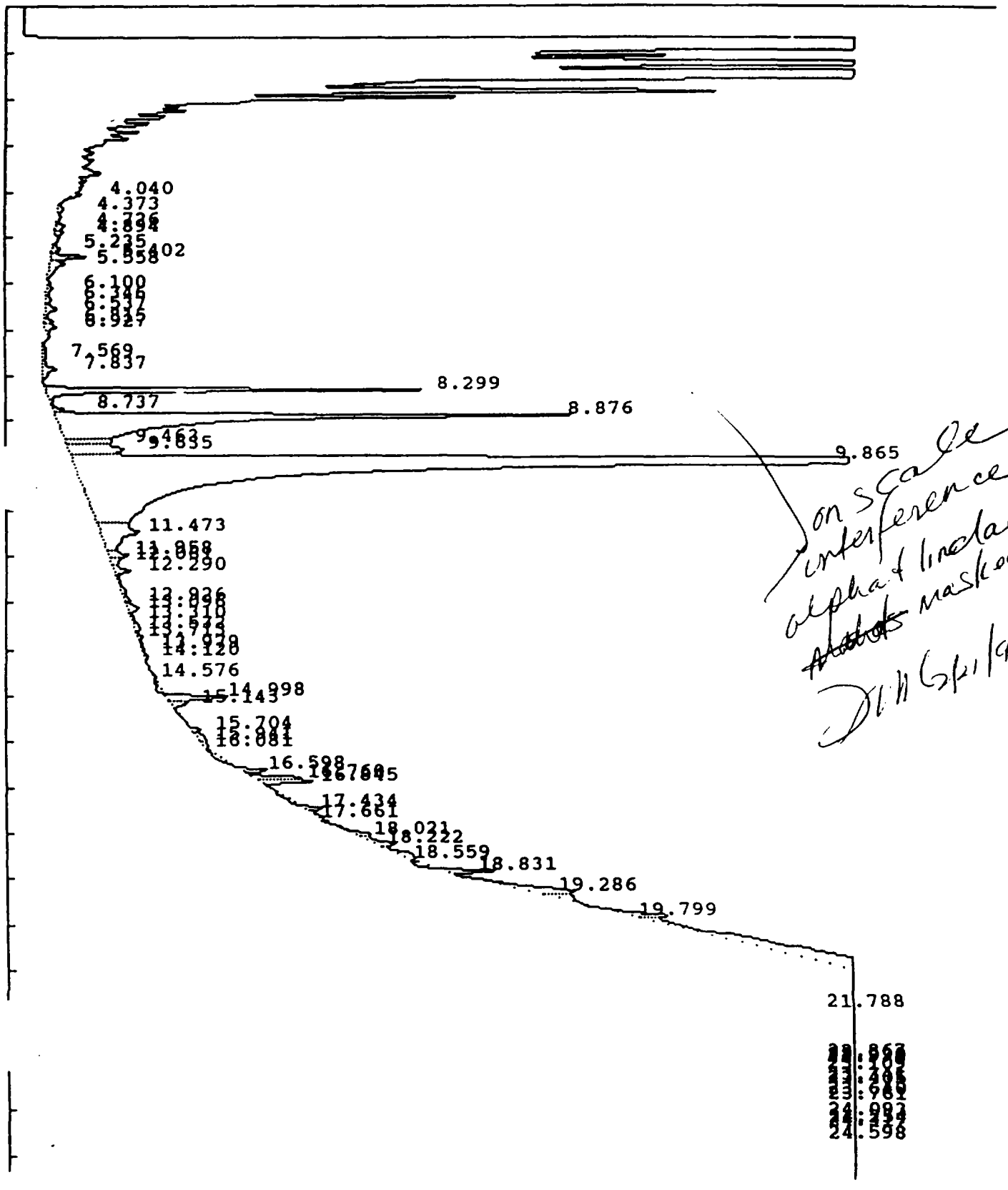
Sample Name : 962743B-14 CNTR WETLND-A8-3 Inj on 1921 15Jan1997
Result File :/HP58905A/RESULT/A5357048.RES INSTRUMENT: HP58905A
Column Type : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



off scale
interference
.41 alpha BHC
.37 lindane
both masked by
interference
DML
2/21/97

IEA Pesticide Standard Report

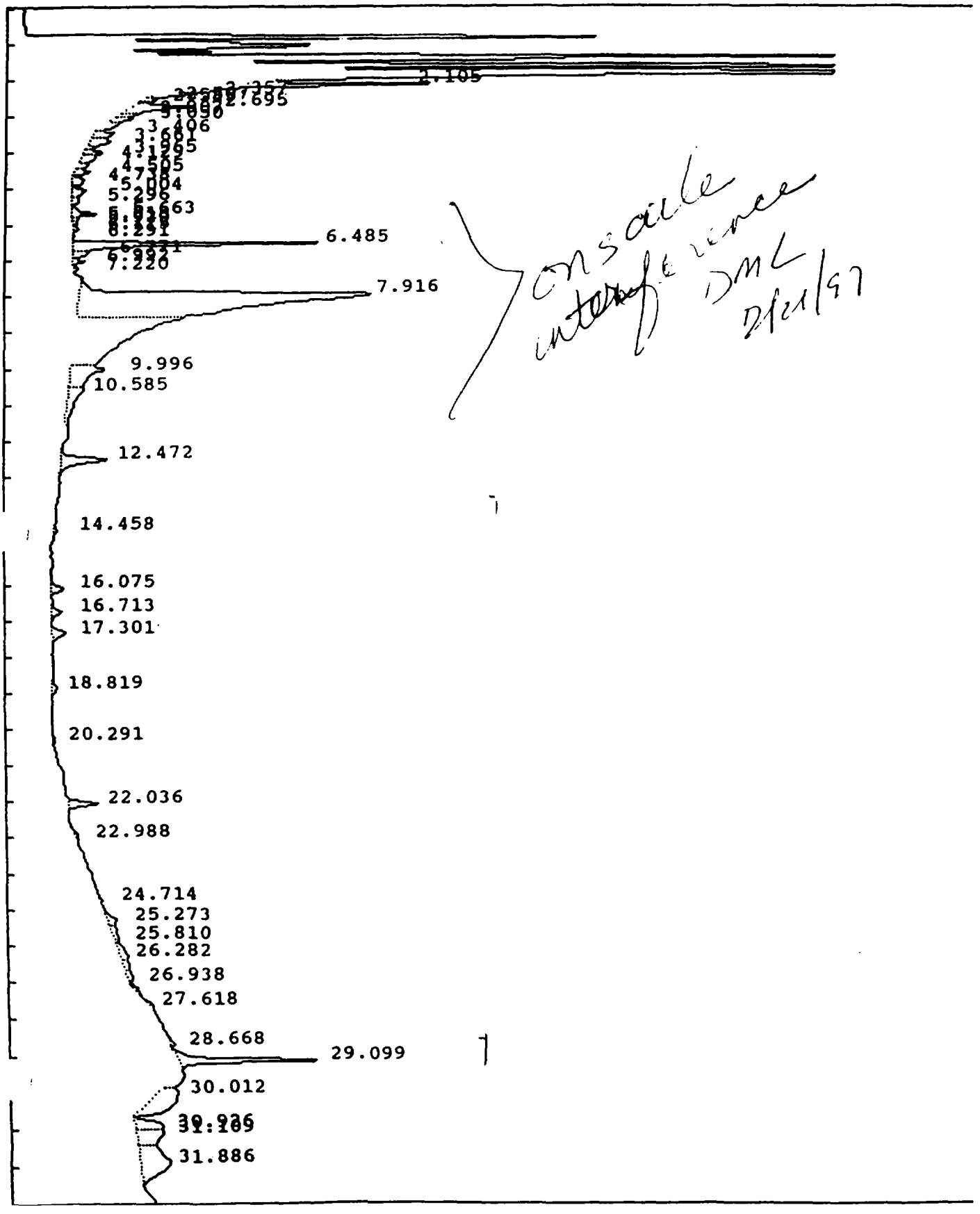
mple Name : 962743B-14 CNTR WETLND-AInj on 2342 08Jan1997
esult File :/DATA/LOOP/RESULT/A1502135.RES INSTRUMENT: HP58901A
olumn Type : RTX-35 30-Meter,0.53mm ID Inj. Vol. : 1 ul



on scale interference alpha + lindane ~~[illegible]~~ masked.
DW 5/21/97

IEA Pesticide Standard Report

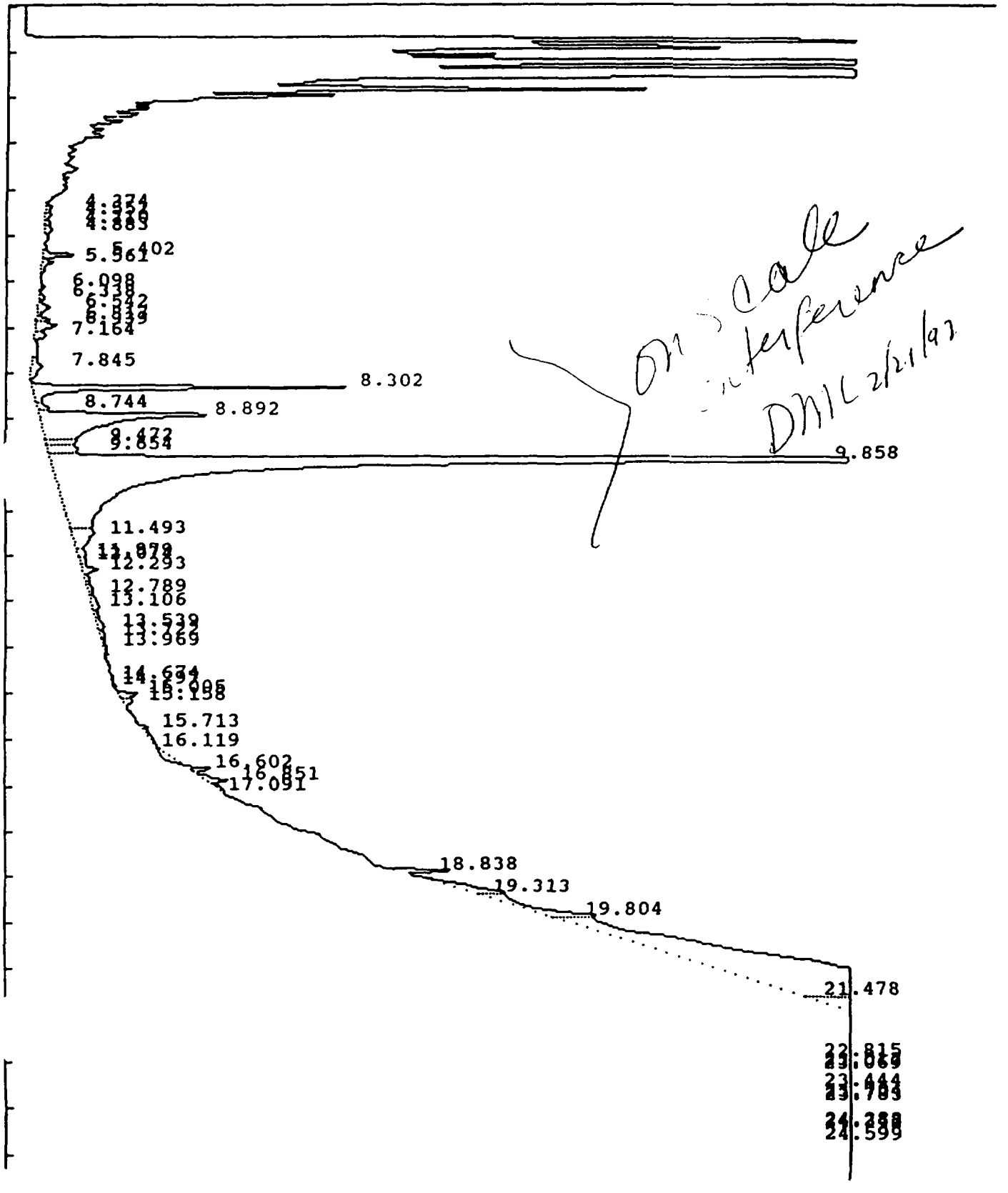
Sample Name : 962743B-15 CNTR WETLND-A8-4 Inj on 2001 15Jan1997
Result File :/HP58905A/RESULT/A5352049.RES INSTRUMENT: HP58905A
olumn Type : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



consider interference DML 2/21/97

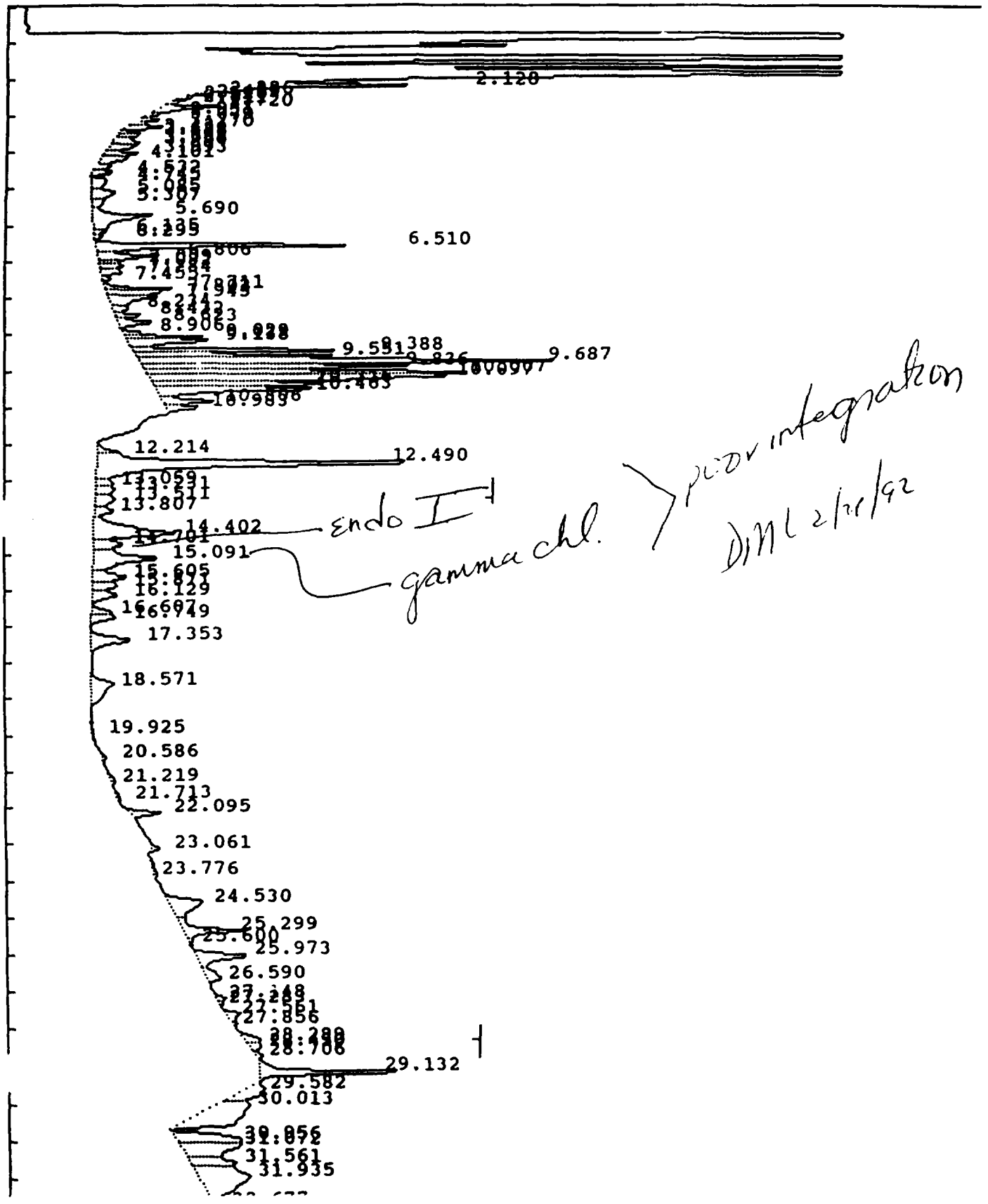
IEA Pesticide Standard Report

mple Name : 962743B-15 CNTR WETLND-AInj on 0235 09Jan1997
esult File :/HP58901A/RESULT/A1502140.RES INSTRUMENT: HP58901A
olumn Type : RTX-35 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 962743B-20 CNTR WETLND-A9 (COMP) Inj on 2040 15Jan1997
esult File :/HP58905A/RESULT/A5357050.RES INSTRUMENT: HP58905A
olumn Type : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

0001A

7096-2743B
OLIN CORPORATION

Case Narrative

Metals - ICAP metals were determined using a JA61E trace ICAP; mercury was determined by the cold vapor technique utilizing the Thermo Jarrell Ash Model QS-1E mercury analyzer using guidance provided in SW846 according to the following Methods: ICAP-3050/6010; mercury-7471.

Three "N" flags resulted from spike analysis of sample CNTR POND DR.-8 for mercury, thallium, and selenium. Since the post-digestion spike recoveries were within the control limits, a matrix interference is not suspected.

One "E" flag resulted from serial dilution of sample CNTR POND DR.-8 for calcium. There is no apparent reason for this flag.

No other problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

Classical Chemistry - Listed below are the wet chemistry analyte methods and references for the samples analyzed in this SDG. Sulfate failed the controls for spike recovery analysis for sample CNTR POND DR-8 resulting in on N flag. No other analytical problems were encountered and all holding times were met.

Analyte	Method	Reference
Ammonia	350.2	1
Sulfate	375.4	1

References:

1. Methods of Chemical Analysis of Water and Wastes, EPA 600, 1983.
2. Test Methods for the Evaluation of Solid Waste, SW846, 3rd ed., 1986.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 8260. The instrumentation used was a Tekmar Dynamic Headspace Concentrator interfaced with a Hewlett-Packard Model 5995 GC/MS/DS.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550/8270A. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

The following samples required diluted analyses for target analyte quantitation:

SAMPLE	DILUTION
CNTR POND DR.-3	1:2
CNTR WETLAND-AB-1	1:400
O/S CNTR PND A8-4	1:5

Pesticides - Pesticide samples were extracted and analyzed by GC/ECD using guidance provided in Methods 3550/8081. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni^{63}).

All samples were extracted and concentrated without any apparent problems.

Surrogate percent recoveries were outside of QC limits in sample O/S CNTR POND A8-4 due to coelution with sample matrix.

The DB-1701 column was used as the primary column.

The RTX-35 column was used as the confirmation column.

Decachlorobiphenyl was lost in sample matrix in sample O/S CNTR POND A8-4 on the RTX-35 and DB-1701 columns.

The percent recoveries for spiking compounds delta-BHC and 4,4'-DDD were outside of QC limits in sample PBLK48QC. delta-BHC degraded in the spiking solution. The spike solution has since been re-prepped and the manufacturer contacted regarding the degradation of delta-BHC. Storage procedure of the solution has been changed as well as more frequent preparation of the standard. The percent recovery for 4,4'-DDD was elevated due to coelution with Endosulfan II on the DB-1701 column. Each compound was calculated as combined area.

The percent recovery for spiking compound gamma-BHC was outside of QC limits in sample CNTR POND DR.-8MS.

4,4'-DDT was outside of retention time windows in sample CNTR POND DR.-8 on the DB-1701 column.

Heptachlor, Dieldrin, Endrin, 4,4'-DDD, 4,4'-DDT and Decachlorobiphenyl were outside of retention time windows in sample CNTR POND DR.-8MS on the DB-1701 column.

Gamma-BHC, Aldrin, Heptachlor, Dieldrin, Endrin, 4,4'-DDD, and 4,4'-DDT were outside of retention time windows in sample CNTR POND DR.-8MSD on the DB-1701 column.

Dieldrin was outside of retention time windows in sample O/S CNTR PND A8-2 on the DB-1701 column.

Gamma-BHC and 4,4'-DDT were outside of retention time windows in sample O/S CNTR PND A8-4 on the DB-1701 column.

Gamma-BHC was over the curve range in sample O/S CNTR PND A8-4. This was not detected until data packaging and the sample was not reanalyzed at a dilution.

Endrin and 4,4'-DDD were outside of retention time windows in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. This retention time shift was taken into consideration when the data was reviewed for target compounds.

The client's samples repeatedly caused the ending standards to fail and 4,4'-DDT to have high breakdown. The client's samples were bracketed using a maximum of 10 samples, but the ending standards and breakdown checks still failed QC criteria.

The percent differences for compounds Endosulfan Sulfate, Endrin Ketone, and gamma-Chlordane were outside of QC limits in standard INDB3 analyzed at 21:42 on 1/14/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 00:08 on 1/15/97 on the DB-1701 column. These standards were the end bracketing standards for samples PBLK48, PBLK48QC, CNTR POND DR.-4, CNTR POND DR.-5, CNTR POND DR.-6, CNTR POND DR.-7, CNTR POND DR.-9, O/S CNTR PND A8-1, O/S CNTR PND A8-2, and O/S CNTR PND A8-3. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

The percent differences for compounds 4,4'-DDT, Methoxychlor and Decachlorobiphenyl were outside of QC limits in standard INDA3 analyzed at 02:39 on 1/16/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. These standards were the end bracketing standards for samples CNTR WETLND-A8-1, CNTR WETLND-A8-2, CNTR WETLND-A8-3, CNTR WETLND-A8-4, CNTR WETLND-A9 (COMP), CNTR POND DR.-3, CNTR POND DR.-8, O/S CNTR PND A8-4, CNTR PND DR.-8MS, and CNTR POND DR.-8MSD. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

Manual integrations were performed if required, and any affected peaks were designated with an "FF" on the area report in the column titled "Code". Manual integrations were initialed by the analyst that performed the integration.

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

Jan 22, 1997
Date

SMITH

APPENDIX D

Inorganic Data Validation Summary

Project Name:	Clini	**Case No./SDG:**	B2743
Project No.:	00-7074-0102	**Sampling Date(s):**	12/16/96
Project Manager:		**Reviewed By:**	E. Bryant Rivers
Laboratory:	TEA	**Completion Date:**	

Compound List: ☑ TAL ☐ Appendix IX ☐ Other _____

Method: ☐ CLP SOW 3/90 ☑ SW-846 ☐ Other _____

Matrix: ☑ soil/solid (mg/Kg) ☒ aqueous (ug/L) field blank

The following table indicates the data validation criteria examined, problems identified, and QA action.

Data Validation Criteria:	accept	FYI	qualify	comments
Holding Times	✓			
Calibration Linearity - Furnace, Hg, and CN	✓			
Calibration Verification	✓			
CRDL Standard			✓	As + Pb are out of criteria Tl %R not [illegible] of any samples Se + Tl not [illegible] of any samples of concern
Calibration Blanks		✓		
Preparation Blanks	✓			
Field Blank		✓		No field blanks provided
ICP Interference Check Sample		✓		No concentrations exceeded 50% of ICS
Laboratory Control Sample	✓			
Matrix Spike Results			✓	Ag is rejected Hg + Se are estimated
Laboratory Duplicate Results	✓			
ICP Serial Dilution			✓	Ca out of criteria based low
Post Digestion Analytical Spike				NA
Method of Standard Addition				NA
Field Duplicate Results		✓		No field [illegible] provided
Sample Result Verification		✓		Transcription errors and Hg not calculated correctly
Other:				

General Comments: _____

NA - Not applicable
NR - Not reviewed

QA Scientist [signature] Date 2/21/97

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

ICP ID Number: JA61E Date: 10/15/96

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200.0	38.0	P
Antimony	206.83		60.0	6.0	P
Arsenic	193.60		10.0	5.0	P
Barium	493.40		200.0	1.0	P
Beryllium	234.86		5.0	1.0	P
Cadmium	228.80		5.0	1.0	P
Calcium	317.93		5000.0	47.0	P
Chromium	267.70		10.0	1.0	P
Cobalt	228.61		50.0	1.0	P
Copper	324.75		25.0	1.0	P
Iron	271.44		100.0	34.0	P
Lead	220.35		3.0	2.0	P
Magnesium	279.07		5000.0	20.0	P
Manganese	257.61		15.0	1.0	P
Mercury			.2		
Nickel	231.60		40.0	1.0	P
Potassium	766.49		5000.0	267.0	P
Selenium	196.02		5.0	5.0	P
Silver	328.06		10.0	1.0	P
Sodium	589.59		5000.0	80.0	P
Thallium	189.90		10.0	8.0	P
Vanadium	292.40		50.0	1.0	P
Zinc	213.85		20.0	3.0	P

Comments:

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

ICP ID Number: _____ Date: 10/15/96

Flame AA ID Number: HG4

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			300.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			1000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			100.0		
Magnesium			1000.0		
Manganese			15.0		
Mercury	253.70		.2	.2	CV
Nickel			40.0		
Potassium			1000.0		
Selenium			500.0		
Silver			10.0		
Sodium			1000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

0834

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-3

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-01

Level (low/med): LOW Date Received: 12/17/96

% Solids: 58.8

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	270 ~~272~~.			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-4

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-02

Level (low/med): LOW Date Received: 12/17/96

% Solids: 50.8

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	17 ~~16.9~~			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: GREY Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-5

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-03

Level (low/med): LOW Date Received: 12/17/96

% Solids: 49.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	210 ~~209~~.			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-6

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-04

Level (low/med): LOW Date Received: 12/17/96

% Solids: 79.8

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	34 ~~33.8~~			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-7

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-05

Level (low/med): LOW Date Received: 12/17/96

% Solids: 49.6

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	23 ~~22.9~~			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: GREY Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-8

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-06

Level (low/med): LOW Date Received: 12/17/96

% Solids: 81

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2100 ~~2073.0~~			P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	0.90	U		P
7440-39-3	Barium	4.6	B		P
7440-41-7	Beryllium	0.18	U		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	21000 ~~20632.~~		E	P
7440-47-3	Chromium	47 ~~.1~~			P
7440-48-4	Cobalt	0.42	B		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	1200 ~~1174.6~~			P
7439-92-1	Lead	4.8			P
7439-95-4	Magnesium	290 ~~286.~~	B		P
7439-96-5	Manganese	7.8			P
7439-97-6	Mercury	**0.11**	U	N	CV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium	80 ~~79.6~~	B		P
7782-49-2	Selenium	0.90	U	N	P
7440-22-4	Silver	0.18	U	N+	P
7440-23-5	Sodium	82 ~~81.6~~	B		P
7440-28-0	Thallium	1.4	U	N	P
7440-62-2	Vanadium	5.3	B		P
7440-66-6	Zinc	6.0			P
57-12-5	Cyanide				NR

SSR 2/21/97

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

* Ag is spike qualified

E Bryan Rives 2/21/96

U.S. EPA - CLP

0840

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR POND DR.-6

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-07

Level (low/med): LOW Date Received: 12/17/96

% Solids: 83.2

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2500 ~~2525.0~~			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	2.2			P
7440-39-3	Barium	6.2	B		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	930 ~~934.~~	B	E	P
7440-47-3	Chromium	10.2			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	2600 ~~2552.6~~			P
7439-92-1	Lead	2.3			P
7439-95-4	Magnesium	900.	B		P
7439-96-5	Manganese	32.2			P
7439-97-6	Mercury	0.090		N	CV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium	240 ~~239.~~	B		P
7782-49-2	Selenium	1.1	U	N	P
7440-22-4	Silver	0.21	U	N	P
7440-23-5	Sodium	70.4	B		P
7440-28-0	Thallium	1.7	U	N	P
7440-62-2	Vanadium	4.8	B		P
7440-66-6	Zinc	12.0			P
57-12-5	Cyanide				NR

EBR 2/21/97

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

Ag - is spike qualified

G. Bryan Rivell 2/21/97

FORM I - IN

ILM03.0

U.S. EPA - CLP

0841

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-1

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-08

Level (low/med): LOW Date Received: 12/17/96

% Solids: 76.2

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1700 ~~1739.9~~			P
7440-36-0	Antimony	1.3	U		P
7440-38-2	Arsenic	3.8			P
7440-39-3	Barium	3.6	B		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	91 ~~90.6~~	B	E	P
7440-47-3	Chromium	2.6			P
7440-48-4	Cobalt	0.21	U		P
7440-50-8	Copper	2.8	B		P
7439-89-6	Iron	2800 ~~2785.4~~			P
7439-92-1	Lead	22 ~~21.8~~			P
7439-95-4	Magnesium	63 ~~62.8~~	B		P
7439-96-5	Manganese	3.9			P
7439-97-6	Mercury	0.18		N	CV
7440-02-0	Nickel	0.96	B		P
7440-09-7	Potassium	57.0	B		P
7782-49-2	Selenium	1.1		N	P
7440-22-4	Silver	0.21	U	N*	P
7440-23-5	Sodium	66 ~~65.9~~	B		P
7440-28-0	Thallium	1.7	U	N	P
7440-62-2	Vanadium	15.2			P
7440-66-6	Zinc	10.4			P
57-12-5	Cyanide				NR

see spike

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

* Ag is spike qualified

FORM I - IN ILM03.0

E. Bryan Burey 2/21/97

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

0842
EPA SAMPLE NO.

O/S CNTR PND A8-2

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-09

Level (low/med): LOW Date Received: 12/17/96

% Solids: 66

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

0843

EPA SAMPLE NO.

O/S CNTR PND A8-3

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-10

Level (low/med): LOW Date Received: 12/17/96

% Solids: 76.8

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	520 ~~522~~.			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

0844

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

O/S CNTR PND A8-4

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-11

Level (low/med): LOW Date Received: 12/17/96

% Solids: 75.9

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	20.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

0845

EPA SAMPLE NO.

CNTR WETLND-A8-1

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-12

Level (low/med): LOW Date Received: 12/17/96

% Solids: 84.3

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-2

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-13

Level (low/med): LOW Date Received: 12/17/96

% Solids: 62

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	25 ~~0~~			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNTR WETLND-A8-3

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-14

Level (low/med): LOW Date Received: 12/17/96

% Solids: 77.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

0848

EPA SAMPLE NO.

CNTR WETLND-A8-4

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-15

Level (low/med): LOW Date Received: 12/17/96

% Solids: 77.5

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2400 ~~2397.6~~			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	10.2	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	340 ~~341.~~	B	E	P
7440-47-3	Chromium	34 ~~33.6~~			P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	1.1	B		P
7439-89-6	Iron	2940 ~~2940.8~~			P
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	510 ~~508.~~	B		P
7439-96-5	Manganese	18.1			P
7439-97-6	Mercury	0.09 ~~0.089~~	U	N	CV
7440-02-0	Nickel	2.3	B		P
7440-09-7	Potassium	120.	B		P
7782-49-2	Selenium	0.99	U	N	P
7440-22-4	Silver	0.20	U	N	P
7440-23-5	Sodium	73.2	B		P
7440-28-0	Thallium	1.6	U	N	P
7440-62-2	Vanadium	7.1	B		P
7440-66-6	Zinc	11.1			P
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

0849

EPA SAMPLE NO.

CNTR WETLND-A9 (CO

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix (soil/water): SOIL Lab Sample ID: 962743B-20

Level (low/med): LOW Date Received: 12/17/96

% Solids: 55.1

Concentration Units (ug/L or mg/kg dry weight): Mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2400 ~~2359.2~~			P
7440-36-0	Antimony	1.7	U		P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	ex ~~19.5~~	B		P
7440-41-7	Beryllium	0.28	U		P
7440-43-9	Cadmium	0.28	U		P
7440-70-2	Calcium	470 ~~466.~~	B	E	P
7440-47-3	Chromium	38.~~2~~			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	2400 ~~2367.4~~			P
7439-92-1	Lead	16.9			P
7439-95-4	Magnesium	130 ~~131.~~	B		P
7439-96-5	Manganese	6.8			P
7439-97-6	Mercury	0.18	U	N	CV
7440-02-0	Nickel	3.9	B		P
7440-09-7	Potassium	87.~~0~~	B		P
7782-49-2	Selenium	1.4	U	N	P
7440-22-4	Silver	0.28	U	(N)*	P
7440-23-5	Sodium	120 ~~119.~~	B		P
7440-28-0	Thallium	2.2	U	N	P
7440-62-2	Vanadium	6.4	B		P
7440-66-6	Zinc	15.~~1~~			P
57-12-5	Cyanide				NR

CBR 2/20/97

Color Before: BROWN Clarity Before: OPAQUE Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

Ag is spike qualified

FORM I - IN ILM03.0

E. Bryan Ruey 2/20/97

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

FIELD BLANK #2

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: C2743

Matrix (soil/water): WATER Lab Sample ID: 962743C-17

Level (low/med): LOW Date Received: 12/17/96

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Different site

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	38.0	U		P
7440-36-0	Antimony	6.0	U		P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	1.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	47.0	U		P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	34.0	U		P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	20.0	U		P
7439-96-5	Manganese	1.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	267.	U		P
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	**Sodium**	**82.0**	**B**		P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	3.0	U		P
57-12-5	Cyanide				NR

Color Before: CL Clarity Before: CLEAR Texture: _____

Color After: CL Clarity After: CLEAR Artifacts: _____

Comments:

This field blank is associated with soil samples from 12/16/96. Therefore it was used to qualify sample results

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

AA CRDL Standard Source: INORG. VENT.

ICP CRDL Standard Source: INORG. VENT.

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R(1)	True	Initial Found	%R(1)	Final Found	%R(1)
Aluminum				400.0	3.40	0.8	-1.96	-0.5
Antimony				120.0	121.86	101.6	123.26	102.7
Arsenic				20.0	17.10	85.5	24.84	124.2
Barium				400.0	.01		.04	
Beryllium				10.0	10.57	105.8	10.57	105.8
Cadmium				10.0	11.01	110.1	10.93	109.4
Calcium				10000.0	-8.72	-0.1	-8.21	-0.1
Chromium				20.0	20.76	103.8	20.76	103.8
Cobalt				100.0	102.74	102.7	102.84	102.8
Copper				50.0	52.28	104.6	52.93	105.9
Iron				200.0	4.80	2.4	6.13	3.1
Lead				6.0	7.82	130.4	7.57	126.3
Magnesium				10000.0	-6.31	-0.1	-5.44	
Manganese				30.0	31.97	106.6	31.61	105.4
Mercury								
Nickel				80.0	85.02	106.3	84.04	105.1
Potassium				10000.0	6.29	0.1	4.86	
Selenium				10.0	9.71	97.2	11.93	119.4
Silver				20.0	20.98	104.9	20.94	104.7
Sodium				10000.0	-.66		19.96	0.2
Thallium				20.0	14.96	74.8	17.18	85.9
Vanadium				100.0	101.56	101.6	101.81	101.8
Zinc				40.0	40.43	101.1	39.68	99.2
Cyanide								

As - all results are estimated
Pb - all results are >3xCRDL. No qualification
Tl - all results are estimated

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

AA CRDL Standard Source: INORG. VENT.

ICP CRDL Standard Source: INORG. VENT.

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R(1)	True	Initial Found	%R(1)	Final Found	%R(1)
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium				10.0	10.89	109.0	9.79	98.0
Silver								
Sodium								
Thallium				20.0	25.11	125.6	20.84	104.2
Vanadium								
Zinc								
Cyanide								

Tl - Not associated with samples of concern. (associated w/ Post Digestion spike only)

E. Bryan Rivers 2/17/97

U.S. EPA - CLP

3
BLANKS

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	5.0	U	5.0	U	5.0	U	-5.3				P
Silver											NR
Sodium											NR
Thallium	9.7	B	13.9		19.3		8.6	B			P
Vanadium											NR
Zinc											NR
Cyanide											NR

Se & Tl - not associated with any samples of concern.
(associated with post digestion spike only)

E. Bryan Rivers 2/17/97

U.S. EPA - CLP

4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

ID Number: JA61E ICS Source: EPA-LV87

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	435349	411076.5	82.2	415713	413607.0	82.7
Antimony		500	2	589.6	117.9	-2	601.7	120.3
Arsenic		500	7	100.7	20.1	-1	98.0	19.6
Barium		500	1	457.4	91.4	1	464.9	92.9
Beryllium		500	0	444.7	88.9	0	443.1	88.7
Cadmium		1000	7	852.9	85.2	6	852.3	85.2
Calcium	500000	500000	409170	386565.9	77.3	383185	382754.7	76.5
Chromium		500	3	427.8	85.5	3	424.2	84.8
Cobalt		500	-1	424.4	84.8	-1	424.1	84.8
Copper		500	2	506.3	101.2	2	512.3	102.4
Iron	200000	200000	173332	163789.4	81.8	163136	163439.7	81.7
Lead		1000	-4	39.3	3.9	-4	39.6	3.9
Magnesium	500000	500000	454173	428701.5	85.7	428530	426863.5	85.3
Manganese		500	-1	424.5	84.9	-1	421.7	84.3
Mercury								
Nickel		1000	3	826.9	82.6	2	827.7	82.7
Potassium			1	-3.6		-10	-1.3	
Selenium		50	5	46.0		-7	39.0	
Silver		1000	0	203.0	20.3	-1	202.9	20.2
Sodium			-134	-65.3		-133	-58.1	
Thallium		100	12	93.0	93.0	21	91.9	91.9
Vanadium		500	0	434.0	86.8	-1	434.4	86.8
Zinc		1000	-11	936.8	93.6	-14	929.7	92.9
Cyanide								

* 100%R, however, the concentrations of Al, Ca, Fe, Mg are <50% of their conc. in the ICS soln. No data are qual.

NH

U.S. EPA - CLP

4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: _____ SAS No.: _____ SDG No.: B2743

ID Number: JA61E ICS Source: EPA-LV87

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000							
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium	500000							
Chromium								
Cobalt								
Copper								
Iron	200000							
Lead								
Magnesium	500000							
Manganese								
Mercury								
Nickel								
Potassium								
Selenium		50	-11	-4.6		-8	-3.5	
Silver								
Sodium								
Thallium		100	21	30.7	30.7	14	19.9	19.9
Vanadium								
Zinc								
Cyanide								

N - not associated with any samples of concern, (associated with post digestion) spike only

E. Bryan Rivers 2/17/97

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

CNTR POND DR.-8S

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 81

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3065.4512		2073.0522		425.71	233.0		P
Antimony	75-125	80.4110		1.0820	U	106.43	75.5		P
Arsenic	75-125	10.4434		0.9017	U	8.51	122.6		P
Barium	75-125	397.5016		4.6055	B	425.71	92.2		P
Beryllium	75-125	10.1024		0.1803	U	10.64	94.9		P
Cadmium	75-125	1.1454		0.1803	U	1.06	107.6		P
Calcium									NR
Chromium	75-125	86.2088		47.1100		42.57	91.8		P
Cobalt	75-125	96.8749		0.4246	B	106.43	90.6		P
Copper	75-125	52.5891		1.6242	B	53.21	95.7		P
Iron		1685.0896		1174.5562		212.86	239.7		P
Lead	75-125	9.8488		4.8548		4.26	117.2		P
Magnesium									NR
Manganese	75-125	104.6044		7.7902		106.43	126.90.9		P
[redacted]	75-125	0.6435		0.1122	U	0.51	125.1	N	CV
Nickel	75-125	98.9357		1.4848	B	106.43	91.5		P
Potassium									NR
Selenium	75-125	2.9073		0.9017	U	2.13	136.5	N	P
Silver	75-125	2.3687		0.1803	U	10.64	22.2	N	P
Sodium									NR
Thallium	75-125	7.3278		1.4427	U	10.64	68.8	N	P
Vanadium	75-125	102.2620		5.2746	B	106.43	91.1		P
Zinc	75-125	108.5386		6.0485		106.43	96.2		P
Cyanide									NR

Comments:

Hg & Se - All results are estimated
Tl - All detection limits are estimated

Ag - All detection limits are rejected
[illegible] 7/17/97

U.S. EPA - CLP

0867

9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

R POND DR.-8L

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743 SAS No.: _____ SDG No.: B2743

Matrix(soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	11495.23		11858.20		3.2		P
Antimony	6.00	U	30.00	U			P
Arsenic	5.00	U	25.00	U			P
Barium	25.54	B	26.03	B	1.9		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	114405.90		126788.15		10.8	E	P
Chromium	261.23		271.73		4.0		P
Cobalt	2.35	B	5.00	U	100.0		P
Copper	9.01	B	8.02	B	10.9		P
Iron	6513.00		6921.82		6.3		P
Lead	26.92		24.61		8.6		P
Magnesium	1587.25	B	1683.97	B	6.1		P
Manganese	43.20		44.65	B	3.4		P
Mercury							NR
Nickel	8.23	B	5.49	B	33.3		P
Potassium	441.19	B	1335.00	U	100.0		P
Selenium	5.00	U	25.00	U			P
Silver	1.00	U	5.00	U			P
Sodium	452.68	B	400.00	U	100.0		P
Thallium	8.00	U	40.00	U			P
Vanadium	29.25	B	30.16	B	3.1		P
Zinc	33.54		36.27	B	8.1		P
Cyanide							NR

~~Ca - all "+" results are biased low.~~

Region I Criteria only requires qualification if %Ds ≥ 15%

MLit 2/24/97

FORM IX - IN

ILM03.0

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

0001A

7096-2743B
OLIN CORPORATION

Case Narrative

Metals - ICAP metals were determined using a JA61E trace ICAP; mercury was determined by the cold vapor technique utilizing the Thermo Jarrell Ash Model QS-1E mercury analyzer using guidance provided in SW846 according to the following Methods: ICAP-3050/6010; mercury-7471.

Three "N" flags resulted from spike analysis of sample CNTR POND DR.-8 for mercury, thallium, and selenium. Since the post-digestion spike recoveries were within the control limits, a matrix interference is not suspected.

One "E" flag resulted from serial dilution of sample CNTR POND DR.-8 for calcium. There is no apparent reason for this flag.

No other problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

Classical Chemistry - Listed below are the wet chemistry analyte methods and references for the samples analyzed in this SDG. Sulfate failed the controls for spike recovery analysis for sample CNTR POND DR-8 resulting in on N flag. No other analytical problems were encountered and all holding times were met.

Analyte	Method	Reference
Ammonia	350.2	1
Sulfate	375.4	1

References:

1. Methods of Chemical Analysis of Water and Wastes, EPA 600, 1983.
2. Test Methods for the Evaluation of Solid Waste, SW846, 3rd ed., 1986.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 8260. The instrumentation used was a Tekmar Dynamic Headspace Concentrator interfaced with a Hewlett-Packard Model 5995 GC/MS/DS.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550/8270A. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

The following samples required diluted analyses for target analyte quantitation:

SAMPLE	DILUTION
CNTR POND DR.-3	1:2
CNTR WETLAND-AB-1	1:400
O/S CNTR PND A8-4	1:5

Pesticides - Pesticide samples were extracted and analyzed by GC/ECD using guidance provided in Methods 3550/8081. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni^{63}).

All samples were extracted and concentrated without any apparent problems.

Surrogate percent recoveries were outside of QC limits in sample O/S CNTR POND A8-4 due to coelution with sample matrix.

The DB-1701 column was used as the primary column.

The RTX-35 column was used as the confirmation column.

Decachlorobiphenyl was lost in sample matrix in sample O/S CNTR POND A8-4 on the RTX-35 and DB-1701 columns.

The percent recoveries for spiking compounds delta-BHC and 4,4'-DDD were outside of QC limits in sample PBLK48QC. delta-BHC degraded in the spiking solution. The spike solution has since been re-prepped and the manufacturer contacted regarding the degradation of delta-BHC. Storage procedure of the solution has been changed as well as more frequent preparation of the standard. The percent recovery for 4,4'-DDD was elevated due to coelution with Endosulfan II on the DB-1701 column. Each compound was calculated as combined area.

The percent recovery for spiking compound gamma-BHC was outside of QC limits in sample CNTR POND DR.-8MS.

4,4'-DDT was outside of retention time windows in sample CNTR POND DR.-8 on the DB-1701 column.

Heptachlor, Dieldrin, Endrin, 4,4'-DDD, 4,4'-DDT and Decachlorobiphenyl were outside of retention time windows in sample CNTR POND DR.-8MS on the DB-1701 column.

Gamma-BHC, Aldrin, Heptachlor, Dieldrin, Endrin, 4,4'-DDD, and 4,4'-DDT were outside of retention time windows in sample CNTR POND DR.-8MSD on the DB-1701 column.

Dieldrin was outside of retention time windows in sample O/S CNTR PND A8-2 on the DB-1701 column.

Gamma-BHC and 4,4'-DDT were outside of retention time windows in sample O/S CNTR PND A8-4 on the DB-1701 column.

Gamma-BHC was over the curve range in sample O/S CNTR PND A8-4. This was not detected until data packaging and the sample was not reanalyzed at a dilution.

Endrin and 4,4'-DDD were outside of retention time windows in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. This retention time shift was taken into consideration when the data was reviewed for target compounds.

The client's samples repeatedly caused the ending standards to fail and 4,4'-DDT to have high breakdown. The client's samples were bracketed using a maximum of 10 samples, but the ending standards and breakdown checks still failed QC criteria.

The percent differences for compounds Endosulfan Sulfate, Endrin Ketone, and gamma-Chlordane were outside of QC limits in standard INDB3 analyzed at 21:42 on 1/14/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 00:08 on 1/15/97 on the DB-1701 column. These standards were the end bracketing standards for samples PBLK48, PBLK48QC, CNTR POND DR.-4, CNTR POND DR.-5, CNTR POND DR.-6, CNTR POND DR.-7, CNTR POND DR.-9, O/S CNTR PND A8-1, O/S CNTR PND A8-2, and O/S CNTR PND A8-3. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

The percent differences for compounds 4,4'-DDT, Methoxychlor and Decachlorobiphenyl were outside of QC limits in standard INDA3 analyzed at 02:39 on 1/16/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. These standards were the end bracketing standards for samples CNTR WETLND-A8-1, CNTR WETLND-A8-2, CNTR WETLND-A8-3, CNTR WETLND-A8-4, CNTR WETLND-A9 (COMP), CNTR POND DR.-3, CNTR POND DR.-8, O/S CNTR PND A8-4, CNTR PND DR.-8MS, and CNTR POND DR.-8MSD. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

Manual integrations were performed if required, and any affected peaks were designated with an "FF" on the area report in the column titled "Code". Manual integrations were initialed by the analyst that performed the integration.

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cheryl Ann Cascella for

Jeffrey C. Curran
Laboratory Manager

Jan 22, 1997
Date

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

NO. [illegible]

JOB #:

CLIENT: [illegible] CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

							METAL AMMONIA SULFATE PST-TCL BNA-TCL	VOA-MISC VOA-TCL	~~PH~~/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC														
							GL250	SEPTA60	GL250														
							Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N								
11	[illegible]	12/15/96 / 1355	SO			N	1	1	012														
12	[illegible]	12/15/96 / 1255	SO			N	1	1	014														
13	[illegible]	12/15/96 / 1245	SO			N	1	1	015														
14	[illegible]	12/15/96 / 1235	SO			N	1	1	016														
15	[illegible]	12/15/96 / 1225	SO			N	1	1	017														
16	[illegible]	12/16/96 / 1415	SO			N		1	2	019													
17	[illegible]	12/16/96 / 1400	SO			N		1	2	020													
18	[illegible]	12/16/96 / 1425 1410	SO			N		1	2	B01													
19	[illegible]	12/16/96 / 1350	SO			N		1	2	B02													
20	[illegible]	12/16/96 / 1235	SO			N		1	2	B03													

Passed Rad Screen

Comp w/ 618-628 Comp 628 prior to analysis (except VOAs)

AIR	S	SOIL	
AQUEOUS	SL	SLUDGE	
COMPLEX	W	WIPE	
DRUM WASTE	O	OTHER	
OIL	FB	FIELD BLANK	
	TB	TRIP BLANK	

BOTTLES PREPARED BY: CP Dan-co	DATE / TIME 12/10/96 1600
SIGNATURE	
SAMPLES RELINQUISHED BY: Russell Mehalick	DATE / TIME 12/16/96 1750
SIGNATURE: Russell Mehalick	
BOTTLES REC'D BY: Russell Mehalick	DATE / TIME 12/15/96 0810
SIGNATURE: Russell Mehalick	
RECEIVED IN LAB BY: CP Dan-co	DATE / TIME 12/17/96 11[illegible]
SIGNATURE	

☒ BOTTLES INTACT ☒ CUSTODY SEALS
☒ PRESERVED ☒ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

LABORATORY COPY

IEA
An Aquarion Company
200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

NO. [illegible]

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

	TESTS								GENERAL REMARKS
	EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-HISC	VOA-HISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	Ammonia Sulfate PST-TCL BNA-TCL Met-HIS	EPH/VPH Ammonia Sulfate PST-TCL BNA-TCL Met-TAL				
	BOTTLE TYPE AND PRESERVATIVE								
	GL250	SEPTA60	GL250		GL 250				

	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	FIELD FILTERED - CIRCLE Y or N Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS
1	CNTR POND DR.-6	12/16/96 / 1310	SO		N	2	1	BC-1						
2	CNTR POND DR.-7	12/16/96 / 1335	SO		N	2	1	BC-4						
3	CNTR POND DR.-8	12/16/96 / 1250	SO		N	2 RAM	1	2 RAM		2 BC-6				
4	CNTR POND DR.-9	12/16/96 / 1320	SO		N	2 RAM	1	2 RAM		2 BC-7				
5	O/S CNTR PND A8-1	12/16/96 / 1210	SO		N		1	1	BC-8					
6	O/S CNTR PND A8-2	12/16/96 / 1200	SO		N		1	1 RAM	1	BC-9				
7	O/S CNTR PND A8-3	12/16/96 / 1140	SO		N		1	1 RAM	1	BC				
8	O/S CNTR PND A8-4	12/16/96 / 1440	SO		N		1	1 RAM	1	B11				
9	CNTR WETLND-A8-1	12/16/96 / 1450	SO		N		1	1 RAM	1	B12				
0	CNTR WETLND-A8-2	12/16/96 / 1520	SO		N	1 RAM	1	1 RAM	1	B13				

Passed Rad Screen
12/17/96 3[illegible]

MATRIX CODES

AIR	S	SOIL	
AQUEOUS	SL	SLUDGE	
COMPLEX	W	WIPE	
DRUM WASTE	O	OTHER	
OIL	FB	FIELD BLANK	
	TB	TRIP BLANK	

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Damiani	12/12/96 1600	Russell Mehalick	12/15/96 0810
SIGNATURE		SIGNATURE	
SAMPLES ~~COLLECTED BY~~ Relinquished by Russell Mehalick	12/16/96 1730	RECEIVED IN LAB BY CP Damiani	12/17/96 1100
SIGNATURE Russell Mehalick		SIGNATURE	

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

LABORATORY COPY

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 4 OF 14 | NO. P/T 2/43A

JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO | DUE DATE

TESTS								GENERAL REMARKS
EPH/VPH ANMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	AMMONIA PST-TCL SULFATE BNA-TCL MET-MISC	EPH/VPH Ammonia Sulfate PST-TCL BNA-TCL Met-TAL				
BOTTLE TYPE AND PRESERVATIVE								
GL250	SEPTA60	GL250	GL250					

#	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	FIELD FILTERED - CIRCLE Y or N Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS
31	CNTR WETLND-A8-3	12/16/96 / 1535	SO		N	2 ~~1~~ RAM	1			2 RAM	BK1			
32	CNTR WETLND-A8-4	12/16/96 / 1505	SO		N	RAM 1	1			2	BK1			
33	CNTR WETLND-A9-1	12/16/96 / 1110	SO		N		BK1 1	1						Comp in lab all parameters but VOA'S
34	CNTR WETLND-A9-2	12/16/96 / 1100	SO		N	~~1~~	BK1 1	1						
35	CNTR WETLND-A9-3	12/16/96 / 1045	SO		N	2 RAM	1		~~1~~ RAM	2		Passed Rad Screen		
36	CNTR WETLND-A9-4	12/16/96 / 1130	SO		N	2 RAM	1		~~1~~ RAM	2		12/17/96		
37	AREA 1-1	12/15/96 / 1425	SO		N		1	1						Comp in lab all parameters but VOA'S (cont.)
38	AREA 1-2	12/15/96 / 1415	SO		N		1	1						
39	AREA 1-3	12/15/96 / 1445	SO		N		1	1						
40	AREA 1-4	12/15/96 / 1435	SO		N		1	1						

MATRIX CODES

- AIR
- AQUEOUS
- COMPLEX
- DRUM WASTE
- OIL
- S - SOIL
- SL - SLUDGE
- W - WIPE
- O - OTHER
- FB - FIELD BLANK
- TB - TRIP BLANK

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Domicano	12/10/96 1600	Russell Mehalick	12/15/96 / 0810
SIGNATURE		SIGNATURE	
		Russell Mehalick	
SAMPLES ~~COLLECTED BY~~ Relinquished by	DATE / TIME	~~RECEIVED~~ IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	CP Domicano	12/17/96 1100
SIGNATURE		SIGNATURE	
Russell Mehalick			

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

LABORATORY COPY

SMITH

APPENDIX E

0980

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CNTR POND DR.-3

L Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743101

% Solids: 68.8 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	153.			
SULFATE	650.		N*	J

Comments:

*Not reported as stated in the case narrative as reported EJR

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

E. Bryan Rivers 2/21/97

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0981

CNTR POND DR.-4

1 Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743102

% Solids: 50.8 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	161.			
SULFATE	24900.		N*	J

Comments:

*Not reported, EDR stated in the Case narrative as reported

FORM I - WC

REVISED
RESUBMITTED

INSERTED BY E. Bryan Ruwet 2/21/97
SIGNATURE DATE

E. Bryan Ruwet 2/21/97

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CNTR POND DR.-5

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743103

% Solids: 49.5 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	343.		N*	
SULFATE	680.			

Comments:

*Not reported, case stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

E. Bryan Rivers 2/21/97

0983

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CNTR POND DR.-6

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743104

% Solids: 79.1 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

Analyte	Concentration	C	Q	M
AMMONIA	61.3			
SULFATE	260.		N*	

QA Qualifiers

J

Comments:

*Not reported. ~~as~~ stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY
INSERTED BY E. Bryan Ricks 2/21/97
SIGNATURE

E. Bryan Ricks 2/21/97

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CNTR POND DR.-7

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743105

% Solids: 49.6 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	202.			
SULFATE	24800.		N*	J

Comments:

*Not reported as stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

E. Bufan Rivers 2/21/97

E. Bufan Rivers 2/21/97

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0985

CNTR POND DR.-8

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743106

% Solids: 81.0 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

Analyte	Concentration	C	Q	M	QA Qualifiers
AMMONIA	77.7				
SULFATE	23900.		N*		J

Comments:

* Not reported. ~~ESS~~ EPA stated in the case narrative as reported.

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

E. Bryan Rivers 2/21/97

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0986

CNTR POND DR.-8

L Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743106D

% Solids: _____ Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	76.8		N *	
SULFATE	24300.			J

Comments:

* Not reported. ~~as~~ col stated in the case narrative as reported lab

Note: Duplicate Sample

FORM I - WC

E. Bryan Rivers 2/21/97

REVISED
RESUBMITTED

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0987

CNTR POND DR.-8

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743106S

% Solids: _____ Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

Analyte	Concentration	C	Q	M
AMMONIA	177 ~~124.~~			
SULFATE	24300.		N	

QA qualifiers

J

Comments:

ammonia - transcription error

sulfate - missing post qualifier
Note: SPIKE SAMPLE M Hicks 2/24/97

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0988

CNTR POND DR.-9

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743107

% Solids: 83.2 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	17.4		(N) *	(J)
SULFATE	250.			

Comments:

* Not reported ~~as~~ EVR reported in case narrative as reported.

FORM I - WC

E. Byron Rivers 2/21/97

RESUBMITTED

INSERTED BY E. Byron Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0989

O/S CNTR PND A8-1

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743108

% Solids: 76.2 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M	
AMMONIA	151.				
SULFATE	130.000	U	N*		UJ

Comments: _____

* Not reported as stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Byron Rivera 2/21/97
SIGNATURE DATE

E. Byron Rivera 2/21/97

0990

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

O/S CNTR FND A8-2

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743109

% Solids: 66.0 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	215.			
SULFATE	290.		N*	J

Comments:

* Not reported. EBR stated in the case narrative as reported.

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

E. Bryan Rivers 2/21/97

0991

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

O/S CNTR PND A8-3

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743110

% Solids: 76.8 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	154.		N*	
SULFATE	320.			J

Comments:

* Not reported. Stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Byron Rivers 2/21/97
SIGNATURE DATE

E. Byron Rivers 2/21/97

SAMPLE NO. 0992

WET CHEM ANALYSIS DATA SHEET

O/S CNTR FND A8-4

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743111

% Solids: 75.9 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	155.			
SULFATE	280.		N*	J

Comments:

*Not reported. ~~Report~~ CBC Stated in the case narrative as reported.

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

E. Bryan Rivers 2/21/97

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0993

CNTR WETLAND-A8-1

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743112

% Solids: 84.3 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

Analyte	Concentration	C	Q	M	QA Qualifiers
AMMONIA	34.6				
SULFATE	430.000	U	N*		UJ

Comments:

* Not Reported Stated in the case narrative as reported

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY

E. Bryan Rivers 2/21/97

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO. 0994

CNTR WETLAND-A8-2

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743113

% Solids: 62.0 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	301.			
SULFATE	290.		N*	J

Comments:

Not Reported Stated in the case narrative as reported.

FORM I - WC

E. Bryan Priest 2/21/97

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Priest 2/21/97
SIGNATURE DATE

0995

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

CNTR WETLAND-A8-3

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743114

% Solids: 77.5 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	94.9			
SULFATE	150.			

Comments:

* Not reported Stated in the case narrative
(a) reported

FORM I - WC

REVISED
RESUBMITTED

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

E. Bryan Rivers 2/21/97

0996

SAMPLE NO.

WET CHEM ANALYSIS DATA SHEET

CNTR WETLAND-A8-4

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743115

% Solids: 77.5 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/Kg

QA Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	73.1			
SULFATE	290.		N*	J

Comments:

* Not reported Stated in the case narrative as reported.

FORM I - WC

E. Bryan Rivers 2/21/97

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

1

WET CHEM ANALYSIS DATA SHEET

0997
SAMPLE NO.

CNTR WETLND-A9(COMP)

Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 2743120

% Solids: 55.1 Date Received: 12/17/96

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

GH Qualifiers

Analyte	Concentration	C	Q	M
AMMONIA	168.			
SULFATE	400.		N*	J

Comments:

* Not reported. Stated in the case narrative as reported

FORM I - WC

E. Bryan Rivers 2/21/97

REVISED DATA
RESUBMITTED BY LABORATORY.

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

4A

SPIKE SAMPLE RECOVERY

SAMPLE NO. 1005

CNTR POND DR.-8

Lab Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743B SAS No. : _____ SDG No.: _____

Matrix: Soil

Solids for Sample: 81.0

Concentration Units (mg/L or mg/kg dry weight) : mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
AMMONIA	75-125	177		77.7		124	80		
SULFATE	75-125	24300		23900		861	46.5	N	*

Comments:

* Not reported ~~as~~ stated the case narrative was reported

04 - all positive results and detection limits are based low

E. Bryan Rivers

FORM IV (Part 1) - WC

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY E. Bryan Rivers 2/21/97
SIGNATURE DATE

			NH_3 (mg/Kg)		
5	PBS	<0.040		D-	1.00
37	LCS	0.780			1.00 104%
38	2743B-06	1.263	77.7		1.00
39	2743B-06D	1.259	76.8		1.00
40	CCV5	1.013			1.00
41	CCB5	<0.040		D-	1.00
42	2743B-06S	2.863	~~770~~	177	1.00
43	2743B-14	1.480	94.9		1.00
44	2743B-15	1.131	73.1		1.00
45	2743B-20	1.863	168		1.00
46	2743C-07	2.372	143		1.00
47	2743C-12	1.524	114		1.00
48	2743C-13	0.412	21.8		1.00
49	2743C-14	0.239	13.9		1.00
50	CCV6	1.020			1.00
51	CCB6	<0.040		D-	1.00
52	BLANK SPIKE	1.911			1.00 95.5%
53	PBW	<0.040		D-	1.00
54	LCS	0.804			1.00 107%
55	2780A-01	<0.040		D-	1.00
56	2780A-02	Offscal		B-	1.00 Δ
57	2688A-01	1.845			1.00
58	2688A-03	0.492			1.00
59	2688A-03D	0.489			1.00
60	CCV7	1.031			1.00
1	CCB7	<0.040		D-	1.00
2	2688A-03S	2.496			1.00 100%
63	2688A-05	Offscal		B-	1.00 Δ
64	2688A-07	Offscal		B-	1.00
65	2688A-15	0.185			1.00
66	2688A-16	0.041			1.00
67	2688A-17	Offscal		B-	1.00 Δ
68	2688A-18	Offscal		B-	1.00
69	2741A-01	1.014			1.00 Δ
70	CCV8	1.060			1.00
71	CCB8	<0.040		D-	1.00
72	2741A-01D	0.817			1.00 Δ
73	2741A-01S	2.706			1.00
74	2741A-02	0.735			1.00
75	2741A-03	0.256			1.00
76	2741A-04	<0.040		D-	1.00
77	2741A-08	1.107			1.00
78	2741A-12	0.849			1.00
79	2741A-16	0.775			1.00
80	CCV9	1.022			1.00
81	CCB9	<0.040		D-	1.00
82	2741A-18	0.679			1.00
83	CCV10	1.047			1.00
84	CCB10	<0.040		D-	1.00

sample value.

1.17% RPD

SA = 124 mg/Kg 80.4%

Value is SA that is reported on Form I

Spike Sample value

* Value that should be reported on Form I

E. Bryan Rivers 2/21/97

1

WET CHEM ANALYSIS DATA SHEET

SAMPLE NO.

FIELD BLANK #2

1 Name: IEA Contract: _____

Lab Code: IEA Case No.: 2743C SAS No. : _____ SDG No.: C2743

Matrix: (soil/water) WATER Lab Sample ID: 2743217

% Solids: _____ Date Received: 12/17/96

Different work order #

Concentration Units (mg/L or mg/kg dry weight) : mg/L

Analyte	Concentration	C	Q	M
AMMONIA	0.040	U		
SULFATE	10.000	U		

Field blank for 12/16/96 samples. No qual. required. MHart 2/24/97

Comments: _____

FORM I - WC

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Mary Ann Lee 2/
SIGNATURE DATE

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

0001A

7096-2743B
OLIN CORPORATION

Case Narrative

Metals - ICAP metals were determined using a JA61E trace ICAP; mercury was determined by the cold vapor technique utilizing the Thermo Jarrell Ash Model QS-1E mercury analyzer using guidance provided in SW846 according to the following Methods: ICAP-3050/6010; mercury-7471.

Three "N" flags resulted from spike analysis of sample CNTR POND DR.-8 for mercury, thallium, and selenium. Since the post-digestion spike recoveries were within the control limits, a matrix interference is not suspected.

One "E" flag resulted from serial dilution of sample CNTR POND DR.-8 for calcium. There is no apparent reason for this flag.

No other problems occurred during analysis. All appropriate protocols were employed. All data appears to be consistent.

Classical Chemistry - Listed below are the wet chemistry analyte methods and references for the samples analyzed in this SDG. Sulfate failed the controls for spike recovery analysis for sample CNTR POND DR-8 resulting in on N flag. No other analytical problems were encountered and all holding times were met.

Analyte	Method	Reference
Ammonia	350.2	1
Sulfate	375.4	1

References:

1. Methods of Chemical Analysis of Water and Wastes, EPA 600, 1983.
2. Test Methods for the Evaluation of Solid Waste, SW846, 3rd ed., 1986.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 8260. The instrumentation used was a Tekmar Dynamic Headspace Concentrator interfaced with a Hewlett-Packard Model 5995 GC/MS/DS.

No problems were encountered.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550/8270A. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

The following samples required diluted analyses for target analyte quantitation:

SAMPLE	DILUTION
CNTR POND DR.-3	1:2
CNTR WETLAND-AB-1	1:400
O/S CNTR PND A8-4	1:5

Pesticides - Pesticide samples were extracted and analyzed by GC/ECD using guidance provided in Methods 3550/8081. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni^{63}).

All samples were extracted and concentrated without any apparent problems.

Surrogate percent recoveries were outside of QC limits in sample O/S CNTR POND A8-4 due to coelution with sample matrix.

The DB-1701 column was used as the primary column.

The RTX-35 column was used as the confirmation column.

Decachlorobiphenyl was lost in sample matrix in sample O/S CNTR POND A8-4 on the RTX-35 and DB-1701 columns.

The percent recoveries for spiking compounds delta-BHC and 4,4'-DDD were outside of QC limits in sample PBLK48QC. delta-BHC degraded in the spiking solution. The spike solution has since been re-prepped and the manufacturer contacted regarding the degradation of delta-BHC. Storage procedure of the solution has been changed as well as more frequent preparation of the standard. The percent recovery for 4,4'-DDD was elevated due to coelution with Endosulfan II on the DB-1701 column. Each compound was calculated as combined area.

The percent recovery for spiking compound gamma-BHC was outside of QC limits in sample CNTR POND DR.-8MS.

4,4'-DDT was outside of retention time windows in sample CNTR POND DR.-8 on the DB-1701 column.

Heptachlor, Dieldrin, Endrin, 4,4'-DDD, 4,4'-DDT and Decachlorobiphenyl were outside of retention time windows in sample CNTR POND DR.-8MS on the DB-1701 column.

Gamma-BHC, Aldrin, Heptachlor, Dieldrin, Endrin, 4,4'-DDD, and 4,4'-DDT were outside of retention time windows in sample CNTR POND DR.-8MSD on the DB-1701 column.

Dieldrin was outside of retention time windows in sample O/S CNTR PND A8-2 on the DB-1701 column.

Gamma-BHC and 4,4'-DDT were outside of retention time windows in sample O/S CNTR PND A8-4 on the DB-1701 column.

Gamma-BHC was over the curve range in sample O/S CNTR PND A8-4. This was not detected until data packaging and the sample was not reanalyzed at a dilution.

Endrin and 4,4'-DDD were outside of retention time windows in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. This retention time shift was taken into consideration when the data was reviewed for target compounds.

The client's samples repeatedly caused the ending standards to fail and 4,4'-DDT to have high breakdown. The client's samples were bracketed using a maximum of 10 samples, but the ending standards and breakdown checks still failed QC criteria.

The percent differences for compounds Endosulfan Sulfate, Endrin Ketone, and gamma-Chlordane were outside of QC limits in standard INDB3 analyzed at 21:42 on 1/14/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 00:08 on 1/15/97 on the DB-1701 column. These standards were the end bracketing standards for samples PBLK48, PBLK48QC, CNTR POND DR.-4, CNTR POND DR.-5, CNTR POND DR.-6, CNTR POND DR.-7, CNTR POND DR.-9, O/S CNTR PND A8-1, O/S CNTR PND A8-2, and O/S CNTR PND A8-3. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

The percent differences for compounds 4,4'-DDT, Methoxychlor and Decachlorobiphenyl were outside of QC limits in standard INDA3 analyzed at 02:39 on 1/16/97 on the DB-1701 column. The percent breakdown for 4,4'-DDT exceeded 20% in the IBS standard analyzed at 03:59 on 1/16/97 on the DB-1701 column. These standards were the end bracketing standards for samples CNTR WETLND-A8-1, CNTR WETLND-A8-2, CNTR WETLND-A8-3, CNTR WETLND-A8-4, CNTR WETLND-A9 (COMP), CNTR POND DR.-3, CNTR POND DR.-8, O/S CNTR PND A8-4, CNTR PND DR.-8MS, and CNTR POND DR.-8MSD. The client's samples were analyzed twice with percent differences outside of QC limits in the ending calibration check. The client's samples are the suspected cause.

Manual integrations were performed if required, and any affected peaks were designated with an "FF" on the area report in the column titled "Code". Manual integrations were initialed by the analyst that performed the integration.

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cheryl Ann Cascella for

Jeffrey C. Curran
Laboratory Manager

Jan 22, 1997
Date

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

 NO. P 27434

EA JOB #:

LIENT: OLIN CORPORATION

ROJECT ID: 037070-SURFACE SOIL

EA PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

							MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL		VOA-MISC VOA-TCL		EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC										
							GL250		SEPTA60		GL250										
							Y / N		Y / N		Y / N		Y / N		Y / N		Y / N		Y / N		Y / N
11	N.B. OF SUMU-6AA	12/15/96	1345	SO		N	1	013	1		012										Comp w/ 6AA-6AP
12	N.B. OF SUMU-6AB	12/15/96	1255	SO		N	1		1		014										Comp 6AB-6AP
13	N.B. OF SUMU-6AC	12/15/96	1245	SO		N	1	018	1		015										6AP prior to
14	N.B. OF SUMU-6AD	12/15/96	1235	SO		N	1		1		016										analysis
15	N.B. OF SUMU-6AE	12/15/96	1225	SO		N	1		1		017				Passed Red Screen						(except VOAs)
16	CEDR POND DR.-1	12/16/96	1415	SO		N			1		2	019									
17	CEDR POND DR.-2	12/16/96	1400	SO		N			1		2	020									
18	CEDR POND DR.-3	12/16/96	1425 1400	SO		N			1		2	B01									
19	CEDR POND DR.-4	12/16/96	1350	SO		N			1		2	B02									
20	CEDR POND DR.-5	12/16/96	1235	SO		N			1		2	B03									

- AIR
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- COMPLEX
- DRUM WASTE
- OIL
- S - SOIL
- SL - SLUDGE
- W - WIPE
- O - OTHER
- FB - FIELD BLANK
- TB - TRIP BLANK

BOTTLES PREPARED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
CP Damon	12/10/96 1600	Russell Mehalick	12/15/96 0810
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SAMPLES RELINQUISHED BY Russell Mehalick	DATE / TIME 12/16/96 1730	RECEIVED IN LAB BY CP Damon	DATE / TIME 12/17/96 1100
SIGNATURE Russell Mehalick		SIGNATURE	

☒ BOTTLES INTACT ☒ CUSTODY SEALS
☒ PRESERVED ☒ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

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An Aquarion C y

Monroe, CT 06468
203-261-4458

CHAIN OF CUSTODY RECORD

PAGE OF NO.

JOB #:

IENT: OLIN CORPORATION

OJECT ID: 037070-SURFACE SOIL

PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO DUE DATE

						TESTS								GENERAL REMARKS
						EPH/VPH ANMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL ANMONIA SULFATE PST-TCL BNA-TCL	Ammonia Sulfate PST-TCL BNA-TCL met-MIS	EPH/VPH Ammonia sulfate PST-TCL BNA-TCL met-TAL				
						BOTTLE TYPE AND PRESERVATIVE								
						GL250	SEPTA60	GL250		GL 250				
LE #	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	FIELD FILTERED - CIRCLE Y or N								SAMPLE REMARKS
						Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	
21	CNTR POND DR.-6	12/16/96/ 1310	SO		N	2	1	BC-1						
22	CNTR POND DR.-7	12/16/96/ 1335	SO		N	2	1	BC-2						
23	CNTR POND DR.-8	12/16/96/ 1250	SO		N	2 RAM	1	2 RAM		2 BC-6				
24	CNTR POND DR.-9	12/16/96/ 1320	SO		N	2 RAM	1	2 RAM		2 BC-7				
25	O/S CNTR PND A8-1	12/16/96/ 1210	SO		N		1	1	BC-8		Passed Rad Screen 12/17/96 3°			
26	O/S CNTR PND A8-2	12/16/96/ 1200	SO		N		1	1 RAM	1	BC-9				
27	O/S CNTR PND A8-3	12/16/96/ 1140	SO		N		1	1 RAM	1	BIC				
28	O/S CNTR PND A8-4	12/16/96/ 1440	SO		N		1	1 RAM	1	B11				
29	CNTR WETLND-A8-1	12/16/96/ 1450	SO		N		1	1 RAM	1	B12				
30	CNTR WETLND-A8-2	12/16/96/ 1520	SO		N	1 RAM	1	1 RAM RAM	1	B13				

MATRIX CODES		
AIR	S	SOIL
AQUEOUS	SL	SLUDGE
COMPLEX	W	WIPE
DRUM WASTE	O	OTHER
OIL	FB	FIELD BLANK
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CP Damiani	12/12/96 16[illegible]	Russell Mehalick	12/15/96 0810
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REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

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CHAIN OF CUSTODY RECORD

PAGE ___ OF ___ | NO. ___

A JOB #:

CLIENT: OLIN CORPORATION

PROJECT ID: 037070-SURFACE SOIL

A PROJECT MGR: STEPHANIE PLUNKETT

RUSH ☐ YES ☐ NO | DUE DATE

TITLE #	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	TESTS: EPH/VPH AMMONIA SULFATE PST-TCL BNA-TCL MET-MISC	VOA-MISC VOA-TCL	MET-TAL AMMONIA SULFATE PST-TCL BNA-TCL	AMMONIA PST-TCL SULFATE BNA-TCL MET-MISC	EPH/VPH Ammonia sulfate PST-TCL BNA-TCL Met-TAL				GENERAL REMARKS
						BOTTLE TYPE AND PRESERVATIVE: GL250	SEPTA60	GL250	GL250					
						FIELD FILTERED - CIRCLE Y or N: Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	SAMPLE REMARKS
31	CNTR WETLND-A8-3	12/16/96 / 1535	SO		N	2 ~~1~~ RAM	1			2 RAM	1341			
32	CNTR WETLND-A8-4	12/16/96 / 1505	SO		N	~~1~~ RAM	1			2	1342			
33	CNTR WETLND-A9-1	12/16/96 / 1110	SO		N		1	1						Comp in lab all parameters but VOA's
34	CNTR WETLND-A9-2	12/16/96 / 1100	SO		N	~~1~~	1	1						
35	CNTR WETLND-A9-3	12/16/96 / 1045	SO		N	2 RAM	1		~~1~~ RAM	2		Passed Rad Screen		
36	CNTR WETLND-A9-4	12/16/96 / 1130	SO		N	2 RAM	1		~~1~~ RAM	2		12/17/96		
37	AREA 1-1	12/15/96 / 1425	SO		N		1	1						Comp in lab all parameters but VOA's (cont.)
38	AREA 1-2	12/15/96 / 1415	SO		N		1	1						
39	AREA 1-3	12/15/96 / 1445	SO		N		1	1						
40	AREA 1-4	12/15/96 / 1435	SO		N		1	1						

MATRIX CODES

- AIR
- AQUEOUS
- COMPLEX
- DRUM WASTE
- OIL
- S - SOIL
- SL - SLUDGE
- W - WIPE
- O - OTHER
- FB - FIELD BLANK
- TB - TRIP BLANK

BOTTLES PREPPED BY	DATE / TIME	BOTTLES REC'D BY	DATE / TIME
C.P. Damiani	12/10/96 1600	Russell Mehalick	12/15/96 / 0810
SIGNATURE		SIGNATURE	
		Russell Mehalick	
SAMPLES ~~CONSIGNED~~ Relinquished by	DATE / TIME	RECEIVED IN LAB BY	DATE / TIME
Russell Mehalick	12/16/96 1730	C.P. Damiani	12/17/96 1100
SIGNATURE		SIGNATURE	
Russell Mehalick			

REMARKS ON SAMPLE RECEIPT

- ☒ BOTTLES INTACT
- ☒ CUSTODY SEALS
- ☒ PRESERVED
- ☒ SEALS INTACT
- ☒ CHILLED
- ☐ SEE REMARKS

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SMITH ENVIRONMENTAL CORPORATE QUALITY ASSURANCE DEPARTMENT
DATA VALIDATION INQUIRY

To: Jeffrey Curran, L. Wiksteron, S. Morrow
cc: Bruce Cushing, Project Manager, SMTH
DATA VALIDATION REPORT

I.E.A. An Aquarion Company Case No.:B2743
Project Name: Wilmington, MA

February 18, 1997

Dear Mr. Curran:

The following questions pertain the wet chem data for B2743:

1. It appears in the raw data and the Spike sample Recovery form (Form4A) that there was no spike added for sulfate because there was only a difference of 20 mg/L or .2mg/kg. However, your SOP states that the added spike for sulfate should be 50.0 mg/L. Please confirm that the spike added for sulfate in case B2743 was not added.

2. It appears that the final result for sulfate samples CNTR POND DR.-8 (962743B-06), CNTR POND DR.-8 (962743B-06)Dup, CNTR POND DR.-8 (962743B-06)Spk, and CNTR WETLND A9 (CO (962743B-20) were incorrectly calculated in the raw data. The percent solids used on the % Percent Solids Determination Form do not reproduce the final result reported. Please indicate what value or where the values are in the data that I should use to reproduce the results of concern.

Please call me with any questions that you may have regarding the above issues.

Thank you,
E. Bryan Rivers
Quality Assurance Scientist

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

February 20, 1997

Mr. E. Bryan Rivers
Smith Environmental Corporation
One Plymouth Meeting
Plymouth Meeting, PA 19462

Dear Mr. Rivers:

In reference to corrective action report #5448, please find enclosed the revised analytical results for IEA reports #7096-2743A, 7096-2743B, and 7096-2743C.

The following tables have been revised: Classical Chemistry Form I's, IV's, and V's.

The changes are based on the following issues: Incorrect sulfate results had been reported.

Very truly yours,

Michele Sciongay

Data Management

CAC/ms

cc: L. Wiksteron
S. Morrow

RECEIVED
FEB 21 1997
T. Bryan Rivers

Schaumburg, Illinois 847-705-0740

N. Billerica, Massachusetts 508-667-1400

Whippany, New Jersey 201-428-8181

Cary, North Carolina 919-677-0090

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Appendix P

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APPENDIX P

GROUNDWATER FLOW MODELING

APPENDIX P

GROUNDWATER FLOW MODELING

OLIN CORPORATION
WILMINGTON, MASSACHUSETTS

PREPARED FOR

OLIN CORPORATION
CHARLESTON, TENNESSEE

JUNE 1997

PROJECT NO. 00-7074-0106

PREPARED BY

SMITH TECHNOLOGY CORPORATION
PLYMOUTH MEETING, PENNSYLVANIA

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D Excerpt from SHARP Manual

ACKNOWLEDGMENTS

We would like to express our sincere thanks to the Town of Wilmington: Mike Woods, Rob Antiko, and all the people that work for the Water Department. The town has not only allowed Olin virtually unlimited access to their property for conducting studies and installing wells, but has also provided information from their files. We have obtained historical reports, current studies, pumping information, precipitation data and more. Water Department personnel have openly and helpfully answered all our questions. Without their help, the groundwater modeling for this project would have been much more difficult.

1.0 INTRODUCTION

Olin Corporation owns a former chemical manufacturing facility located at 51 Eames Street in Wilmington, Massachusetts. Historical waste disposal activities prior to Olin's purchase of the site in 1980 resulted in subsurface contamination beneath the site and surrounding areas. The most extensive of these problems is a layer of dense water containing high concentrations of inorganic contaminants which is present at the base of the unconfined sand and gravel aquifer. This dense layer contains high concentrations of certain indicator parameters (sulfate, ammonia, chromium and chloride) as well as many other inorganic parameters. The minimum pH within the dense layer is approximately 3.2, the maximum specific conductance up to 100,000 umhos, and the maximum specific gravity 1.10. The dense layer is currently present beneath the center of the Olin property and a number of properties to the west on Jewel Drive, Eames Street and Main Street, and extends somewhat beneath Maple Meadow Brook approximately 2,500 feet west of the Olin property. The Town of Wilmington operates a municipal water supply wellfield surrounding Maple Meadow Brook. The wellfield consists of five production wells which together typically pump over one million gallons of water per day. The site and surrounding area are shown on the United States Geologic Survey (USGS) Topographic Map in Figure P-1.

In 1993, Olin submitted the following documents to the Massachusetts Department of Environmental Protection (MADEP):

- A Comprehensive Site Assessment (CSA) (CRA, 1993) describing the subsurface conditions at the site,

- A Work Plan for Supplemental Phase II Field Investigations (BCM, 1993) proposing additional data collection activities needed for further characterization of site conditions, and

- A Public Health Risk Assessment (ABB-ES, 1993) evaluating the risk to human receptors associated with site contamination.

The MADEP provided comments on the risk assessment in a letter dated March 22, 1995. One of the comments stated (p. 2):

> "There is potential future risk due to the possibility of future contamination of the Town of Wilmington public water supply, therefore, this pathway should be addressed in the risk assessment."

In order to include this analysis in revisions to the risk assessment, it was necessary to predict maximum future concentrations of contaminants at the supply wells. Because of the complexity of the hydrogeology, the presence of the dense layer, and the influence of geochemistry in the subsurface, the only feasible approach to estimating future impacts to the supply wells was through mathematical modeling. The use of modeling for this purpose was proposed in the "Scope of Work, Human Health Risk Assessment" (ABB-ES, 1996), which was approved by the MADEP in their letter dated May 16, 1996.

The team of consultants on the project developed an approach to the modeling that consisted of two phases:

(1) Groundwater Flow Modeling, performed by Smith Technology Corporation
(2) Geochemical Fate and Transport Modeling, performed by Geomega

The results of the groundwater flow modeling were used to provide hydrogeologic input to the chemical transport modeling. The results of the chemical transport modeling provided estimated contaminant concentrations at the municipal supply wells for use in the risk assessment. This report presents the details of the groundwater flow modeling only; results of the chemical transport modeling and human health risk assessment are presented separately.

2.0 MODELING OBJECTIVES AND APPROACH

The objectives of the modeling were as follows:

- Most importantly, to develop estimates of maximum contaminant concentrations over an exposure period at the municipal supply well exposure points for use in the human health risk assessment;

- To aid in more fully understanding the complex groundwater flow system in the area surrounding the site; and,

- To aid in understanding the potential movement of the dense layer.

There are significant aspects of this site that make the modeling effort very complex. The hydrogeologic system from which the municipal wells draw water consists of in-filled bedrock valleys, and surface water interaction takes place both on the Olin property and in the extensive wetland surrounding Maple Meadow Brook. The existence of the dense layer adds significant complexity as its movement cannot be modeled using the more common methods that are based on constant-density waters. In addition, the top of the dense layer is characterized by a relatively sharp drop in concentrations to the overlying groundwater, suggesting very low vertical dispersivity. Finally, the concentrations of chromium within the dense layer and groundwater are strongly dependent on the geochemical conditions: at neutral pH, chromium typically precipitates out of solution and is not present in groundwater; at the acidic pHs within the dense layer, it is present and may be mobile.

Due to the complex nature of the system to be modeled, a phased approach was used for the modeling effort. These phases consisted of:

- Constant-Density Groundwater Flow Modeling at Basin Scale - The groundwater flow system within the entire drainage basin surrounding Maple Meadow Brook and including the site was modeled using a constant density. The objective of this phase was to lay a strong foundation for later phases, particularly to provide a solid integrated understanding of the hydrogeologic system.

- Sharp-Interface Modeling at the Site Scale - The movement of the dense layer was modeled using a variable-density approach at a scale encompassing the source areas on site and extending beyond the center of the buried bedrock valley beneath Maple Meadow Brook. The modeling was based on a simplifying assumption that the interface between the dense layer and the overlying groundwater can be approximated as a sharp interface so that dispersion can be neglected. The objective of this phase was to aid in understanding potential movement of the dense layer and to determine where the dense layer will move in the future.

- Generation of Flowpaths - Based on the results of either or both of the first phases, groundwater flowpaths were generated to estimate future movement of contaminants. The flowpaths were initiated at certain receptors and then backtracked upgradient to determine the area of groundwater contributing to water quality at the receptor.

- Chemical Transport Modeling - Using the flowpaths generated during the previous phase, fate and transport along the individual flowpaths were modeled. This modeling estimated how contaminant concentrations changed along the flowpaths, including the effects of geochemistry, and provided estimated concentrations at the receptors.

The estimated exposure point concentrations resulting from the chemical transport modeling were used in evaluating potential human health risk at the municipal supply well exposure points. Each of these phases contributes, either alone or in combination, to meeting the objectives described above.

The implementation of the first three items above is presented in this report; the chemical transport modeling is described in Appendix Q.

The modeling described in this report was performed in accordance with standard practice and MADEP guidance (MADEP, 1993).

3.0 HYDROGEOLOGIC CONCEPTUALIZATION

The hydrogeology of the site and surrounding area is discussed in detail in the CSA and in Sections 2 and 3 of the Supplemental Phase II Report. Those discussions include detailed presentation of collected data, data analyses and conclusions. For the purpose of the modeling, much of the conclusions are re-stated below, but limited specific data is repeated. Figure P-2 is a schematic cross-section showing the major components of the hydrogeologic system.

3.1 HYDROSTRATIGRAPHIC UNITS

Groundwater in the area surrounding the Olin property generally occurs in two types of geologic formations: the unconsolidated sand and gravel deposits, and the underlying crystalline bedrock. The geology of these units is described in more detail in the CSA (CRA, 1993), and Sections 2 and 3 of the Supplemental Phase II Report. The sand and gravel deposits form the significant water-bearing unit in this area; in the context of this modeling report, the term aquifer will refer to these sand and gravel deposits. The bedrock locally interrupts this aquifer in the form of minor outcrops and some major bedrock hills.

The unconsolidated sand and gravel deposits, where present, typically have a high porosity and permeability and thus are able to transmit large quantities of water, providing a highly productive aquifer. Locally, the unconsolidated aquifer exhibits a very high degree of heterogeneity. As evidenced from the detailed well logs generated during the installation of wells in the Western Bedrock Valley, relatively coarse and relatively finer deposits interfinger to produce a very complex stratigraphic profile that does not correlate well horizontally. This is shown quantitatively in the slug test results which reveal hydraulic conductivities ranging between 2 and 3,000 feet/day. Because of this local variability, there will be preferential groundwater flow paths through the sand and gravel aquifer. However, given the complex nature of the glacial depositional environment, it is not realistic to map and correlate the existence of these localized zones. Outside the local scale, the aquifer has a high average hydraulic conductivity and transmissivity. Pumping test results indicate transmissivities between 2,000 and 13,000 square feet/day, with hydraulic conductivities between 20 and 250 feet/day. The combined usage at the five water supply wells making up the Maple Meadow Brook Wellfield averages about 1.4 million gallons per day (MGD) on an annual basis (1992 through 1996 data); these wells are permitted to produce up to 3.5 MGD (IEP, 1990).

The sand and gravel aquifer can be roughly divided into two units. Coarser-grained, more poorly sorted deposits are present beneath and surrounding the Maple Meadow Brook wetland. These have been mapped as kames and kame fields (Qk) by the USGS (Castle, 1959), and are referred

to as ice-contact deposits in the CSA (CRA, 1993). On the Olin property and the immediate vicinity are well sorted fine to medium sands. These are mapped as kame terraces (Qkt) by the USGS (Castle, 1959) and are referred to as outwash deposits in the CSA (CRA, 1993).

In general, the aquifer is unconfined with the exception of the area beneath the Maple Meadow Brook wetland. This area is overlain by extensive swamp deposits (peat and muck), up to 30 feet thick, which restrict groundwater flow and are likely to locally confine the underlying sand and gravel aquifer.

In contrast to the high permeability of the overburden material, the underlying bedrock has a much lower permeability. Because of its low primary porosity, the majority of the groundwater flow takes place through fractures in the crystalline rock. These fractures occupy only a small part of the bedrock formation, and so the bedrock typically contains a very small amount of water compared to the overlying sand and gravel. The flow system in the bedrock is anisotropic because of the structural controls on fracturing. The poorly yielding nature of these fractures is demonstrated by transmissivity values calculated from slug tests which range from 0.035 to 2.3 square feet/day. Calculated hydraulic conductivities would be very low; the CSA presented values of 0.03 to 0.06 feet/day. During purging of the bedrock wells prior to sampling, they are easily pumped dry. In contrast, wells in the sand and gravel show little drawdown even at significantly higher purging rates. In summary, the bedrock formation forms an insignificant part of the overall groundwater flow system in this area.

3.2 AQUIFER BOUNDARIES

The natural boundaries of the sand and gravel aquifer are formed where bedrock outcrops interrupt the aquifer, or where bedrock is present at depth, at surface water divides. In the vicinity of the wellfield, the Maple Meadow Brook drainage basin is bounded on the south and much of the east and west by the presence of extensive bedrock hills. To the north, the limits are formed at surface water divides. Figure P-3 is a reproduction of the USGS surficial geology map (Castle, 1959) showing topographic contours, the swamp deposits in the center of the Maple Meadow Brook basin, and the extent of mapped bedrock.

The limit of the Maple Meadow Brook drainage basin passes near the Olin property. West of this divide, surface water flows towards Maple Meadow Brook; east of the divide, runoff is towards the East Ditch which bounds the Olin property on the east. The East Ditch flows southward eventually reaching Halls Brook and the Aberjona River. Groundwater flow on the Olin property is more complex, with local and seasonal variations in flow direction, historical movement of the dense layer, and modifications of the natural flow system by manmade influences (for example, the South Ditch weir or the National Pollutant Discharge Elimination System (NPDES) outfall into the On-Property West Ditch).

A small portion of the southwest corner of the Olin property is located within a third drainage sub-basin. Runoff from this area is to the southwest towards Breed Avenue and Main Street. Drainage from this area also eventually reaches Halls Brook and the Aberjona River. Groundwater flow in this area has most likely been complicated by the presence of the Calcium-Sulfate Landfill on Olin's property and the adjacent former Sanitary Landfill for the City of Woburn.

3.3 SOURCES AND SINKS OF WATER

In addition to the complex geologic conditions of the sand and gravel aquifer around the site, the sources and sinks of water to the system are complex and include rainfall, evapotranspiration, groundwater pumpage, and recharge and discharge relationships with surface water bodies, all with notable seasonal variability.

3.3.1 Recharge to Groundwater

The only significant source of water to the Maple Meadow Brook basin is precipitation. Northeastern Massachusetts receives an average of 41 inches of precipitation per year (Baker, et al., 1964), of which a relatively large percentage (47 percent for 1930 through 1959) is lost to evapotranspiration which occurs during the growing season (Baker, et al., 1964). Of the remaining rainfall, most is received as groundwater recharge. Because of the highly permeable nature of the surface soils and the predominant gentle slopes, a relatively high percentage of rainfall infiltrates to the subsurface, except where intercepted by wetlands or impermeable surfaces such as buildings and roads. The rain that falls onto the bedrock outcrops cannot infiltrate as readily and so a larger percentage runs off into the surrounding sand and gravel aquifer. Once there, this runoff also recharges the groundwater in the sand and gravel aquifer.

Minor and local sources of water include Olin's NPDES outfall to the On-Property West Ditch and septic leachfields at certain residential properties on Main Street. Olin operates a groundwater interceptor system at Plant B in the northeast portion of its property. The pumped groundwater is treated and then discharged via a NPDES-permitted outfall located at the upstream limit of the On-Property West Ditch. Surface water elevations in this area are higher than groundwater elevations indicating that this section of the ditch system can recharge groundwater. In addition, the South Ditch weir installed in 1994 has created local groundwater mounding upstream in the Off-Property West Ditch. This adds to the potential for recharge to groundwater on a seasonal basis.

All of the residences in the vicinity of the site have septic leachfields. Within the sand and gravel aquifer, two homes also use domestic water supply wells and so are considered non-consumptive users of groundwater. However, there are 15 properties located at the northern end

of Main Street who use septic leachfields, but obtain water from the municipal distribution system. The septic discharge from these properties constitutes a minor local recharge of groundwater. The locations of these properties are shown on Figure P-4.

3.3.2 Groundwater Discharge

The dominant mechanisms of water loss from the sand and gravel aquifer include direct pumpage for municipal and industrial supply, and discharge to surface water bodies. Evapotranspiration is excluded from this discussion as it is considered to intercept recharge.

There are currently two major commercial/industrial and five public water supply groundwater withdrawals in the vicinity of the Olin Facility. The locations of these groundwater users relative to the Olin property are shown on Figure P-4. Specific information about these wells and the groundwater usage is summarized in Table P-1.

The two commercial/industrial groundwater withdrawals are industrial water supply wells on the Altron property located at the intersection of Eames Street and Jewel Drive. Altron's two wells (B1 and B3) are used to provide industrial process water. The wells are set at intermediate depths in the sand and gravel aquifer. According to the CSA, each well pumped approximately 50,000 gallons of groundwater per day (CRA, 1992). More recent information from Altron indicates pumping rates of 80,000 to 100,000 gpd at each well (Wikstrom, 1997). The wells are permitted for a combined pumping rate of 190,000 gpd. After use in the manufacturing processes, the waste water is discharged to the publicly-owned treatment works (POTW). The locations of Altron's wells are shown on Figure P-4.

The five municipal water supply wells making up the Maple Meadow Brook Wellfield include Butters Row No. 1, Butters Row No. 2, Chestnut Street No. 1, Chestnut Street No. 2, and Town Park. The Chestnut Street No. 2 well is also known as the Chestnut Street 1A well. The locations of these wells are shown on Figure P-4. This wellfield and the accompanying water treatment plant are owned and operated by the Town of Wilmington. All five wells are set at intermediate depths within the sand and gravel aquifer (see Table P-1). The combined maximum permitted yield of the five wells is 3.5 MGD. The wellfield was originally developed in the early 1960s, with the Chestnut Street No. 2 well added in 1992. For the period 1992 through 1996, the average pumpage from this wellfield was 1.4 MGD (940 gallons per minute [gpm]). Pumping rates are higher in the summer when water demands are greater, and lower in the winter. Table P-2 shows the monthly pumping rates for each of the wells reported to the MADEP by the Town of Wilmington Water Department for the 5-year period 1992 through 1996.

The other major groundwater discharge point is the Maple Meadow Brook wetland system, covering an area of about 100 acres surrounding Maple Meadow Brook. In the winter, the water level in this wetland is about 1 to 4 feet above the ground surface and it receives significant groundwater discharge. Based on field observations, it is likely that much of the precipitation received during storm events enters the groundwater flow system and is subsequently discharged to the wetlands. Given the presence of this extensive surface water body, it is also likely that the

municipal water supply wells are able to induce recharge from the wetland back into the aquifer. In the summer, there is typically little or no standing water within the wetland, although healthy plant growth during the drought period of 1995 indicates that subsurface water is available to plants.

Other more minor sources of groundwater loss include the ditch systems on the Olin property and Olin's operation of a groundwater interceptor system at Plant B. Olin's groundwater interceptor system consists of three shallow interceptor wells (IW-11, IW-12, and IW-13) pumping a combined average of about 12,000 gallons per day. The ditch system that bounds and crosses the Olin property includes the Off-Property West Ditch, the South Ditch, the Ephemeral Drainage, and the East Ditch (the On-Property West Ditch is a source of groundwater recharge as discussed above). The East Ditch is a perennial stream receiving groundwater discharge throughout the year. The Ephemeral Drainage receives groundwater discharge during periods of high water (typically winter to early spring) and is dry for most of the rest of the year. The South Ditch and the Off-Property West Ditch are both more significant points of seasonal groundwater discharge. The South Ditch flows for most of the year excepting particularly dry periods (summer). Prior to installation of the weir, the Off-Property West Ditch was similar, perhaps going dry for somewhat longer periods on the one branch near GW-76S. Now that the weir is in place, the Off-Property West Ditch rarely, if ever, goes dry. However, during periods of high water, it receives groundwater discharge; during drier periods, the water in the ditch creates a groundwater mound so that groundwater is recharged.

Both the sand and gravel aquifer and the bedrock are utilized for domestic water supplies in this area. Homes located along Cook Avenue, Border Avenue, and the southern end of Main Street have domestic wells set in the bedrock. According to the homeowners, the depths of these wells range from 90 to 705 feet, where known. Three domestic wells in the sand and gravel aquifer on the south end of Main Street have recently been properly abandoned (spring 1997). The depths of these wells were shallow, ranging from 7 to 22 feet. As discussed above, since all of these homeowners also utilize septic leachfields, groundwater use is considered non-consumptive.

3.4 GROUNDWATER FLOW

Complete rounds of groundwater and surface water levels were obtained in October 1995 and April/May 1996. These data are presented in Section 2 of the Supplemental Phase II Report. Groundwater contour maps prepared from these data are shown in Plates P-1 through P-4. Groundwater flow patterns based on these data sets are discussed below.

3.4.1 Horizontal Groundwater Flow

The Olin property is located on a groundwater divide, with flow from much of the property to the southeast within the Aberjona River watershed. Flow from a portion of the property and most of the area to the west is towards the west within the Ipswich River watershed. The divide crosses the groundwater mound located on the northern portion of the Olin property and continues to the bedrock high beneath Cook Avenue. East of this divide, groundwater flow is locally towards the ditch system, and to the East Ditch. To the west of this divide, flow is westward towards Altron, the Maple Meadow Brook wetlands, and the water supply wells. The exact location of this divide varies seasonally, sometimes significantly, based on local factors including the presence of the weir on the South Ditch and pumpage at the Altron industrial wells. Groundwater flow patterns observed in shallow and deep wells are similar.

Local groundwater flow patterns are slightly different than originally shown in the CSA (CRA, 1993) due to the presence of the weir in the South Ditch. The weir has created localized seasonal mounding in this area with a component of flow to the northwest. East of this area, shallow groundwater flow is generally towards the east in the direction of the ditch systems as previously described. However, when groundwater levels are low (typically summer and fall), a distinct mound is formed in this area. As a result, the groundwater divide crosses through this mound allowing groundwater immediately west of the property to flow to the northwest towards the Maple Meadow Brook wetlands and the supply wells. When groundwater levels are high (winter and spring), this mounding is overcome, and local flow is towards the ditches and eventually to the southeast.

An additional seasonal difference in groundwater flow is likely to be present in the vicinity of the Maple Meadow Brook wellfield. During wet periods of the year, the wetland is submerged under several feet of standing water. It is likely that much groundwater is discharging to the wetland at this time, and that the supply wells are inducing localized groundwater recharge from this water body. Conversely, during dry periods of the year, the wetland often holds little standing water due to significant evapotranspiration.

As previously mentioned, in contrast to the highly permeable sand and gravel aquifer, the bedrock formation is much less permeable. Rain that falls onto the bedrock outcrops cannot infiltrate as readily because of the lower permeability and steeper slopes. Therefore, excess water runs off into the surrounding sand and gravel aquifer. This creates increased hydraulic heads and steeper gradients in the aquifer adjacent to bedrock exposures. This phenomenon can be observed in areas where bedrock is near the ground surface, such as near the Calcium-Sulfate Landfill.

3.4.2 Vertical Groundwater Flow

In general, vertical hydraulic gradients are not particularly strong, with head differences between shallow and deep wells typically on the order of tenths of a foot. Upward vertical gradients generally occur immediately adjacent to surface water bodies (Maple Meadow Brook and the ditches). Downward vertical gradients generally dominate the remainder of the area although there are a number of wells with no significant head difference between the shallow and deep well. Immediately adjacent to the water supply wells, vertical gradients in the shallow portions of the aquifer would be expected to be downward towards the intermediate pumping zone; gradients in the deep, upward.

In the fall of 1996, five well clusters were installed into the sand and gravel aquifer beneath the Maple Meadow Brook wetland. A limited amount of water level data has been obtained from these wells, all from the winter of 1996-1997. The data from all wells show little, if any, differences in hydraulic heads with depth.

Head differences between the overburden aquifer and the bedrock are relatively minor. Vertical gradients in the GW-61 and GW-68 clusters are generally upwards, and downwards in the GW-62 and GW-65 clusters. However, given the significant difference in permeability between the sand and gravel aquifer and the bedrock formation, they can be effectively treated as distinct flow systems.

3.4.3 Rate of Groundwater Movement

Due to the local heterogeneities within the sand and gravel aquifer and the change in local gradients, groundwater velocities will be highly variable. The CSA presented average linear groundwater velocities of 100 to 325 feet/year on the Olin property and 10 to 425 feet/year west of the property. These estimates are consistent with the results of the borehole flow monitoring that measured an average velocity of 1.7 feet/day (see Section 2 of the Supplemental Phase II Report). In addition to local variability associated with aquifer heterogeneity, there are likely to be variations in velocities associated with seasonal changes in the flow system.

3.5 DENSE INORGANIC LAYER

The dense layer is a water solution containing high concentrations of inorganic parameters that rests on the top of the low-permeability bedrock surface at the base of the sand and gravel aquifer. The dense layer is characterized by high specific conductance (up to 100,000 umhos), low pH (3.2), and a slight to strong green color due to the presence of chromium in solution. It is also denser than the overlying cleaner groundwater with a density up to 1.10 grams per cubic centimeters (g/cm^3). Of the inorganic parameters present within the dense layer, sulfate is detected at the highest concentrations. The nature and extent of the dense layer are described in

detail in Section 4 of the Supplemental Phase II Report which includes an extensive data set concerning water quality within the dense layer. The extent of the dense layer is shown on Plate P-5.

Under previous owners, liquid wastes with high dissolved solids and low pH were discharged to unlined pits and ponds including Lake Poly Liquid Waste Disposal Area (Lake Poly) and the East and West Pits. Because these impoundments were unlined and the underlying soil was reasonably permeable, much of the liquid waste infiltrated into the subsurface. Because of its high density compared with the native groundwater, it tended to sink through the groundwater until it reached a less permeable barrier, the top of the bedrock. This process created the dense layer present at the base of the aquifer in the vicinity of the Olin property.

Movement of the dense layer is primarily controlled by the shape of the bedrock rather than by hydraulic heads and gradients. Once the dense liquid reached the bedrock, it continued to flow down slope along the top of the bedrock under the influence of gravity. Therefore, the direction of movement of this dense layer can be determined by examining the bedrock contour map which shows the shape of the bedrock surface. Beneath the unlined pits and Lake Poly where the liquid was disposed, the bedrock generally slopes to the west and southwest. Therefore, the dense material moved along the top of the bedrock towards the west and southwest. This process continued until the dense layer reached the bottom of the Western Bedrock Valley that is located beneath the center of the Olin property and passes underneath Jewel Drive. It then continued to move down slope in the bottom of the Western Bedrock Valley toward the west. This process led to the current location of the dense layer beneath the center of the Olin facility and within the Western Bedrock Valley beneath Jewel Drive, the Altron facility, the Koch facility and extending beneath the Maple Meadow Brook wetland. A small amount of the dense material also moved from the center of the Olin property towards the east within the Eastern Bedrock Valley under the same mechanism.

The vertical extent of the dense layer and its interface with the overlying cleaner groundwater were studied as part of the Supplemental Phase II field activities; these studies are described in detail in the Supplemental Phase II Report. In particular, the use of multilevel piezometers, down-hole inductance logging, and specific conductivity profiling have provided vertical profiles through the thickness of the aquifer. The results of these investigations show that there is a relatively sharp interface between the elevated concentrations within the dense layer and the overlying cleaner groundwater. That such a sharp interface would be expected is shown in recent experimental and theoretical work on concentration gradients in the presence of highly concentrated solutions (e.g., Hassanizadeh & Leijnse, 1995; Carey, et al., 1995). As examples, Figures P-5 and P-6 show vertical profiles of specific conductance and sulfate at the three multilevel piezometers. The nature of the vertical profile with its sharp interface indicates that vertical dispersion (including diffusion) is very small. Therefore, movement of contaminants from the dense layer up into the overlying groundwater is expected to be a long, slow process.

4.0 THREE-DIMENSIONAL CONSTANT-DENSITY FLOW MODELING

As described in Section 2 above, the first phase of the groundwater modeling consisted of modeling the groundwater flow system using constant density at the scale of the drainage basin surrounding Maple Meadow Brook. In more detail, the goals of this phase were:

- To aid in understanding the overall groundwater flow system,
- To serve as a basis for developing groundwater flow paths from locations of concern toward the municipal supply wells for use in the later transport modeling, and,
- To provide boundary conditions for the more complex, local-scale modeling phases.

The Modular Three-Dimensional Finite-Difference Groundwater Flow Model (USGS, 1988), known more familiarly as MODFLOW, was the code selected for use in this modeling phase. MODFLOW is publicly available, has been extensively tested and applied, and has been widely accepted for use throughout the industry.

4.1 FINITE-DIFFERENCE GRID

The basic finite-difference grid used for modeling is shown in Plate P-6. Around much of the border, the limits of the grid were placed at divides between the Maple Meadow Brook drainage basin and surrounding drainage basins, at natural no-flow boundaries. In some areas, the size of the grid was shortened by placing the border along a groundwater flowline (an artificial no-flow boundary). This approach was typically applied in stream valleys at significant distance from the area of interest. The grid extends beyond the limits of the Maple Meadow Brook drainage basin in the vicinity of the site to allow the entire site, as well as the component of flow to the southwest, to be included in the model.

The horizontal spacing within the grid is 100 feet in both the x- and y- directions. This spacing may be too coarse to completely capture local behavior either on site (where there is a great deal of data), or near the supply wells (where velocities are expected to be high). However, the use of 100-foot spacing is appropriate for the objectives of the modeling: to simulate groundwater flow at the scale of the entire basin. The entire grid is 65 rows by 78 columns.

The finite-difference grid is aligned with Maple Meadow Brook and the underlying buried bedrock valley (i.e., northeast-southwest). Given the glacial depositional environment of the sand and gravel aquifer within the valley, this orientation is expected to be aligned with the major axes of the hydraulic conductivity tensor.

Vertically, the sand and gravel aquifer was divided into three layers. Three layers were selected to provide a minimum level of vertical resolution: monitoring data is typically available from both the shallow and deep portions of the aquifer, and the supply wells pump from intermediate depths. The layers were developed using the following criteria:

- The saturated thickness of the aquifer was calculated. Where there were less than five feet of sand and gravel, the cell was omitted from the active area of the model.

- The aquifer present between the top of the sand and gravel (typically about 85 feet above mean sea level in elevation) and elevation 60 feet was assigned to Layer 1. In many cells, the bedrock elevation was greater than 60 feet, so this was assigned as the base of Layer 1.

- The aquifer present between elevation 60 and elevation 30 feet was assigned to Layer 2. Again, where the bedrock elevation was between 30 and 60, it was used to define the base of Layer 2.

- The remaining aquifer between elevation 30 feet and the bedrock was assigned to Layer 3.

- As needed, slight adjustments were made to individual cells to prevent small layer thicknesses or isolated cells.

Figure P-7 shows a cross-section through Row 26 of the model grid to illustrate the typical configuration of the layers.

4.2 MODEL INPUTS

The primary model inputs are of two types: inputs based on the geology of the system (hydraulic conductivity, aquifer thickness, etc.), and boundary conditions (sources and sinks of water). Each of these are discussed below.

4.2.1 Boundary Conditions

There are traditionally three types of boundary conditions. specified head, specified flux (including no-flow), and mixed. Specified head boundaries are cells at which the head value is assigned and is unchanged. Specified flux boundaries are those that the rate of water in-flow or out-flow is assigned, for example, pumping or injection wells, groundwater recharge, or no-flow boundaries where a net flux of zero is specified. Mixed boundaries are those that the flux of water is dependent on the head conditions between the boundary and the model. Examples of these head-dependent boundary conditions include rivers, drains, evapotranspiration, and General-Head Boundaries (a MODFLOW term). The groundwater flow modeling surrounding the Olin site incorporates all of these boundary conditions except evapotranspiration. The locations of these boundary conditions are shown on Figure P-8.

As discussed in Section 4.1 above, the model grid is surrounded by no-flow cells located where the aquifer pinches out against the underlying bedrock, at drainage basin divides, or along flow-lines within the basin. The no-flow cells within each layer are shown in Figures P-9 through P-11. The base of the grid is also a no-flow boundary at the interface with the bedrock, which is much less permeable. A single constant-head cell is located in the southern portion of the model as shown on Figure P-8. This constant head cell is used to represent groundwater flow leaving the model in this area, flowing towards Halls Brook.

The five municipal supply wells and two industrial supply wells are treated as pumping wells with a specified pumping rate. For the municipal supply wells, detailed records for usage at individual wells is annually submitted to the MADEP in compliance with the permit issued to the Town of Wilmington. This pumping information for the last 5 years (1992 to 1996) is provided in Table P-2. In addition, daily pumping records for the time period immediately surrounding collection of the water levels used in model calibration were obtained from the Wilmington Water Department. This information is provided on Table P-3. For the Altron supply wells, the CSA reported that the wells each pump at a rate of 50,000 gallons per day (CRA, 1993). All of this information was used to develop pumping rates for input to the model. The excess water provided by homes that are on city water but use local septic leachfields was also modeled as a specified flux boundary condition, specifically as injection wells. Average septic discharges for a three-bedroom house were provided by the Pennsylvania Department of Environmental Protection: 262.5 gallons per day. This value was used in the model. The locations of the cells with pumping and injection wells in the model are shown on Figure P-8.

Groundwater recharge was estimated from rainfall information and adjusted during model calibration. Average annual rainfall for northeastern Massachusetts is approximately 41 inches (Baker, et al., 1964). In addition, rainfall is also monitored locally at the Butters Row Treatment Plant. Table P-4 shows the available data for the last five years (1992 through 1996). Because of the highly permeable nature of the surface soils and the gentle slopes, relatively little runoff would be expected. As a result, a large percentage of rainfall would be expected to infiltrate to the subsurface to recharge the groundwater and/or be evapotranspirated by plants during the growing season. The groundwater recharge values provided to the model include losses to

evapotranspiration which approximate 50 percent of annual rainfall (Baker, et al., 1964). In addition, much less of the rain that falls on the bedrock highs is able to infiltrate due to the much lower permeability of the surface soils and the significantly steeper slopes. The runoff from these areas infiltrates to the subsurface in the surrounding sand and gravel aquifer. Therefore, in the model, the recharge from the areas where bedrock is near or at the ground surface was distributed throughout the aquifer cells immediately surrounding the bedrock. The aerial distribution of recharge is shown on Figure P-12. Recharge was assigned to the uppermost active model layer, which is typically Layer 1, but may be Layer 2 in certain cells.

The remaining boundary conditions represent surface water bodies including the East, South, and West Ditches, two branches of Maple Meadow Brook, and the extensive wetland system surrounding Maple Meadow Brook. Field data has shown that the East Ditch and the South Ditch downstream of the weir receive groundwater discharge. The East Ditch is a perennial stream; portions of the South Ditch go dry during summer months. Both of these water bodies were treated as drains to allow their head conditions to fluctuate. In addition, the Ephemeral Drainage receives groundwater discharge only during particularly wet periods; it is dry for the remainder of the year. The Ephemeral Drainage was also treated as a drain. By contrast, the West Ditch (both the On-Property and Off-Property branches) and the South Ditch upstream of the weir generally do not go dry due to the presence of the weir. The weir allows a relatively fixed head throughout the upstream segments of the ditches, although the actual head varies seasonally. These segments of the ditches were treated as rivers with associated fixed head values. The locations of these features are shown on the map in Figure P-8. Specific input values are discussed in Section 4.2.2 below.

The extensive wetland surrounding Maple Meadow Brook was treated using MODFLOW's General-Head Boundary (GHB) package. The flow of water between the wetlands and the underlying aquifer was determined by the model based on the water level within the wetland, and the leakance (incorporating the vertical permeability and the thickness) of the peat sediments between the wetland and the aquifer. Because Maple Meadow Brook largely flows through this wetland, the brook itself was not modeled explicitly, but was included in the GHB conditions. However, the eastern branch of Maple Meadow Brook where it flows through the gravel pit in the southern part of the study area was treated as a river. The wetland sediments in this area were either removed during gravel pit operations or never existed. The western branch of Maple Meadow Brook (shown as Sawmill Brook on the USGS Topographic Map) is contained within wetland deposits, and it was treated using GHB conditions. The locations of these boundary conditions are shown on Figure P-8; specific input values are discussed in Section 4.2.2 below.

4.2.2 Geologic Inputs

Geologic inputs are those associated with the hydrogeology of the groundwater flow system, such as hydraulic conductivity, aquifer thickness, aquifer storage, streambed permeabilities, and so forth. Table P-5 provides a summary of these parameters and the range of values measured in the field. Detailed descriptions of the specific field tests are presented in the Supplemental Phase II Report, specifically Section 2.2 on hydrogeology.

The sand and gravel aquifer is bounded below by the bedrock, and above by the ground surface or by swamp deposits in the vicinity of Maple Meadow Brook. Much investigation has been focused on defining the shape of the bedrock surface due to its control on migration of the dense layer. A contour map showing the bedrock elevation used to define the lower bound of the model is shown in Figure P-13. The top of the sand and gravel aquifer beneath the wetlands was extrapolated from the peat thickness encountered during drilling in this area. The contours of the top of the sand and gravel aquifer used to define the upper surface of the modeled area are shown in Figure P-14.

As discussed in Section 3 above, the hydraulic conductivity is expected to be highly variable, and field measurements show that this is the case. The modeling was initiated with a constant hydraulic conductivity of 200 feet/day in all cells which was modified during calibration to improve the model's match to observed hydraulic heads. The changes in the hydraulic conductivity during calibration were controlled by the observed and mapped variability in geologic materials. Observed hydraulic heads in well clusters suggest little restriction to vertical flow. Vertical hydraulic conductivities were also evaluated in the pumping test analyses which included the effects of partially penetrating pumping and observation wells. During modeling, a vertical anisotropy of 1/2 to 1/10 was input. For transient simulations, values for aquifer storage are required for input. Storage values were estimated from pumping test analyses. A value of 0.15 was used for unconfined conditions; a value of 0.001 for confined conditions.

The vertical permeability of streambeds in the rivers, ditches, and wetlands were not measured in the field. The sediments lining the upstream portion of the ditches appear generally sandy, although there is locally a great deal of organic debris such as leaves. Further downstream, the stream channel is not as well defined and sediments are likely to be finer-grained and less permeable. The East Ditch is largely lined with engineered materials (railroad bedding and/or rip-rap). The swamp deposits surrounding Maple Meadow Brook appear to be largely uncompacted peat and organic silts, although the channel of the Brook is often sandy. Inductance logging results suggest these deposits may be interbedded with sands or other more competent materials. The nature of the wetland deposits suggest a low vertical permeability, but there may be significant local horizontal flow due to interbedded sands and lack of compaction. Values of vertical leakance for streambed deposits were determined during the calibration process.

The hydraulic heads in the surface water bodies were measured in the field, where possible. There are several gauging stations on the West Ditch and the South Ditch; during the calibration period, there were also two gauging stations on Maple Meadow Brook (more have been added since then). The values of hydraulic head measured in the field are shown on Table P-5.

Ranges for water levels elsewhere were estimated from the flown aerial survey, or from our observation of site conditions over several years of investigations.

The values of all input parameters were adjusted and finalized during model calibration to maximize the model's ability to simulate the hydraulic heads measured in the field.

4.3 CALIBRATION

To provide some confidence that the model was adequately simulating the true system, the model was calibrated to two distinct sets of hydrologic conditions. The calibration data sets included complete rounds of groundwater and surface water levels at two different times: October 1995 and April/May 1996. The October 1995 data set represents very dry conditions following a summer drought that occurred throughout the East Coast. In contrast, the data set for April/May 1996 represents seasonal high water levels at the end of a very wet winter. Both data sets consist only of water levels, but the change in the groundwater flow system between the two periods should be significant. The calibration data sets are shown on Table P-6. The measured water levels have been used to generate groundwater contour maps for both water table and deep wells, as shown in Plates P-1 through P-4.

The wet season (April/May 1996) was simulated using steady-state conditions and the Strongly Implicit Procedure (SIP) for the matrix solver. During the wet season, the flow system is at or near steady state. The inputs to the system are balanced by the outputs, and the groundwater flow patterns are unlikely to change significantly throughout the wet season. In contrast, the available water within the basin is gradually depleted through the growing season as water losses (pumping and evapotranspiration) exceed replenishment. The system doesn't reach steady-state until the wet weather returns and replenishes water storage, within both the aquifer and the surface water bodies. Therefore, the dry season (October 1995) was modeled using transient conditions and the Pre-Conditioned Conjugate Gradient (PCG) matrix solver. Because of the presence of the water table and cells that contain less and less water as the dry season progresses, solution of the dry season conditions was numerically difficult. The SIP solver has difficulty converging on a solution in these conditions (Trescott and Larson, 1977). The PCG solver was unable to be used for steady-state solutions as the resulting matrix was not diagonally dominant, thus necessitating the use of two solvers.

Calibration was performed manually via a trial-and-error process, rather than using an automated procedure. For each of the simulations during calibration, the modeled hydraulic heads were compared to the heads measured in the field, both by calculating differences, and by visually examining groundwater contours. Throughout the calibration process, various input parameters

were adjusted over a certain range to bring the measured and simulated heads closer, and to match our understanding of the groundwater flow system. In addition, the water balance generated by the model was frequently examined for coincidence with the conceptual understanding of the flow system.

4.3.1 Calibration Statistics

For each simulation, certain statistics were calculated to provide a quantitative measure of goodness-of-fit, including the average residual, the mean absolute residual, and the root mean squared error. These are described below.

The average residual (ME) is simply the average difference, in feet, between the measured and simulated heads (residual). It is calculated by:

$$ME = \frac{1}{n}\sum_{i=1}^{n}\left(h_p - h_m\right)_i$$

where: h_m - measured hydraulic head
h_p - hydraulic head predicted by model
n - number of wells at which measurements were obtained
i - individual well at which measurement was obtained

In the calculation of the average residual, positive and negative residuals can cancel each other out. To eliminate this effect, the mean absolute residual (MAE) is the average of the absolute values of the residuals:

$$MAE = \frac{1}{n}\sum_{i=1}^{n}\left|h_p - h_m\right|_i$$

The root mean squared error (residual) is a standard statistical calculation where the residuals are squared before being averaged. This adjustment tends to minimize small errors and accentuate large errors. The root mean squared error (RMS) is calculated by:

$$RMS = \sqrt{\frac{1}{n}\sum_{i=1}^{n}\left(h_p - h_m\right)_i^2}$$

Residual statistics for each layer were calculated separately.

The wet season conditions were calibrated in 54 simulations. The final hydraulic heads for the wet season were then used as initial heads for the dry season simulations. The transient simulation was set up using the following stress periods:

Stress Period 1 60 days (May through June 1995)
Stress Period 2 60 days (July through August 1995)
Stress Period 3 40 days (September through October 9, 1995)

Specific inputs for individual stress periods are presented in Section 4.3.2 below.

The dry season (October 1995) was calibrated in 31 simulations. A few additional simulations were then performed to ensure that the geologic conditions for both periods were identical, and that both periods were adequately calibrated. There were 4 additional simulations for the wet season and 7 for the dry period. The final calibration statistics for all parameters, for both the wet season and the dry season are presented below.

Statistics for Run68 and RunT38

	ME (feet)	MAE (feet)	RMS (feet)	Number of Wells (n)
April/May 1996 (Run68)				
Layer 1	0.24	0.92	1.57	122
Layer 2	-0.27	0.93	1.33	19
Layer 3	0.20	0.31	0.40	6
October 1995 (RunT38)				
Layer 1	0.03	1.06	1.60	119
Layer 2	-0.34	1.26	1.56	20
Layer 3	-0.32	1.05	1.21	6

These statistics show a good average fit between the measured heads and those predicted by the model.

Scatterplots in Figures P-15 through P-18 graphically show the fit between the measured and simulated heads for both hydrologic conditions. These graphs show that most wells cluster around the 1:1 line representing a good match between observed and calibrated values. There are a few outliers that do not match very well. In general, these outlying wells are not related spatially except in the vicinity of the Calcium-Sulfate Landfill. For example, if the Calcium-Sulfate Landfill wells were omitted from the data set, the mean absolute error for Layer 1 would improve by more than 0.2 feet:

April 1996	0.71 feet
October 1995	0.87 feet

This local anomaly is discussed in more detail in Section 4.3.4 below.

4.3.2 Geologic Input Parameters

The final, calibrated values for the geologic input parameters are presented on Table P-5. Three values of hydraulic conductivity were used for Layer 1: 150, 10, and 1 feet/day. The distribution of these values is shown on Figure P-19. The value of 150 feet/day was used for the ice-contact deposits; 10 feet/day was used for the outwash deposits. The location of the boundary between the two units was based on the mapping and geologic cross-sections presented in the CSA (CRA, 1993), and runs roughly north-south near Olin's western property line. The lower permeability of 1 foot/day was needed to simulate the groundwater mound that is present beneath the northern portion of the manufacturing area. This lower permeability is consistent with data from slug tests performed in well pair GW-53 located in this area. The decrease in permeability could be natural, or the result of heavy development in this area and associated compaction of the subsurface materials. Several possible causes of the observed mounding were investigated and simulated in the model, but only a decrease in permeability resulted in appropriate head predictions by the model.

The leakances for the stream beds of the surface water bodies were adjusted until heads in nearby wells were adequately matched. The model was very sensitive to leakance between the Maple Meadow Brook wetland and the underlying aquifer, in both the wet and dry seasons. A very narrow range of approximately 0.5 to 1 foot/day for the vertical hydraulic conductivity of these materials generated appropriate predicted heads. Slight variation beyond these limits resulted in significant changes in the predicted heads in the entire area surrounding the wetland. A final value of 0.75 feet/day was selected.

The model output was also very sensitive to the value of hydraulic head assigned to the General Head Boundary condition at the Maple Meadow Brook wetland. For the wet season, the head remained at the value measured in the field: approximately 80.5 feet. For the dry season, the wetland was known to contain no standing water. Therefore, it was not possible to obtain field measurements at staff gauges, although the water level must have been below the elevation of the ground surface: approximately 79.0 feet. The following values were used for the calibrated model:

Stress Period	GHB Head Value
1 - May-June 1995	78 ft
2 - July-August 1995	69 to 78 ft
3 - September-October 1995	69 to 78 ft

Because the water level in the wetlands changed over time, so did the saturated thickness of the swamp deposits, and therefore, the leakance between the aquifer and the wetlands. To account for this, the assigned head values were used to re-calculate a leakance for each stress period, and these were used as input to the model. In addition, the changing head values were compared to

the elevation of the top of each cell with a GHB condition. As the water level in the wetland dropped over time, certain cells were no longer in contact with the wetland and were not subject to the GHB condition. The GHB condition for these cells was removed in later stress periods. The specific cells to which this change applied are shown on Figure P-8.

For the rivers and drains, actual measured water levels were used for the head values where available. Transitional values between the wet and the dry season were used for the first two stress periods of the October 1995 simulations.

4.3.3 Aquifer Stresses

The final values for the aquifer stresses are provided below:

	April/May 1996	October 1995
Pumping rates (ft^3/day):		
Butters Row No. 1	0	86,136
Butters Row No. 2	106,750	75,193
Chestnut Street No. 1	18,540	57,083
Chestnut Street No. 2	43,070	73,083
Town Park	25,270	23,598
Altron B1	6,700	6,700
Altron B3	6,700	6,700
Injection at septic leachfields (ft^3/day):	35	35

The pumping rates at Altron's industrial supply wells remained unchanged throughout the calibration, as did the injection rates at the septic leachfields. The final pumping rates for the municipal supply wells are based on average reported pumping rates preceding collection of the calibration water levels for the given calibration data set. For the first two stress periods of the transient October 1995 simulation, the actual average monthly pumping rates were used.

The recharge rates were finalized during model calibration. A rate of 0.0046 feet/day (20 inches/year) for the steady-state April 1996 simulation is approximately 50 percent of the annual rainfall for this area, and represents the wet season. The transient October 1995 simulation used a range of recharge values based on actual rainfall for the summer of 1995:

Stress Period	Actual Rainfall	Model Input
1 - May-June 1995	4.91 inches	0.49 inches/60 days
2 - July-August 1995	3.40 inches	0.00
3 - September-October 1995	5.70 inches	0.55 inches/40 days

The variable distribution of recharge was not modified during calibration.

4.3.4 Discussion

The calculated statistics for the model calibration are presented in Section 4.3.1 above and show the successful matching between the hydraulic heads measured in the field, and those predicted by the model. However, model calibration is much more than a simple statistical match. The actual results of the calibrated model are discussed below.

Plates P-7 through P-10 show the model output hydraulic heads contoured on a base map along with the field measured data. Also shown on the maps are the residuals, the differences between the measured and predicted head at each well. The model output for all three layers and the two calibration periods (April 1996 and October 1995) are provided.

The calibrated model for April 1996 shows a very good fit between the measured and simulated hydraulic heads throughout most of the model area. Residuals in wells between the site and Maple Meadow Brook are on the order of only 0.0 to 0.1 foot at most wells in Layer 1. Residuals for wells in Layers 2 and 3 are somewhat greater. In the vicinity of the municipal supply wells, residuals are slightly greater, and are better in Layer 2 compared to Layers 1 and 3. The monitoring wells nearer the pumping wells are going to be strongly influenced by local pumping at the supply wells, and it is not unexpected for residuals to be slightly greater. On the Olin property, residuals are excellent at many wells (on the order of 0.0 to 0.3 feet), but may be up to about 1.0 foot in certain areas. At the scale of the site, there is a heavy density of well data and the hydrologic conditions can be complex due to the presence of the ditch system and the shallow bedrock. Because of these complexities, the model at its 100-foot grid spacing is unable to capture the local scale features with high accuracy. This is demonstrated in the vicinity of the Calcium-Sulfate Landfill, where groundwater flow takes place between two separate bedrock outcrops; model predictions in this area are particularly poor. However, for the purposes of understanding groundwater flow at the scale of the Maple Meadow Brook basin, it is not necessary to completely capture the local features, especially in peripheral areas such as the Calcium-Sulfate Landfill.

For the April 1996 model calibration, the predicted groundwater flow patterns match well with our conceptual understanding of the flow system. On the Olin property, groundwater flow is generally towards the ditch system. West of the property, groundwater flow is to the west. The model results illustrate the influence of Altron's industrial supply wells. The model output shows a clear cone of depression around these wells; this is not as clear from the field data simply because of the relatively few wells located in this area. In addition, vertical gradients are not strong. The water balance for this simulation (180 days) shows:

Sources of Water:	
Wells (septic leachfields)	94,500 cubic feet
Recharge	3.07×10^7 cubic feet
Rivers	8,340 cubic feet
General Head Boundary (wetlands)	2.33×10^7 cubic feet
Sinks of Water:	
Constant head cell	3.20×10^6 cubic feet
Wells (supply wells)	3.73×10^7 cubic feet
Drains (ditches)	5.45×10^6 cubic feet
Rivers	3.28×10^6 cubic feet
General Head Boundary (wetlands)	4.99×10^6 cubic feet

These results show that the flow system is dominated by water provided by rainfall (57 percent) and the wetlands (43 percent), and lost to the supply wells (69 percent). Note also that although the wetlands are a large source of water to the model, water is also discharged to the wetlands. The budget discrepancy for this simulation was excellent: -0.01 percent.

The calibrated model for October 1995 also shows a reasonably good fit with measured heads, although not as good as April 1996. On the east side of Maple Meadow Brook, modeled heads are about 0.5 to 1.0 foot below the measured heads in all layers. Within the parameter ranges used for the model calibration, it was not possible to consistently increase the heads in this area. The residuals in wells in the vicinity of the municipal supply wells are slightly better than for the April 1996 calibration. The residuals at wells on the Olin property are similar to those for the April 1996 calibration, including the poor calibration around the Calcium-Sulfate Landfill.

Again, the model-generated groundwater flow patterns match our conceptual understanding. On the Olin property, groundwater flow is generally towards the ditches, except around the West Ditch, where the weir has created a localized mound. Although not shown in the modeled groundwater contours, there is still a zone of capture surrounding the Altron wells. Further west, flow is westward toward the municipal supply wells. As with April 1996, vertical gradients are small. The water balance for the dry season (5½ months or 160 days) shows:

Sources of Water:	
Aquifer storage	2.33×10^7 cubic feet
Wells (septic leachfields)	84,000 cubic feet
Recharge	3.28×10^6 cubic feet
Rivers	2.07×10^6 cubic feet
General Head Boundary (wetlands)	3.59×10^7 cubic feet

Sinks of Water:

Aquifer storage	5.61×10^5 cubic feet
Constant head cell	1.69×10^6 cubic feet
Wells (supply wells)	4.97×10^7 cubic feet
Drains (ditches)	2.31×10^6 cubic feet
Rivers	4.33×10^5 cubic feet
General Head Boundary (wetlands)	1.00×10^7 cubic feet

For the dry season, the flow system is dominated by water from storage (36 percent) and the wetlands (55 percent), and water is predominantly lost to the supply wells (77 percent). As would be expected, rainfall is a minor source of water compared with the wet season. However, the wetlands are still a major feature during the dry season. It was also clear from the calibration process that it was not possible to calibrate the model without depending on the wetlands as a source of water. It is likely that the swamp deposits have a great potential to store large amounts of water. During the dry season, much of this storage appears to be available to recharge the aquifer and provide water to the supply wells. The budget discrepancy for this simulation was -0.09 percent.

The contrast between the wet and the dry season within the basin is striking, particularly west of the Olin property, surrounding Maple Meadow Brook. In the wet season, groundwater discharges on the east side of the wetlands. In the dry season, the wetlands provide a source of recharge to groundwater, induced by pumping at the municipal supply wells. In the wet season, the supply wells have a drawdown of approximately 5 feet; in the dry season this is significantly increased to over 10 feet. During both seasons, the wells are the dominant mechanism of water loss from the basin. However, the major source of water to the basin appears to be both recharge and storage in the swamp deposits during the wet season; in the dry season, recharge is less important, and water is also released from storage in the aquifer. On the Olin property, the differences between the wet and dry season are much less significant. This is most likely due to the local scale of the flow systems, as shown by the lack of influence from the municipal supply wells, and the local discharge points (the ditches).

To provide an additional check on the ability of the model to simulate the flow system, a simulation was performed without any of the supply wells in operation. It is not possible to actually calibrate to such a condition due to lack of field data. However, the results of such a simulation can be used to ensure that the model does not violate some basic bounds on the flow system. For example, groundwater levels cannot rise above the ground surface, and the water balances must also be realistic. The following inputs were used in this simulation (RUNBCSH) as representing average conditions:

Head in the wetlands	79 feet
Recharge	15 inches/year
Head in the drains	same as April/May 1996
Head in rivers	same as April/May 1996
Head in the West Ditch	79 feet (assuming the absence of the weir)

The results of this simulation for Layer 1 are shown on Figure P-20; Layers 2 and 3 are similar. This model output shows realistic results; groundwater flow patterns are very similar to the calibrated model except in the vicinity of the wetlands, where the influence of the supply wells is clearly missing. Water levels are below the ground surface. In fact, east of the wetlands, water levels are within the seasonal range typically measured during current conditions. The water balance for this simulation (180 days) is as follows:

Sources of Water:	
Recharge	2.27×10^7 cubic feet
Rivers	1.15×10^6 cubic feet
Sinks of Water:	
Constant head cell	2.33×10^6 cubic feet
Drains (ditches)	3.87×10^6 cubic feet
Rivers	2.43×10^6 cubic feet
General Head Boundary (wetlands)	1.52×10^7 cubic feet

The main source of water to the system is rainfall (95 percent); the main loss is to the wetlands (64 percent). This distribution of water is what would typically be expected in an unconfined groundwater flow system in the temperate northeast of the United States. Note that in this situation, the wetlands serve entirely as a groundwater discharge area; no water flows from the wetlands back into the aquifer.

4.4 CALIBRATION UNCERTAINTY

To evaluate the uncertainty of the model calibration in a structured way, sensitivity analyses were performed. A total of 30 additional simulations were performed, 13 for April/May 1996 (Srunss1-Srunss13), and 17 for October 1995 (Sruntr1-Sruntr17). Table P-7 details the adjustments made to the input parameters for each of these simulations. Figures P-21 and P-22 graphically show the changes in the calculated mean absolute residuals for each layer in each of the sensitivity analyses.

For the April/May 1996 calibration simulation, the following sensitivities were observed:

- There is only one parameter that the model output is not particularly sensitive to: the vertical hydraulic conductivity between model layers.

- The model is somewhat sensitive to recharge, and increasing leakance of the streambed sediments.

- The model is sensitive to the following parameters: hydraulic conductivities of model layers, vertical hydraulic conductivity of the wetlands, and pumping rates at the supply wells. Note that although a greater aquifer hydraulic conductivity improved the mean absolute residual for Layer 1 and 2, it was worse for Layer 3. In addition, the model is locally very sensitive to decreasing the leakance of streambed sediments.

The sensitivity of the model to hydraulic head in the wetlands was not tested for the wet season, as the value of this parameter was known using field-measured values of head.

For the October 1995 simulation, the results of the sensitivity analyses are slightly, but not greatly, different:

- The model is largely insensitive to the following parameters: vertical hydraulic conductivities, decreased recharge, aquifer storage (specific yield and storativity), and increased pumping.

- The model is somewhat sensitive to the leakance of streambed sediments, and decreasing hydraulic conductivities.

- The model is sensitive to increasing hydraulic conductivity, increased recharge, the vertical permeability of the wetlands, and the pumping rates at the supply wells. In addition, the model is strongly sensitive to the head in the wetlands.

The changes in residual statistics for each of the sensitivity analyses are shown on Figures P-21 and P-22. Because the majority of wells are located on or in the immediate vicinity of the Olin property, the statistics are dominated by these wells. However, much of the model sensitivity occurs in the vicinity of Maple Meadow Brook. To demonstrate this sensitivity, Figures P-21 and P-22 show changes in residual statistics for the wells surrounding the Maple Meadow Brook wetlands (30 wells for April/May 1996, 32 for October 1995). These show that the greatest sensitivity is related to the amount of water entering the model from the wetland.

The calibrated model is at least somewhat sensitive to many parameters; relatively small adjustments to many of the parameters would result in a poorer model calibration, and a less accurate match to observed field measurements.

Although it may not be directly clear from the sensitivity analyses, the process of model calibration demonstrated that the calibrated solution is relatively tightly constrained. For many parameters, the calibrated values are near the limit of the realistic range of available values. This situation was created because of the extremely dry conditions for the October 1995 calibration. To arrive at an acceptable calibration, it was necessary to provide the maximum amount of water to the system. The input values for aquifer storage, and leakance and heads in the wetlands are high; recharge is not high, but much of the rainfall would be intercepted by evapotranspiration during this particularly dry year. Although the aquifer permeability could be higher, the resulting match is not as good. Therefore, the selected combination of input parameters used for the calibration is relatively tightly controlled.

On May 13, 1997, Smith received additional information about the pumping rates at the Altron industrial supply wells (Wikstrom, 1997). Altron's records indicate the following usage of their wells:

Altron B1	590,000 gallons/6 days
Altron B3	475,000 gallons/6 days

These rates are a significant increase compared to the rates used in the modeling. Because it was not possible to re-calibrate the model within the project schedule, this change was evaluated through sensitivity analyses. The information about this simulation is included on Table P-7 and Figures P-21 and P-22. The results show increased drawdown in the vicinity of the Altron supply wells and therefore, poorer matches to measured hydraulic heads in the nearby wells. However, the increased drawdown is largely confined to the general vicinity of the Altron wells, and doesn't extend beyond about 1,000 feet. For example, the increased drawdown at GW-45, located less than 100 feet from Altron B3, is 0.5 feet for April/May 1996 and 0.6 feet for October 1995. The updated Altron pumping rates indicate that the capture zone of these wells is greater than predicted by the groundwater flow modeling. However, this change does not seem to extend beneath the wetlands, or influence predicted water levels at significant distances from the Altron wells.

The most significant uncertainty in the model results is associated with the importance of the Maple Meadow Brook wetlands as a source of water to the aquifer. The model calibration has resulted in input values that minimize this source of water as much as possible within a realistic range. Other sources of water, such as from aquifer storage and recharge, have been maximized as much as possible while retaining a realistic match between observed and modeled hydraulic heads. Therefore, it is possible that the wetlands are a more important source of water than shown in this model. However, for the purposes of the contaminant transport modeling, such an approach is conservative. Additional water from the wetlands would dilute any contaminant concentrations, while decreasing the influence of the wetlands should bias transport modeling towards solutions with greater concentrations. Similarly, the use of pumping rates at the Altron wells that may be too low is also conservative relative to the contaminant transport modeling. With lower pumping rates, the Altron wells have less potential to capture contaminated water that would then be within the capture zone of the municipal supply wells.

4.5 PARTICLE TRACKING

As discussed in Section 2 above, chemical transport modeling was used to evaluate potential contaminant transport to the municipal supply wells, including geochemical effects. To provide groundwater flow paths to the chemical transport modeling, the groundwater flow model was used to generate particle pathlines. The USGS code MODPATH (Pollock, 1989; Pollock, 1994), programmed to use MODFLOW output, was used to generate the pathlines. The only additional input required for the particle tracking was porosity, used by the model to calculate velocities. A porosity of 0.20 was used for all layers of the model.

The potential receptors that were evaluated using the chemical transport modeling were the Butters Row No. 1 and Chestnut Street No. 1 municipal supply wells. For each well, a number of particles were initiated at the well and then backtracked upgradient to define the area of contribution to the well, both horizontally and vertically. The initial particle locations at the finite-difference cells containing the supply wells are shown on Figure P-23. The volume of water contributed to the well from each flowline was then determined, and a percentage of contribution was calculated.

Each of the backtracked flowlines was examined to determine at what point it would be expected to have the most degraded water quality based on its position relative to contaminated groundwater. For many flowlines, water quality was not expected to be impacted by site contaminants. However, water quality along some of the flowlines was expected to be degraded based on passage of the flowline through areas of contaminated groundwater. Typically the most degraded water quality was expected at the deepest point along such flowlines. The water quality at this point was then estimated, either by assigning it the water quality of a nearby well, or calculating a distance-weighted average of more than one nearby well.

Four scenarios were simulated using the backwards particle tracking:

Scenario 1: All five municipal supply wells pumping at a five year average; wet season
Scenario 2: Only Butters Row No. 1 pumping (at capacity of 1 Mgd); wet season
Scenario 3: All five municipal supply wells pumping at a five year average; dry season
Scenario 4: Only Butters Row No. 1 pumping (at capacity of 1 Mgd); dry season

Pathlines were generated using the hydrologic conditions for both the wet season (April 1996) and the dry season (October 1995). However, for Scenarios 1 and 3, the future use of the supply wells was assumed to be an average of the use over the last five years, or:

Butters Row No. 1	190.2 gpm
Butters Row No. 2	286.7 gpm
Chestnut Street No. 1	173.3 gpm
Chestnut Street No. 2	263.1 gpm
Town Park	30.2 gpm

The scenarios with only Butters Row No. 1 in operation can be considered a potential worst-case situation in which there is no mixing of waters from other wells within the Treatment Plant.

4.5.1 Results

The particle tracking output files are provided in Attachment C. The results of the simulations for each scenario are summarized on Table P-8, which includes the beginning and ending point for each flowline, the percentage contribution to the supply well associated with each flowline, and the estimated characterization of the most degraded water quality along each flowline. A total of 34 flowlines were simulated from Butters Row No. 1 and Chestnut Street No. 1 each (see Figure P-23). These results show that most of the flowlines contributing to each well originate at shallow depths at the wetlands, or outside the area of contaminated groundwater. For example, for Scenario 1, 74% of the water contributing to Butters Row No. 1 is expected to be clean, and only 26% is expected to flow from areas impacted by contaminants.

For each of the four scenarios, the generated particle flowlines are shown on Plates P-11 through P-14. To show the vertical distinction between different flowlines, different colors have been used to distinguish shallow, intermediate, and deep flowlines. Note that flowlines that are expected to cross through contaminated groundwater are not terminated on the figure, but continue beyond the point where the most degraded water quality is expected. All flowlines extend to their endpoints which are the points at which the water enters the groundwater flow system. Many of the flowlines are at shallow depths and terminate at the nearby wetlands or outside the areas impacted by contaminants. Certain flowlines do travel more deeply in the intermediate and deep portions of the aquifer beneath Maple Meadow Brook where they have the potential to transport contaminants.

The results of the particle tracking simulation for both the wet and dry seasons show that there is a groundwater divide in the vicinity of Main Street. To the west of the divide, groundwater flow is towards the wetlands and/or the municipal supply wells; east of the divide, groundwater is captured by the supply wells at Altron.

The particle flowlines with the entire wellfield in operation show that a number of the flowlines that reach the Butters Row No. 1 well pass through the contaminated groundwater beneath Maple Meadow Brook. The capture zones for the other wells are then deflected to the north and south of the capture zone for Butters Row No. 1. Therefore, the location of Butters Row No. 1 relative to the intermediate-TDS groundwater is such that it actually captures relatively more of the water located beneath the center of Maple Meadow Brook. The capture zones for Butters Row No. 2 and both Chestnut Street wells extend further to the west as well as beneath the more northern and southern portions of the wetlands. Based on this result, it is expected that Butters Row No. 1 would be more likely to be impacted by site contaminants than the other supply wells. In fact, existing water quality data does show higher concentrations of indicator parameters at Butters Row No. 1 compared with the other supply wells.

In contrast, the potential worst-case situation with only Butters Row No. 1 in operation indicates that the capture zone would extend radially away from the well in all directions. Fewer of the particle flowlines pass through the intermediate-TDS waters beneath the wetlands. This suggests that the water quality at Butters Row No. 1 would actually be improved under such a scenario.

4.5.2 Uncertainty

The groundwater flow modeling formed the basis for the particle tracking simulations. Therefore, the particle tracking results are subject to the same uncertainties associated with the flow modeling (described in Section 4.4).

The particle tracking simulations were performed for two relatively extreme hydrologic conditions: a relatively wet period, and a drought period. The conditions during the dry season simulation do not represent a typical flow regime in this area. The dry season simulations may be typical of particularly dry periods that may occur several years apart and for relatively short periods of time. On the other hand, the wet season simulations are probably representative of actual conditions for several months of every year. Therefore, the dry season predictions can be considered unusual and extreme. Actual conditions over several years will fall between the wet and the dry seasons, but probably closer to the wet season.

As mentioned above, the only additional input parameter used for particle tracking simulations was porosity of the aquifer. The input porosity has no influence on the direction of particle movement, but does influence calculated velocities. The rate of groundwater movement is inversely proportional to porosity:

$$\bar{v} = \frac{K}{n}\frac{dh}{dl}$$

where $\bar{v}$ is the average groundwater velocity
K is the hydraulic conductivity
dh/dl is the hydraulic gradient
n is the aquifer porosity

The value of porosity used in the modeling was 0.20. Given the heterogeneity of the formation, actual effective porosities may range from 0.10 to 0.40. Therefore, local velocities could be one-half to two times those calculated by the model. However, the scale of heterogeneities within the formation are small compared to the aerial extent and thickness of the aquifer. Velocities over long periods of time are likely to fall in the middle of the range.

For the particle tracking simulations, it was necessary to estimate future pumping rates at the municipal supply wells. Some uncertainty is associated with this estimate, because actual future usage may differ from current pumping rates. However, it is not possible to estimate future usage of the wellfield with any accuracy at this time. The Town of Wilmington has plans to upgrade the treatment capacity of the Butters Row Treatment Plant so that it can accept water from a currently inactive well located elsewhere in the Town (SEA, 1996). The SEA report (SEA, 1996) has also recommended that the Town of Wilmington develop an additional water supply with a capacity of 0.8 gallons per minute to meet projected increases in demand. These changes could lead to increased usage of the Maple Meadow Brook Wellfield because of the additional treatment capacity, or could lead to decreased demand because of increased water availability elsewhere in the Town. Actual demand within the Maple Meadow Brook wellfield will be dependent on these factors plus both seasonal effects and long-term climatic factors. None of these can be easily estimated. Therefore, the pumping rates used in the particle tracking are based on simply continuing the existing usage of the wellfield with no adjustments. Actual future usage is likely to be different, but cannot be estimated at this time.

The recently updated information about the pumping rates at the Altron wells (described in Section 4.4 above) also influences the uncertainty associated with the particle tracking results. The increase in pumping rates at the Altron wells suggests the presence of a greater capture zone than predicted by the groundwater flow modeling. The increased pumping rates at the Altron facility indicate that a greater percentage of potentially contaminated groundwater would be pumped by these wells rather than by the municipal supply wells. Therefore, in terms of evaluating exposure at the municipal supply wells, the original simulations were conservative compared to simulations using the increased rates.

5.0 TWO-DIMENSIONAL SHARP-INTERFACE MODELING

As described in Section 2 above, sharp-interface modeling was used to simulate movement of the dense layer at the scale of the disposal site. The SHARP code, developed by the USGS, was used for this modeling (Essaid, 1990). The SHARP model was developed to simulate movement of saltwater in coastal aquifers. The dynamics of the movement of the dense layer are expected to be exactly analogous to movement of saltwater, excepting any geochemical effects. The dominant constituents in sea water are chloride, sodium, sulfate, and magnesium. Sulfate, chloride, sodium, and calcium are the major constituents in the dense layer, although concentrations within the dense layer are significantly greater than in seawater. The SHARP model simulates bulk movement of the dense layer, rather than movement of individual parameters.

The SHARP model is based on the simplifying assumption that the interface between the freshwater and saltwater can be approximated as a sharp interface, so that mixing between the two waters, via dispersion and/or diffusion, is neglected. This assumption greatly simplifies the mathematical basis underlying the model, although it is still significantly more complex than constant-density groundwater flow modeling. Attachment D includes excerpted pages from the USGS report describing the approach used in the model (Essaid, 1990). The data from the Olin site shows that the interface between the dense layer and the overlying groundwater is, in fact, very abrupt, on the order of a few feet or less compared to an aquifer thickness up to 90 feet. The nature of the interface is shown on the vertical profiles in Figures P-5 and P-6, and is described in detail in Section 2 of the Supplemental Phase II Report. As mentioned in Section 3 above, recent experimental and theoretical work has also shown that interfaces between such waters are expected to be sharp.

The sharp-interface approach to modeling the movement of the dense layer does not provide insight into movement of individual parameters, or the potential for migration of such parameters from the dense layer up into the overlying groundwater. Instead, the objectives of the modeling are to aid in understanding movement of the dense layer as a whole, to evaluate its potential for future movement, and to determine when and where it will come to rest.

5.1 FINITE-DIFFERENCE GRID

The location of the finite-difference grid used for the sharp-interface modeling is shown on Plate P-15. The grid extends from the original source areas on site (Lake Poly and other unlined pits), down through the Western Bedrock Valley to the west, beneath Maple Meadow Brook, and includes all of the municipal supply wells except Town Park. The dense layer was not expected to move into the area beneath Town Park; if needed, the model grid could have been expanded to include the additional area. This grid is oriented differently from the MODFLOW grid; it is oriented most efficiently with respect to the bedrock valleys. The grid does not extend

significantly to the east of the original source areas. Groundwater in the Eastern Bedrock Valley is known to have been impacted by site-related contaminants. However, as shown on Plate P-5, the great majority of the dense layer is currently located within the Western Bedrock Valley. Therefore, this modeling phase has focused west of the original source areas.

A constant grid-spacing of 50 feet was used for the sharp-interface modeling. This provides better local resolution than in the three-dimensional groundwater flow modeling, but does not extrapolate too far beyond the resolution of the field data. In particular, bedrock elevations were obtained at 50-foot spacing along the seismic reflection lines. In addition, testing of the model suggested that the 50-foot spacing would provide reasonable model run-times. The model consists of 100 rows and 50 columns, for a total of 5,000 cells per layer.

Because SHARP is a quasi-three-dimensional model, each individual aquifer consists of one layer. Therefore, a single layer of variable thickness was used to simulate the sand and gravel aquifer. A cross-section along Row 30 is provided on Figure P-24.

5.2 MODEL INPUTS

The sharp-interface modeling requires many of the same inputs as the constant-density flow modeling, but also requires additional information about the two fluids in the systems, such as the specific gravity and viscosity. The inputs to the model are discussed below.

5.2.1 Boundary and Initial Conditions

The SHARP code requires that outer rows and columns of the model grid be assigned as no-flow cells. In addition, as in the constant-density flow modeling, where the saturated thickness of the sand and gravel is relatively small (less than 5 feet), these cells were also eliminated from the model by being assigned as no-flow cells. No-flow cells were also assigned in certain areas to define limits of the natural flow system. Such an area occurs near the southwest corner of the Olin property, where groundwater flow is to the southwest within a separate drainage basin. The locations of all the no-flow cells are shown on Figure P-25. The outer edge of the active cells of the model were assigned as constant freshwater head cells. The boundary condition was necessary to establish the groundwater flow system, since the grid does not typically extend to the natural boundaries of the aquifer. The values of the constant heads were taken from the constant-density flow modeling results for the simulation with no active supply wells (RUNBCSH) as described above in Section 4.3.4, and shown on Figure P-20. The locations of the constant head cells are also shown in Figure P-25.

To decrease the complexity (non-linearity) of the model solution, the aquifer was assumed to be confined. The implications of this are discussed with the geologic inputs in Section 5.2.3 below. However, water must be allowed to pass through the upper surface of the model to appropriately represent groundwater recharge and interactions with surface water bodies. These were simulated in the model using an overlying leaky confined unit with a head-dependent boundary

condition. In fact, in SHARP, it is not possible to simulate interactions with surface water bodies except by this method. There are three different situations that need to be simulated in this way for this project: (1) groundwater recharge from rainfall throughout most of the modeled area, (2) groundwater interactions, both recharge and discharge, with the ditch system, and (3) both recharge and discharge relationships between the aquifer and the wetland surrounding Maple Meadow Brook. The last of these was the most straightforward, as the head-dependent boundary condition was used in the constant-density flow modeling. The leakances from the constant-density flow modeling were used for the sharp-interface model (as adjusted for coordinates and grid cell area). Similarly, the geometry of the ditches was used in conjunction with the leakances from the constant-density flow modeling to develop leakances for the sharp-interface modeling. The head dependent boundary condition for recharge was developed by adjusting the head and the leakance until realistic rates were achieved. For each of these inputs, parameter values were adjusted until simulated values of freshwater heads matched the heads predicted by the calibrated constant-density groundwater flow modeling. The final values are presented below.

Situation	**Head (feet)**	**Conductance**
Recharge from rainfall	95	3.3×10^{-9} ft^2/sec
Ditches	79	7.5 to 20×10^{-4} ft^2/sec
Maple Meadow Brook wetland	79	3 to 105×10^{-4} ft^2/sec

The leakage associated with groundwater recharge averages about 18.5 inches per year across the modeled area. The locations of these head-dependent boundary conditions are shown on Figure P-26.

Initial conditions for the model were needed for freshwater heads and saltwater interface elevations. Initial freshwater heads were extrapolated from the output of the constant-density flow modeling. Because the sharp-interface modeling must simulate an extended period of time, starting from before development of the municipal wellfield, none of the calibrated simulations were appropriate to provide initial conditions. Instead, output from the simulation that used average boundary conditions and none of the pumping wells (RUNBCSH) was used. This simulation is discussed in Section 4.3.4 above. Output values of hydraulic heads from RUNBCSH were used as initial conditions to the sharp-interface modeling. A contour map of these heads is shown on Figure P-27.

The discharge of liquid wastes from the facility was modeled using injection wells. To simulate injection of saltwater, an initial volume of saltwater must be provided to the model. Therefore, a small pool of saltwater was placed in the vicinity of the original source areas. The initial thickness of saltwater in these cells is shown on Figure P-28. Because of the density of the material and the relatively shallow depth to rock in this area (10 to 20 feet), there is expected to be relatively little lag between discharge of wastes and pooling at the base of the aquifer.

5.2.2 Aquifer Stresses

The major stresses in the system are the municipal and industrial supply wells, and the discharge of the liquid wastes that formed the dense layer. The locations of these features are shown on Figure P-25.

Both discharge of liquid wastes, and usage of the supply wells has been highly variable over the past 40 years. Manufacturing operations on the Olin property by previous owners started in 1953 (CRA, 1993). Early records on the location and rates of disposal are not available. However, it appears that liquid wastes were discharged to both Lake Poly and the East and West Pits (C. Swinburn, 1997). It is also known that chromium, detected at concentrations up to 3,700 milligrams per liter (mg/l) in the dense layer, stopped being used in the manufacturing processes in 1967 (CRA, 1993). The earliest quantitative information is available from an engineering study commissioned by the plant in 1970 (Marine Research Laboratory, 1970). Examination of the data from this report suggests that the character of the liquid wastes in 1970 is not consistent with most of the dense layer. Not only is chromium absent, but sulfate concentrations are relatively low (11,000 mg/l compared to 80,000 mg/l). Therefore, it is likely that the source of most of the dense layer pre-dates 1970.

Inductance logging has been performed in wells that penetrate the dense layer (see Section 2 of the Supplemental Phase II Report for a detailed discussion). The elevations of the top of the dense layer determined from that study were used to estimate a volume of the dense layer present within the Western Bedrock Valley:

Volume of Aquifer Occupied by Dense Layer	2.75246×10^7 cubic feet
Estimated Porosity	15%
Volume of Dense Layer	4.1287×10^6 cubic feet

The volumes were estimated using the Volume utility in Golden Software's program Surfer (Golden Software, 1994).

Because of the lack of any actual information on liquid disposal rates, the calculated volume was used to estimate an injection rate. The actual injection was assumed to be evenly distributed over a 15 year period (1953 to 1968). Therefore, an injection rate of 270,769 cubic feet per year (or 3.85 gpm) was used for the modeling. Recent depositions of previous employees at the plant suggests that liquid wastes were disposed in both Lake Poly and the East and West Pits (C. Swinburn, 1997). Therefore, injection was assumed to take place beneath both these areas. Because the objective of this phase of the modeling was to simulate movement of the dense layer, the disposal into unlined pits and the subsequent downward percolation were not modeled. Instead, the waste was injected at the base of the aquifer to simulate the increase in volume of the dense layer.

The other dominant stresses to the flow system are the municipal and industrial supply wells. Altron's two industrial supply wells were installed in approximately 1972. Altron reported a typical pumping rate of 50,000 gallons per day at each of the two wells (CRA, 1993). This pumping rate was assumed to be constant from 1972 through the end of the simulation period.

Usage of the municipal wellfield has been variable since its initial development. Individual wells have been shutdown for various periods in their history. The years of operation for all five wells are summarized below (Town of Wilmington, 1981; IEP, 1990).

Well	Years of Operation	Well Capacity
Butters Row No. 1	1966-1972; 1981-present	1 MGD
Butters Row No. 2	1981-present	1 MGD
Chestnut Street No. 1	1962-1979; 1981-present	1 MGD (1)
Chestnut Street No. 1A/2	1992-present	1 MGD (1)
Town Park	1965-present	0.5 MGD

(1) The combined capacity at the two Chestnut Street wells is 1 million gallons per day (MGD).

As expected, limited information about pumping rates at individual wells is available for earlier time periods. For 1984 through 1989, pumping rates for the wellfield as a whole are available. From 1989 to the present, pumping rates at individual wells are available. This information has been provided by the Town of Wilmington Water Department, or from annual submittals by the Town of Wilmington to the MADEP.

Based on the changes in aquifer stresses, the simulation period for the sharp-interface modeling was divided into stress periods; these are detailed on Table P-9. Where specific information is available, this was used to estimate average pumping rates. Where no information is available, pumping rates were assumed. For example, prior to 1981, it was assumed that all operational wells were pumped at about 1/3 of their capacity. Usage between 1981 and 1984 was assumed to be similar to the usage documented after 1984. For 1984 through 1996, the documented average pumping rate over this period was input. Future use was assumed to be the same as the actual average use over the last five years (1992 through 1996).

5.2.3 Geologic Inputs

For parameters that are consistent between the constant-density flow modeling and the sharp-interface modeling, similar values of inputs were used for both models. This includes parameters such as hydraulic conductivity, bedrock elevation, storage, and so forth. These are summarized on Table P-10.

The elevations of the bedrock surface and the top of the sand and gravel aquifer were extrapolated from the site data set. Figure P-29 provides a contour map showing the bedrock elevations used by the model. The aquifer thickness was assigned as 4 feet less than the thickness of the sand and gravel (i.e., assuming an average depth to the water table of 4 feet).

To decrease the numerical sensitivity of the model convergence, the aquifer was assumed to be confined. In effect, the confined assumption allows the model to use a constant value of transmissivity throughout the simulation period, instead of re-calculating aquifer transmissivities at every time step based on new hydraulic heads. Because the changes in hydraulic head are very small compared to the aquifer thickness, this approximation should have little effect on the model accuracy.

Three values of hydraulic conductivity were used: 1, 10, and 150 feet/day. The distribution of these parameters is shown on Figure P-30. For the constant-density groundwater flow modeling, certain small areas had lower permeability materials in Layer 1 overlying higher permeability in Layer 2. Since the sharp-interface modeling uses only a single layer, only one hydraulic conductivity could be used in these areas. Within the area covered by the sharp-interface grid, this situation occurs only in an area at the center of the Olin property where bedrock is relatively deep. Where Layer 2 was greater than 5 feet thick, the higher hydraulic conductivity of Layer 2 compared to Layer 1 was selected as input to the sharp-interface modeling. The location of this area is shown on Figure P-30.

Values of parameters that characterize the two fluids were based on measurements obtained from wells at the site. All of the measured values of density and viscosity are provided in Table P-11. The data set for April 1997 shows the most internal consistency as well as consistency with water quality information. The relationship between density and viscosity is shown graphically in Figure P-31. The two parameters are highly correlated with a nearly linear relationship. A middle to high value of specific gravity (1.08) was selected for the modeling, with a corresponding viscosity of 1.62 cPoise. The values used as inputs are provided on Table P-10.

5.2.4 Modifications to the Code

The SHARP code used for this project was purchased from the International Groundwater Modeling Center (Golden, Colorado). To apply the code to this problem, the following modifications were made:

- The dimensioning for the finite-difference grid was adjusted to match this problem. The number of columns (NC) was increased to 50, the number of rows (NR) to 100, and the number of layers (NL) was decreased to 1. The adjustment was made to all the relevant PARAMETER statements in all subroutines.

- The dimensioning for the array containing information about the constant freshwater head cells (FFLOW) was increased to 200. This adjustment was made to all the COMMON blocks in all the relevant subroutines.

- A bug in the SIP subroutine was fixed (line SI1874). The unit number assigned to the monitor was corrected to allow iteration information to be printed to the screen during simulations.

- The modified code was compiled on a Fortran90 compiler using the fixed-format option.

None of these changes are substantive and do not result in any change in the solution achieved by the model.

5.2.5 Numerical Parameters

The matrix solver used by the SHARP code is the Strongly Implicit Procedure (SIP). The following numerical parameters were used to aid in convergence of the solver:

Maximum number of iterations (ITMAX)	100
Number of iteration parameters (NITP)	6
Number of iterations after which interface position is fixed (NUP)	30
Closure criteria (ERR)	0.001
Steady-state criteria (STST)	0.001
Relaxation factor for SIP (RFAC)	0.5
Weighting factor for interface projection (WFAC)	0.5
Seed used in calculating iteration parameters (WITER)	100

5.3 CALIBRATION

The data against which the sharp-interface modeling can be calibrated consists of the information about the location and thickness of the dense layer. Prior to the 1990s, the dense layer is known to have been present at a number of deep wells on site, although its thickness was never determined. In 1964, green water was pumped from a well located on the Olin property, then operated as National Polychemicals under previous ownership. In addition, the dense layer was encountered beneath the Altron property when their supply wells were drilled in about 1972. Therefore, the model must simulate the presence of the dense layer in this area by 1972.

The critical calibration data is the current distribution of the dense layer, both its presence and its thickness. The available data are provided in Table P-12. There are 21 locations where the thickness of the dense layer has been determined. These cover an area from the center of the site, through a wide area to the west, and beneath Maple Meadow Brook. Beyond these areas, there are a very large number of wells where the dense layer is known not to be present, including most of the wells beneath Maple Meadow Brook.

The calibration process demonstrated that the geometry of the bedrock surface was the most significant factor controlling movement of the dense layer, and therefore, the model calibration. Plate P-16 shows a model output for 1996 based on the bedrock contours interpreted in Section 2 of the Supplemental Phase II Report. This output is clearly a very poor match between the known distribution of the dense layer and the distribution predicted by the model. The differences are presented on Table P-13. This model output shows that there is little dense layer remaining beneath the Olin property; in actuality, there are many deep wells in this area that contain dense layer. The thicknesses predicted by the model to the west of the site are significantly less than measured in the field in this area. Finally, the model shows extensive pooling of dense layer beneath Maple Meadow Brook, extending to the supply wells; again, a situation that is not observed in the field. Clearly, this model simulation does not adequately match the conditions observed in the field.

To try to adequately capture a more accurate distribution of the dense layer, the model parameters were adjusted in subsequent simulations. These parameters included specific gravity and viscosity of the dense layer, permeability and porosity of the formation, and disposal history at the source areas. However, adjustment to none of these parameters resulted in an appropriate distribution of the dense layer. Finally, the elevation of the base of Layer 1 was adjusted, effectively creating a more prominent barrier to flow at the bedrock ridge located just west of Main Street. The revised base of Layer 1 is shown in Figure P-32.

This adjustment to the base of Layer 1 resulted in a model simulation that was very similar to the distribution of the dense layer that is currently observed in the field. This barrier could be caused by a number of situations in the subsurface:

- The bedrock ridge that exists in this area may be higher than suggested by the existing bedrock contour map (shown in Plate 2-1 of the Supplemental Phase II report). The modifications to the base of Layer 1 used for the model calibration are consistent with the bedrock elevation data from this area. That is, the possible interpretation of this barrier as being bedrock is not violated by actual field data.

- The glacial till overlying the bedrock may have a substantially lower permeability that impedes movement of the dense layer. Till is observed in a number of wells in this area, and intermediate reflectors on the seismic reflection lines may also represent till.

- The leading edge of the dense layer itself may have created a zone of reduced porosity and permeability due to the precipitation of solids from solution at increasing pH. Geochemical modeling of chemistry within and at the toe of the dense layer indicates that these waters are supersaturated with respect to several solid phases including several aluminum sulfates, mixed chromium/iron hydroxides, and iron oxyhydroxides. Other solid phases that are supersaturated in these wells include barite and gypsum. Supersaturation indicates that the chemical conditions in the groundwater are favorable for the precipitation of secondary authigenic solids from groundwater onto the aquifer matrix. The existence of such secondary solids has been confirmed by electron microprobe analyses of aquifer matrix samples. A consequence of this precipitation is a decrease in aquifer porosity and permeability. The geochemical studies are described in more detail in Section 2.7 of the Supplemental Phase II report.

The results of the calibrated model are shown on Plate P-17, and the measured and modeled dense layer thicknesses are compared on Table P-14. The distribution of the dense layer for this simulation is a great improvement over that shown on Plate P-16 which used the bedrock contours as a basis for the base of Layer 1. The thicknesses in most wells are very similar to those observed in the field. Of the wells located in the Maple Meadow Brook wetland, the dense layer is present only in GW-83D. In most areas, the model matches the field conditions well. However, there are some local areas where this is not the case. In particular, the model has not matched the conditions observed at GW-69D and GW-43D very well. In addition, the model predicts no movement of the dense layer to GW-55D. In both of these cases, it is likely that there are local features in the shape of the bedrock that are not known, based on the resolution of the existing data, and thus cannot be included in the model input. Outside these two areas, the general location, shape, and thickness of the dense layer is matched very well by the model.

To quantitatively compare the location and thickness of the dense layer between the measured values and the modeled values, a statistic incorporating both the thicknesses and the elevations was developed:

$$s = \frac{(e_m - e_p) + (t_m - t_p)}{2}$$

where: e_m and e_p are the measured and predicted elevations of the top of the dense layer
t_m and t_p are the measured and predicted thicknesses of the dense layer.

The reasons for using a statistic that combines both these factors include: (1) it is impossible to compare elevations where the dense layer may be absent and so no elevation is available, and (2) using only the thickness may be misleading because the thickness at a well is dependent on the shape of the bedrock in the immediate vicinity of the well, and such local features may not be completely captured in the 50-foot grid spacing used by the model. Therefore, this statistic that incorporates both these features was used. The calculated average differences between the thickness and elevation are shown on both Tables P-13 and P-14. The calibrated output, shown on Table P-14, shows a significant improvement compared with the simulation that did not use the barrier to flow (Table P-13). The calibrated output shows an average difference of 2.0 feet between the measured values and the model predictions.

The computer-generated output file for the calibrated sharp-interface modeling has not been provided with this report. Because of the small time steps and long simulation period, the output file is extremely large. A copy can be obtained from Smith Technology Corporation on request.

To provide understanding of the movement of the dense layer over time, the results of the calibrated model for intermediate time periods can be examined. Figures P-33 through P-37 show the location of the dense layer at 10-year intervals (1955, 1965, 1976, and 1986). These show that the dense layer moved relatively quickly during the injection period and until the barrier was reached. The dense layer then began to accumulate behind the barrier. Only when the accumulation of dense layer exceeded the capacity of the bedrock depressions did it spill over bedrock ridges into additional depressions. These intermediate time steps also show that disposal of waste in Lake Poly and the East and West Pits could easily have allowed a fraction of the dense layer to flow to the east. In addition, at the cessation of disposal, there was a significant accumulation of dense layer beneath the site that then drained down the Western Bedrock Valley over the next several years.

The successful matching of measured and predicted distribution of the dense layer indicates that this model with the sharp-interface approximation can be used to represent the bulk movement of the dense layer at the Olin site. Based on this successful calibration, the model was used to predict the potential future movement of the dense layer as described in Section 5.5 below.

5.4 CALIBRATION UNCERTAINTY

To evaluate the uncertainty of the model calibration, sensitivity analyses were performed. The parameter adjustments made during sensitivity analyses are shown on Table P-15.

For most of the sensitivity simulations, the predicted current distribution of the dense layer looks very similar to that in the calibrated simulation. This lack of sensitivity is associated with the following parameters: source characterization, increasing contrast of density and viscosity, aquifer porosity, and freshwater heads to the west of the Olin property. For these simulations with little sensitivity, the greatest sensitivity occurred at a single well: GW-83D. It appears that whether the dense layer spills over the barrier or not, and how much spills over is affected by

many of the model parameters. This sensitivity is localized to the area around GW-83D; it does not significantly influence the location or the thickness of the dense layer either up-slope from the barrier or down-slope from GW-83D.

In some of the sensitivity simulations, the dense layer was actually lost from the model to the West Ditch. In the history of the site, this would not be unexpected. However, with reference to this modeling, it is numerical artifact associated with injection rates, where the dense layer builds up to the ground surface in the source areas. As a result, the final volume of dense layer in the model is less than currently measured in the subsurface resulting in a slightly poorer fit between measured and modeled conditions. The parameters for which this effect was observed include porosity, increased freshwater heads in the source area, and increased injection rates. Despite the fact that dense layer is lost from these simulations, the results remain similar to the calibrated output.

One of the sensitivity analyses (OLIN60) involved changing the values of the constant-head cells near the municipal supply wells. Instead of using initial conditions based on an absence of pumping, the initial heads were decreased to include drawdowns associated with the supply wells. The modified initial heads were obtained from MODFLOW outputs which included pumping at these wells. Because these constant-head values would be lower, there would be less freshwater available to the supply wells, more closely matching actual conditions for later stress periods. However the results of this sensitivity analysis show that the model is not sensitive to freshwater heads around the supply wells, distant from the location of the dense layer.

There are a few parameters for which the model was sensitive, including a decrease in contrast of density and viscosity, and the freshwater heads on the Olin property, particularly the presence/absence of the West Ditch. With a smaller contrast in density and viscosity between freshwater and the dense layer, more than 50% of the volume of the dense layer is lost to the West Ditch. As a result, the dense layer occupies less space within the aquifer, extending less distance to the west, and at less thickness, with greater volume remaining on the property.

The sensitivity of the model results to the presence/absence of the West Ditch suggests that the elevation of the dense layer interface is affected by the head of the freshwater overlying it. This may be the case only where the dense layer is located shallowly as this sensitivity was not observed further west of the site. Removal of the West Ditch during the sensitivity analyses causes a significant change in freshwater heads in this area as well as a change from a discharge to a recharge area. It is unlikely that natural fluctuations would be as severe. However, the results of this simulation suggest that there would be some fluctuations in the location of the dense layer interface based on the more minor seasonal or cyclic changes in freshwater heads or recharge/discharge relationships that do occur on site.

The different sensitivity analyses also show different times to reach steady-state conditions. This information is provided on Table P-15. For all simulations including the calibrated run, there is little significant change in the location or thickness of the dense layer since the mid-1980s. In the simulations where a portion of the dense layer is lost to the West Ditch, steady-state is reached at

this point. In other simulations, the criteria for steady-state is not reached and the model continues to solve for later time steps. However, little change in the distribution of the dense layer actually takes place in these later time steps.

In addition, it is clear from the adjustments during calibration that the model is strongly sensitive to the shape of the bottom of the aquifer. Adjusting this parameter was necessary to achieve calibration. It is likely that local differences between the modeled and measured distribution of the dense layer are associated with local-scale features of the bedrock surface that are not captured by the modeling.

As described in Section 4.4 above, recent information from the Altron facility shows their current pumping rates to be higher than used for the modeling. To evaluate the importance of this change, an additional sensitivity analysis was performed, using the updated pumping rates for a stress period from 1992 to 1996. The results show that 3% of the water pumped by the Altron wells over the four-year period is from the dense layer. As a result of this loss of volume, the predicted thickness of the dense layer at most locations is slightly less than measured in the field. Therefore, the modeling is sensitive to the Altron pumping rates over a certain threshold value where pumping of the dense layer may take place. These results do not necessarily imply that Altron is actually pumping the dense layer. This simulation is a sensitivity analysis only. Whether the Altron wells are actually pumping a component of the dense layer would be more appropriately evaluated by obtaining more accurate pumping information and performing supplemental modeling.

5.5 FUTURE MOVEMENT OF THE DENSE LAYER

To determine the potential for additional movement of the dense layer, the sharp-interface modeling was extended into the future. The calibrated model results were used as initial conditions for the future simulation. The pumping rates at the municipal and industrial supply wells used for the future simulations are provided on Table P-9. All other inputs remained the same.

The simulation was run until steady-state was reached, which occurred after 39 years, or in the year 2035. The results are shown on Plate P-18. It is clear that there is little significant difference between this output and the calibrated output for 1996. Thus, based on the sharp-interface modeling, it appears that there is little potential for significant additional movement of the dense layer. The results of the sensitivity analyses suggest that this would also be the case over a range of input parameter values, and that there has been little effective movement of the dense layer since the mid-1980s.

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Tables

SMITH

TABLE P-1

Summary of Groundwater Users - Sand and Gravel Aquifer

Olin Corporation
Wilmington, MA Facility

Owner/Location	Well Name	Type of Use	Depth or Open Interval	Average Pumping Rate
Olin Corporation	IW-11	remediation		12,000 gpd (1)
	IW-12	remediation		12,000 gpd (1)
	IW-13	remediation		12,000 gpd (1)
Altron, Inc.	B1	industrial	30 ft	50,000 gpd
	B3	industrial	20 to 25 ft	50,000 gpd
Town of Wilmington	Butters Row No. 1	municipal supply	39 to 52 ft	700 gpm permitted
	Butters Row No. 2	municipal supply	36 to 46 ft	700 gpm permitted
	Chestnut St No. 1	municipal supply	40 to 55 ft	700 gpm (2) permitted
	Chestnut St No. 1A/2	municipal supply	40 to 55 ft	700 gpm (2) permitted
	Town Park	municipal supply	39 ft	350 gpm permitted
Map 25 Lot 8*	inside	domestic supply	unknown	not measured
Map 25 Lot 8*	outside	irrigation	unknown	not measured
Map 25 Lot 7*	na	domestic supply	unknown	not measured

Information about domestic wells provided verbally by homeowners.
(1) and (2) represent combined totals for the three interceptor wells (1) and the two Chestnut St wells (2).
* = Well abandoned in Spring 1997

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TABLE P-2

Usage of Maple Meadow Brook Wellfield: 1992-1996
Olin Corporation
Wilmington, MA Facility

	Chestnut St 1 gallons/mo	Chestnut St 1A(2) gallons/mo	Butters Row No. 1 gallons/mo	Butters Row No. 2 gallons/mo	Town Park gallons/mo	Total
1992						
Jan	6,075,900	0	18,237,100	14,691,600	4,249,200	43,253,800
Feb	5,259,700	1,470,000	17,372,200	13,463,600	2,417,400	39,982,900
Mar	3,423,000	13,580,900	11,479,000	11,970,300	0	40,453,200
Apr	2,911,000	11,668,000	7,309,300	13,642,700	1,981,500	37,512,500
May	3,002,500	13,239,000	7,764,100	17,892,400	4,190,400	46,088,400
June	2,487,000	8,506,600	9,302,100	21,732,300	4,942,900	46,970,900
July	11,321,900	12,316,500	1,806,600	20,504,400	3,154,500	49,103,900
Aug	12,025,000	4,121,400	9,180,100	17,468,100	4,391,900	47,186,500
Sep	7,272,400	8,756,000	6,593,300	10,694,200	2,182,000	35,497,900
Oct	7,968,000	10,110,000	8,780,900	8,663,600	0	35,522,500
Nov	5,325,900	6,689,000	3,246,200	7,197,600	295,700	22,754,400
Dec	7,526,500	9,409,500	934,200	12,837,400	0	30,707,600
Total	74,598,800	99,866,900	102,005,100	170,758,200	27,805,500	475,034,500
1993						
Jan	10,387,800	13,023,900	0	10,494,700	0	33,906,400
Feb	12,504,400	17,861,000	0	13,497,100	0	43,862,500
Mar	10,300,600	14,957,000	388,600	12,147,000	158,400	37,951,600
Apr	9,399,600	13,903,000	0	10,416,700	0	33,719,300
May	14,140,000	21,150,000	0	13,101,200	0	48,391,200
June	12,227,900	17,958,000	14,615,700	9,966,600	2,720,500	57,488,700
July	11,229,600	17,186,000	17,217,700	9,901,100	2,445,400	57,979,800
Aug	9,955,900	15,870,000	15,438,400	9,280,700	2,247,600	52,792,600
Sep	7,311,200	11,701,000	11,821,700	7,284,800	1,843,100	39,961,800
Oct	7,925,300	13,277,000	4,797,000	4,058,400	2,182,200	32,239,900
Nov	8,841,400	9,169,000	4,606,800	7,310,100	1,585,200	31,512,500
Dec	4,299,400	8,972,000	4,729,700	6,622,500	1,518,700	26,142,300
Total	118,523,100	175,027,900	73,615,600	114,080,900	14,701,100	495,948,600
1994						
Jan	4,978,400	10,541,700	5,946,600	8,605,100	1,892,100	31,963,900
Feb	3,492,000	8,128,500	4,186,200	5,559,400	680,400	22,046,500
Mar	2,034,000	10,280,400	0	11,520,300	0	23,834,700
Apr	0	10,758,400	0	13,470,200	0	24,228,600
May	3,825,100	16,239,000	528,600	18,239,700	0	38,832,400
June	7,403,200	19,553,000	8,019,000	20,352,900	2,563,800	57,891,900
July	7,375,800	21,353,000	12,113,400	19,722,200	4,223,600	64,788,000
Aug	6,982,500	15,972,000	11,228,100	17,137,600	3,122,600	54,442,800
Sep	5,445,400	12,815,000	9,046,700	13,889,400	1,714,300	42,910,800
Oct	6,519,800	17,218,000	5,029,600	14,881,800	0	43,649,200
Nov	6,563,100	12,461,600	7,787,200	13,108,500	91,800	40,012,200
Dec	6,184,100	10,500,500	9,914,800	12,767,700	0	39,367,100
Total	60,803,400	165,821,100	73,800,200	169,254,800	14,288,600	483,968,100

TABLE P-2

Usage of Maple Meadow Brook Wellfield: 1992-1996
Olin Corporation
Wilmington, MA Facility

	Chestnut St 1 gallons/mo	Chestnut St 1A(2) gallons/mo	Butters Row No. 1 gallons/mo	Butters Row No. 2 gallons/mo	Town Park gallons/mo	Total
1995						
Jan	9,400,691	11,056,567	11,557,652	11,690,900	0	43,705,810
Feb	9,514,600	5,491,266	11,757,034	11,928,400	0	38,691,300
Mar	9,619,580	7,026,648	11,946,872	13,904,800	0	42,497,900
Apr	9,739,628	6,601,266	12,149,906	12,067,900	0	40,558,700
May	10,152,800	5,825,900	14,132,700	16,291,400	4,687,200	51,090,000
June	15,098,200	16,726,000	14,872,600	14,019,500	4,017,600	64,733,900
July	19,707,500	18,244,700	18,738,200	15,034,200	4,464,000	76,188,600
Aug	20,034,600	18,742,200	18,154,100	15,463,300	3,794,400	76,188,600
Sep	12,538,400	4,710,900	15,632,300	13,026,700	2,808,000	48,716,300
Oct	7,133,100	5,078,800	11,861,300	11,130,100	2,592,000	37,795,300
Nov	11,166,300	6,863,300	12,351,500	11,757,500	0	42,138,600
Dec	12,921,800	4,928,700	13,935,500	9,809,300	0	41,595,300
Total	147,027,199	111,296,247	167,089,664	156,124,000	22,363,200	603,900,310
1996						
Jan	13,316,000	5,200,000	18,057,600	10,788,200	0	47,361,800
Feb	9,602,200	0	8,997,200	2,130,200	0	20,729,600
Mar	10,671,600	0	10,726,600	10,167,600	0	31,565,800
Apr	3,577,600	20,150,000	4,790,100	11,886,300	0	40,404,000
May	5,255,400	0	6,237,400	22,069,100	136,000	33,697,900
June	6,318,000	7,264,000	9,851,200	15,768,000	226,300	39,427,500
July	1,488,900	21,290,000	7,842,500	16,810,700	145,000	47,577,100
Aug	703,200	19,750,000	9,495,400	16,212,300	152,500	46,313,400
Sep	410,600	15,875,000	6,955,200	11,214,200	96,400	34,551,400
Oct	4,523,700	12,581,000	1,936,800	9,507,400	77,800	28,626,700
Nov	0	19,713,000	9,200	9,524,600	0	29,246,800
Dec	92,400	20,557,000	75,600	10,033,600	0	30,758,600
Total	55,959,600	142,380,000	84,974,800	146,112,200	834,000	430,260,600

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TABLE P-3

Pumping at the Maple Meadow Brook Wellfield: Calibration Time Period
Olin Corporation
Wilmington, MA Facility

Date	Butters Row No. 1 gallons/day	Butters Row No. 2 gallons/day	Chestnut St 1 gallons/day	Chestnut St 1A(2) gallons/day	Town Park gallons/day
Sep-Oct 95					
9/24/95	391,500	346,000	583,000	384,000	63,000
9/25/95	412,600	370,900	na	384,000	60,400
9/26/95	513,100	434,200	498,100	384,000	60,400
9/27/95	429,300	374,600	269,900	384,000	63,000
9/28/95	394,000	333,100	250,000	384,000	74,250
9/29/95	480,600	407,600	307,900	384,000	63,000
9/30/95	397,000	337,200	254,600	384,000	67,500
10/1/95	443,100	394,900	288,700	558,250	67,500
10/2/95	303,700	249,600	na	558,250	90,000
10/3/95	524,500	444,800	401,300	558,250	58,500
10/4/95	399,300	325,000	157,700	558,250	63,000
10/5/95	320,800	316,900	217,300	409,000	58,500
10/6/95	378,100	323,700	231,000	578,424	99,000
10/7/95	605,900	535,900	na	576,000	108,000
10/8/95	605,400	537,500	397,000	576,000	160,000
10/9/95	683,100	587,300	456,900	528,000	193,000
10/10/95	571,300	505,400	412,200	528,000	99,000
10/11/95	395,200	356,200	294,200	528,000	99,000
10/12/95	577,800	530,900	82,600	432,000	81,000
10/13/95	394,900	365,600	236,800	288,000	0
10/14/95	369,100	319,000	158,100	480,000	0
Apr-May 96					
4/14/96	294,000	0	213,200	502,600	148,500
4/15/96	261,200	0	203,200	471,600	148,500
4/16/96	239,600	0	192,900	512,600	198,000
4/17/96	299,800	296,100	220,200	500,200	153,000
4/18/96	0	729,400	58,200	150,000	198,000
4/19/96	0	978,500	52,800	160,000	216,000
4/20/96	0	861,700	343,000	361,000	216,000
4/21/96	0	766,800	102,200	250,000	207,000
4/22/96	0	957,600	290,700	425,000	144,000
4/23/96	0	738,900	277,000	114,200	180,000
4/24/96	0	934,400	155,000	302,800	180,000
4/25/96	0	847,200	578,000	131,000	40,000
4/26/96	0	783,400	105,500	191,000	180,000
4/27/96	0	805,600	79,700	200,000	189,000
4/28/96	0	834,800	103,800	225,000	198,000
4/29/96	0	891,200	118,600	375,000	171,000
4/30/96	0	730,200	166,300	400,000	171,000
5/1/96	0	730,500	225,000	410,900	216,000
5/2/96	0	914,200	125,000	268,700	216,000
5/3/96	0	1,036,300	225,000	387,900	162,000
5/4/96	0	725,800	105,000	202,400	144,000

na = no data, meter out of service
0 indicates well off-line
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TABLE P-4

Precipitation Data Recorded at Butters Row Treatment Plant: 1992-1996
Olin Corporation
Wilmington, MA Facility

	1992 (in/month)	1993 (in/month)	1994 (in/month)	1995 (in/month)	1996 (in/month)
January	3.00	2.00*	3.30*	4.10*	6.80*
February	2.15*	4.21*	3.00*	1.91*	3.30*
March	4.00*	4.10*	5.65*	1.88*	3.10*
April	2.70	na	1.56	2.00	4.80*
May	3.40	0.63	5.65	2.60	2.97
June	2.85	1.70	0.84	2.31	1.32
July	2.63	2.10	2.65	2.50	6.50
August	5.60	1.80	4.75	0.90	1.55
September	3.30	5.50	5.20	2.80	6.32
October	2.11	5.05	0.50	6.10	12.10
November	3.97	2.80	3.86	5.85*	2.69
December	5.92*	5.66*	5.61	na	5.55*
Total (in/yr)	41.63	>35.55	42.57	>32.95	57.00

Source: The Wilmington Water Department
* = Includes snowfall at 1" snow = 0.1 inches rainfall
na - no data available

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TABLE P-5

Observed and Calibrated Values of Input Parameters: Constant Density Flow Modeling
Olin Corporation
Wilmington, MA Facility

Parameter	Units	Observed Range		Calibrated Input Value	
		April	October	April	October
Horizontal Hydraulic Conductivity (=K)	ft/day			1 to 150	
Slug test analyses		0.65 to 4,140			
Pumping test analyses		23 to 250			
Ratio of vertical to horizontal K					
Pumping test analyses		0.005 to 2.8		0.1	
Vertical Hydraulic Conductivity					
for the Wetland Peat	ft/day	na		0.75	
Leakance for Rivers	1/day				
Maple Meadow Brook East Branch		na		2	
West Ditch		na		4	
Leakance for Drains (Ditches)	1/day				
East Ditch		na		2	
Ephemeral Drainage		na		0.5	
South Ditch		na		2	
Specific Yield					
Pumping test analyses		0.06 to 0.87		0.15	
Storativity					
Pumping test analyses		1.5E-05 to 5.6E-02		1E-02	
Aquifer Thickness (geologic logs)	ft	0 to 86		0 to 110	
Wetland Peat Thickness	ft	0 to 33		0 to 29.5	
Wetland Head					
Staff gauge data	ft	80.57 to 82.05	<79	80.5	69.0 to 78.0
River Heads					
East Branch (topographic data)	ft	81.0 to 82.5	na	81.0 to 83.3	78.1 to 83.0
West Ditch (gauging data)	ft	81.05 to 81.09	80.29 to 80.37	81.1	80.3 to 80.8
Drain Heads					
East Ditch (topographic data)	ft	79.0 to 73.5	na	74.0 to 78.5	74.0 to 78.5
South Ditch (gauging data)	ft	74.0 to 79.5		74.0 to 78.7	
Ephemeral Drainage (topo. data)	ft	76.1 to 80.3	na	73.1 to 77.3	73.1 to 77.3

na = no data available

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TABLE P-6

Calibration Data Set: Constant Density Flow Modeling
Olin Corporation
Wilmington, MA Facility

Well Number	MODFLOW Layer	Sample Date	Apr-96 Measured Head (ft)	Apr-96 Modeled Head (ft)	Sample Date	Oct-95 Measured Head (ft)	Oct-95 Modeled Head (ft)
GT-04-D	1	5/1/96	81.55	81.31	10/9/95	79.29	80.04
GT-04-S	1	5/1/96	81.53	81.30	10/9/95	79.58	80.06
GT-06-D	1	5/1/96	81.54	81.36	10/9/95	79.22	79.99
GT-06-S	1	5/1/96	81.83	81.35	10/9/95	82.12	80.00
GT-07	1	4/30/96	83.00	81.45	10/8/95	79.39	79.99
GT-09-D	1	5/1/96	81.58	81.52	na	na	na
GW-03-D	1	5/1/96	80.70	79.74	10/9/95	78.40	77.76
GW-03-S	1	5/1/96	81.33	79.75	10/9/95	78.53	77.77
GW-04	1	5/1/96	76.60	76.79	10/9/95	75.67	75.50
GW-04-D	1	5/1/96	76.98	76.94	10/9/95	75.80	75.59
GW-05	1	4/30/96	76.72	75.15	10/8/95	75.68	74.42
GW-06-D	1	5/1/96	81.92	81.54	10/9/95	79.22	79.32
GW-06-S	1	5/1/96	82.75	81.56	10/9/95	79.60	79.36
GW-07	1	5/1/96	80.40	80.72	na	na	na
GW-08	1	5/1/96	79.09	76.95	10/8/95	76.95	76.20
GW-10-D	1	4/30/96	80.13	81.29	10/9/95	78.58	79.88
GW-10-S	1	5/1/96	81.14	81.30	10/8/95	78.74	79.66
GW-11	1	5/1/96	81.31	81.21	10/9/95	79.81	80.13
GW-12	1	5/1/96	81.64	82.40	10/8/95	80.27	80.16
GW-13	1	4/30/96	78.75	80.08	10/9/95	78.00	78.32
GW-14	1	na	na	na	10/8/95	78.19	77.82
GW-15	1	4/30/96	81.51	81.65	10/9/95	79.80	79.07
GW-16	1	4/30/96	81.63	82.23	10/8/95	80.19	79.49
GW-17-D	1	5/1/96	79.17	79.80	10/9/95	77.69	77.77
GW-17-S	1	5/1/96	79.22	79.90	10/9/95	77.97	77.85
GW-18-D	1	5/1/96	77.84	77.99	10/8/95	74.87	76.02
GW-18-S	1	5/1/96	78.27	77.96	10/8/95	Dry	Dry
GW-19-D	1	5/1/96	81.51	81.40	10/9/95	79.34	79.78
GW-19-S	1	5/1/96	81.91	81.40	10/9/95	79.46	79.79
GW-20	1	5/1/96	80.18	82.72	10/9/95	75.36	79.70
GW-21-D	1	4/30/96	83.63	83.06	10/9/95	81.41	79.52
GW-21-S	1	4/30/96	83.92	83.23	10/9/95	82.50	79.63
GW-22-D*	2	4/30/96	81.84	81.37	10/9/95	79.02	79.92
GW-22-S	1	4/30/96	82.77	81.50	10/9/95	79.80	79.98
GW-24	1	5/1/96	81.60	81.28	10/8/95	79.68	79.86
GW-25	1	5/1/96	81.22	81.23	10/8/95	80.08	79.90
GW-26	1	5/1/96	81.12	81.27	10/8/95	78.68	79.27
GW-27-D	1	5/1/96	81.37	81.08	10/9/95	79.17	79.17
GW-27-S	1	5/1/96	81.49	81.11	10/9/95	79.17	79.20
GW-28-D	1	4/30/96	83.19	83.01	10/9/95	80.36	79.90
GW-28-S	1	4/30/96	83.19	82.96	10/9/95	80.43	79.86
GW-29-D	1	4/30/96	81.42	81.45	10/9/95	78.80	79.88

TABLE P-6

Calibration Data Set: Constant Density Flow Modeling
Olin Corporation
Wilmington, MA Facility

Well Number	MODFLOW Layer	Sample Date	Apr-96 Measured Head (ft)	Apr-96 Modeled Head (ft)	Sample Date	Oct-95 Measured Head (ft)	Oct-95 Modeled Head (ft)
GW-29-S	1	4/30/96	82.91	81.42	10/9/95	82.24	79.85
GW-30-DR*	2	5/1/96	80.49	Dry	10/9/95	78.11	Dry
GW-31-D	1	4/30/96	81.39	82.35	10/9/95	79.02	78.91
GW-31-S	1	4/30/96	81.44	82.35	10/9/95	78.76	78.91
GW-32-D	1	4/30/96	81.39	82.20	10/9/95	79.12	Dry
GW-32-S	1	4/30/96	80.73	82.19	10/9/95	77.69	Dry
GW-33-D	1	4/30/96	81.87	82.02	10/9/95	79.23	80.05
GW-33-S	1	4/30/96	81.85	82.04	10/9/95	79.16	80.06
GW-34-D	1	4/30/96	81.63	81.71	10/9/95	79.11	79.97
GW-34-S	1	4/30/96	81.79	81.69	10/9/95	79.17	79.97
GW-35-D*	2	5/1/96	81.70	81.40	10/9/95	79.23	79.91
GW-35-S	1	5/1/96	81.77	81.43	10/9/95	78.98	79.96
GW-36	2	4/30/96	81.51	81.28	10/9/95	79.00	79.77
GW-37	1	5/1/96	81.26	81.27	10/9/95	79.28	79.98
GW-38	1	5/1/96	81.28	81.20	10/9/95	79.70	80.14
GW-39	1	5/1/96	80.96	81.30	10/8/95	80.44	79.82
GW-40-D	2	5/1/96	81.69	85.43	10/8/95	76.03	80.06
GW-40-S	1	5/1/96	82.37	85.82	10/8/95	76.19	80.31
GW-42-D*	2	4/30/96	81.92	81.25	10/9/95	79.55	79.32
GW-42-S	1	4/30/96	81.38	81.26	10/9/95	79.78	79.33
GW-43-D*	2	4/30/96	80.96	81.17	10/8/95	78.51	78.28
GW-43-S	1	4/30/96	81.14	81.16	10/8/95	78.55	78.22
GW-44-D*	3	4/30/96	80.30	81.03	10/8/95	78.13	77.38
GW-44-S	1	4/30/96	81.15	81.03	10/8/95	78.34	77.38
GW-45-D*	2	4/30/96	81.17	80.89	10/8/95	78.46	77.40
GW-45-S	1	4/30/96	81.12	80.97	10/8/95	78.35	77.48
GW-46-D	1	4/30/96	82.58	81.62	10/8/95	81.29	78.12
GW-47	1	4/30/96	82.88	Dry	10/8/95	83.55	Dry
GW-48-D	1	4/30/96	81.02	80.94	10/8/95	78.92	78.16
GW-48-S	1	4/30/96	81.20	81.05	10/8/95	79.09	78.20
GW-50-D	2	5/1/96	76.76	75.41	10/9/95	75.54	74.61
GW-50-S	1	5/1/96	76.77	75.53	10/9/95	75.60	74.71
GW-51-D	1	5/1/96	78.39	79.85	10/9/95	76.99	77.81
GW-51-S	1	5/1/96	79.63	79.85	10/9/95	77.47	77.81
GW-52-D	1	4/30/96	79.91	78.94	10/9/95	78.29	77.53
GW-52-S	1	4/30/96	80.06	78.90	10/9/95	78.45	77.51
GW-53-D	1	4/30/96	85.45	84.45	10/9/95	82.64	81.15
GW-53-S	1	4/30/96	85.81	84.44	10/9/95	83.14	81.14
GW-54-D	1	4/30/96	85.19	85.33	10/9/95	82.71	81.69
GW-54-S	1	4/30/96	85.76	85.33	10/9/95	83.48	81.69
GW-55-D	1	5/1/96	79.98	77.60	10/9/95	78.81	77.18
GW-55-S	1	5/1/96	79.96	77.58	10/9/95	78.67	77.16

TABLE P-6

Calibration Data Set: Constant Density Flow Modeling
Olin Corporation
Wilmington, MA Facility

Well Number	MODFLOW Layer	Sample Date	Apr-96 Measured Head (ft)	Apr-96 Modeled Head (ft)	Sample Date	Oct-95 Measured Head (ft)	Oct-95 Modeled Head (ft)
GW-56-D	1	5/1/96	78.01	76.83	10/8/95	75.79	75.73
GW-56-S	1	5/1/96	78.02	76.84	10/8/95	75.73	75.74
GW-57-D	1	4/30/96	81.23	81.23	10/8/95	78.11	77.28
GW-58-D	3	4/30/96	81.05	81.06	10/8/95	78.37	77.40
GW-58-S	1	4/30/96	81.09	81.05	10/8/95	78.31	77.38
GW-59-D	2	na	na	na	10/8/95	78.98	77.83
GW-59-S	1	na	na	na	10/8/95	78.51	77.83
GW-60-D	1	4/30/96	81.39	81.54	10/8/95	78.58	78.08
GW-60-S	1	4/30/96	81.69	81.55	10/8/95	78.84	78.08
GW-61-D	2	4/30/96	80.67	80.59	10/8/95	77.29	76.18
GW-61-S	1	4/30/96	80.47	80.60	10/8/95	76.83	76.20
GW-62-D	3	4/30/96	81.04	80.88	10/8/95	78.40	77.51
GW-62-M	2	4/30/96	81.05	80.89	10/8/95	78.41	77.51
GW-62-S	1	4/30/96	81.03	80.90	10/8/95	78.45	77.52
GW-63-D	2	4/30/96	79.52	79.18	10/8/95	69.80	70.54
GW-63-S	1	4/30/96	79.56	79.17	10/8/95	69.62	70.54
GW-64-D	3	4/30/96	78.53	78.89	10/8/95	68.76	68.84
GW-64-S	1	4/30/96	78.16	78.93	10/8/95	68.24	68.75
GW-65-D	3	4/30/96	77.97	78.81	10/8/95	69.05	71.17
GW-65-S	2	4/30/96	79.42	78.88	10/8/95	69.67	71.35
GW-66-D	2	4/30/96	81.12	81.11	10/8/95	78.45	77.77
GW-66-S	1	4/30/96	81.12	81.12	10/8/95	78.43	77.77
GW-67-D	3	4/30/96	81.00	80.96	10/8/95	78.15	77.15
GW-67-S	1	4/30/96	81.01	80.96	10/8/95	78.16	77.14
GW-68-D	1	na	na	na	10/8/95	80.24	Dry
GW-69-D	2	4/30/96	81.09	Dry	10/8/95	78.40	Dry
GW-69-S	1	4/30/96	81.06	81.01	10/8/95	78.34	77.65
GW-70-D*	2	4/30/96	81.19	81.22	10/8/95	78.43	77.66
GW-70-S	1	4/30/96	81.18	81.23	10/8/95	78.43	77.67
GW-71-D	2	4/30/96	81.19	81.27	10/8/95	78.43	77.92
GW-71-S	1	4/30/96	81.26	81.26	10/8/95	78.54	77.92
GW-73-D	2	4/30/96	78.34	78.51	10/8/95	68.35	68.26
GW-73-S	1	4/30/96	78.22	79.02	10/8/95	67.99	68.63
GW-74-D	1	4/30/96	73.20	76.18	10/8/95	73.04	73.32
GW-74-S	1	4/30/96	73.13	76.18	10/8/95	73.01	73.32
GW-75-D	2	4/30/96	80.03	81.65	10/8/95	76.07	77.54
GW-75-S	1	4/30/96	79.34	81.65	10/8/95	75.35	77.54
GW-76-S	1	5/1/96	81.18	81.26	10/8/95	78.76	79.50
GW-77-S	1	4/30/96	81.28	81.24	10/8/95	80.44	80.16
GW-78-S	1	5/1/96	80.94	79.45	10/8/95	79.59	78.88
GW-79-S	1	5/1/96	78.96	79.21	10/8/95	77.71	78.52
GW-80-D	1	4/30/96	76.29	76.75	10/8/95	75.60	74.17

TABLE P-6

Calibration Data Set: Constant Density Flow Modeling
Olin Corporation
Wilmington, MA Facility

Well Number	MODFLOW Layer	Sample Date	Apr-96 Measured Head (ft)	Apr-96 Modeled Head (ft)	Sample Date	Oct-95 Measured Head (ft)	Oct-95 Modeled Head (ft)
GW-80-S	1	4/30/96	76.30	76.75	10/8/95	75.89	74.16
GW-81-D	1	5/1/96	82.25	88.31	10/8/95	79.51	82.67
GW-98	1	4/30/96	79.78	78.86	10/8/95	78.12	77.46
GW-99	1	4/30/96	81.15	82.78	10/8/95	78.61	79.51
PZ-11	1	5/1/96	81.13	81.24	10/8/95	78.74	79.45
PZ-12	1	5/1/96	81.12	81.27	10/9/95	80.32	79.42
PZ-13	1	5/1/96	81.11	81.23	10/9/95	80.22	79.94
PZ-14	1	5/1/96	81.09	81.22	10/9/95	80.37	80.19
PZ-15	1	5/1/96	75.99	75.29	10/9/95	75.45	74.57
PZ-16	1	5/1/96	79.01	79.23	10/9/95	77.50	78.50
PZ-17	1	5/1/96	80.55	79.03	10/9/95	79.50	78.64
SL-01-D	1	4/30/96	82.97	87.44	10/8/95	78.48	82.06
SL-01-S	1	5/1/96	82.92	87.48	10/8/95	78.56	82.13
SL-02	1	5/1/96	82.82	86.77	10/8/95	76.53	81.21
SL-03	1	5/1/96	82.93	89.06	10/8/95	75.79	82.85
SL-04	1	5/1/96	Dry	Dry	10/8/95	Dry	89.17
SL-05	1	5/1/96	80.42	86.43	10/8/95	Dry	Dry
SL-06	1	5/1/96	81.73	85.68	10/8/95	75.23	81.77
SL-07	1	5/1/96	83.70	Dry	10/8/95	84.06	Dry
SL-08	1	5/1/96	86.88	Dry	10/8/95	86.83	Dry
SP-01	1	4/30/96	81.81	81.35	10/8/95	80.57	80.09
SP-02	1	4/30/96	82.60	81.51	10/8/95	80.92	79.56
SP-03	1	4/30/96	82.05	81.35	10/8/95	80.28	79.23
SP-05	1	4/30/96	81.23	81.12	10/8/95	Dry	Dry
SP-06	1	4/30/96	81.15	81.14	na	na	na
SP-08	1	4/30/96	77.64	78.38	10/9/95	67.74	67.69

Elevations are with reference to mean sea level.
* - Hydraulic head in well affected by presence of dense layer
na = no field data collected

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TABLE P-7

Sensitivity Analyses: Constant Density Flow Modeling
Olin Corporation
Wilmington, Massachusetts Facility

April/May 1996 (Steady State) Sensitivity Simulations

Run #	Change in Calibration Run 68 Input Parameters			
1	Hydraulic Conductivity = 75, 10, 1 ft/day			
2	Hydraulic Conductivity = 300, 10, 1 ft/day			
3	Hydraulic Conductivity = 150 and 10 ft/day			
4	Ratio of vertical to horizontal hydraulic conductivity = 1/5			
5	Ratio of vertical to horizontal hydraulic conductivity = 1/20			
6	Recharge = 15 in/yr			
7	Recharge = 25 in/yr			
8	Leakance of drain and river bottoms reduced one order of magnitude			
9	Leakance of drain and river bottoms increased one order of magnitude			
10	Vertical hydraulic conductivity of wetland = 0.25 ft/day			
11	Vertical hydraulic conductivity of wetland = 1.5 ft/day			
12	Pumping rates increased to maximum monthly values (cubic ft/day)			
	Butters Row #1 =	40,083	Chestnut St. #1 =	77,279
	Butters Row #2 =	138,553	Chestnut St. # 2/1A =	67,198
	Town Park =	28,879		
13	Pumping rates decreased to minimum monthly values (cubic ft/day)			
	Butters Row #1 =	0	Chestnut St. #1 =	7,059
	Butters Row #2 =	0	Chestnut St. # 2/1A =	15,269
	Town Park =	5,348		
14	Pumping rates of Altron wells increased: B1=11,269; B3 = 9,073 (ft^3/d)			

October 1995 (Transient) Sensitivity Simulations

Run #	Change in Calibration RunT 38 Input Parameters			
1	Hydraulic Conductivity = 75, 10, 1 ft/day			
2	Hydraulic Conductivity = 300, 10, 1 ft/day			
3	Hydraulic Conductivity = 150 and 10 ft/day			
4	Ratio of vertical to horizontal hydraulic conductivity = 1/5			
5	Ratio of vertical to horizontal hydraulic conductivity = 1/20			
6	Recharge = 0 in/yr in all stress periods			
7	Recharge = 2.5, 1.6, 3.0 inches in stress periods 1, 2, and 3 respectively			
8	Leakance of drain and river bottoms reduced one order of magnitude			
9	Leakance of drain and river bottoms increased one order of magnitude			
10	Vertical hydraulic conductivity of wetland = 0.25 ft/day			
11	Vertical hydraulic conductivity of wetland = 1.5 ft/day			
12	Specific yield = 0.01			
13	Storativity = 0.00001			
14	Head in wetlands = 78 ft in all three stress periods			
15	Head in wetlands = 69 ft in stress periods 2 and 3			
16	Pumping rates increased to maximum monthly values (cubic ft/day)			
	Butters Row #1 =	91,330	Chestnut St. #1 =	77,947
	Butters Row #2 =	78,522	Chestnut St. # 2/1A =	77,335
	Town Park =	25,804		
17	Pumping rates decreased to minimum monthly values (cubic ft/day)			
	Butters Row #1 =	40,605	Chestnut St. #1 =	11,044
	Butters Row #2 =	33,372	Chestnut St. # 2/1A =	38,506
	Town Park =	0		
18	Pumping rates of Altron wells increased: B1=11,269; B3 = 9,073 (ft^3/d)			

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TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 1- Wet season with all municipal wells pumping at 5 yr. average rates, particles to Butters Row No. 1 and Chestnut St. No. 1									
1	BR1	60	2.50	28	e	2120	3951	75	s
2	BR1	60	2.71	35	e	2122	3854	73	s
3	BR1	60	3.68	33	e	2076	3776	79	s
4	BR1	60	0.91	54	e	2102	3997	75	s
5	BR1	60	1.39	37	e	2052	3798	79	s
6	BR1	60	2.84	28	e	2014	3781	79	s
7	BR1	60	0.99	105	e	1740	3840	79	b
8	BR1	60	1.44	121	e	1942	3599	78	s
9	BR1	60	2.87	68	e	2007	3656	77	s
10	BR1	53	4.72	38	e	2069	3724	79	s
11	BR1	53	4.68	63	e	2175	3773	72	s
12	BR1	53	4.54	42	e	2182	3912	75	s
13	BR1	53	3.47	108	e	2294	4000	64	s
14	BR1	53	3.32	189	e	2285	4087	64	s
15	BR1	53	3.57	319	e	1815	3454	78	s
16	BR1	53	3.73	145	e	1924	3532	78	s
17	BR1	53	4.60	65	e	2031	3641	77	s
18	BR1	38	4.72	133	e	2124	3608	72	s
19	BR1	38	4.68	60	2	2200	3779	37	100% GW-86M
20	BR1	38	4.54	120	4	2331	3834	37	100% GW-86M
21	BR1	38	3.47	150	5	2366	3970	31	100% GW-86M
22	BR1	38	3.32	270	9	2413	4040	22	100% GW-86M
23	BR1	38	3.57	400	e	1858	3405	78	s
24	BR1	38	3.73	228	e	1949	3461	76	s
25	BR1	38	4.60	148	e	2054	3540	75	s
26	BR1	30	1.99	240	8	2432	3803	-10	100% GW-87D
27	BR1	30	1.70	180	6	2318	3724	-1	48.1% GW-87D, 35.5% GW-86D, 16.4% GW-85D
28	BR1	30	2.58	330	11	2326	3525	20	50.6% GW-86M, 49.4% GW-85M
29	BR1	30	1.13	330	11	2495	3878	-14	100% GW-87D
30	BR1	30	0.46	3600	120	3295	3036	-16	100% GW-83D
31	BR1	30	1.99	120	4	2105	3611	18	67.4% GW-86M, 32.6% GW-85M
32	BR1	30	1.75	768	e	1961	3351	74	s
33	BR1	30	1.42	527	e	2074	3366	73	s
34	BR1	30	2.40	396	e	2085	3403	74	s

TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 1 - continued									
35	CH1	60	3.25	37	e	2047	2913	72	s
36	CH1	60	2.55	31	e	2077	2821	74	s
37	CH1	60	2.42	56	e	2161	2710	71	s
38	CH1	60	2.43	22	e	1913	2936	72	s
39	CH1	60	1.37	29	e	2007	2876	74	s
40	CH1	60	1.11	261	e	2208	2500	65	s
41	CH1	60	2.23	20	e	1812	2940	73	s
42	CH1	60	0.96	25	e	1781	2905	74	s
43	CH1	60	0.51	38	e	1973	2568	75	b
44	CH1	52	2.61	934	e	2786	2118	80	b
45	CH1	52	5.34	198	e	2382	2741	53	s
46	CH1	52	5.43	39	e	2106	2871	70	s
47	CH1	52	3.45	65	e	2017	3030	72	s
48	CH1	52	3.40	45	e	1847	3049	72	s
49	CH1	52	2.80	42	e	1743	3010	74	s
50	CH1	52	3.04	67	e	1682	3024	75	s
51	CH1	52	2.94	82	e	2093	2412	72	s
52	CH1	36	2.61	1792	e	3216	1081	83	b
53	CH1	36	5.34	240	8	2407	2742	23	100% GW-85M
54	CH1	36	5.43	823	e	2650	2906	59	s
55	CH1	36	3.45	439	e	2312	3144	52	s
56	CH1	36	3.40	170	e	1937	3212	72	s
57	CH1	36	2.80	117	e	1754	3156	75	s
58	CH1	36	3.04	146	e	1686	3141	76	s
59	CH1	36	2.94	1330	e	3050	1344	82	b
60	CH1	28	4.37	5250	175	3190	2912	-15	100% GW-83D
61	CH1	28	1.95	1050	35	2557	2951	-3	100% GW-85D
62	CH1	28	1.99	2504	e	3136	811	85	b
63	CH1	28	4.16	4650	155	3297	2917	-5	100% GW-83M
64	CH1	28	1.42	4860	162	3197	2903	-5	100% GW-83M
65	CH1	28	1.46	2281	e	3146	801	85	b
66	CH1	28	4.67	470	e	2023	3301	73	s
67	CH1	28	2.56	295	e	1922	3269	72	s
68	CH1	28	2.59	419	e	1989	3299	72	s

TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 2 - Wet season with Butters Row No. 1 pumping at 1 MGD (all other muncipal wells off), particles to Butters Row No. 1									
1	BR1	60	3.22	62	e	2204	4085	64	s
2	BR1	60	2.59	10	e	2119	3919	75	b
3	BR1	60	3.63	13	e	2083	3781	79	s
4	BR1	60	1.97	229	e	2187	4713	78	b
5	BR1	60	0.46	11	e	2035	3871	77	b
6	BR1	60	2.58	13	e	2009	3754	79	s
7	BR1	60	2.70	206	e	1656	4528	79	b
8	BR1	60	1.91	120	e	1521	3642	79	b
9	BR1	60	3.18	62	e	1904	3523	78	s
10	BR1	53	3.88	16	e	2065	3717	79	s
11	BR1	53	3.92	30	e	2192	3788	72	s
12	BR1	53	3.87	20	e	2192	3968	75	s
13	BR1	53	3.67	130	e	2401	4350	62	s
14	BR1	53	3.63	254	e	2129	4773	78	b
15	BR1	53	3.57	457	e	1093	4213	79	b
16	BR1	53	3.60	254	e	1716	3216	77	b
17	BR1	53	3.82	37	e	1969	3555	78	s
18	BR1	38	3.88	170	e	2141	3373	72	s
19	BR1	38	3.92	60	2	2315	3748	32	77.5% GW-86M, 22.5% GW-85M
20	BR1	38	3.87	90	3	2436	3968	29	100% GW-86M
21	BR1	38	3.67	305	e	2595	4391	76	b
22	BR1	38	3.63	377	e	2253	4900	63	b
23	BR1	38	3.57	610	e	1022	4333	79	b
24	BR1	38	3.60	454	e	1722	3040	74	b
25	BR1	38	3.82	96	e	1983	3415	76	s
26	BR1	30	2.71	90	3	2350	4181	-1	54.2% GW-65D, 45.8% GW-86M
27	BR1	30	1.40	120	4	2463	3884	-17	100% GW-87D
28	BR1	30	1.90	90	3	2274	3623	8	64.5% GW-86M, 35.5% GW-85M
29	BR1	30	2.40	1629	e	3333	5657	82	b
30	BR1	30	0.59	5489	e	4999	6133	85	b
31	BR1	30	1.42	60	2	2037	3536	15	61.9% GW-86M, 38.1% GW-85M
32	BR1	30	3.07	4109	e	4894	6138	85	b
33	BR1	30	2.00	1681	e	316	2776	81	b
34	BR1	30	2.38	714	e	1910	2909	72	b

TABLE P-8

Particle Tracking Results

Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 3 - Dry season with all municipal wells pumping at 5 yr. average rates, particles to Butters Row No. 1 and Chestnut St. No. 1									
1	BR1	60	3.82	33	e	2164	3878	73	s
2	BR1	60	4.05	19	e	2120	3872	73	s
3	BR1	60	5.13	22	e	2122	3822	73	s
4	BR1	60	1.69	44	e	2170	3896	73	s
5	BR1	60	2.15	26	e	2104	3837	73	s
6	BR1	60	3.82	34	e	2118	3764	72	s
7	BR1	60	0.82	111	e	1796	3776	72	b
8	BR1	60	1.57	91	e	2102	3627	72	s
9	BR1	60	3.52	61	e	2116	3673	72	s
10	BR1	53	4.74	44	e	2168	3734	72	s
11	BR1	53	4.97	31	e	2175	3813	73	s
12	BR1	53	4.80	64	e	2327	3841	52	s
13	BR1	53	3.23	85	e	2366	3925	53	s
14	BR1	53	2.92	86	e	2294	4024	64	s
15	BR1	53	2.94	324	e	2308	3374	69	s
16	BR1	53	3.16	245	e	2419	3452	69	s
17	BR1	53	4.49	79	e	2173	3642	72	s
18	BR1	38	4.74	189	e	2547	3608	71	s
19	BR1	38	4.97	30	1	2192	3819	37	s
20	BR1	38	4.80	60	2	2314	3851	29	100% GW-86M
21	BR1	38	3.23	90	3	2383	3917	31	100% GW-86M
22	BR1	38	2.92	120	4	2381	3949	21	100% GW-86M
23	BR1	38	2.94	508	e	2783	3290	59	s
24	BR1	38	3.16	333	e	2627	3383	63	s
25	BR1	38	4.49	120	4	2294	3586	37	59.2% GW-86M, 40.8% GW-85M
26	BR1	30	1.57	120	4	2446	3788	0	100% GW-86D
27	BR1	30	1.56	90	3	2339	3770	2	66.0% GW-86M, 19.2% GW-85M, 14.9% GW-84M
28	BR1	30	2.06	90	3	2316	3718	5	61.6% GW-86M, 22.1% GW-85M, 16.3% GW-84M
29	BR1	30	0.72	150	5	2456	3825	-16	100% GW-87D
30	BR1	30	0.72	120	4	2362	3703	-10	49.5% GW-87D, 34.4% GW-86D, 16.1% GW-85D
31	BR1	30	1.53	120	4	2336	3645	6	62.5% GW-86M, 37.5% GW-85M
32	BR1	30	0.64	210	7	2495	3856	-19	100% GW-87D
33	BR1	30	0.63	210	7	2338	3518	4	50.6% GW-85M, 49.4% GW-86M
34	BR1	30	1.49	150	5	2317	3574	11	56.6% GW-86M, 43.4% GW-85M

TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 3 - continued									
35	CH1	60	3.16	21	e	2050	2870	73	s
36	CH1	60	2.63	25	e	2094	2817	73	s
37	CH1	60	2.48	37	e	2157	2739	71	s
38	CH1	60	2.30	21	e	1981	2922	72	s
39	CH1	60	1.50	17	e	2012	2838	73	s
40	CH1	60	1.23	29	e	2114	2714	71	s
41	CH1	60	1.96	30	1	1917	2986	72	s
42	CH1	60	0.88	34	e	1902	2987	72	s
43	CH1	60	0.20	57	e	2152	2629	71	b
44	CH1	52	2.62	238	e	2682	2684	68	s
45	CH1	52	5.83	175	e	2580	2787	58	s
46	CH1	52	5.92	24	e	2105	2842	70	s
47	CH1	52	3.44	40	e	2070	2948	72	s
48	CH1	52	3.33	52	e	1987	3041	72	s
49	CH1	52	2.63	97	e	1893	3117	71	s
50	CH1	52	2.89	276	e	1933	3206	72	b
51	CH1	52	2.89	189	e	2522	2570	68	s
52	CH1	36	2.62	349	e	2944	2731	65	b
53	CH1	36	5.83	400	e	3061	2823	60	b
54	CH1	36	5.92	307	e	2863	2890	63	b
55	CH1	36	3.44	180	6	2512	2973	32	100% GW-85M
56	CH1	36	3.33	154	e	2334	3065	51	s
57	CH1	36	2.63	190	e	2112	3175	69	s
58	CH1	36	2.89	434	e	2261	3236	67	s
59	CH1	36	2.89	520	e	3249	2598	72	b
60	CH1	28	4.43	450	15	2506	3075	14	100% GW-83M
61	CH1	28	2.19	330	11	2563	2930	-3	100% GW-85D
62	CH1	28	2.03	360	12	2595	2801	2	100% GW-85M
63	CH1	28	4.12	540	18	2590	3053	-2	100% GW-85D
64	CH1	28	1.46	510	17	2580	3057	-1	100% GW-85D
65	CH1	28	1.21	1385	e	3495	2526	62	b
66	CH1	28	4.52	570	19	2589	3060	-3	100% GW-85D
67	CH1	28	2.37	360	12	2552	3096	19	100% GW-85M
68	CH1	28	2.22	360	12	2544	3097	17	100% GW-85M

TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Particle Number	Well	Elevation at Well (feet msl)	Wv (%)	Travel Time (days)	Time Step Index	X Model Coordinate (feet)	Y Model Coordinate (feet)	Z Model Coordinate (feet msl)	Water Quality at Selected Point*
Scenario 4 - Dry season with Butters Row No. 1 pumping at 1 MGD (all other muncipal wells off), particles to Butters Row No. 1									
1	BR1	60	3.35	30	e	2216	4053	64	s
2	BR1	60	2.97	9	e	2133	3892	72	s
3	BR1	60	3.35	9	e	2114	3826	72	s
4	BR1	60	2.56	69	e	2213	4264	64	s
5	BR1	60	0.88	9	e	2100	3866	72	s
6	BR1	60	2.83	18	e	2108	3718	72	s
7	BR1	60	2.94	322	e	2217	4534	58	b
8	BR1	60	2.34	267	e	1657	3152	73	b
9	BR1	60	3.11	95	e	2047	3389	73	s
10	BR1	53	4.14	22	e	2158	3709	72	s
11	BR1	53	4.28	12	e	2170	3836	72	s
12	BR1	53	4.22	26	e	2305	3962	53	s
13	BR1	53	3.85	54	e	2338	4172	53	s
14	BR1	53	3.75	134	e	2338	4391	53	s
15	BR1	53	3.62	1254	e	695	2726	74	b
16	BR1	53	3.66	540	18	2472	2924	40	s
17	BR1	53	4.01	120	e	2279	3357	71	s
18	BR1	38	4.14	174	e	2623	3454	68	s
19	BR1	38	4.28	111	e	2554	3672	71	s
20	BR1	38	4.22	60	2	2430	3913	24	100% GW-86M
21	BR1	38	3.85	30	1	2211	4166	25	51.7% GW-86M, 48.3% GW-65D
22	BR1	38	3.75	234	e	2569	4266	71	b
23	BR1	38	3.62	2771	e	763	1544	75	b
24	BR1	38	3.66	600	20	2477	2883	27	100% GW-85M
25	BR1	38	4.01	300	10	2760	3192	59	s
26	BR1	30	2.00	90	3	2491	4013	-2	63.0% GW-87D, 37.0% GW-86D
27	BR1	30	1.15	90	3	2498	3809	-15	100% GW-87D
28	BR1	30	1.51	60	2	2345	3699	4	69.0% GW-86M, 31.0% GW-85M
29	BR1	30	1.67	297	e	2923	3952	76	b
30	BR1	30	0.33	603	e	3120	3477	74	b
31	BR1	30	1.03	240	8	2638	3320	14	100% GW-85M
32	BR1	30	2.08	528	e	2935	3975	76	b
33	BR1	30	1.28	1088	e	1286	2529	70	b
34	BR1	30	1.61	360	12	2544	3085	13	100% GW-85M

TABLE P-8

Particle Tracking Results
Olin Corporation: Wilmington, MA Facility

Notes:

BR1 = Butters Row No. 1
CH1 = Chestnut Street No. 1
Wv = Percent contribution to well (volumetric weighting factor)
e = endpoint of flow line
s = shallow water from wetlands
b = water quality not affected by Disposal Site or wetlands
* = mixtures are distance-weighted averages

TABLE P-9

Stress Periods for Sharp-Interface Modeling

Olin Corporation
Wilmington, MA Facility

Stress Period:	1	2	3	4	5	6
Time Period:	1953 to 1962	1962 to 1968	1968 to 1972	1972 to 1981	1981 to 1996	1996 to future
Duration:	9 years	6 years	4 years	9 years	15 years	na
Aquifer Stress						
Injection at Source Areas	3.85 gpm	3.85 gpm	na	na	na	na
Butters Row No. 1	na	77.2 gpm	231.6 gpm	na	268.1	190.2
Butters Row No. 2	na	na	na	na	373.6	286.7
Chestnut Street No. 1	na	231.6 gpm	231.6 gpm	180.2 gpm	280.5	173.3
Chestnut Street No. 2/1A	na	na	na	na	82.6	263.1
Altron B1	na	na	na	34.7 gpm	34.7 gpm	34.7 gpm
Altron B3	na	na	na	34.7 gpm	34.7 gpm	34.7 gpm

na - stress not in effect during stress period
Note: Town Park municipal supply well located outside model grid.

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TABLE P-10

Values Assigned to Input Parameters: Sharp-Interface Modeling

Olin Corporation
Wilmington, MA Facility

Parameter	Units	Field Measured Values	Values from Calibrated Groundwater Flow Model	Values Input to Sharp-Interface Model
Hydraulic Conductivity	ft/day		1, 10 and 150	1, 10 and 150
Horizontal Anisotropy			1	1
Aquifer Storativity and Specific Yield			0.001 and 0.15	
Storage				0.001
Porosity				0.15
Aquifer Thickness	ft		0 to 82	0 to 82
Freshwater Parameters*				
Specific gravity		0.99 to 1.00		1.00
Viscosity	cP	1.22 to 3.2		1.21
Saltwater Parameters*				
Specific gravity		1.01 to 1.10		1.08
Viscosity	cP	1.44 to 4.0		1.62

* For reference, published values for water at 15.5 degrees C: density = 1.00 g/cm^3, viscosity = 1.124 cP (Freeze and Cherry, 1979)

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TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
CITY WATER								
			Physical Properties					
	@ Olin Tap	F024	Specific Gravity	1.002		g/ml	04/10/97	1461610
	@ Olin Tap	F031	Viscosity	1.22		cpoise	04/10/97	1461610
GW-17-D								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	0.990		g/ml	05/01/96	1460734
GW-22-D								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	1.050		g/ml	05/02/96	1460741
GW-27-D								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	1.060		g/ml	05/01/96	1460736
GW-30-DR								
			Physical Properties					
		F024	Specific Gravity	1.102		g/ml	04/10/97	1461603
		F024	Specific Gravity	1.037		g/ml	03/24/93	1461624
	DUP OF 1461624	F024	Specific Gravity	1.050		g/ml	03/24/93	1461625
		F031	Viscosity	1.75		cpoise	04/10/97	1461603
		F031	Viscosity	2.03		cpoise	03/24/93	1461624
	DUP OF 1461624	F031	Viscosity	2.21		cpoise	03/24/93	1461625
		F066	Specific Gravity, Field	1.09		g/ml	01/13/95	1460342
		F066	Specific Gravity, Field	1.100		g/ml	05/03/96	1461012
GW-34-D								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	1.000		g/ml	05/02/96	1460739
GW-35-D								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	1.070		g/ml	05/02/96	1460742
GW-36								
			Physical Properties					
		F024	Specific Gravity	1.015		g/ml	03/24/93	1461626
		F031	Viscosity	1.75		cpoise	03/24/93	1461626
	Pre-Purge Sample	F066	Specific Gravity, Field	1.080		g/ml	05/02/96	1460743
GW-37								
			Physical Properties					
	Pre-Purge Sample	F066	Specific Gravity, Field	1.050		g/ml	05/02/96	1460744
GW-40-D								
			Physical Properties					
	FILTERED 1460330	F031	Viscosity	2.80		cpoise	01/11/95	1460177
GW-42-D								
			Physical Properties					
		F024	Specific Gravity	1.095		g/ml	04/10/97	1461607
		F024	Specific Gravity	1.060		g/ml	03/24/93	1461628
	FILTERED 1460611	F031	Viscosity	3.50		cpoise	10/17/95	1460627
	FILTDUP 1460627	F031	Viscosity	4.00		cpoise	10/17/95	1460628
		F031	Viscosity	1.69		cpoise	04/10/97	1461607
		F031	Viscosity	2.13		cpoise	03/24/93	1461628

TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
GW-42-D			Physical Properties					
		F066	Specific Gravity, Field	1.1		g/ml	01/11/95	1460332
		F066	Specific Gravity, Field	1.085		g/ml	05/01/96	1461009
GW-42-S			Physical Properties					
	FILTERED 1460610	F031	Viscosity	3.00		cpoise	10/17/95	1460626
GW-43-D			Physical Properties					
		F024	Specific Gravity	1.086		g/ml	04/10/97	1461608
		F031	Viscosity	1.63		cpoise	04/10/97	1461608
		F066	Specific Gravity, Field	1.02		g/ml	01/10/95	1460340
		F066	Specific Gravity, Field	1.065		g/ml	05/01/96	1461010
GW-44-D			Physical Properties					
		F024	Specific Gravity	1.066		g/ml	04/10/97	1461606
	FILTERED 1460607	F031	Viscosity	3.50		cpoise	10/17/95	1460623
		F031	Viscosity	1.52		cpoise	04/10/97	1461606
		F066	Specific Gravity, Field	1.055		g/ml	01/10/95	1460341
		F066	Specific Gravity, Field	1.050		g/ml	04/30/96	1461005
GW-44-S			Physical Properties					
		F024	Specific Gravity	1.003		g/ml	04/10/97	1461605
	FILTERED 1460606	F031	Viscosity	3.00		cpoise	10/17/95	1460622
		F031	Viscosity	1.24		cpoise	04/10/97	1461605
GW-45-D			Physical Properties					
		F024	Specific Gravity	1.042		g/ml	04/10/97	1461604
	FILTERED 1460338	F031	Viscosity	3.80		cpoise	01/13/95	1460292
		F031	Viscosity	1.44		cpoise	04/10/97	1461604
		F066	Specific Gravity, Field	1.035		g/ml	04/30/96	1461006
GW-45-S			Physical Properties					
	FILTERED 1460339	F031	Viscosity	3.00		cpoise	01/13/95	1460293
GW-50-D			Physical Properties					
		F066	Specific Gravity, Field	1.000		g/ml	05/01/96	1461008
GW-55-D			Physical Properties					
		F066	Specific Gravity, Field	1.015		g/ml	05/01/96	1461011
GW-58-D			Physical Properties					
	FILTERED 1460556	F031	Viscosity	3.00		cpoise	10/16/95	1460555
GW-58-S			Physical Properties					
	FILTERED 1460558	F031	Viscosity	3.00		cpoise	10/16/95	1460557

TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
GW-62-BR								
			Physical Properties					
	FILTERED 1461316	F031	Viscosity	3.00		cpoise	01/16/95	1460202
	FILTERED 1460560	F031	Viscosity	3.00		cpoise	10/16/95	1460559
GW-62-BRD								
			Physical Properties					
		F066	Specific Gravity, Field	0.99		g/ml	01/16/95	1460263
GW-62-D								
			Physical Properties					
	FILTERED 1460336	F031	Viscosity	3.50		cpoise	01/12/95	1460190
	FILTERED 1460562	F031	Viscosity	3.00		cpoise	10/16/95	1460561
GW-62-S								
			Physical Properties					
	FILTERED 1460335	F031	Viscosity	3.00		cpoise	01/12/95	1460189
	FILTERED 1460564	F031	Viscosity	3.00		cpoise	10/16/95	1460563
GW-63-D								
			Physical Properties					
		F024	Specific Gravity	0.968		g/ml	03/24/93	1461627
		F031	Viscosity	1.44		cpoise	03/24/93	1461627
GW-65-BR								
			Physical Properties					
	FILTERED 1460542	F031	Viscosity	3.20		cpoise	10/12/95	1460541
GW-69-D								
			Physical Properties					
		F066	Specific Gravity, Field	1.000		g/ml	04/30/96	1461007
GW-70-D								
			Physical Properties					
		F066	Specific Gravity, Field	1.025		g/ml	04/30/96	1461004
GW-73-S								
			Physical Properties					
		F024	Specific Gravity	1.002		g/ml	04/10/97	1461609
		F031	Viscosity	1.22		cpoise	04/10/97	1461609
GW-80-BR								
			Physical Properties					
	FILTERED 1460546	F031	Viscosity	3.00		cpoise	10/12/95	1460543
GW-80-D								
			Physical Properties					
	FILTERED 1460550	F031	Viscosity	3.50		cpoise	10/12/95	1460549
GW-80-S								
			Physical Properties					
	FILTERED 1460552	F031	Viscosity	3.00		cpoise	10/12/95	1460551
GW-81-BR								
			Physical Properties					
	FILTERED 1460554	F031	Viscosity	3.00		cpoise	10/12/95	1460553

TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
GW-81-D			Physical Properties					
	FILTDUP 1460675	F031	Viscosity	2.50		cpoise	10/12/95	1460537
	FILTERED 1460676	F031	Viscosity	3.00		cpoise	10/12/95	1460675
GW-82-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	0.99		g/ml	01/19/97	1461554
GW-83-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	1.02		g/ml	01/20/97	1461557
GW-84-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	1.00		g/ml	01/20/97	1461559
GW-85-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	1.00		g/ml	01/21/97	1461566
GW-86-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	1.00		g/ml	01/22/97	1461563
GW-87-D			Physical Properties					
	FILTERED	F066	Specific Gravity, Field	1.00		g/ml	01/22/97	1461564
MP-1 #01			Physical Properties					
		F024	Specific Gravity	1.05		g/ml	05/23/96	1460948
MP-1 #02			Physical Properties					
		F024	Specific Gravity	1.07		g/ml	05/23/96	1460949
MP-1 #03			Physical Properties					
	FILTDUP 1460896	F024	Specific Gravity	1.04		g/ml	05/23/96	1460897
		F024	Specific Gravity	1.02		g/ml	05/23/96	1460950
MP-1 #04			Physical Properties					
		F024	Specific Gravity	1.01		g/ml	05/23/96	1460947
MP-1 #05			Physical Properties					
		F024	Specific Gravity	0.976		g/ml	05/23/96	1460952
MP-1 #07			Physical Properties					
		F024	Specific Gravity	0.988		g/ml	05/23/96	1460953
MP-1 #11			Physical Properties					
		F024	Specific Gravity	0.955		g/ml	05/22/96	1460945

TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
MP-1 #17								
			Physical Properties					
		F024	Specific Gravity	0.962		g/ml	05/22/96	1460940
MP-2 #01								
			Physical Properties					
		F024	Specific Gravity	1.07		g/ml	05/20/96	1460916
MP-2 #02								
			Physical Properties					
		F024	Specific Gravity	1.08		g/ml	05/20/96	1460915
MP-2 #03								
			Physical Properties					
		F024	Specific Gravity	1.06		g/ml	05/20/96	1460914
MP-2 #04								
			Physical Properties					
		F024	Specific Gravity	1.06		g/ml	05/20/96	1460913
MP-2 #06								
			Physical Properties					
		F024	Specific Gravity	0.995		g/ml	05/20/96	1460917
MP-2 #07								
			Physical Properties					
		F024	Specific Gravity	0.962		g/ml	05/20/96	1460912
MP-2 #09								
			Physical Properties					
		F024	Specific Gravity	0.964		g/ml	05/20/96	1460910
MP-2 #15								
			Physical Properties					
		F024	Specific Gravity	0.977		g/ml	05/20/96	1460904
MP-3 #01								
			Physical Properties					
		F024	Specific Gravity	1.04		g/ml	05/22/96	1460938
MP-3 #02								
			Physical Properties					
		F024	Specific Gravity	1.02		g/ml	05/22/96	1460937
MP-3 #03								
			Physical Properties					
		F024	Specific Gravity	1.02		g/ml	05/22/96	1460936
MP-3 #04								
			Physical Properties					
		F024	Specific Gravity	0.967		g/ml	05/22/96	1460935
MP-3 #05								
			Physical Properties					
		F024	Specific Gravity	1.01		g/ml	05/21/96	1460934
		F024	Specific Gravity	0.995		g/ml	05/21/96	1460934

TABLE P-11

SPECIFIC GRAVITY AND VISCOSITY RESULTS
FOR GROUNDWATER (INCLUDING DENSE LAYER)

OLIN CORPORATION
WILMINGTON, MA FACILITY

Sample Location	Sample ID	Parameter Code	Parameter Name	Result	Qualifiers (1)	Units	Sample Date	Sample Number
MP-3 #07								
			Physical Properties					
		F024	Specific Gravity	0.997		g/ml	05/21/96	1460932
MP-3 #11								
			Physical Properties					
		F024	Specific Gravity	0.951		g/ml	05/21/96	1460925
MP-3 #17								
			Physical Properties					
		F024	Specific Gravity	0.958		g/ml	05/21/96	1460930

TABLE P-12

Information about the Dense Layer

Olin Corporation
Wilmington, MA Facility

Well	Bedrock Elevation (feet)	Dense Layer Interface (feet)	Dense Layer Thickness (feet)	Sulfate Concentration (mg/l)	Specific Conductance (umhos/cm)
Wells located in dense layer					
GW-7	na	about 69	unknown	3,590	19,200
GW-10D	56.3	about 71	4.7	6,700	9,400
GW-22D	49.2	59.1	9.9	28,000	66,900
GW-27D	57.6	62.9	5.3	18,000	33,300
GW-30DR	48.5	58.7	10.2	87,000	69,700
GW-35D	53.1	58.1	5	58,000	67,700
GW-36	47.8	60.3	12.5	72,000	80,600
GW-37	54.8	58.3	3.5	58,000	53,500
GW-38	57.9	62.9	5	43,000	28,000
GW-42D	45.4	63.4	18	81,000	97,700
GW-43D	56.6	68.6	12	23,000	63,500
GW-44D	22.5	47	24.5	39,000	67,800
GW-45D	29.8	46.8	17	45,000	58,100
GW-55D	65.7	70.2	4.5	8,800	30,700
GW-58D	22.1	26.1	4	3,600	7,940
GW-59D	25.2	42.2	17	30,000	35,000
GW-62BR	15.9			4,900	13,200
GW-69D	46.1	59.1	13	9,200	20,600
GW-70D	35.3	44.8	9.5	19,000	50,500
GW-83D	-36.1	-22.1	14	17,300	37,000
MP-1	46	57	11	74,000	90,200
MP-2	45	55.6	10.6	77,000	102,600
MP-3	22	46.8	24.8	48,000	60,600
Wells located outside the dense layer					
GW-06D	59.6	na	0	170	600
GW-19D	67.9	na	0	740	2,000
GW-29D	na	na	0	740	3,000
GW-33D	67.1	na	0	64	700
GW-39	73.7	na	0	500	881
GW-46D	70.2	na	0	18	200
GW-60D	62.6	na	0	14	200
GW-61D	33.5	na	0	25	500
GW-62D	16.4	na	0	100	579
GW-64D	20.6	na	0	710	1,730
GW-65D	-13.1	na	0	30	300
GW-66D	48.3	na	0	25	530
GW-67D	17.2	na	0	55	316
GW-71D	49.9	na	0	55	500
GW-82D	20.2	na	0	265	741
GW-84D	-20.6	na	0	3,500	8,540
GW-85D	-5.9	na	0	1,770	4,760
GW-86D	-7.1	na	0	1,440	4,050
GW-87D	-25.7	na	0	1,630	4,620

Concentrations are the maximum measured between 1991 and the present.

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TABLE P-13

Model Output Using Bedrock Contours as Base of Layer 1
Sharp-Interface Modeling

Olin Corporation
Wilmington, MA Facility

Well	Field Measurements: Dense Layer Interface (feet)	Field Measurements: Dense Layer Thickness (feet)	Model Predictions: Dense Layer Interface (feet)	Model Predictions: Dense Layer Thickness (feet)	Avg. of Interface Difference and Thick. Difference (feet)
Wells located in dense layer					
GW-7	about 69	unknown	na	0.0	na
GW-10D	about 61	4.7	na	0.0	4.7
GW-22D	59.1	9.9	52.7	1.9	7.2
GW-27D	62.9	5.3	58.6	0.9	4.4
GW-30DR	58.7	10.2	54.1	3.5	5.7
GW-35D	58.1	5.0	53.1	3.9	3.1
GW-36	60.3	12.5	54.2	5.7	6.5
GW-37	58.3	3.5	na	0.0	3.5
GW-38	62.9	5.0	na	0.0	5.0
GW-42D	63.4	18.0	53.1	6.8	10.8
GW-43D	68.6	12.0	na	0.0	12.0
GW-44D	47.0	24.5	28.6	6.6	18.2
GW-45D	46.8	17.0	31.5	2.1	15.1
GW-55D	70.2	4.5	na	0.0	4.5
GW-58D	26.1	4.0	26.3	4.1	-0.1
GW-59D	42.2	17.0	26.9	0.4	16.0
GW-62BR	na	na	na	na	na
GW-69D	59.1	13.0	na	0.0	13.0
GW-70D	44.8	9.5	na	0.0	9.5
GW-83D	-22.1	14.0	24.1	52.9	-42.6
MP-1	57.0	11.0	52.6	5.5	5.0
MP-2	55.6	10.6	53.4	6.5	3.1
MP-3	46.8	24.8	29.7	6.8	17.5
Selected wells located outside the dense layer					
GW-06D	na	0.0	na	0.0	0.0
GW-19D	na	0.0	na	0.0	0.0
GW-29D	na	0.0	na	0.0	0.0
GW-33D	na	0.0	na	0.0	0.0
GW-39	na	0.0	na	0.0	0.0
GW-46D	na	0.0	na	0.0	0.0
GW-60D	na	0.0	na	0.0	0.0
GW-61D	na	0.0	na	0.0	0.0
GW-62D	na	0.0	20.3	4.8	-4.8
GW-64D	na	0.0	na	0.0	0.0
GW-65D	na	0.0	-2.3	8.9	-8.9
GW-66D	na	0.0	na	0.0	0.0
GW-67D	na	0.0	23.3	3.5	-3.5
GW-71D	na	0.0	na	0.0	0.0
GW-82D	na	0.0	20.1	0.4	-0.4
GW-84D	na	0.0	25.9	40.5	-40.5
GW-85D	na	0.0	4.7	1.8	-1.8
GW-86D	na	0.0	5.9	11.5	-11.5
GW-87D	na	0.0	1.5	24.4	-24.4
				Mean Absolute Error =	**7.6**

na = not applicable

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TABLE P-14

Calibrated Model Output: Sharp-Interface Modeling

Olin Corporation
Wilmington, MA Facility

Well	Field Measurements: Dense Layer Interface (feet)	Field Measurements: Dense Layer Thickness (feet)	Model Predictions: Dense Layer Interface (feet)	Model Predictions: Dense Layer Thickness (feet)	Avg. of Interface Difference and Thick. Difference (feet)
Wells located in dense layer					
GW-7	about 69	unknown	na	0.0	na
GW-10D	about 61	4.7	58.0	2.6	2.1
GW-22D	59.1	9.9	57.3	6.6	2.6
GW-27D	62.9	5.3	58.6	1.0	4.3
GW-30DR	58.7	10.2	59.2	8.6	0.6
GW-35D	58.1	5.0	57.8	8.6	-1.7
GW-36	60.3	12.5	59.2	10.8	1.4
GW-37	58.3	3.5	59.3	5.1	-1.3
GW-38	62.9	5.0	na	0.0	5.0
GW-42D	63.4	18.0	58.0	11.7	5.9
GW-43D	68.6	12.0	na	0.0	12.0
GW-44D	47.0	24.5	46.4	24.5	0.3
GW-45D	46.8	17.0	49.6	20.2	-3.0
GW-55D	70.2	4.5	na	0.0	4.5
GW-58D	26.1	4.0	na	0.0	4.0
GW-59D	42.2	17.0	39.8	13.4	3.0
GW-62BR	na	na	15.9	na	na
GW-69D	59.1	13.0	49.6	3.0	9.7
GW-70D	44.8	9.5	43.0	8.5	1.4
GW-83D	-22.1	14.0	-6.8	21.9	-11.6
MP-1	57.0	11.0	57.3	10.1	0.3
MP-2	55.6	10.6	58.4	11.5	-1.8
MP-3	46.8	24.8	47.9	25.0	-0.7
Selected wells located outside the dense layer					
GW-06D	na	0.0	na	0.0	0.0
GW-19D	na	0.0	na	0.0	0.0
GW-29D	na	0.0	na	0.0	0.0
GW-33D	na	0.0	na	0.0	0.0
GW-39	na	0.0	na	0.0	0.0
GW-46D	na	0.0	na	0.0	0.0
GW-60D	na	0.0	na	0.0	0.0
GW-61D	na	0.0	na	0.0	0.0
GW-62D	na	0.0	na	0.0	0.0
GW-64D	na	0.0	na	0.0	0.0
GW-65D	na	0.0	na	0.0	0.0
GW-66D	na	0.0	na	0.0	0.0
GW-67D	na	0.0	22.3	2.2	-2.2
GW-71D	na	0.0	na	0.0	0.0
GW-82D	na	0.0	na	0.0	0.0
GW-84D	na	0.0	na	0.0	0.0
GW-85D	na	0.0	na	0.0	0.0
GW-86D	na	0.0	na	0.0	0.0
GW-87D	na	0.0	na	0.0	0.0
				Mean Absolute Error =	**2.0**

na = not applicable

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TABLE P-15

Sensitivity Analyses: Sharp-Interface Modeling

Olin Corporation
Wilmington, MA Facility

Simulation	Description	Time*	MAE (feet)
OLIN54	Calibrated output	1996	10
OLIN55	Longer time steps during later stress periods	1996	1.8
OLIN56	Freshwater specific gravity=1.00, viscosity=1.0 cP Saltwater specific gravity=1.10, viscosity=1.75 cP Maximum contrast	1996	2.3
OLIN57	Freshwater specific gravity=1.00, viscosity=1.21 cP Saltwater specific gravity=1.05, viscosity=1.47 cP Minimum contrast	1984	3.9
OLIN58	Porosity=0.30	1985	2.4
OLIN59	Modified freshwater heads: Pumping rates at supply wells greater during early years of operation	1996	2.0
OLIN60	Modified freshwater heads: Different heads for constant-head boundary conditions	1982	2.5
OLIN61	Modified freshwater heads: Omit West Ditch	1996	4.8
OLIN62	Modified freshwater heads: Decreased recharge rate	1996	2.2
OLIN63	Modified source term: Injection over 20 years, including to Acid Pits	1996	1.7
OLIN64	Modified source term: Injection rate greater, spread over shorter time period	1986	2.1
OLIN66	Increased pumping rates at Altron wells, 1992-1996	1996	2.7

*Time indicates end of simulation if steady-state was reached before 1996.

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Figures

SMITH

SMITH

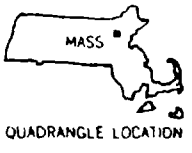
Olin Corporation
Wilmington, Massachusetts

Source: USGS Quadrangle Wilmington, MA 1965 (Photorevised 1979)

Smith Environmental Project No. 00-7074-0102

SCALE
0 2083 Ft.

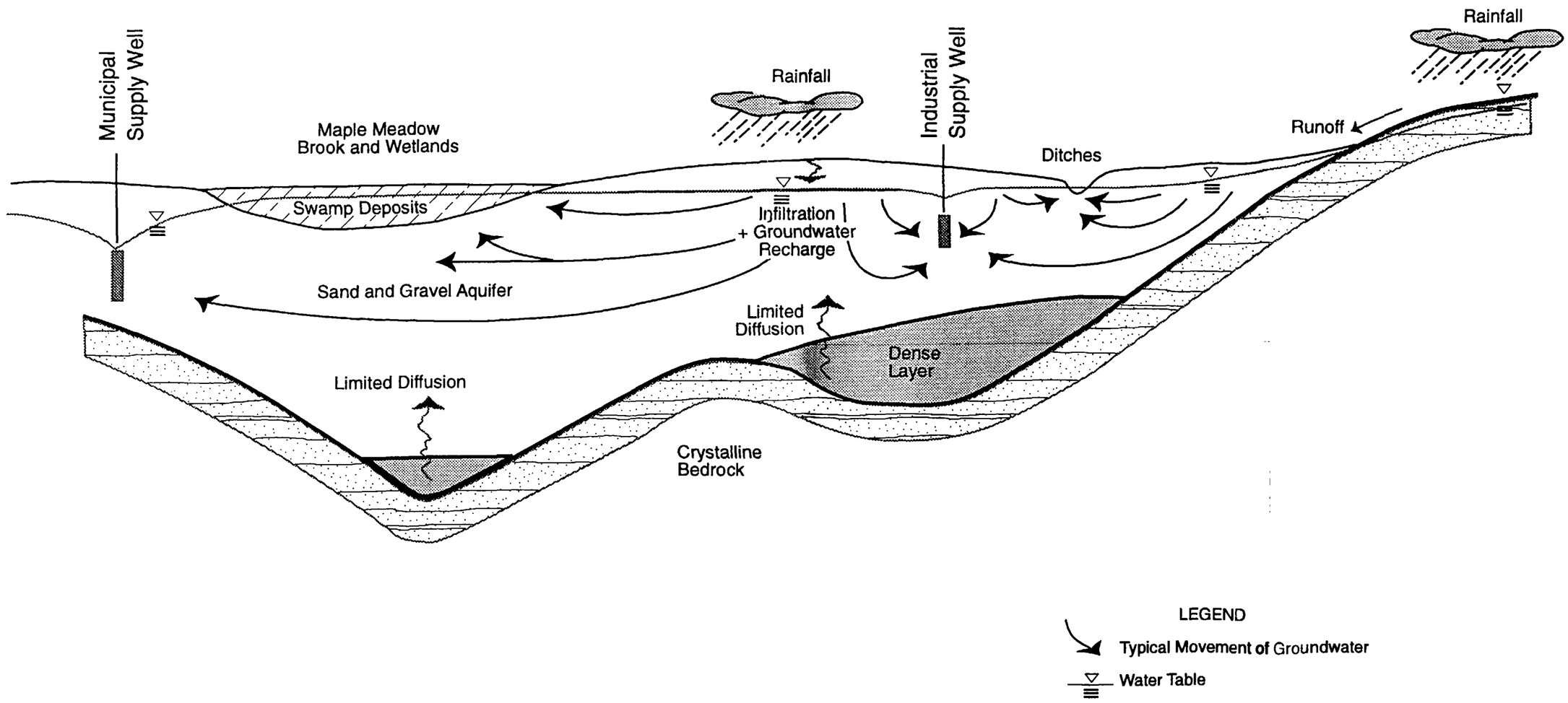
NORTH



QUADRANGLE LOCATION

FIGURE P-1

Property Location Map



Smith Technology Project No. 00-7074-0106

Not to Scale

Figure P-2
Schematic Showing Hydrogeologic System

Source: USGS Quadrangle Map / Surficial Geology of the Wilmington Quadrangle, Massachusetts 1959

Smith Technology Project No. 00-7074-0106

Legend on next page

SCALE

0 3000 Ft.

NORTH

FIGURE P-3

Surficial Geology Map

LEGEND

QUATERNARY

Recent

Local alluvial deposits
Largely muck and sand

Wind deposits
Largely well sorted medium-grained sand. Mapped only where dune form is conspicuous

Sand and gravel, undifferentiated
Includes sediments deposited in basins created by melting of residual ice blocks; commonly overlain by thin veneer of more recent deposits

Pleistocene — *Wisconsin*

Glacial stream and lake deposits

Kame terrace deposits
Sand and pebble to boulder gravel. Includes valley-train deposits

Kame plain deposits
Sand and pebble to cobble gravel

Kame delta deposits
Sand and pebble to cobble gravel

Kame deposits
Pebble to boulder gravel and sand. Generally poorly sorted

Ice-channel fillings
Pebble to boulder gravel and sand. Generally poorly sorted

Glacial ice deposits

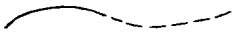
Ground moraine deposits
Till with minor amounts of sand and gravel

Drumlin deposits
Smoothly contoured and elongated hills of till with no exposures of bedrock

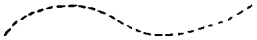
PROTEROZOIC(?) AND PALEOZOIC

Igneous and metamorphic rocks
Individual outcrops shown by solid color. Areas where exposures are small and numerous shown by ruled pattern

Artificial fill



Contact
Dashed where approximately located.



Indefinite contact

Direction of glacial grooves or striae
Bedrock outcrop at tip of arrow.

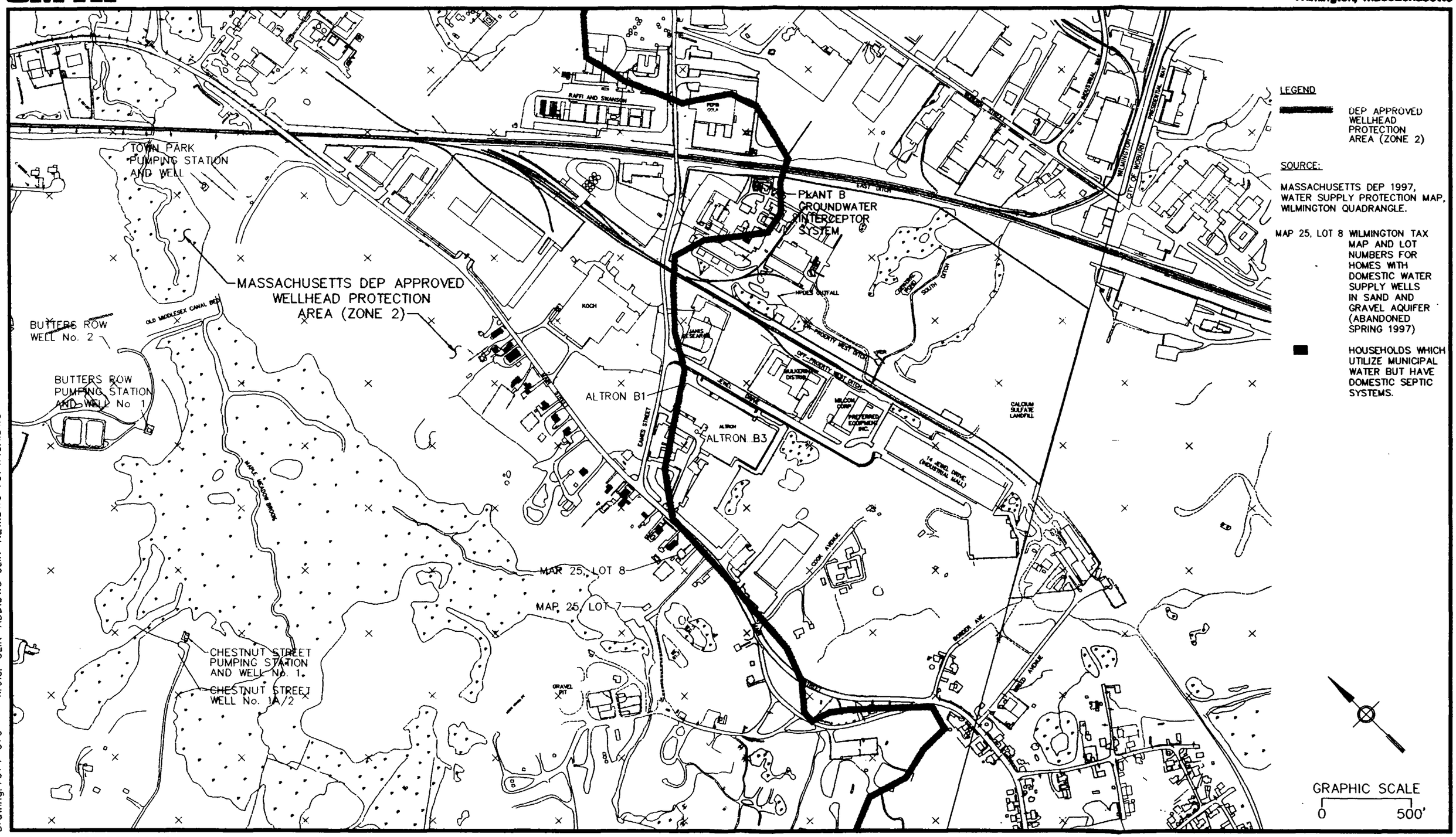
×

Pit

Source: USGS Quadrangle Map / Surficial Geology of the Wilmington Quadrangle, Massachusetts 1959

SMITH TECHNOLOGY CORPORATION

Olin Corporation
Wilmington, Massachusetts



Drawing: 7074-070 Xrefs: OLIN-ADD.DWG OLIN-NEW.DWG 7074FIGA.DWG

Project No. 00-7074-0106
June 20, 1997

Figure P-4
Groundwater Users

FIGURE P-5

Vertical Profiles of Sulfate Concentrations
Measured in the Multi-Level Piezometers in May 1996
Olin Corporation
Wilmington, MA Facility

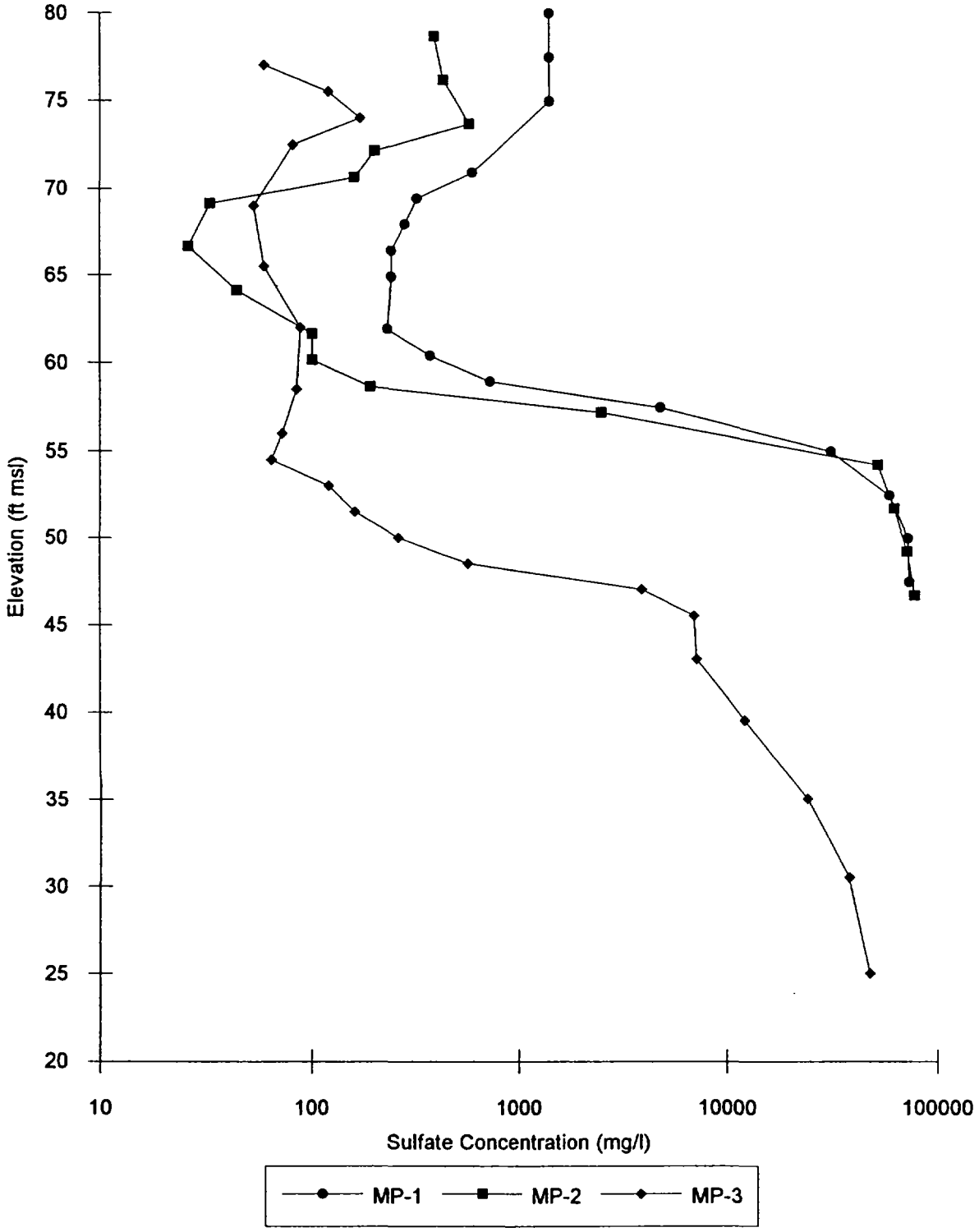


FIGURE P-6

Vertical Profiles of Specific Conductance
Measured in the Multi-Level Piezometers in May 1996
Olin Corporation
Wilmington, MA Facility

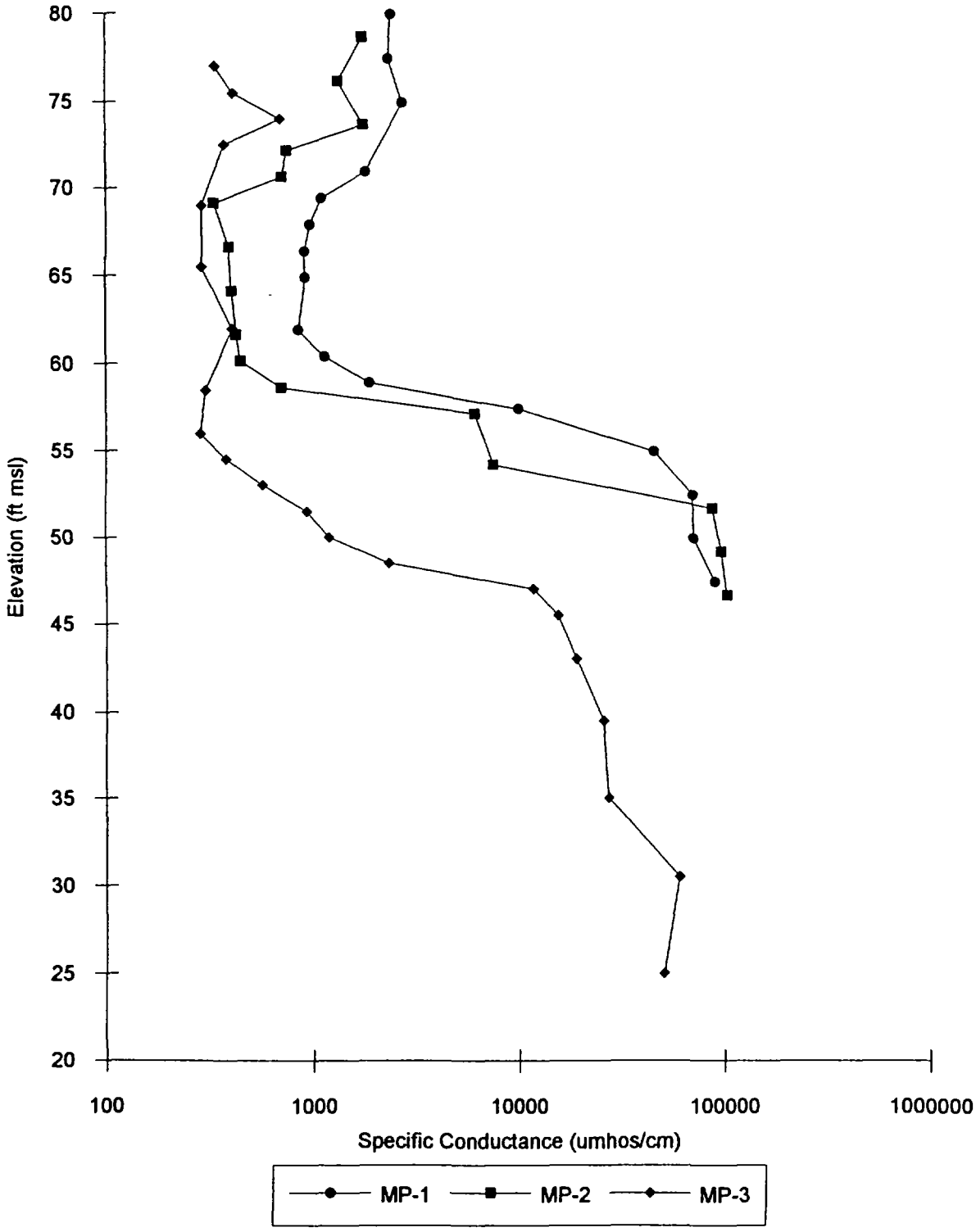
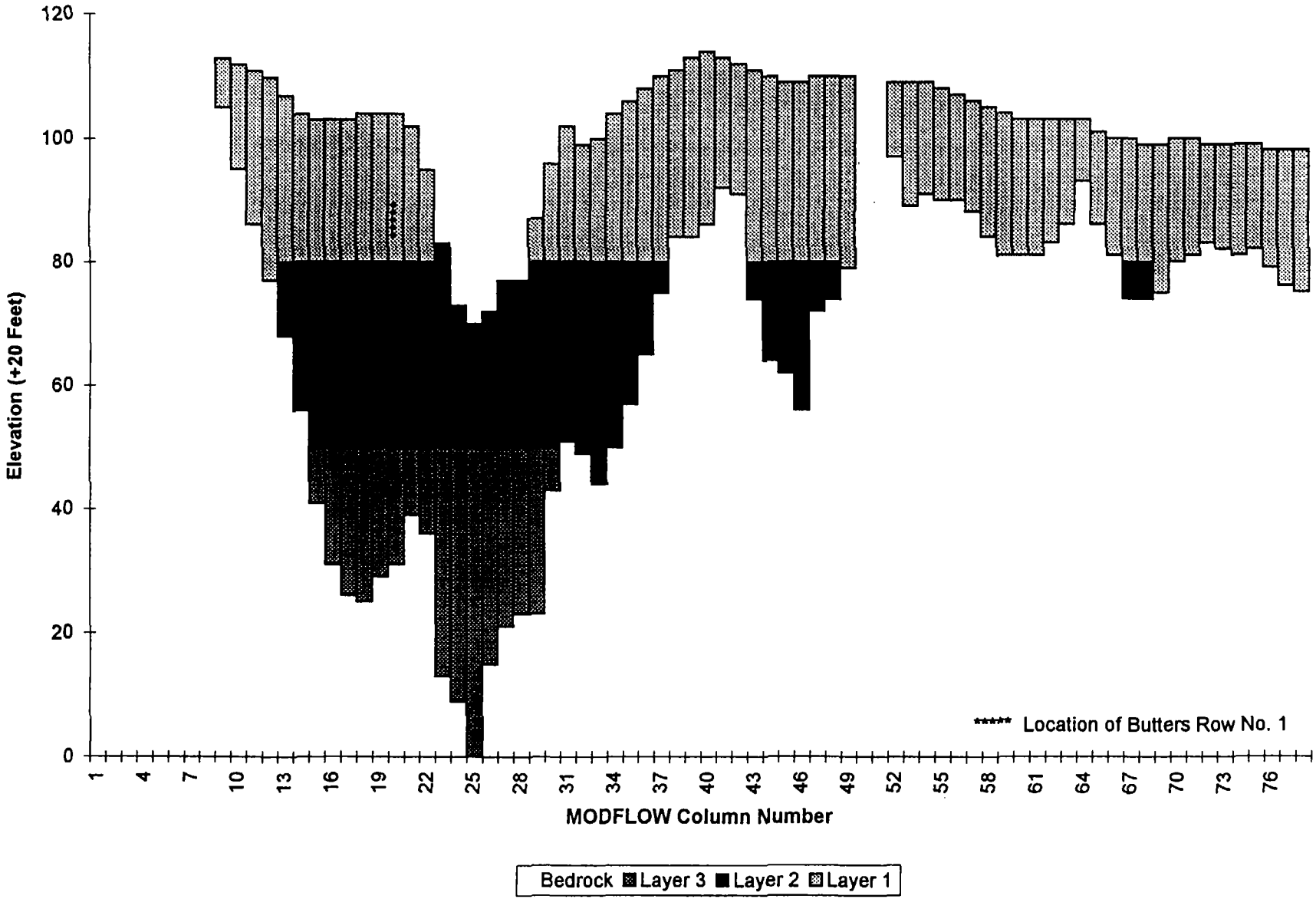
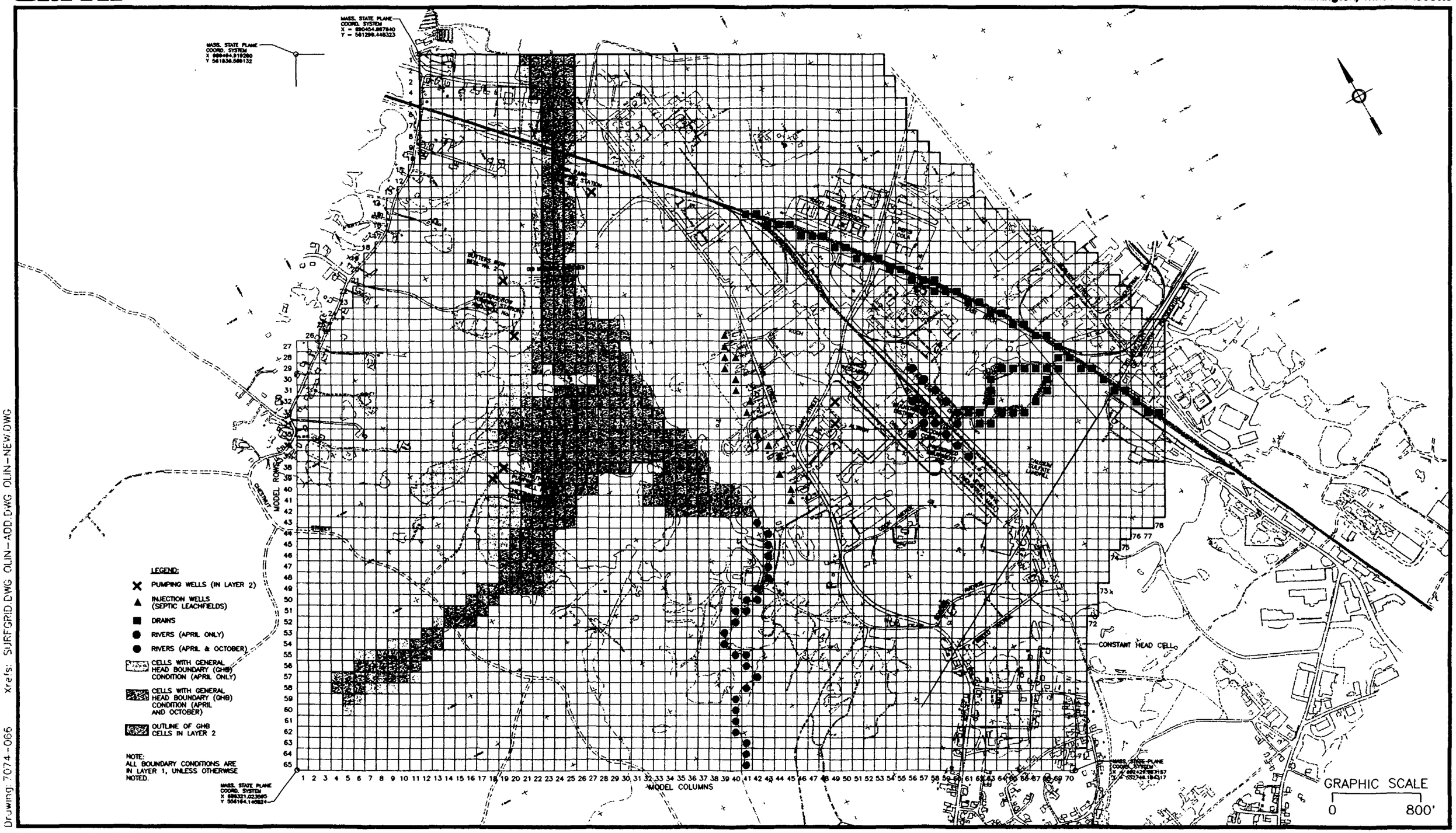


FIG. .E P-7

Vertical Cross-Section along Row 26
Constant Density Flow Modeling
Olin Corporation: Wilmington, MA Facility



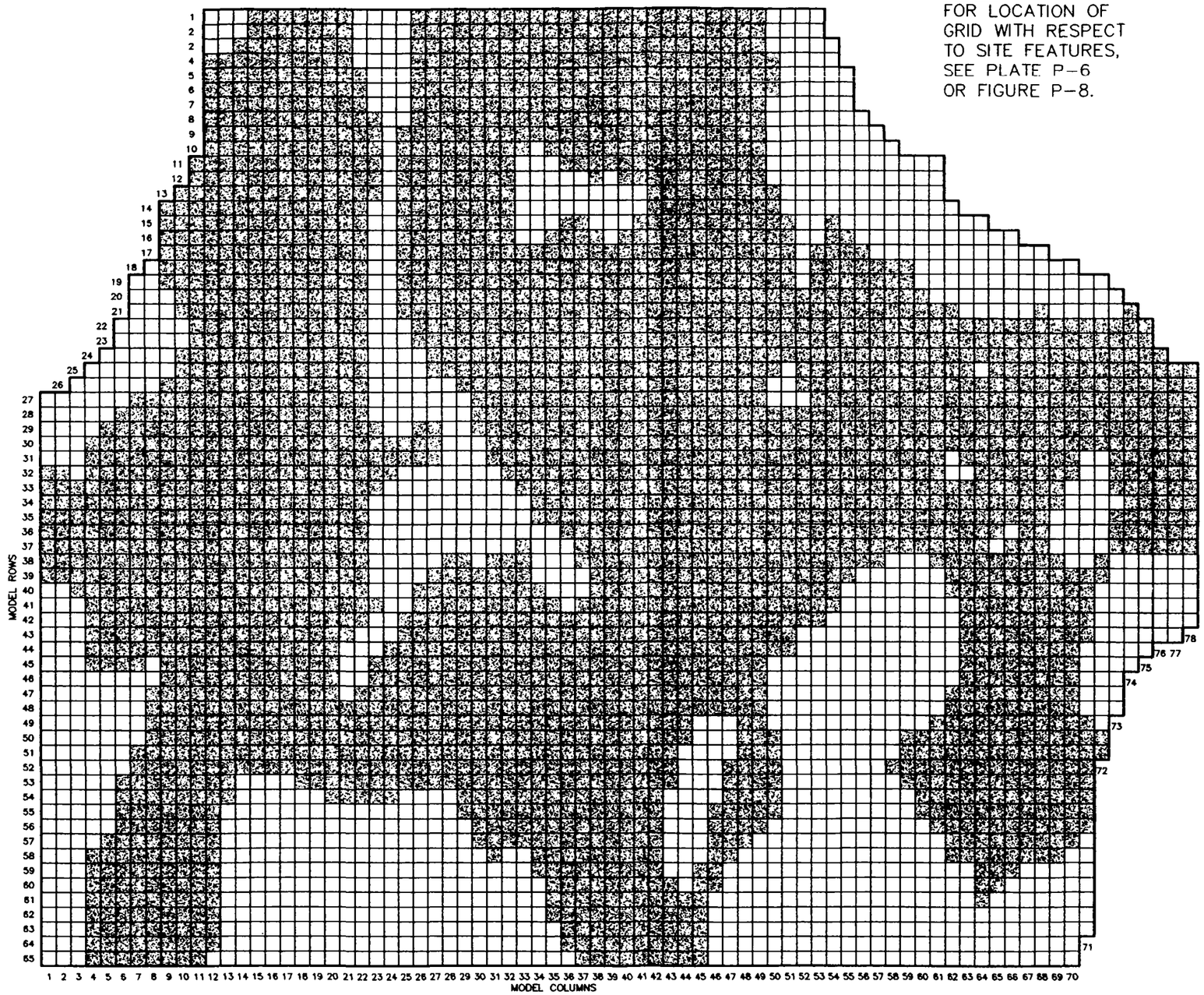


Drawing: 7074-066 Xref's: SURFGRID.DWG OLIN-ADD.DWG OLIN-NEW.DWG

Project No. 00-7074-0106
June 20, 1997

Figure P-8
Boundary Conditions, Constant-Density Flow Modeling

NOTE:
FOR LOCATION OF GRID WITH RESPECT TO SITE FEATURES, SEE PLATE P-6 OR FIGURE P-8.



LEGEND

NO FLOW CELL IN LAYER 1

ACTIVE CELL IN LAYER 1

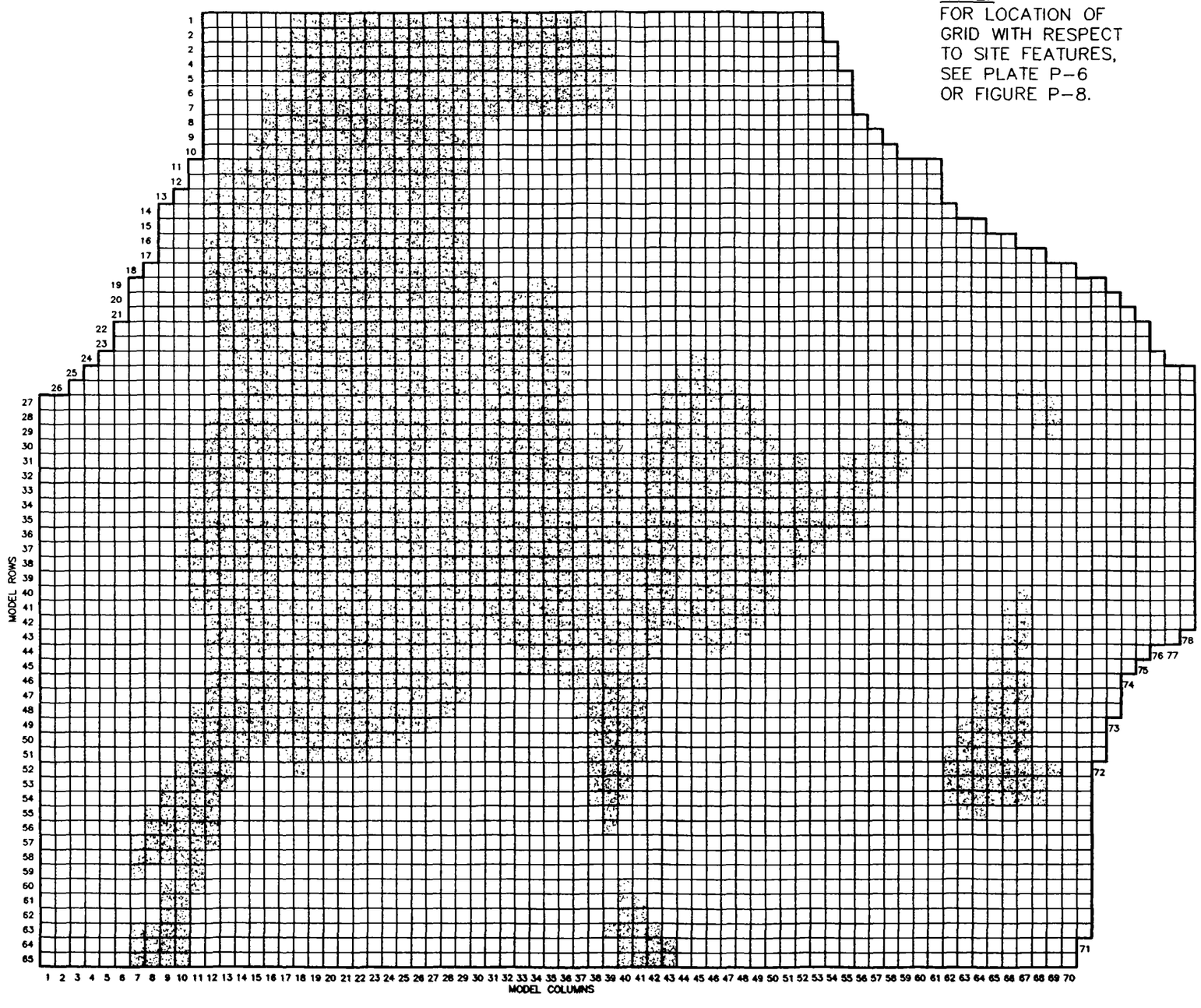
GRAPHIC SCALE

0 800'

Drawing: 7074-064 Xrefs: SURFGRID.DWG

Project No. 00-7074-0106
June 20, 1997

Figure P-9
Cells Active in Layer 1, Constant-Density Flow Modeling



NOTE:
FOR LOCATION OF GRID WITH RESPECT TO SITE FEATURES, SEE PLATE P-6 OR FIGURE P-8.

LEGEND

NO FLOW CELL IN LAYER 2

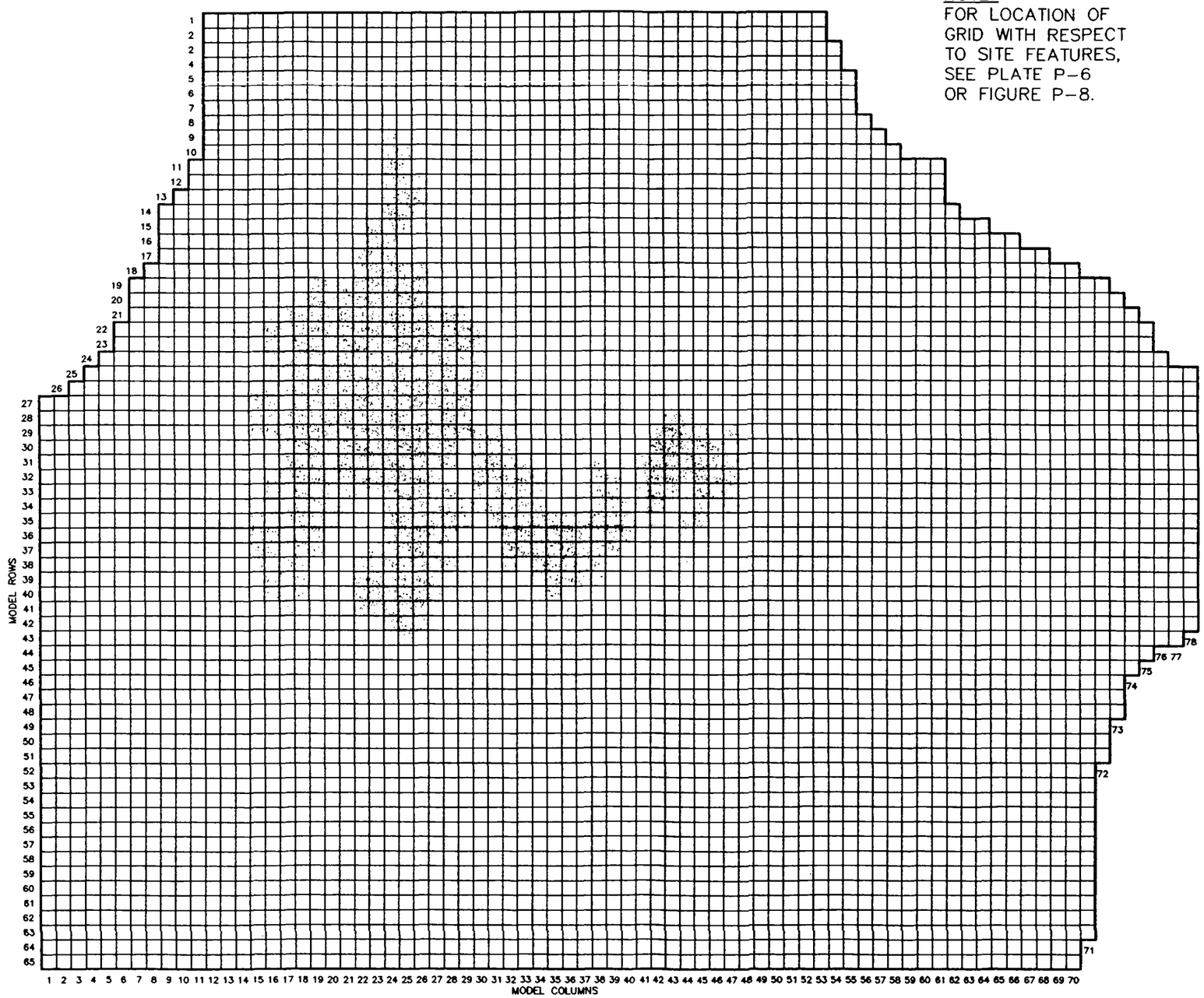
ACTIVE CELL IN LAYER 2

GRAPHIC SCALE

0 800'

Drawing: 7074-064 Xrefs: SURFGRID.DWG

Figure P-10
Cells Active in Layer 2, Constant-Density Flow Modeling



NOTE:
FOR LOCATION OF GRID WITH RESPECT TO SITE FEATURES, SEE PLATE P-6 OR FIGURE P-8.

LEGEND

NO FLOW CELL IN LAYER 3

ACTIVE CELL IN LAYER 3

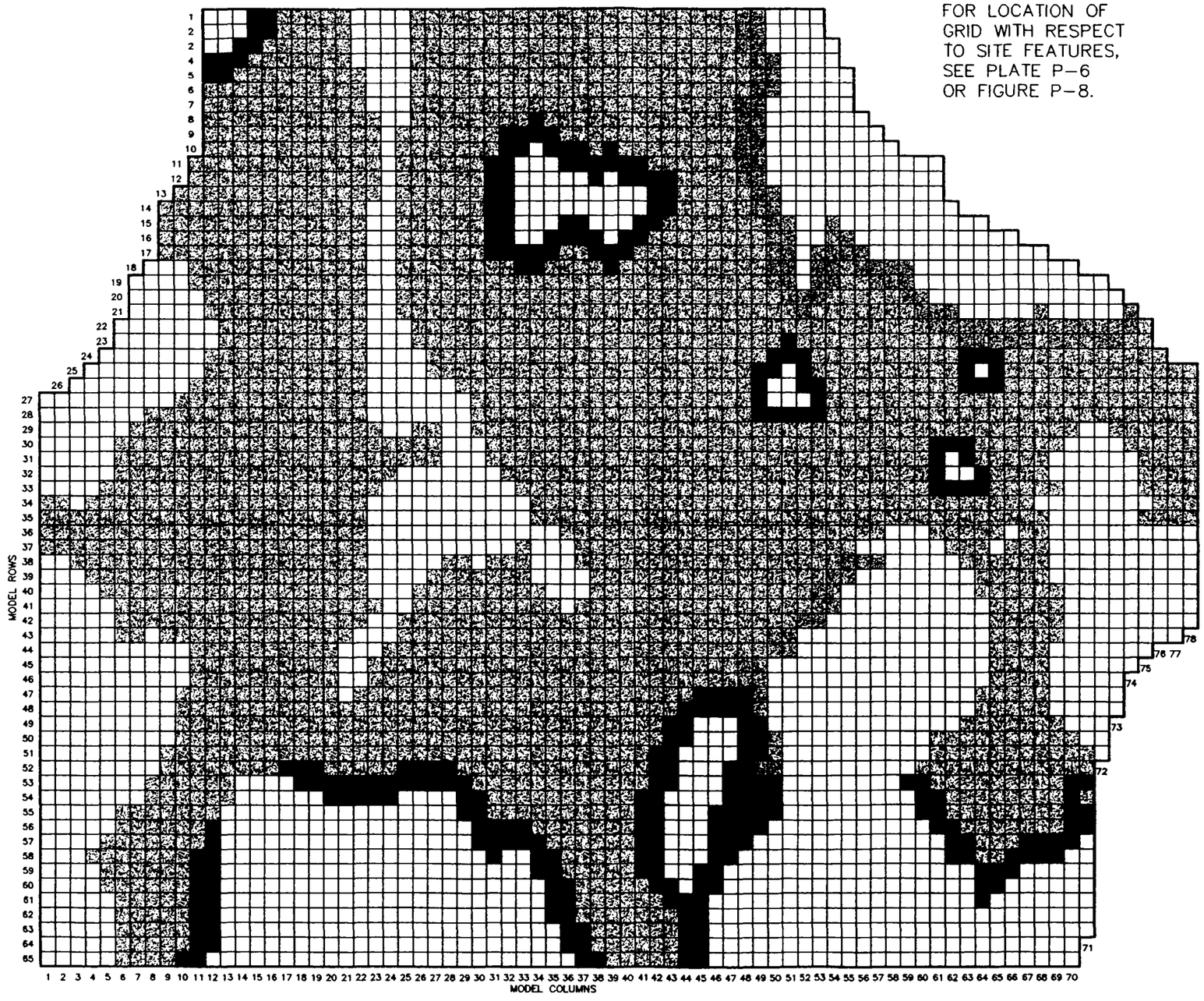
GRAPHIC SCALE

0 800'

Drawing: /074-064 Xrefs: SURFGRID.DWG

Project No. 00-7074-0106
June 20, 1997

Figure P-1
Cells Active in Layer 3, Constant-Density Flow Modeling



NOTE:
FOR LOCATION OF GRID WITH RESPECT TO SITE FEATURES, SEE PLATE P-6 OR FIGURE P-8.

LEGEND

NO FLOW CELL IN LAYER 1

VALUES OF RECHARGE MULTIPLIER

- 1
- 1-2
- 2-3
- 3-4
- 4-5
- 6-7
- 8-9

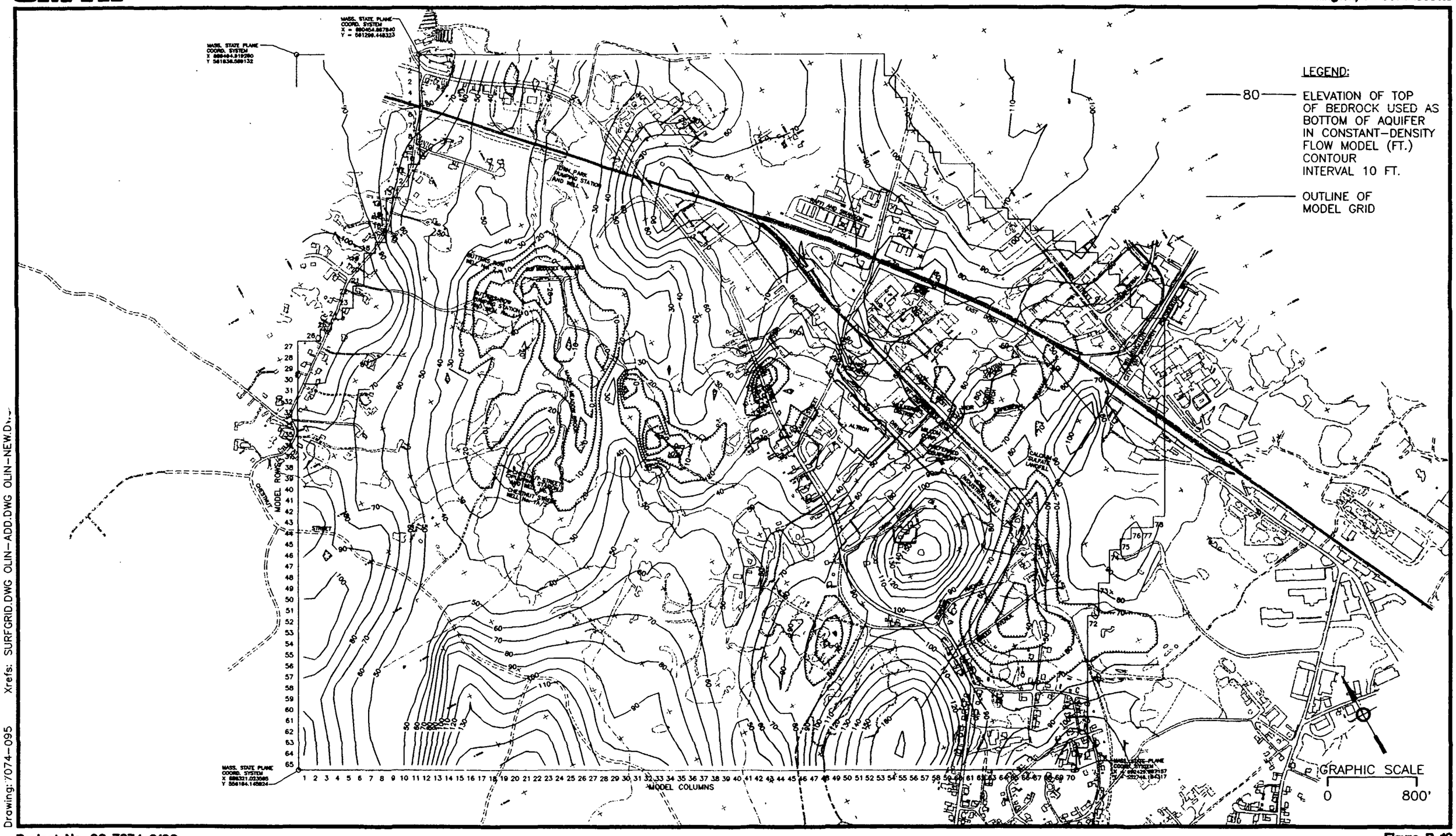
NO VALUE FOR 5-6

A BASE VALUE OF RECHARGE WAS USED FOR MOST CELLS (MULTIPLIER = 1). THIS VALUE WAS MODIFIED FOR DIFFERENT HYDROLOGIC CONDITIONS AND DURING CALIBRATION, RANGING FROM 0 TO 25 INCHES PER YEAR. THE MULTIPLIER REPRESENTS A FACTOR BY WHICH THE BASE VALUE WAS MULTIPLIED FOR SPECIFIC CELLS AS SHOWN.

GRAPHIC SCALE
0 800'

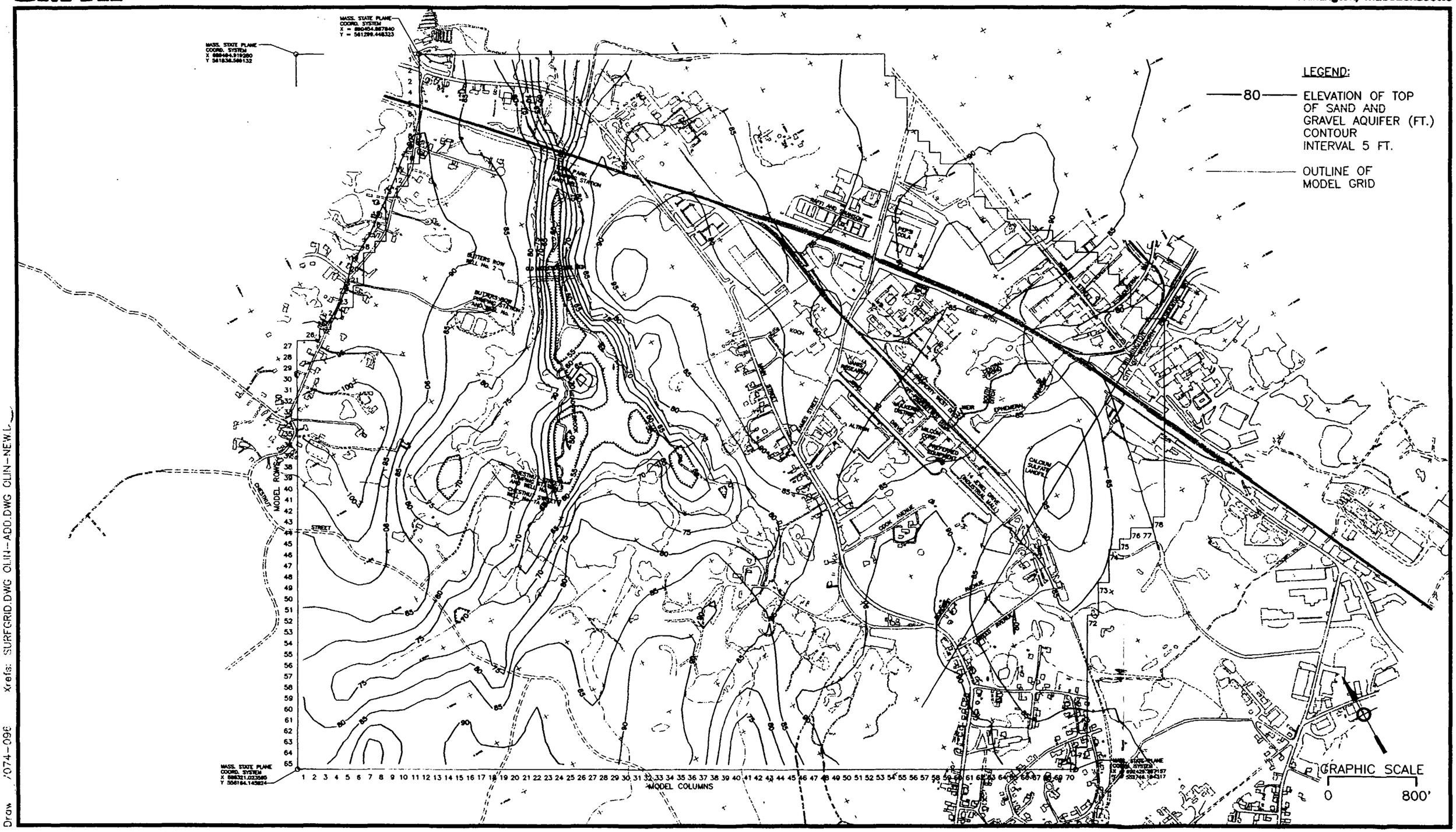
Drawing: 7074-064 Xrefs: SURFGRID.DWG

Figure P-12
Distribution of Recharge



Drawing: 7074-095 Xrefs: SURFGRID.DWG OLIN-ADD.DWG OLIN-NEW.D

Figure P-13
Bedrock Surface, Constant-Density Flow Modeling



Project No. 00-7074-0106
June 20, 1997

Figure P-14
Top of Sand and Gravel Aquifer, Constant-Density Flow Modeling

Draw 7074-096 Xrefs: SURFGRID.DWG OLIN-ADD.DWG OLIN-NEW.L

FIGURE P-15

Scatterplot: Modeled and Measured Heads
April 1996 - Layer 1 (Run68)
Olin Corporation
Wilmington, MA Facility

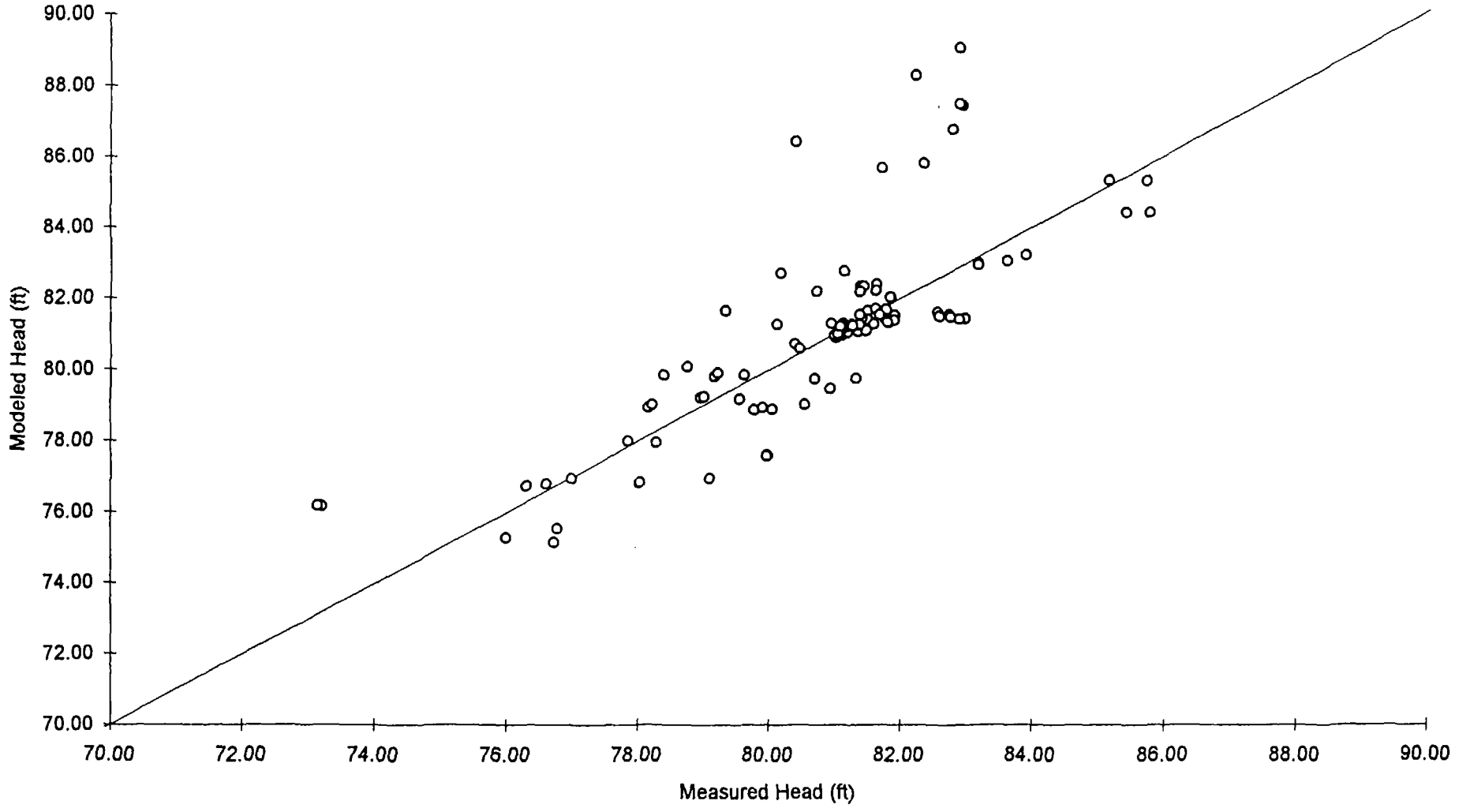


FIGURE P-16

Scatterplot: Modeled and Measured Heads
April 1996 - Layers 2 and 3 (Run68)
Olin Corporation
Wilmington, MA Facility

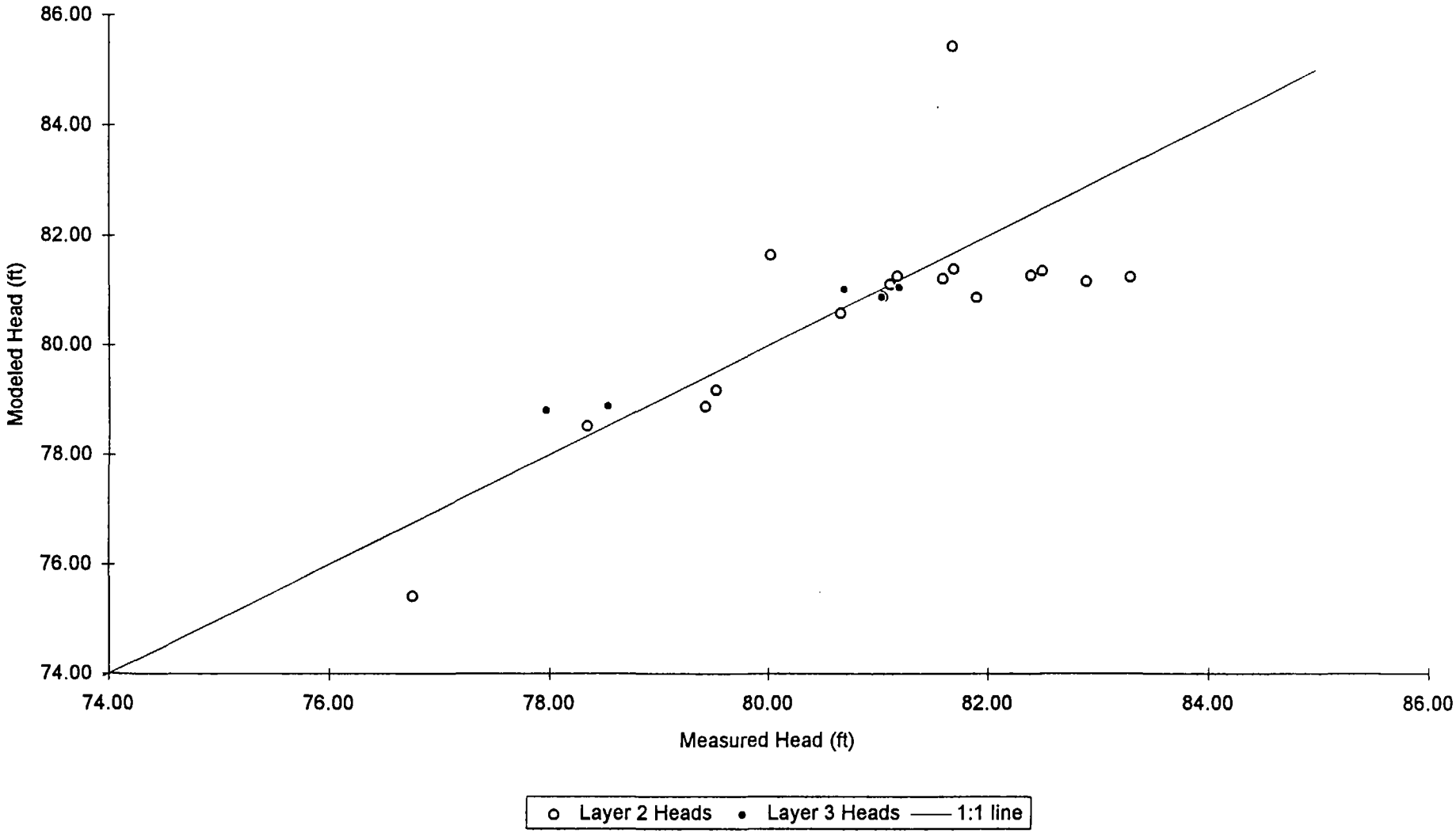


FIGURE P-17

Scatterplot: Modeled and Measured Heads
October 1995 - Layer 1 (RunT38)
Olin Corporation
Wilmington, MA Facility

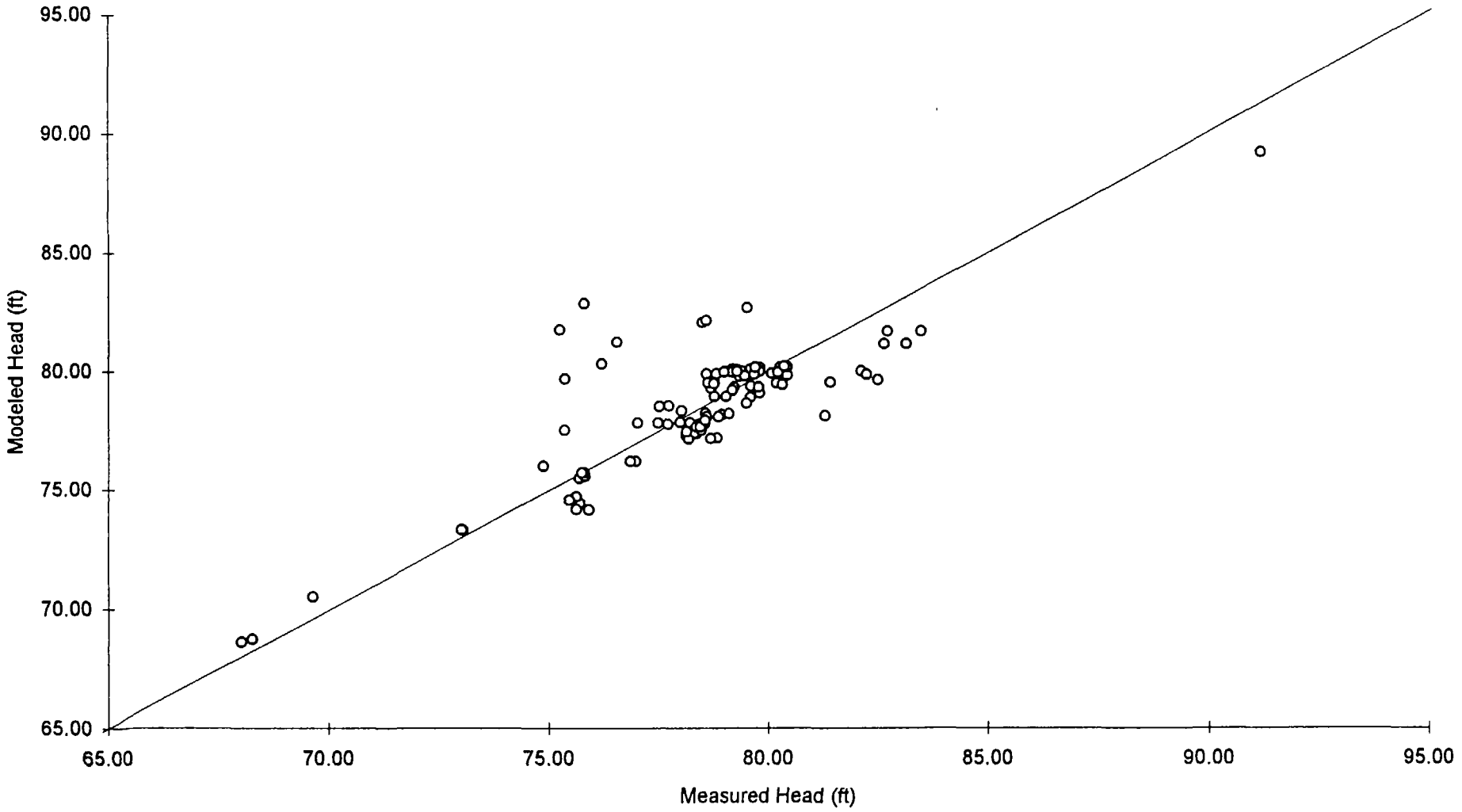
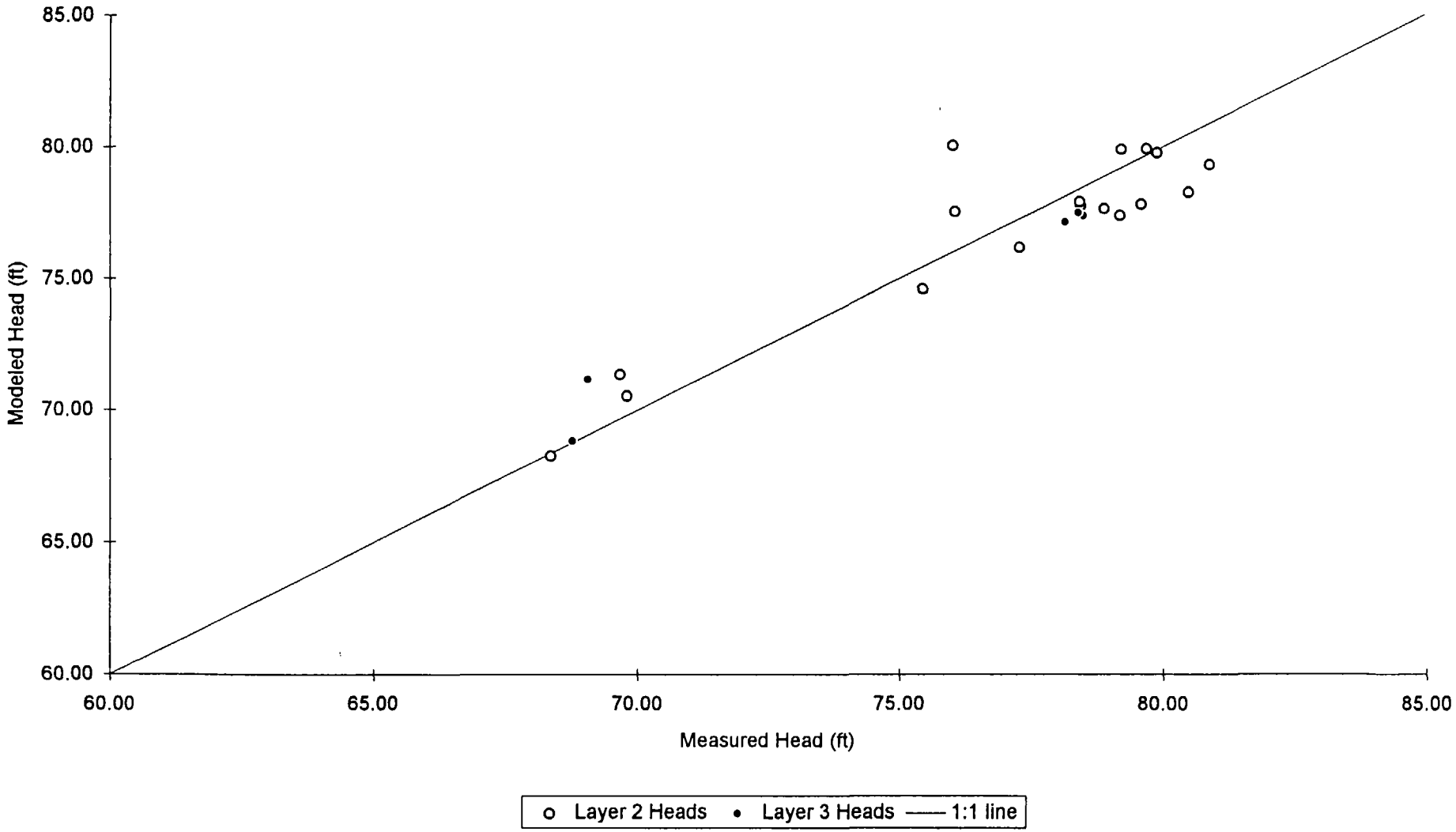
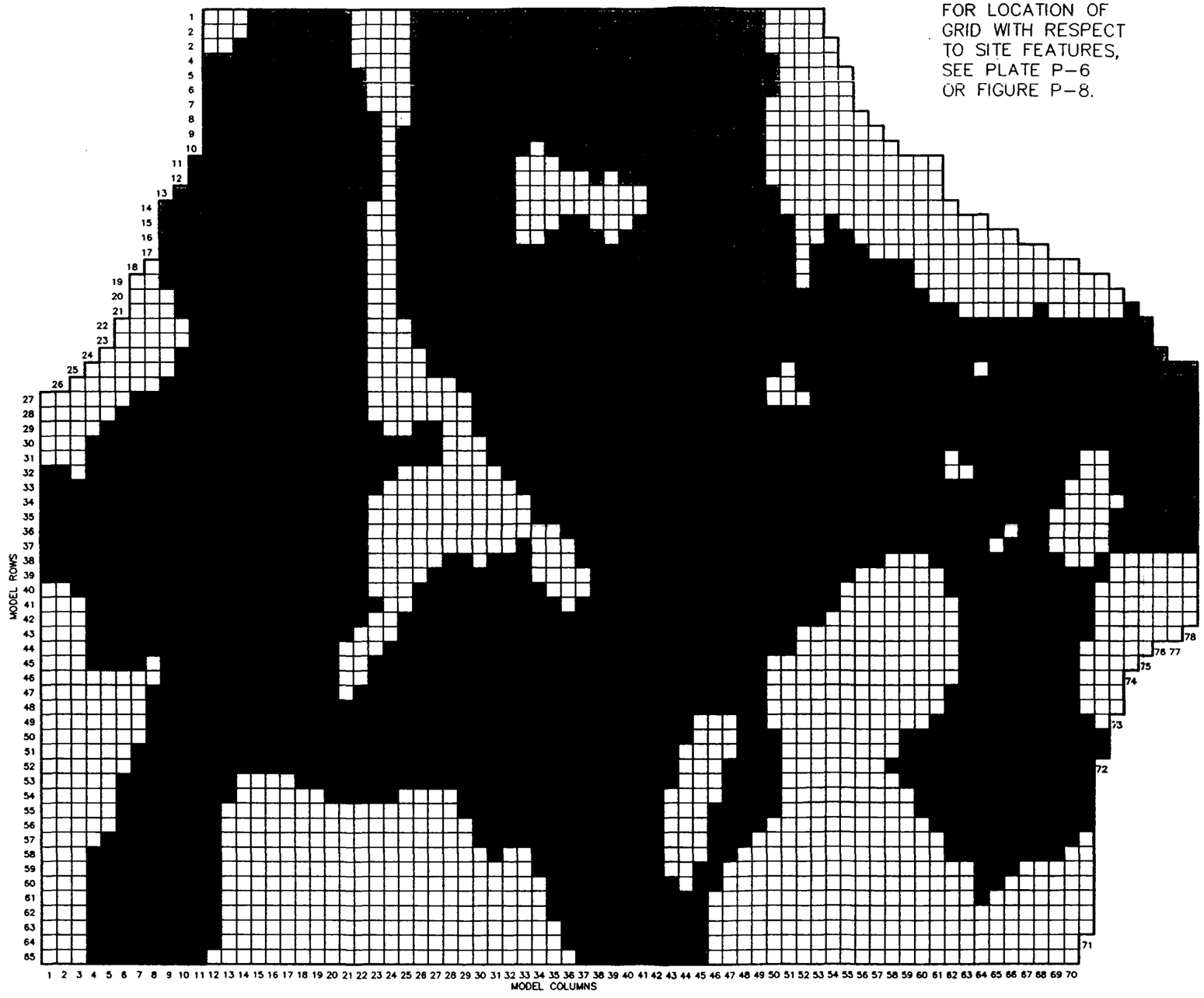


FIGURE P-18

Scatterplot: Modeled and Measured Heads
October 1995 - Layers 2 and 3 (RunT38)
Olin Corporation
Wilmington, MA Facility





NOTE:
FOR LOCATION OF GRID WITH RESPECT TO SITE FEATURES, SEE PLATE P-6 OR FIGURE P-8.

LEGEND

- NO FLOW CELL IN LAYER 1
- K=150 FT/DAY IN LAYER 1
- K=10 FT/DAY IN LAYER 1
- K=1 FT/DAY IN LAYER 1

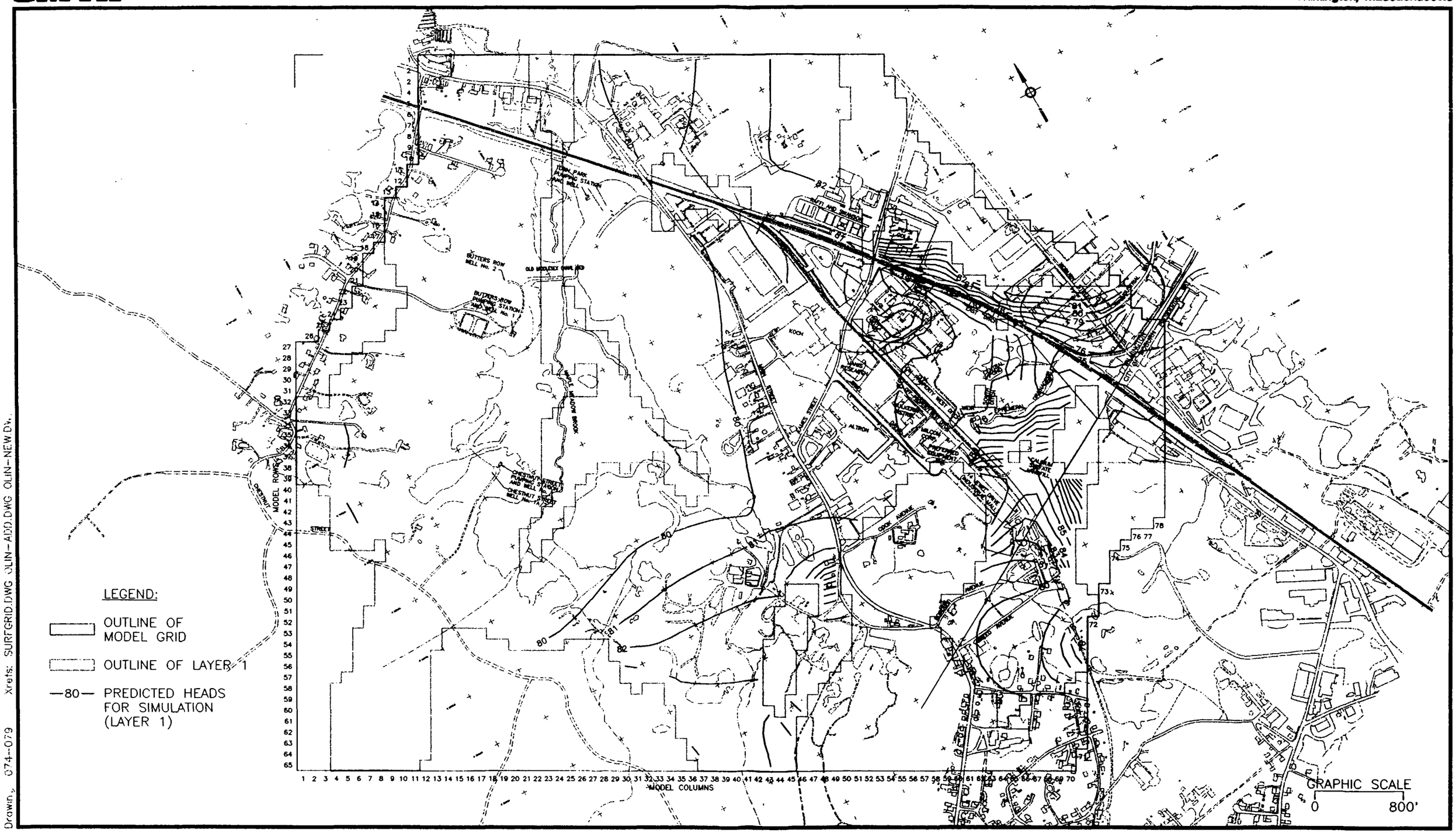
ALL ACTIVE CELLS IN LAYERS 2 & 3 HAVE K=150 FT/DAY

GRAPHIC SCALE
0 800'

Drawn: 074-064 Xrefs: SURFGRID.DWG

Project No. 00-7074-0106
June 20, 1997

Figure P-19
Hydraulic Conductivity in Layer 1



Drawn: 074-079 Xrefs: SURFGRID.DWG OLIN-ADD.DWG OLIN-NEW.DWG

Figure P-20
Simulation with No Well Package

FIGURE P-21

Mean Absolute Residual Error for April 1996 Sensitivity Analyses

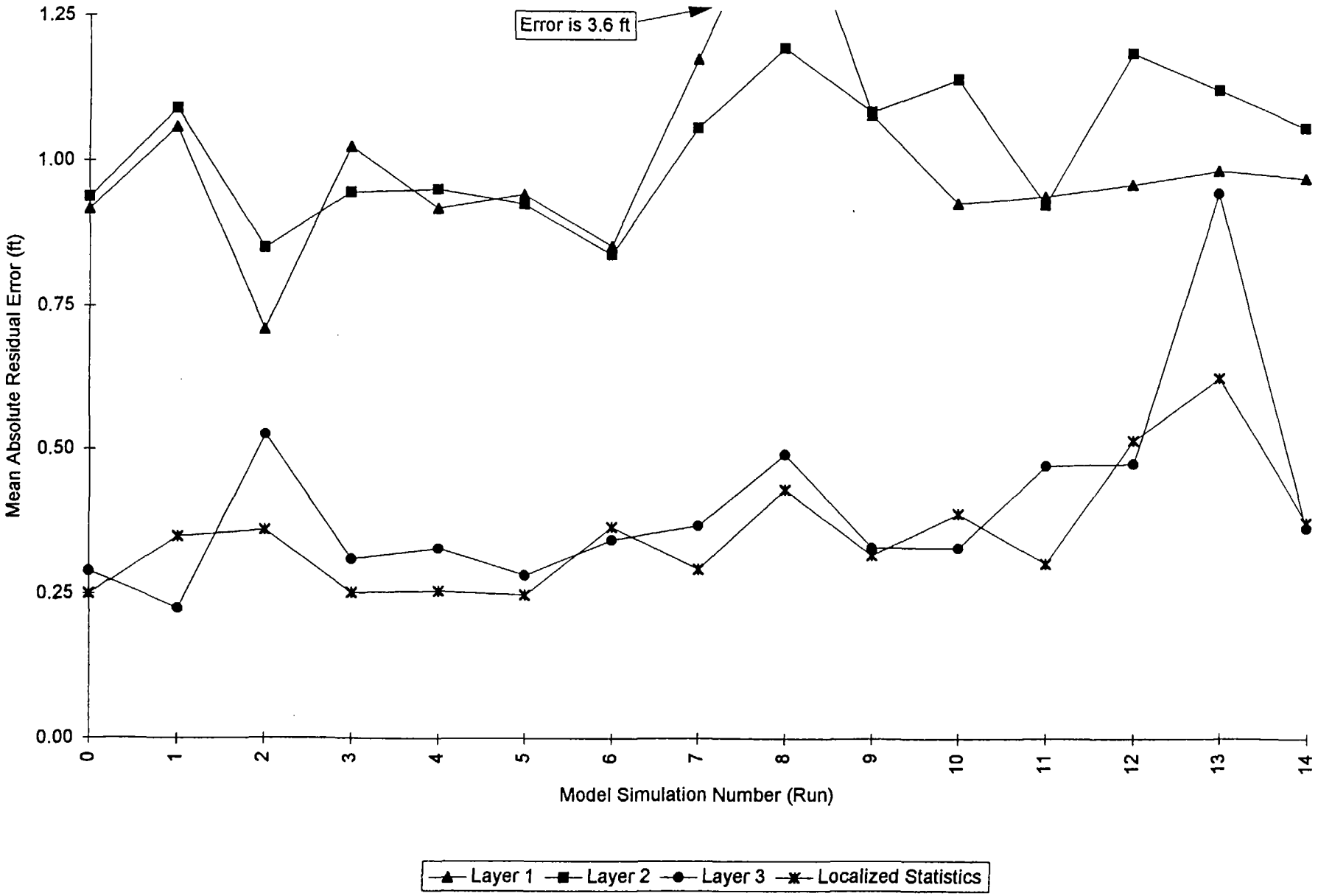
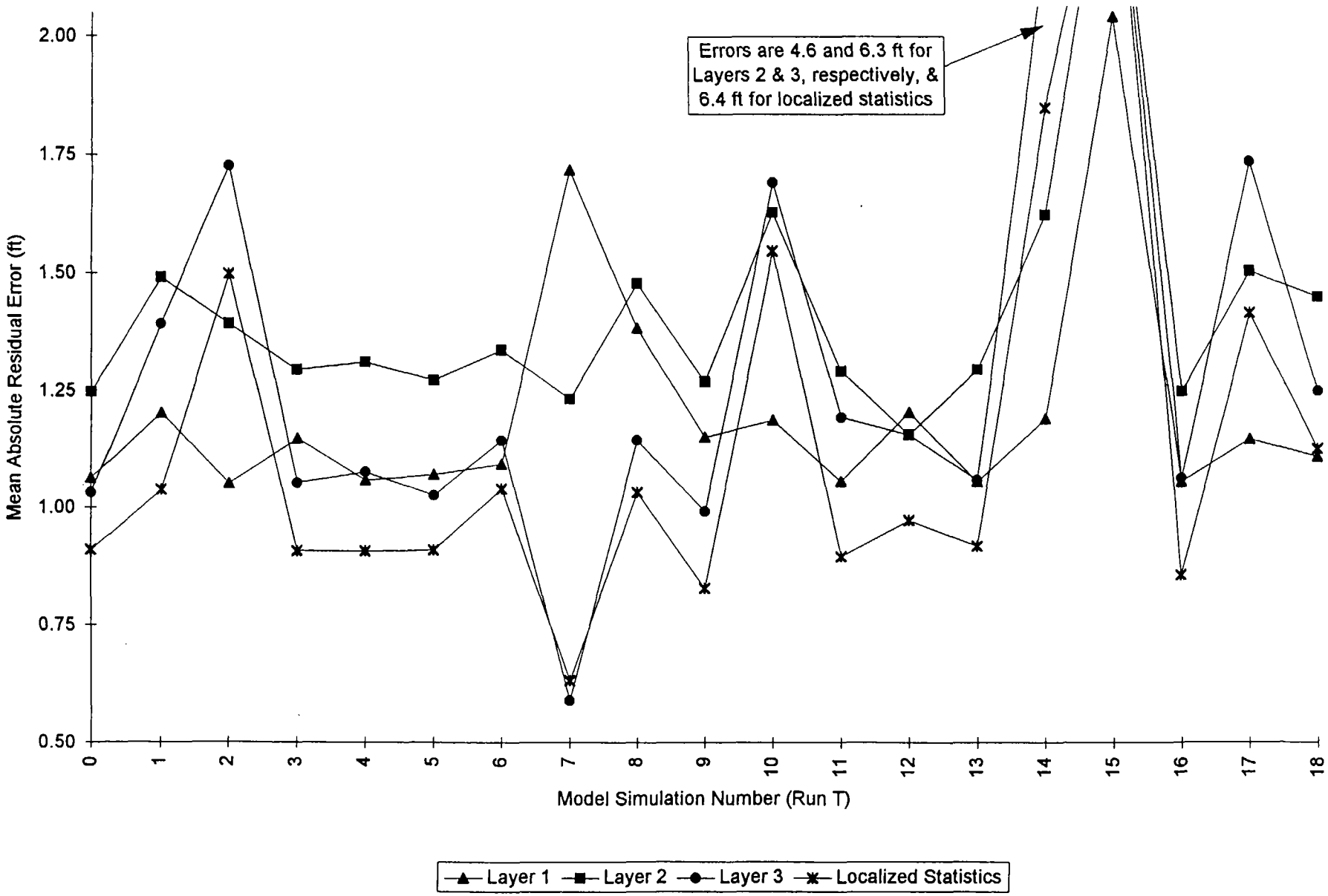
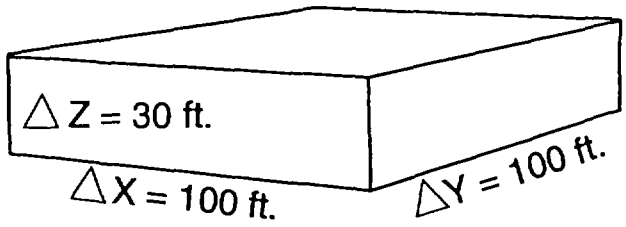


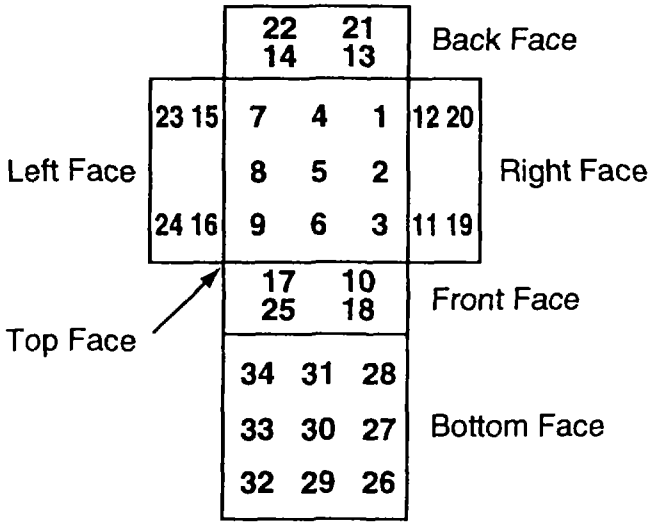
FIGURE P-22

Mean Absolute Residual Error for October 1995 Sensitivity Analyses





Finite Difference Cell
Containing Municipal Supply Well



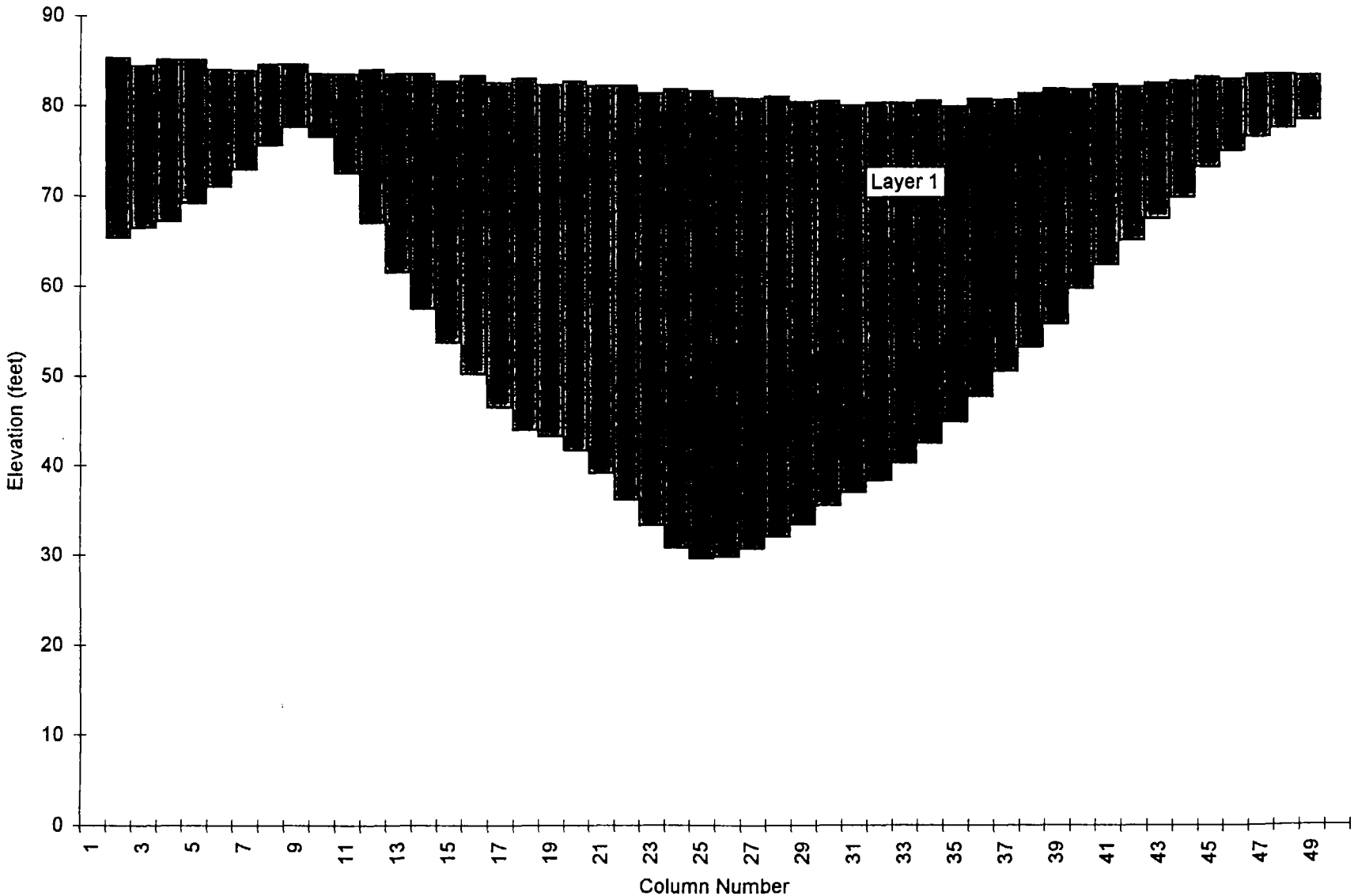
Initial Particle Locations, Butters Row No. 1
Chestnut St. No. 1 Particle Numbers 35-68
in same arrangement as above

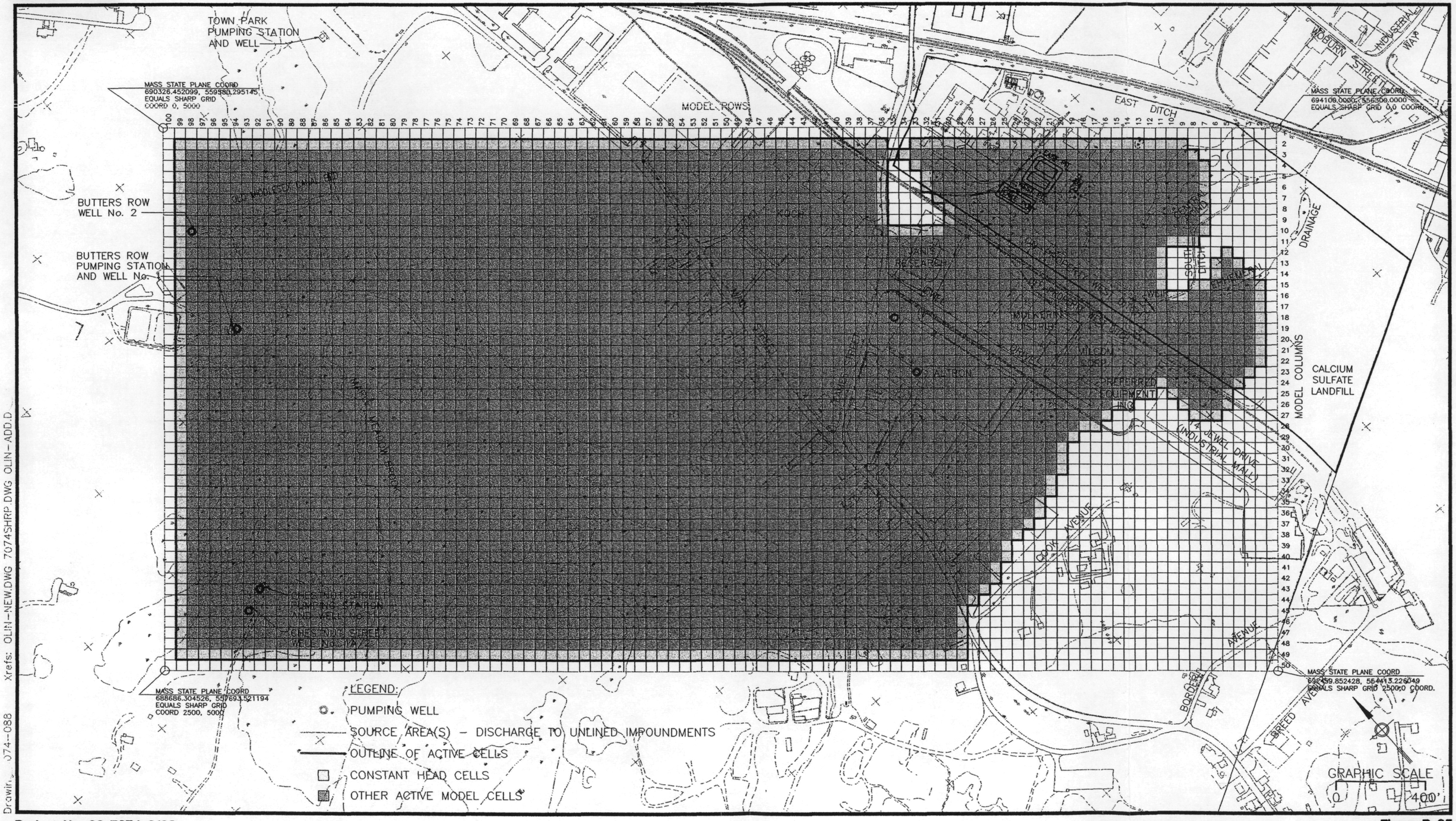
Surface Area for Flow Lines:
Top and Bottom Faces: 1111.1 Square Feet
Side Faces: 750 Square Feet

Figure P-23
Initial Particle Locations

FIGURE P-24

Vertical Cross-Section along Row 30
Sharp-Interface Modeling
Olin Corporation, Wilmington, MA Facility

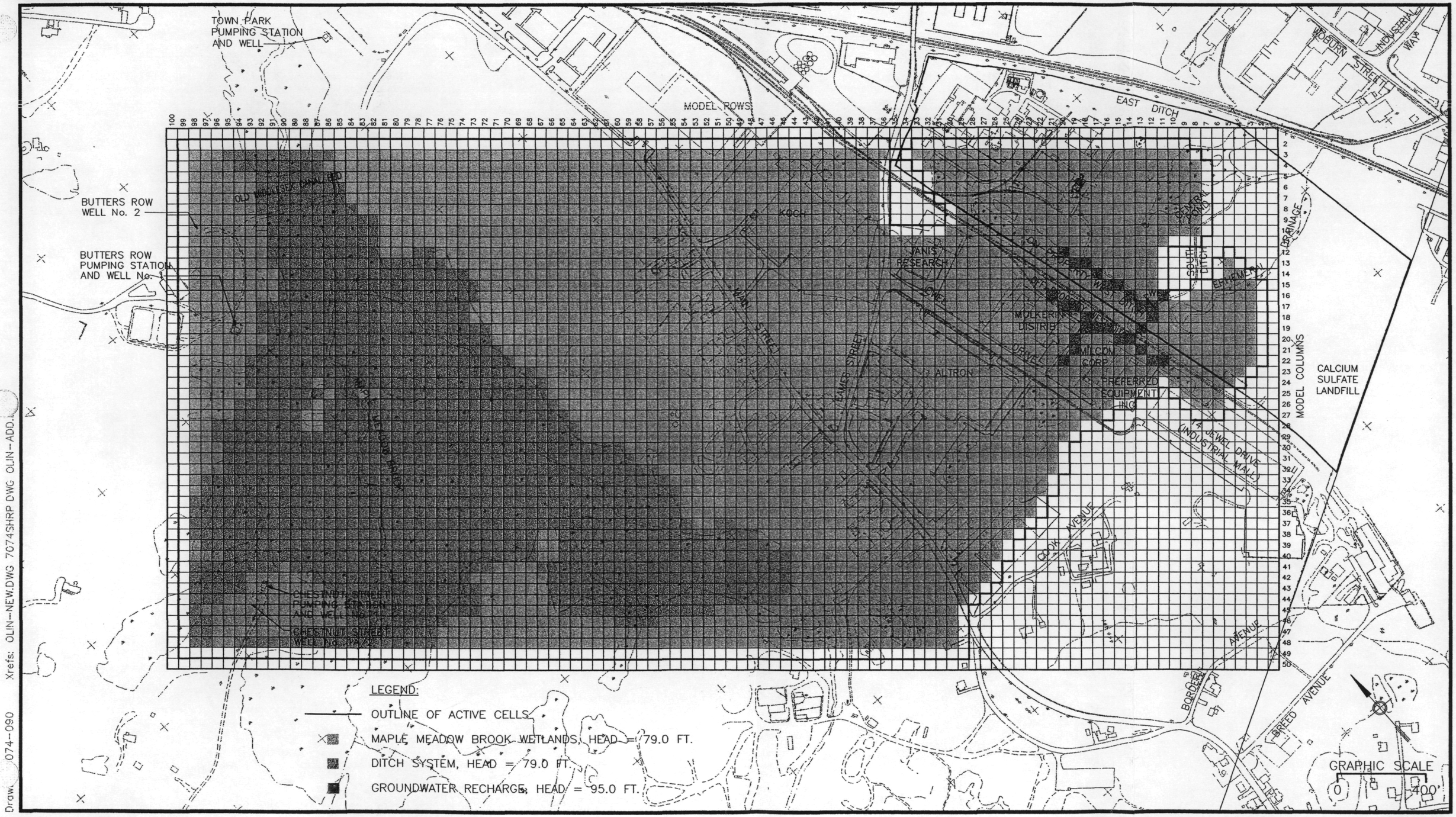




Drawing 074--088 Xrefs: OLIN-NEW.DWG 7074SHRP.DWG OLIN-ADD.D

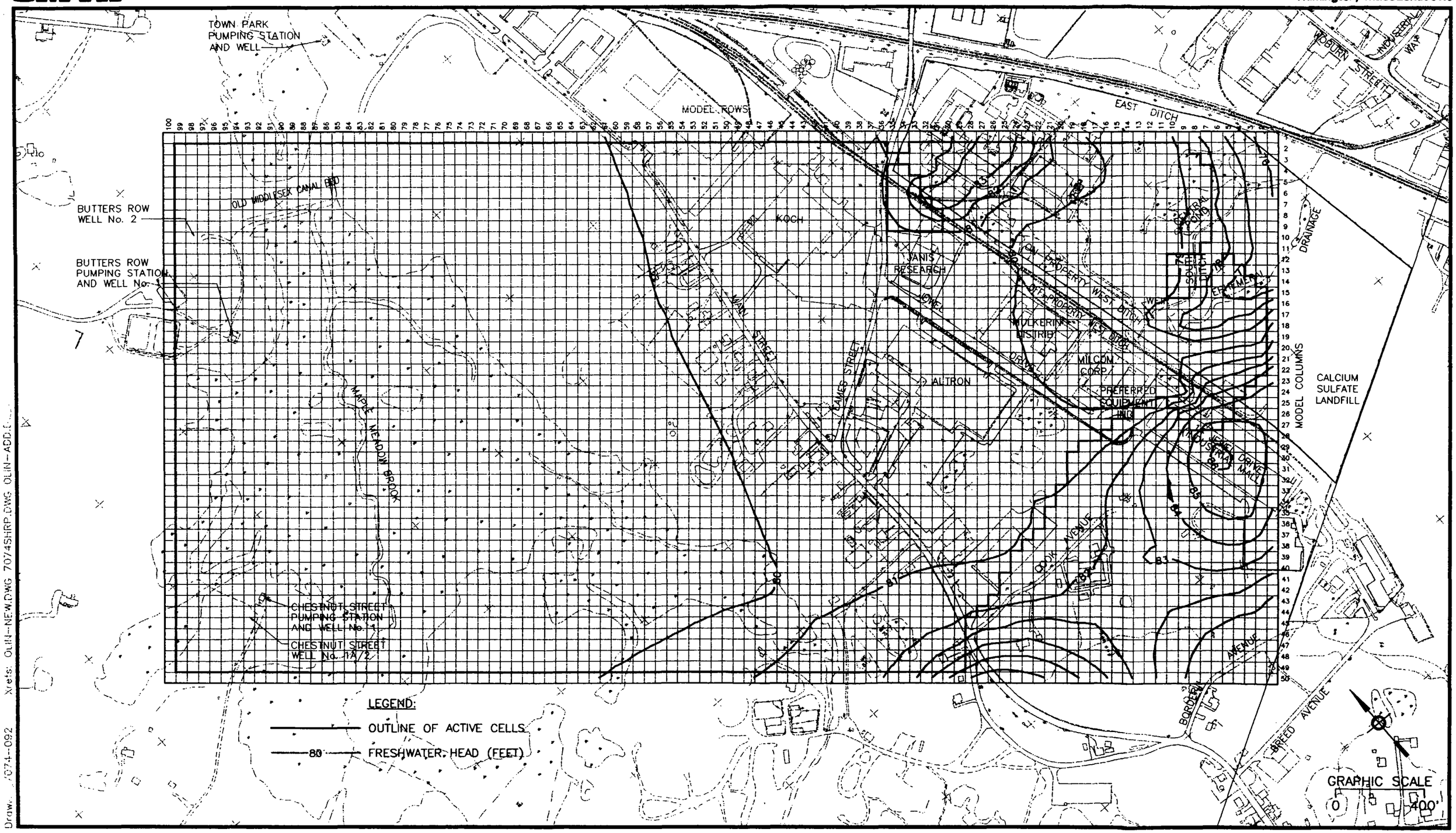
Project No. 00-7074-0106
June 20, 1997

Figure P-25
Boundary Conditions, Sharp-Interface Modeling



Draw: 074-090 Xrefs: OLIN-NEW.DWG 7074SHRP.DWG OLIN-ADD.

Figure P-26
Boundary Conditions Represented as Leakage from Above, Sharp-Interface Modeling

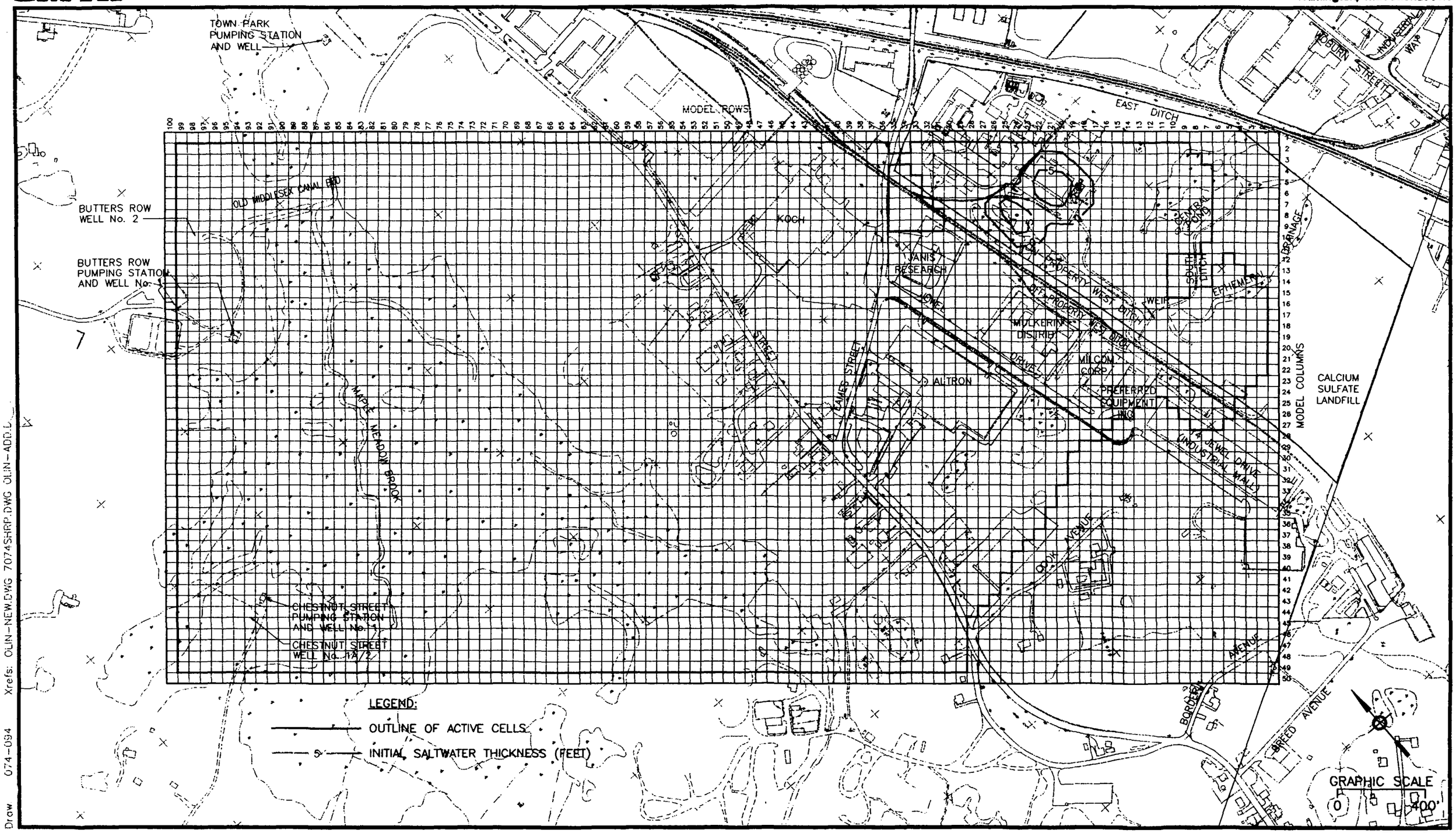


Project No. 00-7074-0106
June 20, 1997

Figure P-27
Initial Freshwater Heads, Sharp-Interface Modeling

SMITH TECHNOLOGY CORPORATION

Olin Corporation
Wilmington, Massachusetts



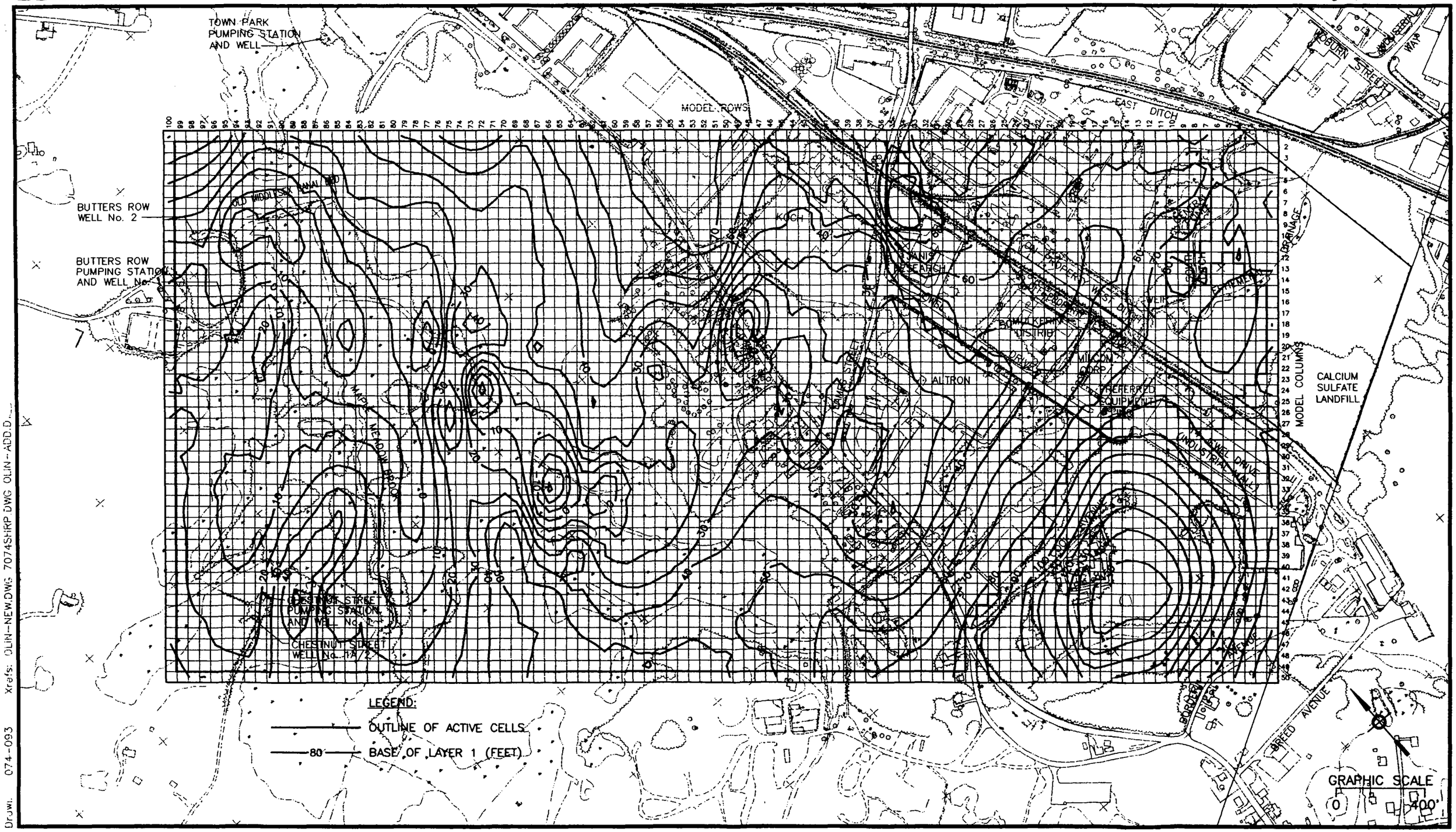
Draw. 074-094 Xrefs: OLIN-NEW.DWG 7074SHRP.DWG OLIN-ADD.D

Project No. 00-7074-0106
June 20, 1997

Figure P-28
Initial Thickness of Saltwater, Sharp-Interface Modeling

SMITH TECHNOLOGY CORPORATION

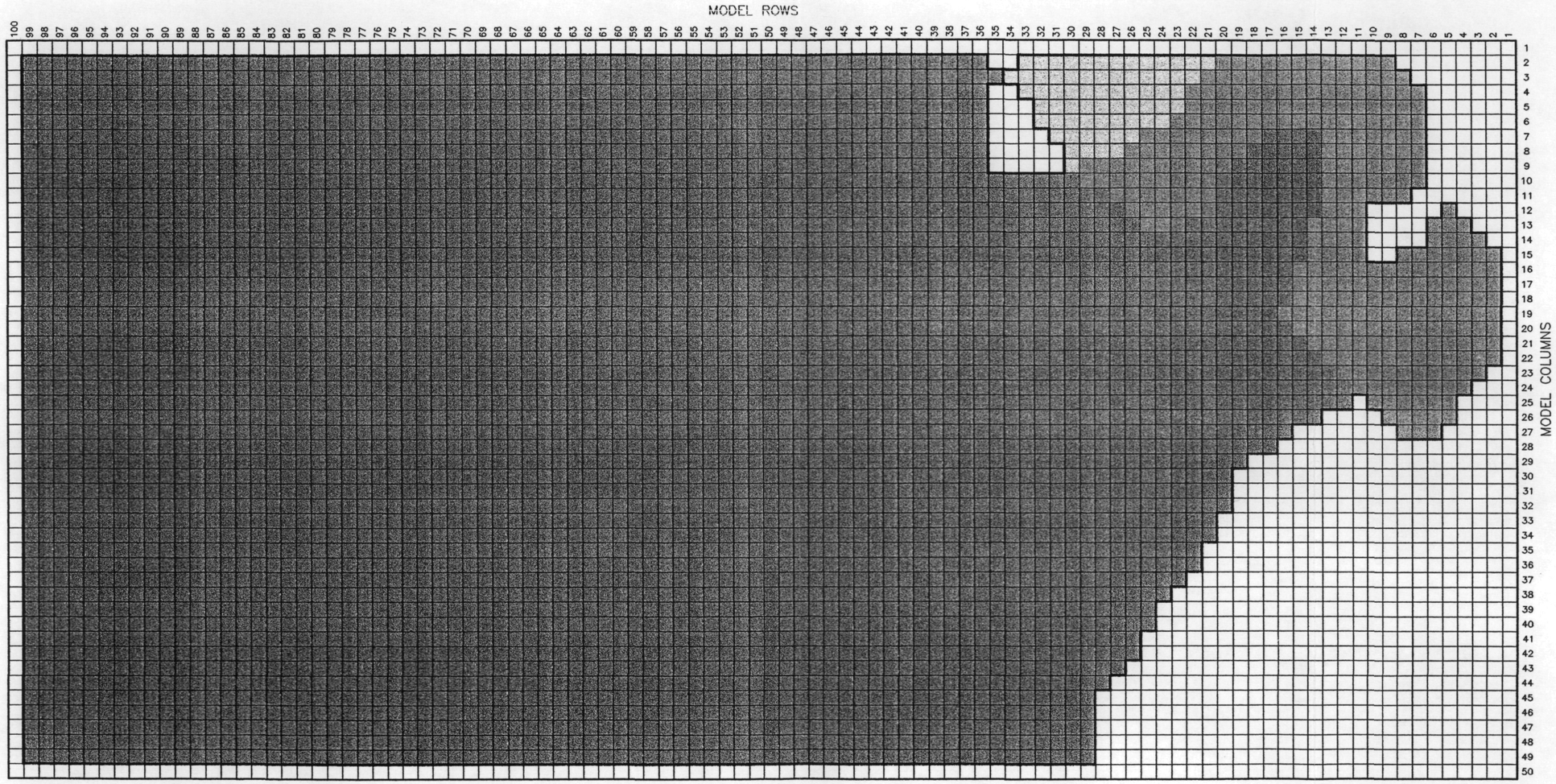
Olin Corporation
Wilmington, Massachusetts



Drawn: 074-093 Xrefs: OLIN-NEW.DWG; 7074SHRP.DWG OLIN-ADD.D...

Project No. 00-7074-0106
June 20, 1997

Figure P-29
Base of Layer 1, Sharp-Interface Modeling



LEGEND:

OUTLINE OF ACTIVE CELLS

HYDRAULIC CONDUCTIVITY:

- 1 FOOT/DAY
- 10 FEET/DAY
- 150 FEET/DAY

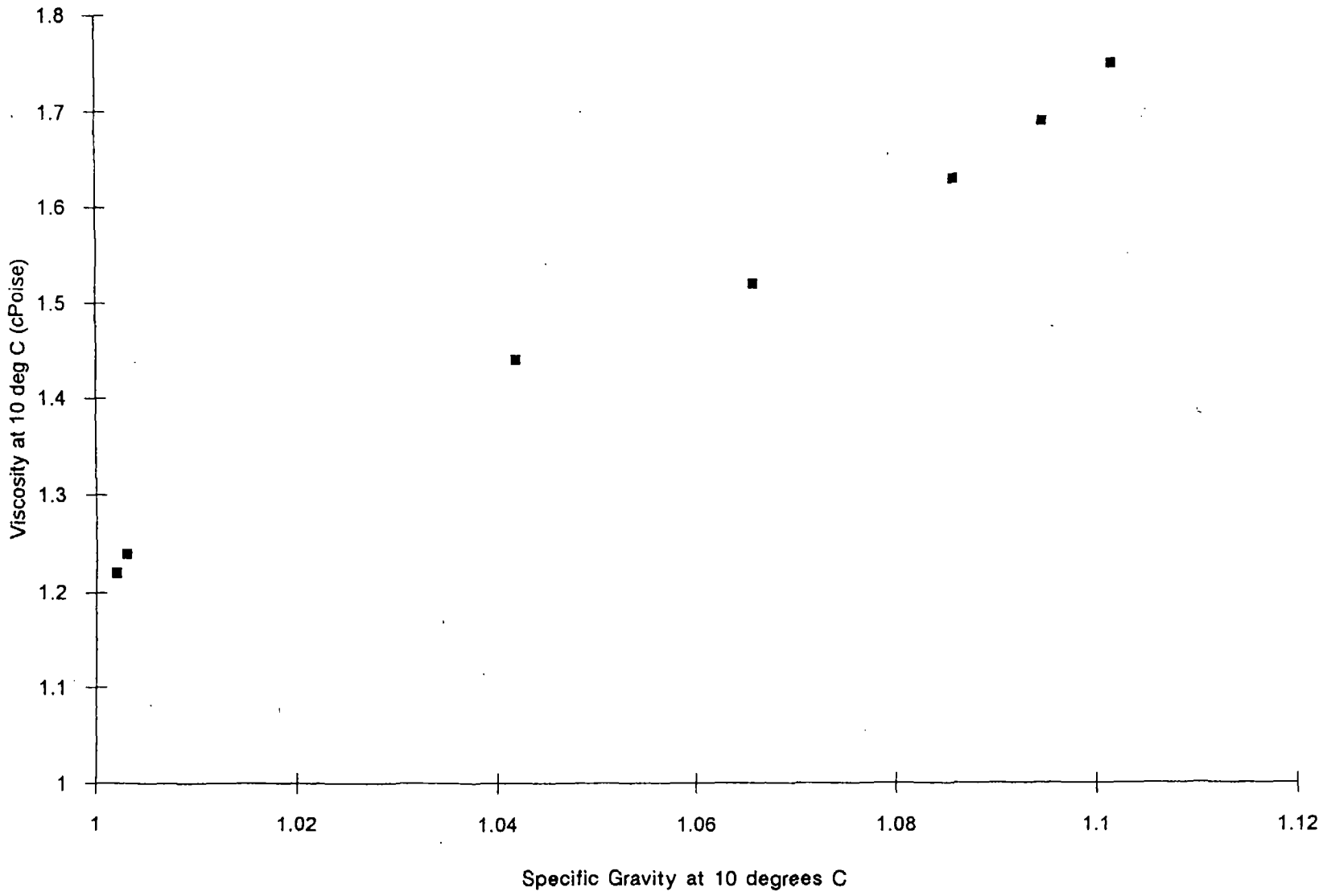
GRAPHIC SCALE
0 400'

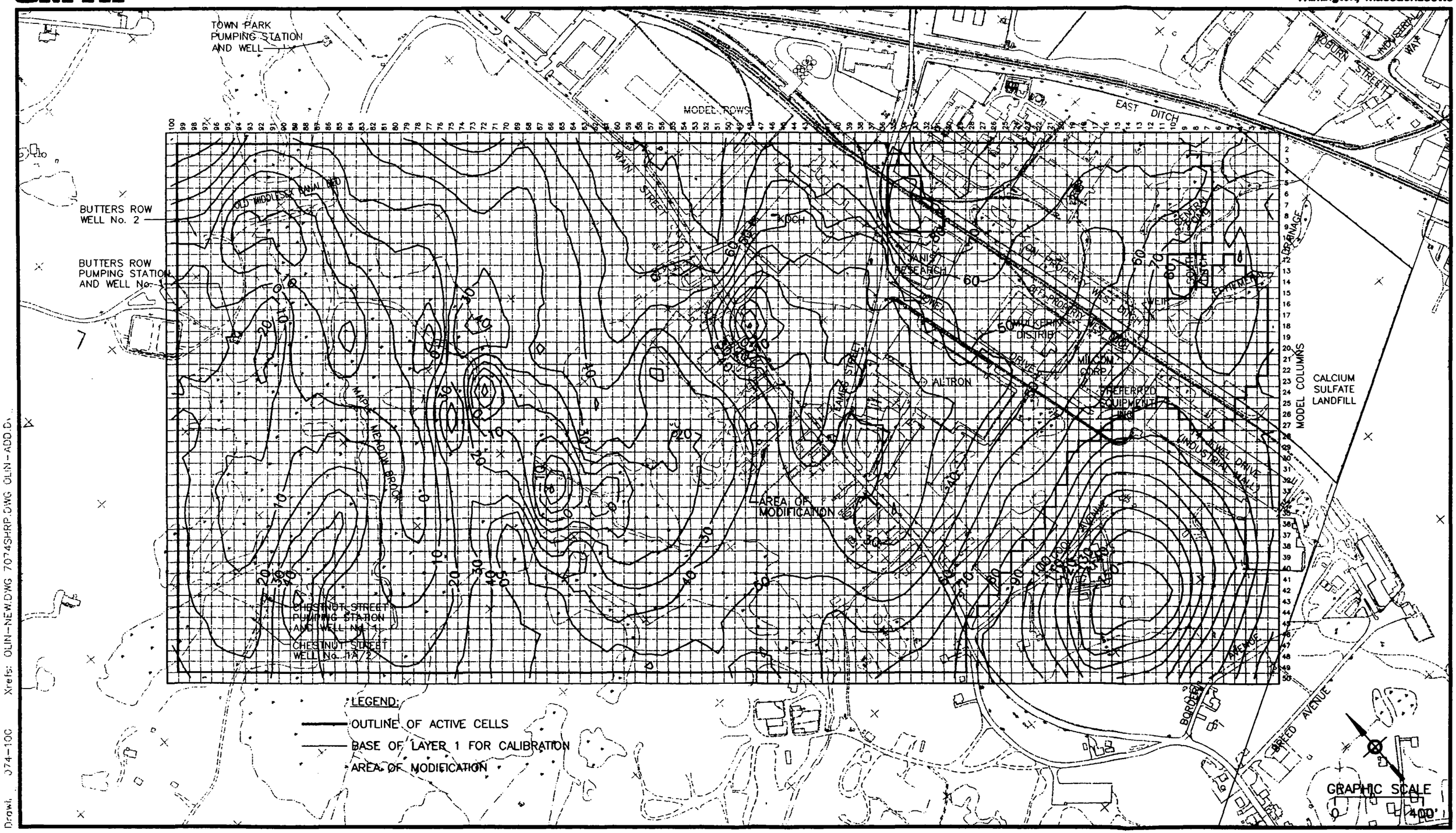
Drawn: 074-091 Xrefs: 7074SHRP.DWG

Figure P-30
Hydraulic Conductivity, Sharp-Interface Modeling

FIGURE P-31

Relationship Between Density and Viscosity
(as seen in April 1997 Data)
Olin Corporation: Wilmington, MA Facility




TOWN PARK PUMPING STATION AND WELL
MODEL ROWS
EAST DITCH
WOBURN STREET
BUTTERS ROW WELL No. 2
BUTTERS ROW PUMPING STATION AND WELL No. 1
OLD MIDDLESEX CANAL BED
MAIN STREET
DITCH
JANIS RESEARCH
POWER
ALTRON
LAMB STREET
MULKERIN DISTRIB
DRIVE
MILCON CORP
PREFERRED EQUIPMENT INC
WEIR
DRAINAGE
CALCIUM SULFATE LANDFILL
MODEL COLUMNS
MAPLE MEADOW BROOK
AREA OF MODIFICATION
CHESTNUT STREET PUMPING STATION AND WELL No. 1
CHESTNUT STREET WELL No. 1A/2
BORDEN AVENUE
BRIED AVENUE
GRAPHIC SCALE
400'
LEGEND:
OUTLINE OF ACTIVE CELLS
BASE OF LAYER 1 FOR CALIBRATION
AREA OF MODIFICATION

SMITH TECHNOLOGY CORPORATION

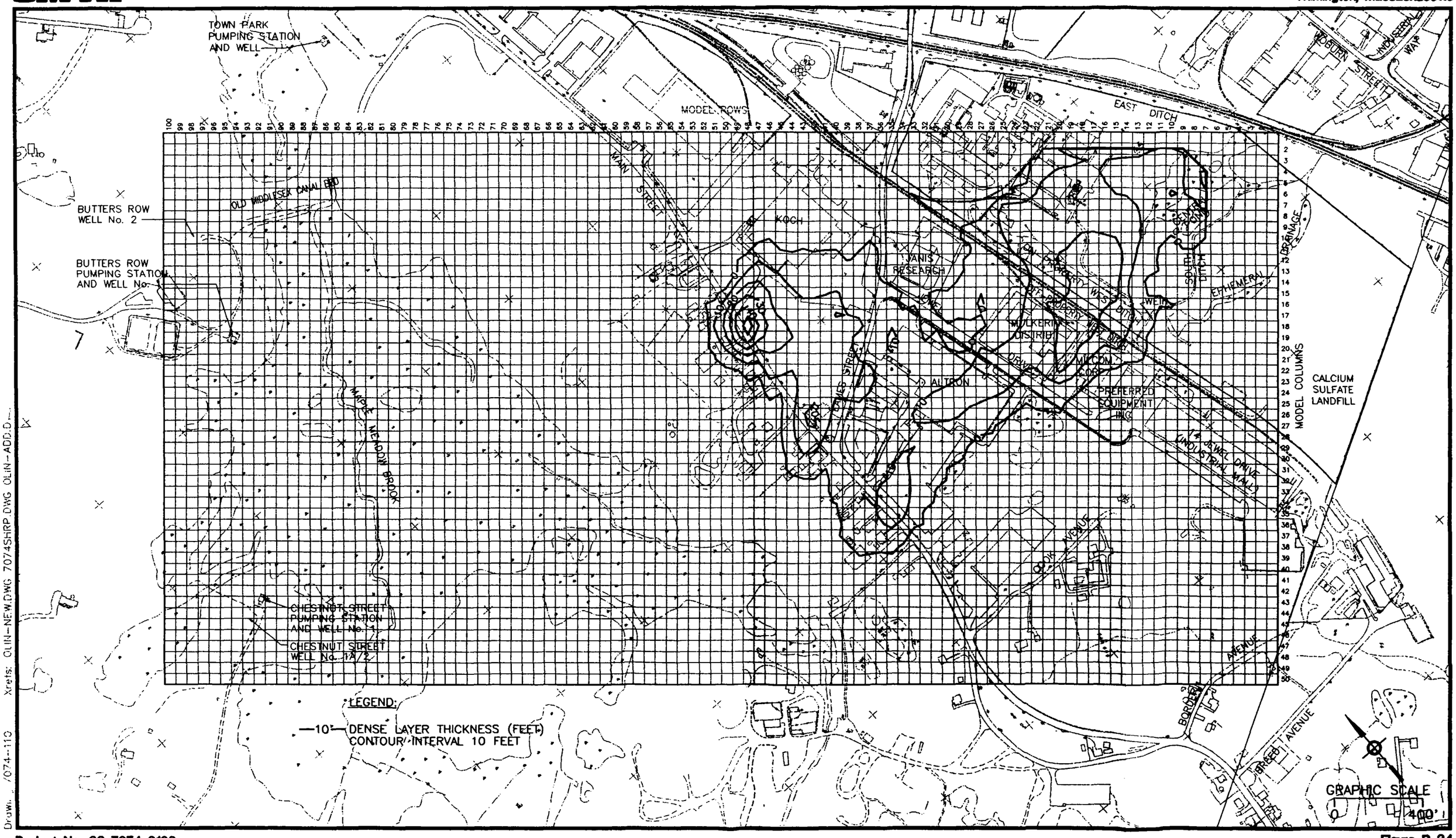
Olin Corporation
Wilmington, Massachusetts

Project No. 00-7074-0106
June 20, 1997

Figure P-33
Predicted Dense Layer Thickness, 1955

SMITH TECHNOLOGY CORPORATION

Olin Corporation
Wilmington, Massachusetts

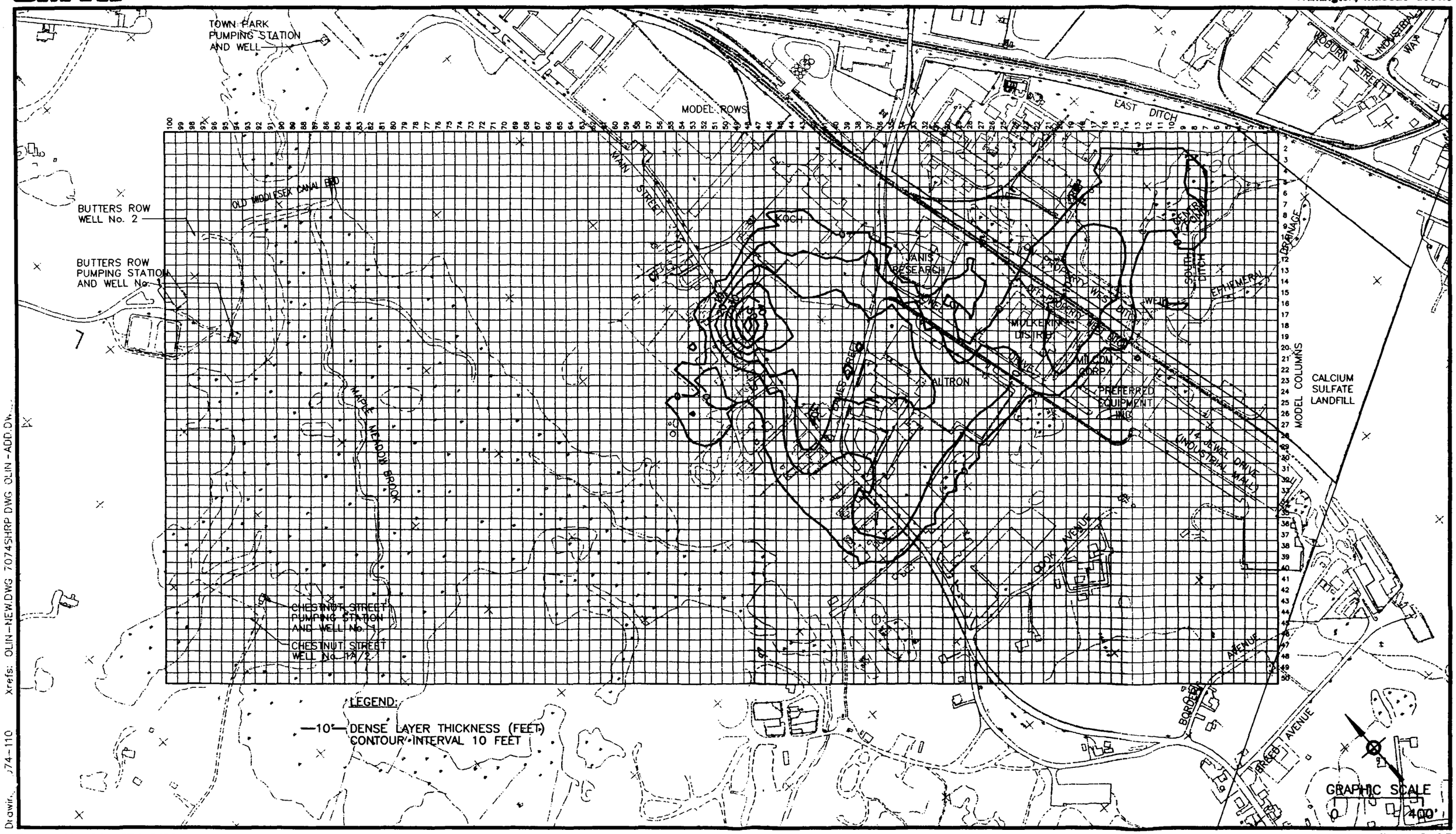


Project No. 00-7074-0106
June 20, 1997

Figure P-34
Predicted Dense Layer Thickness, 1965

SMITH TECHNOLOGY CORPORATION

Olin Corporation
Wilmington, Massachusetts



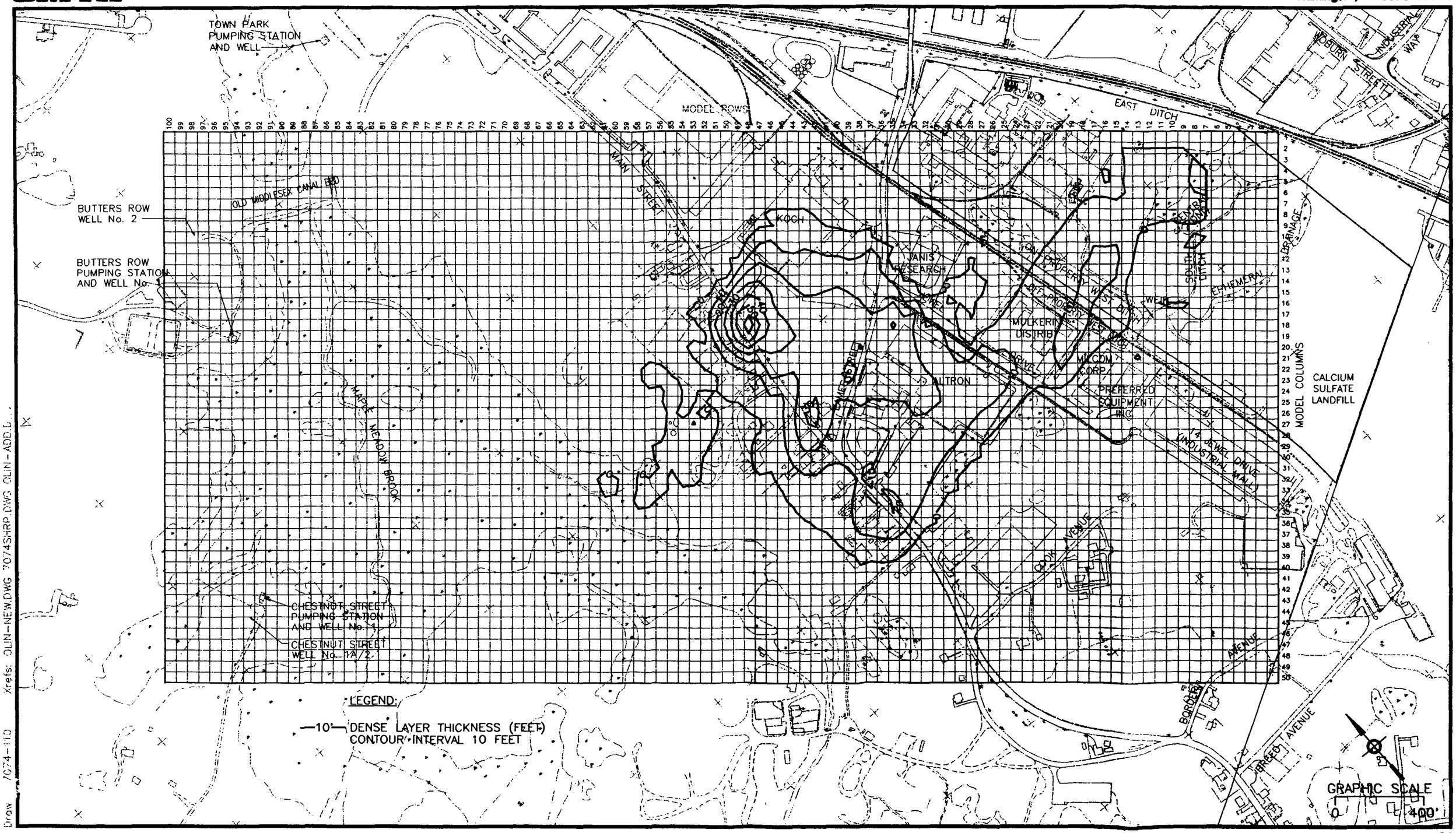
Project No. 00-7074-0106
June 20, 1997

Figure P-35
Predicted Dense Layer Thickness, 1976

Drawing: 74-110 Xrefs: OLIN-NEW.DWG 7074SHRP.DWG OLIN-ADD.DWG

SMITH TECHNOLOGY CORPORATION

Olin Corporation
Wilmington, Massachusetts



Project No. 00-7074-0106
June 20, 1997

Figure P-36
Predicted Dense Layer Thickness, 1986

Drawn 7074-110 Xrefs: OLIN-NEW.DWG 7074SHRP.DWG OLIN-ADD.D...

Attachments

SMITH

SMITH

ATTACHMENT A

CONSTANT-DENSITY FLOW MODELING OUTPUT, APRIL/MAY 1996

```
    MODFLOW/EM version 3.1 -- Serial Number SER04129
 LICENSED TO - Elizabeth Perry, BCM Engrs, Plymouth Meeting, PA
 The File-Name input unit is 99
 ssfile.dat has been opened on unit 99
 The listing file output unit is 40
 run68.out has been opened on unit 40
 The Basic Package input unit is 19
 bas68a.dat has been opened on unit 19
 bcf-ss.dat has been opened on unit 20
 welss.dat has been opened on unit 21
 drn4.dat has been opened on unit 22
 riv496.dat has been opened on unit 23
 ghb75.dat has been opened on unit 26
 rech20.dat has been opened on unit 27
 sip.dat has been opened on unit 28
 oc-ss.dat has been opened on unit 31
 cbc68.out has been opened unformatted on unit 41
 head68.out has been opened unformatted on unit 42
1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0OLIN, WILMINGTON, MA   BASIN-SCALE 3D GROUNDWATER FLOW MODELING                APRIL, STEADY STATE
    3 LAYERS        65 ROWS        78 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS DAYS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT: 20 21 22 23  0  0 26 27 28  0  0 31  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 19
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL NOT BE SAVED -- DRAWDOWN CANNOT BE CALCULATED
   131975 ELEMENTS IN X ARRAY ARE USED BY BAS
   131975 ELEMENTS OF X ARRAY USED OUT OF 3000000
0BCF2 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 2, 7/1/91 INPUT READ FROM UNIT 20
 STEADY-STATE SIMULATION
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
 HEAD AT CELLS THAT CONVERT TO DRY=   100.00
 WETTING CAPABILITY IS NOT ACTIVE
      LAYER  AQUIFER TYPE
      -------------------
         1         3
         2         3
         3         3
    45633 ELEMENTS IN X ARRAY ARE USED BY BCF
   177608 ELEMENTS OF X ARRAY USED OUT OF 3000000
0WEL1 -- WELL PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM 21
 MAXIMUM OF   22 WELLS
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
       88 ELEMENTS IN X ARRAY ARE USED FOR WELLS
   177696 ELEMENTS OF X ARRAY USED OUT OF 3000000
0DRN1 -- DRAIN PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 22
 MAXIMUM OF   58 DRAINS
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
      290 ELEMENTS IN X ARRAY ARE USED FOR DRAINS
   177986 ELEMENTS OF X ARRAY USED OUT OF 3000000
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 27
 OPTION 1 -- RECHARGE TO TOP LAYER
 CELL-BY-CELL FLOW TERMS WILL BE RECORDED ON UNIT 41
     5070 ELEMENTS OF X ARRAY USED FOR RECHARGE
   183056 ELEMENTS OF X ARRAY USED OUT OF 3000000
0RIV1 -- RIVER PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 23
 MAXIMUM OF   40 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
      240 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
   183296 ELEMENTS OF X ARRAY USED OUT OF 3000000
0GHB1 -- GHB PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 26
 MAXIMUM OF  428 HEAD-DEPENDENT BOUNDARY NODES
 CELL-BY-CELL FLOW WILL BE RECORDED ON UNIT 41
     2140 ELEMENTS IN X ARRAY ARE USED FOR HEAD-DEPENDENT BOUNDARIES
   185436 ELEMENTS OF X ARRAY USED OUT OF 3000000
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 28
 MAXIMUM OF 300 ITERATIONS ALLOWED FOR CLOSURE
  3 ITERATION PARAMETERS
    62043 ELEMENTS IN X ARRAY ARE USED BY SIP
   247479 ELEMENTS OF X ARRAY USED OUT OF 3000000
1OLIN, WILMINGTON, MA   BASIN-SCALE 3D GROUNDWATER FLOW MODELING                APRIL, STEADY STATE
0
```

BOUNDARY ARRAY FOR LAYER 1 WILL BE READ ON UNIT 19 USING FORMAT: (40I2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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0 23	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0		
0 24	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0		
0 25	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 26	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 27	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 28	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 29	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 30	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 31	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1		
0 32	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1		
0 33	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1		
0 34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

```
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1
0 35    1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1
0 36    1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  1  1  0  0  0  0  1  1  1  1  1  1
0 37    1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  1  1  1  0  0  0  0  1  1  1  1  1  1
0 38    1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  1  1  0  1  1  1  0  0  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  0  0  1  0  0  0  0  0  0
0 39    1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  0  0  0  0  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 40    0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0
0 41    0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  0  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 42    0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 43    0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 44    0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 45    0  0  0  1  1  1  1  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 46    0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 47    0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 48    0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 49    0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 50    0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 51    0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 52    0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 53    0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 54    0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  0  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  -1 0  0  0  0  0  0  0  0
0 55    0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1
        1  1  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 56    0  0  0  0  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1
        1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 57    0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1
        1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0
0 58    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1  1  1  1  1
        1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0
0 59    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
        1  1  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0
0 60    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1
        1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 61    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
        1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 62    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
        1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 63    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
        1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 64    0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
        1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 65    0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1
        1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0
```

BOUNDARY ARRAY FOR LAYER 2 WILL BE READ ON UNIT 19 USING FORMAT: (40I2)

```
        1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
       41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78
0 1     0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  0  0  0
        0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 2     0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  0  0
```

	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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BOUNDARY ARRAY FOR LAYER 3 WILL BE READ ON UNIT 19 USING FORMAT: (40I2)

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       0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 5    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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0 7    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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0 61    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 62    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 63    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 64    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 65    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
        0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0AQUIFER HEAD WILL BE SET TO -9999.0     AT ALL NO-FLOW NODES (IBOUND=0).
0
```

INITIAL HEAD FOR LAYER 1 WILL BE READ ON UNIT 19 USING FORMAT: (15F8.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.4	80.3	80.3	80.3	80.3	80.3
	80.3	0.0	0.0	0.0	0.0	80.8	80.8	80.9	81.0	81.1	81.2	81.3	81.5	81.6	81.8	81.9	82.1	82.3	82.4	82.6
	82.8	83.0	83.2	83.4	83.6	83.7	83.9	84.1	84.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.3	80.3	80.3	80.3	80.3	80.3
	80.3	0.0	0.0	0.0	0.0	80.8	80.8	80.9	81.0	81.1	81.2	81.3	81.5	81.6	81.8	81.9	82.1	82.3	82.4	82.6
	82.8	83.0	83.2	83.4	83.6	83.7	83.9	84.0	84.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.2	80.2	80.2	80.2	80.2	80.3
	80.3	0.0	0.0	0.0	0.0	80.7	80.8	80.9	81.0	81.1	81.2	81.3	81.5	81.6	81.8	81.9	82.1	82.3	82.4	82.6
	82.8	83.0	83.2	83.4	83.6	83.7	83.9	84.0	84.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	80.1	80.1	80.1	80.2	80.2	80.2	80.2
	80.3	0.0	0.0	0.0	0.0	80.7	80.7	80.8	80.9	81.0	81.1	81.3	81.5	81.6	81.8	82.0	82.1	82.3	82.4	82.6
	82.8	83.0	83.2	83.4	83.5	83.7	83.8	84.0	84.2	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.2
	80.2	90.0	0.0	0.0	0.0	80.6	80.6	80.7	80.8	80.9	81.1	81.3	81.4	81.6	81.8	82.0	82.1	82.3	82.4	82.6
	82.8	83.0	83.2	83.3	83.5	83.7	83.8	84.0	84.1	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.8	79.8	79.9	79.9	79.9	80.0	80.0	80.1	80.1
	80.1	80.2	0.0	0.0	0.0	80.5	80.5	80.6	80.7	80.8	81.0	81.2	81.4	81.6	81.8	82.0	82.2	82.3	82.5	82.7

	82.8	83.0	83.2	83.3	83.5	83.6	83.8	83.9	84.1	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.7	79.7	79.7	79.8	79.8	79.9	79.9	80.0	80.0
	80.1	80.1	0.0	0.0	0.0	80.3	80.4	80.5	80.6	80.7	80.9	81.1	81.4	81.6	81.8	82.0	82.2	82.4	82.5	82.7
	82.8	83.0	83.2	83.3	83.5	83.6	83.7	83.9	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.5	79.6	79.6	79.7	79.7	79.8	79.8	79.9	79.9
	80.0	80.1	80.1	0.0	0.0	80.2	80.2	80.3	80.4	80.5	80.8	81.0	81.3	81.6	81.9	82.1	82.3	82.4	82.6	82.7
	82.9	83.0	83.2	83.3	83.4	83.5	83.7	83.8	83.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4	79.4	79.5	79.5	79.6	79.6	79.7	79.8	79.8
	79.9	79.9	80.0	0.0	90.0	80.0	80.0	80.1	80.2	80.3	80.6	80.9	81.3	81.6	81.9	82.2	82.4	82.5	82.6	82.8
	82.9	83.0	83.2	83.3	83.4	83.5	83.6	83.7	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.3	79.3	79.3	79.4	79.4	79.5	79.6	79.6	79.7
	79.7	79.8	79.9	0.0	90.0	79.7	79.7	79.8	79.9	80.1	80.3	80.8	81.2	0.0	82.3	82.3	82.5	82.6	82.7	82.8
	82.9	83.0	83.1	83.2	83.3	83.3	83.4	83.6	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	79.1	79.1	79.2	79.2	79.3	79.3	79.4	79.4	79.5
	79.6	79.7	79.8	0.0	90.0	79.4	79.4	79.5	79.6	79.8	80.0	90.0	0.0	0.0	0.0	90.0	82.6	82.7	82.8	82.9
	83.0	83.0	83.0	83.1	83.1	83.2	83.3	83.4	83.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.9	78.9	78.9	79.0	79.0	79.1	79.1	79.2	79.3	79.4
	79.4	79.5	90.0	0.0	90.0	79.1	79.0	79.2	79.3	79.5	79.7	90.0	0.0	0.0	0.0	0.0	0.0	90.0	0.0	83.0
	83.0	82.9	82.9	82.9	82.9	83.0	83.1	83.2	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.9	79.0	79.1	79.2
	79.3	79.4	90.0	0.0	79.3	78.9	78.6	78.9	79.1	79.3	79.5	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.6	82.6	82.6	82.7	82.7	82.8	82.9	83.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.7	78.9	79.0
	79.2	79.3	0.0	0.0	79.3	79.1	78.9	79.0	79.2	79.3	79.4	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.1	82.2	82.3	82.3	82.4	82.5	82.6	82.8	82.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.5	78.5	78.4	78.4	78.4	78.3	78.3	78.3	78.3	78.4	78.6	78.8
	79.0	79.4	0.0	0.0	90.0	79.6	79.2	79.2	79.3	79.4	79.5	90.0	0.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0
	90.0	81.3	81.7	81.8	81.9	82.1	82.2	82.3	82.4	82.6	82.8	0.0	0.0	96.2	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	78.4	78.3	78.2	78.2	78.1	78.1	78.0	78.0	78.0	78.2	78.4
	78.8	79.3	0.0	0.0	90.0	79.6	79.3	79.3	79.4	79.5	79.6	80.3	0.0	0.0	90.0	80.9	80.9	90.0	0.0	90.0
	82.1	81.6	81.1	81.3	81.5	81.7	81.8	81.9	82.1	82.3	82.6	0.0	0.0	93.9	93.3	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	78.3	78.2	78.1	78.0	77.9	77.8	77.6	77.5	77.5	77.7	78.0
	78.4	79.1	0.0	0.0	90.0	79.4	79.3	79.4	79.4	79.6	79.7	79.9	90.0	80.7	80.7	80.8	80.8	80.9	81.4	90.0
	90.0	81.6	81.4	81.4	81.4	81.4	81.4	81.5	81.7	81.9	82.2	0.0	90.3	90.9	90.8	90.4	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	78.2	78.1	77.9	77.8	77.6	77.5	77.3	77.1	77.0	77.1	77.4
	78.0	79.0	0.0	0.0	90.0	79.3	79.3	79.4	79.5	79.6	79.8	80.0	80.3	80.5	80.6	80.7	80.8	80.9	81.1	81.3
	81.5	81.6	81.5	81.5	81.5	81.5	81.5	81.5	81.3	81.4	81.9	0.0	87.3	87.7	87.8	87.9	87.4	86.8	87.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	78.1	77.9	77.8	77.6	77.4	77.2	76.9	76.6	76.4	76.3	76.8
	77.3	90.0	0.0	0.0	90.0	79.2	79.3	79.5	79.6	79.7	79.9	80.1	80.3	80.4	80.5	80.7	80.8	80.9	81.0	81.2
	81.4	81.5	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.7	90.0	0.0	82.0	84.0	84.3	84.6	84.7	84.6	85.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	77.8	77.7	77.5	77.3	77.0	76.7	76.2	75.7	75.3	76.0
	76.7	90.0	0.0	0.0	90.0	79.2	79.4	79.5	79.6	79.8	79.9	80.1	80.3	80.4	80.5	80.6	80.7	80.8	81.0	81.2
	81.4	81.5	81.6	81.6	81.6	81.6	81.6	81.7	81.7	81.9	82.2	82.4	82.1	80.6	80.3	81.5	81.9	82.2	83.2	84.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	77.8	77.7	77.5	77.3	77.0	76.6	76.1	75.2	73.6	75.5
	76.5	90.0	0.0	0.0	90.0	90.0	79.4	79.6	79.7	79.8	80.0	80.1	80.3	80.4	80.5	80.6	80.7	80.8	81.0	81.2
	81.3	81.5	81.5	81.6	81.6	81.6	81.6	81.7	81.8	81.9	82.2	82.3	82.2	81.5	80.8	79.6	79.3	80.0	80.9	82.2
	83.4	84.1	0.0	0.0	0.0	0.0	0.0	87.6	0.0	0.0	0.0	0.0	0.0	86.1	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9	77.8	77.6	77.4	77.1	76.8	76.4	75.9	75.4	76.1
	76.8	90.0	0.0	0.0	0.0	90.0	79.5	79.6	79.8	79.9	80.0	80.2	80.3	80.4	80.5	80.6	80.7	80.8	81.0	81.1
	81.3	81.4	81.5	81.5	81.5	81.6	81.6	81.7	81.8	82.0	82.2	82.3	82.3	82.0	81.4	80.8	80.4	78.8	78.1	77.9
	80.6	81.3	82.1	83.3	84.0	84.3	84.6	85.2	85.2	85.5	85.8	85.4	84.8	84.2	82.9	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0	77.9	77.7	77.6	77.3	77.1	76.9	76.6	76.6	76.9
	77.2	90.0	0.0	0.0	0.0	90.0	79.6	79.7	79.8	80.0	80.1	80.2	80.3	80.4	80.5	80.6	80.7	80.8	81.0	81.1
	81.3	81.4	81.4	81.5	81.5	81.5	81.6	81.6	81.7	81.9	82.2	82.4	82.6	82.6	83.3	83.1	82.7	81.2	80.0	79.4
	77.8	78.2	80.5	81.6	82.3	82.5	82.6	82.8	83.3	83.7	83.8	83.7	83.2	82.2	81.3	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	78.2	78.1	77.9	77.8	77.6	77.5	77.3	77.3	77.3	77.5
	77.8	90.0	0.0	0.0	0.0	0.0	90.0	79.8	79.9	80.0	80.1	80.3	80.3	80.4	80.5	80.6	80.7	80.8	81.0	81.1
	81.3	81.3	81.4	81.4	81.4	81.4	81.5	81.5	81.6	81.8	82.4	82.5	82.8	84.1	85.3	85.1	83.7	82.0	81.2	80.6
	79.9	79.3	76.9	76.5	79.4	79.7	80.1	80.5	81.0	81.4	81.6	81.7	81.2	80.3	78.7	76.9	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	78.4	78.3	78.2	78.1	77.9	77.8	77.8	77.8	77.8	78.0

	78.3	78.7	0.0	0.0	0.0	0.0	90.0	90.0	80.0	80.1	80.2	80.3	80.4	80.5	80.6	80.6	80.8	80.9	81.0	81.1
	81.2	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.5	90.0	0.0	82.6	84.1	85.5	85.8	84.9	83.7	82.2	81.7	81.2
	80.7	80.3	79.9	0.0	76.2	76.9	78.0	78.5	79.1	79.6	80.0	80.1	79.8	79.1	77.8	76.7	76.5	76.4		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	78.9	78.7	78.5	78.4	78.3	78.3	78.2	78.2	78.2	78.3	78.5
	78.8	79.2	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.2	80.3	80.4	80.4	80.5	80.6	80.7	80.8	80.9	81.0	81.1
	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	0.0	0.0	85.7	85.6	85.0	84.3	83.0	82.7	82.2	81.9	81.5
	81.1	80.7	80.2	79.4	77.9	77.1	76.0	76.2	77.3	78.1	78.6	78.8	78.7	78.2	77.2	76.5	76.4	76.3		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	79.0	78.9	78.8	78.7	78.6	78.5	78.5	78.5	78.6	78.7	78.9
	79.2	79.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.3	80.4	80.5	80.6	80.6	80.7	80.8	80.9	81.0	81.1
	81.2	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.2	0.0	0.0	0.0	84.2	82.9	82.7	82.6	82.3	82.1	81.8	81.6
	81.2	80.8	80.2	79.3	78.3	77.3	76.1	75.7	75.4	76.5	77.2	77.6	77.7	77.4	76.8	76.3	76.2	76.2		
0 28	0.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	90.0	79.2	79.1	79.0	78.9	78.8	78.8	78.8	78.8	78.9	79.1	79.3
	79.7	79.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.4	80.5	80.5	80.6	80.7	80.7	80.8	80.9	81.0	81.1
	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.3	81.8	82.2	82.2	82.0	81.9	81.7	81.6	81.5
	81.3	80.8	80.1	79.3	78.3	77.3	76.4	75.5	75.0	75.1	75.9	76.3	76.7	76.7	76.3	76.1	76.1	76.0		
0 29	0.0	0.0	0.0	0.0	90.0	90.0	90.0	90.0	79.6	79.4	79.3	79.2	79.1	79.1	79.0	79.0	79.1	79.2	79.4	79.6
	79.9	79.8	90.0	0.0	0.0	80.1	80.1	0.0	0.0	90.0	90.0	80.5	80.6	80.6	80.7	80.8	80.9	80.9	81.0	81.1
	81.1	81.2	81.2	81.2	81.2	81.2	81.1	81.1	81.1	81.1	81.1	81.2	81.2	81.5	81.6	81.3	81.5	81.5	81.5	81.5
	81.2	80.7	79.9	78.4	77.8	76.9	76.0	75.3	75.0	75.3	74.8	74.5	75.6	75.9	75.9	75.8	75.8	75.8		
0 30	0.0	0.0	0.0	90.0	90.0	80.1	80.0	79.9	79.7	79.6	79.4	79.3	79.3	79.2	79.2	79.3	79.3	79.5	79.7	79.9
	80.0	79.9	79.9	80.0	80.1	80.1	80.2	0.0	0.0	0.0	90.0	90.0	80.6	80.7	80.7	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.2	81.1	81.1	81.1	81.0	81.0	81.0	81.1	81.1	81.2	81.2	81.4	81.3	81.2	81.4	81.5	81.5
	81.3	80.6	79.0	78.9	77.9	77.1	76.2	74.8	75.7	76.1	75.8	75.3	73.6	75.0	75.3	75.5	75.6	75.6		
0 31	0.0	0.0	0.0	90.0	90.0	80.2	80.1	79.9	79.8	79.7	79.6	79.5	79.4	79.4	79.4	79.4	79.5	79.7	79.9	80.0
	80.0	80.0	80.0	80.1	80.1	80.2	80.2	0.0	0.0	0.0	90.0	90.0	90.0	80.7	80.8	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	81.0	80.9	80.9	81.0	81.1	81.2	81.2	81.3	81.3	81.3	81.2	81.4	81.4
	81.4	0.0	78.6	78.9	78.7	77.0	76.4	75.6	76.7	77.1	0.0	0.0	74.8	74.5	74.6	75.1	75.3	75.4		
0 32	90.0	90.0	0.0	90.0	80.4	80.2	80.1	80.0	79.9	79.8	79.7	79.6	79.6	79.5	79.5	79.6	79.7	79.8	80.0	80.0
	80.1	80.1	80.1	80.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	80.7	80.8	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.8	80.9	81.0	81.1	81.2	81.2	81.2	81.2	81.3	81.3	81.2	81.3
	81.1	0.0	0.0	78.0	77.3	77.0	76.6	77.7	78.2	78.8	0.0	0.0	74.9	74.8	74.8	74.7	75.0	75.2		
0 33	90.0	90.0	90.0	90.0	80.4	80.3	80.2	80.1	80.0	79.9	79.8	79.7	79.6	79.6	79.6	79.7	79.8	80.0	80.0	80.0
	80.1	80.1	80.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	80.8	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.8	80.9	81.0	81.1	81.2	81.2	81.2	81.3	81.2	81.3	81.3	81.1
	79.4	78.7	78.3	76.8	76.3	76.3	79.4	79.8	79.6	0.0	0.0	0.0	90.0	75.1	75.0	74.9	74.9	75.1		
0 34	90.0	90.0	90.0	80.7	80.5	80.4	80.3	80.2	80.1	79.9	79.8	79.8	79.7	79.7	79.6	79.7	79.8	79.9	79.9	80.0
	80.1	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	80.9	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.8	80.9	81.0	81.1	81.2	81.2	81.3	81.3	81.2	81.2	81.3	81.1
	80.1	77.4	77.3	78.4	78.5	79.9	81.7	81.9	82.2	0.0	0.0	0.0	0.0	75.3	75.3	75.2	75.2	75.2		
0 35	81.5	81.4	81.2	80.9	80.6	80.4	80.3	80.2	80.1	80.0	79.9	79.8	79.7	79.7	79.6	79.6	79.7	79.8	79.8	79.9
	80.0	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	80.9	81.0	81.0	81.0
	81.1	81.1	81.1	81.2	81.1	81.1	81.1	81.0	81.0	81.1	81.1	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.2	81.3
	81.0	80.6	80.3	80.4	80.5	82.0	83.6	83.6	0.0	0.0	0.0	0.0	90.0	75.6	75.5	75.4	75.4	75.4		
0 36	81.5	81.5	81.3	81.0	80.7	80.5	80.4	80.3	80.2	80.1	80.0	79.9	79.8	79.7	79.6	79.5	79.4	79.5	79.5	79.7
	79.9	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.9	80.9	81.0	81.0
	81.1	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.1	81.2	81.2	81.3	81.3	81.3	81.3	81.4	81.4	81.4	81.4	81.3
	81.6	82.3	82.5	82.4	82.0	0.0	85.6	85.7	0.0	0.0	0.0	0.0	90.0	75.9	75.7	75.7	75.6	75.6		
0 37	81.6	81.5	81.3	81.0	80.7	80.6	80.4	80.3	80.2	80.1	80.0	79.9	79.8	79.7	79.5	79.4	79.2	78.8	78.8	79.3
	79.7	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	0.0	0.0	0.0	90.0	80.9	81.0	81.0
	81.1	81.1	81.2	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.4	81.4	81.4	81.5	81.5	81.5	81.6	81.5
	81.4	84.1	84.5	84.7	0.0	87.8	87.2	87.4	0.0	0.0	0.0	0.0	90.0	90.0	76.0	75.8	75.8	75.7		
0 38	81.6	81.6	90.0	80.9	80.7	80.6	80.5	80.4	80.3	80.2	80.1	80.0	79.9	79.7	79.5	79.1	78.7	78.1	78.0	78.9
	79.5	79.9	0.0	0.0	0.0	0.0	0.0	80.5	80.5	0.0	80.7	80.7	80.7	0.0	0.0	0.0	90.0	90.0	81.0	81.0
	81.1	81.1	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.4	81.4	81.4	81.4	81.5	81.5	81.6	81.7	0.0	0.0	0.0
	85.4	86.4	86.5	86.8	87.6	87.9	87.8	88.1	90.0	0.0	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	90.0	90.0	90.0	90.0	80.7	80.6	80.5	80.4	80.4	80.3	80.2	80.1	80.0	79.8	79.5	79.0	78.4	77.6	78.2	79.0
	79.5	79.8	0.0	0.0	0.0	0.0	90.0	80.6	80.6	80.7	80.7	80.7	80.7	0.0	0.0	0.0	0.0	90.0	90.0	81.0
	81.1	81.2	81.2	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.5	81.5	81.6	81.6	81.6	0.0	0.0	0.0	0.0	0.0
	0.0	88.3	88.0	87.8	87.8	87.8	87.8	88.4	90.4	93.2	95.5	97.8	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	90.0	90.0	80.7	80.7	80.6	80.5	80.4	80.3	80.3	80.2	80.0	79.8	79.5	79.2	78.9	78.6	78.9	79.4
	79.7	79.9	0.0	0.0	0.0	90.0	80.6	80.6	80.7	80.7	80.7	80.7	80.7	80.7	0.0	0.0	0.0	90.0	90.0	80.9
	81.0	81.1	81.3	81.3	81.4	81.5	81.5	81.5	81.5	81.6	81.6	81.6	81.7	81.7	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	89.3	88.8	88.2	87.7	87.3	87.2	88.2	89.7	92.1	93.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	90.0	80.8	80.7	80.7	80.6	80.5	80.4	80.3	80.2	80.1	79.9	79.7	79.5	79.4	79.6	79.8	79.9
	80.0	80.1	80.2	0.0	0.0	90.0	80.6	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	0.0	90.0	90.0	80.9	80.9
	80.9	81.1	81.3	81.4	81.5	81.6	81.6	81.6	81.6	81.7	81.7	81.7	81.8	82.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	89.0	88.2	87.3	86.6	86.8	87.8	89.1	91.2	92.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	90.0	81.0	80.8	80.7	80.6	80.5	80.4	80.4	80.3	80.2	80.0	79.9	79.8	79.8	80.0	80.1	80.1
	80.2	80.2	0.0	0.0	90.0	90.0	80.7	80.8	80.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	81.0	81.0	81.0	81.0
	80.9	81.2	81.3	81.5	81.6	81.7	81.7	81.8	81.8	81.8	81.8	81.9	82.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	88.9	87.8	86.8	86.2	86.3	87.3	88.6	90.4	92.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	90.0	81.2	80.9	80.8	80.8	80.6	80.5	80.4	80.3	80.2	80.2	80.1	80.0	80.1	80.2	80.3	80.3
	80.3	0.0	0.0	0.0	90.0	80.7	80.8	80.8	80.9	80.9	81.0	81.0	81.1	81.1	81.1	81.2	81.2	81.2	81.2	81.2
	81.2	81.2	81.4	81.6	81.7	81.8	81.9	81.9	82.0	82.0	81.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	88.3	87.1	86.2	85.7	85.9	86.8	87.9	89.6	91.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 44	0.0	0.0	0.0	90.0	90.0	90.0	90.0	90.0	80.7	80.6	80.5	80.4	80.3	80.3	80.2	80.2	80.2	80.3	80.3	80.4
	0.0	0.0	0.0	90.0	80.7	80.8	80.8	80.9	81.0	81.1	81.1	81.2	81.2	81.3	81.3	81.3	81.4	81.4	81.4	81.4
	81.4	81.4	81.4	81.7	81.9	82.0	82.1	82.2	82.2	82.2	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	87.4	86.1	85.2	85.1	85.3	86.2	87.3	88.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	90.0	90.0	90.0	90.0	0.0	80.7	80.6	80.5	80.5	80.4	80.4	80.3	80.3	80.4	80.4	80.4	80.4
	0.0	0.0	90.0	80.7	80.8	80.8	80.9	81.0	81.1	81.2	81.2	81.3	81.4	81.4	81.4	81.5	81.5	81.6	81.6	81.6
	81.6	81.6	81.6	81.8	82.1	82.3	82.5	82.7	82.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	86.0	85.2	84.5	84.4	84.6	85.4	86.4	87.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.8	80.7	80.6	80.5	80.5	80.4	80.4	80.4	80.4	80.5	80.5	80.5
	0.0	0.0	80.7	80.7	80.8	80.9	81.0	81.1	81.2	81.3	81.4	81.4	81.5	81.6	81.6	81.7	81.7	81.7	81.7	81.7
	81.8	81.8	81.7	82.0	82.3	82.6	82.9	83.4	83.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	84.7	84.3	83.8	83.8	83.9	84.5	85.3	86.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	80.8	80.7	80.6	80.6	80.6	80.5	80.5	80.5	80.5	80.5	80.5	80.6
	0.0	80.7	80.7	80.7	80.9	81.0	81.1	81.2	81.3	81.4	81.5	81.6	81.6	81.7	81.8	81.8	81.8	81.8	81.9	81.9
	81.9	81.9	81.9	82.1	82.5	82.9	83.7	84.8	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	83.7	83.4	83.1	83.1	83.1	83.1	83.2	83.6	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.4	80.8	80.7	80.7	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
	80.7	80.7	80.8	80.9	81.0	81.1	81.2	81.3	81.4	81.5	81.6	81.7	81.8	81.9	81.9	81.9	82.0	82.0	82.0	82.0
	82.0	82.0	82.1	82.3	82.6	83.3	84.8	86.7	87.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.6	82.6	82.6	82.6	82.6	82.5	82.3	82.3	82.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	80.8	80.7	80.7	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.7	80.7
	80.8	80.8	80.9	81.0	81.1	81.2	81.3	81.4	81.6	81.7	81.8	81.9	81.9	82.0	82.1	82.1	82.1	82.1	82.2	82.2
	82.2	82.2	82.2	82.3	0.0	0.0	0.0	89.5	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	82.6	82.5	82.5	82.4	82.4	82.3	82.3	82.1	81.9	81.7	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9	80.8	80.7	80.7	80.7	80.6	80.6	80.6	80.6	80.7	80.7	80.8	80.9
	80.9	81.0	81.1	81.1	81.2	81.3	81.4	81.6	81.7	81.8	81.9	82.0	82.1	82.2	82.2	82.3	82.3	82.3	82.3	82.3
	82.3	82.3	82.3	82.3	0.0	0.0	0.0	91.7	92.0	92.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.8	82.6
	82.5	82.4	82.4	82.3	82.3	82.2	82.0	81.8	81.5	81.0	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	81.1	80.8	80.8	80.7	80.7	80.6	80.6	80.6	80.6	80.6	80.7	80.8	80.9	81.0
	81.1	81.1	81.2	81.3	81.4	81.5	81.6	81.8	81.9	82.0	82.2	82.2	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.4
	82.4	82.4	82.4	0.0	0.0	0.0	0.0	92.9	93.0	93.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.7	82.6
	82.5	82.4	82.3	82.2	82.1	82.0	81.8	81.5	81.0	80.6	80.3	80.4	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	80.8	80.8	80.7	80.7	80.7	80.6	80.6	80.6	80.6	80.7	80.8	81.0	81.1	81.2
	81.2	81.3	81.3	81.4	81.5	81.7	81.8	82.0	82.2	82.3	82.4	82.4	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
	82.5	82.5	82.5	0.0	0.0	0.0	93.8	93.5	93.6	93.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	82.7	82.5
	82.4	82.3	82.2	82.1	82.0	81.8	81.6	81.2	80.7	80.1	79.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	80.8	80.8	80.7	80.7	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	81.2	81.2	81.3
	81.4	81.4	81.5	81.6	81.7	81.8	82.0	82.3	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.6	82.6	82.6
	82.6	82.6	82.6	0.0	0.0	0.0	93.9	93.8	93.9	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	82.5
	82.4	82.3	82.2	82.1	81.9	81.7	81.4	80.9	80.3	79.4	78.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	80.7	80.7	80.6	80.6	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0	81.5
	81.6	81.6	81.7	81.9	0.0	0.0	0.0	0.0	83.1	83.1	83.0	82.9	82.9	82.9	82.8	82.8	82.8	82.8	82.7	82.7
	82.7	82.7	0.0	0.0	0.0	0.0	94.1	94.0	94.1	94.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.6
	82.4	82.3	82.2	82.0	81.9	81.6	81.3	80.8	80.0	78.8	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.6	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.5	83.5	83.4	83.3	83.2	83.1	83.0	83.0	83.0	82.9	82.9	82.8
	82.8	82.9	0.0	0.0	0.0	94.2	94.2	94.2	94.2	94.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0
	82.4	82.3	82.2	82.1	81.9	81.6	81.3	80.8	80.2	79.3	77.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	80.5	80.6	80.6	80.6	80.6	80.6	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.1	84.0	83.7	83.5	83.3	83.2	83.2	83.1	83.1	83.0	83.0
	82.9	83.0	0.0	0.0	0.0	94.2	94.2	94.3	94.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	82.5	82.3	82.2	82.1	81.9	81.7	81.3	80.9	80.4	79.8	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	80.5	80.6	80.6	80.6	80.6	80.6	80.7	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.6	84.6	90.0	90.0	83.7	83.4	83.3	83.3	83.2	83.2	83.1
	83.1	83.1	0.0	0.0	0.0	93.9	94.2	94.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.4	82.3	82.2	82.1	81.8	81.6	81.2	80.8	80.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	80.6	80.6	80.6	80.6	80.6	80.7	80.8	80.8	80.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	0.0	0.0	84.5	83.6	83.5	83.4	83.3	83.3	83.3
	83.2	83.3	0.0	0.0	0.0	93.4	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	90.0	82.5	82.4	82.3	82.1	81.7	81.5	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	80.7	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	83.8	83.6	83.5	83.5	83.4	83.3
	83.4	83.6	0.0	0.0	90.8	91.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	82.8	82.6	82.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	80.9	80.7	80.8	80.9	80.9	81.0	81.0	81.1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	83.8	83.6	83.6	83.5	83.4
	83.6	83.8	84.2	0.0	89.4	90.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	83.4	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	81.1	81.0	81.0	81.0	81.1	81.1	81.1	81.2	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.3	83.9	83.8	83.7	83.6	83.5
	83.7	84.1	84.6	85.5	86.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	81.2	81.2	81.1	81.1	81.2	81.2	81.2	81.3	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	84.0	83.8	83.7	83.7	83.6
	83.8	84.1	84.6	85.2	85.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 63    0.0   0.0   0.0  81.3  81.3  81.2  81.2  81.2  81.3  81.3  81.3  81.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  84.2  83.9  83.8  83.7  83.7
       83.7  84.1  84.5  84.9  85.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 64    0.0   0.0   0.0  81.4  81.3  81.3  81.3  81.3  81.3  81.3  81.4  90.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  84.7  84.0  83.8  83.8  83.7
       83.6  84.0  84.3  84.7  85.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 65    0.0   0.0   0.0  81.4  81.4  81.3  81.3  81.3  81.3  81.4  81.4   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  84.0  83.9  83.8  83.6
       83.3  83.9  84.3  84.6  84.8   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0
```

INITIAL HEAD FOR LAYER 2 WILL BE READ ON UNIT 19 USING FORMAT: (15F8.2)

```
        1     2     3     4     5     6     7     8     9    10    11    12    13    14    15    16    17    18    19    20
       21    22    23    24    25    26    27    28    29    30    31    32    33    34    35    36    37    38    39    40
       41    42    43    44    45    46    47    48    49    50    51    52    53    54    55    56    57    58    59    60
       61    62    63    64    65    66    67    68    69    70    71    72    73    74    75    76    77    78
0  1    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  80.3  80.3  80.3
       80.3  80.4  80.5  80.6  80.7  80.8  80.8  80.9  81.0  81.1  81.2  81.3  81.5  81.6  81.8  81.9  82.1   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  2    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  80.3  80.3  80.3  80.3
       80.3  80.4  80.5  80.6  80.7  80.7  80.8  80.9  81.0  81.1  81.2  81.3  81.5  81.6  81.8  81.9  82.1  82.3   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  3    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  80.2  80.2  80.2  80.3
       80.3  80.4  80.5  80.5  80.6  80.7  80.8  80.9  80.9  81.1  81.2  81.3  81.5  81.6  81.8  81.9  82.1  82.3  82.4   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  4    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  80.2  80.2  80.2  80.2
       80.3  80.3  80.4  80.5  80.6  80.6  80.7  80.8  80.9  81.0  81.1  81.3  81.4  81.6  81.8  81.9  82.1  82.3  82.4   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  5    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  80.1  80.1  80.1  80.2
       80.2  80.3  80.3  80.4  80.5  80.6  80.6  80.7  80.8  80.9  81.1  81.2  81.4  81.6  81.8  82.0  82.1  82.3  82.4   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  6    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.9  80.0  80.0  80.1  80.1
       80.1  80.2  80.3  80.3  80.4  80.4  80.5  80.6  80.7  80.8  81.0  81.2  81.4  81.6  81.8  82.0  82.2  82.3  82.4   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  7    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.8  79.9  79.9  80.0  80.0
       80.1  80.1  80.2  80.2  80.3  80.3  80.4  80.4  80.6  80.7  80.9  81.1  81.4  81.6  81.8  82.0  82.2  82.3  82.5   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  8    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.7  79.8  79.8  79.9  79.9
       80.0  80.1  80.1  80.1  80.1  80.2  80.2  80.3  80.4  80.5  80.7   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  9    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.5  79.6  79.6  79.7  79.7  79.8
       79.9  79.9  80.0  80.0  80.0  80.0  80.0  80.1  80.2  80.3   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 10    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.4  79.4  79.5  79.6  79.6  79.7
       79.7  79.8  79.8  79.8  79.8  79.7  79.7  79.8  79.9  80.1   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 11    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  79.1  79.1  79.2  79.3  79.3  79.4  79.4  79.5
       79.6  79.7  79.7  79.7  79.6  79.4  79.4  79.5  79.6  79.8   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 12    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  78.9  79.0  79.0  79.1  79.1  79.2  79.3  79.4
       79.4  79.5  79.5  79.5  79.4  79.1  78.8  79.1  79.3   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 13    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  78.7  78.8  78.8  78.8  78.8  78.9  79.0  79.1  79.2
       79.3  79.4  79.4  79.4  79.2  78.8  77.7  78.7  79.1   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
```

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.6	78.6	78.6	78.6	78.6	78.6	78.7	78.9	79.0
	79.2	79.3	79.4	79.3	79.3	79.1	78.7	78.9	79.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	78.3	78.3	78.3	78.3	78.4	78.6	78.8
	79.0	79.3	79.3	79.3	79.3	79.3	79.1	79.2	79.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.2	78.2	78.1	78.0	78.0	77.9	78.0	78.1	78.4
	78.8	79.1	79.2	79.2	79.3	79.4	79.3	79.3	79.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.1	78.0	77.9	77.7	77.6	77.5	77.5	77.6	77.9
	78.4	78.8	79.0	79.1	79.2	79.3	79.3	79.4	79.4	79.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9	77.8	77.6	77.4	77.2	77.0	76.9	77.0	77.4
	77.9	78.5	78.7	78.9	79.0	79.2	79.3	79.4	79.5	79.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8	77.6	77.4	77.2	76.9	76.6	76.3	76.2	76.7
	77.3	78.0	78.4	78.7	78.9	79.2	79.3	79.4	79.6	79.7	79.8	0.0	0.0	80.4	80.5	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	77.5	77.3	77.0	76.6	76.2	75.6	74.9	76.0
	76.9	77.7	78.2	78.6	78.9	79.1	79.3	79.5	79.6	79.8	79.9	80.1	80.3	80.4	80.5	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	77.5	77.3	77.0	76.6	76.0	74.8	70.9	75.2
	76.7	77.6	78.2	78.6	78.9	79.1	79.4	79.5	79.7	79.8	80.0	80.1	80.3	80.4	80.5	80.6	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.6	77.3	77.1	76.8	76.3	75.8	75.1	76.1
	76.9	77.7	78.3	78.7	79.0	79.2	79.4	79.6	79.8	79.9	80.0	80.2	80.3	80.4	80.5	80.6	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	77.5	77.3	77.1	76.8	76.6	76.5	76.9
	77.4	78.0	78.5	78.8	79.1	79.3	79.5	79.7	79.8	79.9	80.1	80.2	80.3	80.4	80.5	80.6	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9	77.8	77.6	77.5	77.3	77.2	77.3	77.5
	77.8	78.3	78.7	79.0	79.3	79.4	79.6	79.8	79.9	80.0	80.1	80.3	80.3	80.4	80.5	80.6	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	81.4	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.1	78.0	77.9	77.8	77.8	77.8	77.8	78.0
	78.3	78.7	79.0	79.2	79.4	79.6	79.7	79.8	80.0	80.1	80.2	80.3	80.4	80.5	80.5	80.6	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	81.3	81.4	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	78.3	78.2	78.2	78.2	78.2	78.3	78.5
	78.7	79.1	79.3	79.4	79.6	79.7	79.8	79.9	80.0	80.2	80.3	80.3	80.4	80.5	80.6	80.7	80.8	0.0	0.0	0.0
	0.0	0.0	81.3	81.3	81.3	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	75.9	75.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.6	78.6	78.5	78.5	78.5	78.6	78.7	78.9
	79.1	79.3	79.5	79.6	79.7	79.8	79.9	80.0	80.1	80.2	80.3	80.4	80.5	80.5	80.6	80.7	0.0	0.0	0.0	0.0
	0.0	0.0	81.2	81.2	81.3	81.3	81.2	81.2	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	75.9	75.7	75.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	78.9	78.8	78.8	78.8	78.8	78.9	79.0	79.2
	79.5	79.6	79.7	79.8	79.8	79.9	80.0	80.1	80.2	80.3	80.4	80.4	80.5	80.6	80.6	80.7	0.0	0.0	81.0	81.1
	0.0	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.6	81.6	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.4	75.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.2	79.1	79.0	79.0	79.0	79.1	79.2	79.3	79.5
	79.7	79.8	79.8	79.9	80.0	80.0	80.1	80.1	80.2	80.3	80.4	80.5	80.6	80.6	80.7	80.8	0.0	81.0	81.0	81.1
	81.1	81.1	81.2	81.2	81.2	81.2	81.1	81.1	81.1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.5	81.5	81.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.3	75.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4	79.3	79.3	79.2	79.2	79.3	79.3	79.5	79.6	79.8
	79.9	79.9	79.9	80.0	80.0	80.1	80.1	80.2	80.3	80.4	80.4	80.5	80.6	80.7	80.7	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.0	81.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	81.3	81.4	81.4	81.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	79.5	79.4	79.4	79.4	79.4	79.5	79.6	79.8	79.9
	79.9	80.0	80.0	80.1	80.1	80.2	80.2	80.3	80.3	80.4	80.5	80.5	80.6	80.7	80.7	80.8	80.9	81.0	81.0	81.1
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.8	80.9	81.0	81.1	0.0	0.0	81.3	81.3	81.3	81.3	81.3	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.8	79.7	79.6	79.5	79.5	79.5	79.6	79.7	79.8	79.9	80.0
	80.0	80.1	80.1	80.1	80.2	80.2	80.3	80.3	80.4	80.4	80.5	80.6	80.6	80.7	80.8	80.8	80.9	81.0	81.0	81.1

	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.8	80.5	80.8	81.0	81.1	0.0	81.2	81.2	81.2	81.3	81.3	81.3	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.8	79.7	79.6	79.6	79.6	79.6	79.7	79.8	79.9	80.0
	80.0	80.1	80.1	80.2	80.2	80.3	80.3	80.3	80.4	80.5	80.5	80.6	80.6	80.7	80.8	80.8	80.9	81.0	81.0	81.0
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.7	80.9	81.0	81.1	81.2	81.2	81.2	81.3	81.3	81.3	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.9	79.8	79.8	79.7	79.7	79.6	79.7	79.7	79.8	79.8	79.9
	80.0	80.1	80.2	80.2	80.3	80.3	80.3	80.4	80.4	80.5	80.6	80.6	80.6	80.7	80.8	80.8	80.9	81.0	81.0	81.0
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	80.6	80.9	81.0	81.1	81.2	81.2	81.3	81.3	81.2	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	79.9	79.8	79.7	79.7	79.6	79.6	79.6	79.6	79.7	79.8
	79.9	80.1	80.2	80.2	80.3	80.3	80.4	80.4	80.4	80.5	80.6	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	81.0
	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.0	80.9	81.0	81.1	81.2	81.2	81.3	81.3	81.3	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.1	80.0	79.9	79.8	79.7	79.6	79.4	79.4	79.3	79.4	79.6
	79.8	80.0	80.2	80.2	80.3	80.3	80.4	80.4	80.5	80.5	80.6	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	81.0
	81.1	81.1	81.2	81.2	81.2	81.2	81.2	81.1	81.1	81.2	81.2	81.2	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.1	80.0	79.9	79.8	79.7	79.5	79.3	79.1	78.8	78.7	79.3
	79.7	79.9	80.1	80.2	80.3	80.4	80.4	80.5	80.5	80.6	80.6	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	81.0
	81.1	81.1	81.2	81.2	81.2	81.2	81.3	81.3	81.2	81.3	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.2	80.1	80.0	79.9	79.7	79.4	79.1	78.6	77.9	77.3	78.8
	79.6	79.9	80.1	80.2	80.3	80.4	80.4	80.5	80.5	80.6	80.7	80.7	80.7	80.7	80.8	80.8	80.8	80.9	81.0	81.0
	81.1	81.1	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.4	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.3	80.2	80.1	79.9	79.7	79.4	79.0	78.3	76.4	77.9	78.9
	79.6	79.9	80.1	80.2	80.3	80.4	80.5	80.6	80.6	80.7	80.7	80.7	80.7	80.7	80.8	80.8	80.8	80.9	80.9	81.0
	81.1	81.1	81.2	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.3	80.2	80.0	79.8	79.5	79.2	78.8	78.4	78.8	79.4
	79.7	80.0	80.2	80.3	80.4	80.5	80.5	80.6	80.7	80.7	80.7	80.7	80.7	80.8	80.8	80.8	80.8	80.9	80.9	80.9
	81.0	81.1	81.3	81.3	81.4	81.5	81.5	81.5	81.5	81.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	86.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.3	80.2	80.1	79.9	79.7	79.5	79.4	79.4	79.6	79.8
	79.9	80.1	80.2	80.4	80.4	80.5	80.6	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.9	80.9	80.9	80.9	80.9
	80.9	81.1	81.3	81.4	81.5	81.6	81.6	81.6	81.6	81.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	86.2	86.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.2	80.1	80.0	79.9	79.8	79.8	79.8	80.0	80.1
	80.1	80.2	80.3	80.4	80.5	80.6	80.7	80.8	80.8	80.9	80.9	80.9	80.9	80.9	80.9	81.0	81.0	81.0	81.0	81.0
	81.0	81.2	81.3	81.4	81.6	81.7	81.7	81.7	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	85.8	85.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.3	80.2	80.2	80.1	80.0	80.0	80.1	80.2	80.2
	80.3	80.3	80.4	80.5	80.6	80.7	80.8	80.8	80.9	80.9	81.0	81.0	81.1	81.1	81.1	81.1	81.2	81.2	81.2	81.2
	81.2	81.2	0.0	0.0	81.7	81.8	81.9	81.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	85.4	85.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.4	80.3	80.3	80.2	80.2	80.2	80.3	80.3	80.3
	80.4	80.4	80.5	80.6	80.7	80.8	80.8	80.9	81.0	81.0	0.0	0.0	81.2	81.2	81.3	81.3	81.4	81.4	81.4	81.4
	81.4	81.4	0.0	0.0	0.0	82.0	82.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	84.7	84.9	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.5	80.4	80.4	80.3	80.3	80.3	80.4	80.4	80.4
	80.5	80.5	80.6	80.7	80.8	80.8	80.9	81.0	81.1	81.1	0.0	0.0	81.3	81.4	81.4	81.5	81.5	81.6	81.6	81.6
	81.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	84.2	84.3	84.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.5	80.5	80.4	80.4	80.4	80.4	80.5	80.5	80.5
	80.6	80.6	80.7	80.7	80.8	80.9	81.0	81.1	81.2	0.0	0.0	0.0	0.0	0.0	0.0	81.6	81.7	81.7	81.7	81.7
	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	83.6	83.7	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.6
	80.6	80.7	80.7	80.8	80.9	81.0	81.1	81.2	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.8	81.8	81.9	81.9
	81.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	82.9	83.1	83.1	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.7
	80.7	80.7	80.8	80.9	81.0	81.1	81.2	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	82.0	82.0	82.0
	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	82.6	82.6	82.6	82.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.7	80.7
	80.8	80.8	80.9	81.0	81.1	81.2	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.1	82.1	82.2
	82.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	82.5	82.4	82.4	82.4	82.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.7	80.6	80.6	80.6	80.6	80.7	80.7	80.8	80.8
	80.9	81.0	81.0	81.1	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.3	82.3	82.3
	82.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	82.4	82.3	82.2	82.2	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.7	80.6	80.6	80.6	0.0	0.0	80.7	80.8	80.9	81.0

	81.0	81.1	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.4	82.4	82.4
	82.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.3	82.3	82.2	82.1	82.0	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.7	80.6	80.6	0.0	0.0	0.0	0.0	81.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.5	82.5	82.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.3	82.2	82.1	82.0	81.8	81.6	81.2	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.6	82.6	82.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.3	82.2	82.1	81.9	81.7	81.4	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.8	82.7	82.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	82.3	82.2	82.0	81.9	81.6	81.3	80.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.6	80.6	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	82.2	82.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.6	80.6	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.6	80.7	80.7	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	80.6	80.6	80.7	80.8	80.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	80.7	0.0	0.0	80.9	80.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	81.0	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.6
	83.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.2	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.6
	83.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	81.2	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.7	83.7
	83.7	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	81.3	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.7
	83.7	83.9	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	81.3	81.3	81.3	81.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.6
	83.4	83.9	84.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

INITIAL HEAD FOR LAYER 3 WILL BE READ ON UNIT 19 USING FORMAT: (15F8.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.8	79.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.7	79.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.5	79.4	79.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.4	79.2	78.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	79.3	79.3	79.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	79.3	79.3	79.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	79.2	79.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	78.8	78.9	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	78.4	78.6	78.8	79.0	79.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.1	76.7
	77.3	77.9	78.3	78.7	78.9	79.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	75.5	75.3	76.2
	77.1	77.7	78.2	78.5	78.8	79.1	79.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.5	76.0	75.3	74.5	75.9
	76.9	77.6	78.1	78.5	78.8	79.1	79.3	79.5	79.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.7	76.3	75.9	75.7	76.4
	77.1	77.7	78.2	78.6	78.9	79.2	79.4	79.6	79.8	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	76.8	76.6	76.6	77.0
	77.4	77.9	78.4	78.7	79.0	79.3	79.5	79.7	79.8	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	77.3	77.2	77.3	77.5
	77.8	78.2	78.7	78.9	79.2	79.4	79.6	79.7	79.9	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8	77.7	77.7	77.8	78.0
	78.2	78.6	79.0	79.2	79.4	79.5	79.7	79.8	79.9	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.3	78.2	78.1	78.2	78.3	78.4
	78.7	79.0	79.2	79.4	79.5	79.7	79.8	79.9	80.0	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.5	78.5	78.5	78.5	78.6	78.8
	79.1	79.3	79.5	79.6	79.7	79.8	79.9	80.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.8	78.8	78.8	78.9	79.0	79.2
	79.4	79.6	79.6	79.7	79.8	79.9	80.0	80.1	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	81.2	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	79.0	79.1	79.2	79.3	79.5
	79.7	79.7	79.8	79.8	79.9	80.0	80.1	80.1	80.2	80.3	80.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	81.1	81.2	81.2	81.2	0.0	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4	79.5	79.6	79.7
	79.8	79.9	79.9	80.0	80.0	80.1	80.1	80.2	0.0	80.4	80.4	80.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	81.1	81.1	81.1	81.1	81.1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	79.6	79.8	79.9
	79.9	80.0	80.0	80.1	80.1	80.1	80.2	80.2	0.0	80.4	80.5	80.5	80.6	0.0	0.0	0.0	0.0	81.0	0.0	0.0
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	79.7	79.8	79.8	79.9
	80.0	80.0	80.1	80.1	80.2	80.2	80.2	0.0	0.0	80.5	80.5	80.6	80.6	80.7	0.0	0.0	0.0	81.0	81.0	0.0
	81.1	81.1	81.1	81.1	81.1	81.1	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.7	79.7	79.8	79.8	79.9
	80.0	80.1	80.1	80.2	80.2	80.3	80.3	80.3	0.0	80.5	80.5	80.6	80.6	80.7	0.0	0.0	0.0	81.0	81.0	0.0
	81.1	81.1	81.1	0.0	81.1	81.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.7	79.7	79.7	79.8	79.9
	80.0	0.0	0.0	80.2	80.3	80.3	80.3	80.4	80.4	80.5	80.6	80.6	80.6	80.7	0.0	0.0	0.0	81.0	81.0	81.0
	81.1	81.1	0.0	0.0	81.1	0.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	79.6	79.6	79.6	79.7	79.8
	0.0	0.0	0.0	80.2	80.3	80.3	80.3	80.4	80.4	0.0	80.6	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	81.0
	0.0	0.0	0.0	81.1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.5	79.4	79.3	79.3	79.3	0.0
	0.0	0.0	0.0	80.3	80.3	80.3	80.4	80.4	0.0	0.0	0.0	80.6	80.7	80.7	80.8	80.8	80.9	80.9	81.0	81.0
	0.0	0.0	0.0	81.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4	79.3	79.0	78.8	78.8	0.0
	0.0	0.0	80.1	80.2	80.3	80.3	80.4	0.0	0.0	0.0	0.0	80.7	80.7	80.7	80.8	80.8	80.9	80.9	81.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.4	79.0	78.6	78.1	0.0	0.0
	0.0	80.0	80.1	80.2	80.3	80.4	80.4	80.5	0.0	0.0	0.0	80.7	0.0	80.7	80.8	80.8	80.8	80.9	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.9	78.3	77.3	0.0	0.0
	0.0	80.0	80.1	80.3	80.3	80.4	80.5	0.0	0.0	0.0	0.0	0.0	0.0	80.7	80.8	80.8	80.8	80.9	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.1	78.8	78.3	0.0	0.0
	0.0	80.0	80.2	80.3	80.4	80.4	80.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.8	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.3	0.0	0.0	0.0
	0.0	80.1	80.2	80.3	80.4	80.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	80.4	80.5	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 59    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 60    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 61    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 62    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 63    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 64    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 65    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0HEAD PRINT FORMAT IS FORMAT NUMBER   4    DRAWDOWN PRINT FORMAT IS FORMAT NUMBER   0
0HEADS WILL BE SAVED ON UNIT 42    DRAWDOWNS WILL BE SAVED ON UNIT  0
0OUTPUT CONTROL IS SPECIFIED EVERY TIME STEP
0                                          COLUMN TO ROW ANISOTROPY =   1.000000
0                                                                DELR =   100.0000
0                                                                DELC =   100.0000
0


                    HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT 20 USING FORMAT:          (16F5.0)
                    ----------------------------------------------------------------------------------------------

          1       2       3       4       5       6       7       8       9      10
         11      12      13      14      15      16      17      18      19      20
         21      22      23      24      25      26      27      28      29      30
         31      32      33      34      35      36      37      38      39      40
         41      42      43      44      45      46      47      48      49      50
         51      52      53      54      55      56      57      58      59      60
         61      62      63      64      65      66      67      68      69      70
         71      72      73      74      75      76      77      78
 ..............................................................................................
0  1  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0   150.0
       150.0  0.0000  0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
0  2  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0   150.0
       150.0  0.0000  0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
0  3  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0   150.0   150.0
       150.0  0.0000  0.0000  0.0000  0.0000   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0
       150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0   150.0  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
      0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
```

0 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0

	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	10.00	0.0000	0.0000
	0.0000	0.0000	0.0000	10.00	0.0000	0.0000	0.0000	0.0000		
0 22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	1.000	10.00	10.00	10.00

	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000		
0 23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	1.000	1.000	1.000	1.000	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000		
0 24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	1.000	1.000	1.000	1.000	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	0.0000	0.0000		
0 25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	150.0	1.000	1.000	1.000	1.000	1.000	10.00	10.00	10.00
	10.00	10.00	10.00	0.0000	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 26	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	1.000	1.000	1.000	1.000	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	1.000	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 28	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 29	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 30	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 31	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 32	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0

	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 33	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 34	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0		
0 35	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 36	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	10.00	10.00	10.00	10.00	10.00	0.0000	10.00	10.00	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 37	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	10.00	10.00	10.00	10.00	0.0000	10.00	10.00	10.00	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 38	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	0.0000
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 39	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 40	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 41	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0

	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 42	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 43	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 44	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 45	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0

	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 53	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 54	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 55	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 56	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 57	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 58	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 59	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 60	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 61	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 62	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 63	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 64	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 65	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0										

BOTTOM FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	67.0	57.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	59.0	64.0
	65.0	66.0	67.0	69.0	70.0	70.0	71.0	74.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	64.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	60.0
	63.0	65.0	67.0	68.0	69.0	69.0	70.0	74.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	71.0	61.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0
	61.0	65.0	67.0	68.0	68.0	69.0	71.0	73.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	85.0	77.0	68.0	58.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0
	61.0	65.0	67.0	68.0	68.0	69.0	71.0	73.0	76.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	78.0	72.0	64.0	56.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0

	62.0	65.0	67.0	68.0	69.0	69.0	71.0	72.0	75.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	72.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0
	63.0	66.0	68.0	68.0	69.0	70.0	71.0	72.0	74.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	67.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	65.0	67.0	68.0	69.0	69.0	70.0	71.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	62.0	60.0	56.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	62.0	62.0	61.0	57.0	56.0	60.0	65.0
	67.0	69.0	70.0	70.0	70.0	70.0	70.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	59.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	68.0	71.0	72.0	72.0	69.0	65.0	64.0	65.0	68.0
	70.0	71.0	71.0	71.0	70.0	70.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.0	56.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	78.0	79.0	0.0	81.0	76.0	73.0	71.0	71.0	73.0
	73.0	72.0	73.0	72.0	72.0	71.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	71.0	81.0	0.0	0.0	0.0	83.0	80.0	77.0	77.0	76.0
	77.0	76.0	75.0	73.0	72.0	71.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	59.0	75.0	83.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0	80.0
	80.0	80.0	77.0	74.0	72.0	71.0	70.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	63.0	77.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	77.0	74.0	72.0	71.0	70.0	72.0	75.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	62.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	62.0	73.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	76.0	74.0	71.0	71.0	71.0	73.0	75.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	59.0	55.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	59.0	71.0	82.0	0.0	0.0	0.0	84.0	83.0	0.0	0.0	0.0
	81.0	79.0	76.0	73.0	71.0	72.0	72.0	73.0	75.0	77.0	81.0	0.0	0.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	58.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	57.0	68.0	80.0	0.0	0.0	81.0	78.0	77.0	82.0	0.0	83.0
	80.0	81.0	77.0	73.0	71.0	72.0	72.0	73.0	74.0	76.0	81.0	0.0	0.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	62.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	77.0	87.0	79.0	72.0	71.0	73.0	77.0	81.0	82.0
	82.0	80.0	77.0	74.0	71.0	70.0	72.0	73.0	74.0	76.0	80.0	0.0	83.0	80.0	80.0	84.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	69.0	73.0	66.0	62.0	63.0	68.0	71.0	76.0	80.0
	80.0	79.0	78.0	75.0	71.0	70.0	73.0	73.0	74.0	76.0	80.0	0.0	81.0	76.0	77.0	80.0	83.0	80.0	82.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	74.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	59.0	60.0	60.0	59.0	62.0	68.0	74.0	77.0
	79.0	78.0	77.0	74.0	72.0	70.0	71.0	73.0	74.0	77.0	80.0	0.0	74.0	71.0	74.0	76.0	77.0	71.0	75.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	67.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	60.0	65.0	73.0	76.0
	78.0	76.0	76.0	72.0	71.0	69.0	63.0	72.0	73.0	76.0	79.0	80.0	65.0	67.0	70.0	70.0	69.0	61.0	70.0	82.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	70.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	73.0	75.0
	77.0	75.0	71.0	70.0	67.0	68.0	67.0	66.0	73.0	76.0	78.0	72.0	62.0	64.0	66.0	64.0	66.0	53.0	69.0	77.0
	80.0	81.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	65.0	72.0	76.0
	77.0	74.0	70.0	66.0	61.0	67.0	67.0	62.0	74.0	75.0	76.0	67.0	62.0	64.0	64.0	61.0	59.0	61.0	71.0	74.0
	75.0	74.0	73.0	78.0	78.0	77.0	77.0	76.0	76.0	76.0	78.0	76.0	75.0	72.0	70.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	65.0	71.0	75.0
	76.0	75.0	69.0	63.0	56.0	63.0	64.0	63.0	69.0	75.0	77.0	66.0	63.0	65.0	67.0	67.0	63.0	67.0	71.0	71.0
	70.0	67.0	69.0	73.0	74.0	73.0	71.0	69.0	71.0	73.0	73.0	70.0	71.0	69.0	68.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	69.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0

	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	64.0	69.0	73.0
	74.0	72.0	67.0	57.0	60.0	60.0	61.0	62.0	67.0	77.0	82.0	68.0	65.0	67.0	70.0	74.0	68.0	70.0	68.0	67.0
	65.0	63.0	74.0	74.0	72.0	68.0	63.0	64.0	67.0	65.0	66.0	68.0	67.0	65.0	65.0	64.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	62.0	67.0	73.0
	72.0	71.0	64.0	60.0	60.0	60.0	61.0	59.0	66.0	85.0	0.0	69.0	67.0	70.0	71.0	72.0	70.0	68.0	65.0	63.0
	62.0	64.0	70.0	0.0	71.0	63.0	57.0	58.0	59.0	61.0	64.0	66.0	64.0	62.0	63.0	61.0	58.0	55.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	75.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	64.0	66.0
	72.0	71.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	0.0	0.0	77.0	69.0	71.0	70.0	70.0	68.0	64.0	61.0	61.0
	61.0	63.0	66.0	73.0	66.0	61.0	60.0	60.0	55.0	60.0	61.0	63.0	62.0	61.0	62.0	59.0	56.0	55.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	88.0	85.0	79.0	71.0	62.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	60.0	60.0	61.0
	68.0	68.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	73.0	70.0	68.0	66.0	64.0	59.0	57.0	59.0
	59.0	60.0	61.0	60.0	60.0	58.0	60.0	60.0	60.0	57.0	62.0	62.0	61.0	62.0	59.0	58.0	56.0	56.0		
0 28	0.0	0.0	0.0	0.0	0.0	85.0	82.0	79.0	74.0	66.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	55.0	60.0	60.0
	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	67.0	80.0	76.0	74.0	68.0	64.0	61.0	59.0	60.0	60.0	55.0
	57.0	57.0	58.0	61.0	60.0	60.0	60.0	60.0	60.0	56.0	61.0	62.0	62.0	62.0	55.0	61.0	59.0	55.0		
0 29	0.0	0.0	0.0	0.0	87.0	77.0	76.0	74.0	69.0	62.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	72.0	66.0	67.0	66.0	59.0	55.0	55.0	60.0	60.0	60.0
	57.0	60.0	62.0	74.0	75.0	65.0	69.0	60.0	60.0	56.0	62.0	63.0	66.0	63.0	59.0	63.0	59.0	55.0		
0 30	0.0	0.0	0.0	94.0	81.0	71.0	72.0	69.0	65.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	60.0	61.0	58.0	56.0	60.0	60.0	60.0	60.0
	61.0	69.0	69.0	77.0	70.0	63.0	67.0	56.0	55.0	59.0	68.0	69.0	70.0	63.0	62.0	63.0	58.0	56.0		
0 31	0.0	0.0	0.0	91.0	77.0	70.0	70.0	67.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	57.0	60.0	60.0	60.0	60.0	60.0	57.0
	67.0	0.0	76.0	75.0	78.0	61.0	67.0	61.0	59.0	67.0	0.0	0.0	74.0	65.0	65.0	63.0	58.0	59.0		
0 32	94.0	95.0	0.0	87.0	75.0	69.0	67.0	64.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	66.0
	73.0	0.0	0.0	75.0	73.0	61.0	73.0	64.0	65.0	76.0	0.0	0.0	71.0	67.0	68.0	64.0	61.0	60.0		
0 33	88.0	89.0	91.0	82.0	74.0	69.0	65.0	62.0	57.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	66.0
	73.0	76.0	77.0	66.0	61.0	73.0	72.0	68.0	71.0	0.0	0.0	0.0	76.0	70.0	69.0	66.0	63.0	59.0		
0 34	82.0	82.0	83.0	78.0	72.0	68.0	65.0	60.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	61.0	69.0
	72.0	72.0	65.0	60.0	68.0	76.0	70.0	70.0	80.0	0.0	0.0	0.0	0.0	71.0	69.0	68.0	64.0	59.0		
0 35	74.0	74.0	78.0	76.0	73.0	69.0	64.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	64.0	68.0	72.0
	73.0	70.0	65.0	64.0	74.0	80.0	70.0	75.0	0.0	0.0	0.0	0.0	78.0	74.0	70.0	69.0	66.0	62.0		
0 36	65.0	70.0	76.0	76.0	73.0	69.0	65.0	61.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	64.0	71.0	74.0	75.0
	74.0	71.0	68.0	70.0	78.0	0.0	72.0	82.0	0.0	0.0	0.0	0.0	78.0	75.0	72.0	70.0	69.0	67.0		
0 37	57.0	71.0	77.0	77.0	74.0	69.0	64.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	60.0	66.0	71.0	76.0	78.0	79.0
	77.0	73.0	71.0	74.0	0.0	81.0	75.0	82.0	0.0	0.0	0.0	0.0	79.0	78.0	75.0	73.0	72.0	72.0		
0 38	68.0	77.0	81.0	79.0	75.0	69.0	63.0	60.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	63.0	66.0	77.0	80.0	0.0	0.0	0.0
	80.0	76.0	72.0	73.0	80.0	76.0	72.0	78.0	91.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	82.0	85.0	85.0	82.0	76.0	68.0	63.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	66.0	69.0	75.0	0.0	0.0	0.0	0.0	0.0
	0.0	78.0	73.0	71.0	73.0	72.0	62.0	70.0	84.0	89.0	88.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	90.0	84.0	76.0	67.0	64.0	64.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	66.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	80.0	75.0	71.0	69.0	70.0	60.0	64.0	78.0	84.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	87.0	77.0	67.0	66.0	68.0	66.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	72.0	76.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	77.0	71.0	67.0	60.0	60.0	60.0	73.0	83.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	88.0	78.0	70.0	72.0	73.0	70.0	63.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	70.0	77.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	79.0	70.0	62.0	60.0	60.0	59.0	72.0	81.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 43	0.0	0.0	0.0	88.0	80.0	77.0	78.0	79.0	74.0	65.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	55.0	56.0	60.0	60.0	60.0	60.0	60.0	68.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	80.0	70.0	57.0	60.0	60.0	59.0	71.0	80.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	88.0	84.0	83.0	84.0	85.0	77.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	62.0	56.0	60.0	60.0	60.0	67.0	76.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	80.0	67.0	60.0	60.0	60.0	60.0	70.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	89.0	88.0	88.0	89.0	0.0	77.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	57.0	62.0	64.0	61.0	60.0	62.0	67.0	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	77.0	61.0	60.0	60.0	60.0	60.0	71.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	66.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	59.0	57.0	57.0	56.0	60.0	60.0	60.0	60.0	60.0
	60.0	58.0	63.0	65.0	66.0	67.0	69.0	73.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	71.0	57.0	60.0	60.0	60.0	59.0	72.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	74.0	64.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	59.0	59.0	62.0	62.0	58.0	57.0	60.0	60.0	60.0	60.0
	60.0	58.0	64.0	68.0	71.0	73.0	76.0	77.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	65.0	60.0	60.0	60.0	60.0	60.0	71.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	71.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	60.0	61.0	61.0	63.0	64.0	60.0	59.0	60.0	60.0	60.0	60.0
	60.0	58.0	66.0	70.0	74.0	78.0	81.0	79.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	72.0	60.0	60.0	60.0	60.0	60.0	61.0	71.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0	69.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	61.0	63.0	63.0	64.0	63.0	64.0	62.0	58.0	55.0	60.0	60.0	60.0
	60.0	58.0	68.0	75.0	0.0	0.0	0.0	81.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	75.0	64.0	60.0	60.0	60.0	60.0	60.0	62.0	71.0	78.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	56.0	59.0	62.0	65.0	66.0	66.0	66.0	66.0	63.0	63.0	60.0	56.0	60.0	60.0	60.0
	60.0	60.0	69.0	79.0	0.0	0.0	0.0	80.0	79.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	78.0
	69.0	57.0	60.0	60.0	60.0	60.0	60.0	63.0	71.0	71.0	71.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	80.0	71.0	62.0	60.0	60.0	60.0	60.0	60.0	55.0	56.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	60.0	62.0	65.0	68.0	68.0	69.0	69.0	68.0	67.0	65.0	64.0	60.0	57.0	60.0	60.0	60.0
	60.0	63.0	74.0	0.0	0.0	0.0	0.0	75.0	73.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	73.0
	63.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	67.0	68.0	68.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	75.0	65.0	58.0	60.0	60.0	60.0	60.0	60.0	65.0	64.0	59.0	60.0	56.0	57.0
	57.0	59.0	62.0	65.0	67.0	69.0	71.0	72.0	73.0	73.0	72.0	72.0	69.0	67.0	64.0	61.0	58.0	60.0	60.0	60.0
	56.0	66.0	77.0	0.0	0.0	0.0	80.0	69.0	65.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	78.0	71.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	77.0	69.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	65.0	64.0	64.0
	65.0	67.0	70.0	72.0	74.0	75.0	77.0	77.0	75.0	74.0	73.0	73.0	72.0	70.0	66.0	63.0	58.0	60.0	60.0	60.0
	60.0	69.0	80.0	0.0	0.0	0.0	76.0	62.0	59.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	73.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	72.0	65.0	58.0	60.0	60.0	60.0	60.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0
	73.0	76.0	78.0	80.0	0.0	0.0	0.0	0.0	78.0	76.0	76.0	76.0	75.0	73.0	69.0	64.0	59.0	60.0	60.0	60.0
	63.0	73.0	0.0	0.0	0.0	0.0	73.0	58.0	62.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0
	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	79.0	78.0	79.0	78.0	76.0	71.0	66.0	61.0	56.0	60.0	57.0
	65.0	76.0	0.0	0.0	0.0	82.0	72.0	63.0	70.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0
	70.0	59.0	60.0	60.0	58.0	58.0	58.0	58.0	58.0	62.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	63.0	57.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	80.0	81.0	81.0	79.0	73.0	67.0	61.0	56.0	60.0	58.0
	66.0	77.0	0.0	0.0	0.0	82.0	73.0	70.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	79.0	67.0	61.0	60.0	61.0	61.0	61.0	61.0	62.0	68.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	65.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	83.0	85.0	85.0	82.0	75.0	69.0	62.0	57.0	55.0	59.0
	66.0	77.0	0.0	0.0	0.0	82.0	77.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	76.0	70.0	68.0	68.0	68.0	68.0	68.0	71.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	67.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	59.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0	0.0	84.0	77.0	70.0	64.0	57.0	56.0	58.0
	64.0	73.0	0.0	0.0	0.0	83.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	83.0	77.0	75.0	70.0	71.0	71.0	71.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	67.0	62.0	56.0	60.0	55.0	55.0	60.0	60.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	79.0	72.0	65.0	59.0	57.0	57.0
	60.0	69.0	0.0	0.0	85.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	78.0	75.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	69.0	63.0	56.0	56.0	55.0	60.0	60.0	60.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	74.0	67.0	61.0	57.0	60.0
	55.0	64.0	76.0	0.0	81.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	81.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	71.0	63.0	56.0	55.0	56.0	60.0	60.0	56.0	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	76.0	69.0	62.0	56.0	60.0
	60.0	59.0	70.0	75.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	72.0	64.0	56.0	55.0	55.0	60.0	60.0	58.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	79.0	71.0	64.0	56.0	60.0
	60.0	55.0	64.0	69.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	74.0	65.0	57.0	60.0	60.0	60.0	60.0	60.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	74.0	65.0	60.0	60.0
	60.0	60.0	58.0	64.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	74.0	65.0	58.0	60.0	60.0	60.0	60.0	61.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	76.0	66.0	55.0	60.0
	60.0	60.0	60.0	60.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	74.0	66.0	59.0	60.0	60.0	60.0	60.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	68.0	57.0	60.0
	60.0	60.0	60.0	55.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

VERT HYD COND /THICKNESS FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.7
	0.8	0.0	0.0	0.0	0.0	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.9	1.0	1.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.6
	0.8	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	1.0	1.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.6	0.6
	0.9	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.7	0.6	0.6
	0.9	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6
	0.9	1.6	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.8	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.6	0.7
	0.9	1.3	0.0	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.7	0.7
	0.9	1.0	0.0	0.0	0.0	0.6	0.5	0.5	0.6	0.6	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.7	0.7	0.7
	0.8	0.9	0.8	0.0	0.0	0.6	0.5	0.5	0.6	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.7	0.7	0.7
	0.8	0.8	0.7	0.0	0.7	0.6	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.8	0.8
	0.8	0.7	0.7	0.0	0.7	0.6	0.5	0.6	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
	0.8	0.7	0.8	0.0	0.6	0.5	0.5	0.6	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
	0.7	0.7	0.8	0.0	0.7	0.6	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8
	0.7	0.7	0.8	0.0	0.7	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.8
	0.7	0.7	0.0	0.0	0.8	0.6	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.7	0.8	0.9	1.0	0.8
	0.8	0.7	0.0	0.0	0.8	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.8	0.7	0.7	0.7	0.9	0.9	0.9
	0.9	0.8	0.0	0.0	0.8	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7
	0.7	0.6	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
	0.5	0.6	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.6
	0.6	0.6	0.0	0.0	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5
	0.6	0.7	0.0	0.0	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
	0.6	0.6	0.0	0.0	0.8	0.6	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.5	0.5	0.5	0.5	0.5	0.6
	0.6	0.6	0.0	0.0	0.0	0.6	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.5	0.5	0.5	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.7	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.5	0.6	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.9	0.0	0.0	0.0
	0.0	0.0	0.8	0.6	0.6	0.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.6	0.5	0.6	0.6	0.8	0.0	0.0	0.7	0.8
	0.0	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.9	0.0	0.0	0.7	0.8	0.0	0.0	0.8	0.6	0.6	0.7	0.6	0.6	0.8	0.0	0.7	0.6	0.6
	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.7	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.8	0.9	0.8	0.6	0.7	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.7	0.8	0.7	0.5	0.5	0.6
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.7	0.7	0.6	0.5	0.5	0.6

	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7
	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.7	0.7	0.6	0.5	0.5	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.9	0.0	1.0	0.9	1.0	0.1	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.7	0.7	0.6	0.6	0.5	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.9	0.8	0.8	0.9	0.9	0.1	0.1	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7
	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.7	0.6	0.6	0.6	0.5
	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.9	0.8	1.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7
	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.7	0.6	0.6	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.8	1.0	0.9	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	0.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.9	1.1	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.9
	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	0.6	0.6	0.6
	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	1.3
	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.8	1.1	0.0	1.1	0.8	0.7	0.0	0.0	0.0	0.9	0.6	0.6	0.7
	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.7	1.0
	0.6	0.7	0.0	0.0	0.0	0.0	0.8	0.7	1.1	2.0	1.1	0.8	1.1	0.0	0.0	0.0	0.0	0.7	0.9	0.8
	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.0	1.0	0.9	0.7	0.7	0.6	0.6	0.7	0.8
	0.6	0.8	0.0	0.0	0.0	0.8	0.7	0.8	1.0	1.4	1.4	1.0	0.9	0.8	0.0	0.0	0.0	1.0	1.2	1.0
	0.9	0.9	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.9	0.9	0.8	0.6	0.6	0.6	0.7	0.7
	0.6	0.8	0.9	0.0	0.0	0.7	0.6	0.8	1.0	1.3	1.4	1.1	0.9	0.9	0.9	0.0	1.0	1.5	1.5	1.1
	1.0	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.9	0.7	0.6	0.6	0.6	0.7	0.7
	0.7	0.7	0.0	0.0	0.7	0.6	0.6	0.8	0.9	1.0	1.3	1.1	1.0	0.9	1.1	1.1	1.3	1.4	1.4	1.2
	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.8	0.7	0.6	0.6	0.7	0.8	0.8
	0.8	0.0	0.0	0.0	0.7	0.6	0.7	0.8	0.9	1.1	1.3	1.3	1.2	1.3	1.1	1.2	1.3	1.3	1.3	1.2
	1.1	1.3	0.0	0.0	0.9	0.8	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8
	0.0	0.0	0.0	0.8	0.6	0.6	0.7	0.8	0.9	1.1	0.0	0.0	1.3	1.3	1.1	1.3	1.2	1.1	1.1	1.1
	1.3	1.5	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8
	0.0	0.0	0.8	0.7	0.6	0.6	0.7	0.8	1.0	1.1	0.0	0.0	1.3	1.1	1.1	1.2	1.1	1.0	0.9	1.0
	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9
	0.0	0.0	0.8	0.7	0.6	0.7	0.8	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	0.9	0.9	0.9
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.8	0.9	1.0	1.0	1.1
	0.0	0.9	0.8	0.7	0.7	0.7	0.8	1.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.9	0.9
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0	1.1	1.2	1.1
	1.1	0.9	0.8	0.8	0.8	0.8	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	1.0	0.8	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.3	1.2	1.1
	1.1	0.9	0.9	0.8	0.9	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.1	0.9	0.7	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.1	1.2	1.4	1.4	1.3	1.2	1.2

	1.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.0	0.8	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.9	1.0	1.6	0.0	0.0	1.7	1.3	1.3	1.4
	1.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.0	0.8	0.7	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	1.1	0.0	0.0	0.0	0.0	1.5	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9	0.9	0.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.7	0.8	0.7	0.7	0.7	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.9	0.8	0.8	0.8	0.8	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.9	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.0	0.9	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.0	0.9	0.8	0.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.9	0.9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.1
	1.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	1.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	1.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

TOP FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	84.0	82.0	81.0	78.0	75.0

	69.0	0.0	0.0	0.0	0.0	66.0	71.0	73.0	76.0	79.0	80.0	81.0	81.0	80.0	80.0	80.0	81.0	81.0	82.0	82.0
	82.0	82.0	82.0	82.0	83.0	83.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	84.0	83.0	82.0	80.0	76.0
	70.0	0.0	0.0	0.0	0.0	66.0	71.0	75.0	78.0	79.0	81.0	82.0	82.0	81.0	81.0	80.0	81.0	82.0	82.0	82.0
	82.0	82.0	82.0	83.0	83.0	83.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0	86.0	85.0	83.0	82.0	81.0	78.0
	72.0	0.0	0.0	0.0	0.0	67.0	72.0	76.0	79.0	81.0	82.0	83.0	82.0	82.0	81.0	82.0	82.0	83.0	83.0	83.0
	82.0	82.0	82.0	83.0	83.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	90.0	88.0	86.0	84.0	83.0	83.0	82.0	81.0
	73.0	0.0	0.0	0.0	0.0	68.0	74.0	79.0	81.0	82.0	83.0	84.0	83.0	83.0	82.0	83.0	83.0	84.0	84.0	83.0
	83.0	82.0	82.0	83.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	86.0	84.0	84.0	84.0	84.0	83.0
	75.0	65.0	0.0	0.0	0.0	70.0	77.0	81.0	82.0	84.0	84.0	84.0	84.0	83.0	83.0	84.0	84.0	85.0	84.0	84.0
	83.0	83.0	83.0	83.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	85.0	84.0	84.0	84.0	84.0	83.0
	76.0	67.0	0.0	0.0	0.0	71.0	80.0	83.0	84.0	84.0	85.0	85.0	84.0	84.0	84.0	85.0	85.0	86.0	85.0	84.0
	84.0	83.0	83.0	84.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	85.0	83.0	84.0	84.0	84.0	83.0
	78.0	70.0	0.0	0.0	0.0	74.0	83.0	84.0	84.0	85.0	85.0	85.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	85.0
	84.0	84.0	84.0	84.0	85.0	84.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	85.0	84.0	84.0	85.0	85.0	83.0
	80.0	75.0	67.0	0.0	0.0	76.0	83.0	85.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	86.0	87.0	87.0	86.0	85.0
	84.0	84.0	84.0	84.0	85.0	84.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	86.0	85.0	85.0	85.0	85.0	84.0
	81.0	79.0	71.0	0.0	69.0	79.0	83.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	87.0	87.0	87.0	87.0	86.0	85.0
	85.0	84.0	84.0	85.0	85.0	84.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	89.0	88.0	86.0	85.0	85.0	85.0	85.0	84.0
	82.0	80.0	70.0	0.0	75.0	81.0	84.0	85.0	85.0	85.0	86.0	86.0	87.0	0.0	88.0	88.0	88.0	87.0	86.0	85.0
	85.0	84.0	84.0	84.0	84.0	84.0	83.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	89.0	88.0	87.0	86.0	86.0	85.0	85.0	84.0
	83.0	80.0	68.0	0.0	80.0	83.0	85.0	85.0	85.0	85.0	86.0	87.0	0.0	0.0	0.0	88.0	88.0	88.0	87.0	86.0
	85.0	85.0	85.0	84.0	84.0	83.0	83.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	90.0	88.0	87.0	87.0	86.0	86.0	85.0	84.0
	83.0	79.0	66.0	0.0	75.0	83.0	85.0	86.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	88.0	0.0	86.0
	85.0	85.0	85.0	84.0	84.0	83.0	82.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	92.0	91.0	90.0	89.0	88.0	88.0	87.0	86.0	85.0	84.0
	83.0	78.0	65.0	0.0	71.0	82.0	85.0	86.0	86.0	87.0	88.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	85.0	85.0	84.0	84.0	83.0	82.0	83.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	92.0	92.0	92.0	90.0	89.0	89.0	88.0	88.0	87.0	85.0	84.0
	82.0	76.0	0.0	0.0	68.0	80.0	84.0	87.0	88.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	85.0	85.0	84.0	84.0	83.0	83.0	83.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	93.0	93.0	92.0	91.0	90.0	89.0	89.0	88.0	87.0	85.0	84.0
	81.0	75.0	0.0	0.0	67.0	79.0	85.0	88.0	89.0	90.0	90.0	90.0	0.0	0.0	0.0	91.0	90.0	0.0	0.0	0.0
	87.0	86.0	85.0	85.0	84.0	83.0	83.0	84.0	85.0	85.0	86.0	0.0	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	93.0	92.0	91.0	90.0	90.0	90.0	89.0	87.0	86.0	84.0
	81.0	75.0	0.0	0.0	68.0	79.0	85.0	89.0	90.0	91.0	92.0	91.0	0.0	0.0	92.0	92.0	91.0	89.0	0.0	88.0
	87.0	86.0	85.0	85.0	84.0	84.0	84.0	84.0	85.0	86.0	87.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	93.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	84.0
	82.0	76.0	0.0	0.0	70.0	80.0	86.0	90.0	92.0	93.0	93.0	93.0	93.0	93.0	93.0	92.0	91.0	90.0	89.0	88.0
	87.0	87.0	86.0	85.0	84.0	84.0	85.0	85.0	86.0	86.0	87.0	0.0	89.0	90.0	90.0	91.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	93.0	92.0	91.0	91.0	91.0	90.0	88.0	86.0	85.0
	83.0	78.0	0.0	0.0	73.0	82.0	88.0	92.0	94.0	95.0	95.0	94.0	94.0	94.0	94.0	92.0	91.0	90.0	89.0	88.0
	88.0	87.0	86.0	86.0	85.0	85.0	85.0	86.0	87.0	87.0	87.0	0.0	89.0	90.0	90.0	91.0	91.0	90.0	89.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	94.0	94.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	85.0
	83.0	76.0	0.0	0.0	76.0	83.0	88.0	92.0	95.0	96.0	96.0	95.0	94.0	95.0	94.0	92.0	91.0	90.0	90.0	89.0
	88.0	88.0	87.0	86.0	85.0	85.0	86.0	87.0	87.0	88.0	88.0	0.0	89.0	90.0	90.0	91.0	91.0	89.0	89.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	92.0	91.0	90.0	89.0	89.0	87.0	86.0	86.0
	84.0	75.0	0.0	0.0	74.0	82.0	88.0	92.0	95.0	98.0	97.0	95.0	94.0	95.0	93.0	92.0	91.0	91.0	90.0	90.0
	89.0	88.0	88.0	87.0	86.0	86.0	87.0	88.0	88.0	88.0	88.0	88.0	89.0	89.0	90.0	90.0	90.0	89.0	88.0	88.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	94.0	92.0	90.0	89.0	88.0	88.0	87.0	86.0	86.0
	84.0	77.0	0.0	0.0	68.0	80.0	87.0	91.0	95.0	99.0	97.0	94.0	93.0	93.0	92.0	92.0	91.0	91.0	90.0	90.0
	90.0	89.0	88.0	87.0	87.0	87.0	88.0	89.0	89.0	89.0	88.0	88.0	89.0	89.0	90.0	90.0	89.0	88.0	87.0	87.0
	88.0	88.0	0.0	0.0	0.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0	82.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	91.0	89.0	88.0	87.0	87.0	86.0	86.0	85.0
	84.0	77.0	0.0	0.0	0.0	76.0	85.0	88.0	93.0	99.0	96.0	93.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
	90.0	90.0	89.0	88.0	88.0	88.0	89.0	90.0	90.0	89.0	89.0	88.0	89.0	89.0	90.0	89.0	88.0	87.0	86.0	86.0
	87.0	87.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	83.0	82.0	82.0	82.0	81.0	81.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	92.0	90.0	87.0	86.0	86.0	86.0	85.0	85.0	85.0
	84.0	78.0	0.0	0.0	0.0	71.0	82.0	84.0	89.0	94.0	93.0	90.0	89.0	89.0	89.0	90.0	91.0	91.0	91.0	91.0
	91.0	90.0	90.0	89.0	88.0	89.0	90.0	91.0	90.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	88.0	87.0	85.0	85.0
	86.0	86.0	87.0	86.0	85.0	83.0	83.0	83.0	82.0	82.0	81.0	81.0	81.0	81.0	80.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	92.0	91.0	89.0	86.0	85.0	85.0	85.0	85.0	85.0	85.0
	84.0	79.0	0.0	0.0	0.0	0.0	79.0	76.0	82.0	88.0	89.0	86.0	85.0	87.0	88.0	89.0	90.0	91.0	92.0	92.0
	92.0	91.0	90.0	90.0	89.0	89.0	90.0	92.0	91.0	90.0	89.0	89.0	89.0	89.0	89.0	88.0	87.0	86.0	85.0	85.0
	85.0	85.0	85.0	85.0	83.0	82.0	81.0	81.0	81.0	81.0	81.0	80.0	80.0	80.0	80.0	80.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	91.0	90.0	88.0	85.0	84.0	84.0	84.0	84.0	85.0	84.0
	83.0	77.0	0.0	0.0	0.0	0.0	66.0	66.0	74.0	82.0	85.0	83.0	82.0	85.0	87.0	89.0	90.0	91.0	92.0	93.0
	93.0	92.0	91.0	90.0	89.0	89.0	90.0	91.0	90.0	90.0	0.0	89.0	89.0	89.0	89.0	88.0	86.0	85.0	84.0	84.0
	84.0	84.0	84.0	0.0	82.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	79.0	79.0	79.0	79.0	79.0	78.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	92.0	91.0	90.0	87.0	84.0	83.0	83.0	83.0	84.0	84.0	84.0
	82.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	76.0	82.0	79.0	80.0	84.0	86.0	88.0	90.0	91.0	93.0	94.0
	93.0	92.0	91.0	90.0	89.0	89.0	90.0	90.0	90.0	0.0	0.0	89.0	89.0	89.0	88.0	87.0	86.0	85.0	84.0	83.0
	83.0	83.0	83.0	83.0	81.0	80.0	80.0	79.0	79.0	80.0	80.0	79.0	79.0	79.0	79.0	79.0	78.0	78.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	95.0	95.0	94.0	92.0	91.0	90.0	87.0	85.0	83.0	82.0	83.0	83.0	83.0	83.0
	81.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	80.0	78.0	79.0	83.0	85.0	88.0	89.0	91.0	94.0	94.0
	94.0	93.0	92.0	91.0	89.0	89.0	89.0	90.0	90.0	0.0	0.0	0.0	88.0	88.0	87.0	86.0	85.0	84.0	83.0	83.0
	83.0	83.0	83.0	82.0	81.0	80.0	79.0	79.0	79.0	79.0	80.0	79.0	78.0	78.0	78.0	78.0	78.0	77.0		
0 28	0.0	0.0	0.0	0.0	0.0	97.0	96.0	96.0	94.0	93.0	91.0	90.0	87.0	85.0	83.0	82.0	82.0	82.0	82.0	81.0
	79.0	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	79.0	79.0	80.0	83.0	85.0	87.0	89.0	91.0	94.0	95.0
	94.0	93.0	92.0	91.0	89.0	88.0	88.0	89.0	89.0	89.0	89.0	88.0	88.0	87.0	87.0	86.0	84.0	83.0	83.0	82.0
	82.0	82.0	82.0	82.0	81.0	80.0	79.0	78.0	78.0	80.0	80.0	79.0	79.0	78.0	78.0	77.0	77.0	77.0		
0 29	0.0	0.0	0.0	0.0	98.0	98.0	98.0	97.0	95.0	93.0	92.0	90.0	88.0	85.0	82.0	81.0	81.0	81.0	81.0	79.0
	77.0	72.0	65.0	0.0	0.0	71.0	68.0	0.0	0.0	67.0	77.0	80.0	81.0	83.0	85.0	86.0	88.0	90.0	93.0	94.0
	94.0	93.0	92.0	91.0	88.0	87.0	87.0	89.0	89.0	89.0	88.0	88.0	87.0	87.0	86.0	85.0	84.0	83.0	82.0	82.0
	82.0	82.0	82.0	82.0	81.0	80.0	79.0	78.0	78.0	80.0	81.0	80.0	79.0	78.0	78.0	77.0	77.0	76.0		
0 30	0.0	0.0	0.0	98.0	99.0	100.0	99.0	98.0	96.0	94.0	92.0	91.0	88.0	84.0	82.0	80.0	80.0	80.0	79.0	78.0
	75.0	72.0	68.0	65.0	68.0	79.0	71.0	0.0	0.0	0.0	75.0	79.0	81.0	83.0	84.0	85.0	87.0	89.0	92.0	93.0
	94.0	94.0	93.0	91.0	88.0	86.0	87.0	88.0	89.0	89.0	88.0	87.0	86.0	86.0	85.0	84.0	83.0	82.0	82.0	82.0
	82.0	82.0	83.0	83.0	82.0	81.0	80.0	79.0	80.0	81.0	82.0	81.0	80.0	79.0	77.0	77.0	77.0	76.0		
0 31	0.0	0.0	0.0	100.0	100.0	101.0	101.0	100.0	97.0	95.0	92.0	91.0	88.0	84.0	81.0	79.0	79.0	80.0	78.0	76.0
	74.0	72.0	71.0	71.0	69.0	73.0	68.0	0.0	0.0	0.0	69.0	74.0	81.0	82.0	82.0	84.0	85.0	87.0	90.0	93.0
	94.0	94.0	93.0	91.0	88.0	86.0	87.0	88.0	89.0	88.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	82.0	82.0	81.0
	82.0	0.0	83.0	83.0	83.0	82.0	81.0	81.0	82.0	83.0	0.0	0.0	81.0	79.0	77.0	77.0	77.0	76.0		
0 32	101.0	101.0	0.0	101.0	101.0	102.0	102.0	101.0	98.0	94.0	92.0	90.0	87.0	82.0	79.0	78.0	79.0	79.0	76.0	74.0
	73.0	72.0	71.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	80.0	81.0	82.0	82.0	83.0	86.0	89.0	92.0
	94.0	94.0	93.0	91.0	88.0	87.0	88.0	89.0	89.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	82.0	82.0	81.0	81.0
	82.0	0.0	0.0	84.0	84.0	83.0	83.0	83.0	84.0	85.0	0.0	0.0	82.0	80.0	78.0	77.0	77.0	76.0		
0 33	102.0	102.0	101.0	101.0	102.0	102.0	103.0	102.0	99.0	94.0	90.0	88.0	84.0	80.0	78.0	77.0	77.0	77.0	74.0	72.0
	72.0	70.0	67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	79.0	80.0	80.0	81.0	83.0	87.0	90.0
	93.0	94.0	93.0	91.0	89.0	88.0	88.0	89.0	89.0	88.0	87.0	85.0	85.0	84.0	83.0	83.0	82.0	82.0	81.0	81.0
	82.0	83.0	84.0	85.0	85.0	85.0	85.0	85.0	86.0	0.0	0.0	0.0	0.0	83.0	80.0	78.0	77.0	77.0	76.0	
0 34	101.0	102.0	101.0	101.0	102.0	103.0	103.0	103.0	98.0	93.0	88.0	85.0	82.0	78.0	76.0	75.0	76.0	75.0	71.0	71.0
	72.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	77.0	77.0	78.0	80.0	85.0	88.0
	92.0	93.0	92.0	91.0	89.0	89.0	89.0	89.0	89.0	87.0	86.0	85.0	84.0	83.0	83.0	82.0	82.0	82.0	81.0	81.0
	83.0	84.0	85.0	85.0	86.0	86.0	87.0	87.0	89.0	0.0	0.0	0.0	0.0	81.0	79.0	78.0	77.0	77.0		
0 35	100.0	101.0	101.0	101.0	102.0	103.0	103.0	103.0	97.0	91.0	86.0	82.0	78.0	75.0	73.0	74.0	75.0	74.0	72.0	72.0
	72.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	69.0	73.0	75.0	77.0	83.0	87.0
	90.0	92.0	92.0	91.0	90.0	89.0	89.0	90.0	89.0	87.0	85.0	84.0	84.0	83.0	82.0	82.0	83.0	83.0	82.0	82.0
	83.0	84.0	85.0	86.0	87.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	84.0	82.0	80.0	78.0	77.0	77.0		
0 36	99.0	100.0	100.0	101.0	102.0	103.0	103.0	101.0	95.0	88.0	83.0	79.0	76.0	73.0	71.0	73.0	74.0	74.0	73.0	72.0
	72.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	74.0	77.0	81.0	84.0
	88.0	90.0	91.0	91.0	90.0	89.0	89.0	89.0	88.0	86.0	85.0	84.0	83.0	83.0	82.0	83.0	83.0	83.0	83.0	83.0
	84.0	85.0	86.0	86.0	87.0	0.0	90.0	91.0	0.0	0.0	0.0	0.0	85.0	82.0	80.0	79.0	78.0	77.0		
0 37	98.0	99.0	100.0	100.0	102.0	102.0	102.0	99.0	92.0	85.0	79.0	76.0	73.0	70.0	70.0	72.0	74.0	75.0	74.0	74.0
	74.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	0.0	70.0	77.0	78.0	81.0
	86.0	88.0	90.0	91.0	89.0	88.0	88.0	88.0	87.0	85.0	84.0	83.0	83.0	83.0	83.0	83.0	84.0	84.0	84.0	85.0
	85.0	86.0	86.0	87.0	0.0	90.0	91.0	93.0	0.0	0.0	0.0	0.0	85.0	83.0	81.0	79.0	78.0	77.0		
0 38	97.0	98.0	99.0	100.0	101.0	102.0	101.0	97.0	90.0	82.0	76.0	74.0	71.0	68.0	69.0	72.0	75.0	76.0	75.0	75.0
	75.0	71.0	0.0	0.0	0.0	0.0	0.0	66.0	66.0	0.0	65.0	68.0	74.0	0.0	0.0	0.0	65.0	77.0	74.0	78.0
	84.0	87.0	88.0	89.0	88.0	88.0	87.0	87.0	86.0	84.0	83.0	83.0	84.0	84.0	84.0	84.0	85.0	0.0	0.0	0.0

	86.0	87.0	87.0	87.0	88.0	90.0	92.0	94.0	96.0	0.0	0.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	96.0	97.0	98.0	99.0	101.0	101.0	100.0	95.0	89.0	80.0	75.0	73.0	70.0	67.0	69.0	73.0	76.0	77.0	76.0	75.0
	75.0	71.0	0.0	0.0	0.0	0.0	68.0	70.0	70.0	69.0	70.0	72.0	72.0	0.0	0.0	0.0	0.0	71.0	68.0	75.0
	82.0	84.0	86.0	87.0	87.0	87.0	86.0	86.0	85.0	84.0	82.0	83.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0
	0.0	87.0	87.0	87.0	88.0	90.0	93.0	96.0	97.0	96.0	93.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	97.0	99.0	100.0	101.0	99.0	94.0	88.0	80.0	76.0	74.0	70.0	66.0	71.0	75.0	78.0	78.0	77.0	75.0
	74.0	70.0	0.0	0.0	0.0	68.0	72.0	73.0	74.0	73.0	73.0	74.0	72.0	66.0	0.0	0.0	0.0	66.0	65.0	73.0
	80.0	83.0	84.0	85.0	85.0	85.0	86.0	86.0	85.0	84.0	83.0	84.0	85.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	87.0	87.0	87.0	88.0	90.0	93.0	96.0	99.0	96.0	93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	98.0	99.0	101.0	98.0	93.0	87.0	81.0	77.0	75.0	72.0	70.0	73.0	76.0	79.0	79.0	77.0	75.0
	72.0	68.0	65.0	0.0	0.0	74.0	75.0	76.0	76.0	75.0	75.0	75.0	73.0	69.0	66.0	0.0	66.0	65.0	65.0	72.0
	78.0	81.0	82.0	83.0	84.0	84.0	85.0	85.0	85.0	84.0	84.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	87.0	87.0	88.0	90.0	93.0	96.0	99.0	96.0	93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	97.0	98.0	100.0	97.0	93.0	87.0	83.0	79.0	77.0	75.0	74.0	75.0	78.0	80.0	79.0	77.0	74.0
	70.0	66.0	0.0	0.0	71.0	79.0	78.0	78.0	78.0	77.0	76.0	77.0	75.0	72.0	70.0	69.0	69.0	68.0	69.0	73.0
	77.0	79.0	80.0	82.0	83.0	84.0	85.0	85.0	85.0	85.0	85.0	86.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	86.0	86.0	87.0	89.0	92.0	95.0	97.0	95.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	95.0	97.0	98.0	96.0	92.0	88.0	84.0	81.0	80.0	79.0	77.0	78.0	79.0	80.0	78.0	76.0	73.0
	67.0	0.0	0.0	0.0	74.0	80.0	80.0	79.0	79.0	79.0	78.0	78.0	76.0	74.0	73.0	72.0	73.0	73.0	73.0	75.0
	77.0	77.0	79.0	80.0	82.0	84.0	85.0	85.0	86.0	86.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	86.0	85.0	86.0	88.0	90.0	93.0	94.0	94.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	94.0	96.0	96.0	95.0	92.0	88.0	85.0	83.0	82.0	81.0	80.0	80.0	80.0	79.0	77.0	76.0	73.0
	0.0	0.0	0.0	68.0	77.0	81.0	80.0	80.0	80.0	80.0	79.0	79.0	77.0	76.0	75.0	75.0	76.0	77.0	77.0	77.0
	77.0	75.0	78.0	80.0	82.0	84.0	85.0	86.0	87.0	87.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	85.0	84.0	85.0	87.0	89.0	91.0	93.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	93.0	94.0	95.0	93.0	0.0	89.0	87.0	85.0	84.0	82.0	81.0	82.0	81.0	79.0	76.0	75.0	73.0
	0.0	0.0	67.0	73.0	80.0	81.0	80.0	80.0	80.0	80.0	80.0	80.0	79.0	78.0	78.0	79.0	80.0	81.0	81.0	80.0
	79.0	77.0	79.0	81.0	83.0	84.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	84.0	84.0	84.0	85.0	87.0	89.0	91.0	91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0	86.0	85.0	83.0	82.0	83.0	82.0	77.0	73.0	72.0	69.0
	0.0	0.0	69.0	76.0	81.0	81.0	80.0	80.0	81.0	81.0	81.0	81.0	80.0	80.0	80.0	82.0	84.0	86.0	84.0	82.0
	81.0	79.0	80.0	82.0	83.0	84.0	85.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	83.0	83.0	83.0	84.0	85.0	87.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	89.0	88.0	87.0	85.0	83.0	82.0	84.0	81.0	76.0	71.0	69.0	66.0
	0.0	67.0	72.0	78.0	81.0	81.0	80.0	81.0	81.0	81.0	82.0	82.0	82.0	82.0	83.0	84.0	87.0	89.0	86.0	84.0
	82.0	81.0	81.0	83.0	84.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	84.0	83.0	82.0	82.0	82.0	83.0	86.0	88.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	89.0	88.0	86.0	82.0	81.0	82.0	79.0	73.0	69.0	66.0	66.0
	66.0	70.0	74.0	79.0	81.0	81.0	81.0	81.0	81.0	82.0	83.0	83.0	83.0	84.0	85.0	86.0	89.0	89.0	87.0	85.0
	84.0	83.0	83.0	84.0	85.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	83.0	82.0	81.0	81.0	81.0	82.0	85.0	87.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0	89.0	89.0	86.0	81.0	78.0	77.0	75.0	71.0	68.0	67.0	68.0
	69.0	73.0	76.0	80.0	81.0	81.0	81.0	81.0	82.0	82.0	83.0	84.0	85.0	85.0	86.0	88.0	89.0	90.0	89.0	87.0
	85.0	84.0	84.0	85.0	0.0	0.0	0.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	85.0	82.0	81.0	80.0	81.0	81.0	82.0	84.0	86.0	87.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0	87.0	88.0	90.0	84.0	79.0	75.0	73.0	72.0	69.0	70.0	69.0	70.0
	71.0	75.0	78.0	81.0	82.0	82.0	82.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0	90.0	90.0	89.0	88.0
	86.0	85.0	85.0	85.0	0.0	0.0	0.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0
	85.0	82.0	80.0	80.0	80.0	81.0	82.0	83.0	85.0	86.0	85.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	87.0	86.0	86.0	86.0	86.0	82.0	77.0	71.0	69.0	70.0	70.0	72.0	71.0	72.0
	74.0	78.0	80.0	82.0	82.0	82.0	82.0	82.0	82.0	84.0	86.0	87.0	87.0	88.0	89.0	89.0	90.0	90.0	89.0	89.0
	87.0	85.0	85.0	0.0	0.0	0.0	0.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	87.0
	85.0	82.0	81.0	80.0	80.0	80.0	81.0	83.0	85.0	85.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	85.0	84.0	83.0	83.0	82.0	79.0	75.0	70.0	70.0	71.0	72.0	75.0	73.0	74.0
	77.0	80.0	82.0	83.0	83.0	83.0	82.0	82.0	83.0	85.0	87.0	88.0	89.0	89.0	89.0	90.0	90.0	90.0	89.0	88.0
	87.0	85.0	85.0	0.0	0.0	0.0	85.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0
	85.0	83.0	81.0	80.0	80.0	80.0	81.0	83.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	82.0	83.0	82.0	81.0	80.0	78.0	76.0	74.0	0.0	0.0	0.0	0.0	74.0	74.0	76.0
	79.0	82.0	83.0	84.0	84.0	83.0	83.0	83.0	84.0	86.0	88.0	89.0	90.0	90.0	90.0	90.0	90.0	90.0	89.0	88.0
	86.0	85.0	85.0	0.0	0.0	0.0	85.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0
	86.0	84.0	82.0	81.0	80.0	80.0	81.0	82.0	84.0	84.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	80.0	79.0	79.0	78.0	76.0	75.0	74.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0
	83.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	85.0	87.0	89.0	91.0	91.0	90.0	90.0	90.0	90.0	89.0	88.0	87.0
	86.0	85.0	0.0	0.0	0.0	0.0	86.0	87.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0
	87.0	85.0	83.0	81.0	80.0	80.0	81.0	82.0	83.0	83.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	77.0	77.0	76.0	75.0	74.0	73.0	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	88.0	91.0	92.0	91.0	91.0	90.0	90.0	90.0	89.0	88.0	86.0
	85.0	84.0	0.0	0.0	0.0	87.0	87.0	88.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0
	88.0	86.0	84.0	82.0	81.0	81.0	81.0	82.0	82.0	82.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	75.0	75.0	74.0	74.0	74.0	75.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	92.0	92.0	92.0	91.0	90.0	90.0	89.0	88.0	87.0	85.0
	83.0	83.0	0.0	0.0	0.0	88.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	89.0	87.0	85.0	83.0	82.0	81.0	81.0	81.0	82.0	82.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	74.0	74.0	75.0	75.0	74.0	76.0	78.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	92.0	92.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	83.0

	82.0	82.0	0.0	0.0	0.0	89.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	88.0	86.0	84.0	83.0	82.0	81.0	81.0	82.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	74.0	74.0	75.0	76.0	77.0	77.0	79.0	81.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	0.0	0.0	91.0	90.0	90.0	89.0	87.0	84.0	82.0
	80.0	81.0	0.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	88.0	87.0	85.0	84.0	83.0	81.0	82.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	75.0	75.0	77.0	79.0	80.0	81.0	82.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	88.0	86.0	83.0	80.0
	78.0	79.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	86.0	85.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	76.0	77.0	80.0	83.0	84.0	85.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	85.0	81.0	78.0
	76.0	77.0	81.0	0.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	87.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	79.0	80.0	84.0	88.0	89.0	88.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	84.0	80.0	75.0
	74.0	76.0	80.0	84.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	81.0	83.0	88.0	92.0	92.0	90.0	89.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	87.0	83.0	79.0	74.0
	71.0	75.0	79.0	83.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	83.0	86.0	91.0	96.0	95.0	91.0	90.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	87.0	83.0	77.0	73.0
	71.0	74.0	78.0	82.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	85.0	88.0	93.0	98.0	96.0	92.0	90.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	87.0	82.0	77.0	72.0
	71.0	73.0	77.0	80.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	86.0	89.0	93.0	97.0	95.0	91.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	81.0	76.0	72.0
	71.0	73.0	76.0	79.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 HYD. COND. ALONG ROWS = 150.0000 FOR LAYER 2

0

BOTTOM FOR LAYER 2 WILL BE READ ON UNIT 20 USING FORMAT: (20F4.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	39.0	31.0
	32.0	43.0	47.0	41.0	35.0	31.0	30.0	30.0	29.0	29.0	30.0	31.0	35.0	39.0	45.0	50.0	52.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	45.0	35.0	25.0
	34.0	47.0	48.0	40.0	35.0	30.0	27.0	28.0	28.0	29.0	29.0	31.0	35.0	39.0	44.0	49.0	50.0	53.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	42.0	32.0	26.0
	40.0	52.0	47.0	39.0	34.0	30.0	27.0	27.0	27.0	28.0	29.0	32.0	36.0	39.0	43.0	46.0	48.0	50.0	53.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	40.0	31.0	28.0
	41.0	50.0	44.0	36.0	33.0	28.0	26.0	26.0	27.0	28.0	30.0	34.0	38.0	39.0	39.0	44.0	47.0	47.0	50.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	39.0	33.0	34.0
	43.0	46.0	40.0	34.0	31.0	26.0	26.0	26.0	28.0	30.0	33.0	38.0	42.0	40.0	37.0	45.0	46.0	44.0	48.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	46.0	40.0	36.0	38.0
	43.0	43.0	37.0	33.0	29.0	26.0	26.0	27.0	29.0	32.0	39.0	44.0	46.0	44.0	44.0	49.0	47.0	42.0	50.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	46.0	41.0	39.0	40.0
	44.0	41.0	32.0	29.0	27.0	26.0	25.0	27.0	30.0	35.0	43.0	51.0	53.0	52.0	53.0	54.0	51.0	47.0	54.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	46.0	43.0	41.0	41.0

	44.0	42.0	30.0	27.0	26.0	27.0	25.0	28.0	32.0	39.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	51.0	47.0	44.0	43.0	43.0
	44.0	39.0	30.0	30.0	25.0	26.0	25.0	29.0	35.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	49.0	47.0	45.0	45.0	44.0
	44.0	36.0	29.0	30.0	30.0	26.0	28.0	30.0	38.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	51.0	49.0	48.0	47.0	46.0	45.0
	43.0	35.0	28.0	30.0	30.0	26.0	27.0	30.0	40.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	50.0	48.0	49.0	49.0	46.0	46.0
	42.0	36.0	27.0	30.0	30.0	30.0	26.0	31.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	52.0	50.0	48.0	51.0	51.0	47.0	47.0
	41.0	35.0	26.0	30.0	30.0	30.0	26.0	32.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	53.0	51.0	50.0	47.0	49.0	52.0	53.0	46.0
	41.0	35.0	26.0	30.0	30.0	30.0	26.0	35.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	47.0	46.0	49.0	53.0	54.0	46.0
	41.0	34.0	30.0	30.0	30.0	26.0	28.0	35.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	50.0	50.0	47.0	45.0	48.0	53.0	52.0	49.0
	46.0	35.0	30.0	30.0	28.0	29.0	30.0	38.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	49.0	46.0	45.0	50.0	45.0	43.0
	40.0	30.0	30.0	30.0	27.0	28.0	30.0	38.0	44.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	49.0	47.0	42.0	38.0	39.0	35.0	32.0
	25.0	30.0	30.0	30.0	30.0	30.0	29.0	37.0	41.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	45.0	44.0	37.0	32.0	26.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	27.0	32.0	35.0	43.0	51.0	0.0	0.0	53.0	52.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	49.0	46.0	40.0	28.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	31.0	35.0	43.0	48.0	47.0	41.0	45.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	45.0	32.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	35.0	39.0	38.0	34.0	42.0	52.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	44.0	29.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	33.0	30.0	30.0	40.0	49.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	41.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	29.0	25.0	27.0	41.0	48.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	40.0	28.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	28.0	23.0	28.0	38.0	47.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	37.0	25.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	28.0	24.0	30.0	37.0	46.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	51.0	43.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	36.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	31.0	29.0	24.0	30.0	37.0	45.0	55.0	0.0	0.0	0.0
	0.0	0.0	54.0	44.0	42.0	36.0	52.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0	36.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	37.0	36.0	29.0	23.0	30.0	35.0	46.0	0.0	0.0	0.0	0.0
	0.0	0.0	39.0	29.0	34.0	37.0	42.0	40.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	44.0	33.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	38.0	39.0	31.0	23.0	32.0	36.0	48.0	0.0	0.0	52.0	55.0
	0.0	41.0	30.0	30.0	29.0	28.0	31.0	33.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	42.0	32.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	36.0	29.0	38.0	48.0	0.0	45.0	42.0	47.0
	43.0	30.0	30.0	30.0	30.0	28.0	30.0	28.0	35.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	50.0	52.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.0	39.0	27.0	40.0	28.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	32.0	30.0	30.0	30.0	29.0	31.0	39.0	46.0	45.0	31.0	33.0	42.0
	31.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	31.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	48.0	51.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	46.0	43.0	35.0	32.0	27.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	39.0	30.0	30.0	30.0	30.0	26.0	39.0	42.0	36.0	30.0	27.0	39.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	31.0	46.0	53.0	0.0	0.0	55.0	54.0	55.0	49.0	49.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	47.0	42.0	33.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	32.0	30.0	30.0	30.0	30.0	30.0	40.0	38.0	32.0	30.0	30.0	31.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	25.0	34.0	38.0	53.0	0.0	53.0	52.0	52.0	51.0	49.0	52.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	45.0	36.0	33.0	26.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	30.0	30.0	30.0	30.0	30.0	38.0	36.0	34.0	30.0	30.0	27.0
	30.0	30.0	30.0	32.0	30.0	30.0	30.0	26.0	27.0	34.0	38.0	51.0	45.0	46.0	49.0	49.0	48.0	52.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	44.0	35.0	32.0	26.0	30.0	30.0	30.0	30.0	30.0
	30.0	28.0	34.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	32.0	28.0	30.0	30.0	30.0
	30.0	30.0	29.0	25.0	30.0	25.0	30.0	27.0	29.0	32.0	35.0	37.0	38.0	42.0	49.0	46.0	51.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	48.0	43.0	35.0	29.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	39.0	42.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	27.0	29.0	30.0	30.0	30.0	32.0	29.0	29.0	29.0	29.0	31.0	34.0	36.0	43.0	51.0	50.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	41.0	35.0	29.0	30.0	30.0	30.0	30.0	30.0	28.0
	39.0	47.0	31.0	30.0	30.0	30.0	30.0	30.0	34.0	36.0	29.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	29.0	33.0	31.0	30.0	26.0	33.0	31.0	29.0	28.0	29.0	31.0	37.0	42.0	50.0	55.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	41.0	36.0	29.0	30.0	30.0	30.0	30.0	30.0	42.0
	41.0	32.0	30.0	30.0	30.0	30.0	30.0	25.0	38.0	52.0	35.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0
	33.0	36.0	34.0	29.0	34.0	33.0	32.0	27.0	27.0	31.0	36.0	42.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.0	42.0	36.0	30.0	30.0	30.0	30.0	30.0	28.0	52.0
	36.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	38.0	55.0	39.0	30.0	31.0	30.0	30.0	30.0	30.0	30.0	27.0	33.0
	38.0	40.0	38.0	36.0	35.0	32.0	32.0	24.0	28.0	35.0	41.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	43.0	37.0	31.0	26.0	30.0	30.0	30.0	33.0	46.0
	28.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	42.0	54.0	44.0	36.0	45.0	30.0	30.0	30.0	30.0	30.0	33.0	38.0
	42.0	45.0	42.0	39.0	35.0	29.0	22.0	21.0	31.0	39.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	45.0	39.0	33.0	28.0	30.0	30.0	30.0	35.0	38.0
	26.0	30.0	30.0	30.0	30.0	30.0	30.0	35.0	44.0	52.0	52.0	45.0	39.0	30.0	30.0	26.0	27.0	36.0	40.0	42.0
	46.0	49.0	45.0	42.0	35.0	27.0	23.0	26.0	37.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	47.0	40.0	35.0	33.0	28.0	30.0	26.0	36.0	34.0
	26.0	30.0	30.0	30.0	30.0	30.0	26.0	37.0	45.0	51.0	53.0	48.0	41.0	37.0	32.0	33.0	37.0	45.0	45.0	46.0
	49.0	50.0	48.0	45.0	38.0	32.0	29.0	35.0	44.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	55.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	41.0	39.0	34.0	30.0	28.0	31.0	36.0	33.0
	28.0	25.0	27.0	30.0	30.0	30.0	30.0	38.0	45.0	48.0	53.0	51.0	46.0	40.0	42.0	42.0	45.0	47.0	48.0	48.0
	50.0	51.0	51.0	50.0	44.0	39.0	38.0	43.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	47.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	44.0	40.0	36.0	33.0	32.0	34.0	37.0	33.0
	30.0	28.0	28.0	28.0	30.0	28.0	35.0	40.0	45.0	51.0	54.0	54.0	51.0	50.0	47.0	47.0	49.0	49.0	49.0	50.0
	51.0	53.0	0.0	0.0	50.0	46.0	47.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	47.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	44.0	41.0	39.0	36.0	35.0	36.0	38.0	34.0
	32.0	31.0	30.0	29.0	27.0	32.0	36.0	41.0	47.0	52.0	0.0	0.0	54.0	53.0	48.0	51.0	51.0	50.0	49.0	51.0
	53.0	55.0	0.0	0.0	0.0	53.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	54.0	48.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	45.0	43.0	43.0	38.0	37.0	38.0	39.0	36.0
	33.0	32.0	31.0	30.0	31.0	34.0	38.0	44.0	50.0	54.0	0.0	0.0	55.0	51.0	52.0	54.0	52.0	51.0	49.0	49.0
	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	52.0	47.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	45.0	44.0	43.0	40.0	39.0	40.0	40.0	37.0
	35.0	34.0	33.0	32.0	33.0	36.0	40.0	46.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	52.0	50.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	47.0	45.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	46.0	44.0	41.0	41.0	41.0	41.0	40.0	38.0
	36.0	35.0	34.0	35.0	37.0	39.0	43.0	50.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	52.0	51.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	54.0	45.0	43.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	46.0	44.0	43.0	43.0	43.0	43.0	41.0	39.0
	38.0	37.0	37.0	39.0	41.0	44.0	48.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	50.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	50.0	42.0	42.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	46.0	46.0	45.0	45.0	45.0	45.0	42.0	41.0
	41.0	39.0	41.0	44.0	46.0	49.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	48.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	54.0	45.0	38.0	39.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	47.0	46.0	48.0	48.0	50.0	48.0	46.0	44.0	45.0
	45.0	44.0	47.0	50.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	47.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	49.0	41.0	33.0	37.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	48.0	47.0	52.0	0.0	0.0	52.0	49.0	48.0	50.0
	50.0	51.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	46.0
	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	52.0	44.0	39.0	32.0	39.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	47.0	45.0	49.0	0.0	0.0	0.0	0.0	55.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	49.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	47.0	41.0	38.0	36.0	39.0	42.0	51.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	43.0	44.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	51.0	52.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	43.0	42.0	39.0	39.0	39.0	45.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	45.0	42.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	55.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	50.0	45.0	41.0	41.0	41.0	46.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	48.0	42.0	40.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	52.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	43.0	40.0	40.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	52.0	46.0	42.0	40.0	41.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	51.0	45.0	42.0	42.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	43.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	45.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0
	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
	43.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	51.0	47.0	46.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	46.0
	44.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	52.0	48.0	47.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0

	46.0	49.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	53.0	50.0	48.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0
	46.0	46.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

VERT HYD COND /THICKNESS FOR LAYER 2 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.9	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.6	0.6	0.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
	0.6	0.5	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6
	0.4	0.4	0.4	0.5	0.5	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.5	0.5	0.5
	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.5	0.5	0.4
	0.4	0.4	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.5	0.5	0.5
	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.5	0.5	0.5
	0.5	0.5	0.4	0.4	0.5	0.4	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.5	0.6	0.5
	0.6	0.7	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.4	0.5	0.4	0.5	0.5	0.6	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.7
	0.8	0.6	0.4	0.5	0.4	0.5	0.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.8	0.7	0.7
	0.8	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.8	0.7	0.7	0.7
	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.9	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.7	0.5	0.7	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6
	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.0	0.4	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.5	0.4	0.7	0.8	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6
	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.8	0.0	0.4	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.0
	0.8	0.4	0.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6
	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.0	0.0	0.5	0.6	0.6	0.6	0.8	0.0	0.0	0.0	0.8	0.8	0.0
	0.7	0.6	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.5	0.6
	0.6	0.8	0.8	0.8	0.7	0.6	0.5	0.9	0.0	0.7	0.8	0.6	0.5	0.8	0.0	0.0	0.0	0.8	0.8	0.0
	0.7	0.7	0.8	0.0	0.7	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.5	0.6

	0.8	0.0	0.0	1.0	0.7	0.6	0.6	0.8	0.9	0.8	0.8	0.5	0.4	0.8	0.0	0.0	0.0	0.8	0.7	0.8
	0.8	0.9	0.0	0.0	0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.7	0.6	0.6	0.6	0.7
	0.0	0.0	0.0	1.0	0.7	0.5	0.6	0.8	0.9	0.0	0.8	0.4	0.4	0.6	0.6	0.7	0.8	0.8	0.8	0.8
	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.0
	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.4	0.4	0.5	0.4	0.6	0.7	0.7	0.8	0.9
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.8	0.0
	0.0	0.0	0.7	0.8	0.7	0.6	0.6	0.0	0.0	0.0	0.0	0.5	0.6	0.5	0.6	0.6	0.7	0.6	0.8	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.0	0.0
	0.0	0.6	0.6	0.7	0.6	0.6	0.6	0.9	0.0	0.0	0.0	0.8	0.0	0.6	0.6	0.6	0.6	0.7	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.0	0.0
	0.0	0.6	0.6	0.7	0.7	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.8	0.7	0.8	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0
	0.0	0.7	0.7	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
	0.0	0.8	0.8	0.7	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

TOP FOR LAYER 2 WILL BE READ ON UNIT 20 USING FORMAT: (20F4.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	62.0	56.0	57.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	62.0	56.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	62.0	55.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	63.0	56.0	56.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	56.0	56.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	56.0	56.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	61.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	59.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	56.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	58.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	59.0	54.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	53.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	52.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	65.0	53.0	54.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	53.0	51.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	53.0	50.0	52.0	57.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	52.0	56.0	57.0	54.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	56.0	62.0	62.0	56.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	62.0	60.0	60.0	60.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	58.0	63.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	63.0	64.0	63.0	60.0	59.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	56.0	54.0	59.0	59.0	58.0	57.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	51.0	52.0	57.0	59.0	58.0	56.0	52.0	55.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	51.0	49.0	53.0	56.0	59.0	59.0	56.0	53.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	51.0	50.0	55.0	59.0	60.0	60.0	59.0	56.0	56.0	62.0	63.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	61.0	52.0	51.0	56.0	61.0	64.0	63.0	61.0	60.0	62.0	60.0	59.0	54.0	63.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	53.0	52.0	58.0	63.0	60.0	60.0	65.0	60.0	60.0	60.0	61.0	56.0	58.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	54.0	53.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	58.0	58.0	62.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	56.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	60.0	63.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	59.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0

	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	63.0	63.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	65.0	62.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	64.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	63.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	63.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 HYD. COND. ALONG ROWS = 150.0000 FOR LAYER 3

0

BOTTOM FOR LAYER 3 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	23.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	22.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	22.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	24.0	20.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	23.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	25.0	17.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	12.0	8.0	13.0	20.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	20.0
	9.0	-2.0	-2.0	4.0	11.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	12.0	11.0	8.0
	-9.0	-15.0	-13.0	-4.0	3.0	16.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	10.0	0.0	1.0	-2.0
	-26.0	-21.0	-23.0	-13.0	-3.0	13.0	19.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	2.0	-3.0	-2.0	-9.0
	-23.0	-17.0	-27.0	-16.0	-4.0	8.0	14.0	18.0	18.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	3.0	1.0	1.0	-5.0
	-11.0	-8.0	-22.0	-17.0	-6.0	3.0	9.0	12.0	13.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	4.0	3.0	0.0	-2.0
	0.0	4.0	-10.0	-13.0	-9.0	-1.0	6.0	9.0	9.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	5.0	4.0	6.0	4.0
	10.0	17.0	-6.0	-14.0	-16.0	-4.0	3.0	5.0	6.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	11.0	6.0	5.0	9.0	11.0
	19.0	16.0	-7.0	-11.0	-20.0	-5.0	1.0	3.0	3.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	12.0	9.0	8.0	10.0	17.0
	21.0	7.0	-6.0	-12.0	-24.0	-1.0	2.0	-2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	12.0	10.0	20.0	17.0	18.0
	21.0	2.0	-5.0	-12.0	-13.0	-4.0	4.0	-10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	19.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	14.0	24.0	18.0	16.0	17.0
	10.0	1.0	0.0	-7.0	-5.0	-3.0	0.0	0.0	23.0	23.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	15.0	0.0	15.0	21.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	15.0	14.0	14.0
	8.0	5.0	4.0	0.0	-1.0	-2.0	-1.0	14.0	0.0	-5.0	-1.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-4.0	-8.0	15.0	21.0	21.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	13.0	11.0	12.0
	7.0	8.0	10.0	9.0	4.0	0.0	0.0	24.0	0.0	-14.0	-1.0	13.0	17.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
	21.0	-6.0	12.0	20.0	20.0	21.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	16.0	10.0	6.0	6.0
	9.0	14.0	14.0	13.0	9.0	1.0	-2.0	0.0	0.0	3.0	7.0	7.0	10.0	23.0	0.0	0.0	0.0	20.0	23.0	0.0
	17.0	8.0	21.0	24.0	20.0	21.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	14.0	7.0	3.0	5.0
	13.0	20.0	24.0	21.0	12.0	1.0	-2.0	24.0	0.0	15.0	13.0	5.0	2.0	22.0	0.0	0.0	0.0	24.0	24.0	0.0
	19.0	18.0	23.0	0.0	19.0	20.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	13.0	7.0	1.0	10.0
	20.0	0.0	0.0	22.0	10.0	-2.0	2.0	22.0	23.0	19.0	16.0	-4.0	-9.0	20.0	0.0	0.0	0.0	22.0	19.0	23.0
	24.0	25.0	0.0	0.0	16.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	19.0	13.0	7.0	7.0	18.0
	0.0	0.0	0.0	20.0	5.0	-4.0	5.0	22.0	24.0	0.0	17.0	-14.0	-23.0	11.0	9.0	19.0	22.0	20.0	20.0	23.0
	0.0	0.0	0.0	19.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	18.0	12.0	9.0	14.0	0.0
	0.0	0.0	0.0	14.0	4.0	-4.0	8.0	24.0	0.0	0.0	0.0	-16.0	-13.0	1.0	-6.0	10.0	18.0	19.0	20.0	25.0
	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	18.0	13.0	12.0	21.0	0.0
	0.0	0.0	19.0	12.0	8.0	2.0	12.0	0.0	0.0	0.0	0.0	2.0	7.0	-1.0	0.0	14.0	15.0	12.0	21.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	20.0	15.0	14.0	0.0	0.0
	0.0	14.0	14.0	10.0	5.0	7.0	15.0	25.0	0.0	0.0	0.0	21.0	0.0	15.0	8.0	12.0	14.0	18.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	16.0	16.0	0.0	0.0
	0.0	14.0	14.0	10.0	9.0	11.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	16.0	18.0	19.0	22.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	21.0	21.0	0.0	0.0
	0.0	18.0	21.0	13.0	12.0	16.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0
	0.0	22.0	23.0	16.0	17.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	20.0	20.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0
0

TOP = 30.00000 FOR LAYER 3

SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE

```
                                                  ----------------------------------------
0                                        MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      300
                                                      ACCELERATION PARAMETER =     1.0000
                                            HEAD CHANGE CRITERION FOR CLOSURE =    0.10000E-01
                                            SIP HEAD CHANGE PRINTOUT INTERVAL =        1
0
   3 ITERATION PARAMETERS CALCULATED FROM SPECIFIED WSEED = 0.00064000 :

         0.0000000E+00  0.9747018E+00  0.9993600E+00
1                                           STRESS PERIOD NO.   1, LENGTH =   180.0000
                                            ---------------------------------------------

                                            NUMBER OF TIME STEPS =     2

                                             MULTIPLIER FOR DELT =     1.000

                                           INITIAL TIME STEP SIZE =   90.00000
0          22 WELLS
                                          LAYER    ROW    COL    STRESS RATE   WELL NO.
                                          ----------------------------------------------
                                            1      26     39      35.000          1
                                            1      27     39      35.000          2
                                            1      28     39      35.000          3
                                            1      28     40      35.000          4
                                            1      29     39      35.000          5
                                            1      30     40      35.000          6
                                            1      31     40      35.000          7
                                            1      32     41      35.000          8
                                            1      33     41      35.000          9
                                            1      35     42      35.000         10
                                            1      36     43      35.000         11
                                            1      37     44      35.000         12
                                            1      39     44      35.000         13
                                            1      40     45      35.000         14
                                            1      41     45      35.000         15
                                            2      26     20     0.00000         16
                                            2      21     19    -0.10675E+06     17
                                            2      38     19     -18540.         18
                                            2      39     18     -43070.         19
                                            2      13     27     -25270.         20
                                            2      32     49     -6700.0         21
                                            2      34     49     -6700.0         22
0

   58 DRAINS
0                LAYER     ROW     COL   ELEVATION   CONDUCTANCE   DRAIN NO.
                 ---------------------------------------------------------
                   1       15      41    78.50         150.0          1
                   1       15      42    78.50         240.0          2
                   1       16      43    78.50         330.0          3
                   1       16      44    78.40         330.0          4
                   1       16      45    78.40         270.0          5
                   1       17      46    78.40         315.0          6
                   1       17      47    78.30         330.0          7
                   1       17      48    78.30         210.0          8
                   1       18      49    78.30         330.0          9
                   1       18      50    78.20         330.0         10
                   1       19      51    78.20         270.0         11
                   1       19      52    78.10         330.0         12
                   1       19      53    78.10         180.0         13
                   1       20      54    78.00         330.0         14
                   1       20      55    78.00         300.0         15
                   1       21      56    77.50         330.0         16
                   1       21      57    77.50         330.0         17
                   1       21      58    77.00         120.0         18
                   1       22      58    77.00         210.0         19
                   1       22      59    76.50         330.0         20
                   1       22      60    76.50         330.0         21
                   1       23      61    76.00         330.0         22
                   1       23      62    76.00         330.0         23
                   1       24      63    75.50         330.0         24
                   1       24      64    75.50         360.0         25
                   1       25      65    75.00         360.0         26
                   1       25      66    75.00         300.0         27
                   1       26      67    74.50         360.0         28
```

1	26	68	74.50	210.0	29
1	27	69	74.00	450.0	30
1	28	70	74.00	450.0	31
1	29	71	73.50	330.0	32
1	29	72	73.00	360.0	33
1	30	73	72.50	370.0	34
1	31	74	72.00	330.0	35
1	31	75	71.50	300.0	36
1	32	76	71.00	420.0	37
1	33	77	70.50	360.0	38
1	33	61	78.70	440.0	39
1	33	62	78.60	480.0	40
1	32	63	78.50	440.0	41
1	31	63	78.40	400.0	42
1	30	63	78.20	430.0	43
1	29	64	77.90	440.0	44
1	29	65	77.60	440.0	45
1	29	66	76.70	400.0	46
1	29	67	75.80	400.0	47
1	29	68	74.90	480.0	48
1	28	69	74.00	520.0	49
1	29	69	73.10	250.0	50
1	30	68	74.50	1600.	51
1	31	68	75.10	1125.	52
1	32	67	75.50	250.0	53
1	33	66	75.80	675.0	54
1	33	65	76.10	2750.	55
1	33	64	76.50	1250.	56
1	34	63	76.80	1200.	57
1	34	62	77.30	4000.	58

0

RECHARGE WILL BE READ ON UNIT 27 USING FORMAT: (10F8.4)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
76	77	78													
0 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0080
	0.0080	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0080
	0.0080	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0080	0.0080	
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0080	0.0080	0.0080	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0080	0.0080	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046

	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0076	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0076	0.0076	0.0076	0.0076	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0076	0.0076	0.0000	0.0076	0.0076	0.0076	0.0046	0.0076	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0000	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0076	0.0000	0.0076	0.0076	0.0076	0.0076	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0076	0.0076	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0076	0.0076	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0000	0.0076	0.0076	0.0000	0.0000	0.0000	0.0076	0.0076	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0000	0.0000	0.0076	0.0076	0.0076	0.0076	0.0000	0.0076	0.0076	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0000	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0076	0.0076	0.0076	0.0076	0.0076	0.0046	0.0046	0.0076	0.0076	0.0076	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0146	0.0146	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0076	0.0076	0.0046	0.0046	0.0046	0.0046	0.0076	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0146	0.0146	0.0046	0.0146	0.0146	0.0146	0.0146	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000												
0 19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0000	0.0146	0.0146	0.0046	0.0046	0.0146	0.0146	0.0146	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146	0.0146	0.0046	0.0046	0.0046	0.0046	0.0046	0.0146	0.0146
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0146	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0146
	0.0146	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0146	0.0000
	0.0000	0.0000	0.0000												
0 22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0046
	0.0000	0.0000	0.0000												
0 23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0146	0.0146	0.0146	0.0146	0.0146	0.0046	0.0146	0.0146	0.0146	0.0146	0.0146	0.0046	0.0046
	0.0000	0.0000	0.0000												
0 24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0053	0.0053	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0052	0.0052	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000												
0 25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0053	0.0053	0.0000	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0052	0.0000	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 26	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0053	0.0000	0.0000	0.0053	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0052	0.0052	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0053	0.0000	0.0000	0.0000	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0053	0.0053	0.0053	0.0053	0.0053	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 29	0.0000	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 30	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000
	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0052	0.0052	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0102	0.0102	0.0046	0.0046
	0.0046	0.0046	0.0046												
0 31	0.0000	0.0000	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0052	0.0000	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0102	0.0102	0.0046
	0.0046	0.0046	0.0046												
0 32	0.0117	0.0117	0.0000	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0052	0.0000	0.0000	0.0052	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0102	0.0102	0.0046
	0.0046	0.0046	0.0046												
0 33	0.0117	0.0117	0.0117	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0052	0.0052	0.0052	0.0052	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0102	0.0102	0.0046
	0.0046	0.0046	0.0046												
0 34	0.0046	0.0046	0.0117	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0102	0.0102
	0.0046	0.0046	0.0046												
0 35	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0102	0.0102	0.0046
	0.0046	0.0046	0.0046												
0 36	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0126	0.0126	0.0126
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0102	0.0102	0.0102
	0.0102	0.0102	0.0102												
0 37	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0000	0.0000	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0126	0.0126	0.0126	0.0126	0.0126
	0.0126	0.0046	0.0046	0.0046	0.0000	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0102	0.0102	0.0102
	0.0102	0.0102	0.0102												
0 38	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0154	0.0000	0.0000	0.0000
	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0000	0.0000	0.0102	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 39	0.0128	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0102	0.0102	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 40	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 41	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 42	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 43	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000												
0 44	0.0000	0.0000	0.0000	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 45	0.0000	0.0000	0.0000	0.0128	0.0128	0.0128	0.0128	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073
	0.0073	0.0227	0.0227	0.0126	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073
	0.0073	0.0227	0.0227	0.0126	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000
	0.0000	0.0000	0.0227	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0126	0.0126	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000
	0.0000	0.0000	0.0073	0.0227	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0126	0.0126
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0102	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000
	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000
	0.0000	0.0000	0.0073	0.0227	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0126	0.0126
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0102	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000
	0.0000	0.0192	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0192	0.0192	0.0046	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000
	0.0000	0.0073	0.0073	0.0154	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0126	0.0126	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 53	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0192	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000
	0.0000	0.0073	0.0073	0.0299	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0216	0.0216	
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0192	0.0192	0.0192	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0000
	0.0000	0.0073	0.0073	0.0299	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0216
	0.0216	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192
	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0000
	0.0073	0.0073	0.0073	0.0299	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0216
	0.0216	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 56	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192

	0.0192	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0000
	0.0073	0.0073	0.0299	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0216	0.0216	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192
	0.0192	0.0192	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0000
	0.0073	0.0372	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0216	0.0216	0.0046	0.0046	0.0046	0.0216	0.0216	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0192	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0000
	0.0372	0.0372	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0216	0.0216	0.0046	0.0046	0.0216	0.0216	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 59	0.0000	0.0000	0.0000	0.0128	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0000	0.0372
	0.0372	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0216	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 60	0.0000	0.0000	0.0000	0.0128	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0000	0.0372
	0.0372	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0216	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 61	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0073	0.0073	0.0372
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 62	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0372	0.0299
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 63	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0299	0.0299
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 64	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0299	0.0299
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 65	0.0000	0.0000	0.0000	0.0128	0.0128	0.0046	0.0046	0.0046	0.0046	0.0192	0.0192	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0192	0.0192	0.0046	0.0046	0.0046	0.0046	0.0046	0.0299	0.0299
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0															

40 RIVER REACHES

0	LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
	1	65	41	83.30	0.2000E+07	80.30	1
	1	32	56	81.10	1760.	78.00	2
	1	33	57	81.10	2400.	78.00	3
	1	35	56	81.10	1920.	78.00	4
	1	34	57	81.10	2560.	78.00	5
	1	34	58	81.10	2240.	78.00	6
	1	37	61	81.10	1920.	78.00	7
	1	36	60	81.10	2400.	78.00	8
	1	35	59	81.10	2080.	78.00	9
	1	34	60	81.10	1600.	78.00	10
	1	29	56	81.10	2080.	78.00	11
	1	30	57	81.10	2400.	78.00	12

1	31	58	81.10	2240.	78.00	13
1	32	59	81.10	2240.	78.00	14
1	33	60	81.10	2400.	78.00	15
1	64	41	83.30	2000.	80.30	16
1	63	41	83.30	1600.	80.30	17
1	62	40	83.20	2000.	80.20	18
1	61	40	83.20	2200.	80.20	19
1	60	40	83.10	2000.	80.10	20
1	59	40	83.10	2200.	80.10	21
1	58	41	83.00	2000.	80.00	22
1	57	42	82.90	1600.	79.90	23
1	56	41	82.80	2200.	79.80	24
1	55	41	82.70	1600.	79.70	25
1	55	40	82.70	1800.	79.70	26
1	54	39	82.60	2200.	79.60	27
1	53	39	82.50	2400.	79.50	28
1	52	40	82.40	2000.	79.40	29
1	51	40	82.30	1600.	79.30	30
1	51	41	82.30	1000.	79.30	31
1	50	41	82.20	1600.	79.20	32
1	50	42	82.20	1200.	79.20	33
1	49	42	82.10	2400.	79.10	34
1	48	43	82.00	2200.	79.00	35
1	47	43	81.80	5000.	78.80	36
1	46	43	81.60	5000.	78.60	37
1	45	43	81.40	5000.	78.40	38
1	44	43	81.20	5000.	78.20	39
1	43	42	81.00	5000.	78.00	40

0

428 HEAD-DEPENDENT BOUNDARY NODES

0

LAYER	ROW	COL	ELEVATION	CONDUCTANCE	BOUND NO.
1	1	21	80.50	746.2	1
2	1	22	80.50	438.1	2
2	1	23	80.50	328.1	3
2	1	24	80.50	340.7	4
2	1	25	80.50	425.8	5
1	2	21	80.50	834.3	6
2	2	22	80.50	435.3	7
2	2	23	80.50	324.7	8
2	2	24	80.50	343.2	9
2	2	25	80.50	436.8	10
1	3	21	80.50	1003.	11
2	3	22	80.50	440.8	12
2	3	23	80.50	318.6	13
2	3	24	80.50	340.3	14
2	3	25	80.50	432.1	15
2	4	22	80.50	464.4	16
2	4	23	80.50	319.6	17
2	4	24	80.50	332.3	18
2	4	25	80.50	427.9	19
2	5	23	80.50	327.3	20
2	5	24	80.50	325.6	21
2	5	25	80.50	425.6	22
2	6	23	80.50	330.8	23
2	6	24	80.50	327.7	24
2	6	25	80.50	431.9	25
1	7	22	80.50	866.6	26
2	7	23	80.50	425.3	27
2	7	24	80.50	338.4	28
2	7	25	80.50	447.8	29
1	8	22	80.50	1728.	30
1	8	23	80.50	602.8	31
2	8	24	80.50	344.2	32
2	8	25	80.50	504.0	33
1	8	26	80.50	2589.	34
1	9	23	80.50	949.8	35
2	9	24	80.50	405.6	36
1	9	25	80.50	768.5	37
1	10	23	80.50	856.2	38
2	10	24	80.50	497.5	39
1	10	25	80.50	2089.	40
1	11	23	80.50	665.9	41
2	11	24	80.50	486.3	42

1	12	23	80.50	581.2	43
2	12	24	80.50	417.2	44
1	12	25	80.50	1998.	45
1	13	23	80.50	539.7	46
2	13	24	80.50	384.3	47
1	13	25	80.50	957.4	48
2	14	23	80.50	510.3	49
2	14	24	80.50	326.1	50
1	14	25	80.50	699.4	51
1	15	22	80.50	2135.	52
2	15	23	80.50	482.7	53
2	15	24	80.50	349.1	54
1	15	25	80.50	641.8	55
1	15	26	80.50	3750.	56
1	16	22	80.50	1976.	57
2	16	23	80.50	463.1	58
2	16	24	80.50	358.2	59
1	16	25	80.50	684.8	60
1	16	26	80.50	3750.	61
1	17	22	80.50	2452.	62
2	17	23	80.50	444.9	63
2	17	24	80.50	356.4	64
1	17	25	80.50	850.1	65
1	18	22	80.50	3750.	66
2	18	23	80.50	430.2	67
2	18	24	80.50	370.2	68
1	18	25	80.50	1347.	69
2	19	23	80.50	399.0	70
2	19	24	80.50	342.0	71
2	20	23	80.50	363.4	72
2	20	24	80.50	277.2	73
1	20	25	80.50	1572.	74
2	21	23	80.50	376.8	75
2	21	24	80.50	298.1	76
1	21	25	80.50	664.0	77
2	22	23	80.50	438.1	78
2	22	24	80.50	285.5	79
2	22	25	80.50	441.8	80
1	22	26	80.50	2583.	81
2	23	23	80.50	496.6	82
2	23	24	80.50	278.8	83
2	23	25	80.50	353.6	84
1	23	26	80.50	959.0	85
2	24	23	80.50	522.1	86
2	24	24	80.50	285.1	87
2	24	25	80.50	306.1	88
2	24	26	80.50	533.3	89
2	25	23	80.50	508.4	90
2	25	24	80.50	287.3	91
2	25	25	80.50	271.5	92
2	25	26	80.50	330.0	93
1	25	27	80.50	575.2	94
1	25	28	80.50	581.4	95
1	25	29	80.50	1403.	96
1	26	22	80.50	2056.	97
2	26	23	80.50	479.7	98
2	26	24	80.50	284.2	99
2	26	25	80.50	260.7	100
2	26	26	80.50	282.8	101
2	26	27	80.50	345.3	102
2	26	28	80.50	341.1	103
1	26	29	80.50	605.9	104
1	26	30	80.50	2975.	105
1	27	22	80.50	1339.	106
2	27	23	80.50	465.6	107
2	27	24	80.50	282.5	108
2	27	25	80.50	274.3	109
2	27	26	80.50	322.8	110
2	27	27	80.50	335.6	111
2	27	28	80.50	297.6	112
2	27	29	80.50	410.9	113
1	28	21	80.50	3750.	114
1	28	22	80.50	1110.	115
2	28	23	80.50	465.4	116
2	28	24	80.50	279.2	117

2	28	25	80.50	321.0	118
2	28	26	80.50	451.6	119
2	28	27	80.50	434.0	120
2	28	28	80.50	328.2	121
2	28	29	80.50	319.0	122
1	28	30	80.50	810.5	123
1	29	21	80.50	3727.	124
1	29	22	80.50	1016.	125
2	29	24	80.50	342.7	126
2	29	25	80.50	436.4	127
1	29	26	80.50	920.5	128
1	29	27	80.50	678.3	129
2	29	28	80.50	386.6	130
2	29	29	80.50	308.5	131
1	29	30	80.50	631.0	132
1	30	20	80.50	3750.	133
1	30	21	80.50	2136.	134
2	30	28	80.50	403.3	135
2	30	29	80.50	339.8	136
2	30	30	80.50	535.3	137
1	30	31	80.50	2084.	138
1	31	19	80.50	3750.	139
1	31	20	80.50	2321.	140
1	31	21	80.50	1541.	141
1	31	24	80.50	917.6	142
1	31	25	80.50	730.7	143
1	31	26	80.50	1213.	144
1	31	27	80.50	707.9	145
2	31	28	80.50	410.6	146
2	31	29	80.50	365.4	147
2	31	30	80.50	454.6	148
1	31	31	80.50	725.5	149
1	31	32	80.50	1607.	150
1	32	19	80.50	2541.	151
1	32	20	80.50	1464.	152
1	32	21	80.50	1233.	153
1	32	22	80.50	1019.	154
1	32	23	80.50	912.7	155
1	32	24	80.50	743.6	156
2	32	25	80.50	480.2	157
2	32	26	80.50	486.0	158
2	32	27	80.50	468.8	159
2	32	28	80.50	404.8	160
2	32	29	80.50	375.0	161
2	32	30	80.50	395.6	162
2	32	31	80.50	409.6	163
1	32	32	80.50	643.0	164
1	33	18	80.50	3620.	165
1	33	19	80.50	1409.	166
1	33	20	80.50	1116.	167
1	33	21	80.50	1067.	168
1	33	22	80.50	856.0	169
1	33	23	80.50	644.7	170
2	33	24	80.50	410.3	171
2	33	25	80.50	324.5	172
2	33	26	80.50	305.3	173
2	33	27	80.50	379.3	174
2	33	28	80.50	376.8	175
2	33	29	80.50	365.5	176
2	33	30	80.50	346.6	177
2	33	31	80.50	282.2	178
2	33	32	80.50	404.5	179
1	33	33	80.50	1169.	180
1	34	17	80.50	2455.	181
1	34	18	80.50	1937.	182
1	34	19	80.50	982.0	183
1	34	20	80.50	983.0	184
1	34	21	80.50	1014.	185
1	34	22	80.50	749.2	186
2	34	23	80.50	467.0	187
2	34	24	80.50	282.1	188
2	34	25	80.50	267.3	189
2	34	26	80.50	280.7	190
2	34	27	80.50	339.3	191
2	34	28	80.50	366.4	192

2	34	29	80.50	358.8	193
2	34	30	80.50	324.5	194
2	34	31	80.50	280.6	195
2	34	32	80.50	314.1	196
2	34	33	80.50	534.1	197
1	35	17	80.50	1796.	198
1	35	18	80.50	1533.	199
1	35	19	80.50	1059.	200
1	35	20	80.50	1022.	201
1	35	21	80.50	1025.	202
1	35	22	80.50	715.4	203
2	35	23	80.50	404.4	204
2	35	24	80.50	267.6	205
2	35	25	80.50	253.4	206
2	35	26	80.50	286.9	207
2	35	27	80.50	331.9	208
2	35	28	80.50	373.6	209
2	35	29	80.50	368.7	210
2	35	30	80.50	330.6	211
2	35	31	80.50	291.9	212
2	35	32	80.50	278.9	213
2	35	33	80.50	387.8	214
1	35	34	80.50	851.3	215
1	35	35	80.50	770.9	216
1	36	18	80.50	1535.	217
1	36	19	80.50	1235.	218
1	36	20	80.50	1108.	219
1	36	21	80.50	1114.	220
1	36	22	80.50	709.0	221
2	36	23	80.50	397.7	222
2	36	24	80.50	272.6	223
2	36	25	80.50	254.7	224
2	36	26	80.50	306.8	225
2	36	27	80.50	374.5	226
2	36	28	80.50	402.0	227
2	36	29	80.50	401.2	228
2	36	30	80.50	366.0	229
2	36	31	80.50	322.3	230
2	36	32	80.50	319.6	231
2	36	33	80.50	439.1	232
2	36	34	80.50	483.6	233
2	36	35	80.50	399.0	234
1	36	36	80.50	720.0	235
1	37	16	80.50	1092.	236
1	37	17	80.50	1555.	237
1	37	21	80.50	1365.	238
1	37	22	80.50	825.5	239
2	37	23	80.50	414.7	240
2	37	24	80.50	279.9	241
2	37	25	80.50	264.4	242
2	37	26	80.50	325.3	243
2	37	27	80.50	417.2	244
2	37	28	80.50	483.9	245
2	37	29	80.50	466.4	246
2	37	30	80.50	425.2	247
2	37	31	80.50	398.8	248
2	37	32	80.50	446.0	249
1	37	33	80.50	665.5	250
2	37	34	80.50	383.4	251
2	37	35	80.50	301.6	252
2	37	36	80.50	468.6	253
1	37	37	80.50	854.2	254
1	38	13	80.50	943.6	255
1	38	14	80.50	692.9	256
1	38	15	80.50	764.7	257
1	38	22	80.50	974.5	258
2	38	23	80.50	437.3	259
2	38	24	80.50	291.2	260
2	38	25	80.50	273.3	261
2	38	26	80.50	362.7	262
2	38	27	80.50	483.4	263
1	38	28	80.50	581.7	264
1	38	29	80.50	589.3	265
2	38	30	80.50	526.0	266
2	38	34	80.50	416.2	267

2	38	35	80.50	324.7	268
2	38	36	80.50	364.4	269
1	38	37	80.50	545.8	270
1	39	12	80.50	1295.	271
1	39	13	80.50	831.4	272
1	39	14	80.50	605.1	273
1	39	15	80.50	776.2	274
2	39	23	80.50	461.3	275
2	39	24	80.50	302.6	276
2	39	25	80.50	286.5	277
2	39	26	80.50	445.5	278
1	39	27	80.50	657.5	279
1	39	33	80.50	1109.	280
2	39	34	80.50	480.2	281
2	39	35	80.50	365.0	282
2	39	36	80.50	349.7	283
2	39	37	80.50	445.3	284
1	40	11	80.50	2280.	285
1	40	12	80.50	1370.	286
1	40	13	80.50	858.8	287
2	40	23	80.50	494.6	288
2	40	24	80.50	331.1	289
2	40	25	80.50	342.2	290
1	40	26	80.50	662.1	291
1	40	27	80.50	1033.	292
1	40	32	80.50	1411.	293
1	40	33	80.50	1070.	294
1	40	34	80.50	574.6	295
2	40	35	80.50	445.8	296
2	40	36	80.50	399.8	297
2	40	37	80.50	482.2	298
1	40	38	80.50	571.7	299
1	40	39	80.50	535.7	300
1	40	40	80.50	1226.	301
1	41	12	80.50	1869.	302
1	41	18	80.50	3750.	303
1	41	19	80.50	3750.	304
1	41	20	80.50	1781.	305
1	41	21	80.50	1042.	306
1	41	22	80.50	678.0	307
1	41	23	80.50	545.8	308
2	41	24	80.50	374.7	309
2	41	25	80.50	524.5	310
1	41	32	80.50	1716.	311
1	41	33	80.50	1336.	312
1	41	34	80.50	780.1	313
1	41	35	80.50	582.4	314
2	41	36	80.50	509.2	315
1	41	37	80.50	581.8	316
1	41	38	80.50	553.5	317
1	41	39	80.50	544.7	318
1	41	40	80.50	1138.	319
1	41	41	80.50	3750.	320
1	42	18	80.50	3750.	321
1	42	19	80.50	3423.	322
1	42	20	80.50	1557.	323
1	42	21	80.50	798.3	324
1	42	22	80.50	567.1	325
2	42	23	80.50	485.5	326
2	42	24	80.50	414.0	327
1	42	25	80.50	975.3	328
1	42	34	80.50	1038.	329
1	42	35	80.50	790.0	330
1	42	36	80.50	733.4	331
1	42	37	80.50	776.0	332
1	42	38	80.50	687.8	333
1	42	39	80.50	731.3	334
1	42	40	80.50	1315.	335
1	42	41	80.50	3750.	336
1	43	18	80.50	3750.	337
1	43	19	80.50	2972.	338
1	43	20	80.50	1308.	339
1	43	21	80.50	637.6	340
2	43	22	80.50	480.5	341
2	43	23	80.50	470.6	342

2	43	24	80.50	486.1	343
1	43	25	80.50	1562.	344
1	44	18	80.50	3750.	345
1	44	19	80.50	2340.	346
1	44	20	80.50	1215.	347
2	44	21	80.50	532.4	348
2	44	22	80.50	430.6	349
2	44	23	80.50	502.9	350
1	45	17	80.50	3750.	351
1	45	18	80.50	2361.	352
1	45	19	80.50	1675.	353
1	45	20	80.50	1235.	354
2	45	21	80.50	487.8	355
2	45	22	80.50	449.9	356
1	45	23	80.50	601.9	357
1	46	18	80.50	1333.	358
1	46	19	80.50	1041.	359
1	46	20	80.50	759.0	360
2	46	21	80.50	472.3	361
2	46	22	80.50	508.2	362
1	46	23	80.50	780.8	363
1	46	24	80.50	2861.	364
1	47	19	80.50	720.0	365
1	47	20	80.50	597.5	366
2	47	21	80.50	466.3	367
1	47	22	80.50	609.7	368
1	47	23	80.50	1086.	369
1	47	24	80.50	3750.	370
1	48	19	80.50	582.5	371
1	48	20	80.50	581.2	372
1	48	21	80.50	570.2	373
1	48	22	80.50	794.3	374
1	48	23	80.50	1631.	375
1	49	17	80.50	928.4	376
1	49	18	80.50	688.0	377
1	49	19	80.50	632.8	378
1	49	20	80.50	654.7	379
1	49	21	80.50	736.7	380
1	49	22	80.50	1157.	381
1	50	16	80.50	1007.	382
1	50	17	80.50	785.5	383
1	50	18	80.50	800.6	384
1	51	14	80.50	998.6	385
1	51	15	80.50	740.4	386
1	51	16	80.50	841.0	387
1	51	17	80.50	873.5	388
1	52	13	80.50	1799.	389
1	52	14	80.50	875.2	390
1	52	15	80.50	813.6	391
1	52	16	80.50	969.6	392
1	53	12	80.50	2179.	393
1	53	13	80.50	1370.	394
1	54	9	80.50	3750.	395
1	54	10	80.50	2714.	396
1	54	11	80.50	1739.	397
1	54	12	80.50	1477.	398
1	54	13	80.50	1298.	399
1	55	6	80.50	3436.	400
1	55	7	80.50	3274.	401
1	55	8	80.50	2402.	402
1	55	9	80.50	1786.	403
1	55	10	80.50	1628.	404
1	55	11	80.50	1359.	405
1	55	12	80.50	1573.	406
1	56	6	80.50	1704.	407
1	56	7	80.50	1820.	408
1	56	8	80.50	1639.	409
1	56	9	80.50	1387.	410
1	56	10	80.50	1587.	411
1	56	11	80.50	1952.	412
1	57	5	80.50	1511.	413
1	57	6	80.50	1518.	414
1	57	7	80.50	1731.	415
1	57	8	80.50	1804.	416
1	57	9	80.50	1609.	417

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                    1       57      10    80.50         2257.         418
                    1       57      11    80.50         3750.         419
                    1       58       4    80.50         1500.         420
                    1       58       5    80.50         1431.         421
                    1       58       6    80.50         1936.         422
                    1       58       7    80.50         2944.         423
                    1       58       8    80.50         3750.         424
                    1       58       9    80.50         3750.         425
                    1       59       5    80.50         1701.         426
                    1       59       6    80.50         3750.         427
                    1       60       5    80.50         3735.         428
0CELL CONVERSIONS FOR ITERATION=  1  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 30,  4)    DRY( 31,  4)    DRY( 32,  1)    DRY( 32,  2)    DRY( 33,  3)    DRY( 38, 69)    DRY( 40,  3)
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY(  3, 14)    DRY(  4, 12)    DRY(  4, 13)    DRY( 11, 32)    DRY( 11, 36)    DRY( 12, 32)    DRY( 12, 38)    DRY( 13, 32)
  DRY( 14, 32)    DRY( 15, 32)    DRY( 15, 36)    DRY( 15, 37)    DRY( 16, 38)    DRY( 17, 33)    DRY( 19,  9)    DRY( 20, 10)
  DRY( 21, 10)    DRY( 24, 10)    DRY( 25, 50)    DRY( 26,  9)    DRY( 27,  7)    DRY( 27,  8)    DRY( 29,  5)    DRY( 32,  4)
  DRY( 33,  1)    DRY( 33,  2)    DRY( 33,  4)    DRY( 33, 73)    DRY( 34,  3)    DRY( 36, 73)    DRY( 37, 73)    DRY( 39,  2)
  DRY( 39,  3)    DRY( 40,  4)    DRY( 41,  4)    DRY( 42,  4)    DRY( 43,  4)    DRY( 44,  4)    DRY( 44,  8)    DRY( 44, 51)
  DRY( 45,  4)    DRY( 45,  7)    DRY( 47,  8)    DRY( 52, 58)    DRY( 55, 60)    DRY( 57, 33)    DRY( 58, 62)    DRY( 59, 34)
  DRY( 62, 35)    DRY( 64, 12)
0CELL CONVERSIONS FOR ITERATION=  3  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 16, 40)    DRY( 17, 40)    DRY( 17, 41)    DRY( 28,  6)    DRY( 31, 73)    DRY( 35, 73)    DRY( 35, 74)
  DRY( 36, 74)    DRY( 37, 74)    DRY( 37, 75)    DRY( 44,  5)    DRY( 44,  6)    DRY( 44,  7)    DRY( 45,  5)    DRY( 45,  6)
0CELL CONVERSIONS FOR ITERATION=  4  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY(  5, 12)    DRY(  5, 13)    DRY( 28,  7)    DRY( 30,  5)    DRY( 39,  4)
0CELL CONVERSIONS FOR ITERATION=  7  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 53, 59)    DRY( 58, 31)
0CELL CONVERSIONS FOR ITERATION=  8  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 49, 71)
0CELL CONVERSIONS FOR ITERATION=  9  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 17, 39)    DRY( 48, 70)    DRY( 58, 34)
0CELL CONVERSIONS FOR ITERATION= 10  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 34,  1)    DRY( 34,  2)
0CELL CONVERSIONS FOR ITERATION= 12  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 16, 35)    DRY( 16, 36)
0CELL CONVERSIONS FOR ITERATION= 13  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 19, 51)
0CELL CONVERSIONS FOR ITERATION= 16  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 25, 10)
0CELL CONVERSIONS FOR ITERATION= 27  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY( 39,  1)
0
    45 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,CO
 ---------------------------------------------------------------------------------------------------------------------------------
   -14.00     (  1, 33, 73)  -7.806     (  1, 35, 74)  -5.361     (  1,  5, 12)  -5.486     (  1, 39,  1)   1.721     (  1,  8, 12
   -1.846     (  1, 58, 31)   2.610     (  1, 47, 70)  -2.528     (  1, 47, 70) -0.6763     (  1, 34,  1)   4.038     (  1, 16, 35
   -6.404     (  1, 16, 35)   1.652     (  1, 46, 69)   2.465     (  1, 25, 10) -0.6304     (  1, 45, 70)  -2.131     (  1, 25, 10
   0.5166     (  1, 27,  9) -0.2680     (  1, 27,  9) -0.5316     (  1, 39,  1)  0.7421     (  1, 39,  1) -0.8085     (  1, 39,  1
  -0.4987E-01 (  2, 47, 64)   1.097     (  1, 39,  1)  0.2022     (  1, 38,  1)  -1.281     (  1, 39,  1)   13.30     (  1, 39,  1
   -13.45     (  1, 39,  1)  0.7091E-01 (  1, 37, 66)  0.1543     (  1, 61, 64) -0.1120     (  1, 57, 32) -0.1002     (  1, 61, 64
   0.7436E-01 (  1, 61, 64) -0.5867E-01 (  1, 61, 64)  0.1931E-01 (  2, 44, 65)  0.6099E-01 (  1, 57, 32) -0.6696E-01 (  1, 57, 32
   0.1092     (  1, 38, 72) -0.6377E-01 (  1, 47, 70) -0.6279E-01 (  1, 38, 72) -0.1946E-01 (  1, 37, 66) -0.3611E-01 (  1, 61, 64
  -0.3178E-01 (  1, 57, 32)  0.2641E-01 (  1, 46, 69) -0.1991E-01 (  1, 61, 64)  0.1734E-01 (  1, 61, 64) -0.6791E-02 (  2, 44, 65
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     2 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,CO
 ---------------------------------------------------------------------------------------------------------------------------------
  -0.1261E-01 (  1, 61, 64)  0.6253E-02 (  1, 56, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 1     TOTAL BUDGET PRINTOUT FLAG = 1     CELL-BY-CELL FLOW TERM FLAG = 1
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     1         0       1       0
```

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"   CONSTANT HEAD" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"FLOW RIGHT FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"FLOW FRONT FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"FLOW LOWER FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"           WELLS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"          DRAINS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"        RECHARGE" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
"   RIVER LEAKAGE" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
" HEAD DEP BOUNDS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP  2, STRESS PERIOD  1
1                    HEAD IN LAYER  1 AT END OF TIME STEP  2 IN STRESS PERIOD  1
          ----------------------------------------------------------------------

          1       2       3       4       5       6       7       8       9      10      11      12      13      14      15
         16      17      18      19      20      21      22      23      24      25      26      27      28      29      30
         31      32      33      34      35      36      37      38      39      40      41      42      43      44      45
         46      47      48      49      50      51      52      53      54      55      56      57      58      59      60
         61      62      63      64      65      66      67      68      69      70      71      72      73      74      75
         76      77      78
.....................................................................................................................................
0  1  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 80.45
      80.40   80.38   80.37   80.38   80.39   80.42 ******* ******* ******* ******* 80.87   80.96   81.05   81.14   81.25
      81.36   81.48   81.61   81.74   81.89   82.06   82.22   82.39   82.55   82.73   82.92   83.10   83.29   83.48   83.66
      83.83   83.98   84.14   84.25 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  2  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 80.40
      80.37   80.35   80.35   80.36   80.38   80.40 ******* ******* ******* ******* 80.86   80.94   81.03   81.12   81.23
      81.34   81.47   81.60   81.75   81.90   82.06   82.22   82.39   82.56   82.73   82.91   83.10   83.29   83.48   83.65
      83.82   83.97   84.13   84.24 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  3  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00  80.32
      80.31   80.31   80.32   80.33   80.35   80.38 ******* ******* ******* ******* 80.82   80.90   80.99   81.09   81.19
      81.32   81.45   81.60   81.75   81.91   82.07   82.23   82.39   82.55   82.73   82.90   83.09   83.28   83.47   83.64
      83.80   83.95   84.11   84.24 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  4  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00  100.00  80.23   80.23
      80.24   80.26   80.27   80.29   80.31   80.34 ******* ******* ******* ******* 80.76   80.84   80.93   81.03   81.14
      81.28   81.42   81.58   81.75   81.91   82.08   82.24   82.40   82.55   82.73   82.90   83.08   83.28   83.46   83.63
      83.78   83.93   84.08   84.24   84.41 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  5  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00  100.00  80.10   80.13
      80.16   80.19   80.21   80.24   80.26   80.29   80.34 ******* ******* ******* 80.69   80.76   80.85   80.95   81.07
      81.22   81.39   81.57   81.75   81.92   82.10   82.26   82.42   82.56   82.74   82.91   83.09   83.27   83.45   83.61
      83.76   83.91   84.05   84.21   84.38 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  6  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 79.86   79.90   79.97   80.03
      80.07   80.10   80.14   80.17   80.20   80.24   80.29 ******* ******* ******* 80.59   80.66   80.74   80.85   80.98
      81.14   81.34   81.54   81.75   81.94   82.12   82.29   82.44   82.58   82.76   82.92   83.09   83.27   83.43   83.58
      83.73   83.87   84.01   84.16   84.34 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  7  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 79.77   79.81   79.86   79.92
      79.97   80.01   80.05   80.09   80.13   80.17   80.24 ******* ******* ******* 80.48   80.53   80.61   80.72   80.86
      81.04   81.27   81.51   81.74   81.96   82.16   82.33   82.48   82.62   82.78   82.94   83.10   83.26   83.41   83.55
      83.68   83.82   83.96   84.06 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  8  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 79.67   79.70   79.75   79.80
      79.85   79.90   79.95   80.00   80.04   80.10   80.18   80.21 ******* ******* 80.36   80.38   80.45   80.55   80.70
      80.90   81.19   81.48   81.75   82.00   82.22   82.39   82.54   82.67   82.82   82.97   83.11   83.26   83.39   83.51
      83.62   83.74   83.87   83.96 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0  9  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 79.55   79.57   79.61   79.67
      79.72   79.78   79.83   79.89   79.94   80.00   80.06   80.13 ******* 80.16   80.16   80.19   80.25   80.35   80.50
      80.73   81.07   81.43   81.76   82.07   82.30   82.47   82.61   82.73   82.87   83.00   83.12   83.24   83.34   83.44
      83.54   83.65   83.77   83.85 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
     ******* ******* *******
0 10  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 79.41   79.44   79.48   79.52
      79.58   79.64   79.70   79.76   79.83   79.89   79.95   80.03 ******* 80.05   79.97   79.95   80.01   80.11   80.26
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	80.48	80.92	81.30	*******	82.36	82.45	82.59	82.70	82.81	82.93	83.04	83.13	83.20	83.27	83.34
	83.42	83.52	83.63	83.71	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 11	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.15	79.23	79.27	79.31	79.36
	79.41	79.48	79.55	79.62	79.69	79.77	79.83	79.92	*******	79.83	79.73	79.65	79.72	79.84	80.00
	80.19	100.00	*******	*******	*******	100.00	82.75	82.81	82.90	83.02	83.09	83.11	83.12	83.15	83.19
	83.26	83.34	83.45	83.53	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.05	79.09	79.11	79.14	79.18
	79.23	79.29	79.37	79.46	79.55	79.64	79.71	79.81	*******	79.75	79.46	79.27	79.39	79.57	79.75
	79.94	100.00	*******	*******	*******	*******	*******	100.00	*******	83.13	83.12	83.00	82.96	82.95	82.99
	83.05	83.13	83.23	83.31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 13	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.84	78.90	78.93	78.94	78.96	78.98
	79.02	79.08	79.17	79.27	79.38	79.50	79.60	79.72	*******	79.57	79.22	78.82	79.13	79.38	79.58
	79.75	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	82.66	82.65	82.67	82.71
	82.78	82.87	82.97	83.06	83.08	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 14	*******	*******	*******	*******	*******	*******	*******	*******	78.73	78.75	78.77	78.77	78.76	78.75	78.75
	78.77	78.82	78.91	79.04	79.19	79.35	79.50	*******	*******	79.56	79.37	79.15	79.24	79.39	79.55
	79.67	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	82.19	82.24	82.30	82.37
	82.47	82.57	82.68	82.80	82.88	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 15	*******	*******	*******	*******	*******	*******	*******	*******	78.67	78.66	78.64	78.61	78.57	78.53	78.51
	78.50	78.52	78.60	78.74	78.95	79.19	79.54	*******	*******	79.65	79.73	79.44	79.42	79.49	79.61
	79.70	100.00	*******	*******	*******	100.00	100.00	*******	*******	*******	100.00	81.32	81.73	81.85	81.97
	82.11	82.23	82.34	82.47	82.62	82.83	*******	*******	96.20	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 16	*******	*******	*******	*******	*******	*******	*******	*******	78.61	78.57	78.51	78.43	78.37	78.31	78.24
	78.19	78.17	78.22	78.35	78.61	78.94	79.40	*******	*******	79.67	79.80	79.58	79.56	79.60	79.69
	79.79	80.34	*******	*******	100.00	100.00	81.02	100.00	*******	100.00	82.15	81.62	81.15	81.33	81.50
	81.71	81.83	81.96	82.12	82.30	82.59	*******	*******	93.94	93.30	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 17	*******	*******	*******	*******	*******	*******	*******	*******	78.56	78.48	78.39	78.27	78.18	78.07	77.96
	77.84	77.76	77.75	77.88	78.17	78.60	79.21	*******	*******	79.62	79.63	79.61	79.63	79.69	79.78
	79.89	80.10	100.00	80.77	80.79	80.84	80.92	80.99	100.00	100.00	100.00	81.59	81.44	81.46	81.48
	81.38	81.39	81.52	81.73	81.92	82.23	*******	90.34	90.90	90.79	90.41	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 18	*******	*******	*******	*******	*******	*******	*******	*******	78.58	78.41	78.26	78.12	77.99	77.85	77.67
	77.48	77.31	77.22	77.31	77.67	78.20	78.98	*******	*******	79.57	79.56	79.62	79.68	79.77	79.86
	80.00	80.19	80.42	80.60	80.71	80.79	80.88	80.97	81.10	81.33	81.53	81.60	81.56	81.55	81.54
	81.51	81.51	81.51	81.34	81.38	81.93	*******	87.28	87.71	87.77	87.93	87.36	86.77	87.04	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 19	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.32	78.13	77.98	77.84	77.66	77.42
	77.16	76.88	76.63	76.59	77.05	77.65	78.17	*******	*******	79.43	79.52	79.62	79.72	79.82	79.94
	80.07	80.24	80.41	80.55	80.65	80.76	80.85	80.95	81.08	81.26	81.47	81.58	81.60	81.60	81.59
	81.59	81.60	81.61	81.61	81.69	100.00	*******	82.04	83.96	84.26	84.58	84.72	84.64	85.11	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 20	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.02	77.89	77.74	77.53	77.25
	76.91	76.48	75.95	75.54	76.37	77.20	77.76	*******	*******	79.50	79.53	79.64	79.76	79.87	79.99
	80.12	80.27	80.41	80.52	80.62	80.73	80.83	80.93	81.06	81.24	81.43	81.54	81.59	81.60	81.61
	81.62	81.65	81.68	81.75	81.89	82.21	82.36	82.07	80.55	80.28	81.51	81.86	82.24	83.17	84.60
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 21	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.00	77.86	77.71	77.49	77.21
	76.84	76.30	75.40	73.93	75.80	76.97	77.61	*******	*******	79.42	79.57	79.68	79.80	79.92	80.04
	80.17	80.29	80.41	80.51	80.60	80.70	80.81	80.91	81.04	81.22	81.40	81.51	81.56	81.58	81.59
	81.62	81.65	81.70	81.79	81.96	82.20	82.34	82.17	81.52	80.81	79.55	79.28	79.97	80.94	82.18
	83.42	84.14	*******	*******	*******	*******	*******	87.54	*******	*******	*******	*******	*******	85.99	*******
	*******	*******	*******												
0 22	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.06	77.94	77.77	77.57	77.32
	77.01	76.61	76.10	75.67	76.45	77.21	77.73	*******	*******	*******	79.77	79.76	79.86	79.97	80.09
	80.20	80.32	80.42	80.52	80.60	80.69	80.80	80.90	81.03	81.20	81.37	81.48	81.52	81.54	81.56
	81.59	81.63	81.68	81.78	81.97	82.21	82.35	82.34	82.05	81.42	80.79	80.42	78.75	78.06	77.88
	80.63	81.35	82.09	83.27	84.02	84.27	84.54	85.17	85.18	85.46	85.79	85.34	84.77	84.14	82.79

	*******	*******	*******												
0 23	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.19	78.07	77.91	77.74	77.54
	77.31	77.07	76.85	76.79	77.15	77.61	77.99	*******	*******	*******	79.74	79.80	79.90	80.02	80.13
	80.24	80.35	80.44	80.53	80.61	80.69	80.80	80.90	81.02	81.17	81.32	81.42	81.47	81.49	81.51
	81.53	81.57	81.63	81.71	81.92	82.23	82.41	82.56	82.62	83.28	83.09	82.67	81.16	80.01	79.44
	77.82	78.16	80.46	81.61	82.29	82.46	82.54	82.74	83.26	83.63	83.78	83.66	83.14	82.13	81.22
	*******	*******	*******												
0 24	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.36	78.24	78.10	77.96	77.82
	77.66	77.53	77.46	77.50	77.72	78.04	78.32	*******	*******	*******	*******	79.86	79.96	80.08	80.18
	80.28	80.38	80.47	80.54	80.62	80.70	80.81	80.91	81.02	81.15	81.28	81.37	81.41	81.43	81.44
	81.46	81.50	81.54	81.60	81.80	82.36	82.53	82.79	84.11	85.30	85.13	83.68	81.97	81.21	80.59
	79.86	79.34	76.90	76.53	79.41	79.72	80.11	80.53	80.96	81.33	81.58	81.64	81.15	80.21	78.59
	76.72	*******	*******												
0 25	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.57	78.45	78.32	78.21	78.11
	78.01	77.95	77.94	78.02	78.20	78.46	78.71	*******	*******	*******	*******	79.93	80.04	80.17	80.24
	80.33	80.41	80.49	80.56	80.64	80.72	80.82	80.91	81.02	81.13	81.24	81.31	81.35	81.36	81.38
	81.39	81.42	81.44	81.46	100.00	*******	82.61	84.12	85.47	85.80	84.92	83.66	82.15	81.68	81.20
	80.70	80.26	79.91	*******	76.18	76.88	77.99	78.49	79.03	79.61	79.98	80.04	79.70	78.96	77.61
	76.47	76.30	76.24												
0 26	*******	*******	*******	*******	*******	*******	*******	*******	100.00	79.08	78.82	78.69	78.57	78.47	78.40
	78.34	78.32	78.36	78.45	78.63	78.88	79.27	*******	*******	*******	*******	*******	*******	80.21	80.33
	80.38	80.45	80.52	80.59	80.66	80.73	80.83	80.93	81.03	81.11	81.19	81.26	81.29	81.30	81.32
	81.32	81.33	81.33	81.35	*******	*******	85.65	85.60	85.00	84.35	83.04	82.66	82.23	81.87	81.50
	81.10	80.69	80.24	79.38	77.88	77.06	76.00	76.14	77.29	78.02	78.55	78.73	78.57	78.05	77.05
	76.29	76.20	76.16												
0 27	*******	*******	*******	*******	*******	*******	100.00	100.00	79.72	79.23	79.05	78.92	78.81	78.73	78.67
	78.64	78.65	78.71	78.83	79.01	79.26	79.52	*******	*******	*******	*******	*******	*******	*******	80.35
	80.42	80.49	80.55	80.62	80.68	80.75	80.85	80.95	81.03	81.10	81.16	81.21	81.24	81.25	81.26
	81.26	81.25	81.25	81.24	*******	*******	*******	84.15	82.90	82.71	82.55	82.33	82.06	81.83	81.58
	81.24	80.79	80.19	79.34	78.29	77.28	76.10	75.73	75.40	76.48	77.20	77.54	77.59	77.28	76.59
	76.11	76.06	76.03												
0 28	*******	*******	*******	*******	*******	100.00	100.00	79.88	79.62	79.41	79.26	79.13	79.03	78.96	78.91
	78.91	78.94	79.03	79.16	79.37	79.73	79.75	*******	*******	*******	*******	*******	*******	*******	80.39
	80.46	80.52	80.58	80.64	80.70	80.77	80.87	80.96	81.03	81.09	81.13	81.17	81.19	81.21	81.21
	81.20	81.19	81.18	81.17	81.14	81.23	81.28	81.74	82.17	82.15	81.99	81.93	81.71	81.63	81.53
	81.25	80.78	80.12	79.26	78.33	77.32	76.36	75.53	75.01	75.08	75.90	76.28	76.63	76.55	76.18
	75.90	75.86	75.84												
0 29	*******	*******	*******	*******	100.00	80.30	80.14	79.94	79.73	79.56	79.42	79.30	79.22	79.16	79.13
	79.14	79.20	79.30	79.45	79.64	79.93	79.90	79.89	*******	*******	80.16	80.19	*******	*******	80.43
	80.49	80.55	80.60	80.66	80.72	80.79	80.88	80.96	81.02	81.07	81.11	81.14	81.16	81.17	81.17
	81.15	81.13	81.11	81.09	81.08	81.12	81.19	81.23	81.51	81.62	81.28	81.54	81.54	81.53	81.48
	81.23	80.73	79.94	78.38	77.75	76.91	76.03	75.24	75.03	75.32	74.75	74.48	75.49	75.78	75.74
	75.63	75.62	75.62												
0 30	*******	*******	*******	100.00	100.00	80.26	80.15	79.99	79.83	79.68	79.56	79.46	79.38	79.34	79.33
	79.36	79.43	79.54	79.70	79.95	80.01	79.97	79.99	80.05	80.12	80.17	80.21	*******	*******	*******
	80.51	80.56	80.62	80.68	80.74	80.81	80.89	80.96	81.01	81.06	81.10	81.12	81.14	81.14	81.13
	81.11	81.08	81.04	81.01	81.02	81.07	81.13	81.19	81.23	81.38	81.34	81.22	81.40	81.46	81.46
	81.28	80.59	78.97	78.94	77.89	77.08	76.16	74.85	75.73	76.06	75.76	75.23	73.47	74.84	75.09
	75.28	75.35	75.39												
0 31	*******	*******	*******	100.00	80.46	80.30	80.19	80.05	79.91	79.79	79.67	79.58	79.52	79.49	79.49
	79.52	79.60	79.73	79.97	80.05	80.07	80.04	80.08	80.15	80.19	80.23	80.26	*******	*******	*******
	80.52	80.57	80.63	80.69	80.75	80.82	80.89	80.95	81.01	81.05	81.09	81.11	81.12	81.12	81.10
	81.07	81.02	80.96	80.90	80.94	81.01	81.09	81.17	81.21	81.29	81.30	81.30	81.21	81.36	81.44
	81.40	*******	78.60	78.94	78.69	77.04	76.43	75.56	76.70	77.07	*******	*******	100.00	74.31	74.43
	74.86	75.06	75.15												
0 32	100.00	100.00	*******	100.00	80.47	80.34	80.24	80.11	79.99	79.87	79.77	79.69	79.63	79.60	79.60
	79.64	79.72	79.84	80.02	80.07	80.10	80.12	80.15	80.18	*******	*******	*******	*******	*******	*******
	*******	80.58	80.64	80.70	80.76	80.83	80.89	80.95	81.00	81.04	81.08	81.10	81.11	81.10	81.09
	81.05	80.98	80.88	80.77	80.87	80.98	81.07	81.16	81.21	81.23	81.23	81.28	81.29	81.20	81.29
	81.05	*******	*******	78.01	77.30	77.03	76.57	77.69	78.15	78.77	*******	*******	74.73	74.60	74.58
	74.52	74.82	74.95												
0 33	100.00	100.00	100.00	100.00	80.49	80.39	80.29	80.17	80.06	79.95	79.85	79.77	79.71	79.67	79.66
	79.70	79.80	79.99	80.01	80.05	80.10	80.14	80.17	*******	*******	*******	*******	*******	*******	*******
	*******	*******	80.64	80.70	80.76	80.83	80.89	80.94	80.99	81.03	81.07	81.09	81.10	81.10	81.08
	81.04	80.98	80.89	80.81	80.89	80.99	81.09	81.17	81.21	81.24	81.24	81.18	81.28	81.26	81.08
	79.45	78.66	78.30	76.75	76.26	76.32	79.41	79.72	79.59	*******	*******	*******	100.00	74.81	74.77
	74.70	74.62	74.86												
0 34	100.00	100.00	100.00	80.79	80.59	80.46	80.34	80.23	80.12	80.01	79.91	79.83	79.76	79.71	79.69
	79.72	79.88	79.93	79.94	80.00	80.07	80.13	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	80.71	80.76	80.82	80.88	80.93	80.98	81.02	81.06	81.09	81.11	81.11	81.10
	81.06	81.01	80.91	80.81	80.92	81.04	81.12	81.19	81.23	81.25	81.25	81.23	81.23	81.26	81.09
	80.09	77.42	77.33	78.42	78.47	79.87	81.67	81.87	82.18	*******	*******	*******	*******	74.97	74.98
	74.92	74.90	74.96												
0 35	81.57	81.51	81.31	80.95	80.69	80.52	80.40	80.29	80.18	80.06	79.96	79.87	79.79	79.72	79.66
	79.64	79.75	79.78	79.79	79.89	80.01	80.09	*******	*******	*******	*******	*******	*******	*******	*******

	*******	*******	*******	80.68	80.73	80.80	80.86	80.92	80.97	81.02	81.06	81.10	81.12	81.13	81.13
	81.11	81.07	81.02	80.98	81.04	81.11	81.18	81.23	81.26	81.29	81.28	81.30	81.30	81.18	81.27
	81.02	80.61	80.30	80.34	80.43	81.97	83.58	83.51	*******	*******	*******	*******	100.00	100.00	75.14
	75.12	75.09	75.09												
0 36	81.58	81.53	81.35	81.03	80.76	80.58	80.45	80.34	80.23	80.12	80.02	79.92	79.82	79.71	79.59
	79.50	79.45	79.48	79.50	79.69	79.89	80.03	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	80.77	80.85	80.91	80.96	81.01	81.06	81.10	81.14	81.16	81.17
	81.17	81.15	81.14	81.13	81.15	81.20	81.24	81.28	81.32	81.35	81.36	81.38	81.41	81.42	81.28
	81.62	82.30	82.40	82.37	81.92	*******	85.47	85.64	*******	*******	*******	*******	100.00	100.00	75.31
	75.31	75.28	75.25												
0 37	81.61	81.57	81.39	81.07	80.79	80.62	80.50	80.39	80.29	80.17	80.07	79.97	79.85	79.70	79.52
	79.40	79.21	78.87	78.84	79.28	79.74	79.96	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	80.65	*******	*******	*******	80.81	80.89	80.95	81.00	81.06	81.11	81.16	81.20	81.22
	81.24	81.24	81.24	81.24	81.26	81.28	81.31	81.35	81.39	81.43	81.45	81.49	81.52	81.55	81.52
	81.36	83.98	84.45	84.65	*******	87.64	87.05	87.33	*******	*******	*******	*******	100.00	100.00	100.00
	75.48	75.44	75.41												
0 38	81.66	81.67	81.49	81.03	80.77	80.64	80.54	80.44	80.35	80.24	80.14	80.04	79.94	79.76	79.50
	79.10	78.67	78.15	78.04	78.89	79.55	79.91	*******	*******	*******	*******	*******	80.51	80.54	*******
	80.65	80.67	80.68	*******	*******	*******	80.81	80.89	80.94	80.99	81.05	81.12	81.18	81.24	81.28
	81.31	81.32	81.33	81.34	81.35	81.37	81.40	81.44	81.48	81.52	81.58	81.72	*******	*******	*******
	85.37	86.31	86.41	86.63	87.47	87.70	87.67	88.00	100.00	*******	*******	104.05	*******	*******	*******
	*******	*******	*******												
0 39	100.00	100.00	100.00	100.00	80.75	80.66	80.58	80.49	80.40	80.30	80.22	80.14	79.99	79.77	79.50
	79.01	78.43	77.62	78.18	78.98	79.55	79.86	*******	*******	*******	*******	80.51	80.56	80.60	80.66
	80.68	80.69	80.68	*******	*******	*******	*******	80.87	80.92	80.97	81.04	81.12	81.21	81.28	81.34
	81.38	81.41	81.42	81.43	81.44	81.46	81.50	81.54	81.59	81.61	*******	*******	*******	*******	*******
	*******	88.14	87.88	87.60	87.61	87.57	87.63	88.32	90.51	93.70	96.91	101.50	*******	*******	*******
	*******	*******	*******												
0 40	*******	*******	100.00	100.00	80.79	80.71	80.63	80.55	80.45	80.37	80.31	80.21	80.05	79.80	79.53
	79.22	78.89	78.64	78.92	79.37	79.72	79.95	*******	*******	*******	80.50	80.55	80.61	80.66	80.71
	80.72	80.69	80.70	80.73	*******	*******	*******	80.84	80.87	80.90	81.00	81.12	81.23	81.33	81.41
	81.46	81.49	81.51	81.53	81.54	81.57	81.61	81.68	81.73	*******	*******	*******	*******	*******	*******
	*******	89.14	88.60	87.93	87.46	87.07	86.91	88.00	89.72	92.32	94.34	*******	*******	*******	*******
	*******	*******	*******												
0 41	*******	*******	*******	100.00	80.90	80.77	80.69	80.60	80.50	80.42	80.33	80.25	80.09	79.91	79.72
	79.54	79.44	79.63	79.76	79.87	79.99	80.12	80.25	*******	*******	80.57	80.62	80.67	80.73	80.77
	80.78	80.75	80.76	80.78	80.80	*******	80.84	80.86	80.88	80.88	80.89	81.11	81.26	81.38	81.48
	81.54	81.59	81.61	81.63	81.65	81.67	81.73	81.84	82.07	*******	*******	*******	*******	*******	*******
	*******	*******	88.72	87.92	87.03	86.29	86.46	87.59	89.01	91.28	93.02	*******	*******	*******	*******
	*******	*******	*******												
0 42	*******	*******	*******	100.00	81.01	80.84	80.76	80.66	80.54	80.45	80.38	80.28	80.16	80.04	79.92
	79.83	79.82	80.01	80.09	80.12	80.16	80.23	*******	*******	80.56	80.62	80.68	80.74	80.80	80.85
	80.88	80.89	80.89	80.87	80.90	80.93	80.94	80.97	80.97	80.95	80.93	81.14	81.31	81.45	81.57
	81.65	81.71	81.74	81.76	81.78	81.80	81.88	82.46	*******	*******	*******	*******	*******	*******	*******
	*******	*******	88.55	87.47	86.50	85.84	86.02	87.10	88.39	90.35	92.15	*******	*******	*******	*******
	*******	*******	*******												
0 43	*******	*******	*******	100.00	81.21	80.94	80.86	80.80	80.60	80.50	80.43	80.34	80.25	80.17	80.09
	80.05	80.07	80.21	80.26	80.27	80.28	*******	*******	*******	80.61	80.69	80.75	80.81	80.88	80.93
	80.98	81.01	81.04	81.06	81.09	81.12	81.16	81.18	81.19	81.18	81.17	81.19	81.37	81.54	81.69
	81.80	81.87	81.92	81.96	81.95	81.94	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	87.99	86.74	85.81	85.33	85.50	86.53	87.72	89.47	91.59	*******	*******	*******	*******
	*******	*******	*******												
0 44	*******	*******	*******	100.00	100.00	100.00	100.00	100.00	80.68	80.57	80.49	80.41	80.34	80.28	80.24
	80.22	80.24	80.33	80.36	80.37	*******	*******	*******	80.63	80.69	80.76	80.82	80.89	80.96	81.03
	81.11	81.16	81.20	81.23	81.27	81.30	81.34	81.37	81.39	81.39	81.38	81.38	81.40	81.66	81.85
	81.99	82.11	82.21	82.23	82.15	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	86.99	85.73	84.74	84.66	84.90	85.88	87.00	88.27	*******	*******	*******	*******	*******
	*******	*******	*******												
0 45	*******	*******	*******	100.00	100.00	100.00	100.00	*******	80.75	80.63	80.55	80.48	80.42	80.38	80.35
	80.34	80.38	80.40	80.42	80.44	*******	*******	80.60	80.68	80.76	80.83	80.90	80.98	81.06	81.14
	81.23	81.29	81.34	81.38	81.43	81.47	81.51	81.54	81.56	81.57	81.57	81.58	81.56	81.82	82.04
	82.25	82.45	82.64	82.72	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	85.58	84.77	84.04	84.00	84.23	85.07	86.16	87.43	*******	*******	*******	*******	*******
	*******	*******	*******												
0 46	*******	*******	*******	*******	*******	*******	*******	*******	80.80	80.68	80.60	80.54	80.49	80.46	80.44
	80.43	80.44	80.46	80.48	80.50	*******	*******	80.65	80.69	80.81	80.90	80.98	81.07	81.16	81.27
	81.35	81.43	81.49	81.55	81.60	81.63	81.67	81.69	81.71	81.73	81.74	81.75	81.74	81.99	82.25
	82.56	82.94	83.40	83.73	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	84.21	83.84	83.35	83.33	83.48	84.09	85.03	86.72	*******	*******	*******	*******	*******
	*******	*******	*******												
0 47	*******	*******	*******	*******	*******	*******	*******	100.00	80.81	80.71	80.64	80.59	80.55	80.52	80.51
	80.50	80.51	80.52	80.54	80.57	*******	80.67	80.70	80.74	80.88	80.98	81.07	81.17	81.27	81.38
	81.48	81.56	81.63	81.70	81.75	81.79	81.82	81.84	81.86	81.87	81.89	81.90	81.91	82.14	82.46
	82.94	83.73	84.76	85.44	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	83.29	82.91	82.61	82.59	82.61	82.64	82.79	83.34	86.00	*******	*******	*******	*******	*******

	*******	*******	*******												
0 48	*******	*******	*******	*******	*******	*******	*******	81.44	80.83	80.74	80.67	80.63	80.59	80.57	80.55
	80.55	80.56	80.58	80.61	80.64	80.69	80.73	80.78	80.88	80.98	81.08	81.17	81.28	81.41	81.52
	81.62	81.71	81.79	81.85	81.90	81.94	81.97	81.99	82.00	82.01	82.02	82.04	82.08	82.26	82.61
	83.29	84.75	86.73	87.60	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	82.10	82.08	82.07	82.07	82.05	81.98	81.84	81.77	100.00	*******	*******	*******	*******	*******
	*******	*******	*******												
0 49	*******	*******	*******	*******	*******	*******	*******	81.00	80.83	80.75	80.69	80.65	80.62	80.60	80.59
	80.59	80.60	80.64	80.68	80.73	80.78	80.83	80.92	81.00	81.09	81.19	81.29	81.42	81.55	81.66
	81.77	81.87	81.95	82.01	82.06	82.09	82.12	82.13	82.14	82.14	82.15	82.15	82.19	82.27	*******
	*******	*******	89.51	90.04	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	82.04	82.00	81.96	81.93	81.90	81.84	81.75	81.59	81.39	80.97	100.00	*******	*******	*******	*******
	*******	*******	*******												
0 50	*******	*******	*******	*******	*******	*******	*******	80.90	80.81	80.74	80.69	80.65	80.63	80.61	80.60
	80.60	80.65	80.72	80.80	80.86	80.92	80.98	81.05	81.13	81.22	81.33	81.45	81.57	81.71	81.84
	81.95	82.04	82.12	82.17	82.21	82.24	82.26	82.26	82.26	82.26	82.25	82.26	82.29	82.33	*******
	*******	*******	91.69	92.04	92.71	*******	*******	*******	*******	*******	*******	*******	*******	82.31	82.14
	81.98	81.92	81.86	81.80	81.73	81.64	81.50	81.26	80.90	80.39	80.02	79.96	*******	*******	*******
	*******	*******	*******												
0 51	*******	*******	*******	*******	*******	*******	81.07	80.84	80.77	80.71	80.68	80.65	80.62	80.60	80.59
	80.63	80.72	80.84	80.92	80.99	81.06	81.12	81.18	81.27	81.37	81.48	81.61	81.76	81.91	82.04
	82.15	82.23	82.29	82.34	82.37	82.39	82.39	82.39	82.38	82.37	82.37	82.38	82.40	*******	*******
	*******	*******	92.92	93.04	93.21	*******	*******	*******	*******	*******	*******	*******	*******	82.22	82.08
	81.94	81.85	81.77	81.69	81.59	81.45	81.25	80.92	80.46	79.97	79.67	79.84	*******	*******	*******
	*******	*******	*******												
0 52	*******	*******	*******	*******	*******	*******	80.85	80.78	80.72	80.68	80.65	80.62	80.59	80.58	80.58
	80.66	80.85	80.99	81.10	81.17	81.23	81.28	81.34	81.42	81.53	81.66	81.82	82.01	82.19	82.33
	82.41	82.45	82.49	82.51	82.53	82.53	82.53	82.52	82.50	82.48	82.49	82.50	82.52	*******	*******
	*******	93.74	93.54	93.55	93.59	*******	*******	*******	*******	*******	*******	*******	100.00	82.19	82.03
	81.91	81.80	81.71	81.60	81.47	81.28	81.01	80.61	80.08	79.45	78.94	*******	*******	*******	*******
	*******	*******	*******												
0 53	*******	*******	*******	*******	*******	80.81	80.76	80.71	80.66	80.64	80.62	80.59	80.57	*******	*******
	*******	*******	81.17	81.24	81.34	81.40	81.45	81.51	81.59	81.68	81.82	82.03	82.28	82.58	82.68
	82.71	82.71	82.69	82.69	82.68	82.68	82.67	82.64	82.60	82.60	82.61	82.62	82.63	*******	*******
	*******	93.92	93.85	93.86	93.89	*******	*******	*******	*******	*******	*******	*******	*******	100.00	82.02
	81.89	81.77	81.67	81.54	81.38	81.16	80.85	80.40	79.68	78.83	77.62	*******	*******	*******	*******
	*******	*******	*******												
0 54	*******	*******	*******	*******	*******	80.69	80.67	80.64	80.59	80.58	80.58	80.58	80.55	*******	*******
	*******	*******	*******	*******	81.52	81.55	81.61	81.72	81.87	*******	*******	*******	*******	83.08	83.12
	83.07	83.00	82.93	82.88	82.85	82.83	82.81	82.77	82.73	82.72	82.73	82.74	*******	*******	*******
	*******	94.06	94.03	94.05	94.11	*******	*******	*******	*******	*******	*******	*******	*******	*******	82.05
	81.89	81.76	81.65	81.52	81.33	81.09	80.76	80.27	79.43	78.17	74.00	*******	*******	*******	*******
	*******	*******	*******												
0 55	*******	*******	*******	*******	*******	80.55	80.56	80.57	80.57	80.58	80.59	80.60	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	83.53	83.61
	83.52	83.38	83.20	83.08	83.02	82.99	82.96	82.93	82.88	82.84	82.83	82.86	*******	*******	*******
	94.19	94.16	94.16	94.20	94.28	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00
	81.90	81.78	81.66	81.53	81.33	81.08	80.72	80.24	79.57	78.65	77.15	*******	*******	*******	*******
	*******	*******	*******												
0 56	*******	*******	*******	*******	*******	80.54	80.55	80.57	80.58	80.60	80.62	80.67	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	84.19
	84.09	83.92	83.58	83.31	83.19	83.14	83.10	83.07	83.03	82.99	82.95	82.98	*******	*******	*******
	94.15	94.21	94.27	94.31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	82.01	81.83	81.71	81.58	81.39	81.14	80.81	80.39	79.86	79.22	78.32	*******	*******	*******	*******
	*******	*******	*******												
0 57	*******	*******	*******	*******	80.54	80.55	80.57	80.59	80.61	80.64	80.66	80.74	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	84.76
	84.76	85.37	100.00	83.59	83.36	83.29	83.24	83.20	83.17	83.14	83.11	83.07	*******	*******	*******
	93.95	94.18	94.31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	81.91	81.82	81.68	81.53	81.30	81.01	80.67	80.23	79.78	*******	*******	*******	*******	*******
	*******	*******	*******												
0 58	*******	*******	*******	80.59	80.58	80.59	80.61	80.63	80.66	80.76	80.81	80.86	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	100.00	*******	*******	100.00	83.55	83.44	83.38	83.33	83.29	83.26	83.24	83.33	*******	*******	*******
	93.40	93.98	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	100.00	81.96	81.89	81.75	81.55	81.21	80.96	80.76	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 59	*******	*******	*******	80.73	80.64	80.66	80.74	80.80	80.84	80.90	80.94	80.99	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	100.00	83.75	83.59	83.51	83.45	83.40	83.34	83.43	83.55	*******	*******	90.78
	91.85	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	82.34	82.13	81.92	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 60	*******	*******	*******	80.87	80.74	80.84	80.90	80.94	80.99	81.02	81.07	81.12	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******

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       ******* ******* ******* *******   83.94   83.76   83.63   83.56   83.50   83.45   83.60   83.83   84.23 *******   89.36
         90.76 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******   83.07   82.71 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 61   ******* ******* *******   81.06   81.01   81.01   81.03   81.05   81.09   81.13   81.19   81.25 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* *******   84.23   83.89   83.74   83.66   83.60   83.54   83.73   84.06   84.59   85.53   86.90
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******   84.08 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 62   ******* ******* *******   81.21   81.16   81.14   81.14   81.15   81.18   81.22   81.28   81.38 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* *******  100.00   84.01   83.83   83.74   83.67   83.60   83.77   84.13   84.58   85.18   85.76
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 63   ******* ******* *******   81.32   81.27   81.23   81.23   81.24   81.25   81.28   81.34   81.52 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* *******   84.18   83.94   83.81   83.73   83.68   83.72   84.05   84.48   84.90   85.23
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 64   ******* ******* *******   81.40   81.34   81.30   81.28   81.28   81.30   81.33   81.38  100.00 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* *******   84.65   84.00   83.85   83.75   83.66   83.62   83.97   84.33   84.72   84.96
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 65   ******* ******* *******   81.43   81.38   81.33   81.31   81.31   81.32   81.36   81.40 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* *******   84.03   83.87   83.74   83.58   83.30   83.86   84.24   84.63   84.84
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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1                    HEAD IN LAYER  2 AT END OF TIME STEP  2 IN STRESS PERIOD  1
                    ------------------------------------------------------------

                 1       2       3       4       5       6       7       8       9      10      11      12      13      14      15
                16      17      18      19      20      21      22      23      24      25      26      27      28      29      30
                31      32      33      34      35      36      37      38      39      40      41      42      43      44      45
                46      47      48      49      50      51      52      53      54      55      56      57      58      59      60
                61      62      63      64      65      66      67      68      69      70      71      72      73      74      75
                76      77      78
 ..................................................................................................................................
0  1   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* *******   80.37   80.38   80.39   80.42   80.46   80.55   80.66   80.75   80.86   80.95   81.04   81.13   81.24
         81.35   81.47   81.60   81.73   81.88   82.05   82.20 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0  2   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   80.35   80.35   80.36   80.38   80.40   80.46   80.54   80.65   80.74   80.84   80.93   81.02   81.11   81.22
         81.34   81.46   81.59   81.74   81.89   82.05   82.22   82.37 ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0  3   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   80.31   80.32   80.33   80.35   80.38   80.44   80.52   80.62   80.70   80.80   80.89   80.98   81.08   81.19
         81.31   81.44   81.59   81.74   81.90   82.06   82.23   82.38   82.53 ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0  4   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   80.26   80.27   80.29   80.31   80.34   80.40   80.48   80.57   80.65   80.75   80.83   80.92   81.02   81.14
         81.27   81.41   81.58   81.74   81.91   82.07   82.24   82.39   82.53 ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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       ******* ******* *******
0  5   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   80.19   80.21   80.23   80.26   80.29   80.35   80.43   80.51   80.58   80.67   80.75   80.84   80.94   81.07
         81.21   81.38   81.56   81.75   81.91   82.09   82.26   82.41   82.54 ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0  6   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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	80.06	80.10	80.14	80.17	80.20	80.24	80.29	80.36	80.43	80.50	80.58	80.65	80.73	80.84	80.97
	81.13	81.33	81.54	81.75	81.93	82.11	82.29	82.43	82.56	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 7	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	79.97	80.01	80.05	80.09	80.13	80.18	80.24	80.29	80.34	80.40	80.46	80.52	80.60	80.71	80.85
	81.03	81.27	81.52	81.74	81.95	82.15	82.33	82.46	82.59	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 8	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	79.86	79.90	79.95	80.00	80.04	80.10	80.17	80.21	80.25	80.29	80.33	80.37	80.44	80.54	80.68
	80.89	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 9	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.66
	79.72	79.78	79.83	79.89	79.94	80.00	80.06	80.11	80.13	80.15	80.15	80.18	80.24	80.34	80.47
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 10	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.52
	79.57	79.64	79.70	79.76	79.82	79.89	79.95	80.00	80.01	80.00	79.95	79.94	79.99	80.10	80.25
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 11	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.26	79.30	79.36
	79.41	79.48	79.55	79.62	79.69	79.77	79.83	79.89	79.88	79.81	79.71	79.62	79.69	79.82	80.00
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.11	79.14	79.18
	79.23	79.29	79.38	79.46	79.55	79.64	79.72	79.77	79.75	79.65	79.41	79.11	79.32	79.53	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 13	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.91	78.94	78.95	78.98
	79.01	79.07	79.17	79.28	79.39	79.50	79.60	79.67	79.65	79.51	79.10	77.97	78.95	79.31	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 14	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.79	78.76	78.75	78.75
	78.77	78.81	78.91	79.05	79.20	79.36	79.51	79.60	79.59	79.51	79.30	78.98	79.17	79.35	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 15	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.56	78.53	78.50
	78.49	78.51	78.60	78.75	78.97	79.20	79.43	79.51	79.55	79.57	79.52	79.37	79.39	79.47	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 16	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.40	78.36	78.30	78.24
	78.18	78.15	78.20	78.34	78.61	78.94	79.27	79.38	79.48	79.58	79.61	79.54	79.54	79.59	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 17	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.25	78.17	78.07	77.95
	77.83	77.73	77.71	77.83	78.14	78.56	79.00	79.18	79.34	79.52	79.58	79.59	79.62	79.68	79.78
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 18	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.10	77.98	77.84	77.65
	77.45	77.27	77.15	77.25	77.62	78.12	78.65	78.94	79.18	79.42	79.52	79.60	79.67	79.75	79.85
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 19	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.96	77.83	77.64	77.40
	77.11	76.82	76.56	76.47	77.00	77.63	78.19	78.68	79.03	79.32	79.47	79.60	79.71	79.81	79.92
	80.05	*******	*******	80.55	80.63	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 20	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.87	77.73	77.51	77.22
	76.86	76.40	75.82	75.17	76.29	77.21	77.87	78.48	78.92	79.30	79.47	79.62	79.75	79.86	79.98
	80.11	80.27	80.41	80.52	80.60	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 21	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.84	77.69	77.47	77.17
	76.78	76.22	75.05	71.17	75.48	76.97	77.75	78.42	78.88	79.28	79.49	79.65	79.79	79.91	80.03
	80.16	80.29	80.41	80.51	80.59	80.68	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 22	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.74	77.54	77.29
	76.96	76.57	76.02	75.35	76.39	77.23	77.87	78.49	78.92	79.29	79.57	79.71	79.84	79.96	80.07
	80.20	80.31	80.42	80.50	80.59	80.67	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******												
0 23	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.88	77.72	77.52
	77.28	77.04	76.82	76.74	77.14	77.63	78.11	78.65	79.02	79.35	79.62	79.76	79.89	80.01	80.11
	80.23	80.34	80.44	80.51	80.59	80.67	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 24	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.07	77.94	77.80
	77.64	77.51	77.44	77.48	77.71	78.04	78.42	78.86	79.17	79.45	79.67	79.82	79.94	80.06	80.16
	80.27	80.37	80.46	80.53	80.60	80.68	*******	*******	*******	*******	*******	*******	*******	*******	81.43
	81.44	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 25	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.30	78.20	78.09
	78.00	77.94	77.93	78.00	78.18	78.44	78.77	79.11	79.35	79.56	79.74	79.89	80.01	80.12	80.21
	80.32	80.41	80.49	80.55	80.62	80.69	*******	*******	*******	*******	*******	*******	*******	81.35	81.37
	81.38	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 26	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.55	78.46	78.39
	78.33	78.31	78.34	78.43	78.60	78.85	79.15	79.36	79.53	79.69	79.84	79.96	80.07	80.17	80.27
	80.37	80.45	80.52	80.58	80.65	80.72	80.81	*******	*******	*******	*******	*******	81.28	81.30	81.31
	81.32	81.31	81.32	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	75.92	75.89	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 27	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.79	78.72	78.66
	78.63	78.64	78.69	78.81	78.98	79.21	79.44	79.57	79.69	79.82	79.93	80.03	80.12	80.21	80.33
	80.41	80.49	80.55	80.61	80.67	80.73	*******	*******	*******	*******	*******	*******	81.23	81.24	81.25
	81.25	81.24	81.23	81.22	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	75.87	75.65	75.46	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 28	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.13	79.02	78.95	78.90
	78.89	78.92	79.01	79.14	79.32	79.55	79.67	79.75	79.84	79.94	80.02	80.10	80.17	80.25	80.37
	80.45	80.52	80.57	80.63	80.69	80.75	*******	*******	81.03	81.08	*******	81.16	81.18	81.20	81.20
	81.20	81.18	81.17	81.15	*******	*******	*******	*******	*******	*******	*******	*******	81.58	81.56	*******
	*******	*******	*******	*******	*******	*******	*******	75.45	75.31	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 29	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.29	79.21	79.15	79.11
	79.12	79.19	79.29	79.43	79.60	79.77	79.83	79.88	79.95	80.03	80.10	80.16	80.22	80.30	80.41
	80.48	80.54	80.60	80.65	80.71	80.78	*******	80.97	81.02	81.07	81.11	81.14	81.15	81.16	81.16
	81.15	81.13	81.10	81.09	81.07	*******	*******	*******	*******	*******	*******	*******	81.48	81.49	81.47
	*******	*******	*******	*******	*******	*******	*******	75.33	75.25	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 30	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.55	79.45	79.37	79.33	79.32
	79.35	79.42	79.53	79.66	79.81	79.91	79.94	79.98	80.04	80.10	80.16	80.20	80.26	80.36	80.45
	80.50	80.55	80.61	80.67	80.73	80.81	80.89	80.96	81.01	81.06	81.09	81.12	81.13	81.13	81.12
	81.10	81.07	81.03	80.99	80.99	*******	*******	*******	*******	*******	*******	81.31	81.39	81.42	81.45
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.66	79.57	79.51	79.48	79.49

	79.52	79.59	79.70	79.84	79.94	79.99	80.02	80.06	80.11	80.16	80.21	80.25	80.31	80.39	80.47
	80.52	80.57	80.62	80.68	80.75	80.82	80.89	80.95	81.00	81.04	81.08	81.10	81.11	81.11	81.10
	81.06	81.01	80.93	80.85	80.91	80.99	81.07	*******	*******	81.26	81.27	81.29	81.32	81.35	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 32	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.86	79.76	79.68	79.62	79.59	79.60
	79.63	79.70	79.80	79.92	79.99	80.04	80.08	80.12	80.17	80.21	80.25	80.30	80.35	80.42	80.49
	80.53	80.58	80.63	80.68	80.75	80.83	80.89	80.95	80.99	81.03	81.07	81.09	81.10	81.10	81.08
	81.04	80.97	80.83	80.52	80.82	80.95	81.06	*******	81.21	81.23	81.24	81.26	81.29	81.29	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 33	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.83	79.76	79.70	79.66	79.66
	79.69	79.76	79.86	79.93	79.99	80.05	80.10	80.16	80.21	80.25	80.29	80.33	80.38	80.44	80.50
	80.55	80.59	80.64	80.69	80.75	80.82	80.88	80.94	80.98	81.03	81.06	81.09	81.10	81.10	81.08
	81.04	80.97	80.85	80.71	80.85	80.97	81.09	81.17	81.21	81.24	81.24	81.24	81.27	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 34	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.00	79.90	79.82	79.75	79.70	79.68
	79.69	79.76	79.81	79.87	79.94	80.02	80.10	80.17	80.23	80.28	80.32	80.36	80.40	80.45	80.51
	80.56	80.60	80.64	80.69	80.75	80.81	80.87	80.93	80.97	81.02	81.06	81.08	81.10	81.11	81.09
	81.06	80.99	80.86	80.55	80.87	81.02	81.12	81.19	81.23	81.25	81.25	81.24	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 35	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.05	79.96	79.86	79.78	79.71	79.65
	79.62	79.64	79.66	79.71	79.83	79.96	80.08	80.18	80.25	80.30	80.34	80.38	80.42	80.47	80.52
	80.57	80.61	80.65	80.69	80.73	80.79	80.86	80.91	80.96	81.01	81.05	81.09	81.11	81.12	81.12
	81.10	81.06	81.00	80.94	81.02	81.10	81.17	81.22	81.26	81.28	81.27	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 36	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.10	80.01	79.91	79.80	79.70	79.58
	79.48	79.40	79.35	79.39	79.62	79.85	80.02	80.16	80.25	80.31	80.36	80.40	80.44	80.48	80.53
	80.58	80.63	80.65	80.68	80.73	80.78	80.84	80.90	80.95	81.00	81.05	81.09	81.13	81.15	81.16
	81.16	81.15	81.13	81.11	81.14	81.19	81.23	81.27	81.30	81.34	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 37	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.16	80.06	79.96	79.84	79.69	79.50
	79.31	79.07	78.81	78.75	79.27	79.71	79.96	80.13	80.24	80.32	80.38	80.42	80.46	80.50	80.55
	80.61	80.64	80.66	80.69	80.73	80.77	80.82	80.89	80.94	81.00	81.05	81.10	81.15	81.19	81.21
	81.23	81.23	81.23	81.23	81.25	81.27	81.30	81.33	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 38	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.22	80.13	80.02	79.89	79.70	79.44
	79.08	78.61	77.94	77.37	78.85	79.59	79.92	80.11	80.23	80.33	80.40	80.45	80.50	80.54	80.59
	80.65	80.66	80.68	80.70	80.73	80.77	80.81	80.87	80.93	80.99	81.05	81.11	81.18	81.23	81.27
	81.30	81.32	81.33	81.33	81.34	81.35	81.37	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 39	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.29	80.21	80.11	79.95	79.73	79.44
	78.99	78.28	76.45	77.90	78.96	79.59	79.91	80.12	80.25	80.36	80.43	80.49	80.55	80.59	80.66
	80.68	80.68	80.69	80.72	80.74	80.77	80.81	80.86	80.91	80.96	81.03	81.12	81.21	81.28	81.34
	81.38	81.40	81.41	81.42	81.43	81.44	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 40	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.28	80.18	80.01	79.78	79.52
	79.19	78.82	78.40	78.83	79.37	79.74	79.98	80.17	80.30	80.40	80.48	80.54	80.60	80.65	80.70
	80.72	80.71	80.72	80.74	80.76	80.79	80.81	80.85	80.88	80.92	81.00	81.12	81.23	81.33	81.40
	81.45	81.48	81.50	81.51	81.53	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	86.21	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 41	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.32	80.22	80.07	79.89	79.71
	79.52	79.37	79.37	79.57	79.79	79.96	80.11	80.25	80.37	80.46	80.54	80.61	80.66	80.72	80.77
	80.78	80.76	80.77	80.79	80.81	80.83	80.85	80.87	80.89	80.90	80.93	81.11	81.26	81.38	81.47
	81.53	81.57	81.60	81.62	81.63	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	85.85	85.94	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 42	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.26	80.15	80.03	79.90
	79.81	79.78	79.85	79.98	80.07	80.14	80.24	80.34	80.44	80.53	80.60	80.67	80.73	80.79	80.84
	80.88	80.88	80.89	80.88	80.91	80.93	80.95	80.97	80.98	80.97	80.97	81.14	81.30	81.44	81.56
	81.64	81.69	81.72	81.74	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	85.48	85.57	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 43	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.32	80.24	80.16	80.08
	80.03	80.04	80.12	80.20	80.24	80.28	80.36	80.43	80.52	80.60	80.67	80.74	80.81	80.87	80.93
	80.97	81.00	81.03	81.05	81.08	81.11	81.15	81.18	81.19	81.18	81.17	81.19	*******	*******	81.68
	81.78	81.85	81.89	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******

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       ******* ******* ******* ******* *******   85.07   85.13 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 44   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.39   80.33   80.27   80.23
         80.21   80.23   80.29   80.33   80.36   80.40   80.45   80.52   80.60   80.68   80.75   80.81   80.88   80.95   81.02
       ******* *******   81.19   81.23   81.26   81.30   81.34   81.36   81.38   81.38   81.38   81.37 ******* ******* *******
         81.97   82.07 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* *******   84.31   84.48   84.58 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 45   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.46   80.42   80.37   80.34
         80.34   80.36   80.39   80.41   80.44   80.48   80.53   80.59   80.67   80.74   80.82   80.89   80.97   81.05   81.12
       ******* *******   81.34   81.37   81.41   81.47   81.51   81.53   81.55   81.57   81.57 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* *******   83.77   83.86   83.96 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 46   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.53   80.49   80.46   80.44
         80.43   80.44   80.46   80.48   80.51   80.55   80.59   80.65   80.71   80.80   80.89   80.97   81.06   81.14 *******
       ******* ******* ******* ******* *******   81.62   81.66   81.69   81.71   81.72   81.74 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* *******   83.15   83.22   83.31 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 47   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.58   80.55   80.52   80.50
         80.50   80.50   80.52   80.54   80.57   80.61   80.66   80.71   80.77   80.88   80.97   81.06   81.15   81.25 *******
       ******* ******* ******* ******* *******   81.82   81.84   81.86   81.87   81.88 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******   82.42   82.58   82.63   82.66 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 48   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.67   80.62   80.59   80.57   80.55
         80.55   80.56   80.58   80.61   80.65   80.69   80.74   80.80   80.88   80.97   81.06   81.16   81.26 *******
       ******* ******* ******* ******* ******* *******   81.96   81.99   82.00   82.01   82.02 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******   82.09   82.12   82.11   82.04 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 49   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.68   80.64   80.62   80.60   80.58
         80.59   80.60   80.64   80.69   80.73   80.78   80.84   80.91   80.99   81.08   81.16   81.27 ******* ******* *******
       ******* ******* ******* ******* ******* ******* *******   82.13   82.14   82.14   82.14 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* *******   81.95   81.92   81.90   81.85   81.76 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 50   ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.68   80.65   80.63   80.61   80.60
         80.61   80.65   80.72   80.79   80.85   80.91   80.97   81.03   81.10   81.19 ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* *******   82.26   82.26   82.26   82.25 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* *******   81.84   81.79   81.73   81.65   81.52 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 51   ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.71   80.67   80.64   80.62   80.60 *******
       *******   80.72   80.83   80.90   80.97   81.04   81.10   81.16 ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* *******   82.39   82.38   82.37   82.36 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   81.83   81.76   81.68   81.59   81.46   81.28 ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 52   ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   80.67   80.65   80.62   80.60 ******* *******
       ******* *******   80.98 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* *******   82.51   82.49   82.48 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   81.78   81.70   81.60   81.47   81.29   81.03   80.61   80.14 ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 53   ******* ******* ******* ******* ******* ******* ******* ******* *******   80.66   80.64   80.62   80.59   80.58 ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* *******   82.63   82.60   82.60 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   81.75   81.66   81.54   81.38   81.17   80.88   80.47 ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 54   ******* ******* ******* ******* ******* ******* ******* ******* *******   80.59   80.59   80.59   80.59 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* *******   82.76   82.73   82.71 ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       *******   81.74   81.64   81.51   81.33   81.10   80.79   80.35 ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 55   ******* ******* ******* ******* ******* ******* ******* *******   80.57   80.58   80.59   80.60   80.60 ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* *******   82.88 ******* ******* ******* ******* ******* *******
       ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* *******   81.65   81.54 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
       ******* ******* *******
0 56   ******* ******* ******* ******* ******* ******* *******   80.57   80.59   80.61   80.63   80.66 ******* ******* *******
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0 57	*******	*******	*******	*******	*******	*******	80.58	80.59	80.62	80.65	80.68	80.72	*******	*******
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0 58	*******	*******	*******	*******	*******	*******	80.62	80.63	80.67	80.75	80.80	*******	*******	*******
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0 59	*******	*******	*******	*******	*******	*******	80.73	*******	*******	80.89	80.93	*******	*******	*******
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0 60	*******	*******	*******	*******	*******	*******	*******	*******	81.02	81.02	81.05	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	*******	83.46	*******	*******	*******	*******
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0 61	*******	*******	*******	*******	*******	*******	*******	*******	81.10	81.12	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	*******	83.56	83.71	*******	*******	*******
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0 62	*******	*******	*******	*******	*******	*******	*******	*******	81.18	81.20	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	*******	83.63	83.74	*******	*******	*******
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0 63	*******	*******	*******	*******	*******	*******	81.24	81.25	81.25	81.27	*******	*******	*******	*******
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0 64	*******	*******	*******	*******	*******	*******	81.28	81.28	81.29	81.32	*******	*******	*******	*******
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0 65	*******	*******	*******	*******	*******	*******	81.30	81.31	81.32	81.35	*******	*******	*******	*******
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16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78												

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	*******	*******	*******	*******	*******	*******	*******	*******	80.00	79.98	*******	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	78.97	79.14	79.29	*******	*******	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	78.60	78.86	79.11	79.35	79.49	*******	*******	*******	*******
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0 19	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	76.39	76.94	77.59	78.17	78.59	78.94	79.23	79.42	*******	*******	*******	*******
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	*******	76.28	75.75	75.52	76.44	77.32	77.92	78.41	78.82	79.16	79.41	79.59	*******	*******	*******
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	76.69	76.21	75.55	74.75	76.18	77.21	77.84	78.37	78.78	79.13	79.42	79.63	79.79	79.91	*******
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	76.89	76.55	76.18	75.98	76.68	77.36	77.93	78.44	78.83	79.17	79.47	79.68	79.83	79.96	80.06
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0 23	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	77.23	77.01	76.84	76.85	77.21	77.65	78.14	78.60	78.95	79.26	79.53	79.73	79.88	80.00	80.09
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	77.60	77.49	77.42	77.47	77.69	78.00	78.41	78.83	79.13	79.39	79.61	79.79	79.93	80.04	80.13
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	77.97	77.91	77.91	77.97	78.13	78.38	78.76	79.11	79.33	79.52	79.70	79.86	79.99	80.09	80.18
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0 26	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.41
	78.32	78.29	78.31	78.40	78.55	78.81	79.15	79.36	79.51	79.66	79.79	79.93	80.05	80.13	80.24
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0 27	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.65
	78.62	78.61	78.65	78.77	78.94	79.20	79.45	79.56	79.67	79.78	79.89	80.01	80.10	80.16	*******
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0 28	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	78.89
	78.87	78.88	78.99	79.12	79.30	79.53	79.65	79.73	79.81	79.89	79.99	80.08	80.15	80.21	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	81.18	81.19	*******
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	79.07	79.17	79.30	79.43	79.59	79.74	79.80	79.86	79.92	79.99	80.07	80.14	80.19	80.29	80.42
	80.48	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	81.14	81.15	81.16	81.15
	*******	81.12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 30	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	79.44	79.53	79.65	79.78	79.87	79.91	79.96	80.01	80.08	80.14	80.18	80.23	*******	80.48
	80.50	80.55	*******	*******	*******	*******	*******	*******	*******	*******	*******	81.12	81.13	81.13	81.12
	81.10	81.07	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	79.61	79.70	79.81	79.90	79.96	80.00	80.04	80.10	80.15	80.19	80.23	80.29	*******	80.49
	80.52	80.56	80.61	*******	*******	*******	*******	80.95	*******	*******	81.09	81.11	81.11	81.11	81.10
	81.07	81.02	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 32	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	79.65	79.71	79.79	79.88	79.95	80.01	80.06	80.11	80.16	80.20	80.24	80.27	*******	*******	80.50
	80.53	80.58	80.62	80.67	*******	*******	*******	80.95	80.98	*******	81.08	81.09	81.10	81.10	81.08
	81.04	80.98	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 33	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	79.70	79.75	79.82	79.88	79.95	80.02	80.09	80.15	80.20	80.25	80.28	80.31	80.37	*******	80.51
	80.55	80.59	80.63	80.68	*******	*******	*******	80.94	80.98	*******	81.07	81.09	81.10	*******	81.07
	81.03	80.98	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 34	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	79.69	79.73	79.77	79.82	79.91	80.00	*******	*******	80.24	80.28	80.32	80.34	80.40	80.46	80.51
	80.56	80.61	80.64	80.68	*******	*******	*******	80.93	80.97	81.01	81.06	81.08	*******	*******	81.09
	*******	80.99	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 35	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.63
	79.60	79.60	79.61	79.68	79.81	*******	*******	*******	80.26	80.30	80.34	80.37	80.42	80.46	*******
	80.58	80.62	80.65	80.68	80.73	80.79	80.85	80.91	80.96	81.00	*******	*******	*******	81.13	81.12
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 36	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.56
	79.46	79.37	79.32	79.37	*******	*******	*******	*******	80.26	80.31	80.35	80.39	80.43	*******	*******
	*******	80.64	80.66	80.69	80.73	80.77	80.84	80.90	80.95	81.00	*******	*******	*******	81.15	*******
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0 37	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.47
	79.27	79.04	78.84	78.86	*******	*******	*******	80.15	80.24	80.32	80.37	80.41	*******	*******	*******
	*******	80.65	80.67	80.70	80.73	80.77	80.82	80.88	80.93	*******	*******	*******	*******	*******	*******
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0 38	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.40
	79.05	78.61	78.12	*******	*******	*******	79.97	80.12	80.24	80.33	80.39	80.44	80.49	*******	*******
	*******	80.66	*******	80.71	80.74	80.77	80.81	80.86	*******	*******	*******	*******	*******	*******	*******
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0 39	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	78.91	78.31	77.28	*******	*******	*******	79.98	80.13	80.26	80.35	80.42	80.48	*******	*******	*******
	*******	*******	*******	80.72	80.74	80.77	80.81	80.86	*******	*******	*******	*******	*******	*******	*******

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	79.11	78.76	78.27	*******	*******	*******	80.02	80.17	80.30	80.39	80.47	80.52	*******	*******	*******
	*******	*******	*******	*******	80.76	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	79.30	*******	*******	*******	*******	80.11	80.24	80.36	80.45	80.52	*******	*******	*******	*******
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      ******* ******* *******
0HEAD WILL BE SAVED ON UNIT 42 AT END OF TIME STEP  2, STRESS PERIOD  1
0


                         VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP  2 IN STRESS PERIOD  1
                         ------------------------------------------------------------------------------
0                 CUMULATIVE VOLUMES      L**3                                  RATES FOR THIS TIME STEP      L**3/T
                  ------------------                                            ------------------------

                       IN:                                                                IN:
                       ---                                                                ---
                            STORAGE =   0.00000                                                STORAGE =   0.00000
                     CONSTANT HEAD =   0.00000                                         CONSTANT HEAD =   0.00000
                             WELLS =    94500.                                                 WELLS =    525.00
                            DRAINS =   0.00000                                                DRAINS =   0.00000
                          RECHARGE =   0.30735E+08                                          RECHARGE =   0.17075E+06
                     RIVER LEAKAGE =    8343.6                                        RIVER LEAKAGE =    46.338
                   HEAD DEP BOUNDS =   0.23342E+08                                   HEAD DEP BOUNDS =   0.12968E+06
0                        TOTAL IN =   0.54180E+08                                         TOTAL IN =   0.30100E+06
0                      OUT:                                                               OUT:
                       ----                                                               ----
                            STORAGE =   0.00000                                                STORAGE =   0.00000
                     CONSTANT HEAD =   0.32008E+07                                         CONSTANT HEAD =    17777.
                             WELLS =   0.37265E+08                                                 WELLS =   0.20703E+06
                            DRAINS =   0.54468E+07                                                DRAINS =    30260.
                          RECHARGE =   0.00000                                                RECHARGE =   0.00000
                     RIVER LEAKAGE =   0.32784E+07                                         RIVER LEAKAGE =    18214.
                   HEAD DEP BOUNDS =   0.49946E+07                                   HEAD DEP BOUNDS =    27748.
0                       TOTAL OUT =   0.54186E+08                                        TOTAL OUT =   0.30103E+06
0                        IN - OUT =   -6176.0                                             IN - OUT =   -30.188
0                PERCENT DISCREPANCY =              -0.01                          PERCENT DISCREPANCY =              -0.01


0


          TIME SUMMARY AT END OF TIME STEP  2 IN STRESS PERIOD  1
                                 SECONDS       MINUTES       HOURS         DAYS          YEARS
                              ---------------------------------------------------------------------
      TIME STEP LENGTH        0.777600E+07   129600.       2160.00       90.0000       0.246407
    STRESS PERIOD TIME        0.155520E+08   259200.       4320.00       180.000       0.492813
 TOTAL SIMULATION TIME        0.155520E+08   259200.       4320.00       180.000       0.492813
1
```

SMITH

ATTACHMENT B

CONSTANT-DENSITY FLOW MODELING OUTPUT, OCTOBER 1995

```
    MODFLOW/EM version 3.1 -- Serial Number SER04129
 LICENSED TO - Elizabeth Perry, BCM Engrs, Plymouth Meeting, PA
 The File-Name input unit is 99
 trfile.dat has been opened on unit 99
 The listing file output unit is 40
 runt38.out has been opened on unit 40
 The Basic Package input unit is 19
 bastr.dat has been opened on unit 19
 bcftr.dat has been opened on unit 20
 weltr.dat has been opened on unit 21
 drntr.dat has been opened on unit 22
 rivtr.dat has been opened on unit 23
 ghbsl75.dat has been opened on unit 26
 rechtr.dat has been opened on unit 27
 pcg.dat has been opened on unit 32
 oc30.dat has been opened on unit 31
 head68.out has been opened unformatted on unit 50
 cbct38.out has been opened unformatted on unit 41
 headt38.out has been opened unformatted on unit 42
1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0OLIN, WILMINGTON, MA   BASIN-SCALE 3D GROUNDWATER FLOW MODELING                OCTOBER, TRANSIENT
    3 LAYERS        65 ROWS        78 COLUMNS
   3 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS DAYS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT: 20 21 22 23  0  0 26 27  0  0  0 31 32  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 19
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL NOT BE SAVED -- DRAWDOWN CANNOT BE CALCULATED
   131975 ELEMENTS IN X ARRAY ARE USED BY BAS
   131975 ELEMENTS OF X ARRAY USED OUT OF 3000000
0BCF2 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 2, 7/1/91 INPUT READ FROM UNIT 20
 TRANSIENT SIMULATION
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
 HEAD AT CELLS THAT CONVERT TO DRY=   100.00
 WETTING CAPABILITY IS NOT ACTIVE
      LAYER  AQUIFER TYPE
      ------------------
         1         3
         2         3
         3         3
    76053 ELEMENTS IN X ARRAY ARE USED BY BCF
   208028 ELEMENTS OF X ARRAY USED OUT OF 3000000
0WEL1 -- WELL PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM 21
 MAXIMUM OF   22 WELLS
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
       88 ELEMENTS IN X ARRAY ARE USED FOR WELLS
   208116 ELEMENTS OF X ARRAY USED OUT OF 3000000
0DRN1 -- DRAIN PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 22
 MAXIMUM OF   58 DRAINS
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
      290 ELEMENTS IN X ARRAY ARE USED FOR DRAINS
   208406 ELEMENTS OF X ARRAY USED OUT OF 3000000
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 27
 OPTION 1 -- RECHARGE TO TOP LAYER
 CELL-BY-CELL FLOW TERMS WILL BE RECORDED ON UNIT 41
     5070 ELEMENTS OF X ARRAY USED FOR RECHARGE
   213476 ELEMENTS OF X ARRAY USED OUT OF 3000000
0RIV1 -- RIVER PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 23
 MAXIMUM OF   40 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT 41
      240 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
   213716 ELEMENTS OF X ARRAY USED OUT OF 3000000
0GHB1 -- GHB PACKAGE, VERSION 1, 9/1/87 INPUT READ FROM UNIT 26
 MAXIMUM OF  419 HEAD-DEPENDENT BOUNDARY NODES
 CELL-BY-CELL FLOW WILL BE RECORDED ON UNIT 41
     2095 ELEMENTS IN X ARRAY ARE USED FOR HEAD-DEPENDENT BOUNDARIES
   215811 ELEMENTS OF X ARRAY USED OUT OF 3000000
0PCG2 -- CONJUGATE GRADIENT SOLUTION PACKAGE, VERSION 2, 5/1/88
 MAXIMUM OF 200 CALLS OF SOLUTION ROUTINE
 MAXIMUM OF   1 INTERNAL ITERATIONS PER CALL TO SOLUTION ROUTINE
 MATRIX PRECONDITIONING TYPE :    1
   62440 ELEMENTS IN X ARRAY ARE USED BY PCG
  278251 ELEMENTS OF X ARRAY USED OUT OF3000000
```

1OLIN, WILMINGTON, MA BASIN-SCALE 3D GROUNDWATER FLOW MODELING OCTOBER, TRANSIENT
0

BOUNDARY ARRAY FOR LAYER 1 WILL BE READ ON UNIT 19 USING FORMAT: (4012)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 4	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 5	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 6	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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0 7	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 14	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0 15	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0
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0 16	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1
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0 17	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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0 18	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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0 19	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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0 22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0		
0 23	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0		
0 24	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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0 25	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 26	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
0 27	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
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0 28	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
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0 29	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1
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0 30	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1
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0 31	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1		
0 32	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1		
0 33	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

```
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1
0 34  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1
0 35  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1
0 36  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  1  1  0  0  0  0  1  1  1  1  1  1
0 37  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  0  0  0  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1
0 38  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  1  1  0  1  1  1  0  0  0  1  1  1  1
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0 39  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  0  0  0  0  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 40  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 41  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  0  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 42  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 43  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 44  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0
0 45  0  0  0  1  1  1  1  0  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 46  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 47  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 48  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 49  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 50  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 51  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  0  0  0  0  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 52  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 53  0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0
0 54  0  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  1  1  1  1  1  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  0  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  -1 0  0  0  0  0  0  0
0 55  0  0  0  0  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  0  0  0  1  1  1  1  1  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 56  0  0  0  0  0  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  0  0  0  1  1  1  1  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0
0 57  0  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  1  1  1
      1  1  0  0  0  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0
0 58  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  1  1  1  1  1  1  1  1
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0 59  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1  1  1
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0 60  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
      1  1  1  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0
0 61  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
      1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 62  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
      1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0 63  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
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0 64  0  0  0  1  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1  1
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0 65  0  0  0  1  1  1  1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  1  1  1  1  1
      1  1  1  1  1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0
```

BOUNDARY ARRAY FOR LAYER 2 WILL BE READ ON UNIT 19 USING FORMAT: (40I2)

```
      1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
     41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78
0 1   0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  0  0  0
```

| | | |

```
0 39  0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 40  0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0
0 41  0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0
0 42  0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0
0 43  0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 0 0 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0
0 44  0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 2 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0
0 45  0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
      2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 2 0 0 0 0 0 0 0 0 0 0 0
0 46  0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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      2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
```

BOUNDARY ARRAY FOR LAYER 3 WILL BE READ ON UNIT 19 USING FORMAT: (40I2)

```
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     41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78
0  1  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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	81.28	81.37	81.41	81.43	81.44	81.46	81.50	81.54	81.60	81.80
	82.36	82.53	82.79	84.11	85.30	85.13	83.68	81.97	81.21	80.59
	79.86	79.34	76.90	76.53	79.41	79.72	80.11	80.53	80.96	81.33
	81.58	81.64	81.15	80.21	78.59	76.72	-9999.	-9999.		
0 25	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0
	78.57	78.45	78.32	78.21	78.11	78.01	77.95	77.94	78.02	78.20
	78.46	78.71	-9999.	-9999.	-9999.	-9999.	79.93	80.04	80.17	80.24
	80.33	80.41	80.49	80.56	80.64	80.72	80.82	80.91	81.02	81.13
	81.24	81.31	81.35	81.36	81.38	81.39	81.42	81.44	81.46	100.0
	-9999.	82.61	84.12	85.47	85.80	84.92	83.66	82.15	81.68	81.20
	80.70	80.26	79.91	-9999.	76.18	76.88	77.99	78.49	79.03	79.61
	79.98	80.04	79.70	78.96	77.61	76.47	76.30	76.24		
0 26	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	79.08
	78.82	78.69	78.57	78.47	78.40	78.34	78.32	78.36	78.45	78.63
	78.88	79.27	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.21	80.33
	80.38	80.45	80.52	80.59	80.66	80.73	80.83	80.93	81.03	81.11
	81.19	81.26	81.29	81.30	81.32	81.32	81.33	81.33	81.35	-9999.
	-9999.	85.65	85.60	85.00	84.35	83.04	82.66	82.23	81.87	81.50
	81.10	80.69	80.24	79.38	77.88	77.06	76.00	76.14	77.29	78.02
	78.55	78.73	78.57	78.05	77.05	76.29	76.20	76.16		
0 27	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	100.0	79.72	79.23
	79.05	78.92	78.81	78.73	78.67	78.64	78.65	78.71	78.83	79.01
	79.26	79.52	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.35
	80.42	80.49	80.55	80.62	80.68	80.75	80.85	80.95	81.03	81.10
	81.16	81.21	81.24	81.25	81.26	81.26	81.25	81.25	81.24	-9999.
	-9999.	-9999.	84.15	82.90	82.71	82.55	82.33	82.06	81.83	81.58
	81.24	80.79	80.19	79.34	78.29	77.28	76.10	75.73	75.40	76.48
	77.20	77.54	77.59	77.28	76.59	76.11	76.06	76.03		
0 28	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	100.0	79.88	79.62	79.41
	79.26	79.13	79.03	78.96	78.91	78.91	78.94	79.03	79.16	79.37
	79.73	79.75	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.39
	80.46	80.52	80.58	80.64	80.70	80.77	80.87	80.96	81.03	81.09
	81.13	81.17	81.19	81.21	81.21	81.20	81.19	81.18	81.17	81.14
	81.23	81.28	81.74	82.17	82.15	81.99	81.93	81.71	81.63	81.53
	81.25	80.78	80.12	79.26	78.33	77.32	76.36	75.53	75.01	75.08
	75.90	76.28	76.63	76.55	76.18	75.90	75.86	75.84		
0 29	-9999.	-9999.	-9999.	-9999.	100.0	80.30	80.14	79.94	79.73	79.56
	79.42	79.30	79.22	79.16	79.13	79.14	79.20	79.30	79.45	79.64
	79.93	79.90	79.89	-9999.	-9999.	80.16	80.19	-9999.	-9999.	80.43
	80.49	80.55	80.60	80.66	80.72	80.79	80.88	80.96	81.02	81.07
	81.11	81.14	81.16	81.17	81.17	81.15	81.13	81.11	81.09	81.08
	81.12	81.19	81.23	81.51	81.62	81.28	81.54	81.54	81.53	81.48
	81.23	80.73	79.94	78.38	77.75	76.91	76.03	75.24	75.03	75.32
	74.75	74.48	75.49	75.78	75.74	75.63	75.62	75.62		
0 30	-9999.	-9999.	-9999.	100.0	100.0	80.26	80.15	79.99	79.83	79.68
	79.56	79.46	79.38	79.34	79.33	79.36	79.43	79.54	79.70	79.95
	80.01	79.97	79.99	80.05	80.12	80.17	80.21	-9999.	-9999.	-9999.
	80.51	80.56	80.62	80.68	80.74	80.81	80.89	80.96	81.01	81.06
	81.10	81.12	81.14	81.14	81.13	81.11	81.08	81.04	81.01	81.02
	81.07	81.13	81.19	81.23	81.38	81.34	81.22	81.40	81.46	81.46
	81.28	80.59	78.97	78.94	77.89	77.08	76.16	74.85	75.73	76.06
	75.76	75.23	73.47	74.84	75.09	75.28	75.35	75.39		
0 31	-9999.	-9999.	-9999.	100.0	80.46	80.30	80.19	80.05	79.91	79.79

	79.67	79.58	79.52	79.49	79.49	79.52	79.60	79.73	79.97	80.05
	80.07	80.04	80.08	80.15	80.19	80.23	80.26	-9999.	-9999.	-9999.
	80.52	80.57	80.63	80.69	80.75	80.82	80.89	80.95	81.01	81.05
	81.09	81.11	81.12	81.12	81.10	81.07	81.02	80.96	80.90	80.94
	81.01	81.09	81.17	81.21	81.29	81.30	81.30	81.21	81.36	81.44
	81.40	-9999.	78.60	78.94	78.69	77.04	76.43	75.56	76.70	77.07
	-9999.	-9999.	100.0	74.31	74.43	74.86	75.06	75.15		
0 32	100.0	100.0	-9999.	100.0	80.47	80.34	80.24	80.11	79.99	79.87
	79.77	79.69	79.63	79.60	79.60	79.64	79.72	79.84	80.02	80.07
	80.10	80.12	80.15	80.18	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.58	80.64	80.70	80.76	80.83	80.89	80.95	81.00	81.04
	81.08	81.10	81.11	81.10	81.09	81.05	80.98	80.88	80.77	80.87
	80.98	81.07	81.16	81.21	81.23	81.23	81.28	81.29	81.20	81.29
	81.05	-9999.	-9999.	78.01	77.30	77.03	76.57	77.69	78.15	78.77
	-9999.	-9999.	74.73	74.60	74.58	74.52	74.82	74.95		
0 33	100.0	100.0	100.0	100.0	80.49	80.39	80.29	80.17	80.06	79.95
	79.85	79.77	79.71	79.67	79.66	79.70	79.80	79.99	80.01	80.05
	80.10	80.14	80.17	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	80.64	80.70	80.76	80.83	80.89	80.94	80.99	81.03
	81.07	81.09	81.10	81.10	81.08	81.04	80.98	80.89	80.81	80.89
	80.99	81.09	81.17	81.21	81.24	81.24	81.18	81.28	81.26	81.08
	79.45	78.66	78.30	76.75	76.26	76.32	79.41	79.72	79.59	-9999.
	-9999.	-9999.	100.0	74.81	74.77	74.70	74.62	74.86		
0 34	100.0	100.0	100.0	80.79	80.59	80.46	80.34	80.23	80.12	80.01
	79.91	79.83	79.76	79.71	79.69	79.72	79.88	79.93	79.94	80.00
	80.07	80.13	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	80.71	80.76	80.82	80.88	80.93	80.98	81.02
	81.06	81.09	81.11	81.11	81.10	81.06	81.01	80.91	80.81	80.92
	81.04	81.12	81.19	81.23	81.25	81.25	81.23	81.23	81.26	81.09
	80.09	77.42	77.33	78.42	78.47	79.87	81.67	81.87	82.18	-9999.
	-9999.	-9999.	-9999.	74.97	74.98	74.92	74.90	74.96		
0 35	81.57	81.51	81.31	80.95	80.69	80.52	80.40	80.29	80.18	80.06
	79.96	79.87	79.79	79.72	79.66	79.64	79.75	79.78	79.79	79.89
	80.01	80.09	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	80.68	80.73	80.80	80.86	80.92	80.97	81.02
	81.06	81.10	81.12	81.13	81.13	81.11	81.07	81.02	80.98	81.04
	81.11	81.18	81.23	81.26	81.29	81.28	81.30	81.30	81.18	81.27
	81.02	80.61	80.30	80.34	80.43	81.97	83.58	83.51	-9999.	-9999.
	-9999.	-9999.	100.0	100.0	75.14	75.12	75.09	75.09		
0 36	81.58	81.53	81.35	81.03	80.76	80.58	80.45	80.34	80.23	80.12
	80.02	79.92	79.82	79.71	79.59	79.50	79.45	79.48	79.50	79.69
	79.89	80.03	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	80.77	80.85	80.91	80.96	81.01
	81.06	81.10	81.14	81.16	81.17	81.17	81.15	81.14	81.13	81.15
	81.20	81.24	81.28	81.32	81.35	81.36	81.38	81.41	81.42	81.28
	81.62	82.30	82.40	82.37	81.92	-9999.	85.47	85.64	-9999.	-9999.
	-9999.	-9999.	100.0	100.0	75.31	75.31	75.28	75.25		
0 37	81.61	81.57	81.39	81.07	80.79	80.62	80.50	80.39	80.29	80.17
	80.07	79.97	79.85	79.70	79.52	79.40	79.21	78.87	78.84	79.28
	79.74	79.96	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	80.65	-9999.	-9999.	-9999.	80.81	80.89	80.95	81.00
	81.06	81.11	81.16	81.20	81.22	81.24	81.24	81.24	81.24	81.26
	81.28	81.31	81.35	81.39	81.43	81.45	81.49	81.52	81.55	81.52
	81.36	83.98	84.45	84.65	-9999.	87.64	87.05	87.33	-9999.	-9999.
	-9999.	-9999.	100.0	100.0	100.0	75.48	75.44	75.41		
0 38	81.66	81.67	81.49	81.03	80.77	80.64	80.54	80.44	80.35	80.24
	80.14	80.04	79.94	79.76	79.50	79.10	78.67	78.15	78.04	78.89
	79.55	79.91	-9999.	-9999.	-9999.	-9999.	-9999.	80.51	80.54	-9999.
	80.65	80.67	80.68	-9999.	-9999.	-9999.	80.81	80.89	80.94	80.99
	81.05	81.12	81.18	81.24	81.28	81.31	81.32	81.33	81.34	81.35
	81.37	81.40	81.44	81.48	81.52	81.58	81.72	-9999.	-9999.	-9999.
	85.37	86.31	86.41	86.63	87.47	87.70	87.67	88.00	100.0	-9999.
	-9999.	104.1	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 39	100.0	100.0	100.0	100.0	80.75	80.66	80.58	80.49	80.40	80.30
	80.22	80.14	79.99	79.77	79.50	79.01	78.43	77.62	78.18	78.98
	79.55	79.86	-9999.	-9999.	-9999.	-9999.	80.51	80.56	80.60	80.66
	80.68	80.69	80.68	-9999.	-9999.	-9999.	-9999.	80.87	80.92	80.97
	81.04	81.12	81.21	81.28	81.34	81.38	81.41	81.42	81.43	81.44
	81.46	81.50	81.54	81.59	81.61	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	88.14	87.88	87.60	87.61	87.57	87.63	88.32	90.51	93.70
	96.91	101.5	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 40	-9999.	-9999.	100.0	100.0	80.79	80.71	80.63	80.55	80.45	80.37
	80.31	80.21	80.05	79.80	79.53	79.22	78.89	78.64	78.92	79.37
	79.72	79.95	-9999.	-9999.	-9999.	80.50	80.55	80.61	80.66	80.71
	80.72	80.69	80.70	80.73	-9999.	-9999.	-9999.	80.84	80.87	80.90

	81.00	81.12	81.23	81.33	81.41	81.46	81.49	81.51	81.53	81.54
	81.57	81.61	81.68	81.73	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	89.14	88.60	87.93	87.46	87.07	86.91	88.00	89.72	92.32
	94.34	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 41	-9999.	-9999.	-9999.	100.0	80.90	80.77	80.69	80.60	80.50	80.42
	80.33	80.25	80.09	79.91	79.72	79.54	79.44	79.63	79.76	79.87
	79.99	80.12	80.25	-9999.	-9999.	80.57	80.62	80.67	80.73	80.77
	80.78	80.75	80.76	80.78	80.80	-9999.	80.84	80.86	80.88	80.88
	80.89	81.11	81.26	81.38	81.48	81.54	81.59	81.61	81.63	81.65
	81.67	81.73	81.84	82.07	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	88.72	87.92	87.03	86.29	86.46	87.59	89.01	91.28
	93.02	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 42	-9999.	-9999.	-9999.	100.0	81.01	80.84	80.76	80.66	80.54	80.45
	80.38	80.28	80.16	80.04	79.92	79.83	79.82	80.01	80.09	80.12
	80.16	80.23	-9999.	-9999.	80.56	80.62	80.68	80.74	80.80	80.85
	80.88	80.89	80.89	80.87	80.90	80.93	80.94	80.97	80.97	80.95
	80.93	81.14	81.31	81.45	81.57	81.65	81.71	81.74	81.76	81.78
	81.80	81.88	82.46	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	88.55	87.47	86.50	85.84	86.02	87.10	88.39	90.35
	92.15	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 43	-9999.	-9999.	-9999.	100.0	81.21	80.94	80.86	80.80	80.60	80.50
	80.43	80.34	80.25	80.17	80.09	80.05	80.07	80.21	80.26	80.27
	80.28	-9999.	-9999.	-9999.	80.61	80.69	80.75	80.81	80.88	80.93
	80.98	81.01	81.04	81.06	81.09	81.12	81.16	81.18	81.19	81.18
	81.17	81.19	81.37	81.54	81.69	81.80	81.87	81.92	81.96	81.95
	81.94	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	87.99	86.74	85.81	85.33	85.50	86.53	87.72	89.47
	91.59	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 44	-9999.	-9999.	-9999.	100.0	100.0	100.0	100.0	100.0	80.68	80.57
	80.49	80.41	80.34	80.28	80.24	80.22	80.24	80.33	80.36	80.37
	-9999.	-9999.	-9999.	80.63	80.69	80.76	80.82	80.89	80.96	81.03
	81.11	81.16	81.20	81.23	81.27	81.30	81.34	81.37	81.39	81.39
	81.38	81.38	81.40	81.66	81.85	81.99	82.11	82.21	82.23	82.15
	100.0	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	86.99	85.73	84.74	84.66	84.90	85.88	87.00	88.27
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 45	-9999.	-9999.	-9999.	100.0	100.0	100.0	100.0	-9999.	80.75	80.63
	80.55	80.48	80.42	80.38	80.35	80.34	80.38	80.40	80.42	80.44
	-9999.	-9999.	80.60	80.68	80.76	80.83	80.90	80.98	81.06	81.14
	81.23	81.29	81.34	81.38	81.43	81.47	81.51	81.54	81.56	81.57
	81.57	81.58	81.56	81.82	82.04	82.25	82.45	82.64	82.72	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	85.58	84.77	84.04	84.00	84.23	85.07	86.16	87.43
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 46	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.80	80.68
	80.60	80.54	80.49	80.46	80.44	80.43	80.44	80.46	80.48	80.50
	-9999.	-9999.	80.65	80.69	80.81	80.90	80.98	81.07	81.16	81.27
	81.35	81.43	81.49	81.55	81.60	81.63	81.67	81.69	81.71	81.73
	81.74	81.75	81.74	81.99	82.25	82.56	82.94	83.40	83.73	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	84.21	83.84	83.35	83.33	83.48	84.09	85.03	86.72
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 47	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	80.81	80.71
	80.64	80.59	80.55	80.52	80.51	80.50	80.51	80.52	80.54	80.57
	-9999.	80.67	80.70	80.74	80.88	80.98	81.07	81.17	81.27	81.38
	81.48	81.56	81.63	81.70	81.75	81.79	81.82	81.84	81.86	81.87
	81.89	81.90	81.91	82.14	82.46	82.94	83.73	84.76	85.44	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	83.29	82.91	82.61	82.59	82.61	82.64	82.79	83.34	86.00
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 48	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.44	80.83	80.74
	80.67	80.63	80.59	80.57	80.55	80.55	80.56	80.58	80.61	80.64
	80.69	80.73	80.78	80.88	80.98	81.08	81.17	81.28	81.41	81.52
	81.62	81.71	81.79	81.85	81.90	81.94	81.97	81.99	82.00	82.01
	82.02	82.04	82.08	82.26	82.61	83.29	84.75	86.73	87.60	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	82.10	82.08	82.07	82.07	82.05	81.98	81.84	81.77	100.0
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 49	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.00	80.83	80.75
	80.69	80.65	80.62	80.60	80.59	80.59	80.60	80.64	80.68	80.73
	80.78	80.83	80.92	81.00	81.09	81.19	81.29	81.42	81.55	81.66
	81.77	81.87	81.95	82.01	82.06	82.09	82.12	82.13	82.14	82.14
	82.15	82.15	82.19	82.27	-9999.	-9999.	-9999.	89.51	90.04	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	82.04	82.00	81.96	81.93	81.90	81.84	81.75	81.59	81.39	80.97

	100.0	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 50	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.90	80.81	80.74
	80.69	80.65	80.63	80.61	80.60	80.60	80.65	80.72	80.80	80.86
	80.92	80.98	81.05	81.13	81.22	81.33	81.45	81.57	81.71	81.84
	81.95	82.04	82.12	82.17	82.21	82.24	82.26	82.26	82.26	82.26
	82.25	82.26	82.29	82.33	-9999.	-9999.	-9999.	91.69	92.04	92.71
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.31	82.14
	81.98	81.92	81.86	81.80	81.73	81.64	81.50	81.26	80.90	80.39
	80.02	79.96	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 51	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.07	80.84	80.77	80.71
	80.68	80.65	80.62	80.60	80.59	80.63	80.72	80.84	80.92	80.99
	81.06	81.12	81.18	81.27	81.37	81.48	81.61	81.76	81.91	82.04
	82.15	82.23	82.29	82.34	82.37	82.39	82.39	82.39	82.38	82.37
	82.37	82.38	82.40	-9999.	-9999.	-9999.	-9999.	92.92	93.04	93.21
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.22	82.08
	81.94	81.85	81.77	81.69	81.59	81.45	81.25	80.92	80.46	79.97
	79.67	79.84	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 52	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.85	80.78	80.72	80.68
	80.65	80.62	80.59	80.58	80.58	80.66	80.85	80.99	81.10	81.17
	81.23	81.28	81.34	81.42	81.53	81.66	81.82	82.01	82.19	82.33
	82.41	82.45	82.49	82.51	82.53	82.53	82.53	82.52	82.50	82.48
	82.49	82.50	82.52	-9999.	-9999.	-9999.	93.74	93.54	93.55	93.59
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	82.19	82.03
	81.91	81.80	81.71	81.60	81.47	81.28	81.01	80.61	80.08	79.45
	78.94	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 53	-9999.	-9999.	-9999.	-9999.	-9999.	80.81	80.76	80.71	80.66	80.64
	80.62	80.59	80.57	-9999.	-9999.	-9999.	-9999.	81.17	81.24	81.34
	81.40	81.45	81.51	81.59	81.68	81.82	82.03	82.28	82.58	82.68
	82.71	82.71	82.69	82.69	82.68	82.68	82.67	82.64	82.60	82.60
	82.61	82.62	82.63	-9999.	-9999.	-9999.	93.92	93.85	93.86	93.89
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0	82.02
	81.89	81.77	81.67	81.54	81.38	81.16	80.85	80.40	79.68	78.83
	77.62	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 54	-9999.	-9999.	-9999.	-9999.	-9999.	80.69	80.67	80.64	80.59	80.58
	80.58	80.58	80.55	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.52
	81.55	81.61	81.72	81.87	-9999.	-9999.	-9999.	-9999.	83.08	83.12
	83.07	83.00	82.93	82.88	82.85	82.83	82.81	82.77	82.73	82.72
	82.73	82.74	-9999.	-9999.	-9999.	-9999.	94.06	94.03	94.05	94.11
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.05
	81.89	81.76	81.65	81.52	81.33	81.09	80.76	80.27	79.43	78.17
	74.00	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 55	-9999.	-9999.	-9999.	-9999.	-9999.	80.55	80.56	80.57	80.57	80.58
	80.59	80.60	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	83.53	83.61
	83.52	83.38	83.20	83.08	83.02	82.99	82.96	82.93	82.88	82.84
	82.83	82.86	-9999.	-9999.	-9999.	94.19	94.16	94.16	94.20	94.28
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	100.0
	81.90	81.78	81.66	81.53	81.33	81.08	80.72	80.24	79.57	78.65
	77.15	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 56	-9999.	-9999.	-9999.	-9999.	-9999.	80.54	80.55	80.57	80.58	80.60
	80.62	80.67	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	84.19
	84.09	83.92	83.58	83.31	83.19	83.14	83.10	83.07	83.03	82.99
	82.95	82.98	-9999.	-9999.	-9999.	94.15	94.21	94.27	94.31	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	82.01	81.83	81.71	81.58	81.39	81.14	80.81	80.39	79.86	79.22
	78.32	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 57	-9999.	-9999.	-9999.	-9999.	80.54	80.55	80.57	80.59	80.61	80.64
	80.66	80.74	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	84.76
	84.76	85.37	100.0	83.59	83.36	83.29	83.24	83.20	83.17	83.14
	83.11	83.07	-9999.	-9999.	-9999.	93.95	94.18	94.31	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.91	81.82	81.68	81.53	81.30	81.01	80.67	80.23	79.78
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 58	-9999.	-9999.	-9999.	80.59	80.58	80.59	80.61	80.63	80.66	80.76
	80.81	80.86	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	100.0	-9999.	-9999.	100.0	83.55	83.44	83.38	83.33	83.29	83.26
	83.24	83.33	-9999.	-9999.	-9999.	93.40	93.98	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	100.0	81.96	81.89	81.75	81.55	81.21	80.96	80.76	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 59	-9999.	-9999.	-9999.	80.73	80.64	80.66	80.74	80.80	80.84	80.90
	80.94	80.99	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999	-9999.	100.0	83.75	83.59	83.51	83.45	83.40	83.34
	83.43	83.55	-9999.	-9999.	90.78	91.85	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	82.34	82.13	81.92	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 60	-9999.	-9999.	-9999.	80.87	80.74	80.84	80.90	80.94	80.99	81.02
	81.07	81.12	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	83.94	83.76	83.63	83.56	83.50	83.45
	83.60	83.83	84.23	-9999.	89.36	90.76	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	83.07	82.71	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 61	-9999.	-9999.	-9999.	81.06	81.01	81.01	81.03	81.05	81.09	81.13
	81.19	81.25	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	84.23	83.89	83.74	83.66	83.60	83.54
	83.73	84.06	84.59	85.53	86.90	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	84.08	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 62	-9999.	-9999.	-9999.	81.21	81.16	81.14	81.14	81.15	81.18	81.22
	81.28	81.38	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	100.0	84.01	83.83	83.74	83.67	83.60
	83.77	84.13	84.58	85.18	85.76	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 63	-9999.	-9999.	-9999.	81.32	81.27	81.23	81.23	81.24	81.25	81.28
	81.34	81.52	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	84.18	83.94	83.81	83.73	83.68
	83.72	84.05	84.48	84.90	85.23	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 64	-9999.	-9999.	-9999.	81.40	81.34	81.30	81.28	81.28	81.30	81.33
	81.38	100.0	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	84.65	84.00	83.85	83.75	83.66
	83.62	83.97	84.33	84.72	84.96	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 65	-9999.	-9999.	-9999.	81.43	81.38	81.33	81.31	81.31	81.32	81.36
	81.40	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	84.03	83.87	83.74	83.58
	83.30	83.86	84.24	84.63	84.84	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0										

INITIAL HEAD, LAYER 2 WILL BE READ UNFORMATTED ON UNIT 50

	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78		
0 1	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.37	80.38	80.39
	80.42	80.46	80.55	80.66	80.75	80.86	80.95	81.04	81.13	81.24
	81.35	81.47	81.60	81.73	81.88	82.05	82.20	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 2	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.35	80.35	80.36	80.38
	80.40	80.46	80.54	80.65	80.74	80.84	80.93	81.02	81.11	81.22
	81.34	81.46	81.59	81.74	81.89	82.05	82.22	82.37	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 3	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.31	80.32	80.33	80.35
	80.38	80.44	80.52	80.62	80.70	80.80	80.89	80.98	81.08	81.19
	81.31	81.44	81.59	81.74	81.90	82.06	82.23	82.38	82.53	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 4	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.26	80.27	80.29	80.31
	80.34	80.40	80.48	80.57	80.65	80.75	80.83	80.92	81.02	81.14
	81.27	81.41	81.58	81.74	81.91	82.07	82.24	82.39	82.53	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 5	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.19	80.21	80.23	80.26
	80.29	80.35	80.43	80.51	80.58	80.67	80.75	80.84	80.94	81.07
	81.21	81.38	81.56	81.75	81.91	82.09	82.26	82.41	82.54	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 6	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	80.06	80.10	80.14	80.17	80.20
	80.24	80.29	80.36	80.43	80.50	80.58	80.65	80.73	80.84	80.97
	81.13	81.33	81.54	81.75	81.93	82.11	82.29	82.43	82.56	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 7	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	79.97	80.01	80.05	80.09	80.13
	80.18	80.24	80.29	80.34	80.40	80.46	80.52	80.60	80.71	80.85
	81.03	81.27	81.52	81.74	81.95	82.15	82.33	82.46	82.59	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 8	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	79.86	79.90	79.95	80.00	80.04
	80.10	80.17	80.21	80.25	80.29	80.33	80.37	80.44	80.54	80.68
	80.89	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 9	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.66	79.72	79.78	79.83	79.89	79.94
	80.00	80.06	80.11	80.13	80.15	80.15	80.18	80.24	80.34	80.47
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 10	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.52	79.57	79.64	79.70	79.76	79.82
	79.89	79.95	80.00	80.01	80.00	79.95	79.94	79.99	80.10	80.25
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 11	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	79.26	79.30	79.36	79.41	79.48	79.55	79.62	79.69
	79.77	79.83	79.89	79.88	79.81	79.71	79.62	79.69	79.82	80.00
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 12	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	79.11	79.14	79.18	79.23	79.29	79.38	79.46	79.55
	79.64	79.72	79.77	79.75	79.65	79.41	79.11	79.32	79.53	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 13	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	78.91	78.94	78.95	78.98	79.01	79.07	79.17	79.28	79.39
	79.50	79.60	79.67	79.65	79.51	79.10	77.97	78.95	79.31	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 14	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	78.79	78.76	78.75	78.75	78.77	78.81	78.91	79.05	79.20
	79.36	79.51	79.60	79.59	79.51	79.30	78.98	79.17	79.35	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 15	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	78.56	78.53	78.50	78.49	78.51	78.60	78.75	78.97
	79.20	79.43	79.51	79.55	79.57	79.52	79.37	79.39	79.47	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 16	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	78.40	78.36	78.30	78.24	78.18	78.15	78.20	78.34	78.61
	78.94	79.27	79.38	79.48	79.58	79.61	79.54	79.54	79.59	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 17	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	78.25	78.17	78.07	77.95	77.83	77.73	77.71	77.83	78.14
	78.56	79.00	79.18	79.34	79.52	79.58	79.59	79.62	79.68	79.78
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 18	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	78.10	77.98	77.84	77.65	77.45	77.27	77.15	77.25	77.62
	78.12	78.65	78.94	79.18	79.42	79.52	79.60	79.67	79.75	79.85
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 19	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	77.96	77.83	77.64	77.40	77.11	76.82	76.56	76.47	77.00
	77.63	78.19	78.68	79.03	79.32	79.47	79.60	79.71	79.81	79.92
	80.05	-9999.	-9999.	80.55	80.63	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 20	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	77.87	77.73	77.51	77.22	76.86	76.40	75.82	75.17	76.29
	77.21	77.87	78.48	78.92	79.30	79.47	79.62	79.75	79.86	79.98
	80.11	80.27	80.41	80.52	80.60	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 21	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	77.84	77.69	77.47	77.17	76.78	76.22	75.05	71.17	75.48
	76.97	77.75	78.42	78.88	79.28	79.49	79.65	79.79	79.91	80.03
	80.16	80.29	80.41	80.51	80.59	80.68	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 22	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	77.74	77.54	77.29	76.96	76.57	76.02	75.35	76.39
	77.23	77.87	78.49	78.92	79.29	79.57	79.71	79.84	79.96	80.07
	80.20	80.31	80.42	80.50	80.59	80.67	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 23	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	77.88	77.72	77.52	77.28	77.04	76.82	76.74	77.14
	77.63	78.11	78.65	79.02	79.35	79.62	79.76	79.89	80.01	80.11
	80.23	80.34	80.44	80.51	80.59	80.67	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 24	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	78.07	77.94	77.80	77.64	77.51	77.44	77.48	77.71
	78.04	78.42	78.86	79.17	79.45	79.67	79.82	79.94	80.06	80.16
	80.27	80.37	80.46	80.53	80.60	80.68	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	81.43	81.44	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 25	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	78.30	78.20	78.09	78.00	77.94	77.93	78.00	78.18
	78.44	78.77	79.11	79.35	79.56	79.74	79.89	80.01	80.12	80.21
	80.32	80.41	80.49	80.55	80.62	80.69	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	81.35	81.37	81.38	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 26	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	78.55	78.46	78.39	78.33	78.31	78.34	78.43	78.60
	78.85	79.15	79.36	79.53	79.69	79.84	79.96	80.07	80.17	80.27
	80.37	80.45	80.52	80.58	80.65	80.72	80.81	-9999.	-9999.	-9999.
	-9999.	-9999.	81.28	81.30	81.31	81.32	81.31	81.32	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	75.92	75.89	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 27	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	78.79	78.72	78.66	78.63	78.64	78.69	78.81	78.98
	79.21	79.44	79.57	79.69	79.82	79.93	80.03	80.12	80.21	80.33
	80.41	80.49	80.55	80.61	80.67	80.73	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	81.23	81.24	81.25	81.25	81.24	81.23	81.22	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	75.87	75.65	75.46	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 28	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	79.13	79.02	78.95	78.90	78.89	78.92	79.01	79.14	79.32
	79.55	79.67	79.75	79.84	79.94	80.02	80.10	80.17	80.25	80.37
	80.45	80.52	80.57	80.63	80.69	80.75	-9999.	-9999.	81.03	81.08
	-9999.	81.16	81.18	81.20	81.20	81.20	81.18	81.17	81.15	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.58	81.56	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	75.45	75.31	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 29	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	79.29	79.21	79.15	79.11	79.12	79.19	79.29	79.43	79.60
	79.77	79.83	79.88	79.95	80.03	80.10	80.16	80.22	80.30	80.41
	80.48	80.54	80.60	80.65	80.71	80.78	-9999.	80.97	81.02	81.07
	81.11	81.14	81.15	81.16	81.16	81.15	81.13	81.10	81.09	81.07
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.48	81.49	81.47
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	75.33	75.25	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 30	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	79.55	79.45	79.37	79.33	79.32	79.35	79.42	79.53	79.66	79.81
	79.91	79.94	79.98	80.04	80.10	80.16	80.20	80.26	80.36	80.45
	80.50	80.55	80.61	80.67	80.73	80.81	80.89	80.96	81.01	81.06
	81.09	81.12	81.13	81.13	81.12	81.10	81.07	81.03	80.99	80.99
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.31	81.39	81.42	81.45
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 31	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	79.66	79.57	79.51	79.48	79.49	79.52	79.59	79.70	79.84	79.94
	79.99	80.02	80.06	80.11	80.16	80.21	80.25	80.31	80.39	80.47
	80.52	80.57	80.62	80.68	80.75	80.82	80.89	80.95	81.00	81.04
	81.08	81.10	81.11	81.11	81.10	81.06	81.01	80.93	80.85	80.91
	80.99	81.07	-9999.	-9999.	81.26	81.27	81.29	81.32	81.35	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 32	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	79.86
	79.76	79.68	79.62	79.59	79.60	79.63	79.70	79.80	79.92	79.99
	80.04	80.08	80.12	80.17	80.21	80.25	80.30	80.35	80.42	80.49
	80.53	80.58	80.63	80.68	80.75	80.83	80.89	80.95	80.99	81.03
	81.07	81.09	81.10	81.10	81.08	81.04	80.97	80.83	80.52	80.82
	80.95	81.06	-9999.	81.21	81.23	81.24	81.26	81.29	81.29	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 33	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	79.83	79.76	79.70	79.66	79.66	79.69	79.76	79.86	79.93	79.99
	80.05	80.10	80.16	80.21	80.25	80.29	80.33	80.38	80.44	80.50
	80.55	80.59	80.64	80.69	80.75	80.82	80.88	80.94	80.98	81.03
	81.06	81.09	81.10	81.10	81.08	81.04	80.97	80.85	80.71	80.85
	80.97	81.09	81.17	81.21	81.24	81.24	81.24	81.27	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 34	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.00
	79.90	79.82	79.75	79.70	79.68	79.69	79.76	79.81	79.87	79.94
	80.02	80.10	80.17	80.23	80.28	80.32	80.36	80.40	80.45	80.51
	80.56	80.60	80.64	80.69	80.75	80.81	80.87	80.93	80.97	81.02
	81.06	81.08	81.10	81.11	81.09	81.06	80.99	80.86	80.55	80.87
	81.02	81.12	81.19	81.23	81.25	81.25	81.24	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 35	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.05
	79.96	79.86	79.78	79.71	79.65	79.62	79.64	79.66	79.71	79.83
	79.96	80.08	80.18	80.25	80.30	80.34	80.38	80.42	80.47	80.52
	80.57	80.61	80.65	80.69	80.73	80.79	80.86	80.91	80.96	81.01
	81.05	81.09	81.11	81.12	81.12	81.10	81.06	81.00	80.94	81.02
	81.10	81.17	81.22	81.26	81.28	81.27	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 36	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.10
	80.01	79.91	79.80	79.70	79.58	79.48	79.40	79.35	79.39	79.62
	79.85	80.02	80.16	80.25	80.31	80.36	80.40	80.44	80.48	80.53
	80.58	80.63	80.65	80.68	80.73	80.78	80.84	80.90	80.95	81.00
	81.05	81.09	81.13	81.15	81.16	81.16	81.15	81.13	81.11	81.14
	81.19	81.23	81.27	81.30	81.34	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 37	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.16
	80.06	79.96	79.84	79.69	79.50	79.31	79.07	78.81	78.75	79.27
	79.71	79.96	80.13	80.24	80.32	80.38	80.42	80.46	80.50	80.55
	80.61	80.64	80.66	80.69	80.73	80.77	80.82	80.89	80.94	81.00
	81.05	81.10	81.15	81.19	81.21	81.23	81.23	81.23	81.23	81.25
	81.27	81.30	81.33	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 38	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.22
	80.13	80.02	79.89	79.70	79.44	79.08	78.61	77.94	77.37	78.85
	79.59	79.92	80.11	80.23	80.33	80.40	80.45	80.50	80.54	80.59
	80.65	80.66	80.68	80.70	80.73	80.77	80.81	80.87	80.93	80.99
	81.05	81.11	81.18	81.23	81.27	81.30	81.32	81.33	81.33	81.34
	81.35	81.37	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 39	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.29
	80.21	80.11	79.95	79.73	79.44	78.99	78.28	76.45	77.90	78.96

	79.59	79.91	80.12	80.25	80.36	80.43	80.49	80.55	80.59	80.66
	80.68	80.68	80.69	80.72	80.74	80.77	80.81	80.86	80.91	80.96
	81.03	81.12	81.21	81.28	81.34	81.38	81.40	81.41	81.42	81.43
	81.44	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 40	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	80.28	80.18	80.01	79.78	79.52	79.19	78.82	78.40	78.83	79.37
	79.74	79.98	80.17	80.30	80.40	80.48	80.54	80.60	80.65	80.70
	80.72	80.71	80.72	80.74	80.76	80.79	80.81	80.85	80.88	80.92
	81.00	81.12	81.23	81.33	81.40	81.45	81.48	81.50	81.51	81.53
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	86.21	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 41	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	80.32	80.22	80.07	79.89	79.71	79.52	79.37	79.37	79.57	79.79
	79.96	80.11	80.25	80.37	80.46	80.54	80.61	80.66	80.72	80.77
	80.78	80.76	80.77	80.79	80.81	80.83	80.85	80.87	80.89	80.90
	80.93	81.11	81.26	81.38	81.47	81.53	81.57	81.60	81.62	81.63
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	85.85	85.94	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 42	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.26	80.15	80.03	79.90	79.81	79.78	79.85	79.98	80.07
	80.14	80.24	80.34	80.44	80.53	80.60	80.67	80.73	80.79	80.84
	80.88	80.88	80.89	80.88	80.91	80.93	80.95	80.97	80.98	80.97
	80.97	81.14	81.30	81.44	81.56	81.64	81.69	81.72	81.74	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	85.48	85.57	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 43	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.32	80.24	80.16	80.08	80.03	80.04	80.12	80.20	80.24
	80.28	80.36	80.43	80.52	80.60	80.67	80.74	80.81	80.87	80.93
	80.97	81.00	81.03	81.05	81.08	81.11	81.15	81.18	81.19	81.18
	81.17	81.19	-9999.	-9999.	81.68	81.78	81.85	81.89	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	85.07	85.13	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 44	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.39	80.33	80.27	80.23	80.21	80.23	80.29	80.33	80.36
	80.40	80.45	80.52	80.60	80.68	80.75	80.81	80.88	80.95	81.02
	-9999.	-9999.	81.19	81.23	81.26	81.30	81.34	81.36	81.38	81.38
	81.38	81.37	-9999.	-9999.	-9999.	81.97	82.07	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	84.31	84.48	84.58	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 45	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.46	80.42	80.37	80.34	80.34	80.36	80.39	80.41	80.44
	80.48	80.53	80.59	80.67	80.74	80.82	80.89	80.97	81.05	81.12
	-9999.	-9999.	81.34	81.37	81.41	81.47	81.51	81.53	81.55	81.57
	81.57	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	83.77	83.86	83.96	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 46	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.53	80.49	80.46	80.44	80.43	80.44	80.46	80.48	80.51
	80.55	80.59	80.65	80.71	80.80	80.89	80.97	81.06	81.14	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	81.62	81.66	81.69	81.71	81.72
	81.74	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	83.15	83.22	83.31	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 47	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	80.58	80.55	80.52	80.50	80.50	80.50	80.52	80.54	80.57
	80.61	80.66	80.71	80.77	80.88	80.97	81.06	81.15	81.25	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.82	81.84	81.86	81.87
	81.88	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	82.42	82.58	82.63	82.66	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 48	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	80.67	80.62	80.59	80.57	80.55	80.55	80.56	80.58	80.61	80.65
	80.69	80.74	80.80	80.88	80.97	81.06	81.16	81.26	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.96	81.99	82.00	82.01
	82.02	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	82.09	82.12	82.11	82.04	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 49	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	80.68	80.64	80.62	80.60	80.58	80.59	80.60	80.64	80.69	80.73
	80.78	80.84	80.91	80.99	81.08	81.16	81.27	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.13	82.14	82.14
	82.14	-9999.	-9999.	-9999.	-9999.	-9999.	9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	81.95	81.92	81.90	81.85	81.76	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 50	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	80.68	80.65	80.63	80.61	80.60	80.61	80.65	80.72	80.79	80.85
	80.91	80.97	81.03	81.10	81.19	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.26	82.26	82.26
	82.25	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	81.84	81.79	81.73	81.65	81.52	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 51	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.71
	80.67	80.64	80.62	80.60	-9999.	-9999.	80.72	80.83	80.90	80.97
	81.04	81.10	81.16	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.39	82.38	82.37
	82.36	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.83	81.76	81.68	81.59	81.46	81.28	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 52	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.67
	80.65	80.62	80.60	-9999.	-9999.	-9999.	-9999.	80.98	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.51	82.49	82.48
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.78	81.70	81.60	81.47	81.29	81.03	80.61	80.14	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 53	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.66	80.64
	80.62	80.59	80.58	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.63	82.60	82.60
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.75	81.66	81.54	81.38	81.17	80.88	80.47	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 54	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.59	80.59
	80.59	80.59	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.76	82.73	82.71
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.74	81.64	81.51	81.33	81.10	80.79	80.35	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 55	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.57	80.58	80.59
	80.60	80.60	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	82.88	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	81.65	81.54	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 56	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.57	80.59	80.61
	80.63	80.66	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	83.02	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 57	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.58	80.59	80.62	80.65
	80.68	80.72	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 58	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.62	80.63	80.67	80.75
	80.80	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 59	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	80.73	-9999.	-9999.	80.89
	80.93	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 60	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.02	81.02
	81.05	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 61	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.10	81.12
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	83.71	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	83.74	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 63	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.24	81.25	81.25	81.27
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	83.73	84.01	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 64	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.28	81.28	81.29	81.32
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	83.65	83.95	84.28	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 65	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	81.30	81.31	81.32	81.35
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	83.43	83.86	84.19	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0										

INITIAL HEAD, LAYER 3 WILL BE READ UNFORMATTED ON UNIT 50

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 16	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 17	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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0 18	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 19	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	76.39	76.94

	77.59	78.17	78.59	78.94	79.23	79.42	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 20	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	76.28	75.75	75.52	76.44
	77.32	77.92	78.41	78.82	79.16	79.41	79.59	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 21	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	76.69	76.21	75.55	74.75	76.18
	77.21	77.84	78.37	78.78	79.13	79.42	79.63	79.79	79.91	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 22	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	76.89	76.55	76.18	75.98	76.68
	77.36	77.93	78.44	78.83	79.17	79.47	79.68	79.83	79.96	80.06
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 23	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	77.23	77.01	76.84	76.85	77.21
	77.65	78.14	78.60	78.95	79.26	79.53	79.73	79.88	80.00	80.09
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 24	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	77.60	77.49	77.42	77.47	77.69
	78.00	78.41	78.83	79.13	79.39	79.61	79.79	79.93	80.04	80.13
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 25	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	77.97	77.91	77.91	77.97	78.13
	78.38	78.76	79.11	79.33	79.52	79.70	79.86	79.99	80.09	80.18
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 26	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	78.41	78.32	78.29	78.31	78.40	78.55
	78.81	79.15	79.36	79.51	79.66	79.79	79.93	80.05	80.13	80.24
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 27	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	78.65	78.62	78.61	78.65	78.77	78.94
	79.20	79.45	79.56	79.67	79.78	79.89	80.01	80.10	80.16	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 28	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	78.89	78.87	78.88	78.99	79.12	79.30
	79.53	79.65	79.73	79.81	79.89	79.99	80.08	80.15	80.21	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	81.18	81.19	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.

	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 29	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.08	79.07	79.17	79.30	79.43	79.59
	79.74	79.80	79.86	79.92	79.99	80.07	80.14	80.19	80.29	80.42
	80.48	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.14	81.15	81.16	81.15	-9999.	81.12	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 30	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	79.44	79.53	79.65	79.78
	79.87	79.91	79.96	80.01	80.08	80.14	80.18	80.23	-9999.	80.48
	80.50	80.55	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	81.12	81.13	81.13	81.12	81.10	81.07	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 31	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	79.61	79.70	79.81	79.90
	79.96	80.00	80.04	80.10	80.15	80.19	80.23	80.29	-9999.	80.49
	80.52	80.56	80.61	-9999.	-9999.	-9999.	-9999.	80.95	-9999.	-9999.
	81.09	81.11	81.11	81.11	81.10	81.07	81.02	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 32	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	79.65	79.71	79.79	79.88	79.95
	80.01	80.06	80.11	80.16	80.20	80.24	80.27	-9999.	-9999.	80.50
	80.53	80.58	80.62	80.67	-9999.	-9999.	-9999.	80.95	80.98	-9999.
	81.08	81.09	81.10	81.10	81.08	81.04	80.98	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 33	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	79.70	79.75	79.82	79.88	79.95
	80.02	80.09	80.15	80.20	80.25	80.28	80.31	80.37	-9999.	80.51
	80.55	80.59	80.63	80.68	-9999.	-9999.	-9999.	80.94	80.98	-9999.
	81.07	81.09	81.10	-9999.	81.07	81.03	80.98	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 34	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	79.69	79.73	79.77	79.82	79.91
	80.00	-9999.	-9999.	80.24	80.28	80.32	80.34	80.40	80.46	80.51
	80.56	80.61	80.64	80.68	-9999.	-9999.	-9999.	80.93	80.97	81.01
	81.06	81.08	-9999.	-9999.	81.09	-9999.	80.99	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 35	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.63	79.60	79.60	79.61	79.68	79.81
	-9999.	-9999.	-9999.	80.26	80.30	80.34	80.37	80.42	80.46	-9999.
	80.58	80.62	80.65	80.68	80.73	80.79	80.85	80.91	80.96	81.00
	-9999.	-9999.	-9999.	81.13	81.12	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 36	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.56	79.46	79.37	79.32	79.37	-9999.
	-9999.	-9999.	-9999.	80.26	80.31	80.35	80.39	80.43	-9999.	-9999.
	-9999.	80.64	80.66	80.69	80.73	80.77	80.84	80.90	80.95	81.00
	-9999.	-9999.	-9999.	81.15	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 37	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.47	79.27	79.04	78.84	78.86	-9999.
	-9999.	-9999.	80.15	80.24	80.32	80.37	80.41	-9999.	-9999.	-9999.
	-9999.	80.65	80.67	80.70	80.73	80.77	80.82	80.88	80.93	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		

0 38	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	79.40	79.05	78.61	78.12	-9999.	-9999.
	-9999.	79.97	80.12	80.24	80.33	80.39	80.44	80.49	-9999.	-9999.
	-9999.	80.66	-9999.	80.71	80.74	80.77	80.81	80.86	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 39	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	78.91	78.31	77.28	-9999.	-9999.
	-9999.	79.98	80.13	80.26	80.35	80.42	80.48	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	80.72	80.74	80.77	80.81	80.86	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 40	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
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	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		
0 65	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.
	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.	-9999.		

OHEAD PRINT FORMAT IS FORMAT NUMBER 4 DRAWDOWN PRINT FORMAT IS FORMAT NUMBER 0

```
0HEADS WILL BE SAVED ON UNIT 42    DRAWDOWNS WILL BE SAVED ON UNIT  0
0OUTPUT CONTROL IS SPECIFIED EVERY TIME STEP
0                                                COLUMN TO ROW ANISOTROPY =   1.000000
0                                                                    DELR =   100.0000
0                                                                    DELC =   100.0000
0                                                     PRIMARY STORAGE COEF =  0.1000000E-01 FOR LAYER  1
0
```

HYD. COND. ALONG ROWS FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78		
0 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0

	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	10.00	0.0000	0.0000
	0.0000	0.0000	0.0000	10.00	0.0000	0.0000	0.0000	0.0000		
0 22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	1.000	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000		
0 23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	1.000	1.000	1.000	1.000	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000	0.0000		
0 24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	1.000	1.000	1.000	1.000	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	0.0000	0.0000		
0 25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	150.0	1.000	1.000	1.000	1.000	1.000	10.00	10.00	10.00
	10.00	10.00	10.00	0.0000	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 26	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0

	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	1.000	1.000	1.000	1.000	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	1.000	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 28	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 29	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 30	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	150.0	150.0	150.0		
0 31	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 32	150.0	150.0	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 33	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 34	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0		
0 35	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	10.00	10.00
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000	0.0000

	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 36	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	10.00	10.00	10.00	10.00	10.00	0.0000	10.00	10.00	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 37	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	10.00	10.00	10.00	10.00	0.0000	10.00	10.00	10.00	0.0000	0.0000
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0		
0 38	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	0.0000
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000
	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.0000
	0.0000	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 39	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 40	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 41	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 42	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 43	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 44	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 45	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0

	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 53	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 54	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0

	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 55	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 56	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 57	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0
	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	150.0	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 58	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	150.0	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 59	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 60	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 61	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 62	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 63	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		

0 64	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0 65	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0	150.0	150.0	150.0
	150.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	150.0	150.0	150.0	150.0
	150.0	150.0	150.0	150.0	150.0	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0										

BOTTOM FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	67.0	57.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	59.0	64.0
	65.0	66.0	67.0	69.0	70.0	70.0	71.0	74.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	64.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	60.0
	63.0	65.0	67.0	68.0	69.0	69.0	70.0	74.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	71.0	61.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0
	61.0	65.0	67.0	68.0	68.0	69.0	71.0	73.0	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	85.0	77.0	68.0	58.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0
	61.0	65.0	67.0	68.0	68.0	69.0	71.0	73.0	76.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	78.0	72.0	64.0	56.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0
	62.0	65.0	67.0	68.0	69.0	69.0	71.0	72.0	75.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	72.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0
	63.0	66.0	68.0	68.0	69.0	70.0	71.0	72.0	74.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	67.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	65.0	67.0	68.0	69.0	69.0	70.0	71.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	62.0	60.0	56.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	62.0	62.0	61.0	57.0	56.0	60.0	65.0
	67.0	69.0	70.0	70.0	70.0	70.0	70.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	59.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	68.0	71.0	72.0	72.0	69.0	65.0	64.0	65.0	68.0
	70.0	71.0	71.0	71.0	70.0	70.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.0	56.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	78.0	79.0	0.0	81.0	76.0	73.0	71.0	71.0	73.0
	73.0	72.0	73.0	72.0	72.0	71.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	71.0	81.0	0.0	0.0	0.0	83.0	80.0	77.0	77.0	76.0
	77.0	76.0	75.0	73.0	72.0	71.0	71.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	59.0	75.0	83.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0	80.0
	80.0	80.0	77.0	74.0	72.0	71.0	70.0	72.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	63.0	77.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	77.0	74.0	72.0	71.0	70.0	72.0	75.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	62.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	62.0	73.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	76.0	74.0	71.0	71.0	71.0	73.0	75.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	59.0	55.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	59.0	71.0	82.0	0.0	0.0	0.0	84.0	83.0	0.0	0.0	0.0
	81.0	79.0	76.0	73.0	71.0	72.0	72.0	73.0	75.0	77.0	81.0	0.0	0.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	58.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	57.0	68.0	80.0	0.0	0.0	81.0	78.0	77.0	82.0	0.0	83.0
	80.0	81.0	77.0	73.0	71.0	72.0	72.0	73.0	74.0	76.0	81.0	0.0	0.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	62.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	77.0	87.0	79.0	72.0	71.0	73.0	77.0	81.0	82.0
	82.0	80.0	77.0	74.0	71.0	70.0	72.0	73.0	74.0	76.0	80.0	0.0	83.0	80.0	80.0	84.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	69.0	73.0	66.0	62.0	63.0	68.0	71.0	76.0	80.0
	80.0	79.0	78.0	75.0	71.0	70.0	73.0	73.0	74.0	76.0	80.0	0.0	81.0	76.0	77.0	80.0	83.0	80.0	82.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	74.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	59.0	60.0	60.0	59.0	62.0	68.0	74.0	77.0
	79.0	78.0	77.0	74.0	72.0	70.0	71.0	73.0	74.0	77.0	80.0	0.0	74.0	71.0	74.0	76.0	77.0	71.0	75.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	67.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	60.0	65.0	73.0	76.0
	78.0	76.0	76.0	72.0	71.0	69.0	63.0	72.0	73.0	76.0	79.0	80.0	65.0	67.0	70.0	70.0	69.0	61.0	70.0	82.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	70.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	73.0	75.0
	77.0	75.0	71.0	70.0	67.0	68.0	67.0	66.0	73.0	76.0	78.0	72.0	62.0	64.0	66.0	64.0	66.0	53.0	69.0	77.0
	80.0	81.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	65.0	72.0	76.0
	77.0	74.0	70.0	66.0	61.0	67.0	67.0	62.0	74.0	75.0	76.0	67.0	62.0	64.0	64.0	61.0	59.0	61.0	71.0	74.0
	75.0	74.0	73.0	78.0	78.0	77.0	77.0	76.0	76.0	76.0	78.0	76.0	75.0	72.0	70.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	65.0	71.0	75.0
	76.0	75.0	69.0	63.0	56.0	63.0	64.0	63.0	69.0	75.0	77.0	66.0	63.0	65.0	67.0	67.0	63.0	67.0	71.0	71.0
	70.0	67.0	69.0	73.0	74.0	73.0	71.0	69.0	71.0	73.0	73.0	70.0	71.0	69.0	68.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	69.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	64.0	69.0	73.0
	74.0	72.0	67.0	57.0	60.0	60.0	61.0	62.0	67.0	77.0	82.0	68.0	65.0	67.0	70.0	74.0	68.0	70.0	68.0	67.0
	65.0	63.0	74.0	74.0	72.0	68.0	63.0	64.0	67.0	65.0	66.0	68.0	67.0	65.0	65.0	64.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	62.0	67.0	73.0
	72.0	71.0	64.0	60.0	60.0	60.0	61.0	59.0	66.0	85.0	0.0	69.0	67.0	70.0	71.0	72.0	70.0	68.0	65.0	63.0
	62.0	64.0	70.0	0.0	71.0	63.0	57.0	58.0	59.0	61.0	64.0	66.0	64.0	62.0	63.0	61.0	58.0	55.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	75.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	64.0	66.0
	72.0	71.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	0.0	0.0	77.0	69.0	71.0	70.0	70.0	68.0	64.0	61.0	61.0
	61.0	63.0	66.0	73.0	66.0	61.0	60.0	60.0	55.0	60.0	61.0	63.0	62.0	61.0	62.0	59.0	56.0	55.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	88.0	85.0	79.0	71.0	62.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	60.0	60.0	61.0
	68.0	68.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	73.0	70.0	68.0	66.0	64.0	59.0	57.0	59.0
	59.0	60.0	61.0	60.0	60.0	58.0	60.0	60.0	60.0	57.0	62.0	62.0	61.0	62.0	59.0	58.0	56.0	56.0		
0 28	0.0	0.0	0.0	0.0	0.0	85.0	82.0	79.0	74.0	66.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	55.0	60.0	60.0
	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	67.0	80.0	76.0	74.0	68.0	64.0	61.0	59.0	60.0	60.0	55.0
	57.0	57.0	58.0	61.0	60.0	60.0	60.0	60.0	60.0	56.0	61.0	62.0	62.0	62.0	55.0	61.0	59.0	55.0		
0 29	0.0	0.0	0.0	0.0	87.0	77.0	76.0	74.0	69.0	62.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	72.0	66.0	67.0	66.0	59.0	55.0	55.0	60.0	60.0	60.0
	57.0	60.0	62.0	74.0	75.0	65.0	69.0	60.0	60.0	56.0	62.0	63.0	66.0	63.0	59.0	63.0	59.0	55.0		
0 30	0.0	0.0	0.0	94.0	81.0	71.0	72.0	69.0	65.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	60.0	61.0	58.0	56.0	60.0	60.0	60.0	60.0
	61.0	69.0	69.0	77.0	70.0	63.0	67.0	56.0	55.0	59.0	68.0	69.0	70.0	63.0	62.0	63.0	58.0	56.0		
0 31	0.0	0.0	0.0	91.0	77.0	70.0	70.0	67.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	57.0	60.0	60.0	60.0	60.0	60.0	57.0

	67.0	0.0	76.0	75.0	78.0	61.0	67.0	61.0	59.0	67.0	0.0	0.0	74.0	65.0	65.0	63.0	58.0	59.0		
0 32	94.0	95.0	0.0	87.0	75.0	69.0	67.0	64.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	66.0
	73.0	0.0	0.0	75.0	73.0	61.0	73.0	64.0	65.0	76.0	0.0	0.0	71.0	67.0	68.0	64.0	61.0	60.0		
0 33	88.0	89.0	91.0	82.0	74.0	69.0	65.0	62.0	57.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	66.0
	73.0	76.0	77.0	66.0	61.0	73.0	72.0	68.0	71.0	0.0	0.0	0.0	76.0	70.0	69.0	66.0	63.0	59.0		
0 34	82.0	82.0	83.0	78.0	72.0	68.0	65.0	60.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	61.0	69.0
	72.0	72.0	65.0	60.0	68.0	76.0	70.0	70.0	80.0	0.0	0.0	0.0	0.0	71.0	69.0	68.0	64.0	59.0		
0 35	74.0	74.0	78.0	76.0	73.0	69.0	64.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	64.0	68.0	72.0
	73.0	70.0	65.0	64.0	74.0	80.0	70.0	75.0	0.0	0.0	0.0	0.0	78.0	74.0	70.0	69.0	66.0	62.0		
0 36	65.0	70.0	76.0	76.0	73.0	69.0	65.0	61.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	64.0	71.0	74.0	75.0
	74.0	71.0	68.0	70.0	78.0	0.0	72.0	82.0	0.0	0.0	0.0	0.0	78.0	75.0	72.0	70.0	69.0	67.0		
0 37	57.0	71.0	77.0	77.0	74.0	69.0	64.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	60.0	66.0	71.0	76.0	78.0	79.0
	77.0	73.0	71.0	74.0	0.0	81.0	75.0	82.0	0.0	0.0	0.0	0.0	79.0	78.0	75.0	73.0	72.0	72.0		
0 38	68.0	77.0	81.0	79.0	75.0	69.0	63.0	60.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	63.0	66.0	77.0	80.0	0.0	0.0	0.0
	80.0	76.0	72.0	73.0	80.0	76.0	72.0	78.0	91.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	82.0	85.0	85.0	82.0	76.0	68.0	63.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	59.0	66.0	69.0	75.0	0.0	0.0	0.0	0.0	0.0
	0.0	78.0	73.0	71.0	73.0	72.0	62.0	70.0	84.0	89.0	88.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	90.0	84.0	76.0	67.0	64.0	64.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	66.0	72.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	80.0	75.0	71.0	69.0	70.0	60.0	64.0	78.0	84.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	87.0	77.0	67.0	66.0	68.0	66.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	72.0	76.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	77.0	71.0	67.0	60.0	60.0	60.0	73.0	83.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	88.0	78.0	70.0	72.0	73.0	70.0	63.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	70.0	77.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	79.0	70.0	62.0	60.0	60.0	59.0	72.0	81.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	88.0	80.0	77.0	78.0	79.0	74.0	65.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	55.0	56.0	60.0	60.0	60.0	60.0	60.0	68.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	80.0	70.0	57.0	60.0	60.0	59.0	71.0	80.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	88.0	84.0	83.0	84.0	85.0	77.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	62.0	56.0	60.0	60.0	60.0	67.0	76.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	80.0	67.0	60.0	60.0	60.0	60.0	70.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	89.0	88.0	88.0	89.0	0.0	77.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	57.0	62.0	64.0	61.0	60.0	62.0	67.0	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	77.0	61.0	60.0	60.0	60.0	60.0	71.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	66.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	59.0	57.0	57.0	56.0	60.0	60.0	60.0	60.0	60.0
	60.0	58.0	63.0	65.0	66.0	67.0	69.0	73.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	71.0	57.0	60.0	60.0	60.0	59.0	72.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	74.0	64.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	59.0	59.0	62.0	62.0	58.0	57.0	60.0	60.0	60.0	60.0
	60.0	58.0	64.0	68.0	71.0	73.0	76.0	77.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	79.0	65.0	60.0	60.0	60.0	60.0	60.0	71.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	71.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	60.0	61.0	61.0	63.0	64.0	60.0	59.0	60.0	60.0	60.0	60.0
	60.0	58.0	66.0	70.0	74.0	78.0	81.0	79.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	72.0	60.0	60.0	60.0	60.0	60.0	61.0	71.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0	69.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	58.0	61.0	63.0	63.0	64.0	63.0	64.0	62.0	58.0	55.0	60.0	60.0	60.0
	60.0	58.0	68.0	75.0	0.0	0.0	0.0	81.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	75.0	64.0	60.0	60.0	60.0	60.0	60.0	62.0	71.0	78.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	66.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	56.0	59.0	62.0	65.0	66.0	66.0	66.0	66.0	63.0	63.0	60.0	56.0	60.0	60.0	60.0

	60.0	60.0	69.0	79.0	0.0	0.0	0.0	80.0	79.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	78.0
	69.0	57.0	60.0	60.0	60.0	60.0	60.0	63.0	71.0	71.0	71.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	80.0	71.0	62.0	60.0	60.0	60.0	60.0	60.0	55.0	56.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	60.0	62.0	65.0	68.0	68.0	69.0	69.0	68.0	67.0	65.0	64.0	60.0	57.0	60.0	60.0	60.0
	60.0	63.0	74.0	0.0	0.0	0.0	0.0	75.0	73.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	73.0
	63.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	67.0	68.0	68.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	75.0	65.0	58.0	60.0	60.0	60.0	60.0	60.0	65.0	64.0	59.0	60.0	56.0	57.0
	57.0	59.0	62.0	65.0	67.0	69.0	71.0	72.0	73.0	73.0	72.0	72.0	69.0	67.0	64.0	61.0	58.0	60.0	60.0	60.0
	56.0	66.0	77.0	0.0	0.0	0.0	80.0	69.0	65.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	78.0	71.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	77.0	69.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	65.0	64.0	64.0
	65.0	67.0	70.0	72.0	74.0	75.0	77.0	77.0	75.0	74.0	73.0	73.0	72.0	70.0	66.0	63.0	58.0	60.0	60.0	60.0
	60.0	69.0	80.0	0.0	0.0	0.0	76.0	62.0	59.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.0	73.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	72.0	65.0	58.0	60.0	60.0	60.0	60.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0
	73.0	76.0	78.0	80.0	0.0	0.0	0.0	0.0	78.0	76.0	76.0	76.0	75.0	73.0	69.0	64.0	59.0	60.0	60.0	60.0
	63.0	73.0	0.0	0.0	0.0	0.0	73.0	58.0	62.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0
	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	55.0	58.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	68.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	79.0	78.0	79.0	78.0	76.0	71.0	66.0	61.0	56.0	60.0	57.0
	65.0	76.0	0.0	0.0	0.0	82.0	72.0	63.0	70.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0
	70.0	59.0	60.0	60.0	58.0	58.0	58.0	58.0	58.0	62.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	63.0	57.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	80.0	81.0	81.0	79.0	73.0	67.0	61.0	56.0	60.0	58.0
	66.0	77.0	0.0	0.0	0.0	82.0	73.0	70.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	79.0	67.0	61.0	60.0	61.0	61.0	61.0	61.0	62.0	68.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	65.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	83.0	85.0	85.0	82.0	75.0	69.0	62.0	57.0	55.0	59.0
	66.0	77.0	0.0	0.0	0.0	82.0	77.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	76.0	70.0	68.0	68.0	68.0	68.0	68.0	71.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	67.0	62.0	57.0	60.0	60.0	60.0	60.0	60.0	59.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0	0.0	84.0	77.0	70.0	64.0	57.0	56.0	58.0
	64.0	73.0	0.0	0.0	0.0	83.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	83.0	77.0	75.0	70.0	71.0	71.0	71.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	67.0	62.0	56.0	60.0	55.0	55.0	60.0	60.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	79.0	72.0	65.0	59.0	57.0	57.0
	60.0	69.0	0.0	0.0	85.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	78.0	75.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	69.0	63.0	56.0	56.0	55.0	60.0	60.0	60.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	74.0	67.0	61.0	57.0	60.0
	55.0	64.0	76.0	0.0	81.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	81.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	71.0	63.0	56.0	55.0	56.0	60.0	60.0	56.0	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	76.0	69.0	62.0	56.0	60.0
	60.0	59.0	70.0	75.0	78.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	72.0	64.0	56.0	55.0	55.0	60.0	60.0	58.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	79.0	71.0	64.0	56.0	60.0
	60.0	55.0	64.0	69.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	74.0	65.0	57.0	60.0	60.0	60.0	60.0	60.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	74.0	65.0	60.0	60.0
	60.0	60.0	58.0	64.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	74.0	65.0	58.0	60.0	60.0	60.0	60.0	61.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	76.0	66.0	55.0	60.0
	60.0	60.0	60.0	60.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	74.0	66.0	59.0	60.0	60.0	60.0	60.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	68.0	57.0	60.0
	60.0	60.0	60.0	55.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

VERT HYD COND /THICKNESS FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.7
	0.8	0.0	0.0	0.0	0.0	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.9	1.0	1.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.6
	0.8	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	1.0	1.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.6	0.6
	0.9	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.7	0.6	0.6
	0.9	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6
	0.9	1.6	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.8	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.6	0.7
	0.9	1.3	0.0	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.7	0.7	0.7
	0.9	1.0	0.0	0.0	0.0	0.6	0.5	0.5	0.6	0.6	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.7	0.7	0.7
	0.8	0.9	0.8	0.0	0.0	0.6	0.5	0.5	0.6	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.7	0.7	0.7
	0.8	0.8	0.7	0.0	0.7	0.6	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.8	0.8
	0.8	0.7	0.7	0.0	0.7	0.6	0.5	0.6	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
	0.8	0.7	0.8	0.0	0.6	0.5	0.5	0.6	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
	0.7	0.7	0.8	0.0	0.7	0.6	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8
	0.7	0.7	0.8	0.0	0.7	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.8
	0.7	0.7	0.0	0.0	0.8	0.6	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.7	0.8	0.9	1.0	0.8
	0.8	0.7	0.0	0.0	0.8	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.8	0.7	0.7	0.7	0.9	0.9	0.9
	0.9	0.8	0.0	0.0	0.8	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7
	0.7	0.6	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
	0.5	0.6	0.0	0.0	0.7	0.6	0.5	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.6
	0.6	0.6	0.0	0.0	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5

	0.6	0.7	0.0	0.0	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
	0.6	0.6	0.0	0.0	0.8	0.6	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.5	0.5	0.5	0.5	0.5	0.6
	0.6	0.6	0.0	0.0	0.0	0.6	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.5	0.5	0.5	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.7	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6
	0.6	0.6	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.5	0.6	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.9	0.0	0.0	0.0
	0.0	0.0	0.8	0.6	0.6	0.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.6	0.5	0.6	0.6	0.8	0.0	0.0	0.7	0.8
	0.0	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.6	0.7	0.9	0.0	0.0	0.7	0.8	0.0	0.0	0.8	0.6	0.6	0.7	0.6	0.6	0.8	0.0	0.7	0.6	0.6
	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.7	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.8	0.9	0.8	0.6	0.7	0.0	0.0	0.0	0.7	0.6	0.6	0.6	0.7	0.8	0.7	0.5	0.5	0.6
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.0	0.0	0.0	0.8	0.7	0.6	0.5	0.7	0.7	0.6	0.5	0.5	0.6
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7
	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.7	0.7	0.6	0.5	0.5	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.9	0.0	1.0	0.9	1.0	0.1	0.1	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.7	0.7	0.6	0.6	0.5	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.9	0.8	0.8	0.9	0.9	0.1	0.1	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7
	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.7	0.6	0.6	0.6	0.5
	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.9	0.8	1.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7
	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.7	0.6	0.6	0.5
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.8	1.0	0.9	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	0.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.9	1.1	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.9
	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	0.6	0.6	0.6
	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	1.3
	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.8	1.1	0.0	1.1	0.8	0.7	0.0	0.0	0.0	0.9	0.6	0.6	0.7
	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.7	1.0
	0.6	0.7	0.0	0.0	0.0	0.0	0.8	0.7	1.1	2.0	1.1	0.8	1.1	0.0	0.0	0.0	0.0	0.7	0.9	0.8
	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.0	1.0	0.9	0.7	0.7	0.6	0.6	0.7	0.8
	0.6	0.8	0.0	0.0	0.0	0.8	0.7	0.8	1.0	1.4	1.4	1.0	0.9	0.8	0.0	0.0	0.0	1.0	1.2	1.0
	0.9	0.9	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.9	0.9	0.8	0.6	0.6	0.6	0.7	0.7
	0.6	0.8	0.9	0.0	0.0	0.7	0.6	0.8	1.0	1.3	1.4	1.1	0.9	0.9	0.9	0.0	1.0	1.5	1.5	1.1
	1.0	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.9	0.7	0.6	0.6	0.6	0.7	0.7
	0.7	0.7	0.0	0.0	0.7	0.6	0.6	0.8	0.9	1.0	1.3	1.1	1.0	0.9	1.1	1.1	1.3	1.4	1.4	1.2
	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.8	0.7	0.6	0.6	0.7	0.8	0.8
	0.8	0.0	0.0	0.0	0.7	0.6	0.7	0.8	0.9	1.1	1.3	1.3	1.2	1.3	1.1	1.2	1.3	1.3	1.3	1.2
	1.1	1.3	0.0	0.0	0.9	0.8	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8
	0.0	0.0	0.0	0.8	0.6	0.6	0.7	0.8	0.9	1.1	0.0	0.0	1.3	1.3	1.1	1.3	1.2	1.1	1.1	1.1
	1.3	1.5	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8
	0.0	0.0	0.8	0.7	0.6	0.6	0.7	0.8	1.0	1.1	0.0	0.0	1.3	1.1	1.1	1.2	1.1	1.0	0.9	1.0
	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9
	0.0	0.0	0.8	0.7	0.6	0.7	0.8	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	0.9	0.9	0.9
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.7	0.8	0.9	1.0	1.0	1.1
	0.0	0.9	0.8	0.7	0.7	0.7	0.8	1.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.9	0.9
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0	1.1	1.2	1.1
	1.1	0.9	0.8	0.8	0.8	0.8	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	1.0	0.8	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.3	1.2	1.1
	1.1	0.9	0.9	0.8	0.9	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.1	0.9	0.7	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	1.1	1.2	1.4	1.4	1.3	1.2	1.2
	1.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.0	0.8	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.9	1.0	1.6	0.0	0.0	1.7	1.3	1.3	1.4
	1.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7
	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.0	0.8	0.7	0.6	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	1.1	0.0	0.0	0.0	0.0	1.5	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9	0.9	0.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.7	0.8	0.7	0.7	0.7	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.9	0.8	0.8	0.8	0.8	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.9	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.0	0.9	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.0	0.9	0.8	0.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.9	0.9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.1
	1.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	1.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	1.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 SECONDARY STORAGE COEF = 0.1500000 FOR LAYER 1

0

TOP FOR LAYER 1 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	84.0	82.0	81.0	78.0	75.0
	69.0	0.0	0.0	0.0	0.0	66.0	71.0	73.0	76.0	79.0	80.0	81.0	81.0	80.0	80.0	80.0	81.0	81.0	82.0	82.0
	82.0	82.0	82.0	82.0	83.0	83.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	84.0	83.0	82.0	80.0	76.0
	70.0	0.0	0.0	0.0	0.0	66.0	71.0	75.0	78.0	79.0	81.0	82.0	82.0	81.0	81.0	80.0	81.0	82.0	82.0	82.0
	82.0	82.0	82.0	83.0	83.0	83.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0	86.0	85.0	83.0	82.0	81.0	78.0
	72.0	0.0	0.0	0.0	0.0	67.0	72.0	76.0	79.0	81.0	82.0	83.0	82.0	82.0	81.0	82.0	82.0	83.0	83.0	83.0
	82.0	82.0	82.0	83.0	83.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	90.0	88.0	86.0	84.0	83.0	83.0	82.0	81.0
	73.0	0.0	0.0	0.0	0.0	68.0	74.0	79.0	81.0	82.0	83.0	84.0	83.0	83.0	82.0	83.0	83.0	84.0	84.0	83.0
	83.0	82.0	82.0	83.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	86.0	84.0	84.0	84.0	84.0	83.0
	75.0	65.0	0.0	0.0	0.0	70.0	77.0	81.0	82.0	84.0	84.0	84.0	84.0	83.0	83.0	84.0	84.0	85.0	84.0	84.0
	83.0	83.0	83.0	83.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	85.0	84.0	84.0	84.0	84.0	83.0
	76.0	67.0	0.0	0.0	0.0	71.0	80.0	83.0	84.0	84.0	85.0	85.0	84.0	84.0	84.0	85.0	85.0	86.0	85.0	84.0
	84.0	83.0	83.0	84.0	84.0	84.0	84.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	85.0	83.0	84.0	84.0	84.0	83.0
	78.0	70.0	0.0	0.0	0.0	74.0	83.0	84.0	84.0	85.0	85.0	85.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	85.0
	84.0	84.0	84.0	84.0	85.0	84.0	84.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	85.0	84.0	84.0	85.0	85.0	83.0
	80.0	75.0	67.0	0.0	0.0	76.0	83.0	85.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	86.0	87.0	87.0	86.0	85.0

	84.0	84.0	84.0	84.0	85.0	84.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	86.0	85.0	85.0	85.0	85.0	84.0
	81.0	79.0	71.0	0.0	69.0	79.0	83.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	87.0	87.0	87.0	87.0	86.0	85.0
	85.0	84.0	84.0	85.0	85.0	84.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	89.0	88.0	86.0	85.0	85.0	85.0	85.0	84.0
	82.0	80.0	70.0	0.0	75.0	81.0	84.0	85.0	85.0	85.0	86.0	86.0	87.0	0.0	88.0	88.0	88.0	87.0	86.0	85.0
	85.0	84.0	84.0	84.0	84.0	84.0	83.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	89.0	88.0	87.0	86.0	86.0	85.0	85.0	84.0
	83.0	80.0	68.0	0.0	80.0	83.0	85.0	85.0	85.0	85.0	86.0	87.0	0.0	0.0	0.0	88.0	88.0	88.0	87.0	86.0
	85.0	85.0	85.0	84.0	84.0	83.0	83.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	90.0	88.0	87.0	87.0	86.0	86.0	85.0	84.0
	83.0	79.0	66.0	0.0	75.0	83.0	85.0	86.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	88.0	0.0	86.0
	85.0	85.0	85.0	84.0	84.0	83.0	82.0	83.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	92.0	91.0	90.0	89.0	88.0	88.0	87.0	86.0	85.0	84.0
	83.0	78.0	65.0	0.0	71.0	82.0	85.0	86.0	86.0	87.0	88.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	85.0	85.0	84.0	84.0	83.0	82.0	83.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	92.0	92.0	92.0	90.0	89.0	89.0	88.0	88.0	87.0	85.0	84.0
	82.0	76.0	0.0	0.0	68.0	80.0	84.0	87.0	88.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	85.0	85.0	84.0	84.0	83.0	83.0	83.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	93.0	93.0	92.0	91.0	90.0	89.0	89.0	88.0	87.0	85.0	84.0
	81.0	75.0	0.0	0.0	67.0	79.0	85.0	88.0	89.0	90.0	90.0	90.0	0.0	0.0	0.0	91.0	90.0	0.0	0.0	0.0
	87.0	86.0	85.0	85.0	84.0	83.0	83.0	84.0	85.0	85.0	86.0	0.0	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	93.0	92.0	91.0	90.0	90.0	90.0	89.0	87.0	86.0	84.0
	81.0	75.0	0.0	0.0	68.0	79.0	85.0	89.0	90.0	91.0	92.0	91.0	0.0	0.0	92.0	92.0	91.0	89.0	0.0	88.0
	87.0	86.0	85.0	85.0	84.0	84.0	84.0	84.0	85.0	86.0	87.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	93.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	84.0
	82.0	76.0	0.0	0.0	70.0	80.0	86.0	90.0	92.0	93.0	93.0	93.0	93.0	93.0	93.0	92.0	91.0	90.0	89.0	88.0
	87.0	87.0	86.0	85.0	84.0	84.0	85.0	85.0	86.0	86.0	87.0	0.0	89.0	90.0	90.0	91.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	93.0	92.0	91.0	91.0	91.0	90.0	88.0	86.0	85.0
	83.0	78.0	0.0	0.0	73.0	82.0	88.0	92.0	94.0	95.0	95.0	94.0	94.0	94.0	94.0	92.0	91.0	90.0	89.0	88.0
	88.0	87.0	86.0	86.0	85.0	85.0	85.0	86.0	87.0	87.0	87.0	0.0	89.0	90.0	90.0	91.0	91.0	90.0	89.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	94.0	94.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	85.0
	83.0	76.0	0.0	0.0	76.0	83.0	88.0	92.0	95.0	96.0	96.0	95.0	94.0	95.0	94.0	92.0	91.0	90.0	90.0	89.0
	88.0	88.0	87.0	86.0	85.0	85.0	86.0	87.0	87.0	88.0	88.0	0.0	89.0	90.0	90.0	91.0	91.0	89.0	89.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	94.0	94.0	92.0	91.0	90.0	89.0	89.0	87.0	86.0	86.0
	84.0	75.0	0.0	0.0	74.0	82.0	88.0	92.0	95.0	98.0	97.0	95.0	94.0	95.0	93.0	92.0	91.0	91.0	90.0	90.0
	89.0	88.0	88.0	87.0	86.0	86.0	87.0	88.0	88.0	88.0	88.0	88.0	89.0	89.0	90.0	90.0	90.0	89.0	88.0	88.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	94.0	92.0	90.0	89.0	88.0	88.0	87.0	86.0	86.0
	84.0	77.0	0.0	0.0	68.0	80.0	87.0	91.0	95.0	99.0	97.0	94.0	93.0	93.0	92.0	92.0	91.0	91.0	90.0	90.0
	90.0	89.0	88.0	87.0	87.0	87.0	88.0	89.0	89.0	89.0	88.0	88.0	89.0	89.0	90.0	90.0	89.0	88.0	87.0	87.0
	88.0	88.0	0.0	0.0	0.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0	82.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	93.0	91.0	89.0	88.0	87.0	87.0	86.0	86.0	85.0
	84.0	77.0	0.0	0.0	0.0	76.0	85.0	88.0	93.0	99.0	96.0	93.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
	90.0	90.0	89.0	88.0	88.0	88.0	89.0	90.0	90.0	89.0	89.0	88.0	89.0	89.0	90.0	89.0	88.0	87.0	86.0	86.0
	87.0	87.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	83.0	82.0	82.0	82.0	81.0	81.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	92.0	90.0	87.0	86.0	86.0	86.0	85.0	85.0	85.0
	84.0	78.0	0.0	0.0	0.0	71.0	82.0	84.0	89.0	94.0	93.0	90.0	89.0	89.0	89.0	90.0	91.0	91.0	91.0	91.0
	91.0	90.0	90.0	89.0	88.0	89.0	90.0	91.0	90.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	88.0	87.0	85.0	85.0
	86.0	86.0	87.0	86.0	85.0	83.0	83.0	83.0	82.0	82.0	81.0	81.0	81.0	81.0	80.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	92.0	91.0	89.0	86.0	85.0	85.0	85.0	85.0	85.0	85.0
	84.0	79.0	0.0	0.0	0.0	0.0	79.0	76.0	82.0	88.0	89.0	86.0	85.0	87.0	88.0	89.0	90.0	91.0	92.0	92.0
	92.0	91.0	90.0	90.0	89.0	89.0	90.0	92.0	91.0	90.0	89.0	89.0	89.0	89.0	89.0	88.0	87.0	86.0	85.0	85.0
	85.0	85.0	85.0	85.0	83.0	82.0	81.0	81.0	81.0	81.0	81.0	80.0	80.0	80.0	80.0	80.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.0	91.0	90.0	88.0	85.0	84.0	84.0	84.0	84.0	85.0	84.0
	83.0	77.0	0.0	0.0	0.0	0.0	66.0	66.0	74.0	82.0	85.0	83.0	82.0	85.0	87.0	89.0	90.0	91.0	92.0	93.0
	93.0	92.0	91.0	90.0	89.0	89.0	90.0	91.0	90.0	90.0	0.0	89.0	89.0	89.0	89.0	88.0	86.0	85.0	84.0	84.0
	84.0	84.0	84.0	0.0	82.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	79.0	79.0	79.0	79.0	79.0	78.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0	92.0	91.0	90.0	87.0	84.0	83.0	83.0	83.0	84.0	84.0	84.0
	82.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	76.0	82.0	79.0	80.0	84.0	86.0	88.0	90.0	91.0	93.0	94.0
	93.0	92.0	91.0	90.0	89.0	89.0	90.0	90.0	90.0	0.0	0.0	89.0	89.0	89.0	88.0	87.0	86.0	85.0	84.0	83.0
	83.0	83.0	83.0	83.0	81.0	80.0	80.0	79.0	79.0	80.0	80.0	79.0	79.0	79.0	79.0	78.0	78.0	78.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	95.0	95.0	94.0	92.0	91.0	90.0	87.0	85.0	83.0	82.0	83.0	83.0	83.0	83.0

	81.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	80.0	78.0	79.0	83.0	85.0	88.0	89.0	91.0	94.0	94.0
	94.0	93.0	92.0	91.0	89.0	89.0	89.0	90.0	90.0	0.0	0.0	0.0	88.0	86.0	87.0	86.0	85.0	84.0	83.0	83.0
	83.0	83.0	83.0	82.0	81.0	80.0	79.0	79.0	79.0	79.0	80.0	79.0	78.0	78.0	78.0	78.0	78.0	77.0		
0 28	0.0	0.0	0.0	0.0	0.0	97.0	96.0	96.0	94.0	93.0	91.0	90.0	87.0	85.0	83.0	82.0	82.0	82.0	82.0	81.0
	79.0	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	79.0	79.0	80.0	83.0	85.0	87.0	89.0	91.0	94.0	95.0
	94.0	93.0	92.0	91.0	89.0	88.0	88.0	89.0	89.0	89.0	89.0	88.0	88.0	87.0	87.0	86.0	84.0	83.0	83.0	82.0
	82.0	82.0	82.0	82.0	81.0	80.0	79.0	78.0	78.0	80.0	80.0	79.0	79.0	78.0	78.0	77.0	77.0	77.0		
0 29	0.0	0.0	0.0	0.0	98.0	98.0	98.0	97.0	95.0	93.0	92.0	90.0	88.0	85.0	82.0	[illegible]	81.0	[illegible]	81.0	79.0
	77.0	72.0	65.0	0.0	0.0	71.0	68.0	0.0	0.0	67.0	77.0	80.0	81.0	83.0	85.0	86.0	88.0	90.0	93.0	94.0
	94.0	93.0	92.0	91.0	88.0	87.0	87.0	89.0	89.0	89.0	88.0	88.0	87.0	87.0	86.0	85.0	84.0	83.0	82.0	82.0
	82.0	82.0	82.0	82.0	81.0	80.0	79.0	78.0	78.0	80.0	81.0	80.0	79.0	78.0	78.0	77.0	77.0	76.0		
0 30	0.0	0.0	0.0	98.0	99.0	100.0	99.0	98.0	96.0	94.0	92.0	91.0	88.0	84.0	82.0	80.0	80.0	80.0	79.0	78.0
	75.0	72.0	68.0	65.0	68.0	79.0	71.0	0.0	0.0	0.0	75.0	79.0	81.0	83.0	84.0	85.0	87.0	89.0	92.0	93.0
	94.0	94.0	93.0	91.0	88.0	86.0	87.0	88.0	89.0	89.0	88.0	87.0	86.0	86.0	85.0	84.0	83.0	82.0	82.0	82.0
	82.0	82.0	83.0	83.0	82.0	81.0	80.0	79.0	80.0	81.0	82.0	81.0	80.0	79.0	77.0	77.0	77.0	76.0		
0 31	0.0	0.0	0.0	100.0	100.0	101.0	101.0	100.0	97.0	95.0	92.0	91.0	88.0	84.0	81.0	79.0	79.0	80.0	78.0	76.0
	74.0	72.0	71.0	71.0	69.0	73.0	68.0	0.0	0.0	0.0	69.0	74.0	81.0	82.0	82.0	84.0	85.0	87.0	90.0	93.0
	94.0	94.0	93.0	91.0	88.0	86.0	87.0	88.0	89.0	88.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	82.0	82.0	81.0
	82.0	0.0	83.0	83.0	83.0	82.0	81.0	81.0	82.0	83.0	0.0	0.0	81.0	79.0	77.0	77.0	77.0	76.0		
0 32	101.0	101.0	0.0	101.0	101.0	102.0	102.0	101.0	98.0	94.0	92.0	90.0	87.0	82.0	79.0	78.0	79.0	79.0	76.0	74.0
	73.0	72.0	71.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	80.0	81.0	82.0	82.0	83.0	86.0	89.0	92.0
	94.0	94.0	93.0	91.0	88.0	87.0	88.0	89.0	89.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	82.0	82.0	81.0	81.0
	82.0	0.0	0.0	84.0	84.0	83.0	83.0	83.0	84.0	85.0	0.0	0.0	82.0	80.0	78.0	77.0	77.0	76.0		
0 33	102.0	102.0	101.0	101.0	102.0	102.0	103.0	102.0	99.0	94.0	90.0	88.0	84.0	80.0	78.0	77.0	77.0	77.0	74.0	72.0
	72.0	70.0	67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	79.0	80.0	80.0	81.0	83.0	87.0	90.0
	93.0	94.0	93.0	91.0	89.0	88.0	88.0	89.0	89.0	88.0	87.0	85.0	85.0	84.0	83.0	83.0	82.0	82.0	81.0	81.0
	82.0	83.0	84.0	85.0	85.0	85.0	85.0	85.0	86.0	0.0	0.0	0.0	83.0	80.0	78.0	77.0	77.0	76.0		
0 34	101.0	102.0	101.0	101.0	102.0	103.0	103.0	103.0	98.0	93.0	88.0	85.0	82.0	78.0	76.0	75.0	76.0	75.0	71.0	71.0
	72.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	77.0	77.0	78.0	80.0	85.0	88.0
	92.0	93.0	92.0	91.0	89.0	89.0	89.0	89.0	89.0	87.0	86.0	85.0	84.0	83.0	83.0	82.0	82.0	82.0	81.0	81.0
	83.0	84.0	85.0	85.0	86.0	86.0	87.0	87.0	89.0	0.0	0.0	0.0	0.0	81.0	79.0	78.0	77.0	77.0		
0 35	100.0	101.0	101.0	101.0	102.0	103.0	103.0	103.0	97.0	91.0	86.0	82.0	78.0	75.0	73.0	74.0	75.0	74.0	72.0	72.0
	72.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	69.0	73.0	75.0	77.0	83.0	87.0
	90.0	92.0	92.0	91.0	90.0	89.0	89.0	90.0	89.0	87.0	85.0	84.0	84.0	83.0	82.0	82.0	83.0	83.0	82.0	82.0
	83.0	84.0	85.0	86.0	87.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	84.0	82.0	80.0	78.0	77.0	77.0		
0 36	99.0	100.0	100.0	101.0	102.0	103.0	103.0	101.0	95.0	88.0	83.0	79.0	76.0	73.0	71.0	73.0	74.0	74.0	73.0	72.0
	72.0	68.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	74.0	77.0	81.0	84.0
	88.0	90.0	91.0	91.0	90.0	89.0	89.0	89.0	88.0	86.0	85.0	84.0	83.0	83.0	82.0	83.0	83.0	83.0	83.0	83.0
	84.0	85.0	86.0	86.0	87.0	0.0	90.0	91.0	0.0	0.0	0.0	0.0	85.0	82.0	80.0	79.0	78.0	77.0		
0 37	98.0	99.0	100.0	100.0	102.0	102.0	102.0	99.0	92.0	85.0	79.0	76.0	73.0	70.0	70.0	72.0	74.0	75.0	74.0	74.0
	74.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	0.0	70.0	77.0	78.0	81.0
	86.0	88.0	90.0	91.0	89.0	88.0	88.0	88.0	87.0	85.0	84.0	83.0	83.0	83.0	83.0	83.0	84.0	84.0	84.0	85.0
	85.0	86.0	86.0	87.0	0.0	90.0	91.0	93.0	0.0	0.0	0.0	0.0	85.0	83.0	81.0	79.0	78.0	77.0		
0 38	97.0	98.0	99.0	100.0	101.0	102.0	101.0	97.0	90.0	82.0	76.0	74.0	71.0	68.0	69.0	72.0	75.0	76.0	75.0	75.0
	75.0	71.0	0.0	0.0	0.0	0.0	0.0	66.0	66.0	0.0	65.0	68.0	74.0	0.0	0.0	0.0	65.0	77.0	74.0	78.0
	84.0	87.0	88.0	89.0	88.0	88.0	87.0	87.0	86.0	84.0	83.0	83.0	84.0	84.0	84.0	84.0	85.0	0.0	0.0	0.0
	86.0	87.0	87.0	87.0	88.0	90.0	92.0	94.0	96.0	0.0	0.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	96.0	97.0	98.0	99.0	101.0	101.0	100.0	95.0	89.0	80.0	75.0	73.0	70.0	67.0	69.0	73.0	76.0	77.0	76.0	75.0
	75.0	71.0	0.0	0.0	0.0	0.0	68.0	70.0	70.0	69.0	70.0	72.0	72.0	0.0	0.0	0.0	0.0	71.0	68.0	75.0
	82.0	34.0	86.0	87.0	87.0	87.0	86.0	86.0	85.0	84.0	82.0	83.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	0.0
	0.0	87.0	87.0	87.0	88.0	90.0	93.0	96.0	97.0	96.0	93.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	97.0	99.0	100.0	101.0	99.0	94.0	88.0	80.0	76.0	74.0	70.0	66.0	71.0	75.0	78.0	78.0	77.0	75.0
	74.0	70.0	0.0	0.0	0.0	68.0	72.0	73.0	74.0	73.0	73.0	74.0	72.0	66.0	0.0	0.0	0.0	66.0	65.0	73.0
	80.0	83.0	84.0	85.0	85.0	85.0	86.0	86.0	85.0	84.0	83.0	84.0	85.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	87.0	87.0	87.0	88.0	90.0	93.0	96.0	99.0	96.0	93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	98.0	99.0	101.0	98.0	93.0	87.0	81.0	77.0	75.0	72.0	70.0	73.0	76.0	79.0	79.0	77.0	75.0
	72.0	68.0	65.0	0.0	0.0	74.0	75.0	76.0	76.0	75.0	75.0	75.0	73.0	69.0	66.0	0.0	66.0	65.0	65.0	72.0
	78.0	81.0	82.0	83.0	84.0	84.0	85.0	85.0	85.0	84.0	84.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	87.0	87.0	88.0	90.0	93.0	96.0	99.0	96.0	93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	97.0	98.0	100.0	97.0	93.0	87.0	83.0	79.0	77.0	75.0	74.0	75.0	78.0	80.0	79.0	77.0	74.0
	70.0	66.0	0.0	0.0	71.0	79.0	78.0	78.0	78.0	77.0	76.0	77.0	75.0	72.0	70.0	69.0	69.0	68.0	69.0	73.0
	77.0	79.0	80.0	82.0	83.0	84.0	85.0	85.0	85.0	85.0	85.0	86.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	86.0	86.0	87.0	89.0	92.0	95.0	97.0	95.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	95.0	97.0	98.0	96.0	92.0	88.0	84.0	81.0	80.0	79.0	77.0	78.0	79.0	80.0	78.0	76.0	73.0
	67.0	0.0	0.0	0.0	74.0	80.0	80.0	79.0	79.0	79.0	78.0	78.0	76.0	74.0	73.0	72.0	73.0	73.0	73.0	75.0
	77.0	77.0	79.0	80.0	82.0	84 0	85.0	85.0	86.0	86.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	86.0	85.0	86.0	88.0	90.0	93.0	94.0	94.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	94.0	96.0	96.0	95.0	92.0	88.0	85.0	83.0	82.0	81.0	80.0	80.0	80.0	79.0	77.0	76.0	73.0
	0.0	0.0	0.0	68.0	77.0	81.0	80.0	80.0	80.0	80.0	79.0	79.0	77.0	76.0	75.0	75.0	76.0	77.0	77.0	77.0
	77.0	75.0	78.0	80.0	82.0	84.0	85.0	86.0	87.0	87.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	85.0	84.0	85.0	87.0	89.0	91.0	93.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	93.0	94.0	95.0	93.0	0.0	89.0	87.0	85.0	84.0	82.0	81.0	82.0	81.0	79.0	76.0	75.0	73.0
	0.0	0.0	67.0	73.0	80.0	81.0	80.0	80.0	80.0	80.0	80.0	80.0	79.0	78.0	78.0	79.0	80.0	81.0	81.0	80.0
	79.0	77.0	79.0	81.0	83.0	84.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	84.0	84.0	84.0	85.0	87.0	89.0	91.0	91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0	86.0	85.0	83.0	82.0	83.0	82.0	77.0	73.0	72.0	69.0
	0.0	0.0	69.0	76.0	81.0	81.0	80.0	80.0	81.0	81.0	81.0	81.0	80.0	80.0	80.0	82.0	84.0	86.0	84.0	82.0
	81.0	79.0	80.0	82.0	83.0	84.0	85.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	83.0	83.0	83.0	84.0	85.0	87.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	89.0	88.0	87.0	85.0	83.0	82.0	84.0	81.0	76.0	71.0	69.0	66.0
	0.0	67.0	72.0	78.0	81.0	81.0	80.0	81.0	81.0	81.0	82.0	82.0	82.0	82.0	83.0	84.0	87.0	89.0	86.0	84.0
	82.0	81.0	81.0	83.0	84.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	84.0	83.0	82.0	82.0	82.0	83.0	86.0	88.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	89.0	88.0	86.0	82.0	81.0	82.0	79.0	73.0	69.0	66.0	66.0
	66.0	70.0	74.0	79.0	81.0	81.0	81.0	81.0	81.0	82.0	83.0	83.0	83.0	84.0	85.0	86.0	89.0	89.0	87.0	85.0
	84.0	83.0	83.0	84.0	85.0	85.0	86.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	83.0	82.0	81.0	81.0	81.0	82.0	85.0	87.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0	89.0	89.0	86.0	81.0	78.0	77.0	75.0	71.0	68.0	67.0	68.0
	69.0	73.0	76.0	80.0	81.0	81.0	81.0	81.0	82.0	82.0	83.0	84.0	85.0	85.0	86.0	88.0	89.0	90.0	89.0	87.0
	85.0	84.0	84.0	85.0	0.0	0.0	0.0	87.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	85.0	82.0	81.0	80.0	81.0	81.0	82.0	84.0	86.0	87.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0	87.0	88.0	90.0	84.0	79.0	75.0	73.0	72.0	69.0	70.0	69.0	70.0
	71.0	75.0	78.0	81.0	82.0	82.0	82.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0	90.0	90.0	89.0	88.0
	86.0	85.0	85.0	85.0	0.0	0.0	0.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0
	85.0	82.0	80.0	80.0	80.0	81.0	82.0	83.0	85.0	86.0	85.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	87.0	86.0	86.0	86.0	86.0	82.0	77.0	71.0	69.0	70.0	70.0	72.0	71.0	72.0
	74.0	78.0	80.0	82.0	82.0	82.0	82.0	82.0	82.0	84.0	86.0	87.0	87.0	88.0	89.0	89.0	90.0	90.0	89.0	89.0
	87.0	85.0	85.0	0.0	0.0	0.0	0.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	87.0
	85.0	82.0	81.0	80.0	80.0	80.0	81.0	83.0	85.0	85.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	85.0	84.0	83.0	83.0	82.0	79.0	75.0	70.0	70.0	71.0	72.0	75.0	73.0	74.0
	77.0	80.0	82.0	83.0	83.0	83.0	82.0	82.0	83.0	85.0	87.0	88.0	89.0	89.0	89.0	90.0	90.0	90.0	89.0	88.0
	87.0	85.0	85.0	0.0	0.0	0.0	85.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0
	85.0	83.0	81.0	80.0	80.0	80.0	81.0	83.0	84.0	84.0	84.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	82.0	83.0	82.0	81.0	80.0	78.0	76.0	74.0	0.0	0.0	0.0	0.0	74.0	74.0	76.0
	79.0	82.0	83.0	84.0	84.0	83.0	83.0	83.0	84.0	86.0	88.0	89.0	90.0	90.0	90.0	90.0	90.0	90.0	89.0	88.0
	86.0	85.0	85.0	0.0	0.0	0.0	85.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	88.0
	86.0	84.0	82.0	81.0	80.0	80.0	81.0	82.0	84.0	84.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	80.0	79.0	79.0	78.0	76.0	75.0	74.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	78.0
	83.0	84.0	85.0	85.0	0.0	0.0	0.0	0.0	85.0	87.0	89.0	91.0	91.0	90.0	90.0	90.0	90.0	89.0	88.0	87.0
	86.0	85.0	0.0	0.0	0.0	0.0	86.0	87.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0
	87.0	85.0	83.0	81.0	80.0	80.0	81.0	82.0	83.0	83.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	77.0	77.0	76.0	75.0	74.0	73.0	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	88.0	91.0	92.0	91.0	91.0	90.0	90.0	90.0	89.0	88.0	86.0
	85.0	84.0	0.0	0.0	0.0	87.0	87.0	88.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0
	88.0	86.0	84.0	82.0	81.0	81.0	81.0	82.0	82.0	82.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	75.0	75.0	74.0	74.0	74.0	75.0	76.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	92.0	92.0	92.0	91.0	90.0	90.0	89.0	88.0	87.0	85.0
	83.0	83.0	0.0	0.0	0.0	88.0	88.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	89.0	87.0	85.0	83.0	82.0	81.0	81.0	81.0	82.0	82.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	74.0	74.0	75.0	75.0	74.0	76.0	78.0	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.0	92.0	92.0	92.0	91.0	90.0	90.0	89.0	88.0	86.0	83.0
	82.0	82.0	0.0	0.0	0.0	89.0	89.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	88.0	86.0	84.0	83.0	82.0	81.0	81.0	82.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	74.0	74.0	75.0	76.0	77.0	77.0	79.0	81.0	82.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.0	0.0	0.0	91.0	90.0	90.0	89.0	87.0	84.0	82.0
	80.0	81.0	0.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	88.0	87.0	85.0	84.0	83.0	81.0	82.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	75.0	75.0	77.0	79.0	80.0	81.0	82.0	84.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	88.0	86.0	83.0	80.0
	78.0	79.0	0.0	0.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	86.0	85.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	76.0	77.0	80.0	83.0	84.0	85.0	85.0	86.0	87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	88.0	85.0	81.0	78.0
	76.0	77.0	81.0	0.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	87.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	79.0	80.0	84.0	88.0	89.0	88.0	87.0	88.0	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	89.0	87.0	84.0	80.0	75.0
	74.0	76.0	80.0	84.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	81.0	83.0	88.0	92.0	92.0	90.0	89.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	90.0	87.0	83.0	79.0	74.0
	71.0	75.0	79.0	83.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	83.0	86.0	91.0	96.0	95.0	91.0	90.0	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	87.0	83.0	77.0	73.0
	71.0	74.0	78.0	82.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	85.0	88.0	93.0	98.0	96.0	92.0	90.0	89.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	87.0	82.0	77.0	72.0
	71.0	73.0	77.0	80.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

```
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 65    0.0   0.0   0.0  86.0  89.0  93.0  97.0  95.0  91.0  89.0  89.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  86.0  81.0  76.0  72.0
       71.0  73.0  76.0  79.0  82.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0                                                   PRIMARY STORAGE COEF =  0.1000000E-01 FOR LAYER  2
0                                                   HYD. COND. ALONG ROWS =   150.0000     FOR LAYER  2
0

                                        BOTTOM FOR LAYER  2 WILL BE READ ON UNIT 20 USING FORMAT:          (20F4.0)
                                        ----------------------------------------------------------------------------------------

        1     2     3     4     5     6     7     8     9    10    11    12    13    14    15    16    17    18    19    20
       21    22    23    24    25    26    27    28    29    30    31    32    33    34    35    36    37    38    39    40
       41    42    43    44    45    46    47    48    49    50    51    52    53    54    55    56    57    58    59    60
       61    62    63    64    65    66    67    68    69    70    71    72    73    74    75    76    77    78
 ..........................................................................................................................
0  1    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  48.0  39.0  31.0
       32.0  43.0  47.0  41.0  35.0  31.0  30.0  30.0  29.0  29.0  30.0  31.0  35.0  39.0  45.0  50.0  52.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  2    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  54.0  45.0  35.0  25.0
       34.0  47.0  48.0  40.0  35.0  30.0  27.0  28.0  28.0  29.0  29.0  31.0  35.0  39.0  44.0  49.0  50.0  53.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  3    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  52.0  42.0  32.0  26.0
       40.0  52.0  47.0  39.0  34.0  30.0  27.0  27.0  27.0  28.0  29.0  32.0  36.0  39.0  43.0  46.0  48.0  50.0  53.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  4    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  49.0  40.0  31.0  28.0
       41.0  50.0  44.0  36.0  33.0  28.0  26.0  26.0  27.0  28.0  30.0  34.0  38.0  39.0  39.0  44.0  47.0  47.0  50.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  5    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  47.0  39.0  33.0  34.0
       43.0  46.0  40.0  34.0  31.0  26.0  26.0  26.0  28.0  30.0  33.0  38.0  42.0  40.0  37.0  45.0  46.0  44.0  48.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  6    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  53.0  46.0  40.0  36.0  38.0
       43.0  43.0  37.0  33.0  29.0  26.0  26.0  27.0  29.0  32.0  39.0  44.0  46.0  44.0  44.0  49.0  47.0  42.0  50.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  7    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  52.0  46.0  41.0  39.0  40.0
       44.0  41.0  32.0  29.0  27.0  26.0  25.0  27.0  30.0  35.0  43.0  51.0  53.0  52.0  53.0  54.0  51.0  47.0  54.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  8    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  51.0  46.0  43.0  41.0  41.0
       44.0  42.0  30.0  27.0  26.0  27.0  25.0  28.0  32.0  39.0  50.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0  9    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  54.0  51.0  47.0  44.0  43.0  43.0
       44.0  39.0  30.0  30.0  25.0  26.0  25.0  29.0  35.0  44.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 10    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  52.0  49.0  47.0  45.0  45.0  44.0
       44.0  36.0  29.0  30.0  30.0  26.0  28.0  30.0  38.0  50.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 11    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  54.0  54.0  51.0  49.0  48.0  47.0  46.0  45.0
       43.0  35.0  28.0  30.0  30.0  26.0  27.0  30.0  40.0  55.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 12    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  55.0  53.0  50.0  48.0  49.0  49.0  46.0  46.0
       42.0  36.0  27.0  30.0  30.0  30.0  26.0  31.0  44.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 13    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  54.0  54.0  52.0  50.0  48.0  51.0  51.0  47.0  47.0
       41.0  35.0  26.0  30.0  30.0  30.0  26.0  32.0  46.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 14    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  53.0  53.0  51.0  50.0  47.0  49.0  52.0  53.0  46.0
       41.0  35.0  26.0  30.0  30.0  30.0  26.0  35.0  46.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 15    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  54.0  50.0  47.0  46.0  49.0  53.0  54.0  46.0
```

	41.0	34.0	30.0	30.0	30.0	26.0	28.0	35.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	50.0	50.0	47.0	45.0	48.0	53.0	52.0	49.0
	46.0	35.0	30.0	30.0	28.0	29.0	30.0	38.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	49.0	46.0	45.0	50.0	45.0	43.0
	40.0	30.0	30.0	30.0	27.0	28.0	30.0	38.0	44.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	49.0	47.0	42.0	38.0	39.0	35.0	32.0
	25.0	30.0	30.0	30.0	30.0	30.0	29.0	37.0	41.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	45.0	44.0	37.0	32.0	26.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	27.0	32.0	35.0	43.0	51.0	0.0	0.0	53.0	52.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	49.0	46.0	40.0	28.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	31.0	35.0	43.0	48.0	47.0	41.0	45.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	45.0	32.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	35.0	39.0	38.0	34.0	42.0	52.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	44.0	29.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	33.0	30.0	30.0	40.0	49.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	41.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	29.0	25.0	27.0	41.0	48.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	40.0	28.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	28.0	23.0	28.0	38.0	47.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	37.0	25.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	28.0	24.0	30.0	37.0	46.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	51.0	43.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	36.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	31.0	29.0	24.0	30.0	37.0	45.0	55.0	0.0	0.0	0.0
	0.0	0.0	54.0	44.0	42.0	36.0	52.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0	36.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	37.0	36.0	29.0	23.0	30.0	35.0	46.0	0.0	0.0	0.0	0.0
	0.0	0.0	39.0	29.0	34.0	37.0	42.0	40.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	44.0	33.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	38.0	39.0	31.0	23.0	32.0	36.0	48.0	0.0	0.0	52.0	55.0
	0.0	41.0	30.0	30.0	29.0	28.0	31.0	33.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	42.0	32.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	36.0	29.0	38.0	48.0	0.0	45.0	42.0	47.0
	43.0	30.0	30.0	30.0	30.0	28.0	30.0	28.0	35.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	50.0	52.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.0	39.0	27.0	40.0	28.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	32.0	30.0	30.0	30.0	29.0	31.0	39.0	46.0	45.0	31.0	33.0	42.0
	31.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	31.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	48.0	51.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	46.0	43.0	35.0	32.0	27.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	39.0	30.0	30.0	30.0	30.0	26.0	39.0	42.0	36.0	30.0	27.0	39.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	31.0	46.0	53.0	0.0	0.0	55.0	54.0	55.0	49.0	49.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	50.0	47.0	42.0	33.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	32.0	30.0	30.0	30.0	30.0	30.0	40.0	38.0	32.0	30.0	30.0	31.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	27.0	25.0	34.0	38.0	53.0	0.0	53.0	52.0	52.0	51.0	49.0	52.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	45.0	36.0	33.0	26.0	30.0	30.0	30.0	30.0	30.0
	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	26.0	30.0	30.0	30.0	30.0	30.0	38.0	36.0	34.0	30.0	30.0	27.0
	30.0	30.0	30.0	32.0	30.0	30.0	30.0	26.0	27.0	34.0	38.0	51.0	45.0	46.0	49.0	49.0	48.0	52.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	44.0	35.0	32.0	26.0	30.0	30.0	30.0	30.0	30.0
	30.0	28.0	34.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	32.0	28.0	30.0	30.0	30.0
	30.0	30.0	29.0	25.0	30.0	25.0	30.0	27.0	29.0	32.0	35.0	37.0	38.0	42.0	49.0	46.0	51.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	48.0	43.0	35.0	29.0	30.0	30.0	30.0	30.0	30.0	30.0
	30.0	39.0	42.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	27.0	29.0	30.0	30.0	30.0	32.0	29.0	29.0	29.0	29.0	31.0	34.0	36.0	43.0	51.0	50.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	41.0	35.0	29.0	30.0	30.0	30.0	30.0	30.0	28.0
	39.0	47.0	31.0	30.0	30.0	30.0	30.0	30.0	34.0	36.0	29.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	29.0	33.0	31.0	30.0	26.0	33.0	31.0	29.0	28.0	29.0	31.0	37.0	42.0	50.0	55.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	41.0	36.0	29.0	30.0	30.0	30.0	30.0	30.0	42.0
	41.0	32.0	30.0	30.0	30.0	30.0	30.0	25.0	38.0	52.0	35.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0
	33.0	36.0	34.0	29.0	34.0	33.0	32.0	27.0	27.0	31.0	36.0	42.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	47.0	42.0	36.0	30.0	30.0	30.0	30.0	30.0	28.0	52.0
	36.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	38.0	55.0	39 0	30.0	31.0	30.0	30.0	30.0	30.0	30.0	27.0	33.0
	38.0	40.0	38.0	36.0	35.0	32.0	32.0	24.0	28.0	35.0	41.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	49.0	43.0	37.0	31.0	26.0	30.0	30.0	30.0	33.0	46.0
	28.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	42.0	54.0	44.0	36.0	45.0	30.0	30.0	30.0	30.0	30.0	33.0	38.0
	42.0	45.0	42.0	39.0	35.0	29.0	22.0	21.0	31.0	39.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	45.0	39.0	33.0	28.0	30.0	30.0	30.0	35.0	38.0
	26.0	30.0	30.0	30.0	30.0	30.0	30.0	35.0	44.0	52.0	52.0	45.0	39.0	30.0	30.0	26.0	27.0	36.0	40.0	42.0
	46.0	49.0	45.0	42.0	35.0	27.0	23.0	26.0	37.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	47.0	40.0	35.0	33.0	28.0	30.0	26.0	36.0	34.0
	26.0	30.0	30.0	30.0	30.0	30.0	26.0	37.0	45.0	51.0	53.0	48.0	41.0	37.0	32.0	33.0	37.0	45.0	45.0	46.0
	49.0	50.0	48.0	45.0	38.0	32.0	29.0	35.0	44.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	55.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	41.0	39.0	34.0	30.0	28.0	31.0	36.0	33.0
	28.0	25.0	27.0	30.0	30.0	30.0	30.0	38.0	45.0	48.0	53.0	51.0	46.0	40.0	42.0	42.0	45.0	47.0	48.0	48.0
	50.0	51.0	51.0	50.0	44.0	39.0	38.0	43.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	47.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	44.0	40.0	36.0	33.0	32.0	34.0	37.0	33.0
	30.0	28.0	28.0	28.0	30.0	28.0	35.0	40.0	45.0	51.0	54.0	54.0	51.0	50.0	47.0	47.0	49.0	49.0	49.0	50.0
	51.0	53.0	0.0	0.0	50.0	46.0	47.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	47.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	44.0	41.0	39.0	36.0	35.0	36.0	38.0	34.0
	32.0	31.0	30.0	29.0	27.0	32.0	36.0	41.0	47.0	52.0	0.0	0.0	54.0	53.0	48.0	51.0	51.0	50.0	49.0	51.0
	53.0	55.0	0.0	0.0	0.0	53.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	54.0	48.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	45.0	43.0	43.0	38.0	37.0	38.0	39.0	36.0
	33.0	32.0	31.0	30.0	31.0	34.0	38.0	44.0	50.0	54.0	0.0	0.0	55.0	51.0	52.0	54.0	52.0	51.0	49.0	49.0
	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	52.0	47.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	45.0	44.0	43.0	40.0	39.0	40.0	40.0	37.0
	35.0	34.0	33.0	32.0	33.0	36.0	40.0	46.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	54.0	52.0	50.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	47.0	45.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	46.0	44.0	41.0	41.0	41.0	41.0	40.0	38.0
	36.0	35.0	34.0	35.0	37.0	39.0	43.0	50.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	52.0	51.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	54.0	45.0	43.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	46.0	44.0	43.0	43.0	43.0	43.0	41.0	39.0
	38.0	37.0	37.0	39.0	41.0	44.0	48.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	50.0	49.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	50.0	42.0	42.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	47.0	46.0	46.0	45.0	45.0	45.0	45.0	42.0	41.0
	41.0	39.0	41.0	44.0	46.0	49.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	48.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	54.0	45.0	38.0	39.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	47.0	46.0	48.0	48.0	50.0	48.0	46.0	44.0	45.0
	45.0	44.0	47.0	50.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	47.0
	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	49.0	41.0	33.0	37.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	48.0	47.0	52.0	0.0	0.0	52.0	49.0	48.0	50.0
	50.0	51.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	46.0
	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	52.0	44.0	39.0	32.0	39.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	47.0	45.0	49.0	0.0	0.0	0.0	0.0	55.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	49.0	49.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	47.0	41.0	38.0	36.0	39.0	42.0	51.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	48.0	43.0	44.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	51.0	52.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	43.0	42.0	39.0	39.0	39.0	45.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	45.0	42.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	53.0	55.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	50.0	45.0	41.0	41.0	41.0	46.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	48.0	42.0	40.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	52.0	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	43.0	40.0	40.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	52.0	46.0	42.0	40.0	41.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	51.0	45.0	42.0	42.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	43.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	45.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0
	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
	43.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	51.0	47.0	46.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	46.0
	44.0	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	52.0	48.0	47.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
	46.0	49.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	53.0	50.0	48.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0
	46.0	46.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0																				

VERT HYD COND /THICKNESS FOR LAYER 2 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.9	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.6	0.6	0.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
	0.6	0.5	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6
	0.4	0.4	0.4	0.5	0.5	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.5	0.5	0.5
	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.5	0.5	0.4
	0.4	0.4	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.5	0.5	0.5
	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.5	0.5	0.5
	0.5	0.5	0.4	0.4	0.5	0.4	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.5	0.6	0.5
	0.6	0.7	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.6
	0.7	0.7	0.4	0.5	0.4	0.5	0.5	0.6	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.6	0.6	0.7
	0.8	0.6	0.4	0.5	0.4	0.5	0.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.8	0.7	0.7
	0.8	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.8	0.7	0.7	0.7
	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.9	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.7	0.5	0.7	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6
	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.0	0.4	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.5	0.4	0.7	0.8	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.6	0.6
	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.8	0.0	0.4	0.5	0.6	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.0
	0.8	0.4	0.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6
	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.0	0.0	0.5	0.6	0.6	0.6	0.8	0.0	0.0	0.0	0.8	0.8	0.0
	0.7	0.6	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.5	0.6
	0.6	0.8	0.8	0.8	0.7	0.6	0.5	0.9	0.0	0.7	0.8	0.6	0.5	0.8	0.0	0.0	0.0	0.8	0.8	0.0
	0.7	0.7	0.8	0.0	0.7	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.5	0.6
	0.8	0.0	0.0	1.0	0.7	0.6	0.6	0.8	0.9	0.8	0.8	0.5	0.4	0.8	0.0	0.0	0.0	0.8	0.7	0.8
	0.8	0.9	0.0	0.0	0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.7	0.6	0.6	0.6	0.7
	0.0	0.0	0.0	1.0	0.7	0.5	0.6	0.8	0.9	0.0	0.8	0.4	0.4	0.6	0.6	0.7	0.8	0.8	0.8	0.8
	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.6	0.0
	0.0	0.0	0.0	0.8	0.6	0.5	0.6	0.8	0.0	0.0	0.0	0.4	0.4	0.5	0.4	0.6	0.7	0.7	0.8	0.9
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.6	0.8	0.0
	0.0	0.0	0.7	0.8	0.7	0.6	0.6	0.0	0.0	0.0	0.0	0.5	0.6	0.5	0.6	0.6	0.7	0.6	0.8	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.6	0.0	0.0
	0.0	0.6	0.6	0.7	0.6	0.6	0.6	0.9	0.0	0.0	0.0	0.8	0.0	0.6	0.6	0.6	0.6	0.7	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.7	0.0	0.0
	0.0	0.6	0.6	0.7	0.7	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.8	0.7	0.8	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0
	0.0	0.7	0.7	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0

	0.0	0.8	0.8	0.7	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 SECONDARY STORAGE COEF = 0.1500000 FOR LAYER 2

0

TOP FOR LAYER 2 WILL BE READ ON UNIT 20 USING FORMAT: (20F4.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	62.0	56.0	57.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	62.0	56.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	62.0	55.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	63.0	56.0	56.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	56.0	56.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	56.0	56.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	61.0	57.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	59.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	56.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	58.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	59.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	58.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	59.0	54.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	53.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	52.0	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	65.0	53.0	54.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	53.0	51.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	53.0	50.0	52.0	57.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	52.0	56.0	57.0	54.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	56.0	62.0	62.0	56.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	57.0	62.0	60.0	60.0	60.0	55.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0

	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	61.0	58.0	63.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	63.0	64.0	63.0	60.0	59.0	60.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	61.0	56.0	54.0	59.0	59.0	58.0	57.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	52.0	51.0	52.0	57.0	59.0	58.0	56.0	52.0	55.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	51.0	49.0	53.0	56.0	59.0	59.0	56.0	53.0	52.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	51.0	50.0	55.0	59.0	60.0	60.0	59.0	56.0	56.0	62.0	63.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	61.0	52.0	51.0	56.0	61.0	64.0	63.0	61.0	60.0	62.0	60.0	59.0	54.0	63.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	62.0	53.0	52.0	58.0	63.0	60.0	60.0	65.0	60.0	60.0	60.0	61.0	56.0	58.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	63.0	54.0	53.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	63.0	58.0	58.0	62.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	56.0	57.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	62.0	60.0	63.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	59.0	65.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	64.0	61.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	63.0	63.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	65.0	62.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	64.0	62.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	63.0	64.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	63.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0

	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	60.0	60.0	60.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 57	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 58	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 59	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 63	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0
	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 64	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 65	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0
	60.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

0 PRIMARY STORAGE COEF = 0.1000000E-01 FOR LAYER 3
0 HYD. COND. ALONG ROWS = 150.0000 FOR LAYER 3
0

BOTTOM FOR LAYER 3 WILL BE READ ON UNIT 20 USING FORMAT: (16F5.0)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
0 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	23.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	22.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	22.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	21.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	24.0	20.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	23.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	25.0	17.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	12.0	8.0	13.0	20.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	20.0
	9.0	-2.0	-2.0	4.0	11.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	12.0	11.0	8.0
	-9.0	-15.0	-13.0	-4.0	3.0	16.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	10.0	0.0	1.0	-2.0
	-26.0	-21.0	-23.0	-13.0	-3.0	13.0	19.0	23.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	2.0	-3.0	-2.0	-9.0
	-23.0	-17.0	-27.0	-16.0	-4.0	8.0	14.0	18.0	18.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	3.0	1.0	1.0	-5.0
	-11.0	-8.0	-22.0	-17.0	-6.0	3.0	9.0	12.0	13.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	4.0	3.0	0.0	-2.0
	0.0	4.0	-10.0	-13.0	-9.0	-1.0	6.0	9.0	9.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	5.0	4.0	6.0	4.0
	10.0	17.0	-6.0	-14.0	-16.0	-4.0	3.0	5.0	6.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	11.0	6.0	5.0	9.0	11.0
	19.0	16.0	-7.0	-11.0	-20.0	-5.0	1.0	3.0	3.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	12.0	9.0	8.0	10.0	17.0
	21.0	7.0	-6.0	-12.0	-24.0	-1.0	2.0	-2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	12.0	10.0	20.0	17.0	18.0
	21.0	2.0	-5.0	-12.0	-13.0	-4.0	4.0	-10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	19.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	14.0	24.0	18.0	16.0	17.0
	10.0	1.0	0.0	-7.0	-5.0	-3.0	0.0	0.0	23.0	23.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	15.0	0.0	15.0	21.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	15.0	14.0	14.0
	8.0	5.0	4.0	0.0	-1.0	-2.0	-1.0	14.0	0.0	-5.0	-1.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-4.0	-8.0	15.0	21.0	21.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	13.0	11.0	12.0
	7.0	8.0	10.0	9.0	4.0	0.0	0.0	24.0	0.0	-14.0	-1.0	13.0	17.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
	21.0	-6.0	12.0	20.0	20.0	21.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	16.0	10.0	6.0	6.0
	9.0	14.0	14.0	13.0	9.0	1.0	-2.0	0.0	0.0	3.0	7.0	7.0	10.0	23.0	0.0	0.0	0.0	20.0	23.0	0.0
	17.0	8.0	21.0	24.0	20.0	21.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	14.0	7.0	3.0	5.0
	13.0	20.0	24.0	21.0	12.0	1.0	-2.0	24.0	0.0	15.0	13.0	5.0	2.0	22.0	0.0	0.0	0.0	24.0	24.0	0.0
	19.0	18.0	23.0	0.0	19.0	20.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	13.0	7.0	1.0	10.0
	20.0	0.0	0.0	22.0	10.0	-2.0	2.0	22.0	23.0	19.0	16.0	-4.0	-9.0	20.0	0.0	0.0	0.0	22.0	19.0	23.0
	24.0	25.0	0.0	0.0	16.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	19.0	13.0	7.0	7.0	18.0
	0.0	0.0	0.0	20.0	5.0	-4.0	5.0	22.0	24.0	0.0	17.0	-14.0	-23.0	11.0	9.0	19.0	22.0	20.0	20.0	23.0
	0.0	0.0	0.0	19.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	18.0	12.0	9.0	14.0	0.0

	0.0	0.0	0.0	14.0	4.0	-4.0	8.0	24.0	0.0	0.0	0.0	-16.0	-13.0	1.0	-6.0	10.0	18.0	19.0	20.0	25.0
	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	18.0	13.0	12.0	21.0	0.0
	0.0	0.0	19.0	12.0	8.0	2.0	12.0	0.0	0.0	0.0	0.0	2.0	7.0	-1.0	0.0	14.0	15.0	12.0	21.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	20.0	15.0	14.0	0.0	0.0
	0.0	14.0	14.0	10.0	5.0	7.0	15.0	25.0	0.0	0.0	0.0	21.0	0.0	15.0	8.0	12.0	14.0	18.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	16.0	16.0	0.0	0.0
	0.0	14.0	14.0	10.0	9.0	11.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	16.0	18.0	19.0	22.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	21.0	21.0	0.0	0.0
	0.0	18.0	21.0	13.0	12.0	16.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0
	0.0	22.0	23.0	16.0	17.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	20.0	20.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0 54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

```
0 55    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 56    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 57    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 58    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 59    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 60    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 61    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 62    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 63    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 64    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0 65    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
0                                                   SECONDARY STORAGE COEF =  0.1500000     FOR LAYER  3
0                                                                TOP =   30.00000     FOR LAYER  3
0


                                                  SOLUTION BY THE CONJUGATE-GRADIENT METHOD
                                                  -----------------------------------------
0                                     MAXIMUM NUMBER OF CALLS TO PCG ROUTINE =      200
                                         MAXIMUM ITERATIONS PER CALL TO PCG =        1
                                                 MATRIX PRECONDITIONING TYPE =        1
                              RELAXATION FACTOR (ONLY USED WITH PRECOND. TYPE 1) =    0.10000E+01
                        PARAMETER OF POLYMOMIAL PRECOND. = 2 (2) OR IS CALCULATED :        0
                                                 HEAD CHANGE CRITERION FOR CLOSURE =    0.10000E-01
                                            RESIDUAL CHANGE CRITERION FOR CLOSURE =    0.10000E+02
                                   PCG HEAD AND RESIDUAL CHANGE PRINTOUT INTERVAL =        1
                                   ALL PRINTING FROM THE SOLVER IS SUPPRESSED (1) =        0
     FOR NPCOND=1, DO (0) OR DO NOT (1) RECALC. CHOL. DIAG. EACH OUTER ITER. =        0

1                                                STRESS PERIOD NO.   1, LENGTH =   60.00000
                                                 -------------------------------------------

                                                 NUMBER OF TIME STEPS =    30

                                                  MULTIPLIER FOR DELT =     1.000

                                                INITIAL TIME STEP SIZE =   2.000000
0            22 WELLS
                                               LAYER    ROW    COL    STRESS RATE   WELL NO.
                                               ---------------------------------------------
                                                 1      26     39      35.000           1
                                                 1      27     39      35.000           2
```

1	28	39	35.000	3
1	28	40	35.000	4
1	29	39	35.000	5
1	30	40	35.000	6
1	31	40	35.000	7
1	32	41	35.000	8
1	33	41	35.000	9
1	35	42	35.000	10
1	36	43	35.000	11
1	37	44	35.000	12
1	39	44	35.000	13
1	40	45	35.000	14
1	41	45	35.000	15
2	26	20	-63574.	16
2	21	19	-66436.	17
2	38	19	-55345.	18
2	39	18	-49429.	19
2	13	27	-19079.	20
2	32	49	-6700.0	21
2	34	49	-6700.0	22

0

58 DRAINS

0

LAYER	ROW	COL	ELEVATION	CONDUCTANCE	DRAIN NO.
1	15	41	78.50	150.0	1
1	15	42	78.50	240.0	2
1	16	43	78.50	330.0	3
1	16	44	78.40	330.0	4
1	16	45	78.40	270.0	5
1	17	46	78.40	315.0	6
1	17	47	78.30	330.0	7
1	17	48	78.30	210.0	8
1	18	49	78.30	330.0	9
1	18	50	78.20	330.0	10
1	19	51	78.20	270.0	11
1	19	52	78.10	330.0	12
1	19	53	78.10	180.0	13
1	20	54	78.00	330.0	14
1	20	55	78.00	300.0	15
1	21	56	77.50	330.0	16
1	21	57	77.50	330.0	17
1	21	58	77.00	120.0	18
1	22	58	77.00	210.0	19
1	22	59	76.50	330.0	20
1	22	60	76.50	330.0	21
1	23	61	76.00	330.0	22
1	23	62	76.00	330.0	23
1	24	63	75.50	330.0	24
1	24	64	75.50	360.0	25
1	25	65	75.00	360.0	26
1	25	66	75.00	300.0	27
1	26	67	74.50	360.0	28
1	26	68	74.50	210.0	29
1	27	69	74.00	450.0	30
1	28	70	74.00	450.0	31
1	29	71	73.50	330.0	32
1	29	72	73.00	360.0	33
1	30	73	72.50	370.0	34
1	31	74	72.00	330.0	35
1	31	75	71.50	300.0	36
1	32	76	71.00	420.0	37
1	33	77	70.50	360.0	38
1	33	61	78.70	440.0	39
1	33	62	78.60	480.0	40
1	32	63	78.50	440.0	41
1	31	63	78.40	400.0	42
1	30	63	78.20	430.0	43
1	29	64	77.90	440.0	44
1	29	65	77.60	440.0	45
1	29	66	76.70	400.0	46
1	29	67	75.80	400.0	47
1	29	68	74.90	480.0	48
1	28	69	74.00	520.0	49
1	29	69	73.10	250.0	50

1	30	68	74.50	1600.	51
1	31	68	75.10	1125.	52
1	32	67	75.50	250.0	53
1	33	66	75.80	675.0	54
1	33	65	76.10	2750.	55
1	33	64	76.50	1250.	56
1	34	63	76.80	1200.	57
1	34	62	77.30	4000.	58

0

RECHARGE WILL BE READ ON UNIT 27 USING FORMAT: (10F8.4)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
	76	77	78												
0 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012
	0.0012	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012
	0.0012	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012	0.0012	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0011	0.0011	0.0011	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												

0 10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0011	0.0011	0.0000	0.0011	0.0011	0.0011	0.0007	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0000	0.0011	0.0011	0.0011	0.0011	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0000	0.0011	0.0011	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0000	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0007	0.0007	0.0011	0.0011	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0022	0.0022	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0011	0.0011	0.0007	0.0007	0.0007	0.0007	0.0011	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0022	0.0022	0.0007	0.0022	0.0022	0.0022	0.0022	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0000	0.0022	0.0022	0.0007	0.0007	0.0022	0.0022	0.0022	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022	0.0022	0.0007	0.0007	0.0007	0.0007	0.0007	0.0022	0.0022
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0022	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0022
	0.0022	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0000
	0.0000	0.0000	0.0000												
0 22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007

	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0007
	0.0000	0.0000	0.0000												
0 23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0022	0.0022	0.0022	0.0022	0.0022	0.0007	0.0022	0.0022	0.0022	0.0022	0.0022	0.0007	0.0007
	0.0000	0.0000	0.0000												
0 24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0000	0.0000												
0 25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0008	0.0008	0.0000	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0008	0.0000	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 26	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0008	0.0000	0.0000	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0008	0.0000	0.0000	0.0000	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0008	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 29	0.0000	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 30	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0015	0.0015	0.0007	0.0007
	0.0007	0.0007	0.0007												
0 31	0.0000	0.0000	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0008	0.0000	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0015	0.0015	0.0007
	0.0007	0.0007	0.0007												
0 32	0.0017	0.0017	0.0000	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0008	0.0000	0.0000	0.0008	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0015	0.0015	0.0007
	0.0007	0.0007	0.0007												
0 33	0.0017	0.0017	0.0017	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0000	0.0000	0.0000	0.0015	0.0015	0.0007
	0.0007	0.0007	0.0007												
0 34	0.0007	0.0007	0.0017	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
	0.0007	0.0007	0.0007												

0 35	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0007
	0.0007	0.0007	0.0007												
0 36	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0019	0.0019	0.0019
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0000	0.0007	0.0007	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0015
	0.0015	0.0015	0.0015												
0 37	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0019	0.0019	0.0019	0.0019	0.0019
	0.0019	0.0007	0.0007	0.0007	0.0000	0.0007	0.0007	0.0007	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0015
	0.0015	0.0015	0.0015												
0 38	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0023	0.0000	0.0000	0.0000
	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0000	0.0000	0.0015	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 39	0.0019	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0015	0.0015	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 40	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 41	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 42	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 43	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 44	0.0000	0.0000	0.0000	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 45	0.0000	0.0000	0.0000	0.0019	0.0019	0.0019	0.0019	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011

	0.0011	0.0034	0.0034	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011
	0.0011	0.0034	0.0034	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000
	0.0000	0.0000	0.0034	0.0034	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000
	0.0000	0.0000	0.0011	0.0034	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0015	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029
	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000
	0.0000	0.0000	0.0011	0.0034	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0015	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0029
	0.0029	0.0029	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0029	0.0029	0.0007	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000
	0.0000	0.0011	0.0011	0.0023	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 53	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000
	0.0000	0.0000	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0007
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000
	0.0000	0.0011	0.0011	0.0045	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0032	0.0032
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029	0.0029	0.0029	0.0029	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0000	0.0011	0.0011	0.0045	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0032
	0.0032	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0029	0.0029
	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0045	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0032
	0.0032	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 56	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0029
	0.0029	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0045	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0032	0.0032	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 57	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0029
	0.0029	0.0029	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0011	0.0055	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0032	0.0032	0.0007	0.0007	0.0007	0.0032	0.0032	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 58	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0029	0.0000	0.0000	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0055	0.0055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0032	0.0032	0.0007	0.0007	0.0032	0.0032	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 59	0.0000	0.0000	0.0000	0.0019	0.0019	0.0007	0.0007	0.0007	0.0007	0.0007	0.0029	0.0029	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	0.0007	0.0011	0.0011	0.0000	0.0000	0.0055
	0.0055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0032	0.0032	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												

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0 60    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0029  0.0029  0.0007  0.0007  0.0007  0.0007  0.0007  0.0011  0.0011  0.0000  0.0055
        0.0055  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0032  0.0032  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 61    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0029  0.0029  0.0007  0.0007  0.0007  0.0007  0.0007  0.0007  0.0011  0.0011  0.0055
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0032  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 62    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0029  0.0029  0.0007  0.0007  0.0007  0.0007  0.0007  0.0007  0.0007  0.0055  0.0045
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 63    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
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        0.0000  0.0000  0.0000
0 64    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0029  0.0029  0.0007  0.0007  0.0007  0.0007  0.0007  0.0007  0.0045  0.0045
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 65    0.0000  0.0000  0.0000  0.0019  0.0019  0.0007  0.0007  0.0007  0.0007  0.0029  0.0029  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0029  0.0029  0.0007  0.0007  0.0007  0.0007  0.0007  0.0045  0.0045
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0
```

40 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	65	41	83.00	0.2000E+07	80.00	1
1	32	56	80.80	1760.	77.80	2
1	33	57	80.80	2400.	77.80	3
1	35	56	80.80	1920.	77.80	4
1	34	57	80.80	2560.	77.80	5
1	34	58	80.80	2240.	77.80	6
1	37	61	80.80	1920.	77.80	7
1	36	60	80.80	2400.	77.80	8
1	35	59	80.80	2080.	77.80	9
1	34	60	80.80	1600.	77.80	10
1	29	56	80.80	2080.	77.80	11
1	30	57	80.80	2400.	77.80	12
1	31	58	80.80	2240.	77.80	13
1	32	59	80.80	2240.	77.80	14
1	38	60	80.80	2400.	77.80	15
1	64	41	83.00	2000.	80.00	16
1	63	41	83.00	1600.	80.00	17
1	62	40	82.90	2000.	79.90	18
1	61	40	82.90	2200.	79.90	19
1	60	40	82.80	2000.	79.80	20
1	59	40	82.80	2200.	79.80	21
1	58	41	82.70	2000.	79.70	22
1	57	42	82.60	1600.	79.60	23
1	56	41	82.50	2200.	79.50	24
1	55	41	82.40	1600.	79.40	25
1	55	40	82.40	1800.	79.40	26
1	54	39	82.30	2200.	79.30	27
1	53	39	82.20	2400.	79.20	28
1	52	40	82.10	2000.	79.10	29
1	51	40	82.00	1600.	79.00	30
1	51	41	82.00	1000.	79.00	31
1	50	41	81.90	1600.	78.90	32
1	50	42	81.90	1200.	78.90	33
1	49	42	81.80	2400.	78.80	34

1	48	43	81.70	2200.	78.70	35
1	47	43	81.50	5000.	78.50	36
1	46	43	81.30	5000.	78.30	37
1	45	43	81.10	5000.	78.10	38
1	44	43	80.90	5000.	77.90	39
1	43	42	80.70	5000.	77.70	40

0

419 HEAD-DEPENDENT BOUNDARY NODES

0

LAYER	ROW	COL	ELEVATION	CONDUCTANCE	BOUND NO.
1	1	21	78.00	828.6	1
2	1	22	78.00	465.3	2
2	1	23	78.00	343.1	3
2	1	24	78.00	357.0	4
2	1	25	78.00	451.5	5
1	2	21	78.00	938.7	6
2	2	22	78.00	462.1	7
2	2	23	78.00	339.4	8
2	2	24	78.00	359.6	9
2	2	25	78.00	463.8	10
1	3	21	78.00	1158.	11
2	3	22	78.00	468.3	12
2	3	23	78.00	332.7	13
2	3	24	78.00	356.5	14
2	3	25	78.00	458.5	15
2	4	22	78.00	495.0	16
2	4	23	78.00	333.8	17
2	4	24	78.00	347.7	18
2	4	25	78.00	453.8	19
2	5	23	78.00	342.2	20
2	5	24	78.00	340.4	21
2	5	25	78.00	451.3	22
2	6	23	78.00	346.1	23
2	6	24	78.00	342.6	24
2	6	25	78.00	458.3	25
1	7	22	78.00	979.9	26
2	7	23	78.00	450.9	27
2	7	24	78.00	354.4	28
2	7	25	78.00	476.2	29
1	8	22	78.00	2246.	30
1	8	23	78.00	655.5	31
2	8	24	78.00	360.7	32
2	8	25	78.00	540.3	33
1	8	26	78.00	3750.	34
1	9	23	78.00	1087.	35
2	9	24	78.00	428.8	36
1	9	25	78.00	856.2	37
1	10	23	78.00	966.6	38
2	10	24	78.00	532.9	39
1	10	25	78.00	2896.	40
1	11	23	78.00	730.8	41
2	11	24	78.00	520.0	42
1	12	23	78.00	630.0	43
2	12	24	78.00	441.7	44
1	12	25	78.00	2723.	45
1	13	23	78.00	581.5	46
2	13	24	78.00	405.0	47
1	13	25	78.00	1098.	48
2	14	23	78.00	547.5	49
2	14	24	78.00	340.9	50
1	14	25	78.00	771.3	51
1	15	22	78.00	2985.	52
2	15	23	78.00	515.9	53
2	15	24	78.00	366.2	54
1	15	25	78.00	701.8	55
1	16	22	78.00	2683.	56
2	16	23	78.00	493.6	57
2	16	24	78.00	376.2	58
1	16	25	78.00	753.5	59
1	17	22	78.00	3644.	60
2	17	23	78.00	473.0	61
2	17	24	78.00	374.2	62
1	17	25	78.00	958.8	63
1	18	22	78.00	3750.	64

2	18	23	78.00	456.4	65
2	18	24	78.00	389.4	66
1	18	25	78.00	1641.	67
2	19	23	78.00	421.4	68
2	19	24	78.00	358.3	69
2	20	23	78.00	381.9	70
2	20	24	78.00	287.9	71
1	20	25	78.00	1989.	72
2	21	23	78.00	396.8	73
2	21	24	78.00	310.4	74
1	21	25	78.00	728.5	75
2	22	23	78.00	465.3	76
2	22	24	78.00	296.8	77
2	22	25	78.00	469.5	78
1	22	26	78.00	3750.	79
2	23	23	78.00	531.8	80
2	23	24	78.00	289.6	81
2	23	25	78.00	371.1	82
1	23	26	78.00	1100.	83
2	24	23	78.00	561.2	84
2	24	24	78.00	296.4	85
2	24	25	78.00	319.1	86
2	24	26	78.00	574.1	87
2	25	23	78.00	545.4	88
2	25	24	78.00	298.8	89
2	25	25	78.00	281.7	90
2	25	26	78.00	345.1	91
1	25	27	78.00	623.0	92
1	25	28	78.00	630.2	93
1	25	29	78.00	1726.	94
1	26	22	78.00	2833.	95
2	26	23	78.00	512.4	96
2	26	24	78.00	295.4	97
2	26	25	78.00	270.1	98
2	26	26	78.00	293.9	99
2	26	27	78.00	362.0	100
2	26	28	78.00	357.4	101
1	26	29	78.00	659.1	102
1	26	30	78.00	3750.	103
1	27	22	78.00	1630.	104
2	27	23	78.00	496.4	105
2	27	24	78.00	293.5	106
2	27	25	78.00	284.7	107
2	27	26	78.00	337.3	108
2	27	27	78.00	351.3	109
2	27	28	78.00	309.9	110
2	27	29	78.00	434.7	111
1	28	22	78.00	1302.	112
2	28	23	78.00	496.2	113
2	28	24	78.00	290.0	114
2	28	25	78.00	335.4	115
2	28	26	78.00	480.6	116
2	28	27	78.00	460.7	117
2	28	28	78.00	343.3	118
2	28	29	78.00	333.2	119
1	28	30	78.00	908.8	120
1	29	21	78.00	3750.	121
1	29	22	78.00	1175.	122
2	29	24	78.00	359.1	123
2	29	25	78.00	463.3	124
1	29	26	78.00	1049.	125
1	29	27	78.00	745.7	126
2	29	28	78.00	407.6	127
2	29	29	78.00	321.7	128
1	29	30	78.00	689.0	129
1	30	20	78.00	3750.	130
1	30	21	78.00	2986.	131
2	30	28	78.00	426.2	132
2	30	29	78.00	355.9	133
2	30	30	78.00	576.5	134
1	30	31	78.00	2887.	135
1	31	19	78.00	3750.	136
1	31	20	78.00	3362.	137
1	31	21	78.00	1940.	138
1	31	24	78.00	1046.	139

1	31	25	78.00	809.6	140
1	31	26	78.00	1447.	141
1	31	27	78.00	781.7	142
2	31	28	78.00	434.4	143
2	31	29	78.00	384.1	144
2	31	30	78.00	483.9	145
1	31	31	78.00	803.3	146
1	31	32	78.00	2045.	147
1	32	19	78.00	3750.	148
1	32	20	78.00	1819.	149
1	32	21	78.00	1476.	150
1	32	22	78.00	1179.	151
1	32	23	78.00	1039.	152
1	32	24	78.00	825.5	153
2	32	25	78.00	513.0	154
2	32	26	78.00	519.7	155
2	32	27	78.00	500.1	156
2	32	28	78.00	427.9	157
2	32	29	78.00	394.8	158
2	32	30	78.00	417.7	159
2	32	31	78.00	433.2	160
1	32	32	78.00	703.3	161
1	33	18	78.00	3750.	162
1	33	19	78.00	1735.	163
1	33	20	78.00	1312.	164
1	33	21	78.00	1244.	165
1	33	22	78.00	966.3	166
1	33	23	78.00	705.3	167
2	33	24	78.00	434.0	168
2	33	25	78.00	339.2	169
2	33	26	78.00	318.2	170
2	33	27	78.00	399.5	171
2	33	28	78.00	396.7	172
2	33	29	78.00	384.2	173
2	33	30	78.00	363.4	174
2	33	31	78.00	293.2	175
2	33	32	78.00	427.6	176
1	33	33	78.00	1385.	177
1	34	17	78.00	3650.	178
1	34	18	78.00	2611.	179
1	34	19	78.00	1130.	180
1	34	20	78.00	1131.	181
1	34	21	78.00	1173.	182
1	34	22	78.00	832.3	183
2	34	23	78.00	498.0	184
2	34	24	78.00	293.1	185
2	34	25	78.00	277.2	186
2	34	26	78.00	291.6	187
2	34	27	78.00	355.4	188
2	34	28	78.00	385.3	189
2	34	29	78.00	376.8	190
2	34	30	78.00	339.2	191
2	34	31	78.00	291.5	192
2	34	32	78.00	327.9	193
2	34	33	78.00	575.0	194
1	35	17	78.00	2362.	195
1	35	18	78.00	1927.	196
1	35	19	78.00	1233.	197
1	35	20	78.00	1183.	198
1	35	21	78.00	1187.	199
1	35	22	78.00	790.9	200
2	35	23	78.00	427.4	201
2	35	24	78.00	277.5	202
2	35	25	78.00	262.3	203
2	35	26	78.00	298.3	204
2	35	27	78.00	347.3	205
2	35	28	78.00	393.2	206
2	35	29	78.00	387.8	207
2	35	30	78.00	345.9	208
2	35	31	78.00	303.7	209
2	35	32	78.00	289.6	210
2	35	33	78.00	409.0	211
1	35	34	78.00	960.3	212
1	35	35	78.00	859.3	213
1	36	18	78.00	1930.	214

1	36	19	78.00	1479.	215
1	36	20	78.00	1301.	216
1	36	21	78.00	1308.	217
1	36	22	78.00	783.0	218
2	36	23	78.00	419.9	219
2	36	24	78.00	282.9	220
2	36	25	78.00	263.7	221
2	36	26	78.00	319.8	222
2	36	27	78.00	394.2	223
2	36	28	78.00	424.8	224
2	36	29	78.00	423.9	225
2	36	30	78.00	384.7	226
2	36	31	78.00	336.8	227
2	36	32	78.00	333.8	228
2	36	33	78.00	466.4	229
2	36	34	78.00	516.9	230
2	36	35	78.00	421.4	231
1	36	36	78.00	796.5	232
1	37	16	78.00	1278.	233
1	37	17	78.00	1961.	234
1	37	21	78.00	1669.	235
1	37	22	78.00	927.7	236
2	37	23	78.00	439.0	237
2	37	24	78.00	290.8	238
2	37	25	78.00	274.1	239
2	37	26	78.00	340.0	240
2	37	27	78.00	441.8	241
2	37	28	78.00	517.3	242
2	37	29	78.00	497.3	243
2	37	30	78.00	450.8	244
2	37	31	78.00	421.2	245
2	37	32	78.00	474.1	246
1	37	33	78.00	730.3	247
2	37	34	78.00	404.1	248
2	37	35	78.00	314.2	249
2	37	36	78.00	499.8	250
1	37	37	78.00	964.0	251
1	38	13	78.00	1079.	252
1	38	14	78.00	763.4	253
1	38	15	78.00	851.5	254
1	38	22	78.00	1120.	255
2	38	23	78.00	464.4	256
2	38	24	78.00	302.9	257
2	38	25	78.00	283.6	258
2	38	26	78.00	381.2	259
2	38	27	78.00	516.7	260
1	38	28	78.00	630.6	261
1	38	29	78.00	639.6	262
2	38	30	78.00	565.6	263
2	38	34	78.00	440.7	264
2	38	35	78.00	339.4	265
2	38	36	78.00	383.0	266
1	38	37	78.00	588.6	267
1	39	12	78.00	1566.	268
1	39	13	78.00	935.1	269
1	39	14	78.00	658.2	270
1	39	15	78.00	865.8	271
2	39	23	78.00	491.5	272
2	39	24	78.00	315.4	273
2	39	25	78.00	297.8	274
2	39	26	78.00	473.7	275
1	39	27	78.00	720.6	276
1	39	33	78.00	1302.	277
2	39	34	78.00	513.0	278
2	39	35	78.00	383.6	279
2	39	36	78.00	366.8	280
2	39	37	78.00	473.4	281
1	40	11	78.00	3276.	282
1	40	12	78.00	1676.	283
1	40	13	78.00	969.9	284
2	40	23	78.00	529.5	285
2	40	24	78.00	346.4	286
2	40	25	78.00	358.6	287
1	40	26	78.00	726.3	288
1	40	27	78.00	1199.	289

1	40	32	78.00	1738.	290
1	40	33	78.00	1249.	291
1	40	34	78.00	622.3	292
2	40	35	78.00	474.0	293
2	40	36	78.00	422.3	294
2	40	37	78.00	515.3	295
1	40	38	78.00	618.9	296
1	40	39	78.00	576.9	297
1	40	40	78.00	1466.	298
1	41	12	78.00	2489.	299
1	41	19	78.00	3750.	300
1	41	20	78.00	2335.	301
1	41	21	78.00	1210.	302
1	41	22	78.00	745.3	303
1	41	23	78.00	588.7	304
2	41	24	78.00	394.4	305
2	41	25	78.00	563.9	306
1	41	32	78.00	2225.	307
1	41	33	78.00	1626.	308
1	41	34	78.00	870.7	309
1	41	35	78.00	631.4	310
2	41	36	78.00	546.2	311
1	41	37	78.00	630.7	312
1	41	38	78.00	597.6	313
1	41	39	78.00	587.3	314
1	41	40	78.00	1342.	315
1	42	19	78.00	3750.	316
1	42	20	78.00	1964.	317
1	42	21	78.00	893.4	318
1	42	22	78.00	613.5	319
2	42	23	78.00	519.0	320
2	42	24	78.00	438.2	321
1	42	25	78.00	1121.	322
1	42	34	78.00	1204.	323
1	42	35	78.00	883.0	324
1	42	36	78.00	812.9	325
1	42	37	78.00	865.5	326
1	42	38	78.00	757.2	327
1	42	39	78.00	810.3	328
1	42	40	78.00	1594.	329
1	42	41	78.00	3750.	330
1	43	19	78.00	3750.	331
1	43	20	78.00	1584.	332
1	43	21	78.00	696.8	333
2	43	22	78.00	513.4	334
2	43	23	78.00	502.1	335
2	43	24	78.00	519.8	336
1	43	25	78.00	1972.	337
1	44	18	78.00	3750.	338
1	44	19	78.00	3402.	339
1	44	20	78.00	1450.	340
2	44	21	78.00	573.0	341
2	44	22	78.00	456.9	342
2	44	23	78.00	539.1	343
1	45	18	78.00	3446.	344
1	45	19	78.00	2157.	345
1	45	20	78.00	1478.	346
2	45	21	78.00	521.7	347
2	45	22	78.00	478.6	348
1	45	23	78.00	654.4	349
1	46	18	78.00	1621.	350
1	46	19	78.00	1209.	351
1	46	20	78.00	844.5	352
2	46	21	78.00	504.0	353
2	46	22	78.00	545.2	354
1	46	23	78.00	871.5	355
1	46	24	78.00	3750.	356
1	47	19	78.00	796.5	357
1	47	20	78.00	649.3	358
2	47	21	78.00	497.2	359
1	47	22	78.00	663.7	360
1	47	23	78.00	1270.	361
1	47	24	78.00	3750.	362
1	48	19	78.00	631.6	363
1	48	20	78.00	630.0	364

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                    1       48      21    78.00          617.1          365
                    1       48      22    78.00          888.4          366
                    1       48      23    78.00          2084.          367
                    1       49      17    78.00          1060.          368
                    1       49      18    78.00          757.5          369
                    1       49      19    78.00          691.1          370
                    1       49      20    78.00          717.3          371
                    1       49      21    78.00          817.0          372
                    1       49      22    78.00          1369.          373
                    1       50      16    78.00          1163.          374
                    1       50      17    78.00          877.4          375
                    1       50      18    78.00          896.2          376
                    1       51      14    78.00          1152.          377
                    1       51      15    78.00          821.5          378
                    1       51      16    78.00          947.2          379
                    1       51      17    78.00          988.6          380
                    1       52      13    78.00          2366.          381
                    1       52      14    78.00          990.8          382
                    1       52      15    78.00          912.5          383
                    1       52      16    78.00          1114.          384
                    1       53      12    78.00          3071.          385
                    1       53      13    78.00          1676.          386
                    1       54      10    78.00          3750.          387
                    1       54      11    78.00          2264.          388
                    1       54      12    78.00          1839.          389
                    1       54      13    78.00          1570.          390
                    1       55       6    78.00          3750.          391
                    1       55       7    78.00          3750.          392
                    1       55       8    78.00          3534.          393
                    1       55       9    78.00          2344.          394
                    1       55      10    78.00          2079.          395
                    1       55      11    78.00          1660.          396
                    1       55      12    78.00          1991.          397
                    1       56       6    78.00          2205.          398
                    1       56       7    78.00          2404.          399
                    1       56       8    78.00          2097.          400
                    1       56       9    78.00          1702.          401
                    1       56      10    78.00          2013.          402
                    1       56      11    78.00          2640.          403
                    1       57       5    78.00          1892.          404
                    1       57       6    78.00          1904.          405
                    1       57       7    78.00          2251.          406
                    1       57       8    78.00          2376.          407
                    1       57       9    78.00          2048.          408
                    1       57      10    78.00          3228.          409
                    1       57      11    78.00          3750.          410
                    1       58       4    78.00          1875.          411
                    1       58       5    78.00          1768.          412
                    1       58       6    78.00          2611.          413
                    1       58       7    78.00          3750.          414
                    1       58       8    78.00          3750.          415
                    1       58       9    78.00          3750.          416
                    1       59       5    78.00          2199.          417
                    1       59       6    78.00          3750.          418
                    1       60       5    78.00          3750.          419
OCELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  1      (ROW,COL)
  DRY(  4, 13)    DRY( 12, 32)    DRY( 13, 32)    DRY( 14, 32)    DRY( 15, 32)    DRY( 16, 32)    DRY( 16, 40)    DRY( 17, 33)
  DRY( 17, 40)    DRY( 17, 41)    DRY( 21, 10)    DRY( 24, 10)    DRY( 25, 50)    DRY( 27,  7)    DRY( 28,  7)    DRY( 30,  4)
  DRY( 35, 73)    DRY( 36, 73)    DRY( 36, 74)    DRY( 37, 73)    DRY( 37, 74)    DRY( 39,  2)    DRY( 39,  3)    DRY( 40,  3)
  DRY( 40,  4)    DRY( 41,  4)    DRY( 42,  4)    DRY( 43,  4)    DRY( 44,  4)    DRY( 44,  5)    DRY( 45,  4)    DRY( 45,  5)
  DRY( 45,  6)    DRY( 45,  7)    DRY( 59, 34)    DRY( 63, 12)    DRY( 64, 12)
0
    75 CALLS TO PCG ROUTINE FOR TIME STEP   1 IN STRESS PERIOD  1
    75 TOTAL ITERATIONS
OMAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -28.29     (  1, 37, 74)      5.155     (  2, 38, 19)      2.195     (  3, 41, 17)     -2.425     (  1, 57, 48)
        3.136     (  1, 57, 48)     -2.775     (  1, 57, 48)      2.461     (  1, 57, 48)     -2.113     (  1, 57, 48)
        1.868     (  1, 57, 48)     -1.600     (  1, 57, 48)      1.419     (  1, 57, 48)     -1.215     (  1, 57, 48)
        1.080     (  1, 57, 48)    -0.9178     (  1, 57, 48)     0.8223     (  1, 57, 48)    -0.6980     (  1, 57, 48)
       0.6265     (  1, 57, 48)    -0.5316     (  1, 57, 48)     0.4775     (  1, 57, 48)    -0.4052     (  1, 57, 48)
       0.3642     (  1, 57, 48)    -0.3091     (  1, 57, 48)     0.2779     (  1, 57, 48)    -0.2360     (  1, 57, 48)
       0.2122     (  1, 57, 48)    -0.1802     (  1, 57, 48)     0.1621     (  1, 57, 48)    -0.1377     (  1, 57, 48)
       0.1239     (  1, 57, 48)    -0.1053     (  1, 57, 48)     0.9472E-01 (  1, 57, 48)    -0.8054E-01 (  1, 57, 48)
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      0.7247E-01 (  1, 57, 48)     -0.6164E-01 (  1, 57, 48)      0.5547E-01 (  1, 57, 48)     -0.4720E-01 (  1, 57, 48)
      0.4248E-01 (  1, 57, 48)     -0.3617E-01 (  1, 57, 48)      0.3255E-01 (  1, 57, 48)     -0.2772E-01 (  1, 57, 48)
      0.2495E-01 (  1, 57, 48)     -0.2126E-01 (  1, 57, 48)      0.1914E-01 (  1, 57, 48)     -0.1631E-01 (  1, 57, 48)
      0.1469E-01 (  1, 57, 48)     -0.1252E-01 (  1, 57, 48)      0.1128E-01 (  1, 57, 48)     -0.9619E-02 (  1, 57, 48)
      0.8662E-02 (  1, 57, 48)     -0.7391E-02 (  1, 57, 48)      0.6656E-02 (  1, 57, 48)     -0.5682E-02 (  1, 57, 48)
      0.5117E-02 (  1, 57, 48)     -0.4370E-02 (  1, 57, 48)      0.3936E-02 (  1, 57, 48)     -0.3363E-02 (  1, 57, 48)
      0.3029E-02 (  1, 57, 48)     -0.2589E-02 (  1, 57, 48)      0.2332E-02 (  1, 57, 48)     -0.1994E-02 (  1, 57, 48)
      0.1796E-02 (  1, 57, 48)     -0.1536E-02 (  1, 57, 48)      0.1384E-02 (  1, 57, 48)     -0.1184E-02 (  1, 57, 48)
      0.1067E-02 (  1, 57, 48)     -0.9135E-03 (  1, 57, 48)      0.8233E-03 (  1, 57, 48)     -0.7051E-03 (  1, 57, 48)
      0.6355E-03 (  1, 57, 48)     -0.5446E-03 (  1, 57, 48)      0.4908E-03 (  1, 57, 48)     -0.4206E-03 (  1, 57, 48)
      0.3789E-03 (  1, 57, 48)     -0.3251E-03 (  1, 57, 48)      0.2929E-03 (  1, 57, 48)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      0.1803E+06 (  1, 65, 41)      0.1239E+06 (  1, 65, 41)      0.9863E+05 (  1, 65, 41)      0.7755E+05 (  1, 65, 41)
      0.6828E+05 (  1, 65, 41)      0.5986E+05 (  1, 65, 41)      0.5298E+05 (  1, 65, 41)      0.4646E+05 (  1, 65, 41)
      0.4112E+05 (  1, 65, 41)      0.3605E+05 (  1, 65, 41)      0.3191E+05 (  1, 65, 41)      0.2797E+05 (  1, 65, 41)
      0.2476E+05 (  1, 65, 41)      0.2171E+05 (  1, 65, 41)      0.1922E+05 (  1, 65, 41)      0.1684E+05 (  1, 65, 41)
      0.1491E+05 (  1, 65, 41)      0.1307E+05 (  1, 65, 41)      0.1157E+05 (  1, 65, 41)      0.1014E+05 (  1, 65, 41)
       8974.     (  1, 65, 41)       7865.     (  1, 65, 41)       6962.     (  1, 65, 41)       6101.     (  1, 65, 41)
       5400.     (  1, 65, 41)       4733.     (  1, 65, 41)       4189.     (  1, 65, 41)       3671.     (  1, 65, 41)
       3249.     (  1, 65, 41)       2847.     (  1, 65, 41)       2520.     (  1, 65, 41)       2208.     (  1, 65, 41)
       1954.     (  1, 65, 41)       1713.     (  1, 65, 41)       1516.     (  1, 65, 41)       1328.     (  1, 65, 41)
       1175.     (  1, 65, 41)       1030.     (  1, 65, 41)       911.5     (  1, 65, 41)       798.6     (  1, 65, 41)
       706.8     (  1, 65, 41)       619.2     (  1, 65, 41)       548.0     (  1, 65, 41)       480.1     (  1, 65, 41)
       424.9     (  1, 65, 41)       372.3     (  1, 65, 41)       329.5     (  1, 65, 41)       288.6     (  1, 65, 41)
       255.4     (  1, 65, 41)       223.8     (  1, 65, 41)       198.0     (  1, 65, 41)       173.5     (  1, 65, 41)
       153.5     (  1, 65, 41)       134.5     (  1, 65, 41)       119.0     (  1, 65, 41)       104.3     (  1, 65, 41)
       92.27     (  1, 65, 41)       80.83     (  1, 65, 41)       71.52     (  1, 65, 41)       62.66     (  1, 65, 41)
       55.44     (  1, 65, 41)       48.57     (  1, 65, 41)       42.98     (  1, 65, 41)       37.65     (  1, 65, 41)
       33.31     (  1, 65, 41)       29.19     (  1, 65, 41)       25.82     (  1, 65, 41)       22.62     (  1, 65, 41)
       20.01     (  1, 65, 41)       17.53     (  1, 65, 41)       15.51     (  1, 65, 41)       13.59     (  1, 65, 41)
       12.02     (  1, 65, 41)       10.53     (  1, 65, 41)       9.318     (  1, 65, 41)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  2  STRESS PERIOD=  1      (ROW,COL)
  DRY( 26,  9)    DRY( 31,  4)    DRY( 33,  3)    DRY( 44,  8)
    39 CALLS TO PCG ROUTINE FOR TIME STEP   2 IN STRESS PERIOD  1
    39 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -3.460     (  1, 33,  3)      0.9439     (  1, 57, 48)     -0.8490     (  1, 57, 48)     -0.7727     (  1, 58, 47)
       0.5772     (  1, 58, 47)      0.4817     (  1, 57, 48)     -0.4001     (  1, 57, 48)      0.3514     (  1, 57, 48)
      -0.2919     (  1, 57, 48)      0.2565     (  1, 57, 48)     -0.2141     (  1, 57, 48)      0.1886     (  1, 57, 48)
      -0.1582     (  1, 57, 48)      0.1397     (  1, 57, 48)     -0.1178     (  1, 57, 48)      0.1042     (  1, 57, 48)
      -0.8811E-01 (  1, 57, 48)      0.7807E-01 (  1, 57, 48)     -0.6623E-01 (  1, 57, 48)      0.5874E-01 (  1, 57, 48)
      -0.4997E-01 (  1, 57, 48)      0.4435E-01 (  1, 57, 48)     -0.3781E-01 (  1, 57, 48)      0.3358E-01 (  1, 57, 48)
      -0.2868E-01 (  1, 57, 48)      0.2548E-01 (  1, 57, 48)     -0.2181E-01 (  1, 57, 48)      0.1938E-01 (  1, 57, 48)
      -0.1661E-01 (  1, 57, 48)      0.1476E-01 (  1, 57, 48)     -0.1267E-01 (  1, 57, 48)      0.1126E-01 (  1, 57, 48)
      -0.9675E-02 (  1, 57, 48)      0.8597E-02 (  1, 57, 48)     -0.7399E-02 (  1, 57, 48)      0.6573E-02 (  1, 57, 48)
      -0.5664E-02 (  1, 57, 48)      0.5031E-02 (  1, 57, 48)     -0.4340E-02 (  1, 57, 48)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       2345.     (  1, 38,  2)      -1752.     (  2, 52, 18)       1464.     (  1, 31,  5)       1258.     (  1, 31,  5)
       1089.     (  1, 31,  5)       939.3     (  1, 31,  5)       815.0     (  1, 31,  5)       703.7     (  1, 31,  5)
       611.2     (  1, 31,  5)       528.1     (  1, 31,  5)       459.0     (  1, 31,  5)       396.8     (  1, 31,  5)
       345.1     (  1, 31,  5)       298.5     (  1, 31,  5)       259.7     (  1, 31,  5)       224.7     (  1, 31,  5)
       195.6     (  1, 31,  5)       169.3     (  1, 31,  5)       147.4     (  1, 31,  5)       127.6     (  1, 31,  5)
       111.1     (  1, 31,  5)       96.19     (  1, 31,  5)       83.79     (  1, 31,  5)       72.56     (  1, 31,  5)
       63.21     (  1, 31,  5)       54.74     (  1, 31,  5)       47.70     (  1, 31,  5)       41.31     (  1, 31,  5)
       36.00     (  1, 31,  5)       31.18     (  1, 31,  5)       27.17     (  1, 31,  5)       23.54     (  1, 31,  5)
       20.51     (  1, 31,  5)       17.77     (  1, 31,  5)       15.49     (  1, 31,  5)       13.41     (  1, 31,  5)
       11.69     (  1, 31,  5)       10.13     (  1, 31,  5)       8.826     (  1, 31,  5)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
```

```
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  3  STRESS PERIOD=  1      (ROW,COL)
  DRY( 19,  9)    DRY( 27,  8)    DRY( 29,  5)    DRY( 32,  4)    DRY( 47,  8)
    29 CALLS TO PCG ROUTINE FOR TIME STEP   3 IN STRESS PERIOD  1
    29 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -1.797     (  1, 32,  4)     0.4783     (  1, 57, 48)     -0.3038     (  1, 53, 18)     0.3644     (  1, 57, 48)
      -0.2993     (  1, 57, 48)     0.2745     (  1, 57, 48)     -0.1893     (  1, 57, 48)     0.1717     (  1, 57, 48)
      -0.1280     (  1, 57, 48)     0.1238     (  1, 57, 48)     -0.9264E-01 (  1, 57, 48)     0.9010E-01 (  1, 57, 48)
      -0.6761E-01 (  1, 57, 48)     0.6595E-01 (  1, 57, 48)     -0.4954E-01 (  1, 57, 48)     0.4842E-01 (  1, 57, 48)
      -0.3644E-01 (  1, 57, 48)     0.3565E-01 (  1, 57, 48)     -0.2687E-01 (  1, 57, 48)     0.2630E-01 (  1, 57, 48)
      -0.1986E-01 (  1, 57, 48)     0.1944E-01 (  1, 57, 48)     -0.1471E-01 (  1, 57, 48)     0.1439E-01 (  1, 57, 48)
      -0.1090E-01 (  1, 57, 48)     0.1067E-01 (  1, 57, 48)     -0.8095E-02 (  1, 57, 48)     0.7916E-02 (  1, 57, 48)
      -0.6016E-02 (  1, 57, 48)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -1009.     (  1, 58, 12)     -1244.     (  2, 52, 18)      818.8     (  1, 29,  6)      595.5     (  1, 29,  6)
        481.1     (  1, 29,  6)      396.7     (  1, 29,  6)      341.0     (  1, 29,  6)      284.5     (  1, 29,  6)
        244.9     (  1, 29,  6)      204.1     (  1, 29,  6)      175.7     (  1, 29,  6)      146.3     (  1, 29,  6)
        125.9     (  1, 29,  6)      104.8     (  1, 29,  6)      90.20     (  1, 29,  6)      75.02     (  1, 29,  6)
        64.54     (  1, 29,  6)      53.65     (  1, 29,  6)      46.13     (  1, 29,  6)      38.32     (  1, 29,  6)
        32.93     (  1, 29,  6)      27.33     (  1, 29,  6)      23.48     (  1, 29,  6)      19.47     (  1, 29,  6)
        16.71     (  1, 29,  6)      13.85     (  1, 29,  6)      12.03     (  1, 32,  5)      10.07     (  1, 32,  5)
        8.828     (  1, 32,  5)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  4  STRESS PERIOD=  1      (ROW,COL)
  DRY(  3, 14)    DRY( 20, 10)    DRY( 32,  2)
    26 CALLS TO PCG ROUTINE FOR TIME STEP   4 IN STRESS PERIOD  1
    26 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -1.144     (  1, 33,  2)     0.4126     (  1, 56, 48)     -0.3195     (  1, 57, 48)     0.2880     (  1, 57, 48)
      -0.2313     (  1, 57, 48)     0.1587     (  1, 57, 48)     -0.1287     (  1, 57, 48)     0.1076     (  1, 57, 48)
      -0.9012E-01 (  1, 57, 48)     0.7642E-01 (  1, 57, 48)     -0.6462E-01 (  1, 57, 48)     0.5517E-01 (  1, 57, 48)
      -0.4697E-01 (  1, 57, 48)     0.4028E-01 (  1, 57, 48)     -0.3446E-01 (  1, 57, 48)     0.2962E-01 (  1, 57, 48)
      -0.2544E-01 (  1, 57, 48)     0.2190E-01 (  1, 57, 48)     -0.1886E-01 (  1, 57, 48)     0.1625E-01 (  1, 57, 48)
      -0.1402E-01 (  1, 57, 48)     0.1209E-01 (  1, 57, 48)     -0.1045E-01 (  1, 57, 48)     0.9011E-02 (  1, 57, 48)
      -0.7799E-02 (  1, 57, 48)     0.6727E-02 (  1, 57, 48)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -800.0     (  1, 52, 19)     -648.2     (  2, 52, 18)      339.8     (  2, 52, 18)      272.6     (  1, 57, 48)
       -195.5     (  1, 57, 48)      172.8     (  1, 57, 48)      135.8     (  1, 34,  1)      122.0     (  1, 57, 48)
        101.5     (  1, 35,  1)      88.45     (  1, 35,  1)      78.12     (  1, 35,  1)      67.94     (  1, 35,  1)
        59.92     (  1, 35,  1)      52.03     (  1, 35,  1)      45.82     (  1, 35,  1)      39.73     (  1, 35,  1)
        34.95     (  1, 35,  1)      30.26     (  1, 35,  1)      26.58     (  1, 35,  1)      22.99     (  1, 35,  1)
        20.18     (  1, 35,  1)      17.43     (  1, 35,  1)      15.28     (  1, 35,  1)      13.18     (  1, 35,  1)
        11.55     (  1, 35,  1)      9.953     (  1, 35,  1)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  5  STRESS PERIOD=  1      (ROW,COL)
  DRY( 32,  1)    DRY( 48,  8)
    19 CALLS TO PCG ROUTINE FOR TIME STEP   5 IN STRESS PERIOD  1
    19 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
```

```
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.9941     (  1, 33,  2)     0.1974     (  1, 53, 18)    -0.1626     (  1, 53, 18)     0.1054     (  1, 53, 18)
      -0.7349E-01 (  1, 53, 18)     0.4610E-01 (  1, 53, 18)    -0.3419E-01 (  1, 65, 44)     0.4454E-01 (  1, 57, 48)
      -0.4529E-01 (  1, 57, 48)     0.3996E-01 (  1, 57, 48)    -0.3340E-01 (  1, 57, 48)     0.2822E-01 (  1, 57, 48)
      -0.2367E-01 (  1, 57, 48)     0.2007E-01 (  1, 57, 48)    -0.1692E-01 (  1, 57, 48)     0.1439E-01 (  1, 57, 48)
      -0.1218E-01 (  1, 57, 48)     0.1003E-01 (  1, 57, 48)    -0.8743E-02 (  1, 57, 48)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -634.0     (  1, 52, 19)     -637.3     (  2, 52, 18)      295.2     (  2, 52, 18)     -321.8     (  2, 52, 18)
        124.3     (  1, 34,  1)     -151.2     (  2, 52, 18)      76.85     (  1, 34,  1)      57.59     (  1, 34,  1)
        50.27     (  1, 34,  1)      42.54     (  1, 57, 48)      35.73     (  1, 34,  1)      30.13     (  1, 57, 48)
        25.28     (  1, 34,  1)      21.50     (  1, 57, 48)      17.79     (  1, 34,  1)      15.45     (  1, 57, 48)
        12.47     (  1, 34,  1)      10.97     (  1, 57, 48)      9.804     (  1, 19, 51)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  6  STRESS PERIOD=  1      (ROW,COL)
  DRY( 11, 32)    DRY( 15, 41)    DRY( 28,  6)    DRY( 33,  2)    DRY( 44,  7)
0CELL CONVERSIONS FOR ITERATION= 71  LAYER= 1  TIME STEP=  6  STRESS PERIOD=  1      (ROW,COL)
  DRY( 19, 51)
    71 CALLS TO PCG ROUTINE FOR TIME STEP   6 IN STRESS PERIOD  1
    71 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.8139     (  1, 33,  1)     0.1572     (  1, 53, 18)    -0.1282     (  1, 53, 18)     0.8838E-01 (  1, 53, 18)
      -0.6339E-01 (  1, 53, 18)     0.4388E-01 (  1, 53, 18)    -0.3230E-01 (  1, 53, 18)     0.2223E-01 (  1, 53, 18)
      -0.1864E-01 (  1, 65, 44)     0.1513E-01 (  1, 65, 44)    -0.1341E-01 (  1, 65, 44)     0.1103E-01 (  1, 65, 44)
      -0.9883E-02 (  1, 65, 44)    -0.8561E-02 (  1, 19, 51)    -0.7601E-02 (  1, 65, 44)    -0.7427E-02 (  1, 19, 51)
      -0.6142E-02 (  1, 19, 51)    -0.6500E-02 (  1, 19, 51)    -0.5607E-02 (  1, 19, 51)    -0.5747E-02 (  1, 19, 51)
      -0.5133E-02 (  1, 19, 51)    -0.5142E-02 (  1, 19, 51)    -0.4713E-02 (  1, 19, 51)    -0.4649E-02 (  1, 19, 51)
      -0.4345E-02 (  1, 19, 51)    -0.4248E-02 (  1, 19, 51)    -0.4024E-02 (  1, 19, 51)    -0.3918E-02 (  1, 19, 51)
      -0.3749E-02 (  1, 19, 51)    -0.3646E-02 (  1, 19, 51)    -0.3516E-02 (  1, 19, 51)    -0.3425E-02 (  1, 19, 51)
      -0.3322E-02 (  1, 19, 51)    -0.3243E-02 (  1, 19, 51)    -0.3163E-02 (  1, 19, 51)    -0.3100E-02 (  1, 19, 51)
      -0.3036E-02 (  1, 19, 51)    -0.2987E-02 (  1, 19, 51)    -0.2939E-02 (  1, 19, 51)    -0.2899E-02 (  1, 19, 51)
      -0.2864E-02 (  1, 19, 51)    -0.2834E-02 (  1, 19, 51)    -0.2816E-02 (  3, 38, 32)     0.2803E-02 (  3, 38, 32)
      -0.2793E-02 (  3, 38, 32)     0.2787E-02 (  3, 38, 32)    -0.2783E-02 (  3, 38, 32)     0.2782E-02 (  3, 38, 32)
      -0.2786E-02 (  3, 38, 32)     0.2795E-02 (  3, 38, 32)    -0.2805E-02 (  3, 38, 32)     0.2822E-02 (  3, 38, 32)
      -0.2842E-02 (  3, 38, 32)    -0.2877E-02 (  1, 19, 51)    -0.2910E-02 (  1, 19, 51)    -0.2955E-02 (  1, 19, 51)
      -0.3006E-02 (  1, 19, 51)    -0.3061E-02 (  1, 19, 51)    -0.3125E-02 (  1, 19, 51)    -0.3196E-02 (  1, 19, 51)
      -0.3279E-02 (  1, 19, 51)    -0.3369E-02 (  1, 19, 51)    -0.3474E-02 (  1, 19, 51)    -0.3585E-02 (  1, 19, 51)
      -0.3716E-02 (  1, 19, 51)    -0.3857E-02 (  1, 19, 51)    -0.4021E-02 (  1, 19, 51)    -0.4199E-02 (  1, 19, 51)
      -0.4403E-02 (  1, 19, 51)    -0.4631E-02 (  1, 19, 51)    -0.2620E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -504.1     (  1, 52, 19)     -491.8     (  2, 52, 18)      268.8     (  2, 52, 18)     -256.2     (  2, 52, 18)
        135.5     (  2, 52, 18)     -130.8     (  2, 52, 18)      70.48     (  1, 34,  2)     -66.99     (  2, 52, 18)
        52.03     (  1, 19, 51)      45.10     (  1, 19, 51)      43.61     (  1, 19, 51)      38.16     (  1, 19, 51)
        37.01     (  1, 19, 51)      32.77     (  1, 19, 51)      31.75     (  1, 19, 51)      28.52     (  1, 19, 51)
        27.55     (  1, 19, 51)      25.13     (  1, 19, 51)      24.20     (  1, 19, 51)      22.38     (  1, 19, 51)
        21.51     (  1, 19, 51)      20.15     (  1, 19, 51)      19.36     (  1, 19, 51)      18.31     (  1, 19, 51)
        17.62     (  1, 19, 51)      16.80     (  1, 19, 51)      16.20     (  1, 19, 51)      15.55     (  1, 19, 51)
        15.04     (  1, 19, 51)      14.52     (  1, 19, 51)      14.09     (  1, 19, 51)      13.67     (  1, 19, 51)
        13.30     (  1, 19, 51)      12.96     (  1, 19, 51)      12.65     (  1, 19, 51)      12.37     (  1, 19, 51)
        12.12     (  1, 19, 51)      11.89     (  1, 19, 51)      11.69     (  1, 19, 51)      11.51     (  1, 19, 51)
        11.34     (  1, 19, 51)      11.20     (  1, 19, 51)      11.08     (  1, 19, 51)      10.98     (  1, 19, 51)
        10.89     (  1, 19, 51)      10.83     (  1, 19, 51)      10.78     (  1, 19, 51)      10.74     (  1, 19, 51)
        10.73     (  1, 19, 51)      10.74     (  1, 19, 51)      10.76     (  1, 19, 51)      10.80     (  1, 19, 51)
        10.86     (  1, 19, 51)      10.94     (  1, 19, 51)      11.05     (  1, 19, 51)      11.16     (  1, 19, 51)
        11.31     (  1, 19, 51)      11.48     (  1, 19, 51)      11.67     (  1, 19, 51)      11.89     (  1, 19, 51)
        12.14     (  1, 19, 51)      12.43     (  1, 19, 51)      12.75     (  1, 19, 51)      13.11     (  1, 19, 51)
        13.51     (  1, 19, 51)      13.96     (  1, 19, 51)      14.46     (  1, 19, 51)      15.03     (  1, 19, 51)
        15.66     (  1, 19, 51)      16.37     (  1, 19, 51)     -6.348     (  1, 20, 51)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
```

```
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    13 CALLS TO PCG ROUTINE FOR TIME STEP   7 IN STRESS PERIOD  1
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.5799     (  1, 33,  1)     0.1104     (  1, 52, 19)    -0.9399E-01 (  1, 53, 18)     0.6002E-01 (  1, 53, 18)
      -0.4215E-01 (  1, 53, 18)     0.2643E-01 (  1, 53, 18)    -0.1996E-01 (  1, 65, 44)     0.1498E-01 (  1, 65, 44)
      -0.1270E-01 (  1, 65, 44)     0.9507E-02 (  1, 65, 44)    -0.8022E-02 (  1, 65, 44)     0.5947E-02 (  1, 65, 44)
      -0.4989E-02 (  1, 65, 44)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -405.6     (  1, 51, 24)     -363.1     (  2, 52, 18)       186.9     (  2, 52, 18)     -174.1     (  2, 52, 18)
        82.93     (  2, 52, 18)     -79.65     (  2, 52, 18)       37.44     (  2, 52, 18)     -36.29     (  2, 52, 18)
        19.07     (  2, 64, 43)     -21.73     (  2, 64, 43)       11.[illegible]     (  2, 64, 43)     -13.62     (  2, 64, 43)
        7.295     (  2, 64, 43)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  8  STRESS PERIOD=  1      (ROW,COL)
  DRY( 15, 36)    DRY( 25, 10)
    11 CALLS TO PCG ROUTINE FOR TIME STEP   8 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.4756     (  1, 38, 72)     0.9199E-01 (  1, 52, 19)    -0.7990E-01 (  1, 53, 18)     0.5324E-01 (  1, 53, 18)
      -0.3817E-01 (  1, 53, 18)     0.2493E-01 (  1, 53, 18)    -0.1839E-01 (  1, 53, 18)     0.1192E-01 (  1, 53, 18)
      -0.8898E-02 (  1, 53, 18)     0.5880E-02 (  1, 65, 44)    -0.4978E-02 (  1, 65, 44)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -337.8     (  1, 51, 24)     -304.0     (  2, 52, 18)       162.5     (  2, 52, 18)     -155.6     (  2, 52, 18)
        76.89     (  2, 52, 18)     -75.83     (  2, 52, 18)       37.05     (  2, 52, 18)     -36.79     (  2, 52, 18)
        17.68     (  2, 52, 18)     -17.07     (  2, 52, 18)      -9.084     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  9  STRESS PERIOD=  1      (ROW,COL)
  DRY( 33,  1)
    15 CALLS TO PCG ROUTINE FOR TIME STEP   9 IN STRESS PERIOD  1
    15 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.4048     (  1, 38, 72)     0.7018E-01 (  1, 52, 19)    -0.6142E-01 (  1, 53, 18)     0.4154E-01 (  1, 53, 18)
      -0.2915E-01 (  1, 53, 18)     0.1829E-01 (  1, 53, 18)     0.1401E-01 (  3, 38, 32)    -0.1291E-01 (  3, 38, 32)
       0.1026E-01 (  3, 38, 32)    -0.8824E-02 (  3, 38, 32)     0.6957E-02 (  3, 38, 32)    -0.5745E-02 (  3, 38, 32)
       0.4514E-02 (  3, 38, 32)    -0.3660E-02 (  3, 38, 32)     0.2879E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -282.1     (  1, 51, 24)      228.5     (  1, 52, 19)       128.0     (  2, 52, 18)     -118.2     (  2, 52, 18)
        58.79     (  2, 52, 18)     -52.89     (  2, 52, 18)       34.00     (  3, 38, 32)     -38.59     (  3, 38, 32)
        23.85     (  3, 38, 32)     -26.35     (  3, 38, 32)       15.72     (  3, 38, 32)     -17.15     (  3, 38, 32)
        10.06     (  3, 38, 32)     -10.94     (  3, 38, 32)       6.378     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
```

```
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    13 CALLS TO PCG ROUTINE FOR TIME STEP  10 IN STRESS PERIOD  1
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------- ----------------------------------------------------------------------------------------------
      -0.3660     (  1, 34,  1)     0.6528E-01 (  1, 52, 19)    -0.5499E-01 (  1, 53, 18)     0.3462E-01 (  1, 53, 18)
      -0.2373E-01 (  1, 53, 18)     0.1440E-01 (  1, 53, 18)    -0.1052E-01 (  3, 38, 32)     0.7845E-02 (  3, 38, 32)
      -0.7620E-02 (  3, 38, 32)     0.5722E-02 (  3, 38, 32)    -0.5300E-02 (  3, 38, 32)     0.3950E-02 (  3, 38, 32)
      -0.3551E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -240.9     (  1, 51, 24)     -212.8     (  2, 52, 18)      108.0     (  2, 52, 18)     -98.68     (  2, 52, 18)
        45.90     (  2, 52, 18)     -42.04     (  2, 52, 18)     -22.77     (  3, 38, 32)      26.89     (  3, 38, 32)
       -16.41     (  3, 38, 32)      19.10     (  3, 38, 32)     -11.29     (  3, 38, 32)      12.97     (  3, 38, 32)
       -7.495     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 11  STRESS PERIOD=  1      (ROW,COL)
  DRY( 16, 38)
    13 CALLS TO PCG ROUTINE FOR TIME STEP  11 IN STRESS PERIOD  1
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.3044     (  1, 34,  1)     0.5463E-01 (  1, 52, 19)    -0.4688E-01 (  1, 53, 18)     0.2975E-01 (  1, 53, 18)
      -0.2040E-01 (  1, 53, 18)    -0.1293E-01 (  3, 38, 32)     0.9882E-02 (  3, 38, 32)    -0.9092E-02 (  3, 38, 32)
       0.7097E-02 (  3, 38, 32)    -0.6153E-02 (  3, 38, 32)     0.4816E-02 (  3, 38, 32)    -0.4023E-02 (  3, 38, 32)
       0.3153E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -204.0     (  1, 51, 24)     -179.8     (  2, 52, 18)      92.79     (  2, 52, 18)     -84.56     (  2, 52, 18)
        39.42     (  2, 52, 18)     -37.73     (  3, 38, 32)      23.56     (  3, 38, 32)     -27.10     (  3, 38, 32)
        16.31     (  3, 38, 32)     -18.44     (  3, 38, 32)      10.80     (  3, 38, 32)     -12.09     (  3, 38, 32)
        6.975     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    13 CALLS TO PCG ROUTINE FOR TIME STEP  12 IN STRESS PERIOD  1
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2655     (  1, 34,  1)     0.4607E-01 (  1, 52, 19)    -0.3973E-01 (  1, 53, 18)     0.2483E-01 (  1, 53, 18)
      -0.1685E-01 (  1, 53, 18)     0.1135E-01 (  3, 38, 32)    -0.1101E-01 (  3, 38, 32)     0.8082E-02 (  3, 38, 32)
      -0.7456E-02 (  3, 38, 32)     0.5449E-02 (  3, 38, 32)    -0.4875E-02 (  3, 38, 32)     0.3551E-02 (  3, 38, 32)
      -0.3124E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -173.8     (  1, 51, 24)     -153.6     (  2, 52, 18)      77.44     (  2, 52, 18)     -70.42     (  2, 52, 18)
       -33.66     (  3, 38, 32)      38.70     (  3, 38, 32)     -23.60     (  3, 38, 32)      26.79     (  3, 38, 32)
       -15.83     (  3, 38, 32)      17.74     (  3, 38, 32)     -10.28     (  3, 38, 32)      11.45     (  3, 38, 32)
       -6.572     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
```

```
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  13 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2396     (  1, 35,  1)     0.3892E-01 (  1, 52, 19)    -0.3398E-01 (  1, 53, 18)     0.2124E-01 (  1, 53, 18)
      -0.1440E-01 (  1, 53, 18)    -0.1126E-01 (  3, 38, 32)     0.8558E-02 (  3, 38, 32)    -0.7672E-02 (  3, 38, 32)
       0.5929E-02 (  3, 38, 32)    -0.5067E-02 (  3, 38, 32)     0.3933E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -148.8     (  1, 51, 24)     -131.0     (  2, 52, 18)      66.48     (  2, 52, 18)     -59.86     (  2, 52, 18)
        28.85     (  3, 38, 32)     -32.73     (  3, 38, 32)      20.20     (  3, 38, 32)     -22.64     (  3, 38, 32)
        13.60     (  3, 38, 32)     -15.02     (  3, 38, 32)      8.863     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  14 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2257     (  1, 35,  1)     0.3133E-01 (  1, 52, 19)    -0.2810E-01 (  3, 38, 32)     0.1928E-01 (  3, 38, 32)
      -0.1793E-01 (  3, 38, 32)     0.1249E-01 (  3, 38, 32)    -0.1117E-01 (  3, 38, 32)     0.7817E-02 (  3, 38, 32)
      -0.6865E-02 (  3, 38, 32)     0.4848E-02 (  3, 38, 32)    -0.4224E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -127.5     (  1, 51, 24)      105.0     (  1, 52, 19)     -59.21     (  3, 38, 32)      63.54     (  3, 38, 32)
       -37.86     (  3, 38, 32)      40.17     (  3, 38, 32)     -23.50     (  3, 38, 32)      24.87     (  3, 38, 32)
       -14.45     (  3, 38, 32)      15.36     (  3, 38, 32)     -8.919     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  15 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2134     (  1, 35,  1)    -0.3060E-01 (  3, 38, 32)     0.2365E-01 (  3, 38, 32)    -0.2075E-01 (  3, 38, 32)
       0.1514E-01 (  3, 38, 32)    -0.1281E-01 (  3, 38, 32)     0.9534E-02 (  3, 38, 32)    -0.7871E-02 (  3, 38, 32)
       0.5932E-02 (  3, 38, 32)    -0.4838E-02 (  3, 38, 32)     0.3687E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -112.6     (  1, 50, 26)     -92.21     (  3, 38, 32)      55.75     (  3, 38, 32)     -58.48     (  3, 38, 32)
        34.93     (  3, 38, 32)     -36.68     (  3, 38, 32)      21.66     (  3, 38, 32)     -22.74     (  3, 38, 32)
        13.37     (  3, 38, 32)     -14.08     (  3, 38, 32)      8.278     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  16 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2023     (  1, 35,  1)     0.2298E-01 (  3, 38, 32)    -0.2606E-01 (  3, 38, 32)     0.1763E-01 (  3, 38, 32)
      -0.1596E-01 (  3, 38, 32)     0.1094E-01 (  3, 38, 32)    -0.9644E-02 (  3, 38, 32)     0.6691E-02 (  3, 38, 32)
```

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     -0.5836E-02 (  3, 38, 32)      0.4105E-02 (  3, 38, 32)     -0.3566E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -99.93     (  1, 50, 26)       91.56     (  3, 38, 32)      -54.59     (  3, 38, 32)       56.92     (  3, 38, 32)
       -33.53     (  3, 38, 32)       34.70     (  3, 38, 32)      -20.29     (  3, 38, 32)       21.09     (  3, 38, 32)
       -12.33     (  3, 38, 32)       12.91     (  3, 38, 32)      -7.568     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  17 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1921     (  1, 36,  1)     -0.2658E-01 (  3, 38, 32)      0.2102E-01 (  3, 38, 32)     -0.1815E-01 (  3, 38, 32)
       0.1317E-01 (  3, 38, 32)     -0.1099E-01 (  3, 38, 32)      0.8116E-02 (  3, 38, 32)     -0.6655E-02 (  3, 38, 32)
       0.4982E-02 (  3, 38, 32)     -0.4056E-02 (  3, 38, 32)      0.3074E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -88.86     (  1, 50, 26)      -81.46     (  3, 38, 32)       49.65     (  3, 38, 32)      -50.68     (  3, 38, 32)
        30.48     (  3, 38, 32)      -31.10     (  3, 38, 32)       18.57     (  3, 38, 32)      -19.00     (  3, 38, 32)
        11.34     (  3, 38, 32)      -11.68     (  3, 38, 32)       6.980     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP  18 IN STRESS PERIOD  1
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1827     (  1, 36,  1)      0.1992E-01 (  3, 38, 32)     -0.2297E-01 (  3, 38, 32)      0.1552E-01 (  3, 38, 32)
      -0.1385E-01 (  3, 38, 32)      0.9466E-02 (  3, 38, 32)     -0.8260E-02 (  3, 38, 32)      0.5725E-02 (  3, 38, 32)
      -0.4963E-02 (  3, 38, 32)      0.3493E-02 (  3, 38, 32)     -0.3021E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -81.57     (  2, 39, 10)       80.56     (  3, 38, 32)      -48.55     (  3, 38, 32)       49.22     (  3, 38, 32)
       -29.33     (  3, 38, 32)       29.56     (  3, 38, 32)      -17.55     (  3, 38, 32)       17.81     (  3, 38, 32)
       -10.60     (  3, 38, 32)       10.86     (  3, 38, 32)      -6.484     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  19 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1741     (  1, 36,  1)     -0.2336E-01 (  3, 38, 32)      0.1892E-01 (  3, 38, 32)     -0.1608E-01 (  3, 38, 32)
       0.1162E-01 (  3, 38, 32)     -0.9586E-02 (  3, 38, 32)      0.7041E-02 (  3, 38, 32)     -0.5743E-02 (  3, 38, 32)
       0.4281E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -76.05     (  2, 39, 10)      -72.85     (  3, 38, 32)       44.77     (  3, 38, 32)      -44.48     (  3, 38, 32)
        27.00     (  3, 38, 32)      -26.83     (  3, 38, 32)       16.23     (  3, 38, 32)      -16.23     (  3, 38, 32)
        9.833     (  3, 38, 32)
0
```

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0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  20 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1663     (  1, 36,  1)     0.2879E-01 (  3, 38, 32)    -0.2789E-01 (  3, 38, 32)     0.1713E-01 (  3, 38, 32)
      -0.1440E-01 (  3, 38, 32)     0.9295E-02 (  3, 38, 32)    -0.7941E-02 (  3, 38, 32)     0.5295E-02 (  3, 38, 32)
      -0.4570E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        74.41     (  1, 53, 69)      107.5      (  3, 38, 32)      -51.95     (  3, 38, 32)      54.70     (  3, 38, 32)
       -27.67     (  3, 38, 32)      29.99      (  3, 38, 32)      -15.49     (  3, 38, 32)      17.24     (  3, 38, 32)
       -9.007     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  21 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1592     (  1, 36,  1)    -0.3012E-01 (  3, 38, 32)     0.2348E-01 (  3, 38, 32)    -0.1730E-01 (  3, 38, 32)
       0.1232E-01 (  3, 38, 32)    -0.9425E-02 (  3, 38, 32)     0.6896E-02 (  3, 38, 32)    -0.5364E-02 (  3, 38, 32)
       0.4008E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        70.75     (  3, 38, 32)     -95.97      (  3, 38, 32)      47.34      (  3, 38, 32)     -49.67     (  3, 38, 32)
        25.47     (  3, 38, 32)     -27.58      (  3, 38, 32)      14.37      (  3, 38, 32)     -15.94     (  3, 38, 32)
        8.383     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  22 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1527     (  1, 36,  1)     0.2471E-01 (  3, 38, 32)    -0.2397E-01 (  3, 38, 32)     0.1473E-01 (  3, 38, 32)
      -0.1242E-01 (  3, 38, 32)     0.8012E-02 (  3, 38, 32)    -0.6851E-02 (  3, 38, 32)     0.4558E-02 (  3, 38, 32)
      -0.3934E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        68.80     (  1, 53, 69)      92.79      (  3, 38, 32)      -44.32     (  3, 38, 32)      47.39     (  3, 38, 32)
       -23.65     (  3, 38, 32)      26.05      (  3, 38, 32)      -13.22     (  3, 38, 32)      14.95     (  3, 38, 32)
       -7.655     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  23 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
```

```
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1470     (  1, 37,  1)     -0.2614E-01 (  3, 38, 32)      0.2058E-01 (  3, 38, 32)     -0.1501E-01 (  3, 38, 32)
       0.1066E-01 (  3, 38, 32)     -0.8115E-02 (  3, 38, 32)      0.5923E-02 (  3, 38, 32)     -0.4592E-02 (  3, 38, 32)
       0.3425E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        67.53     (  1, 53, 69)      -84.25     (  3, 38, 32)      41.21     (  3, 38, 32)      -43.02     (  3, 38, 32)
        21.96     (  3, 38, 32)      -23.73     (  3, 38, 32)      12.30     (  3, 38, 32)      -13.64     (  3, 38, 32)
        7.138     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  24 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1420     (  1, 38,  1)      0.2138E-01 (  3, 38, 32)     -0.2089E-01 (  3, 38, 32)      0.1279E-01 (  3, 38, 32)
      -0.1075E-01 (  3, 38, 32)      0.6928E-02 (  3, 38, 32)     -0.5914E-02 (  3, 38, 32)      0.3930E-02 (  3, 38, 32)
      -0.3391E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        66.47     (  1, 53, 69)       81.04     (  3, 38, 32)      -38.50     (  3, 38, 32)       41.09     (  3, 38, 32)
       -20.44     (  3, 38, 32)       22.52     (  3, 38, 32)      -11.39     (  3, 38, 32)       12.90     (  3, 38, 32)
       -6.586     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP  25 IN STRESS PERIOD  1
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1378     (  1, 38,  1)     -0.2279E-01 (  3, 38, 32)      0.1802E-01 (  3, 38, 32)     -0.1303E-01 (  3, 38, 32)
       0.9239E-02 (  3, 38, 32)     -0.7016E-02 (  3, 38, 32)      0.5122E-02 (  3, 38, 32)     -0.3969E-02 (  3, 38, 32)
       0.2962E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        64.74     (  1, 53, 69)      -74.00     (  3, 38, 32)      35.82     (  3, 38, 32)      -37.30     (  3, 38, 32)
        19.00     (  3, 38, 32)      -20.51     (  3, 38, 32)      10.64     (  3, 38, 32)      -11.79     (  3, 38, 32)
        6.184     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  26 IN STRESS PERIOD  1
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1338     (  1, 38,  1)      0.1868E-01 (  3, 38, 32)     -0.1826E-01 (  3, 38, 32)      0.1112E-01 (  3, 38, 32)
      -0.9351E-02 (  3, 38, 32)      0.6029E-02 (  3, 38, 32)     -0.5154E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        62.69     (  1, 53, 69)       71.10     (  3, 38, 32)      -33.42     (  3, 38, 32)       35.76     (  3, 38, 32)
```

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      -17.76     (  3, 38, 32)       19.61     (  3, 38, 32)      -9.935     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  27 IN STRESS PERIOD  1
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1298     (  1, 38,  1)     -0.2887E-01 (  3, 38, 32)      0.1993E-01 (  3, 38, 32)     -0.1317E-01 (  3, 38, 32)
       0.9311E-02 (  3, 38, 32)     -0.6749E-02 (  3, 38, 32)      0.4955E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        78.50     (  3, 38, 32)      -85.77     (  3, 38, 32)       34.80     (  3, 38, 32)      -39.27     (  3, 38, 32)
        17.27     (  3, 38, 32)      -20.67     (  3, 38, 32)       9.386     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  28 IN STRESS PERIOD  1
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1253     (  1, 38,  1)      0.2474E-01 (  3, 38, 32)     -0.1946E-01 (  3, 38, 32)      0.1117E-01 (  3, 38, 32)
      -0.9262E-02 (  3, 38, 32)      0.5774E-02 (  3, 38, 32)     -0.4945E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -72.13     (  3, 38, 32)       79.45     (  3, 38, 32)      -32.57     (  3, 38, 32)       36.72     (  3, 38, 32)
       -16.42     (  3, 38, 32)       19.42     (  3, 38, 32)      -8.983     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  29 IN STRESS PERIOD  1
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1203     (  1, 38,  1)     -0.2556E-01 (  3, 38, 32)      0.1746E-01 (  3, 38, 32)     -0.1159E-01 (  3, 38, 32)
       0.8212E-02 (  3, 38, 32)     -0.5979E-02 (  3, 38, 32)      0.4399E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        70.80     (  3, 38, 32)      -74.89     (  3, 38, 32)       30.75     (  3, 38, 32)      -34.48     (  3, 38, 32)
        15.38     (  3, 38, 32)      -18.26     (  3, 38, 32)       8.421     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  30 IN STRESS PERIOD  1
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1151     (  1, 38,  1)      0.2223E-01 (  3, 38, 32)     -0.1738E-01 (  3, 38, 32)      0.9975E-02 (  3, 38, 32)
      -0.8283E-02 (  3, 38, 32)      0.5182E-02 (  3, 38, 32)     -0.4443E-02 (  3, 38, 32)
```

```
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------
       -64.88     (  3, 38, 32)      71.16     (  3, 38, 32)      -28.93     (  3, 38, 32)      32.91     (  3, 38, 32)
       -14.65     (  3, 38, 32)      17.47     (  3, 38, 32)      -8.065     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0


                         VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 30 IN STRESS PERIOD  1
                         ------------------------------------------------------------------------------
0                 CUMULATIVE VOLUMES      L**3                                  RATES FOR THIS TIME STEP      L**3/T
                  ------------------                                            ------------------------

                        IN:                                                            IN:
                        ---                                                            ---
                          STORAGE =   0.95706E+07                                      STORAGE =    53729.
                    CONSTANT HEAD =   0.00000                                    CONSTANT HEAD =   0.00000
                            WELLS =    31500.                                            WELLS =    525.00
                           DRAINS =   0.00000                                           DRAINS =   0.00000
                         RECHARGE =   0.17074E+07                                     RECHARGE =    28408.
                    RIVER LEAKAGE =   0.88347E+06                                RIVER LEAKAGE =    24317.
                  HEAD DEP BOUNDS =   0.96510E+07                              HEAD DEP BOUNDS =   0.20796E+06
0                       TOTAL IN =   0.21844E+08                                    TOTAL IN =   0.31494E+06
0                       OUT:                                                           OUT:
                        ----                                                           ----
                          STORAGE =   0.36450E+06                                      STORAGE =    12.772
                    CONSTANT HEAD =   0.84772E+06                                CONSTANT HEAD =    11502.
                            WELLS =   0.16036E+08                                        WELLS =   0.26726E+06
                           DRAINS =   0.13372E+07                                       DRAINS =    16189.
                         RECHARGE =   0.00000                                         RECHARGE =   0.00000
                    RIVER LEAKAGE =   0.17678E+06                                RIVER LEAKAGE =    174.41
                  HEAD DEP BOUNDS =   0.31116E+07                              HEAD DEP BOUNDS =    20101.
0                      TOTAL OUT =   0.21874E+08                                   TOTAL OUT =   0.31524E+06
0                       IN - OUT =   -29630.                                         IN - OUT =   -298.72
0               PERCENT DISCREPANCY =              -0.14                     PERCENT DISCREPANCY =              -0.09


0


         TIME SUMMARY AT END OF TIME STEP 30 IN STRESS PERIOD  1
                            SECONDS        MINUTES        HOURS          DAYS           YEARS
                         ---------------------------------------------------------------------
     TIME STEP LENGTH        172800.        2880.00       48.0000        2.00000       0.547570E-02
   STRESS PERIOD TIME      0.518400E+07    86400.0       1440.00        60.0000       0.164271
 TOTAL SIMULATION TIME     0.518400E+07    86400.0       1440.00        60.0000       0.164271
1
1                                          STRESS PERIOD NO.   2, LENGTH =   60.00000
                                           ---------------------------------------------

                                           NUMBER OF TIME STEPS =    30

                                            MULTIPLIER FOR DELT =     1.000

                                          INITIAL TIME STEP SIZE =   2.000000
0            22 WELLS
                                         LAYER    ROW    COL    STRESS RATE   WELL NO.
                                         ---------------------------------------------
                                           1      26     39      35.000          1
                                           1      27     39      35.000          2
                                           1      28     39      35.000          3
                                           1      28     40      35.000          4
                                           1      29     39      35.000          5
                                           1      30     40      35.000          6
                                           1      31     40      35.000          7
                                           1      32     41      35.000          8
```

1	33	41	35.000	9
1	35	42	35.000	10
1	36	43	35.000	11
1	37	44	35.000	12
1	39	44	35.000	13
1	40	45	35.000	14
1	41	45	35.000	15
2	26	20	-79556.	16
2	21	19	-65766.	17
2	38	19	-85702.	18
2	39	18	-79760.	19
2	13	27	-17809.	20
2	32	49	-6700.0	21
2	34	49	-6700.0	22

OREUSING DRAINS FROM LAST STRESS PERIOD
0 RECHARGE = 0.0000000
0

40 RIVER REACHES
0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	65	41	82.60	0.2000E+07	79.60	1
1	32	56	80.30	1760.	77.30	2
1	33	57	80.30	2400.	77.30	3
1	35	56	80.30	1920.	77.30	4
1	34	57	80.30	2560.	77.30	5
1	34	58	80.30	2240.	77.30	6
1	37	61	80.30	1920.	77.30	7
1	36	60	80.30	2400.	77.30	8
1	35	59	80.30	2080.	77.30	9
1	34	60	80.30	1600.	77.30	10
1	29	56	80.30	2080.	77.30	11
1	30	57	80.30	2400.	77.30	12
1	31	58	80.30	2240.	77.30	13
1	32	59	80.30	2240.	77.30	14
1	33	60	80.30	2400.	77.30	15
1	64	41	82.60	2000.	79.60	16
1	63	41	82.40	1600.	79.40	17
1	62	40	82.20	2000.	79.20	18
1	61	40	82.00	2200.	79.00	19
1	60	40	81.80	2000.	78.80	20
1	59	40	81.60	2200.	78.60	21
1	58	41	81.40	2000.	78.40	22
1	57	42	81.20	1600.	78.20	23
1	56	41	81.00	2200.	78.00	24
1	55	41	80.80	1600.	77.80	25
1	55	40	80.80	1800.	77.80	26
1	54	39	80.60	2200.	77.60	27
1	53	39	80.40	2400.	77.40	28
1	52	40	80.20	2000.	77.20	29
1	51	40	80.00	1600.	77.00	30
1	51	41	80.00	1000.	77.00	31
1	50	41	79.80	1600.	76.80	32
1	50	42	79.80	1200.	76.80	33
1	49	42	79.60	2400.	76.60	34
1	48	43	79.40	2200.	76.40	35
1	47	43	79.20	5000.	76.20	36
1	46	43	79.00	5000.	76.00	37
1	45	43	78.70	5000.	75.70	38
1	44	43	78.40	5000.	75.40	39
1	43	42	78.10	5000.	75.10	40

0

358 HEAD-DEPENDENT BOUNDARY NODES
0

LAYER	ROW	COL	ELEVATION	CONDUCTANCE	BOUND NO.
1	1	21	69.00	3750.	1
2	1	22	69.00	1053.	2
2	1	23	69.00	583.1	3
2	1	24	69.00	624.4	4
2	1	25	69.00	985.2	5
2	2	22	69.00	1038.	6
2	2	23	69.00	572.6	7
2	2	24	69.00	632.6	8
2	2	25	69.00	1046.	9

2	3	22	69.00	1069.	10
2	3	23	69.00	553.9	11
2	3	24	69.00	623.1	12
2	3	25	69.00	1019.	13
2	4	22	69.00	1220.	14
2	4	23	69.00	557.0	15
2	4	24	69.00	596.6	16
2	4	25	69.00	996.3	17
2	5	23	69.00	580.7	18
2	5	24	69.00	575.3	19
2	5	25	69.00	984.3	20
2	6	23	69.00	591.9	21
2	6	24	69.00	581.9	22
2	6	25	69.00	1018.	23
2	7	23	69.00	982.5	24
2	7	24	69.00	616.6	25
2	7	25	69.00	1111.	26
1	8	23	69.00	3072.	27
2	8	24	69.00	636.1	28
2	8	25	69.00	1537.	29
2	9	24	69.00	883.4	30
2	10	24	69.00	1478.	31
1	11	23	69.00	3750.	32
2	11	24	69.00	1383.	33
1	12	23	69.00	2582.	34
2	12	24	69.00	940.0	35
1	13	23	69.00	1924.	36
2	13	24	69.00	788.1	37
2	14	23	69.00	1596.	38
2	14	24	69.00	576.8	39
1	14	25	69.00	3750.	40
2	15	23	69.00	1354.	41
2	15	24	69.00	653.2	42
1	15	25	69.00	3750.	43
2	16	23	69.00	1211.	44
2	16	24	69.00	685.7	45
1	16	25	69.00	3750.	46
2	17	23	69.00	1094.	47
2	17	24	69.00	679.2	48
2	18	23	74.40	584.4	49
2	18	24	74.80	467.0	50
1	18	25	75.20	3750.	51
2	19	23	74.40	528.3	52
2	19	24	74.80	423.0	53
2	20	23	74.40	467.6	54
2	20	24	74.80	328.2	55
1	20	25	75.20	3750.	56
2	21	23	74.40	490.1	57
2	21	24	74.80	357.8	58
1	21	25	75.20	1001.	59
2	22	23	74.40	599.1	60
2	22	24	74.80	339.9	61
2	22	25	75.20	569.3	62
2	23	23	74.40	714.2	63
2	23	24	74.80	330.4	64
2	23	25	75.20	430.8	65
1	23	26	75.60	1697.	66
2	24	23	74.40	768.0	67
2	24	24	74.80	339.3	68
2	24	25	75.20	362.3	69
2	24	26	75.60	703.4	70
2	25	23	74.40	738.8	71
2	25	24	74.80	342.5	72
2	25	25	75.20	314.8	73
2	25	26	75.60	388.0	74
1	25	27	76.00	747.0	75
1	25	28	76.40	728.1	76
1	25	29	76.80	2384.	77
2	26	23	74.40	679.6	78
2	26	24	74.80	338.0	79
2	26	25	75.20	300.4	80
2	26	26	75.60	324.4	81
2	26	27	76.00	400.6	82
2	26	28	76.40	386.9	83
1	26	29	76.80	736.8	84

1	26	30	77.20	3750.	85
1	27	22	74.00	3750.	86
2	27	23	74.40	651.7	87
2	27	24	74.80	335.5	88
2	27	25	75.20	318.5	89
2	27	26	75.60	378.1	90
2	27	27	76.00	387.6	91
2	27	28	76.40	331.8	92
2	27	29	76.80	467.2	93
1	28	22	74.00	3750.	94
2	28	23	74.40	651.4	95
2	28	24	74.80	330.9	96
2	28	25	75.20	383.4	97
2	28	26	75.60	567.9	98
2	28	27	76.00	525.2	99
2	28	28	76.40	370.4	100
2	28	29	76.80	351.9	101
1	28	30	77.20	1006.	102
1	29	22	74.00	3148.	103
2	29	24	74.80	424.1	104
2	29	25	75.20	560.2	105
1	29	26	75.60	1580.	106
1	29	27	76.00	930.8	107
2	29	28	76.40	446.5	108
2	29	29	76.80	339.2	109
1	29	30	77.20	743.6	110
2	30	28	76.40	468.9	111
2	30	29	76.80	377.4	112
2	30	30	77.20	614.2	113
1	30	31	77.60	3412.	114
1	31	24	74.80	1888.	115
1	31	25	75.20	1160.	116
1	31	26	75.60	2696.	117
1	31	27	76.00	987.5	118
2	31	28	76.40	478.7	119
2	31	29	76.80	409.2	120
2	31	30	77.20	510.2	121
1	31	31	77.60	839.2	122
1	31	32	78.00	2045.	123
1	32	21	73.60	3750.	124
1	32	22	74.00	3178.	125
1	32	23	74.40	2074.	126
1	32	24	74.80	1274.	127
2	32	25	75.20	634.6	128
2	32	26	75.60	623.4	129
2	32	27	76.00	577.0	130
2	32	28	76.40	470.9	131
2	32	29	76.80	421.4	132
2	32	30	77.20	437.1	133
2	32	31	77.60	443.5	134
1	32	32	78.00	703.3	135
1	33	20	73.20	3750.	136
1	33	21	73.60	3750.	137
1	33	22	74.00	1994.	138
1	33	23	74.40	1066.	139
2	33	24	74.80	532.7	140
2	33	25	75.20	388.3	141
2	33	26	75.60	354.3	142
2	33	27	76.00	447.1	143
2	33	28	76.40	433.4	144
2	33	29	76.80	409.3	145
2	33	30	77.20	378.0	146
2	33	31	77.60	297.9	147
2	33	32	78.00	427.6	148
1	33	33	78.40	1290.	149
1	34	19	72.80	3750.	150
1	34	20	73.20	3750.	151
1	34	21	73.60	3750.	152
1	34	22	74.00	1497.	153
2	34	23	74.40	654.3	154
2	34	24	74.80	335.0	155
2	34	25	75.20	309.2	156
2	34	26	75.60	321.6	157
2	34	27	76.00	392.6	158
2	34	28	76.40	419.8	159

2	34	29	76.80	401.0	160
2	34	30	77.20	351.9	161
2	34	31	77.60	296.1	162
2	34	32	78.00	327.9	163
2	34	33	78.40	557.9	164
1	35	19	72.80	3750.	165
1	35	20	73.20	3750.	166
1	35	21	73.60	3750.	167
1	35	22	74.00	1368.	168
2	35	23	74.40	537.8	169
2	35	24	74.80	314.8	170
2	35	25	75.20	290.8	171
2	35	26	75.60	329.8	172
2	35	27	76.00	382.7	173
2	35	28	76.40	429.2	174
2	35	29	76.80	413.4	175
2	35	30	77.20	359.1	176
2	35	31	77.60	308.7	177
2	35	32	78.00	289.6	178
2	35	33	78.40	400.2	179
1	35	34	78.00	960.3	180
1	35	35	78.00	859.3	181
1	36	20	73.20	3750.	182
1	36	21	73.60	3750.	183
1	36	22	74.00	1344.	184
2	36	23	74.40	526.0	185
2	36	24	74.80	321.7	186
2	36	25	75.20	292.5	187
2	36	26	75.60	356.3	188
2	36	27	76.00	440.5	189
2	36	28	76.40	467.1	190
2	36	29	76.80	454.7	191
2	36	30	77.20	401.2	192
2	36	31	77.60	343.0	193
2	36	32	78.00	333.8	194
2	36	33	78.40	455.0	195
2	36	34	78.00	516.9	196
2	36	35	78.00	421.4	197
1	36	36	78.00	796.5	198
1	37	16	74.00	3750.	199
1	37	21	73.60	3750.	200
1	37	22	74.00	1836.	201
2	37	23	74.40	556.2	202
2	37	24	74.80	332.0	203
2	37	25	75.20	305.4	204
2	37	26	75.60	381.6	205
2	37	27	76.00	500.7	206
2	37	28	76.40	581.5	207
2	37	29	76.80	540.3	208
2	37	30	77.20	473.5	209
2	37	31	77.60	430.9	210
2	37	32	78.00	474.1	211
1	37	33	78.40	702.9	212
2	37	34	78.00	404.1	213
2	37	35	78.00	314.2	214
2	37	36	78.00	499.8	215
1	37	37	78.00	964.0	216
1	38	13	74.00	2544.	217
1	38	14	74.00	1288.	218
1	38	15	74.00	1560.	219
1	38	22	74.00	2781.	220
2	38	23	74.40	597.6	221
2	38	24	74.80	347.9	222
2	38	25	75.20	317.2	223
2	38	26	75.60	434.1	224
2	38	27	76.00	599.3	225
1	38	28	76.40	728.6	226
1	38	29	76.80	712.5	227
2	38	30	77.20	601.9	228
2	38	34	78.00	440.7	229
2	38	35	78.00	339.4	230
2	38	36	78.00	383.0	231
1	38	37	78.00	588.6	232
1	39	12	74.00	3750.	233
1	39	13	74.00	1865.	234

1	39	14	74.00	1014.	235
1	39	15	74.00	1609.	236
2	39	23	74.40	643.3	237
2	39	24	74.80	364.4	238
2	39	25	75.20	335.1	239
2	39	26	75.60	558.3	240
1	39	27	76.00	892.1	241
1	39	33	78.40	1217.	242
2	39	34	78.00	513.0	243
2	39	35	78.00	383.6	244
2	39	36	78.00	366.8	245
2	39	37	78.00	473.4	246
1	40	12	74.00	3750.	247
1	40	13	74.00	2009.	248
2	40	23	74.40	710.0	249
2	40	24	74.80	406.4	250
2	40	25	75.20	414.0	251
1	40	26	75.60	946.1	252
1	40	27	76.00	1762.	253
1	40	32	78.00	1738.	254
1	40	33	78.40	1171.	255
1	40	34	78.00	622.3	256
2	40	35	78.00	474.0	257
2	40	36	78.00	422.3	258
2	40	37	78.00	515.3	259
1	40	38	78.00	618.9	260
1	40	39	78.00	576.9	261
1	40	40	78.00	1466.	262
1	41	21	73.60	3750.	263
1	41	22	74.00	1237.	264
1	41	23	74.40	820.5	265
2	41	24	74.80	474.2	266
2	41	25	75.20	714.3	267
1	41	32	78.00	2225.	268
1	41	33	78.40	1496.	269
1	41	34	78.00	870.7	270
1	41	35	78.00	631.4	271
2	41	36	78.00	546.2	272
1	41	37	78.00	630.7	273
1	41	38	78.00	597.6	274
1	41	39	78.00	587.3	275
1	41	40	78.00	1342.	276
1	42	21	73.60	1877.	277
1	42	22	74.00	911.9	278
2	42	23	74.40	691.3	279
2	42	24	74.80	538.9	280
1	42	25	75.20	1928.	281
1	42	34	78.00	1204.	282
1	42	35	78.00	883.0	283
1	42	36	78.00	812.9	284
1	42	37	78.00	865.5	285
1	42	38	78.00	757.2	286
1	42	39	78.00	810.3	287
1	42	40	78.00	1594.	288
1	42	41	78.00	3750.	289
1	43	21	73.60	1179.	290
2	43	22	74.00	707.0	291
2	43	23	74.40	661.5	292
2	43	24	74.80	667.9	293
1	43	25	75.20	3750.	294
1	44	20	73.20	3750.	295
2	44	21	73.60	863.2	296
2	44	22	74.00	604.1	297
2	44	23	74.40	727.2	298
1	45	20	73.20	3750.	299
2	45	21	73.60	751.8	300
2	45	22	74.00	642.7	301
1	45	23	74.40	954.2	302
1	46	19	72.80	3750.	303
1	46	20	73.20	1838.	304
2	46	21	73.60	715.6	305
2	46	22	74.00	768.7	306
1	46	23	74.40	1498.	307
1	47	19	72.80	1779.	308
1	47	20	73.20	1111.	309

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                    2      47      21    73.60          702.0          310
                    1      47      22    74.00          1027.          311
                    1      47      23    74.40          3251.          312
                    1      48      19    72.80          1124.          313
                    1      48      20    73.20          1056.          314
                    1      48      21    73.60          967.4          315
                    1      48      22    74.00          1688.          316
                    1      49      17    74.00          2436.          317
                    1      49      18    72.40          1744.          318
                    1      49      19    72.80          1327.          319
                    1      49      20    73.20          1326.          320
                    1      49      21    73.60          1569.          321
                    1      49      22    74.00          3750.          322
                    1      50      16    74.00          3065.          323
                    1      50      17    74.00          1649.          324
                    1      50      18    72.40          2709.          325
                    1      51      14    74.00          2987.          326
                    1      51      15    74.00          1462.          327
                    1      51      16    74.00          1914.          328
                    1      51      17    74.00          2091.          329
                    1      52      14    74.00          2101.          330
                    1      52      15    74.00          1778.          331
                    1      52      16    74.00          2742.          332
                    1      53      12    76.00          3750.          333
                    1      53      13    76.00          3030.          334
                    1      54      11    76.00          3750.          335
                    1      54      12    76.00          3609.          336
                    1      54      13    76.00          2700.          337
                    1      55       8    76.00          3750.          338
                    1      55       9    76.00          3750.          339
                    1      55      10    76.00          3750.          340
                    1      55      11    76.00          2980.          341
                    1      55      12    76.00          3750.          342
                    1      56       6    76.00          3750.          343
                    1      56       7    76.00          3750.          344
                    1      56       8    76.00          3750.          345
                    1      56       9    76.00          3117.          346
                    1      56      10    76.00          3750.          347
                    1      56      11    76.00          3750.          348
                    1      57       5    76.00          3750.          349
                    1      57       6    76.00          3750.          350
                    1      57       7    76.00          3750.          351
                    1      57       8    76.00          3750.          352
                    1      57       9    76.00          3750.          353
                    1      57      10    76.00          3750.          354
                    1      58       4    76.00          3750.          355
                    1      58       5    76.00          3347.          356
                    1      58       6    76.00          3750.          357
                    1      59       5    76.00          3750.          358
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  1  STRESS PERIOD=  2      (ROW,COL)
  DRY(  5, 12)    DRY( 11, 36)    DRY( 15, 37)    DRY( 16, 35)    DRY( 17, 39)    DRY( 24, 51)    DRY( 27,  9)    DRY( 28,  8)
  DRY( 30,  5)    DRY( 33,  4)    DRY( 33, 73)    DRY( 34,  3)    DRY( 38,  3)    DRY( 39,  4)    DRY( 42, 53)    DRY( 43,  5)
  DRY( 43,  8)    DRY( 44,  6)    DRY( 44, 51)    DRY( 49, 71)    DRY( 51,  7)    DRY( 52, 58)    DRY( 53, 59)    DRY( 55, 60)
  DRY( 57, 32)    DRY( 57, 33)    DRY( 58, 62)    DRY( 62, 35)
0
   45 CALLS TO PCG ROUTINE FOR TIME STEP   1 IN STRESS PERIOD  2
   45 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -7.570     (  2, 38, 19)      -2.417     (  1, 52, 19)      1.747     (  1, 53, 18)      -1.590     (  1, 53, 18)
        1.004     (  1, 53, 18)     -0.7185     (  1, 53, 18)    -0.6983     (  3, 38, 32)      0.5909     (  3, 38, 32)
      -0.4909     (  3, 38, 32)      0.3860     (  3, 38, 32)    -0.3141     (  3, 38, 32)      0.2459     (  3, 38, 32)
      -0.2000     (  3, 38, 32)      0.1566     (  3, 38, 32)    -0.1275     (  3, 38, 32)      0.9982E-01 (  3, 38, 32)
      -0.8129E-01 (  3, 38, 32)      0.6367E-01 (  3, 38, 32)    -0.5187E-01 (  3, 38, 32)      0.4063E-01 (  3, 38, 32)
      -0.3312E-01 (  3, 38, 32)      0.2594E-01 (  3, 38, 32)    -0.2115E-01 (  3, 38, 32)      0.1656E-01 (  3, 38, 32)
      -0.1351E-01 (  3, 38, 32)      0.1058E-01 (  3, 38, 32)    -0.8633E-02 (  3, 38, 32)      0.6760E-02 (  3, 38, 32)
      -0.5518E-02 (  3, 38, 32)      0.4320E-02 (  3, 38, 32)    -0.3527E-02 (  3, 38, 32)      0.2762E-02 (  3, 38, 32)
      -0.2255E-02 (  3, 38, 32)      0.1766E-02 (  3, 38, 32)    -0.1442E-02 (  3, 38, 32)      0.1129E-02 (  3, 38, 32)
      -0.9225E-03 (  3, 38, 32)      0.7221E-03 (  3, 38, 32)    -0.5901E-03 (  3, 38, 32)      0.4619E-03 (  3, 38, 32)
      -0.3775E-03 (  3, 38, 32)      0.2955E-03 (  3, 38, 32)    -0.2416E-03 (  3, 38, 32)      0.1891E-03 (  3, 38, 32)
      -0.1546E-03 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
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 ----------------------------------------------------------------------------------------------------------------------------
      0.2079E+06 (  1, 65, 41)     0.1543E+06 (  1, 65, 41)     0.1164E+06 (  1, 65, 41)     0.8666E+05 (  1, 65, 41)
      0.6634E+05 (  1, 65, 41)     0.5095E+05 (  1, 65, 41)     0.4047E+05 (  1, 65, 41)     0.3211E+05 (  1, 65, 41)
      0.2582E+05 (  1, 65, 41)     0.2056E+05 (  1, 65, 41)     0.1655E+05 (  1, 65, 41)     0.1318E+05 (  1, 65, 41)
      0.1061E+05 (  1, 65, 41)      8451.     (  1, 65, 41)      6800.     (  1, 65, 41)      5416.     (  1, 65, 41)
       4358.     (  1, 65, 41)      3471.     (  1, 65, 41)      2793.     (  1, 65, 41)      2225.     (  1, 65, 41)
       1790.     (  1, 65, 41)      1426.     (  1, 65, 41)      1147.     (  1, 65, 41)      913.7     (  1, 65, 41)
       735.1     (  1, 65, 41)      585.5     (  1, 65, 41)      471.0     (  1, 65, 41)      375.2     (  1, 65, 41)
       301.8     (  1, 65, 41)      240.4     (  1, 65, 41)      193.4     (  1, 65, 41)      154.1     (  1, 65, 41)
       123.9     (  1, 65, 41)      98.72     (  1, 65, 41)      79.41     (  1, 65, 41)      63.25     (  1, 65, 41)
       50.88     (  1, 65, 41)      40.53     (  1, 65, 41)      32.60     (  1, 65, 41)      25.97     (  1, 65, 41)
       20.89     (  1, 65, 41)      16.64     (  1, 65, 41)      13.38     (  1, 65, 41)      10.66     (  1, 65, 41)
       8.575     (  1, 65, 41)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  2  STRESS PERIOD=  2      (ROW,COL)
  DRY( 18, 40)    DRY( 54, 24)    DRY( 58, 34)
    25 CALLS TO PCG ROUTINE FOR TIME STEP   2 IN STRESS PERIOD  2
    25 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------
      -1.900     (  1, 38, 19)    -0.4114     (  3, 40, 16)     0.2987     (  3, 41, 17)    -0.2287     (  3, 41, 17)
     -0.1387     (  1, 65, 44)     0.1282     (  3, 38, 32)    -0.1286     (  3, 38, 32)     0.1100     (  3, 38, 32)
     -0.9377E-01 (  3, 38, 32)     0.7458E-01 (  3, 38, 32)    -0.6132E-01 (  3, 38, 32)     0.4816E-01 (  3, 38, 32)
     -0.3939E-01 (  3, 38, 32)     0.3090E-01 (  3, 38, 32)    -0.2526E-01 (  3, 38, 32)     0.1981E-01 (  3, 38, 32)
     -0.1620E-01 (  3, 38, 32)     0.1271E-01 (  3, 38, 32)    -0.1039E-01 (  3, 38, 32)     0.8154E-02 (  3, 38, 32)
     -0.6666E-02 (  3, 38, 32)     0.5233E-02 (  3, 38, 32)    -0.4279E-02 (  3, 38, 32)     0.3359E-02 (  3, 38, 32)
     -0.2747E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------
      -3672.     (  2, 38, 19)     1842.     (  1, 38, 19)     980.2     (  1, 38, 19)     745.1     (  1, 38, 19)
       540.7     (  1, 38, 19)     431.5     (  1, 38, 19)    -362.0     (  3, 38, 32)     299.0     (  3, 38, 32)
      -249.5     (  3, 38, 32)     197.1     (  3, 38, 32)    -161.5     (  3, 38, 32)     126.8     (  3, 38, 32)
      -103.6     (  3, 38, 32)     81.27     (  3, 38, 32)    -66.46     (  3, 38, 32)     53.46     (  1, 38, 19)
       43.46     (  1, 38, 19)     35.39     (  1, 38, 19)     28.77     (  1, 38, 19)     23.41     (  1, 38, 19)
       19.02     (  1, 38, 19)     15.48     (  1, 38, 19)     12.57     (  1, 38, 19)     10.22     (  1, 38, 19)
       8.295     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  3  STRESS PERIOD=  2      (ROW,COL)
  DRY(  5, 13)    DRY( 10, 35)    DRY( 13, 31)    DRY( 16, 42)    DRY( 41, 54)    DRY( 64, 36)
    23 CALLS TO PCG ROUTINE FOR TIME STEP   3 IN STRESS PERIOD  2
    23 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------
      -0.9409    (  1, 39, 18)    -0.2537     (  3, 10, 25)    -0.1787     (  1, 53, 18)     0.1106     (  1, 65, 44)
      -0.1051    (  1, 65, 44)     0.8522E-01 (  1, 65, 44)    -0.6418E-01 (  1, 65, 44)    -0.5034E-01 (  3, 38, 32)
       0.4607E-01 (  3, 38, 32)    -0.4165E-01 (  3, 38, 32)     0.3410E-01 (  3, 38, 32)    -0.2837E-01 (  3, 38, 32)
       0.2243E-01 (  3, 38, 32)    -0.1836E-01 (  3, 38, 32)     0.1444E-01 (  3, 38, 32)    -0.1179E-01 (  3, 38, 32)
       0.9277E-02 (  3, 38, 32)    -0.7573E-02 (  3, 38, 32)     0.5961E-02 (  3, 38, 32)    -0.4867E-02 (  3, 38, 32)
       0.3832E-02 (  3, 38, 32)    -0.3129E-02 (  3, 38, 32)     0.2464E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL    RESIDUAL    LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------
      -1366.     (  2, 38, 19)     1041.     (  1, 38, 19)     680.6     (  1, 38, 19)     489.1     (  1, 38, 19)
       370.1     (  1, 38, 19)     286.5     (  1, 38, 19)     227.0     (  1, 38, 19)     180.5     (  1, 38, 19)
       146.5     (  1, 38, 19)     118.8     (  1, 38, 19)     97.39     (  1, 38, 19)     79.35     (  1, 38, 19)
       65.10     (  1, 38, 19)     53.07     (  1, 38, 19)     43.54     (  1, 38, 19)     35.50     (  1, 38, 19)
       29.11     (  1, 38, 19)     23.72     (  1, 38, 19)     19.44     (  1, 38, 19)     15.84     (  1, 38, 19)
       12.98     (  1, 38, 19)     10.56     (  1, 38, 19)     8.646     (  1, 38, 19)
```

```
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  4  STRESS PERIOD=  2      (ROW,COL)
  DRY(  1, 15)    DRY( 10, 32)    DRY( 12, 38)    DRY( 17, 34)    DRY( 28, 51)    DRY( 49,  8)    DRY( 54, 23)
    22 CALLS TO PCG ROUTINE FOR TIME STEP   4 IN STRESS PERIOD  2
    22 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7365     (  1, 12, 30)     0.2342     (  1, 52, 19)     -0.1544     (  1, 53, 18)     0.8112E-01 (  1, 53, 18)
      -0.6656E-01 (  1, 65, 44)     0.6369E-01 (  3, 38, 32)     -0.6138E-01 (  3, 38, 32)     0.5070E-01 (  3, 38, 32)
      -0.4292E-01 (  3, 38, 32)     0.3362E-01 (  3, 38, 32)     -0.2774E-01 (  3, 38, 32)     0.2160E-01 (  3, 38, 32)
      -0.1776E-01 (  3, 38, 32)     0.1384E-01 (  3, 38, 32)     -0.1138E-01 (  3, 38, 32)     0.8888E-02 (  3, 38, 32)
      -0.7306E-02 (  3, 38, 32)     0.5714E-02 (  3, 38, 32)     -0.4697E-02 (  3, 38, 32)     0.3677E-02 (  3, 38, 32)
      -0.3023E-02 (  3, 38, 32)     0.2369E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        924.3     (  2, 36, 20)      625.3     (  1, 38, 19)      472.5     (  1, 38, 19)      330.3     (  1, 38, 19)
        261.7     (  1, 38, 19)      207.7     (  1, 38, 19)      170.5     (  1, 38, 19)      140.9     (  3, 38, 32)
        114.3     (  1, 38, 19)      93.15     (  1, 38, 19)      77.08     (  1, 38, 19)      62.86     (  1, 38, 19)
        52.04     (  1, 38, 19)      42.45     (  1, 38, 19)      35.12     (  1, 38, 19)      28.65     (  1, 38, 19)
        23.69     (  1, 38, 19)      19.31     (  1, 38, 19)      15.97     (  1, 38, 19)      13.01     (  1, 38, 19)
        10.74     (  1, 38, 19)      8.757     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  5  STRESS PERIOD=  2      (ROW,COL)
  DRY(  4, 14)    DRY( 17, 32)    DRY( 44,  9)
    21 CALLS TO PCG ROUTINE FOR TIME STEP   5 IN STRESS PERIOD  2
    21 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.6250     (  1, 12, 30)     0.2005     (  1, 52, 19)     -0.1305     (  1, 53, 18)     0.7001E-01 (  1, 53, 18)
      -0.5765E-01 (  3, 38, 32)     0.5457E-01 (  3, 38, 32)     -0.4981E-01 (  3, 38, 32)     0.3977E-01 (  3, 38, 32)
      -0.3320E-01 (  3, 38, 32)     0.2576E-01 (  3, 38, 32)     -0.2122E-01 (  3, 38, 32)     0.1646E-01 (  3, 38, 32)
      -0.1355E-01 (  3, 38, 32)     0.1055E-01 (  3, 38, 32)     -0.8683E-02 (  3, 38, 32)     0.6778E-02 (  3, 38, 32)
      -0.5583E-02 (  3, 38, 32)     0.4368E-02 (  3, 38, 32)     -0.3599E-02 (  3, 38, 32)     0.2822E-02 (  3, 38, 32)
      -0.2327E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -761.0     (  1, 52, 19)      497.6     (  1, 52, 19)      330.5     (  1, 38, 19)      231.5     (  1, 38, 19)
        188.7     (  1, 38, 19)      161.2     (  3, 38, 32)      -129.1     (  3, 38, 32)      109.9     (  3, 38, 32)
        85.72     (  1, 38, 19)      70.39     (  3, 38, 32)      58.41     (  1, 38, 19)      47.82     (  1, 38, 19)
        39.81     (  1, 38, 19)      32.59     (  1, 38, 19)      27.11     (  1, 38, 19)      22.18     (  1, 38, 19)
        18.44     (  1, 38, 19)      15.09     (  1, 38, 19)      12.52     (  1, 38, 19)      10.23     (  1, 38, 19)
        8.491     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  6  STRESS PERIOD=  2      (ROW,COL)
  DRY( 12, 31)    DRY( 38,  4)    DRY( 46,  9)
    19 CALLS TO PCG ROUTINE FOR TIME STEP   6 IN STRESS PERIOD  2
    19 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.5216     (  1, 11, 31)     0.1652     (  1, 52, 19)     -0.1100     (  1, 53, 18)     0.5976E-01 (  1, 53, 18)
```

```
      0.4534E-01 (  3, 38, 32)     -0.4637E-01 (  3, 38, 32)      0.3862E-01 (  3, 38, 32)     -0.3243E-01 (  3, 38, 32)
      0.2551E-01 (  3, 38, 32)     -0.2081E-01 (  3, 38, 32)      0.1633E-01 (  3, 38, 32)     -0.1331E-01 (  3, 38, 32)
      0.1050E-01 (  3, 38, 32)     -0.8581E-02 (  3, 38, 32)      0.6814E-02 (  3, 38, 32)     -0.5590E-02 (  3, 38, 32)
      0.4470E-02 (  3, 38, 32)     -0.3687E-02 (  3, 38, 32)      0.2975E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -607.6     (  1, 52, 19)      422.2     (  1, 52, 19)      244.1     (  1, 38, 19)      170.1     (  1, 38, 19)
        141.2     (  1, 38, 19)     -130.5     (  3, 38, 32)      101.5     (  3, 38, 32)     -87.35     (  3, 38, 32)
        65.69     (  1, 38, 19)     -55.84     (  3, 38, 32)      45.15     (  1, 38, 19)      37.04     (  1, 38, 19)
        31.00     (  1, 38, 19)      25.42     (  1, 38, 19)      21.25     (  1, 38, 19)      17.40     (  1, 38, 19)
        14.53     (  1, 38, 19)      11.89     (  1, 38, 19)      9.903     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD     DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  7  STRESS PERIOD=  2      (ROW,COL)
  DRY(  2, 15)    DRY( 10, 33)    DRY( 15, 42)    DRY( 18,  9)    DRY( 26, 10)    DRY( 31, 73)    DRY( 58, 31)
    19 CALLS TO PCG ROUTINE FOR TIME STEP   7 IN STRESS PERIOD  2
    19 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.4652     (  1, 11, 31)      0.1355     (  1, 52, 19)     -0.8968E-01 (  1, 53, 18)      0.4851E-01 (  3, 38, 32)
      -0.5411E-01 (  3, 38, 32)      0.4382E-01 (  3, 38, 32)     -0.3677E-01 (  3, 38, 32)      0.2797E-01 (  3, 38, 32)
      -0.2303E-01 (  3, 38, 32)      0.1758E-01 (  3, 38, 32)     -0.1448E-01 (  3, 38, 32)      0.1113E-01 (  3, 38, 32)
      -0.9182E-02 (  3, 38, 32)      0.7091E-02 (  3, 38, 32)     -0.5855E-02 (  3, 38, 32)      0.4538E-02 (  3, 38, 32)
      -0.3749E-02 (  3, 38, 32)      0.2914E-02 (  3, 38, 32)     -0.2407E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -487.8     (  1, 52, 19)      350.9     (  1, 52, 19)      190.6     (  1, 38, 19)      173.1     (  3, 38, 32)
       -140.9     (  3, 38, 32)      123.8     (  3, 38, 32)     -90.51     (  3, 38, 32)      77.72     (  3, 38, 32)
       -56.71     (  3, 38, 32)      48.82     (  3, 38, 32)      38.31     (  1, 38, 19)      31.41     (  1, 38, 19)
        26.49     (  1, 38, 19)      21.71     (  1, 38, 19)      18.29     (  1, 38, 19)      14.98     (  1, 38, 19)
        12.60     (  1, 38, 19)      10.32     (  1, 38, 19)      8.672     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD     DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  8  STRESS PERIOD=  2      (ROW,COL)
  DRY(  6, 12)    DRY( 37, 75)    DRY( 42,  5)    DRY( 43,  7)    DRY( 45,  9)    DRY( 55, 29)
    18 CALLS TO PCG ROUTINE FOR TIME STEP   8 IN STRESS PERIOD  2
    18 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.4327     (  1,  3, 15)      0.1021     (  1, 52, 19)     -0.5888E-01 (  1, 52, 19)     -0.4436E-01 (  3, 38, 32)
       0.4221E-01 (  3, 38, 32)     -0.3664E-01 (  3, 38, 32)      0.2873E-01 (  3, 38, 32)     -0.2317E-01 (  3, 38, 32)
       0.1799E-01 (  3, 38, 32)     -0.1445E-01 (  3, 38, 32)      0.1130E-01 (  3, 38, 32)     -0.9098E-02 (  3, 38, 32)
       0.7157E-02 (  3, 38, 32)     -0.5774E-02 (  3, 38, 32)      0.4562E-02 (  3, 38, 32)     -0.3685E-02 (  3, 38, 32)
       0.2921E-02 (  3, 38, 32)     -0.2361E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL     RESIDUAL     LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -393.4     (  1, 52, 19)      273.7     (  1, 52, 19)      151.8     (  1, 38, 19)     -143.6     (  3, 38, 32)
        110.9     (  3, 38, 32)     -101.2     (  3, 38, 32)      71.36     (  3, 38, 32)     -63.39     (  3, 38, 32)
        44.54     (  3, 38, 32)     -39.67     (  3, 38, 32)      30.97     (  1, 38, 19)      25.32     (  1, 38, 19)
        21.51     (  1, 38, 19)      17.58     (  1, 38, 19)      14.92     (  1, 38, 19)      12.18     (  1, 38, 19)
        10.33     (  1, 38, 19)      8.429     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD     DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
```

```
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP=  9  STRESS PERIOD=  2      (ROW,COL)
  DRY( 31,  5)    DRY( 34,  2)    DRY( 54, 22)
    17 CALLS TO PCG ROUTINE FOR TIME STEP   9 IN STRESS PERIOD  2
    17 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.3778     (  1,  6, 13)     0.7053E-01 (  1, 52, 19)    -0.4006E-01 (  1, 52, 19)    -0.4640E-01 (  3, 38, 32)
       0.3998E-01 (  3, 38, 32)    -0.3293E-01 (  3, 38, 32)     0.2530E-01 (  3, 38, 32)    -0.2020E-01 (  3, 38, 32)
       0.1559E-01 (  3, 38, 32)    -0.1248E-01 (  3, 38, 32)     0.9723E-02 (  3, 38, 32)    -0.7815E-02 (  3, 38, 32)
       0.6134E-02 (  3, 38, 32)    -0.4943E-02 (  3, 38, 32)     0.3900E-02 (  3, 38, 32)    -0.3148E-02 (  3, 38, 32)
       0.2493E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        279.1     (  2,  1, 21)      189.3     (  1, 52, 19)      126.1     (  1, 38, 19)     -139.9     (  3, 38, 32)
        100.9     (  3, 38, 32)     -89.83     (  3, 38, 32)      62.26     (  3, 38, 32)     -55.13     (  3, 38, 32)
        38.42     (  3, 38, 32)     -34.24     (  3, 38, 32)      26.73     (  1, 38, 19)      21.88     (  1, 38, 19)
        18.64     (  1, 38, 19)      15.25     (  1, 38, 19)      12.98     (  1, 38, 19)      10.61     (  1, 38, 19)
        9.019     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 10  STRESS PERIOD=  2      (ROW,COL)
  DRY( 29,  6)    DRY( 34,  1)    DRY( 34,  4)    DRY( 39,  1)    DRY( 61, 35)
    16 CALLS TO PCG ROUTINE FOR TIME STEP  10 IN STRESS PERIOD  2
    16 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.3470     (  1,  6, 13)     0.5473E-01 (  1, 52, 19)    -0.3911E-01 (  3, 38, 32)     0.4067E-01 (  3, 38, 32)
      -0.3699E-01 (  3, 38, 32)     0.2804E-01 (  3, 38, 32)    -0.2293E-01 (  3, 38, 32)     0.1718E-01 (  3, 38, 32)
      -0.1403E-01 (  3, 38, 32)     0.1063E-01 (  3, 38, 32)    -0.8715E-02 (  3, 38, 32)     0.6666E-02 (  3, 38, 32)
      -0.5483E-02 (  3, 38, 32)     0.4223E-02 (  3, 38, 32)    -0.3479E-02 (  3, 38, 32)     0.2694E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -242.3     (  1, 52, 19)     -164.9     (  2, 38, 19)     -126.4     (  3, 38, 32)      122.5     (  3, 38, 32)
       -92.33     (  3, 38, 32)      77.00     (  3, 38, 32)     -56.42     (  3, 38, 32)      47.04     (  3, 38, 32)
       -34.71     (  3, 38, 32)      29.17     (  3, 38, 32)      23.11     (  1, 38, 19)      19.14     (  1, 38, 19)
        16.19     (  1, 38, 19)      13.39     (  1, 38, 19)      11.31     (  1, 38, 19)      9.353     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 11  STRESS PERIOD=  2      (ROW,COL)
  DRY( 11, 37)    DRY( 29,  7)    DRY( 41,  5)    DRY( 57, 31)
    16 CALLS TO PCG ROUTINE FOR TIME STEP  11 IN STRESS PERIOD  2
    16 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.3250     (  1,  7, 12)    -0.4573E-01 (  3, 10, 25)    -0.4572E-01 (  3, 38, 32)     0.4218E-01 (  3, 38, 32)
      -0.3476E-01 (  3, 38, 32)     0.2604E-01 (  3, 38, 32)    -0.2077E-01 (  3, 38, 32)     0.1568E-01 (  3, 38, 32)
      -0.1259E-01 (  3, 38, 32)     0.9635E-02 (  3, 38, 32)    -0.7781E-02 (  3, 38, 32)     0.6019E-02 (  3, 38, 32)
      -0.4880E-02 (  3, 38, 32)     0.3803E-02 (  3, 38, 32)    -0.3091E-02 (  3, 38, 32)     0.2422E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        211.4     (  2,  1, 21)     -148.1     (  2, 38, 19)     -145.2     (  3, 38, 32)      110.7     (  3, 38, 32)
       -90.76     (  3, 38, 32)      66.28     (  3, 38, 32)     -54.31     (  3, 38, 32)      40.05     (  3, 38, 32)
       -33.17     (  3, 38, 32)      24.70     (  3, 38, 32)     -20.63     (  3, 38, 32)      17.20     (  1, 38, 19)
        14.27     (  1, 38, 19)      12.06     (  1, 38, 19)      10.00     (  1, 38, 19)      8.443     (  1, 38, 19)
0
```

```
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 12  STRESS PERIOD=  2      (ROW,COL)
  DRY( 19, 10)    DRY( 57, 34)
    15 CALLS TO PCG ROUTINE FOR TIME STEP  12 IN STRESS PERIOD  2
    15 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.3042     (  1,  7, 12)    -0.3990E-01 (  3, 10, 25)    -0.4052E-01 (  3, 38, 32)     0.3696E-01 (  3, 38, 32)
      -0.3040E-01 (  3, 38, 32)     0.2293E-01 (  3, 38, 32)    -0.1817E-01 (  3, 38, 32)     0.1379E-01 (  3, 38, 32)
      -0.1099E-01 (  3, 38, 32)     0.8454E-02 (  3, 38, 32)    -0.6781E-02 (  3, 38, 32)     0.5269E-02 (  3, 38, 32)
      -0.4243E-02 (  3, 38, 32)     0.3322E-02 (  3, 38, 32)    -0.2683E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        185.9     (  2,  1, 21)     -135.2     (  2, 38, 19)     -129.5     (  3, 38, 32)      94.76     (  3, 38, 32)
       -81.41     (  3, 38, 32)      56.80     (  3, 38, 32)     -48.69     (  3, 38, 32)      34.25     (  3, 38, 32)
       -29.67     (  3, 38, 32)      21.37     (  1, 38, 19)     -18.41     (  3, 38, 32)      15.05     (  1, 38, 19)
        12.40     (  1, 38, 19)      10.57     (  1, 38, 19)      8.712     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 13  STRESS PERIOD=  2      (ROW,COL)
  DRY( 28,  9)
    14 CALLS TO PCG ROUTINE FOR TIME STEP  13 IN STRESS PERIOD  2
    14 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2851     (  1,  8, 12)    -0.3484E-01 (  3, 10, 25)     0.4067E-01 (  3, 38, 32)    -0.3793E-01 (  3, 38, 32)
       0.2723E-01 (  3, 38, 32)    -0.2215E-01 (  3, 38, 32)     0.1600E-01 (  3, 38, 32)    -0.1311E-01 (  3, 38, 32)
       0.9641E-02 (  3, 38, 32)    -0.7960E-02 (  3, 38, 32)     0.5933E-02 (  3, 38, 32)    -0.4922E-02 (  3, 38, 32)
       0.3706E-02 (  3, 38, 32)    -0.3081E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        164.0     (  2,  1, 21)     -122.4     (  2, 38, 19)      133.2     (  3, 38, 32)     -86.22     (  3, 38, 32)
        78.47     (  3, 38, 32)     -50.26     (  3, 38, 32)      46.33     (  3, 38, 32)     -30.05     (  3, 38, 32)
        28.04     (  3, 38, 32)      19.32     (  1, 38, 19)      17.30     (  3, 38, 32)      13.61     (  1, 38, 19)
        11.06     (  1, 38, 19)      9.563     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 14  STRESS PERIOD=  2      (ROW,COL)
  DRY( 14, 31)    DRY( 16, 36)    DRY( 16, 51)    DRY( 48, 70)
    13 CALLS TO PCG ROUTINE FOR TIME STEP  14 IN STRESS PERIOD  2
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2671     (  1, 11, 11)    -0.3417E-01 (  3, 38, 32)     0.3975E-01 (  3, 38, 32)    -0.3506E-01 (  3, 38, 32)
       0.2488E-01 (  3, 38, 32)    -0.2022E-01 (  3, 38, 32)     0.1453E-01 (  3, 38, 32)    -0.1191E-01 (  3, 38, 32)
       0.8721E-02 (  3, 38, 32)    -0.7205E-02 (  3, 38, 32)     0.5348E-02 (  3, 38, 32)    -0.4440E-02 (  3, 38, 32)
       0.3330E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        145.4     (  2,  1, 21)     -118.9     (  3, 38, 32)      124.5     (  3, 38, 32)     -78.41     (  3, 38, 32)
        72.17     (  3, 38, 32)     -45.35     (  3, 38, 32)      42.40     (  3, 38, 32)     -27.00     (  3, 38, 32)
```

```
       25.57     (  3, 38, 32)       17.48     (  1, 38, 19)       15.72     (  3, 38, 32)       12.32     (  1, 38, 19)
       9.995     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 15  STRESS PERIOD=  2      (ROW,COL)
  DRY( 22, 11)    DRY( 39,  5)    DRY( 43,  6)
    13 CALLS TO PCG ROUTINE FOR TIME STEP  15 IN STRESS PERIOD  2
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2527     (  1, 13, 10)     0.3432E-01 (  3, 38, 32)    -0.4744E-01 (  3, 38, 32)     0.3316E-01 (  3, 38, 32)
      -0.2564E-01 (  3, 38, 32)     0.1886E-01 (  3, 38, 32)    -0.1482E-01 (  3, 38, 32)     0.1112E-01 (  3, 38, 32)
      -0.8836E-02 (  3, 38, 32)     0.6731E-02 (  3, 38, 32)    -0.5392E-02 (  3, 38, 32)     0.4156E-02 (  3, 38, 32)
      -0.3346E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       129.6     (  2,  1, 21)      155.1     (  3, 38, 32)      -119.1     (  3, 38, 32)       81.66     (  3, 38, 32)
      -66.79     (  3, 38, 32)      46.93     (  3, 38, 32)      -39.04     (  3, 38, 32)       27.86     (  3, 38, 32)
      -23.49     (  3, 38, 32)      16.95     (  3, 38, 32)      -14.43     (  3, 38, 32)       11.59     (  1, 38, 19)
       9.617     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 16  STRESS PERIOD=  2      (ROW,COL)
  DRY( 29,  8)    DRY( 53, 27)    DRY( 56, 30)
    13 CALLS TO PCG ROUTINE FOR TIME STEP  16 IN STRESS PERIOD  2
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2394     (  1, 13, 10)    -0.3995E-01 (  3, 38, 32)     0.4193E-01 (  3, 38, 32)    -0.3168E-01 (  3, 38, 32)
       0.2240E-01 (  3, 38, 32)    -0.1781E-01 (  3, 38, 32)     0.1295E-01 (  3, 38, 32)    -0.1044E-01 (  3, 38, 32)
       0.7728E-02 (  3, 38, 32)    -0.6284E-02 (  3, 38, 32)     0.4719E-02 (  3, 38, 32)    -0.3860E-02 (  3, 38, 32)
       0.2930E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       112.3     (  2,  1, 21)     -145.3     (  3, 38, 32)       108.6     (  3, 38, 32)      -74.67     (  3, 38, 32)
       60.72     (  3, 38, 32)     -42.68     (  3, 38, 32)       35.43     (  3, 38, 32)      -25.27     (  3, 38, 32)
       21.27     (  3, 38, 32)     -15.34     (  3, 38, 32)       13.04     (  3, 38, 32)       10.44     (  1, 38, 19)
       8.666     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 17  STRESS PERIOD=  2      (ROW,COL)
  DRY( 19, 41)
    12 CALLS TO PCG ROUTINE FOR TIME STEP  17 IN STRESS PERIOD  2
    12 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2263     (  1, 13, 10)     0.2897E-01 (  3, 38, 32)    -0.3977E-01 (  3, 38, 32)     0.2749E-01 (  3, 38, 32)
      -0.2128E-01 (  3, 38, 32)     0.1559E-01 (  3, 38, 32)    -0.1225E-01 (  3, 38, 32)     0.9145E-02 (  3, 38, 32)
      -0.7270E-02 (  3, 38, 32)     0.5509E-02 (  3, 38, 32)    -0.4414E-02 (  3, 38, 32)     0.3385E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
```

```
       104.7     (  2,  1, 21)      132.1     (  3, 38, 32)     -97.95     (  3, 38, 32)      68.52     (  3, 38, 32)
      -54.76     (  3, 38, 32)      39.25     (  3, 38, 32)     -31.87     (  3, 38, 32)      23.18     (  3, 38, 32)
      -19.08     (  3, 38, 32)      14.03     (  3, 38, 32)     -11.66     (  3, 38, 32)      9.366     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 18  STRESS PERIOD=  2      (ROW,COL)
  DRY( 50, 59)    DRY( 56, 32)
    12 CALLS TO PCG ROUTINE FOR TIME STEP  18 IN STRESS PERIOD  2
    12 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2134     (  1, 13, 10)     0.3197E-01 (  3, 38, 32)    -0.3943E-01 (  3, 38, 32)     0.2562E-01 (  3, 38, 32)
      -0.2010E-01 (  3, 38, 32)     0.1438E-01 (  3, 38, 32)    -0.1150E-01 (  3, 38, 32)     0.8400E-02 (  3, 38, 32)
      -0.6795E-02 (  3, 38, 32)     0.5045E-02 (  3, 38, 32)    -0.4112E-02 (  3, 38, 32)     0.3092E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       95.10     (  2,  1, 21)      142.4     (  3, 38, 32)      -86.39     (  3, 38, 32)      69.03     (  3, 38, 32)
      -47.56     (  3, 38, 32)      39.31     (  3, 38, 32)      -27.51     (  3, 38, 32)      23.14     (  3, 38, 32)
      -16.40     (  3, 38, 32)      13.97     (  3, 38, 32)       10.38     (  1, 38, 19)      8.616     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 19  STRESS PERIOD=  2      (ROW,COL)
  DRY( 53,  6)
    11 CALLS TO PCG ROUTINE FOR TIME STEP  19 IN STRESS PERIOD  2
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.2010     (  1, 13, 10)     0.3199E-01 (  3, 38, 32)    -0.3767E-01 (  3, 38, 32)     0.2382E-01 (  3, 38, 32)
      -0.1885E-01 (  3, 38, 32)     0.1332E-01 (  3, 38, 32)    -0.1075E-01 (  3, 38, 32)     0.7758E-02 (  3, 38, 32)
      -0.6330E-02 (  3, 38, 32)     0.4645E-02 (  3, 38, 32)    -0.3818E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       86.28     (  2,  1, 21)      141.1     (  3, 38, 32)      -77.72     (  3, 38, 32)      66.89     (  3, 38, 32)
      -42.56     (  3, 38, 32)      37.98     (  3, 38, 32)      -24.53     (  3, 38, 32)      22.30     (  3, 38, 32)
      -14.57     (  3, 38, 32)      13.42     (  3, 38, 32)       9.535     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 20  STRESS PERIOD=  2      (ROW,COL)
  DRY( 32,  5)    DRY( 40,  5)
    11 CALLS TO PCG ROUTINE FOR TIME STEP  20 IN STRESS PERIOD  2
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1891     (  1, 13, 10)    -0.3802E-01 (  3, 38, 32)     0.3509E-01 (  3, 38, 32)    -0.2329E-01 (  3, 38, 32)
       0.1702E-01 (  3, 38, 32)    -0.1285E-01 (  3, 38, 32)     0.9673E-02 (  3, 38, 32)    -0.7429E-02 (  3, 38, 32)
       0.5687E-02 (  3, 38, 32)    -0.4414E-02 (  3, 38, 32)     0.3424E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       78.24     (  2,  1, 21)     -141.6     (  3, 38, 32)       69.56     (  3, 38, 32)     -64.61     (  3, 38, 32)
       37.94     (  3, 38, 32)     -36.40     (  3, 38, 32)       21.78     (  3, 38, 32)     -21.27     (  3, 38, 32)
       12.88     (  3, 38, 32)     -12.75     (  3, 38, 32)       8.785     (  1, 38, 19)
```

```
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 21  STRESS PERIOD=  2      (ROW,COL)
  DRY(  5, 14)    DRY( 17, 38)    DRY( 43,  9)
    11 CALLS TO PCG ROUTINE FOR TIME STEP  21 IN STRESS PERIOD  2
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1777     (  1, 13, 10)     0.2871E-01 (  3, 38, 32)    -0.3283E-01 (  3, 38, 32)     0.2039E-01 (  3, 38, 32)
      -0.1626E-01 (  3, 38, 32)     0.1137E-01 (  3, 38, 32)    -0.9228E-02 (  3, 38, 32)     0.6589E-02 (  3, 38, 32)
      -0.5403E-02 (  3, 38, 32)     0.3921E-02 (  3, 38, 32)    -0.3237E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        71.41     (  2,  1, 21)      126.1      (  3, 38, 32)      -64.80     (  3, 38, 32)      59.12      (  3, 38, 32)
       -35.36     (  3, 38, 32)      33.44      (  3, 38, 32)      -20.27     (  3, 38, 32)      19.53      (  3, 38, 32)
       -11.96     (  3, 38, 32)      11.67      (  3, 38, 32)       8.050     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 22  STRESS PERIOD=  2      (ROW,COL)
  DRY( 12, 42)    DRY( 35, 74)    DRY( 38,  5)    DRY( 48, 47)    DRY( 56, 33)    DRY( 60, 64)
    11 CALLS TO PCG ROUTINE FOR TIME STEP  22 IN STRESS PERIOD  2
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1669     (  1, 13, 10)    -0.3143E-01 (  3, 38, 32)     0.2946E-01 (  3, 38, 32)    -0.1983E-01 (  3, 38, 32)
       0.1446E-01 (  3, 38, 32)    -0.1097E-01 (  3, 38, 32)     0.8227E-02 (  3, 38, 32)    -0.6340E-02 (  3, 38, 32)
       0.4832E-02 (  3, 38, 32)    -0.3761E-02 (  3, 38, 32)     0.2903E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        65.37     (  2,  1, 21)     -117.2      (  3, 38, 32)      60.08     (  3, 38, 32)     -54.23      (  3, 38, 32)
        32.89     (  3, 38, 32)     -30.61      (  3, 38, 32)      18.88     (  3, 38, 32)     -17.88      (  3, 38, 32)
        11.15     (  3, 38, 32)     -10.69      (  3, 38, 32)      7.387     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 23  STRESS PERIOD=  2      (ROW,COL)
  DRY(  6, 13)    DRY( 60, 65)
    11 CALLS TO PCG ROUTINE FOR TIME STEP  23 IN STRESS PERIOD  2
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1567     (  1, 13, 10)     0.2494E-01 (  3, 38, 32)    -0.2833E-01 (  3, 38, 32)     0.1757E-01 (  3, 38, 32)
      -0.1405E-01 (  3, 38, 32)     0.9785E-02 (  3, 38, 32)    -0.7953E-02 (  3, 38, 32)     0.5655E-02 (  3, 38, 32)
      -0.4641E-02 (  3, 38, 32)     0.3353E-02 (  3, 38, 32)    -0.2771E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        59.64     (  2,  1, 21)      109.5      (  3, 38, 32)      -55.35     (  3, 38, 32)      51.47      (  3, 38, 32)
       -30.17     (  3, 38, 32)      29.06      (  3, 38, 32)      -17.23     (  3, 38, 32)      16.93      (  3, 38, 32)
       -10.13     (  3, 38, 32)      10.09      (  3, 38, 32)      6.790      (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
```

```
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 24  STRESS PERIOD=  2      (ROW,COL)
  DRY(  4, 50)    DRY( 12, 40)    DRY( 17, 42)    DRY( 23, 11)
     9 CALLS TO PCG ROUTINE FOR TIME STEP  24 IN STRESS PERIOD  2
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1471     (  1, 13, 10)     -0.2680E-01 (  3, 38, 32)      0.2530E-01 (  3, 38, 32)     -0.1709E-01 (  3, 38, 32)
       0.1243E-01 (  3, 38, 32)     -0.9436E-02 (  3, 38, 32)      0.7058E-02 (  3, 38, 32)     -0.5438E-02 (  3, 38, 32)
       0.4134E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -56.31     (  1,  8, 32)      -100.2     (  3, 38, 32)       52.06     (  3, 38, 32)      -46.46     (  3, 38, 32)
        28.44     (  3, 38, 32)      -26.18     (  3, 38, 32)       16.28     (  3, 38, 32)      -15.25     (  3, 38, 32)
        9.584     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 25  STRESS PERIOD=  2      (ROW,COL)
  DRY( 20, 52)    DRY( 47, 49)
     9 CALLS TO PCG ROUTINE FOR TIME STEP  25 IN STRESS PERIOD  2
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1411     (  1, 10, 38)      0.3338E-01 (  3, 38, 32)     -0.3015E-01 (  3, 38, 32)      0.1640E-01 (  3, 38, 32)
      -0.1367E-01 (  3, 38, 32)      0.8521E-02 (  3, 38, 32)     -0.7200E-02 (  3, 38, 32)      0.4634E-02 (  3, 38, 32)
      -0.3957E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -72.29     (  3, 38, 32)       134.2     (  3, 38, 32)      -41.86     (  3, 38, 32)       58.62     (  3, 38, 32)
       -21.13     (  3, 38, 32)       30.82     (  3, 38, 32)       11.61     (  1, 38, 19)       16.93     (  3, 38, 32)
        7.967     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 26  STRESS PERIOD=  2      (ROW,COL)
  DRY( 15, 51)    DRY( 33,  5)    DRY( 46, 49)
     9 CALLS TO PCG ROUTINE FOR TIME STEP  26 IN STRESS PERIOD  2
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1380     (  1, 10, 38)     -0.2628E-01 (  3, 38, 32)      0.2339E-01 (  3, 38, 32)     -0.1502E-01 (  3, 38, 32)
       0.1111E-01 (  3, 38, 32)     -0.8175E-02 (  3, 38, 32)      0.6208E-02 (  3, 38, 32)     -0.4649E-02 (  3, 38, 32)
       0.3590E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        52.82     (  1, 53, 69)      -98.27     (  3, 38, 32)       42.25     (  3, 38, 32)      -44.11     (  3, 38, 32)
        22.71     (  3, 38, 32)      -24.49     (  3, 38, 32)       12.80     (  3, 38, 32)      -14.10     (  3, 38, 32)
        7.556     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
```

```
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 27  STRESS PERIOD=  2      (ROW,COL)
  DRY( 18, 41)    DRY( 38, 57)
    9 CALLS TO PCG ROUTINE FOR TIME STEP  27 IN STRESS PERIOD  2
    9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1348     (  1, 10, 39)     0.2648E-01 (  3, 38, 32)    -0.2486E-01 (  3, 38, 32)     0.1380E-01 (  3, 38, 32)
      -0.1144E-01 (  3, 38, 32)     0.7298E-02 (  3, 38, 32)    -0.6137E-02 (  3, 38, 32)     0.4033E-02 (  3, 38, 32)
      -0.3425E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -56.10     (  3, 38, 32)      108.5     (  3, 38, 32)      -36.55     (  3, 38, 32)      47.88     (  3, 38, 32)
       -18.84     (  3, 38, 32)      25.61     (  3, 38, 32)      -10.22     (  3, 38, 32)      14.27     (  3, 38, 32)
        6.867     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
    9 CALLS TO PCG ROUTINE FOR TIME STEP  28 IN STRESS PERIOD  2
    9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1317     (  1, 10, 39)    -0.2387E-01 (  3, 38, 32)     0.2077E-01 (  3, 38, 32)    -0.1317E-01 (  3, 38, 32)
       0.9804E-02 (  3, 38, 32)    -0.7133E-02 (  3, 38, 32)     0.5447E-02 (  3, 38, 32)    -0.4036E-02 (  3, 38, 32)
       0.3133E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        51.38     (  1, 53, 69)      -88.83     (  3, 38, 32)      35.91     (  3, 38, 32)      -39.73     (  3, 38, 32)
        19.22     (  3, 38, 32)      -21.92     (  3, 38, 32)      10.79     (  3, 38, 32)      -12.55     (  3, 38, 32)
        6.439     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 29  STRESS PERIOD=  2      (ROW,COL)
  DRY(  3, 15)    DRY( 12, 41)    DRY( 59, 45)
    7 CALLS TO PCG ROUTINE FOR TIME STEP  29 IN STRESS PERIOD  2
    7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.1285     (  1, 10, 39)     0.2226E-01 (  3, 38, 32)    -0.2122E-01 (  3, 38, 32)     0.1197E-01 (  3, 38, 32)
      -0.9906E-02 (  3, 38, 32)     0.6388E-02 (  3, 38, 32)    -0.5360E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        50.68     (  1, 53, 69)      91.55     (  3, 38, 32)      -32.26     (  3, 38, 32)      40.93     (  3, 38, 32)
       -16.82     (  3, 38, 32)      22.07     (  3, 38, 32)      -9.217     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
    0         0       0       0
0CELL CONVERSIONS FOR ITERATION=  2  LAYER= 1  TIME STEP= 30  STRESS PERIOD=  2      (ROW,COL)
  DRY( 10, 36)    DRY( 56, 61)
    7 CALLS TO PCG ROUTINE FOR TIME STEP  30 IN STRESS PERIOD  2
    7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
```

```
 ---------------------------------------------------------------------------------------------------------------
      -0.1254     (  1, 10, 39)     -0.3089E-01 (  3, 38, 32)      0.2279E-01 (  3, 38, 32)     -0.1339E-01 (  3, 38, 32)
       0.1014E-01 (  3, 38, 32)     -0.6714E-02 (  3, 38, 32)      0.5239E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------
        71.56     (  3, 38, 32)      -105.8     (  3, 38, 32)      30.77      (  3, 38, 32)      -45.76     (  3, 38, 32)
        15.04     (  3, 38, 32)      -23.46     (  3, 38, 32)      8.138      (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
0


                          VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 30 IN STRESS PERIOD  2
                          ------------------------------------------------------------------------------
0                  CUMULATIVE VOLUMES      L**3                                  RATES FOR THIS TIME STEP      L**3/T
                   ------------------                                            ------------------------

                        IN:                                                            IN:
                        ---                                                            ---
                          STORAGE =   0.21915E+08                                       STORAGE =    62932.
                    CONSTANT HEAD =   0.00000                                     CONSTANT HEAD =   0.00000
                            WELLS =    63000.                                             WELLS =    525.00
                           DRAINS =   0.00000                                            DRAINS =   0.00000
                         RECHARGE =   0.17074E+07                                      RECHARGE =   0.00000
                    RIVER LEAKAGE =   0.17182E+07                                 RIVER LEAKAGE =    20965.
                  HEAD DEP BOUNDS =   0.24160E+08                               HEAD DEP BOUNDS =   0.31009E+06
0                        TOTAL IN =   0.49563E+08                                     TOTAL IN =   0.39451E+06
0                       OUT:                                                           OUT:
                        ----                                                           ----
                          STORAGE =   0.36451E+06                                       STORAGE =    1.4420
                    CONSTANT HEAD =   0.13984E+07                                 CONSTANT HEAD =    7465.2
                            WELLS =   0.36555E+08                                       WELLS =   0.34199E+06
                           DRAINS =   0.20076E+07                                       DRAINS =    7665.7
                         RECHARGE =   0.00000                                          RECHARGE =   0.00000
                    RIVER LEAKAGE =   0.42996E+06                                 RIVER LEAKAGE =    407.89
                  HEAD DEP BOUNDS =   0.88577E+07                               HEAD DEP BOUNDS =    37340.
0                       TOTAL OUT =   0.49614E+08                                    TOTAL OUT =   0.39487E+06
0                        IN - OUT =   -50148.                                         IN - OUT =   -365.00
0                PERCENT DISCREPANCY =              -0.10                       PERCENT DISCREPANCY =              -0.09


0


          TIME SUMMARY AT END OF TIME STEP 30 IN STRESS PERIOD  2
                              SECONDS        MINUTES         HOURS          DAYS           YEARS
                            ---------------------------------------------------------------------
      TIME STEP LENGTH        172800.        2880.00        48.0000        2.00000       0.547570E-02
    STRESS PERIOD TIME       0.518400E+07   86400.0        1440.00        60.0000       0.164271
 TOTAL SIMULATION TIME       0.103680E+08   172800.        2880.00        120.000       0.328542
1
1                                                STRESS PERIOD NO.   3, LENGTH =   40.00000
                                                 ----------------------------------------------

                                                 NUMBER OF TIME STEPS =    20

                                                  MULTIPLIER FOR DELT =     1.000

                                                INITIAL TIME STEP SIZE =   2.000000
0            22 WELLS
                                               LAYER    ROW    COL    STRESS RATE   WELL NO.
                                               ---------------------------------------------
                                                 1      26     39      35.000          1
                                                 1      27     39      35.000          2
                                                 1      28     39      35.000          3
                                                 1      28     40      35.000          4
                                                 1      29     39      35.000          5
```

1	30	40	35.000	6
1	31	40	35.000	7
1	32	41	35.000	8
1	33	41	35.000	9
1	35	42	35.000	10
1	36	43	35.000	11
1	37	44	35.000	12
1	39	44	35.000	13
1	40	45	35.000	14
1	41	45	35.000	15
2	26	20	-86136.	16
2	21	19	-75193.	17
2	38	19	-57083.	18
2	39	18	-73802.	19
2	13	27	-23598.	20
2	32	49	-6700.0	21
2	34	49	-6700.0	22

OREUSING DRAINS FROM LAST STRESS PERIOD
0

RECHARGE WILL BE READ ON UNIT 27 USING FORMAT: (10F8.4)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
	76	77	78												
0 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019
	0.0019	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019
	0.0019	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0019	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011

	0.0011	0.0011	0.0011	0.0018	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0018	0.0018	0.0018	0.0018	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0018	0.0018	0.0000	0.0018	0.0018	0.0018	0.0011	0.0018	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0000	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0018	0.0000	0.0018	0.0018	0.0018	0.0018	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0018	0.0018	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0000	0.0018	0.0018	0.0000	0.0000	0.0000	0.0018	0.0018	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0000	0.0000	0.0018	0.0018	0.0018	0.0018	0.0000	0.0018	0.0018	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0000	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0018	0.0018	0.0018	0.0018	0.0018	0.0011	0.0011	0.0018	0.0018	0.0018	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0035	0.0035	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0018	0.0018	0.0011	0.0011	0.0011	0.0011	0.0018	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0035	0.0035	0.0011	0.0035	0.0035	0.0035	0.0035	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0000	0.0035	0.0035	0.0011	0.0011	0.0035	0.0035	0.0035	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035	0.0035	0.0011	0.0011	0.0011	0.0011	0.0011	0.0035	0.0035
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000												
0 21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0035	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0035
	0.0035	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0035	0.0000
	0.0000	0.0000	0.0000												
0 22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0011
	0.0000	0.0000	0.0000												
0 23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0035	0.0035	0.0035	0.0035	0.0035	0.0011	0.0035	0.0035	0.0035	0.0035	0.0035	0.0011	0.0011
	0.0000	0.0000	0.0000												
0 24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0013	0.0013	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0012	0.0012	0.0012	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0000	0.0000												
0 25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0013	0.0013	0.0000	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0012	0.0000	0.0012	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 26	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0013	0.0000	0.0000	0.0013	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0012	0.0012	0.0012	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0013	0.0000	0.0000	0.0000	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0013	0.0013	0.0013	0.0013	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 29	0.0000	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 30	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0013	0.0013	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0024	0.0024	0.0011	0.0011
	0.0011	0.0011	0.0011												
0 31	0.0000	0.0000	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0013	0.0000	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0024	0.0024	0.0011
	0.0011	0.0011	0.0011												
0 32	0.0028	0.0028	0.0000	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0013	0.0000	0.0000	0.0013	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0024	0.0024	0.0011
	0.0011	0.0011	0.0011												
0 33	0.0028	0.0028	0.0028	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0013	0.0013	0.0013	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0024	0.0024	0.0011
	0.0011	0.0011	0.0011												
0 34	0.0011	0.0011	0.0028	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024
	0.0011	0.0011	0.0011												
0 35	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024	0.0011
	0.0011	0.0011	0.0011												
0 36	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0030	0.0030	0.0030
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024	0.0024
	0.0024	0.0024	0.0024												
0 37	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0000	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0030	0.0030	0.0030	0.0030	0.0030
	0.0030	0.0011	0.0011	0.0011	0.0000	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0024	0.0024	0.0024
	0.0024	0.0024	0.0024												
0 38	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0037	0.0000	0.0000	0.0000
	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0000	0.0000	0.0024	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 39	0.0031	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0024	0.0024	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 40	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011
	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 41	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 42	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 43	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 44	0.0000	0.0000	0.0000	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 45	0.0000	0.0000	0.0000	0.0031	0.0031	0.0031	0.0031	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000

	0.0000	0.0000	0.0000												
0 46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017
	0.0017	0.0054	0.0054	0.0030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017
	0.0017	0.0054	0.0054	0.0030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000
	0.0000	0.0000	0.0054	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0030	0.0030	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000
	0.0000	0.0000	0.0017	0.0054	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0030
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0024	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000
	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000
	0.0000	0.0000	0.0017	0.0054	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0030
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0024	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0046	0.0000	0.0000
	0.0000	0.0046	0.0046	0.0046	0.0011	0.0011	0.0011	0.0011	0.0011	0.0046	0.0046	0.0046	0.0046	0.0011	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000
	0.0000	0.0017	0.0017	0.0037	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0030	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 53	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0011
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000
	0.0000	0.0017	0.0017	0.0072	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0052
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0052	0.0052	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000	0.0000
	0.0000	0.0017	0.0017	0.0072	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052
	0.0052	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046
	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000	0.0000
	0.0017	0.0017	0.0017	0.0072	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052
	0.0052	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0052	0.0052	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 56	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046
	0.0046	0.0046	0.0046	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000	0.0000
	0.0017	0.0017	0.0072	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0052	0.0052	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0052	0.0052	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0046	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046
	0.0046	0.0046	0.0046	0.0046	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0017	0.0017	0.0000	0.0000	0.0000
	0.0017	0.0089	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0052	0.0052	0.0011	0.0011	0.0011	0.0052	0.0052	0.0052	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000												
0 58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0011	0.0011	0.0011	0.0046	0.0046	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

```
        0.0046  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0017  0.0017  0.0000  0.0000  0.0000
        0.0089  0.0089  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0052  0.0052  0.0011  0.0011  0.0052  0.0052  0.0052  0.0052  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 59    0.0000  0.0000  0.0000  0.0031  0.0000  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0017  0.0017  0.0000  0.0000  0.0089
        0.0089  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0052  0.0052  0.0052  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 60    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0017  0.0017  0.0000  0.0089
        0.0089  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0052  0.0052  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 61    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0011  0.0017  0.0017  0.0089
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0052  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 62    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0011  0.0011  0.0089  0.0072
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 63    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0011  0.0072  0.0072
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 64    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0011  0.0072  0.0072
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0 65    0.0000  0.0000  0.0000  0.0031  0.0031  0.0011  0.0011  0.0011  0.0011  0.0046  0.0046  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0046  0.0046  0.0011  0.0011  0.0011  0.0011  0.0011  0.0072  0.0072
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000  0.0000
        0.0000  0.0000  0.0000
0
```

```
    14 RIVER REACHES
0                LAYER     ROW     COL     STAGE     CONDUCTANCE   BOTTOM ELEVATION   RIVER REACH
                 ---------------------------------------------------------------------------------
                   1       32      56     80.30        1760.            77.30             1
                   1       33      57     80.30        2400.            77.30             2
                   1       35      56     80.30        1920.            77.30             3
                   1       34      57     80.30        2560.            77.30             4
                   1       34      58     80.30        2240.            77.30             5
                   1       37      61     80.30        1920.            77.30             6
                   1       36      60     80.30        2400.            77.30             7
                   1       35      59     80.30        2080.            77.30             8
                   1       34      60     80.30        1600.            77.30             9
                   1       29      56     80.30        2080.            77.30            10
                   1       30      57     80.30        2400.            77.30            11
                   1       31      58     80.30        2240.            77.30            12
                   1       32      59     80.30        2240.            77.30            13
                   1       33      60     80.30        2400.            77.30            14
OREUSING HEAD-DEPENDENT BOUNDS FROM LAST STRESS PERIOD
0
    28 CALLS TO PCG ROUTINE FOR TIME STEP   1 IN STRESS PERIOD  3
    28 TOTAL ITERATIONS
OMAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        2.291     (  2, 38, 19)      0.5369     (  3, 37, 19)     -0.3978     (  2, 64, 43)     -0.3005     (  1, 65, 44)
       -0.2427    (  2, 64, 43)     -0.1869     (  1, 65, 44)     -0.1506     (  2, 64, 43)     -0.1167     (  1, 65, 44)
       -0.9439E-01 (  2, 64, 43)    -0.7347E-01 (  1, 65, 44)     -0.5958E-01 (  2, 64, 43)     -0.4655E-01 (  1, 65, 44)
```

```
     -0.3781E-01 (  2, 64, 43)     -0.2963E-01 (  1, 65, 44)     -0.2409E-01 (  2, 64, 43)     -0.1892E-01 (  1, 65, 44)
     -0.1540E-01 (  2, 64, 43)     -0.1212E-01 (  1, 65, 44)     -0.9870E-02 (  2, 64, 43)     -0.7779E-02 (  1, 65, 44)
     -0.6338E-02 (  2, 64, 43)     -0.5002E-02 (  1, 65, 44)     -0.4077E-02 (  2, 64, 43)     -0.3222E-02 (  1, 65, 44)
     -0.2626E-02 (  2, 64, 43)     -0.2077E-02 (  1, 65, 44)     -0.1694E-02 (  2, 64, 43)     -0.1341E-02 (  1, 65, 44)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -5110.     (  3, 37, 19)      -4894.     (  2, 38, 19)      -3287.     (  2, 38, 19)      -2132.     (  2, 38, 19)
      -1621.     (  2, 38, 19)      -1131.     (  2, 38, 19)      -864.4     (  2, 38, 19)      -608.6     (  2, 38, 19)
      -481.2     (  1, 38, 19)      -377.3     (  1, 38, 19)      -323.5     (  1, 38, 19)      -253.3     (  1, 38, 19)
      -215.9     (  1, 38, 19)      -169.0     (  1, 38, 19)      -143.4     (  1, 38, 19)      -112.2     (  1, 38, 19)
      -94.92     (  1, 38, 19)      -74.36     (  1, 38, 19)      -62.71     (  1, 38, 19)      -49.17     (  1, 38, 19)
      -41.36     (  1, 38, 19)      -32.46     (  1, 38, 19)      -27.25     (  1, 38, 19)      -21.41     (  1, 38, 19)
      -17.94     (  1, 38, 19)      -14.11     (  1, 38, 19)      -11.80     (  1, 38, 19)      -9.285     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    20 CALLS TO PCG ROUTINE FOR TIME STEP   2 IN STRESS PERIOD  3
    20 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      0.5520     (  1, 38, 19)     -0.1022     (  2, 38, 19)     -0.9644E-01 (  2, 64, 43)     -0.6083E-01 (  1, 65, 44)
     -0.5720E-01 (  2, 64, 43)      0.4170E-01 (  2, 64, 43)     -0.3622E-01 (  2, 64, 43)      0.2520E-01 (  2, 64, 43)
     -0.2236E-01 (  2, 64, 43)      0.1549E-01 (  2, 64, 43)     -0.1379E-01 (  2, 64, 43)      0.9544E-02 (  2, 64, 43)
     -0.8508E-02 (  2, 64, 43)      0.5887E-02 (  2, 64, 43)     -0.5249E-02 (  2, 64, 43)      0.3635E-02 (  2, 64, 43)
     -0.3239E-02 (  2, 64, 43)      0.2246E-02 (  2, 64, 43)     -0.2000E-02 (  2, 64, 43)      0.1389E-02 (  2, 64, 43)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       1560.     (  2, 38, 19)      -702.5     (  1, 38, 19)      -506.2     (  1, 38, 19)      -376.0     (  1, 38, 19)
      -313.7     (  1, 38, 19)      -230.6     (  1, 38, 19)      -192.6     (  1, 38, 19)      -142.2     (  1, 38, 19)
      -118.9     (  1, 38, 19)      -88.10     (  1, 38, 19)      -73.65     (  1, 38, 19)      -54.69     (  1, 38, 19)
      -45.67     (  1, 38, 19)      -33.99     (  1, 38, 19)      -28.35     (  1, 38, 19)      -21.14     (  1, 38, 19)
      -17.60     (  1, 38, 19)      -13.16     (  1, 38, 19)      -10.94     (  1, 38, 19)      -8.192     (  1, 38, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    13 CALLS TO PCG ROUTINE FOR TIME STEP   3 IN STRESS PERIOD  3
    13 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      0.2203     (  1, 38, 72)     -0.4900E-01 (  2, 44, 42)      0.4498E-01 (  2, 44, 42)     -0.3057E-01 (  2, 44, 42)
      0.2433E-01 (  2, 44, 42)     -0.1809E-01 (  2, 44, 42)      0.1452E-01 (  2, 44, 42)     -0.1094E-01 (  2, 44, 42)
      0.8764E-02 (  2, 44, 42)     -0.6591E-02 (  2, 44, 42)      0.5249E-02 (  2, 44, 42)     -0.3904E-02 (  2, 44, 42)
      0.3073E-02 (  2, 44, 42)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       465.8     (  2, 38, 19)      -170.9     (  1, 38, 19)      -114.7     (  1, 39, 18)      -82.92     (  2, 44, 42)
      -63.42     (  1, 39, 18)      -49.73     (  2, 44, 42)      -36.54     (  1, 39, 18)      -30.06     (  2, 44, 42)
      -21.47     (  1, 39, 18)      -18.04     (  2, 44, 42)      -12.78     (  1, 39, 18)      -10.61     (  2, 44, 42)
      -7.678     (  1, 39, 18)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
    11 CALLS TO PCG ROUTINE FOR TIME STEP   4 IN STRESS PERIOD  3
    11 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
```

```
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       0.1993     (  1, 38, 72)     -0.2609E-01 (  2, 44, 42)      0.2714E-01 (  2, 44, 42)     -0.1760E-01 (  2, 44, 42)
       0.1264E-01 (  2, 44, 42)     -0.8815E-02 (  2, 44, 42)      0.6247E-02 (  2, 44, 42)      0.4886E-02 (  3, 38, 32)
      -0.4200E-02 (  3, 38, 32)      0.3456E-02 (  3, 38, 32)     -0.2891E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        165.4     (  2, 38, 19)      -92.97     (  2, 44, 42)       52.05     (  2, 44, 42)      -39.80     (  2, 44, 42)
       -26.19     (  1, 39, 18)       19.89     (  3, 38, 32)      -15.25     (  1, 39, 18)       14.74     (  3, 38, 32)
       -10.14     (  3, 38, 32)       10.25     (  3, 38, 32)      -6.878     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     9 CALLS TO PCG ROUTINE FOR TIME STEP   5 IN STRESS PERIOD  3
     9 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       0.1703     (  1, 38, 72)     -0.2551E-01 (  2, 44, 42)      0.2012E-01 (  2, 44, 42)     -0.1255E-01 (  3, 38, 32)
       0.1016E-01 (  3, 38, 32)     -0.7380E-02 (  3, 38, 32)      0.6048E-02 (  3, 38, 32)     -0.4409E-02 (  3, 38, 32)
       0.3631E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        73.57     (  2, 44, 42)      -78.65     (  2, 44, 42)       33.41     (  1, 21, 19)      -40.91     (  3, 38, 32)
        19.67     (  1, 21, 19)      -24.28     (  3, 38, 32)       11.79     (  1, 21, 19)      -14.57     (  3, 38, 32)
        7.141     (  1, 21, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP   6 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       0.1432     (  1, 38, 72)     -0.2357E-01 (  2, 44, 42)      0.1706E-01 (  2, 44, 42)      0.1033E-01 (  3, 38, 32)
      -0.8450E-02 (  3, 38, 32)      0.5902E-02 (  3, 38, 32)     -0.4874E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        71.22     (  2, 44, 42)      -66.23     (  2, 44, 42)       28.08     (  1, 21, 19)       34.45     (  3, 38, 32)
        16.50     (  1, 21, 19)       19.84     (  3, 38, 32)       9.862     (  1, 21, 19)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP   7 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       0.1201     (  1, 38, 72)     -0.2468E-01 (  3, 38, 32)      0.1744E-01 (  3, 38, 32)     -0.1095E-01 (  3, 38, 32)
       0.8264E-02 (  3, 38, 32)     -0.5694E-02 (  3, 38, 32)      0.4476E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        69.53     (  3, 38, 32)      -74.09     (  3, 38, 32)       29.81     (  3, 38, 32)      -34.09     (  3, 38, 32)
        15.12     (  3, 38, 32)      -18.23     (  3, 38, 32)       8.721     (  1, 21, 19)
0
```

```
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP   8 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      0.1006     (  1, 38, 72)     0.2070E-01 (  3, 38, 32)     -0.1532E-01 (  3, 38, 32)     0.9449E-02 (  3, 38, 32)
     -0.7460E-02 (  3, 38, 32)     0.5020E-02 (  3, 38, 32)     -0.4075E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -62.07     (  3, 38, 32)      62.71     (  3, 38, 32)      -27.03     (  3, 38, 32)      29.81     (  3, 38, 32)
      -13.93     (  3, 38, 32)      16.15     (  3, 38, 32)      -7.795     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP   9 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      0.8463E-01 (  1, 38, 72)    -0.2036E-01 (  3, 38, 32)     0.1385E-01 (  3, 38, 32)    -0.9072E-02 (  3, 38, 32)
      0.6729E-02 (  3, 38, 32)    -0.4784E-02 (  3, 38, 32)     0.3695E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       61.10     (  3, 38, 32)     -57.12     (  3, 38, 32)      25.73     (  3, 38, 32)     -26.97     (  3, 38, 32)
       13.26     (  3, 38, 32)     -14.63     (  3, 38, 32)      7.408     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  10 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
     -0.8186E-01 (  1,  1, 43)     0.1786E-01 (  3, 38, 32)     -0.1308E-01 (  3, 38, 32)     0.8103E-02 (  3, 38, 32)
     -0.6419E-02 (  3, 38, 32)     0.4326E-02 (  3, 38, 32)     -0.3517E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -55.19     (  3, 38, 32)      52.70     (  3, 38, 32)      -23.71     (  3, 38, 32)      25.22     (  3, 38, 32)
      -12.31     (  3, 38, 32)      13.71     (  3, 38, 32)      -6.901     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  11 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
     -0.8019E-01 (  1,  1, 43)    -0.1773E-01 (  3, 38, 32)     0.1189E-01 (  3, 38, 32)    -0.7953E-02 (  3, 38, 32)
      0.5860E-02 (  3, 38, 32)    -0.4232E-02 (  3, 38, 32)     0.3241E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
```

```
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        54.36     (  3, 38, 32)      -48.39     (  3, 38, 32)       22.86     (  3, 38, 32)      -23.20     (  3, 38, 32)
        11.91     (  3, 38, 32)      -12.68     (  3, 38, 32)       6.684     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  12 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7855E-01 (  1,  1, 43)     0.1585E-01 (  3, 38, 32)    -0.1154E-01 (  3, 38, 32)     0.7203E-02 (  3, 38, 32)
      -0.5727E-02 (  3, 38, 32)     0.3874E-02 (  3, 38, 32)    -0.3154E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -49.90     (  3, 38, 32)       45.96     (  3, 38, 32)      -21.37     (  3, 38, 32)       22.23     (  3, 38, 32)
       -11.20     (  3, 38, 32)       12.16     (  3, 38, 32)      -6.300     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  13 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7694E-01 (  1,  1, 43)    -0.1601E-01 (  3, 38, 32)     0.1064E-01 (  3, 38, 32)    -0.7220E-02 (  3, 38, 32)
       0.5301E-02 (  3, 38, 32)    -0.3866E-02 (  3, 38, 32)     0.2946E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        49.78     (  3, 38, 32)      -42.96     (  3, 38, 32)       20.94     (  3, 38, 32)      -20.82     (  3, 38, 32)
        10.99     (  3, 38, 32)      -11.44     (  3, 38, 32)       6.182     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  14 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7551E-01 (  1,  1, 44)     0.1445E-01 (  3, 38, 32)    -0.1046E-01 (  3, 38, 32)     0.6563E-02 (  3, 38, 32)
      -0.5228E-02 (  3, 38, 32)     0.3550E-02 (  3, 38, 32)    -0.2891E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -46.20     (  3, 38, 32)       41.23     (  3, 38, 32)      -19.69     (  3, 38, 32)       20.08     (  3, 38, 32)
       -10.39     (  3, 38, 32)       11.03     (  3, 38, 32)      -5.866     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     7 CALLS TO PCG ROUTINE FOR TIME STEP  15 IN STRESS PERIOD  3
     7 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
```

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 ---------------------------------------------------------------------------------------------------------------------------
      -0.7410E-01 (  1,  1, 44)     -0.1467E-01 (  3, 38, 32)      0.9636E-02 (  3, 38, 32)     -0.6604E-02 (  3, 38, 32)
       0.4830E-02 (  3, 38, 32)     -0.3556E-02 (  3, 38, 32)      0.2697E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        46.47     (  3, 38, 32)      -38.53     (  3, 38, 32)      19.38     (  3, 38, 32)      -18.78     (  3, 38, 32)
        10.24     (  3, 38, 32)      -10.38     (  3, 38, 32)      5.779     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     5 CALLS TO PCG ROUTINE FOR TIME STEP  16 IN STRESS PERIOD  3
     5 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7273E-01 (  1,  1, 44)      0.1331E-01 (  3, 38, 32)     -0.9548E-02 (  3, 38, 32)      0.6029E-02 (  3, 38, 32)
      -0.4806E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
       -43.23     (  3, 38, 32)       37.29     (  3, 38, 32)      -18.29     (  3, 38, 32)       18.26     (  3, 38, 32)
       -9.722     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     6 CALLS TO PCG ROUTINE FOR TIME STEP  17 IN STRESS PERIOD  3
     6 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7140E-01 (  1,  1, 45)     -0.1873E-01 (  3, 38, 32)      0.9711E-02 (  3, 38, 32)     -0.6980E-02 (  3, 38, 32)
       0.4630E-02 (  3, 38, 32)     -0.3639E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        76.93     (  3, 38, 32)      -32.64     (  3, 38, 32)      25.86     (  3, 38, 32)      -14.77     (  3, 38, 32)
        13.18     (  3, 38, 32)      -8.029     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     6 CALLS TO PCG ROUTINE FOR TIME STEP  18 IN STRESS PERIOD  3
     6 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.7023E-01 (  1,  1, 46)     -0.1622E-01 (  3, 38, 32)      0.8872E-02 (  3, 38, 32)     -0.6480E-02 (  3, 38, 32)
       0.4379E-02 (  3, 38, 32)     -0.3453E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        64.59     (  3, 38, 32)      -30.07     (  3, 38, 32)      23.48     (  3, 38, 32)      -14.18     (  3, 38, 32)
        12.27     (  3, 38, 32)      -7.830     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
```

```
     0         0       0       0
     6 CALLS TO PCG ROUTINE FOR TIME STEP  19 IN STRESS PERIOD  3
     6 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.6919E-01 (  1,  1, 47)     -0.1549E-01 (  3, 38, 32)      0.8340E-02 (  3, 38, 32)     -0.6198E-02 (  3, 38, 32)
       0.4168E-02 (  3, 38, 32)     -0.3324E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        62.92     (  3, 38, 32)      -27.52     (  3, 38, 32)       22.88     (  3, 38, 32)      -13.15     (  3, 38, 32)
        12.06     (  3, 38, 32)      -7.296     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 0     TOTAL BUDGET PRINTOUT FLAG = 0     CELL-BY-CELL FLOW TERM FLAG = 0
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     0         0       0       0
     6 CALLS TO PCG ROUTINE FOR TIME STEP  20 IN STRESS PERIOD  3
     6 TOTAL ITERATIONS
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL    HEAD CHANGE  LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
      -0.6821E-01 (  1,  1, 47)     -0.1459E-01 (  3, 38, 32)      0.7953E-02 (  3, 38, 32)     -0.5919E-02 (  3, 38, 32)
       0.4009E-02 (  3, 38, 32)     -0.3196E-02 (  3, 38, 32)
0
0MAXIMUM RESIDUAL FOR EACH ITERATION:
0     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL     RESIDUAL    LAYER,ROW,COL
 ---------------------------------------------------------------------------------------------------------------------------
        58.74     (  3, 38, 32)      -26.43     (  3, 38, 32)       21.64     (  3, 38, 32)      -12.75     (  3, 38, 32)
        11.50     (  3, 38, 32)      -7.112     (  3, 38, 32)
0
0HEAD/DRAWDOWN PRINTOUT FLAG = 1     TOTAL BUDGET PRINTOUT FLAG = 1     CELL-BY-CELL FLOW TERM FLAG = 1
0OUTPUT FLAGS FOR ALL LAYERS ARE THE SAME:
   HEAD    DRAWDOWN  HEAD  DRAWDOWN
 PRINTOUT  PRINTOUT  SAVE    SAVE
 ---------------------------------
     1         0       1       0
 "         STORAGE" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "   CONSTANT HEAD" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "FLOW RIGHT FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "FLOW FRONT FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "FLOW LOWER FACE " BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "           WELLS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "          DRAINS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "        RECHARGE" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 "   RIVER LEAKAGE" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
 " HEAD DEP BOUNDS" BUDGET VALUES WILL BE SAVED ON UNIT 41 AT END OF TIME STEP 20, STRESS PERIOD  3
1                 HEAD IN LAYER  1 AT END OF TIME STEP 20 IN STRESS PERIOD  3
            ---------------------------------------------------------------

          1       2       3       4       5       6       7       8       9      10      11      12      13      14      15
         16      17      18      19      20      21      22      23      24      25      26      27      28      29      30
         31      32      33      34      35      36      37      38      39      40      41      42      43      44      45
         46      47      48      49      50      51      52      53      54      55      56      57      58      59      60
         61      62      63      64      65      66      67      68      69      70      71      72      73      74      75
         76      77      78
 ------------------------------------------------------------------------------------------------------------------------------
0  1  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00
        69.23   69.20   69.18   69.16   69.14   69.09 ******* ******* ******* *******   69.78   69.96   70.14   70.34   70.55
        70.78   71.01   71.27   71.53   71.82   72.14   72.46   72.85   73.19   73.60   74.06   74.51   74.96   75.41   75.83
        76.17   76.43   76.71   77.36 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
      ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
      ******* ******* *******
0  2  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00
        69.22   69.19   69.18   69.17   69.15   69.14 ******* ******* ******* *******   69.77   69.94   70.13   70.32   70.54
        70.77   71.01   71.27   71.55   71.84   72.16   72.49   72.83   73.22   73.61   74.04   74.50   74.97   75.44   75.85
        76.19   76.44   76.72   77.36 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
      ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
      ******* ******* *******
0  3  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* 100.00 100.00
        69.21   69.19   69.18   69.17   69.16   69.15 ******* ******* ******* *******   69.74   69.91   70.09   70.29   70.51
```

	70.74	71.00	71.27	71.57	71.87	72.20	72.53	72.86	73.20	73.64	74.05	74.51	75.01	75.49	75.90
	76.22	76.50	76.76	77.34	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 4	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	84.60	100.00	100.00	69.23
	69.20	69.19	69.18	69.17	69.17	69.16	*******	*******	*******	*******	69.70	69.86	70.04	70.24	70.46
	70.70	70.98	71.28	71.59	71.91	72.24	72.57	72.90	73.22	73.67	74.07	74.55	75.07	75.56	75.97
	76.30	76.59	76.86	77.21	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 5	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	100.00	100.00	69.20
	69.19	69.18	69.17	69.17	69.17	69.17	69.17	*******	*******	*******	69.65	69.79	69.96	70.16	70.38
	70.64	70.94	71.28	71.62	71.95	72.29	72.63	72.95	73.26	73.71	74.13	74.63	75.16	75.66	76.08
	76.42	76.72	76.98	77.26	80.04	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 6	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	100.00	69.20	69.18
	69.17	69.17	69.16	69.16	69.16	69.16	69.17	*******	*******	*******	69.57	69.70	69.86	70.05	70.28
	70.55	70.90	71.27	71.64	71.99	72.36	72.71	73.01	73.32	73.77	74.21	74.75	75.30	75.81	76.23
	76.58	76.87	77.11	77.32	80.04	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 7	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.01	69.16	69.15	69.15
	69.15	69.15	69.15	69.15	69.15	69.15	69.15	*******	*******	*******	69.48	69.60	69.74	69.92	70.14
	70.43	70.82	71.25	71.67	72.05	72.45	72.81	73.10	73.41	73.85	74.34	74.92	75.49	76.00	76.43
	76.77	77.04	77.26	77.43	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 8	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.10	69.10	69.11	69.12
	69.12	69.12	69.13	69.13	69.13	69.13	69.13	69.10	*******	*******	69.37	69.47	69.60	69.76	69.96
	70.25	70.73	71.23	71.71	72.16	72.60	72.96	73.25	73.56	73.98	74.52	75.14	75.74	76.27	76.68
	76.99	77.23	77.42	77.57	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 9	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.05	69.05	69.06	69.07
	69.08	69.09	69.10	69.11	69.11	69.11	69.11	69.11	*******	69.17	69.24	69.32	69.43	69.57	69.74
	70.01	70.45	71.28	72.16	72.59	72.86	73.13	73.40	73.71	74.15	74.77	75.46	76.07	76.58	76.95
	77.22	77.43	77.60	77.76	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 10	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.99	69.00	69.01	69.01
	69.03	69.04	69.06	69.08	69.09	69.09	69.09	69.08	*******	69.09	69.10	69.14	69.23	69.36	69.52
	69.79	100.00	100.00	*******	100.00	100.00	73.56	73.66	73.92	74.46	75.14	75.83	76.46	76.95	77.26
	77.49	77.66	77.80	77.95	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 11	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.90	68.92	68.93	68.93	68.95
	68.97	68.99	69.02	69.04	69.06	69.08	69.08	69.05	*******	68.99	68.94	68.91	69.02	69.16	69.30
	71.02	100.00	*******	*******	*******	100.00	100.00	77.02	77.02	76.06	77.02	76.57	77.06	77.40	77.60
	77.75	77.88	77.99	78.12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.85	68.86	68.86	68.86	68.87
	68.89	68.92	68.96	69.00	69.04	69.07	69.08	69.05	*******	68.91	68.77	68.58	68.79	69.01	69.21
	100.00	100.00	*******	*******	*******	*******	*******	100.00	*******	100.00	100.00	100.00	77.76	77.81	77.90
	77.98	78.06	78.14	78.27	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 13	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.77	68.78	68.78	68.77	68.77	68.78
	68.79	68.83	68.89	68.96	69.02	69.07	69.10	69.08	*******	68.91	68.66	68.14	68.68	69.03	69.31
	100.00	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.08	78.20	78.10	78.11
	78.14	78.19	78.27	78.38	79.12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 14	*******	*******	*******	*******	*******	*******	*******	*******	70.03	68.72	68.71	68.70	68.68	68.66	68.66
	68.68	68.71	68.79	68.89	69.00	69.09	69.16	*******	*******	69.09	69.05	68.92	69.16	69.41	69.72
	100.00	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	79.09	78.34	78.26	78.24
	78.25	78.29	78.36	78.47	78.73	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 15	*******	*******	*******	*******	*******	*******	*******	*******	70.02	68.65	68.63	68.60	68.56	68.54	68.53
	68.53	68.57	68.65	68.79	68.96	69.11	69.24	*******	*******	69.35	69.55	69.61	69.78	69.99	70.29
	71.13	100.00	*******	*******	*******	100.00	100.00	*******	*******	*******	100.00	100.00	78.37	78.33	78.31
	78.32	78.35	78.40	78.49	78.63	100.00	*******	*******	87.40	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******

	*******	*******	*******												
0 16	*******	*******	*******	*******	*******	*******	*******	*******	69.17	68.60	68.56	68.48	68.44	68.40	68.37
	68.36	68.37	68.46	68.62	68.87	69.13	69.34	*******	*******	69.75	70.12	70.27	70.43	70.65	70.94
	71.45	100.00	*******	*******	100.00	100.00	77.03	100.00	*******	100.00	82.34	100.00	78.39	78.34	78.33
	78.33	78.36	78.41	78.48	78.58	100.00	*******	*******	86.24	85.96	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 17	*******	*******	*******	*******	*******	*******	*******	*******	71.01	68.56	68.48	68.38	68.32	68.26	68.20
	68.15	68.13	68.20	68.40	68.72	69.10	69.45	*******	*******	70.82	70.83	70.92	71.08	71.31	71.63
	72.01	100.00	100.00	100.00	74.78	74.83	74.91	100.00	100.00	100.00	100.00	100.00	78.39	78.32	78.30
	78.30	78.33	78.37	78.44	78.54	80.08	*******	84.53	84.32	84.25	84.78	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 18	*******	*******	*******	*******	*******	*******	*******	*******	100.00	68.60	68.38	68.27	68.20	68.11	68.01
	67.92	67.86	67.88	68.08	68.51	69.02	69.50	*******	*******	72.33	71.55	71.52	71.67	71.91	72.21
	72.61	73.27	74.06	74.57	74.70	74.81	74.90	74.98	76.03	100.00	100.00	79.03	78.35	78.25	78.24
	78.24	78.27	78.31	78.36	78.43	80.07	*******	82.24	82.13	82.18	82.34	83.30	81.44	82.48	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 19	*******	*******	*******	*******	*******	*******	*******	*******	100.00	100.00	68.29	68.18	68.10	67.99	67.85
	67.70	67.56	67.48	67.60	68.19	68.89	69.48	*******	*******	71.98	71.89	71.97	72.17	72.43	72.75
	73.16	73.71	74.17	74.51	74.68	74.83	74.93	75.02	75.17	77.01	100.00	78.22	78.13	78.12	78.14
	78.15	78.17	78.22	78.28	78.39	100.00	*******	79.00	80.01	80.15	80.07	79.77	79.47	79.61	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 20	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	68.29	68.12	68.04	67.91	67.74
	67.53	67.26	66.94	66.72	67.73	68.70	69.42	*******	*******	72.85	72.29	72.36	72.58	72.85	73.17
	73.54	73.95	74.31	74.56	74.72	74.87	74.99	75.09	75.23	76.07	78.01	77.92	77.95	77.99	78.01
	78.05	78.07	78.12	78.20	78.32	79.11	100.00	78.96	78.64	78.54	78.70	78.58	78.57	78.82	82.26
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 21	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	70.03	68.11	68.03	67.90	67.72
	67.47	67.11	66.40	64.83	67.21	68.56	69.41	*******	*******	72.50	72.48	72.68	72.94	73.22	73.52
	73.84	74.17	74.45	74.65	74.81	74.95	75.09	75.20	75.39	75.85	77.14	77.79	77.82	77.86	77.89
	77.94	77.99	78.02	78.12	78.30	78.71	78.92	78.96	78.85	78.62	78.10	77.88	77.87	78.04	78.61
	80.42	81.39	*******	*******	*******	*******	*******	81.12	*******	*******	*******	*******	*******	78.67	*******
	*******	*******	*******												
0 22	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	68.21	68.10	67.97	67.81
	67.59	67.33	66.99	66.73	67.71	68.71	69.52	*******	*******	*******	72.76	72.98	73.26	73.55	73.83
	74.11	74.38	74.61	74.79	74.93	75.07	75.23	75.35	75.54	76.20	77.21	77.67	77.72	77.75	77.78
	77.83	77.88	77.93	78.03	78.29	78.68	78.91	79.01	79.03	78.86	78.62	78.38	77.50	77.04	76.82
	77.51	77.63	77.75	78.81	79.15	78.93	78.86	78.97	78.81	78.89	79.11	78.54	78.12	77.69	77.04
	*******	*******	*******												
0 23	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	68.36	68.25	68.13	67.98
	67.80	67.62	67.48	67.52	68.06	68.88	69.66	*******	*******	*******	73.34	73.33	73.58	73.88	74.14
	74.39	74.61	74.80	74.95	75.09	75.23	75.40	75.56	75.80	76.34	77.03	77.49	77.62	77.66	77.70
	77.73	77.78	77.83	77.90	78.17	78.66	78.96	79.13	79.30	80.01	80.03	79.71	78.75	78.05	77.65
	76.65	76.63	77.15	77.42	77.62	77.54	77.41	77.43	77.62	77.74	77.66	77.51	77.19	76.65	76.16
	*******	*******	*******												
0 24	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	69.16	68.57	68.45	68.34	68.21
	68.04	67.89	67.76	67.75	68.06	68.90	69.77	*******	*******	*******	*******	73.61	73.90	74.26	74.48
	74.68	74.86	75.02	75.15	75.28	75.42	75.60	75.79	76.06	76.48	76.99	77.35	77.52	77.58	77.61
	77.63	77.68	77.73	77.77	77.99	100.00	79.05	79.27	80.46	81.70	81.71	80.49	79.33	78.81	78.37
	77.87	77.49	75.97	75.71	76.37	76.34	76.37	76.47	76.58	76.64	76.67	76.61	76.23	75.64	74.68
	73.61	*******	*******												
0 25	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	69.07	68.85	68.71	68.60	68.47
	68.31	68.14	67.91	67.63	67.48	68.75	69.91	*******	*******	*******	*******	73.99	74.38	74.95	74.93
	75.01	75.13	75.25	75.37	75.49	75.62	75.80	76.01	76.27	76.63	77.02	77.30	77.45	77.51	77.54
	77.57	77.61	77.63	77.65	100.00	*******	79.11	80.39	81.76	82.24	81.63	80.60	79.54	79.19	78.83
	78.45	78.11	77.87	*******	75.33	75.46	75.64	75.71	75.81	75.94	75.99	75.88	75.54	75.01	74.16
	73.48	73.38	73.35												
0 26	*******	*******	*******	*******	*******	*******	*******	*******	100.00	100.00	69.32	69.16	69.01	68.89	68.77
	68.63	68.44	68.12	67.42	65.88	68.67	70.33	*******	*******	*******	*******	*******	*******	75.08	75.61
	75.36	75.41	75.50	75.60	75.71	75.84	76.01	76.26	76.52	76.76	77.03	77.28	77.41	77.46	77.49
	77.52	77.53	77.55	77.56	*******	*******	81.96	81.79	81.51	81.16	80.36	80.10	79.75	79.46	79.14
	78.80	78.46	78.09	77.34	76.22	75.61	74.94	74.91	75.18	75.33	75.39	75.28	75.02	74.57	73.87
	73.38	73.33	73.31												
0 27	*******	*******	*******	*******	*******	*******	100.00	100.00	100.00	71.02	69.64	69.47	69.34	69.22	69.12
	69.01	68.89	68.73	68.51	68.47	69.91	71.80	*******	*******	*******	*******	*******	*******	*******	75.50
	75.58	75.67	75.75	75.84	75.94	76.06	76.27	76.50	76.71	76.89	77.09	77.27	77.38	77.42	77.45
	77.47	77.49	77.50	77.50	*******	*******	*******	80.64	79.97	80.06	80.14	80.04	79.84	79.63	79.36
	79.03	78.63	78.14	77.45	76.59	75.81	74.99	74.74	74.53	74.76	74.85	74.76	74.56	74.18	73.62
	73.29	73.26	73.24												
0 28	*******	*******	*******	*******	*******	100.00	100.00	100.00	100.00	70.18	69.97	69.81	69.67	69.57	69.48
	69.43	69.41	69.43	69.54	69.91	70.88	72.34	*******	*******	*******	*******	*******	*******	*******	75.80

	75.86	75.93	76.00	76.07	76.16	76.28	76.50	76.69	76.88	77.02	77.16	77.29	77.36	77.40	77.43
	77.44	77.45	77.46	77.47	77.49	100.00	78.05	78.61	79.36	79.76	80.05	80.04	79.90	79.80	79.54
	79.20	78.79	78.28	77.57	76.73	75.94	75.24	74.68	74.40	74.29	74.34	74.23	74.12	73.80	73.40
	73.19	73.16	73.14												
0 29	*******	*******	*******	*******	100.00	100.00	100.00	100.00	70.61	70.39	70.22	70.09	69.98	69.90	69.84
	69.85	69.93	70.08	70.34	70.79	71.52	72.58	72.75	*******	*******	74.54	74.73	*******	*******	76.02
	76.17	76.21	76.25	76.31	76.39	76.51	76.69	76.88	77.01	77.12	77.22	77.30	77.35	77.39	77.41
	77.42	77.42	77.43	77.45	77.50	77.70	77.93	78.08	78.66	79.46	80.16	80.08	79.94	79.87	79.76
	79.38	78.95	78.50	77.89	76.74	75.85	75.27	74.62	74.33	74.32	73.89	73.49	73.60	73.39	73.17
	73.04	73.02	73.02												
0 30	*******	*******	*******	100.00	100.00	71.69	72.02	70.99	70.80	70.63	70.47	70.35	70.26	70.21	70.21
	70.26	70.39	70.60	70.91	71.36	71.92	72.53	73.01	73.56	74.06	74.49	74.72	*******	*******	*******
	76.65	76.51	76.50	76.54	76.61	76.72	76.87	77.00	77.09	77.18	77.26	77.32	77.36	77.38	77.40
	77.40	77.40	77.39	77.41	77.50	77.69	77.90	78.11	78.31	78.99	79.71	80.14	79.98	79.91	79.84
	79.56	79.06	78.39	77.78	76.34	75.84	75.31	74.62	74.73	74.64	74.25	73.74	72.76	72.83	72.82
	72.85	72.87	72.89												
0 31	*******	*******	*******	100.00	100.00	71.54	71.37	71.14	70.97	70.82	70.69	70.59	70.52	70.49	70.51
	70.59	70.75	70.99	71.33	71.78	72.31	72.81	73.31	73.92	74.32	74.77	74.96	*******	*******	*******
	76.66	76.83	76.72	76.74	76.80	76.89	77.00	77.09	77.16	77.24	77.30	77.34	77.37	77.39	77.40
	77.39	77.37	77.34	77.34	77.46	77.65	77.88	78.15	78.36	78.98	79.45	79.80	80.13	79.98	79.93
	79.78	*******	78.32	77.83	78.09	75.84	75.53	75.18	75.25	75.10	*******	*******	100.00	72.47	72.48
	72.64	72.72	72.76												
0 32	100.00	100.00	*******	100.00	100.00	71.52	71.42	71.28	71.15	71.01	70.90	70.81	70.75	70.72	70.74
	70.82	70.98	71.24	71.62	72.13	72.84	73.27	73.64	74.00	*******	*******	*******	*******	*******	*******
	*******	76.87	76.88	76.90	76.96	77.03	77.10	77.17	77.23	77.29	77.34	77.37	77.39	77.40	77.41
	77.39	77.36	77.29	77.23	77.42	77.65	77.91	78.23	78.56	78.97	79.38	79.67	79.89	80.16	80.06
	79.74	*******	*******	76.98	76.33	75.98	75.81	76.06	75.98	76.51	*******	*******	72.60	72.53	72.49
	72.43	72.57	72.63												
0 33	100.00	100.00	100.00	100.00	100.00	71.60	71.51	71.42	71.31	71.21	71.10	71.01	70.94	70.90	70.89
	70.94	71.08	71.36	71.82	72.51	73.00	73.35	73.68	*******	*******	*******	*******	*******	*******	*******
	*******	*******	77.14	77.06	77.09	77.15	77.20	77.25	77.30	77.34	77.38	77.41	77.42	77.43	77.43
	77.41	77.38	77.32	77.30	77.47	77.70	77.97	78.27	78.58	78.93	79.25	79.97	79.85	80.08	80.24
	79.04	78.28	77.55	76.57	76.16	75.97	77.38	77.25	76.77	*******	*******	*******	100.00	72.58	72.54
	72.48	72.42	72.55												
0 34	100.00	100.00	100.00	100.00	72.22	71.73	71.64	71.55	71.47	71.39	71.29	71.20	71.11	71.03	70.97
	70.96	71.04	71.32	72.02	72.56	73.03	73.34	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	77.17	77.21	77.25	77.29	77.33	77.37	77.40	77.43	77.45	77.47	77.47	77.47
	77.46	77.42	77.37	77.31	77.52	77.76	78.01	78.28	78.57	78.91	79.28	79.68	79.86	80.05	80.23
	79.22	77.36	77.03	77.36	77.16	77.75	78.93	78.74	80.24	*******	*******	*******	*******	72.64	72.61
	72.57	72.55	72.58												
0 35	78.35	78.33	78.06	76.06	73.10	71.88	71.78	71.70	71.64	71.57	71.49	71.39	71.28	71.14	71.00
	70.89	70.83	71.01	71.76	72.41	72.98	73.31	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	77.32	77.36	77.36	77.38	77.41	77.43	77.46	77.48	77.50	77.51	77.52	77.52
	77.52	77.50	77.49	77.50	77.64	77.83	78.03	78.27	78.54	78.88	79.31	79.51	79.69	80.20	80.13
	79.61	78.95	78.53	78.38	78.17	80.15	80.32	79.94	*******	*******	*******	*******	100.00	100.00	72.67
	72.65	72.63	72.63												
0 36	78.34	78.31	78.10	76.32	73.48	72.09	71.93	71.86	71.81	71.76	71.70	71.62	71.48	71.28	71.03
	70.82	70.42	70.29	70.70	71.99	72.79	73.25	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	77.47	77.47	77.48	77.49	77.51	77.53	77.55	77.57	77.58	77.59
	77.59	77.59	77.61	77.65	77.74	77.88	78.05	78.25	78.50	78.78	79.11	79.36	79.61	79.90	80.19
	80.06	79.92	79.73	79.59	79.34	*******	81.62	82.46	*******	*******	*******	*******	100.00	100.00	72.77
	72.73	72.71	72.69												
0 37	78.35	78.34	78.24	77.04	74.04	72.12	72.05	72.01	71.98	71.97	71.95	71.91	71.79	71.49	71.16
	71.31	69.85	69.11	69.09	70.77	72.47	73.16	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	77.40	*******	*******	*******	77.57	77.55	77.56	77.57	77.59	77.61	77.62	77.64	77.65
	77.66	77.68	77.70	77.74	77.81	77.91	78.05	78.22	78.45	78.68	78.98	79.25	79.53	79.85	80.13
	80.34	80.87	80.92	80.96	*******	83.28	82.63	83.41	*******	*******	*******	*******	100.00	100.00	100.00
	73.13	72.86	72.83												
0 38	78.37	78.40	100.00	100.00	100.00	72.18	72.15	72.14	72.14	72.18	72.23	72.31	72.43	71.97	71.41
	70.24	68.90	67.29	66.20	69.59	71.83	73.03	*******	*******	*******	*******	*******	75.72	76.00	*******
	76.98	77.20	77.37	*******	*******	*******	77.61	77.60	77.61	77.63	77.65	77.67	77.68	77.70	77.72
	77.73	77.75	77.77	77.80	77.86	77.94	78.05	78.21	78.38	78.56	78.81	100.00	*******	*******	*******
	81.88	82.04	81.99	82.08	82.72	82.80	82.67	83.02	91.09	*******	*******	92.59	*******	*******	*******
	*******	*******	*******												
0 39	100.00	100.00	100.00	100.00	100.00	72.25	72.24	72.24	72.28	72.36	72.51	72.88	72.60	72 00	71.40
	69.95	68.38	65.79	67.30	69.87	71.71	72.70	*******	*******	*******	*******	75.41	75.63	75.94	76.41
	76.91	77.23	77.49	*******	*******	*******	*******	77.66	77.68	77.71	77.72	77.73	77.75	77.77	77.78
	77.79	77.81	77.82	77.85	77.89	77.95	78.05	78.18	78.32	78.47	*******	*******	*******	*******	*******
	*******	82.93	82.66	82.47	82.40	82.27	82.13	82.46	84.86	89.23	90.52	92.02	*******	*******	*******
	*******	*******	*******												
0 40	*******	*******	100.00	100.00	100.00	72.31	72.30	72.32	72.38	72.47	72.61	72.93	72.58	71.77	71.07
	70.20	69.24	68.42	69.17	70.69	71.98	72.78	*******	*******	*******	75.10	75.40	75.60	75.91	76.35
	76.85	77.33	77.56	77.60	*******	*******	*******	77.75	77.77	77.81	77.80	77.80	77.81	77.83	77.84
	77.85	77.86	77.87	77.89	77.92	77.97	78.04	78.16	78.27	*******	*******	*******	*******	*******	*******
	*******	83.43	82.89	82.40	81.98	81.54	81.21	81.97	83.29	86.13	88.46	*******	*******	*******	*******

	*******	*******	*******												
0 41	*******	*******	*******	100.00	100.00	72.34	72.34	72.37	72.44	72.50	72.54	72.50	72.23	71.77	71.26
	70.72	70.22	70.01	70.50	71.48	72.64	73.17	73.71	*******	*******	75.04	75.29	75.56	75.88	76.29
	76.78	77.30	77.55	77.61	77.67	*******	77.78	77.81	77.84	77.87	77.87	77.87	77.88	77.88	77.90
	77.90	77.91	77.92	77.93	77.95	77.99	78.05	78.14	100.00	*******	*******	*******	*******	*******	*******
	*******	*******	82.73	82.05	81.38	80.69	80.79	81.59	82.62	85.19	87.46	*******	*******	*******	*******
	*******	*******	*******												
0 42	*******	*******	*******	100.00	100.00	72.38	72.43	73.02	72.51	72.55	72.53	72.41	72.20	71.90	71.56
	71.24	71.01	71.01	71.39	72.03	72.82	73.30	*******	*******	74.84	75.01	75.25	75.52	75.85	76.23
	76.66	77.08	77.36	77.56	77.66	77.74	77.81	77.86	77.90	77.93	77.95	77.94	77.94	77.94	77.95
	77.96	77.97	77.97	77.98	77.99	78.01	78.10	100.00	*******	*******	*******	*******	*******	*******	*******
	*******	*******	82.46	81.49	80.84	80.33	80.44	81.21	82.15	84.13	87.00	*******	*******	*******	*******
	*******	*******	*******												
0 43	*******	*******	*******	100.00	100.00	100.00	100.00	100.00	100.00	72.65	72.60	72.48	72.32	72.11	71.89
	71.70	71.61	71.69	71.99	72.45	72.98	*******	*******	*******	74.88	75.00	75.23	75.50	75.81	76.17
	76.58	76.95	77.24	77.46	77.60	77.72	77.81	77.88	77.94	77.97	77.99	78.00	78.01	78.02	78.02
	78.03	78.04	78.04	78.04	78.04	78.07	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	82.08	80.81	80.27	79.96	80.07	80.79	81.63	83.26	87.33	*******	*******	*******	*******
	*******	*******	*******												
0 44	*******	*******	*******	100.00	100.00	100.00	100.00	100.00	100.00	72.81	72.75	72.64	72.51	72.36	72.21
	72.11	72.08	72.18	72.44	72.85	*******	*******	*******	74.46	74.74	74.96	75.20	75.47	75.77	76.12
	76.53	76.87	77.19	77.41	77.58	77.72	77.84	77.92	77.98	78.03	78.05	78.07	78.08	78.10	78.11
	78.12	78.13	78.15	78.12	78.12	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	81.31	80.01	79.50	79.50	79.65	80.32	81.09	82.53	*******	*******	*******	*******	*******
	*******	*******	*******												
0 45	*******	*******	*******	100.00	100.00	100.00	100.00	*******	100.00	73.04	72.97	72.86	72.75	72.64	72.53
	72.46	72.45	72.54	72.73	73.03	*******	*******	74.21	74.46	74.70	74.93	75.18	75.45	75.75	76.11
	76.51	76.84	77.17	77.40	77.59	77.75	77.88	77.97	78.04	78.09	78.13	78.15	78.16	78.18	78.20
	78.23	78.27	78.31	78.24	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	79.94	79.37	79.04	79.06	79.21	79.76	80.50	82.13	*******	*******	*******	*******	*******
	*******	*******	*******												
0 46	*******	*******	*******	*******	*******	*******	*******	*******	100.00	73.32	73.23	73.12	73.02	72.92	72.83
	72.77	72.75	72.80	72.90	73.16	*******	*******	74.26	74.46	74.68	74.92	75.16	75.44	75.75	76.15
	76.51	76.85	77.16	77.42	77.63	77.81	77.94	78.04	78.12	78.17	78.20	78.23	78.25	78.26	78.29
	78.35	78.47	78.72	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	78.96	78.81	78.61	78.63	78.73	79.10	79.65	82.52	*******	*******	*******	*******	*******
	*******	*******	*******												
0 47	*******	*******	*******	*******	*******	*******	*******	100.00	74.19	73.63	73.52	73.41	73.30	73.19	73.10
	73.03	73.00	73.00	73.05	73.28	*******	73.98	74.27	74.46	74.68	74.91	75.16	75.44	75.78	76.18
	76.54	76.88	77.19	77.48	77.71	77.88	78.03	78.13	78.21	78.26	78.29	78.31	78.33	78.34	78.38
	78.49	78.88	79.90	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	79.53	78.24	78.13	78.16	78.19	78.23	78.31	78.56	83.23	*******	*******	*******	*******	*******
	*******	*******	*******												
0 48	*******	*******	*******	*******	*******	*******	*******	100.00	74.23	73.99	73.85	73.72	73.59	73.46	73.35
	73.27	73.22	73.15	73.19	73.41	73.70	73.99	74.23	74.45	74.67	74.91	75.17	75.47	75.85	76.22
	76.60	76.95	77.27	77.57	77.81	77.99	78.13	78.24	78.31	78.35	78.38	78.40	78.41	78.41	78.42
	78.54	100.00	82.24	83.51	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.78	77.80	77.82	77.84	77.85	77.83	77.76	77.73	100.00	*******	*******	*******	*******	*******
	*******	*******	*******												
0 49	*******	*******	*******	*******	*******	*******	*******	100.00	74.48	74.32	74.17	74.03	73.87	73.71	73.58
	73.51	73.48	73.17	73.28	73.49	73.74	74.00	74.22	74.44	74.67	74.92	75.19	75.54	75.90	76.30
	76.69	77.06	77.39	77.69	77.93	78.11	78.25	78.36	78.42	78.46	78.49	78.50	78.50	78.48	*******
	*******	*******	84.07	84.64	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	77.73	77.72	77.72	77.73	77.73	77.72	77.68	77.61	77.54	78.05	100.00	*******	*******	*******	*******
	*******	*******	*******												
0 50	*******	*******	*******	*******	*******	*******	*******	75.25	74.79	74.64	74.50	74.35	74.17	73.95	73.79
	73.74	73.60	73.24	73.46	73.63	73.82	74.02	74.22	74.44	74.67	74.95	75.24	75.58	75.99	76.42
	76.83	77.21	77.55	77.84	78.07	78.25	78.38	78.49	78.55	78.58	78.60	78.60	78.60	79.06	*******
	*******	*******	85.08	85.25	85.46	*******	*******	*******	*******	*******	*******	*******	*******	100.00	78.13
	77.68	77.66	77.65	77.64	77.62	77.59	77.53	77.41	77.20	76.84	76.65	76.62	*******	*******	*******
	*******	*******	*******												
0 51	*******	*******	*******	*******	*******	*******	100.00	75.31	75.11	74.98	74.85	74.71	74.50	74.14	73.95
	73.87	73.74	73.58	73.62	73.73	73.88	74.04	74.23	74.45	74.69	74.96	75.28	75.68	76.13	76.58
	77.01	77.39	77.74	78.01	78.24	78.41	78.53	78.63	78.68	78.71	78.72	78.72	78.71	*******	*******
	*******	*******	85.49	85.54	85.60	*******	*******	*******	*******	*******	*******	*******	*******	77.85	77.72
	77.65	77.62	77.59	77.57	77.53	77.47	77.38	77.20	76.95	76.65	76.49	76.56	*******	*******	*******
	*******	*******	*******												
0 52	*******	*******	*******	*******	*******	*******	75.71	75.49	75.37	75.28	75.20	75.12	74.93	74.30	74.04
	73.93	73.79	73.71	73.75	73.83	73.94	74.07	74.24	74.45	74.71	75.00	75.35	75.82	76.39	76.87
	77.27	77.62	77.94	78.21	78.43	78.59	78.70	78.79	78.83	78.85	78.87	78.86	78.85	*******	*******
	*******	85.73	85.67	85.68	85.69	*******	*******	*******	*******	*******	*******	*******	100.00	78.15	77.67
	77.62	77.58	77.55	77.51	77.45	77.36	77.23	77.02	76.74	76.41	76.15	*******	*******	*******	*******
	*******	*******	*******												
0 53	*******	*******	*******	*******	*******	100.00	75.77	75.67	75.60	75.55	75.54	75.60	75.54	*******	*******
	*******	*******	73.77	73.81	73.89	73.99	74.10	74.26	74.47	74.79	75.26	100.00	77.11	76.95	77.26

	77.53	77.83	78.15	78.42	78.64	78.79	78.89	78.96	78.99	79.01	79.02	79.02	80.03	*******	*******
	*******	85.78	85.76	85.76	85.77	*******	*******	*******	*******	*******	*******	*******	*******	100.00	77.67
	77.60	77.55	77.51	77.46	77.39	77.29	77.14	76.91	76.53	76.11	75.53	*******	*******	*******	*******
	*******	*******	*******												
0 54	*******	*******	*******	*******	*******	75.94	75.87	75.81	75.78	75.76	75.81	75.82	75.82	*******	*******
	*******	*******	*******	*******	74.02	74.09	100.00	100.00	100.00	*******	*******	*******	*******	78.10	77.68
	77.84	78.05	78.38	78.66	78.88	79.01	79.09	79.14	79.18	79.19	79.20	79.20	*******	*******	*******
	*******	85.83	85.82	85.82	85.83	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.77
	77.58	77.53	77.48	77.43	77.35	77.23	77.07	76.82	76.40	75.79	74.00	*******	*******	*******	*******
	*******	*******	*******												
0 55	*******	*******	*******	*******	*******	75.97	75.95	75.94	75.92	75.91	75.92	75.92	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00	79.08
	78.50	79.02	78.75	78.95	79.14	79.24	79.31	79.36	79.38	79.41	79.42	79.43	*******	*******	*******
	85.90	85.87	85.86	85.87	85.91	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00
	77.57	77.52	77.47	77.41	77.32	77.19	77.02	76.78	76.45	76.00	75.28	*******	*******	*******	*******
	*******	*******	*******												
0 56	*******	*******	*******	*******	*******	75.99	75.99	75.98	75.98	75.97	75.97	75.97	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	100.00
	80.12	100.00	100.00	79.35	79.43	79.48	79.53	79.56	79.58	79.61	79.64	79.69	*******	*******	*******
	85.93	85.92	85.91	85.91	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	100.00	77.52	77.47	77.41	77.32	77.19	77.03	76.83	76.56	76.25	75.81	*******	*******	*******	*******
	*******	*******	*******												
0 57	*******	*******	*******	*******	76.01	76.01	76.01	76.01	76.01	76.01	76.02	76.02	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	84.22
	100.00	100.00	100.00	100.00	79.68	79.71	79.74	79.76	79.79	79.82	79.86	79.94	*******	*******	*******
	85.97	85.98	85.97	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.58	77.49	77.42	77.34	77.24	77.10	76.94	76.70	76.49	*******	*******	*******	*******	*******
	*******	*******	*******												
0 58	*******	*******	*******	76.02	76.02	76.02	76.04	76.04	76.04	76.05	76.06	76.06	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	100.00	*******	*******	100.00	79.94	79.92	79.93	79.95	79.98	80.01	80.06	80.14	*******	*******	*******
	85.99	86.03	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	100.00	77.66	77.48	77.39	77.32	77.19	77.09	78.08	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 59	*******	*******	*******	76.07	76.04	76.07	76.07	76.08	76.09	76.09	76.10	76.11	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	100.00	80.23	80.12	80.11	80.13	80.15	80.18	80.23	80.30	*******	*******	100.00
	85.77	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	78.15	77.53	77.50	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 60	*******	*******	*******	76.12	76.11	76.11	76.12	76.12	76.13	76.13	76.14	76.15	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	80.53	80.30	80.28	80.28	80.30	80.34	80.39	80.47	80.64	*******	82.57
	84.59	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	100.00	100.00	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 61	*******	*******	*******	76.17	76.16	76.15	76.15	76.15	76.16	76.16	76.18	76.20	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	100.00	80.45	80.42	80.42	80.43	80.47	80.53	80.62	80.77	81.02	81.45
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	84.38	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 62	*******	*******	*******	76.22	76.20	76.18	76.18	76.18	76.18	76.19	76.20	76.40	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	100.00	80.64	80.54	80.53	80.53	80.57	80.62	80.71	80.82	80.98	81.15
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 63	*******	*******	*******	76.26	76.22	76.21	76.20	76.20	76.20	76.21	76.22	100.00	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	81.19	80.66	80.63	80.62	80.65	80.69	80.76	80.85	80.95	81.05
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 64	*******	*******	*******	76.28	76.24	76.22	76.22	76.21	76.21	76.22	76.23	100.00	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	100.00	80.73	80.69	80.68	80.70	80.73	80.79	80.86	80.94	81.01
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 65	*******	*******	*******	76.30	76.25	76.23	76.22	76.22	76.22	76.23	76.24	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	80.82	80.73	80.71	80.72	80.75	80.80	80.86	80.94	80.99
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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1                    HEAD IN LAYER  2 AT END OF TIME STEP 20 IN STRESS PERIOD  3
          ---------------------------------------------------------------

            1       2       3       4       5       6       7       8       9      10      11      12      13      14      15
           16      17      18      19      20      21      22      23      24      25      26      27      28      29      30
           31      32      33      34      35      36      37      38      39      40      41      42      43      44      45
           46      47      48      49      50      51      52      53      54      55      56      57      58      59      60
           61      62      63      64      65      66      67      68      69      70      71      72      73      74      75
           76      77      78
 ..........................................................................................................................
  0  1  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        ******* *******   69.17   69.16   69.14   69.12   69.12   69.20   69.35   69.51   69.75   69.95   70.14   70.34   70.55
          70.77   71.00   71.25   71.52   71.81   72.13   72.43 ******* ******* ******* ******* ******* ******* ******* *******
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  0  2  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        *******   69.19   69.18   69.16   69.15   69.14   69.13   69.21   69.35   69.50   69.74   69.93   70.12   70.32   70.53
          70.76   71.00   71.26   71.53   71.83   72.15   72.48   72.80 ******* ******* ******* ******* ******* ******* *******
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  0  3  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        *******   69.19   69.18   69.17   69.16   69.15   69.14   69.21   69.34   69.48   69.72   69.90   70.09   70.28   70.50
          70.73   70.98   71.26   71.55   71.86   72.19   72.52   72.84   73.17 ******* ******* ******* ******* ******* *******
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  0  4  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        *******   69.18   69.18   69.17   69.16   69.16   69.15   69.21   69.32   69.46   69.67   69.85   70.03   70.23   70.45
          70.69   70.96   71.27   71.59   71.90   72.22   72.56   72.88   73.17 ******* ******* ******* ******* ******* *******
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  0  5  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        *******   69.18   69.17   69.17   69.17   69.17   69.17   69.21   69.30   69.42   69.62   69.78   69.96   70.15   70.37
          70.63   70.93   71.27   71.62   71.93   72.27   72.63   72.93   73.20 ******* ******* ******* ******* ******* *******
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  0  6  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
          69.17   69.16   69.16   69.16   69.16   69.16   69.17   69.19   69.26   69.37   69.54   69.69   69.86   70.05   70.27
          70.54   70.89   71.27   71.64   71.98   72.34   72.71   72.99   73.26 ******* ******* ******* ******* ******* *******
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  0  7  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
          69.15   69.15   69.15   69.15   69.15   69.15   69.15   69.16   69.22   69.30   69.46   69.59   69.74   69.91   70.13
          70.41   70.82   71.25   71.66   72.04   72.44   72.80   73.07   73.36 ******* ******* ******* ******* ******* *******
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  0  8  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
          69.12   69.12   69.12   69.13   69.13   69.13   69.13   69.13   69.17   69.23   69.35   69.46   69.59   69.75   69.94
          70.22 ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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  0  9  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
          69.07   69.09   69.10   69.10   69.11   69.11   69.11   69.11   69.12   69.17   69.24   69.32   69.42   69.56   69.71
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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  0 10  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
          69.03   69.04   69.06   69.07   69.09   69.09   69.09   69.08   69.07   69.08   69.10   69.14   69.22   69.35   69.50
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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  0 11  ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******   68.92   68.93   68.95
          68.96   68.99   69.02   69.04   69.06   69.08   69.07   69.06   69.03   68.99   68.94   68.90   69.00   69.14   69.30
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 12    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.86   68.86   68.87
          68.89   68.92   68.96   69.00   69.04   69.07   69.08   69.06   69.01   68.92   68.75   68.50   68.76   68.98 *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 13    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.77   68.77   68.77   68.77
          68.79   68.83   68.89   68.96   69.02   69.07   69.10   69.09   69.05   68.93   68.61   67.57   68.58   68.98 *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 14    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.70   68.67   68.66   68.66
          68.67   68.71   68.79   68.89   69.00   69.09   69.16   69.19   69.20   69.13   69.03   68.83   69.11   69.36 *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 15    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.56   68.54   68.52
          68.53   68.56   68.65   68.79   68.96   69.12   69.25   69.35   69.43   69.45   69.55   69.58   69.74   69.95 *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 16    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.46   68.43   68.40   68.37
          68.35   68.36   68.45   68.62   68.87   69.14   69.38   69.58   69.76   69.94   70.12   70.25   70.40   70.62 *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 17    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.36   68.31   68.26   68.20
          68.14   68.12   68.19   68.38   68.71   69.12   69.53   69.88   70.23   70.66   70.79   70.90   71.06   71.30   71.65
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 18    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.26   68.19   68.11   68.01
          67.91   67.84   67.85   68.06   68.51   69.04   69.62   70.30   70.83   71.44   71.43   71.49   71.66   71.90   72.19
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 19    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.17   68.09   67.98   67.84
          67.68   67.54   67.45   67.56   68.18   68.91   69.61   70.45   71.08   71.66   71.80   71.95   72.17   72.42   72.74
          73.15 ******* ******* 74.54   74.67 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 20    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.11   68.03   67.90   67.72
          67.51   67.24   66.91   66.59   67.71   68.72   69.56   70.51   71.26   72.03   72.14   72.33   72.58   72.85   73.17
          73.54   73.98   74.33   74.56   74.70 ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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        ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 21    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.10   68.02   67.89   67.70
          67.45   67.09   66.30   63.61   67.09   68.57   69.56   70.60   71.38   72.10   72.37   72.65   72.93   73.22   73.52
          73.84   74.18   74.46   74.65   74.79   74.94 ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 22    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.09   67.96   67.79
          67.58   67.32   66.98   66.63   67.70   68.73   69.68   70.74   71.50   72.20   72.62   72.94   73.25   73.55   73.82
          74.12   74.39   74.62   74.78   74.92   75.05 ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 23    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.23   68.12   67.97
          67.79   67.62   67.48   67.52   68.07   68.90   69.83   70.91   71.67   72.38   72.95   73.25   73.56   73.86   74.11
          74.38   74.61   74.80   74.94   75.08   75.20 ******* ******* ******* ******* ******* ******* ******* ******* *******
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0 24    ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* ******* *******   68.43   68.33   68.20
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	68.03	67.88	67.76	67.75	68.05	68.91	69.96	71.11	71.87	72.58	73.16	73.52	73.87	74.20	74.43
	74.66	74.86	75.01	75.14	75.27	75.39	*******	*******	*******	*******	*******	*******	*******	*******	77.60
	77.61	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 25	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.69	68.58	68.46
	68.30	68.13	67.91	67.61	67.33	68.72	70.09	71.35	72.11	72.78	73.35	73.83	74.22	74.60	74.80
	74.97	75.12	75.25	75.36	75.48	75.59	*******	*******	*******	*******	*******	*******	*******	77.51	77.54
	77.56	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 26	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.99	68.88	68.76
	68.62	68.43	68.10	67.28	64.32	68.45	70.41	71.65	72.38	73.02	73.57	74.04	74.45	74.86	75.17
	75.29	75.40	75.50	75.59	75.70	75.81	75.99	*******	*******	*******	*******	*******	77.41	77.46	77.49
	77.51	77.52	77.54	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	74.88	74.82	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 27	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.32	69.22	69.10
	69.00	68.87	68.70	68.45	68.23	69.76	71.27	72.08	72.71	73.31	73.81	74.24	74.63	74.99	75.39
	75.55	75.66	75.74	75.83	75.92	76.02	*******	*******	*******	*******	*******	*******	77.39	77.42	77.45
	77.47	77.48	77.49	77.49	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	74.85	74.71	74.60	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 28	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.82	69.67	69.56	69.47
	69.41	69.39	69.41	69.51	69.85	70.79	71.88	72.47	73.03	73.58	74.05	74.44	74.79	75.15	75.67
	75.84	75.93	75.98	76.06	76.15	76.25	*******	*******	76.92	77.03	*******	77.32	77.37	77.40	77.42
	77.44	77.45	77.46	77.46	*******	*******	*******	*******	*******	*******	*******	*******	79.89	79.86	*******
	*******	*******	*******	*******	*******	*******	*******	74.62	74.54	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 29	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.07	69.97	69.89	69.81
	69.82	69.91	70.07	70.32	70.77	71.47	72.26	72.75	73.31	73.81	74.28	74.62	74.97	75.40	75.91
	76.12	76.19	76.24	76.31	76.38	76.48	*******	76.94	77.02	77.12	77.24	77.32	77.36	77.38	77.40
	77.42	77.42	77.43	77.44	77.49	*******	*******	*******	*******	*******	*******	*******	79.90	79.88	79.84
	*******	*******	*******	*******	*******	*******	*******	74.58	74.50	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 30	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.48	70.35	70.25	70.20	70.20
	70.26	70.40	70.60	70.91	71.35	71.91	72.49	73.00	73.53	74.00	74.41	74.73	75.11	75.64	76.13
	76.39	76.45	76.49	76.53	76.60	76.73	76.91	77.02	77.10	77.18	77.27	77.33	77.36	77.38	77.39
	77.40	77.39	77.39	77.39	77.46	*******	*******	*******	*******	*******	*******	79.94	79.91	79.90	79.86
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.68	70.59	70.51	70.48	70.52
	70.59	70.75	70.99	71.32	71.76	72.27	72.77	73.27	73.78	74.21	74.60	74.90	75.27	75.81	76.26
	76.52	76.66	76.69	76.73	76.79	76.90	77.01	77.10	77.16	77.24	77.31	77.34	77.37	77.39	77.39
	77.39	77.37	77.33	77.29	77.42	77.62	77.85	*******	*******	79.12	79.41	79.74	79.90	79.92	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 32	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.00	70.89	70.81	70.75	70.72	70.74
	70.83	70.98	71.24	71.60	72.07	72.60	73.07	73.51	73.95	74.36	74.72	75.04	75.46	75.92	76.33
	76.59	76.77	76.85	76.89	76.95	77.03	77.11	77.18	77.23	77.29	77.34	77.37	77.39	77.40	77.40
	77.39	77.35	77.25	76.99	77.37	77.61	77.87	*******	78.60	78.98	79.36	79.64	79.82	79.94	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 33	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.08	71.01	70.94	70.89	70.89
	70.94	71.08	71.34	71.75	72.27	72.76	73.21	73.64	74.09	74.48	74.83	75.16	75.55	75.98	76.38
	76.66	76.88	77.01	77.04	77.09	77.15	77.20	77.25	77.30	77.34	77.38	77.40	77.42	77.43	77.43
	77.41	77.37	77.29	77.21	77.43	77.67	77.96	78.28	78.58	78.93	79.27	79.61	79.75	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 34	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.39	71.29	71.19	71.10	71.03	70.96
	70.96	71.04	71.28	71.75	72.28	72.80	73.28	73.73	74.22	74.60	74.93	75.24	75.62	76.02	76.41
	76.74	76.97	77.11	77.15	77.21	77.26	77.30	77.33	77.37	77.40	77.42	77.44	77.46	77.47	77.47
	77.45	77.41	77.32	77.07	77.48	77.74	78.00	78.27	78.55	78.90	79.27	79.62	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 35	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.56	71.48	71.39	71.27	71.14	70.99
	70.87	70.81	70.95	71.43	72.09	72.75	73.27	73.81	74.31	74.68	74.99	75.29	75.65	76.04	76.44
	76.81	77.05	77.20	77.27	77.33	77.36	77.38	77.41	77.43	77.45	77.48	77.50	77.51	77.52	77.52
	77.51	77.50	77.47	77.46	77.63	77.82	78.03	78.26	78.52	78.87	79.26	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 36	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.75	71.70	71.61	71.47	71.26	71.00
	70.73	70.38	70.25	70.56	71.63	72.56	73.23	73.83	74.30	74.68	75.01	75.31	75.66	76.06	76.49
	76.87	77.12	77.27	77.35	77.40	77.44	77.46	77.48	77.49	77.51	77.53	77.55	77.56	77.57	77.58
	77.59	77.59	77.60	77.64	77.73	77.87	78.04	78.23	78.48	78.77	*******	*******	*******	*******	*******

	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 37	*******	*******	*******	*******	*******	*******	*******	*******	*******	71.96	71.95	71.89	71.75	71.45	71.05
	70.61	69.74	69.03	68.84	70.69	72.27	73.11	73.74	74.22	74.65	75.00	75.32	75.67	76.01	76.54
	76.96	77.18	77.32	77.40	77.46	77.51	77.54	77.54	77.55	77.57	77.59	77.60	77.62	77.63	77.65
	77.66	77.67	77.70	77.73	77.80	77.90	78.04	78.20	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 38	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.18	72.23	72.27	72.17	71.71	71.07
	70.10	68.80	67.04	64.76	69.44	71.91	72.98	73.63	74.15	74.61	74.99	75.31	75.64	75.98	76.53
	76.97	77.19	77.35	77.47	77.52	77.57	77.59	77.60	77.61	77.63	77.65	77.66	77.68	77.70	77.71
	77.73	77.75	77.77	77.80	77.85	77.92	78.03	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 39	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.36	72.50	72.67	72.37	71.79	71.06
	69.84	68.17	64.50	66.88	69.81	71.79	72.84	73.58	74.12	74.59	74.98	75.31	75.60	75.91	76.41
	76.92	77.22	77.45	77.54	77.58	77.62	77.65	77.66	77.68	77.70	77.72	77.73	77.75	77.76	77.78
	77.79	77.81	77.82	77.84	77.88	77.94	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 40	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.61	72.74	72.38	71.73	71.04
	70.14	69.15	68.16	69.04	70.69	72.00	72.90	73.61	74.15	74.60	74.99	75.29	75.57	75.89	76.34
	76.86	77.29	77.51	77.58	77.63	77.68	77.71	77.73	77.76	77.79	77.79	77.80	77.81	77.82	77.84
	77.85	77.86	77.87	77.88	77.91	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	80.65	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 41	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.54	72.48	72.20	71.75	71.24
	70.69	70.16	69.94	70.46	71.47	72.42	73.12	73.70	74.22	74.64	74.96	75.26	75.53	75.86	76.28
	76.78	77.27	77.50	77.59	77.65	77.71	77.76	77.80	77.84	77.86	77.87	77.87	77.87	77.88	77.89
	77.90	77.91	77.91	77.93	77.94	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	80.37	80.44	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 42	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.39	72.19	71.89	71.54
	71.21	70.98	70.97	71.37	72.04	72.74	73.31	73.82	74.29	74.70	74.96	75.23	75.50	75.83	76.21
	76.66	77.08	77.37	77.54	77.65	77.73	77.80	77.85	77.90	77.93	77.94	77.94	77.93	77.94	77.95
	77.96	77.96	77.97	77.97	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	80.10	80.16	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 43	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.46	72.30	72.10	71.87
	71.68	71.59	71.67	71.99	72.47	73.00	73.50	73.94	74.35	74.73	74.96	75.21	75.48	75.79	76.15
	76.58	76.96	77.25	77.46	77.61	77.72	77.81	77.88	77.94	77.97	77.99	78.00	*******	*******	78.01
	78.02	78.03	78.03	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	79.80	79.84	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 44	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.63	72.50	72.35	72.20
	72.10	72.07	72.17	72.43	72.83	73.25	73.65	74.05	74.40	74.70	74.94	75.19	75.45	75.75	76.08
	*******	*******	77.21	77.42	77.59	77.72	77.83	77.92	77.98	78.03	78.05	78.06	*******	*******	*******
	78.11	78.12	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	79.26	79.40	79.46	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 45	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	72.85	72.75	72.63	72.52
	72.45	72.45	72.53	72.74	73.05	73.42	73.77	74.14	74.43	74.68	74.92	75.16	75.43	75.74	76.08
	*******	*******	77.19	77.41	77.58	77.75	77.88	77.97	78.04	78.09	78.12	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	78.91	78.98	79.06	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 46	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	73.11	73.02	72.92	72.83
	72.76	72.75	72.80	72.93	73.19	73.54	73.86	74.20	74.44	74.68	74.91	75.15	75.42	75.71	*******
	*******	*******	*******	*******	*******	77.81	77.94	78.04	78.12	78.17	78.20	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	78.52	78.58	78.64	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 47	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	73.39	73.29	73.19	73.10
	73.03	72.99	73.00	73.09	73.31	73.62	73.94	74.22	74.45	74.67	74.90	75.14	75.42	75.75	*******
	*******	*******	*******	*******	*******	*******	78.04	78.13	78.21	78.26	78.29	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	78.04	78.16	78.21	78.24	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 48	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	73.86	73.71	73.58	73.45	73.35
	73.27	73.21	73.16	73.22	73.42	73.69	73.97	74.22	74.44	74.66	74.90	75.15	75.44	*******	*******
	*******	*******	*******	*******	*******	*******	78.13	78.24	78.31	78.35	78.38	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	77.83	77.87	77.89	77.86	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 49	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	74.16	74.02	73.87	73.71	73.58

	73.49	73.43	73.23	73.32	73.51	73.75	73.99	74.21	74.43	74.66	74.90	75.16	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	78.37	78.42	78.46	78.48	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	77.71	77.72	77.73	77.72	77.69	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 50	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	74.48	74.34	74.17	73.94	73.77
	73.71	73.58	73.33	73.46	73.62	73.82	74.02	74.21	74.43	74.65	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	78.50	78.55	78.58	78.59	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	77.65	77.64	77.62	77.59	77.54	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 51	*******	*******	*******	*******	*******	*******	*******	*******	*******	74.99	74.84	74.71	74.50	74.16	*******
	*******	73.72	73.57	73.60	73.72	73.87	74.04	74.21	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	78.64	78.68	78.70	78.70	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.61	77.59	77.56	77.53	77.48	77.39	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 52	*******	*******	*******	*******	*******	*******	*******	*******	*******	75.28	75.20	75.12	74.96	*******	*******
	*******	*******	73.70	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	78.79	78.83	78.84	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.57	77.54	77.50	77.45	77.37	77.24	77.02	76.78	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 53	*******	*******	*******	*******	*******	*******	*******	*******	75.61	75.55	75.53	75.54	75.49	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	78.96	78.99	79.00	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.54	77.51	77.46	77.39	77.29	77.15	76.94	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 54	*******	*******	*******	*******	*******	*******	*******	*******	75.78	75.76	75.77	75.79	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	79.13	79.17	79.18	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	77.53	77.48	77.43	77.35	77.24	77.09	76.87	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 55	*******	*******	*******	*******	*******	*******	*******	75.94	75.92	75.90	75.90	75.91	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	79.38	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	77.47	77.42	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 56	*******	*******	*******	*******	*******	*******	*******	75.98	75.97	75.97	75.97	75.97	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	79.57	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 57	*******	*******	*******	*******	*******	*******	76.01	76.01	76.01	76.01	76.01	76.01	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 58	*******	*******	*******	*******	*******	*******	76.04	76.04	76.04	76.05	76.05	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 59	*******	*******	*******	*******	*******	*******	76.07	*******	*******	76.09	76.09	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 60	*******	*******	*******	*******	*******	*******	*******	*******	76.13	76.13	76.13	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	80.35	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	*******	*******												
0 61	*******	*******	*******	*******	*******	*******	*******	*******	76.16	76.16	*******	*******	*******	*******	*******
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0 62    ******* ******* ******* ******* ******* ******* ******* *******   76.18   76.18 ******* ******* ******* ******* *******
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0 63    ******* ******* ******* ******* ******* *******   76.20   76.20   76.20   76.20 ******* ******* ******* ******* *******
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0 64    ******* ******* ******* ******* ******* *******   76.21   76.21   76.21   76.22 ******* ******* ******* ******* *******
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0 65    ******* ******* ******* ******* ******* *******   76.22   76.22   76.22   76.23 ******* ******* ******* ******* *******
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         16    17    18    19    20    21    22    23    24    25    26    27    28    29    30
         31    32    33    34    35    36    37    38    39    40    41    42    43    44    45
         46    47    48    49    50    51    52    53    54    55    56    57    58    59    60
         61    62    63    64    65    66    67    68    69    70    71    72    73    74    75
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0 16	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	69.77	70.24	70.73	71.35	71.46	*******	*******	*******	*******
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0 19	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	67.17	66.89	66.91	67.89	68.87	69.64	70.36	71.05	71.67	72.04	72.33	*******	*******	*******
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	67.40	67.11	66.72	66.32	67.69	68.81	69.64	70.44	71.14	71.77	72.26	72.63	72.96	73.24	*******
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	67.53	67.33	67.14	67.16	67.98	68.87	69.74	70.57	71.28	71.93	72.49	72.91	73.26	73.57	73.82
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	67.75	67.60	67.52	67.64	68.18	68.96	69.88	70.78	71.49	72.15	72.74	73.18	73.55	73.85	74.06
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	67.99	67.87	67.77	67.81	68.15	68.94	70.01	71.05	71.77	72.41	72.97	73.44	73.84	74.15	74.36
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	68.26	68.11	67.93	67.73	67.71	68.76	70.17	71.40	72.08	72.66	73.20	73.70	74.12	74.45	74.68
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0 26	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	68.77
	68.60	68.41	68.14	67.61	66.67	68.64	70.58	71.73	72.37	72.92	73.42	73.92	74.35	74.67	75.04
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0 27	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.08
	68.97	68.84	68.65	68.47	68.40	69.81	71.33	72.09	72.68	73.17	73.66	74.14	74.53	74.79	*******
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0 28	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.45
	69.37	69.32	69.38	69.48	69.84	70.85	71.87	72.44	72.97	73.43	73.90	74.34	74.68	74.97	*******
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0 29	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	69.75
	69.73	69.89	70.09	70.34	70.80	71.55	72.20	72.72	73.23	73.69	74.13	74.51	74.81	75.32	75.93
	76.15	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.33	77.36	77.38	77.40
	*******	77.42	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 30	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	70.43	70.63	70.93	71.38	71.94	72.47	72.98	73.47	73.92	74.32	74.63	74.94	*******	76.25
	76.35	76.46	*******	*******	*******	*******	*******	*******	*******	*******	*******	77.34	77.36	77.38	77.39
	77.40	77.39	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 31	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	*******	70.80	71.01	71.34	71.77	72.25	72.73	73.22	73.72	74.15	74.51	74.77	75.16	*******	76.35
	76.46	76.62	76.71	*******	*******	*******	*******	77.11	*******	*******	77.32	77.35	77.37	77.38	77.39
	77.39	77.37	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 32	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	70.87	71.01	71.26	71.59	72.02	72.49	72.98	73.45	73.92	74.34	74.66	74.88	*******	*******	76.41
	76.56	76.74	76.83	76.90	*******	*******	*******	77.18	77.23	*******	77.35	77.37	77.39	77.40	77.40

	77.39	77.36	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 33	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	70.96	71.10	71.35	71.70	72.14	72.63	73.12	73.61	74.10	74.50	74.81	75.03	75.48	*******	76.44
	76.66	76.85	76.96	77.02	*******	*******	*******	77.26	77.30	*******	77.38	77.40	77.41	*******	77.43
	77.41	77.38	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 34	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	70.96	71.04	71.26	71.63	72.11	72.65	*******	*******	74.27	74.63	74.91	75.15	75.57	76.02	76.42
	76.75	76.96	77.06	77.14	*******	*******	*******	77.34	77.37	77.40	77.42	77.44	*******	*******	77.47
	*******	77.41	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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0 35	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.97
	70.85	70.80	70.92	71.29	71.93	*******	*******	*******	74.37	74.70	74.95	75.20	75.61	75.99	*******
	76.86	77.06	77.14	77.25	77.33	77.37	77.39	77.41	77.43	77.45	*******	*******	*******	77.53	77.51
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0 36	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.96
	70.67	70.35	70.24	70.47	*******	*******	*******	*******	74.38	74.70	74.96	75.22	75.59	*******	*******
	*******	77.15	77.22	77.32	77.38	77.43	77.46	77.48	77.49	77.50	*******	*******	*******	77.57	*******
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0 37	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.96
	70.44	69.70	69.14	69.14	*******	*******	*******	73.82	74.26	74.65	74.95	75.20	*******	*******	*******
	*******	77.20	77.28	77.38	77.44	77.49	77.53	77.54	77.54	*******	*******	*******	*******	*******	*******
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0 38	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	70.94
	69.99	68.82	67.58	*******	*******	*******	73.15	73.67	74.18	74.60	74.93	75.23	75.59	*******	*******
	*******	77.19	*******	77.46	77.51	77.55	77.58	77.59	*******	*******	*******	*******	*******	*******	*******
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0 39	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	69.65	68.24	66.10	*******	*******	*******	73.07	73.62	74.14	74.57	74.92	75.23	*******	*******	*******
	*******	*******	*******	77.53	77.57	77.60	77.63	77.65	*******	*******	*******	*******	*******	*******	*******
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0 40	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
	69.96	69.06	67.96	*******	*******	*******	73.05	73.63	74.17	74.58	74.93	75.23	*******	*******	*******
	*******	*******	*******	*******	77.62	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******
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	*******	70.03	*******	*******	*******	*******	73.17	73.71	74.23	74.60	74.90	*******	*******	*******	*******
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	*******	*******	*******	*******	*******	*******	*******	*******	74.34	74.67	74.93	*******	*******	*******	*******
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OHEAD WILL BE SAVED ON UNIT 42 AT END OF TIME STEP 20, STRESS PERIOD  3
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                    VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 20 IN STRESS PERIOD  3
                    ------------------------------------------------------------------------------
0                CUMULATIVE VOLUMES      L**3                          RATES FOR THIS TIME STEP      L**3/T
                 ------------------                                    ------------------------

                      IN:                                                   IN:
                      ---                                                   ---
                        STORAGE =   0.23311E+08                               STORAGE =    23578.
                  CONSTANT HEAD =   0.00000                             CONSTANT HEAD =   0.00000
                          WELLS =    84000.                                     WELLS =   525.00
                         DRAINS =   0.00000                                    DRAINS =   0.00000
                       RECHARGE =   0.32779E+07                              RECHARGE =    39262.
                  RIVER LEAKAGE =   0.20705E+07                         RIVER LEAKAGE =    8920.8
                HEAD DEP BOUNDS =   0.35926E+08                       HEAD DEP BOUNDS =   0.29643E+06
0                      TOTAL IN =   0.64669E+08                             TOTAL IN =   0.36872E+06
0                     OUT:                                                  OUT:
                      ----                                                  ----
                        STORAGE =   0.56130E+06                               STORAGE =    838.87
                  CONSTANT HEAD =   0.16890E+07                         CONSTANT HEAD =    6984.4
                          WELLS =   0.49724E+08                                 WELLS =   0.32921E+06
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                    DRAINS =   0.23057E+07                                    DRAINS =    7136.1
                 RECHARGE =   0.00000                                      RECHARGE =   0.00000
            RIVER LEAKAGE =   0.43287E+06                             RIVER LEAKAGE =    68.965
          HEAD DEP BOUNDS =   0.10015E+08                           HEAD DEP BOUNDS =    24628.
0               TOTAL OUT =   0.64728E+08                                 TOTAL OUT =   0.36887E+06
0                IN - OUT =   -58240.                                      IN - OUT =   -152.13
0       PERCENT DISCREPANCY =          -0.09                      PERCENT DISCREPANCY =          -0.04


0

      TIME SUMMARY AT END OF TIME STEP 20 IN STRESS PERIOD  3
                          SECONDS       MINUTES       HOURS        DAYS         YEARS
                     ---------------------------------------------------------------------
     TIME STEP LENGTH      172800.       2880.00      48.0000      2.00000     0.547570E-02
   STRESS PERIOD TIME    0.345600E+07   57600.0      960.000      40.0000     0.109514
 TOTAL SIMULATION TIME   0.138240E+08   230400.      3840.00      160.000     0.438056
1
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SMITH

ATTACHMENT C

PARTICLE TRACKING RESULTS

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
1	20	26	2	1983	3983	60	1.00	0	0
1	22	26	1	2120	3951	75	1.00	28	E
2	20	26	2	1983	3950	60	1.00	0	0
2	22	27	1	2107	3862	70	0.75	30	1
2	22	27	1	2122	3854	73	1.00	35	E
3	20	26	2	1983	3917	60	1.00	0	0
3	21	28	1	2072	3789	74	0.74	30	1
3	21	28	1	2076	3776	79	1.00	33	E
4	20	26	2	1950	3983	60	1.00	0	0
4	21	25	1	2026	4009	77	0.93	30	1
4	22	26	1	2102	3997	75	1.00	54	E
5	20	26	2	1950	3950	60	1.00	0	0
5	21	27	1	2031	3830	78	0.94	30	1
5	21	28	1	2052	3798	79	1.00	37	E
6	20	26	2	1950	3917	60	1.00	0	0
6	21	28	1	2014	3781	79	1.00	28	E
7	20	26	2	1917	3983	60	1.00	0	0
7	19	26	1	1846	3975	75	0.85	30	1
7	18	26	1	1787	3931	77	0.94	60	2
7	18	27	1	1751	3872	78	0.98	90	3
7	18	27	1	1740	3840	79	1.00	105	E
8	20	26	2	1917	3950	60	1.00	0	0
8	19	27	1	1869	3864	75	0.83	30	1
8	19	28	1	1868	3770	77	0.89	60	2
8	19	29	1	1895	3686	78	0.93	90	3
8	20	29	1	1940	3603	79	0.98	120	4
8	20	30	1	1942	3599	78	1.00	121	E
9	20	26	2	1917	3917	60	1.00	0	0
9	20	28	1	1926	3772	73	0.68	30	1
9	20	29	1	1989	3674	75	0.79	60	2
9	21	29	1	2007	3656	77	1.00	68	E
10	20	26	2	1975	3900	53	0.75	0	0
10	21	28	1	2057	3746	68	0.42	30	1
10	21	28	1	2069	3724	79	1.00	38	E
11	20	26	2	2000	3925	53	0.75	0	0
11	22	27	2	2140	3837	60	0.98	30	1
11	22	28	1	2174	3778	71	0.90	60	2
11	22	28	1	2175	3773	72	1.00	63	E
12	20	26	2	2000	3975	53	0.75	0	0
12	22	26	1	2165	3933	64	0.24	30	1
12	22	26	1	2182	3912	75	1.00	42	E
13	20	26	2	1975	4000	53	0.75	0	0
13	21	25	2	2078	4061	56	0.85	30	1
13	22	25	2	2181	4042	52	0.72	60	2
13	23	25	2	2260	4016	59	0.85	90	3
13	23	25	2	2294	4000	64	1.00	108	E
14	20	26	2	1925	4000	53	0.75	0	0
14	20	24	2	1934	4109	59	0.97	30	1
14	20	24	1	1978	4134	60	0.02	60	2
14	21	24	1	2037	4133	61	0.03	90	3
14	22	24	2	2106	4129	59	0.97	120	4
14	22	24	2	2196	4112	51	0.71	150	5
14	23	25	2	2269	4093	61	0.92	180	6
14	23	25	2	2285	4087	64	1.00	189	E
15	20	26	2	1900	3975	53	0.75	0	0
15	18	26	2	1772	3942	58	0.94	30	1
15	18	27	1	1723	3886	61	0.03	60	2
15	18	27	1	1703	3822	62	0.13	90	3
15	17	28	1	1693	3768	64	0.21	120	4
15	17	28	1	1689	3717	65	0.27	150	5
15	17	29	1	1694	3667	66	0.33	180	6
15	18	29	1	1703	3617	67	0.38	210	7
15	18	30	1	1720	3565	68	0.43	240	8
15	18	30	1	1743	3519	69	0.48	270	9
15	18	31	1	1780	3478	71	0.55	300	10

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
15	19	31	1	1815	3454	78	1.00	319	E
16	20	26	2	1900	3925	53	0.75	0	0
16	19	27	2	1821	3820	57	0.91	30	1
16	19	28	1	1821	3725	60	0.00	60	2
16	19	29	1	1842	3648	62	0.11	90	3
16	19	30	1	1879	3580	64	0.24	120	4
16	20	30	1	1924	3532	78	1.00	145	E
17	20	26	2	1925	3900	53	0.75	0	0
17	20	28	1	1952	3725	60	0.01	30	1
17	21	29	1	2021	3649	71	0.66	60	2
17	21	29	1	2031	3641	77	1.00	65	E
18	20	26	2	1975	3900	38	0.25	0	0
18	21	28	2	2056	3751	41	0.36	30	1
18	21	29	2	2099	3678	52	0.72	60	2
18	22	29	2	2122	3641	59	0.97	90	3
18	22	29	1	2124	3616	68	0.64	120	4
18	22	29	1	2124	3608	72	1.00	133	E
19	20	26	2	2000	3925	38	0.25	0	0
19	22	27	2	2140	3837	37	0.23	30	1
19	22	28	2	2200	3779	37	0.24	60	2
19	23	28	2	2230	3746	40	0.31	90	3
19	23	28	2	2258	3717	42	0.38	120	4
19	23	29	2	2284	3688	43	0.45	150	5
19	24	29	2	2308	3663	44	0.51	180	6
19	24	29	2	2333	3643	46	0.60	210	7
19	24	29	2	2359	3625	49	0.69	240	8
19	24	29	2	2384	3606	51	0.79	270	9
19	25	30	2	2404	3590	56	0.87	300	10
19	25	30	2	2422	3577	58	0.95	330	11
19	25	30	1	2439	3566	61	0.09	360	12
19	25	30	1	2458	3561	63	0.35	390	13
19	25	30	1	2477	3555	64	0.55	420	14
19	25	30	1	2499	3549	66	0.71	450	15
19	26	30	1	2509	3543	75	0.77	480	16
19	26	30	1	2518	3538	76	0.82	510	17
19	26	30	1	2526	3531	76	0.86	540	18
19	26	30	1	2535	3525	77	0.91	570	19
19	26	30	1	2543	3517	78	0.95	600	20
19	26	30	1	2551	3509	79	0.98	630	21
19	26	30	1	2555	3506	79	1.00	643	E
20	20	26	2	2000	3975	38	0.25	0	0
20	22	26	2	2176	3936	37	0.22	30	1
20	23	27	2	2250	3897	38	0.23	60	2
20	23	27	2	2289	3863	39	0.27	90	3
20	24	27	2	2331	3834	37	0.33	120	4
20	24	27	2	2373	3809	39	0.40	150	5
20	25	28	2	2406	3786	43	0.49	180	6
20	25	28	2	2433	3769	45	0.59	210	7
20	25	28	2	2459	3752	48	0.69	240	8
20	25	28	2	2486	3735	51	0.79	270	9
20	26	28	2	2510	3720	58	0.89	300	10
20	26	28	2	2531	3708	61	0.98	330	11
20	26	28	2	2536	3704	62	1.00	338	E
21	20	26	2	1975	4000	38	0.25	0	0
21	21	25	2	2078	4061	36	0.20	30	1
21	22	25	2	2181	4042	33	0.11	60	2
21	23	25	2	2260	4016	32	0.07	90	3
21	24	26	2	2315	3991	31	0.04	120	4
21	24	26	2	2366	3970	31	0.05	150	5
21	25	26	2	2410	3950	32	0.08	180	6
21	25	26	2	2453	3934	34	0.18	210	7
21	25	26	2	2492	3917	36	0.28	240	8
21	26	26	2	2526	3903	39	0.40	270	9
21	26	27	2	2553	3892	43	0.51	300	10
21	26	27	2	2579	3881	46	0.61	330	11

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
16	23	30	2	2236	3503	56	0.87	180	6
16	24	31	2	2323	3474	59	0.98	210	7
16	25	31	1	2405	3454	68	0.84	240	8
16	25	31	1	2419	3452	69	1.00	245	E
17	20	26	2	1925	3900	53	0.75	0	0
17	21	28	2	2015	3718	56	0.87	30	1
17	22	29	2	2122	3653	59	0.97	60	2
17	22	29	1	2173	3642	72	1.00	79	E
18	20	26	2	1975	3900	38	0.25	0	0
18	22	28	2	2126	3759	36	0.21	30	1
18	23	28	2	2226	3709	40	0.31	60	2
18	24	29	2	2312	3673	39	0.34	90	3
18	25	29	2	2405	3641	46	0.49	120	4
18	25	29	2	2484	3615	52	0.68	150	5
18	26	29	1	2542	3605	66	0.54	180	6
18	26	29	1	2547	3608	71	1.00	189	E
19	20	26	2	2000	3925	38	0.25	0	0
19	22	27	2	2192	3819	37	0.23	30	1
19	23	28	2	2279	3768	40	0.30	60	2
19	24	28	2	2374	3725	39	0.42	90	3
19	25	29	2	2460	3689	50	0.62	120	4
19	26	29	1	2538	3661	60	0.04	150	5
19	26	29	1	2547	3663	71	1.00	168	E
20	20	26	2	2000	3975	38	0.25	0	0
20	23	26	2	2222	3903	31	0.02	30	1
20	24	27	3	2314	3851	29	0.98	60	2
20	24	27	3	2397	3809	30	0.99	90	3
20	25	28	2	2482	3770	36	0.22	120	4
20	26	28	2	2557	3736	45	0.47	150	5
20	27	28	2	2626	3705	53	0.71	180	6
20	27	29	2	2692	3677	60	0.98	210	7
20	27	29	1	2697	3676	68	1.00	234	E
21	20	26	2	1975	4000	38	0.25	0	0
21	22	25	2	2134	4021	35	0.18	30	1
21	23	26	2	2277	3967	32	0.06	60	2
21	24	26	2	2383	3917	31	0.05	90	3
21	25	27	2	2478	3873	35	0.25	120	4
21	26	27	2	2558	3832	44	0.53	150	5
21	27	28	2	2632	3795	56	0.80	180	6
21	27	28	2	2681	3773	62	1.00	203	E
22	20	26	2	1925	4000	38	0.25	0	0
22	21	25	3	2014	4096	30	0.99	30	1
22	22	25	3	2189	4061	28	0.87	60	2
22	23	25	3	2292	4000	23	0.80	90	3
22	24	26	3	2381	3949	21	0.79	120	4
22	25	26	3	2458	3906	22	0.85	150	5
22	26	27	3	2532	3867	30	0.99	180	6
22	27	27	2	2609	3828	38	0.28	210	7
22	27	28	2	2678	3794	46	0.51	240	8
22	28	28	2	2747	3766	50	0.76	270	9
22	29	28	2	2811	3737	55	1.00	298	E
23	20	26	2	1900	3975	38	0.25	0	0
23	18	26	2	1786	3915	31	0.04	30	1
23	18	27	2	1772	3836	33	0.10	60	2
23	18	28	2	1784	3753	35	0.18	90	3
23	19	29	2	1816	3671	36	0.21	120	4
23	19	30	2	1868	3599	36	0.19	150	5
23	20	30	2	1932	3543	35	0.15	180	6
23	21	31	2	2007	3500	33	0.10	210	7
23	21	31	2	2085	3466	33	0.11	240	8
23	22	31	2	2166	3438	35	0.16	270	9
23	23	31	2	2251	3411	36	0.21	300	10
23	24	32	2	2336	3388	38	0.27	330	11
23	25	32	2	2419	3369	40	0.30	360	12
23	25	32	2	2493	3352	42	0.37	390	13

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
23	26	32	2	2561	3337	47	0.49	420	14
23	27	32	2	2627	3321	51	0.65	450	15
23	28	32	2	2703	3303	56	0.86	480	16
23	28	33	2	2783	3290	59	1.00	508	E
24	20	26	2	1900	3925	38	0.25	0	0
24	19	27	2	1855	3802	37	0.22	30	1
24	20	29	2	1904	3698	38	0.27	60	2
24	20	29	2	1981	3616	36	0.21	90	3
24	21	30	2	2066	3566	35	0.15	120	4
24	22	30	2	2152	3532	34	0.13	150	5
24	23	30	2	2236	3503	34	0.14	180	6
24	24	31	2	2323	3474	36	0.21	210	7
24	25	31	2	2407	3447	40	0.34	240	8
24	25	31	2	2484	3423	45	0.50	270	9
24	26	31	2	2554	3403	53	0.78	300	10
24	27	32	2	2620	3385	62	0.98	330	11
24	27	32	2	2627	3383	63	1.00	333	E
25	20	26	2	1925	3900	38	0.25	0	0
25	21	28	2	2015	3718	37	0.22	30	1
25	22	29	2	2122	3653	35	0.15	60	2
25	23	29	2	2210	3618	37	0.24	90	3
25	23	30	2	2294	3586	37	0.24	120	4
25	24	30	2	2380	3558	39	0.31	150	5
25	25	30	2	2461	3530	43	0.43	180	6
25	26	30	2	2535	3502	47	0.58	210	7
25	26	31	2	2599	3475	57	0.91	240	8
25	27	31	1	2650	3451	62	0.19	270	9
25	27	31	1	2667	3436	68	1.00	294	E
26	20	26	2	1983	3983	30	0.00	0	0
26	23	26	3	2201	3923	4	0.30	30	1
26	23	27	3	2288	3871	4	0.28	60	2
26	24	27	3	2372	3827	0	0.28	90	3
26	25	28	3	2446	3788	0	0.31	120	4
26	26	28	3	2520	3748	8	0.36	150	5
26	26	28	3	2596	3713	11	0.45	180	6
26	27	29	3	2669	3687	17	0.55	210	7
26	28	29	3	2726	3665	21	0.71	240	8
26	28	29	3	2773	3645	29	0.97	270	9
26	29	29	2	2859	3610	38	0.30	300	10
26	30	30	2	2945	3572	43	0.36	330	11
26	31	30	2	3002	3540	40	0.32	360	12
26	31	30	2	3048	3509	53	0.76	390	13
26	31	30	1	3052	3500	75	1.00	415	E
27	20	26	2	1983	3950	30	0.00	0	0
27	22	27	3	2160	3868	16	0.37	30	1
27	23	27	3	2257	3812	6	0.33	60	2
27	24	28	3	2339	3770	2	0.34	90	3
27	25	28	3	2414	3733	3	0.36	120	4
27	25	29	3	2486	3697	10	0.42	150	5
27	26	29	3	2561	3662	14	0.52	180	6
27	27	29	3	2629	3636	19	0.65	210	7
27	27	29	3	2692	3616	24	0.79	240	8
27	28	30	2	2751	3599	32	0.07	270	9
27	29	30	2	2851	3568	40	0.33	300	10
27	30	30	2	2942	3536	41	0.32	330	11
27	30	30	2	3000	3509	39	0.25	360	12
27	31	31	2	3049	3484	46	0.52	390	13
27	31	31	2	3087	3463	57	0.89	420	14
27	32	31	1	3112	3441	74	1.00	444	E
28	20	26	2	1983	3917	30	0.00	0	0
28	22	27	3	2148	3807	17	0.44	30	1
28	23	28	3	2234	3755	9	0.41	60	2
28	24	28	3	2316	3718	5	0.42	90	3
28	24	29	3	2390	3682	9	0.44	120	4
28	25	29	3	2468	3645	13	0.51	150	5

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
15	15	24	1	1465	4105	64	0.21	120	4
15	15	24	1	1420	4118	65	0.29	150	5
15	14	24	1	1378	4129	67	0.38	180	6
15	14	24	1	1338	4139	69	0.48	210	7
15	13	24	1	1299	4150	70	0.57	240	8
15	13	24	1	1261	4158	72	0.67	270	9
15	13	24	1	1221	4168	74	0.75	300	10
15	12	24	1	1185	4176	74	0.80	330	11
15	12	24	1	1157	4183	75	0.83	360	12
15	12	24	1	1133	4191	75	0.85	390	13
15	12	24	1	1114	4200	76	0.88	420	14
15	12	23	1	1100	4211	78	0.95	450	15
15	11	23	1	1093	4213	79	1.00	457	E
16	20	26	2	1900	3925	53	0.75	0	0
16	18	28	2	1701	3777	59	0.96	30	1
16	17	29	1	1653	3677	61	0.06	60	2
16	17	30	1	1634	3578	63	0.15	90	3
16	17	31	1	1631	3489	64	0.19	120	4
16	17	31	1	1640	3412	64	0.22	150	5
16	17	32	1	1653	3347	65	0.26	180	6
16	17	33	1	1670	3288	65	0.31	210	7
16	18	33	1	1701	3232	68	0.44	240	8
16	18	33	1	1716	3216	77	1.00	254	E
17	20	26	2	1925	3900	53	0.75	0	0
17	20	30	1	1959	3591	67	0.39	30	1
17	20	30	1	1969	3555	78	1.00	37	E
18	20	26	2	1975	3900	38	0.25	0	0
18	21	29	2	2099	3643	49	0.63	30	1
18	22	30	2	2135	3569	57	0.92	60	2
18	22	30	1	2145	3510	62	0.19	90	3
18	22	31	1	2142	3457	65	0.44	120	4
18	22	31	1	2140	3405	67	0.61	150	5
18	22	32	1	2141	3373	72	1.00	170	E
19	20	26	2	2000	3925	38	0.25	0	0
19	23	27	2	2245	3809	32	0.05	30	1
19	24	28	2	2315	3748	32	0.07	60	2
19	24	28	2	2388	3702	34	0.18	90	3
19	25	29	2	2430	3673	40	0.31	120	4
19	25	29	2	2467	3647	44	0.44	150	5
19	26	29	2	2504	3623	48	0.59	180	6
19	26	29	2	2539	3605	55	0.84	210	7
19	26	30	2	2565	3589	60	0.99	240	8
19	26	30	1	2579	3581	62	0.11	270	9
19	26	30	1	2590	3575	64	0.23	300	10
19	27	30	1	2602	3568	64	0.33	330	11
19	27	30	1	2619	3560	64	0.34	360	12
19	27	30	1	2632	3551	64	0.36	390	13
19	27	30	1	2644	3541	64	0.39	420	14
19	27	30	1	2653	3530	64	0.41	450	15
19	27	30	1	2661	3517	65	0.43	480	16
19	27	30	1	2668	3502	65	0.46	510	17
19	27	31	1	2672	3483	66	0.75	540	18
19	27	31	1	2674	3473	68	1.00	558	E
20	20	26	2	2000	3975	38	0.25	0	0
20	23	26	2	2283	3988	31	0.03	30	1
20	24	26	3	2370	3978	29	0.97	60	2
20	25	26	3	2436	3968	29	0.99	90	3
20	26	26	2	2502	3958	32	0.11	120	4
20	26	26	2	2558	3951	37	0.31	150	5
20	27	26	2	2608	3945	43	0.49	180	6
20	27	26	2	2648	3943	46	0.61	210	7
20	27	26	2	2686	3940	50	0.73	240	8
20	28	26	2	2723	3937	53	0.83	270	9
20	28	26	2	2758	3936	55	0.92	300	10
20	28	26	2	2789	3934	57	1.00	326	E

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
21	20	26	2	1975	4000	38	0.25	0	0
21	22	23	3	2118	4209	27	0.91	30	1
21	23	23	3	2211	4262	19	0.79	60	2
21	23	23	3	2281	4295	19	0.79	90	3
21	24	22	3	2342	4321	23	0.85	120	4
21	24	22	3	2397	4346	28	0.95	150	5
21	25	22	2	2453	4368	35	0.15	180	6
21	26	22	2	2504	4389	41	0.37	210	7
21	26	22	2	2551	4399	54	0.78	240	8
21	26	21	1	2583	4405	61	0.05	270	9
21	26	22	1	2594	4393	73	0.80	300	10
21	26	22	1	2595	4391	76	1.00	305	E
22	20	26	2	1925	4000	38	0.25	0	0
22	20	23	3	1901	4247	29	0.96	30	1
22	20	22	3	1922	4347	26	0.89	60	2
22	20	21	3	1956	4418	26	0.87	90	3
22	20	21	3	2000	4480	26	0.89	120	4
22	21	20	3	2029	4531	26	0.91	150	5
22	21	20	3	2063	4577	28	0.96	180	6
22	22	19	2	2104	4624	32	0.06	210	7
22	22	19	2	2144	4685	35	0.17	240	8
22	22	18	2	2178	4746	42	0.40	270	9
22	23	18	2	2205	4798	53	0.71	300	10
22	23	17	2	2224	4839	56	0.82	330	11
22	23	17	2	2243	4879	60	0.94	360	12
22	23	16	2	2253	4900	63	1.00	377	E
23	20	26	2	1900	3975	38	0.25	0	0
23	17	25	2	1684	4044	32	0.06	30	1
23	16	25	2	1593	4072	35	0.15	60	2
23	16	25	2	1520	4090	41	0.36	90	3
23	15	24	2	1464	4104	42	0.43	120	4
23	15	24	2	1424	4118	43	0.45	150	5
23	14	24	2	1386	4131	50	0.49	180	6
23	14	24	2	1344	4143	51	0.56	210	7
23	14	24	2	1312	4155	53	0.63	240	8
23	13	24	2	1276	4167	58	0.81	270	9
23	13	24	1	1242	4178	61	0.07	300	10
23	13	24	1	1202	4189	65	0.25	330	11
23	12	24	1	1171	4199	62	0.26	360	12
23	12	23	1	1148	4210	63	0.28	390	13
23	12	23	1	1129	4222	64	0.31	420	14
23	12	23	1	1113	4235	64	0.33	450	15
23	11	23	1	1098	4250	74	0.36	480	16
23	11	23	1	1070	4265	75	0.45	510	17
23	11	23	1	1050	4281	75	0.57	540	18
23	11	22	1	1036	4300	77	0.71	570	19
23	11	22	1	1025	4324	78	0.92	600	20
23	11	22	1	1022	4333	79	1.00	610	E
24	20	26	2	1900	3925	38	0.25	0	0
24	18	28	2	1701	3777	37	0.22	30	1
24	17	29	2	1653	3677	40	0.34	60	2
24	17	30	2	1636	3575	42	0.40	90	3
24	17	31	2	1632	3484	42	0.38	120	4
24	17	31	2	1638	3408	41	0.36	150	5
24	17	32	2	1647	3344	41	0.35	180	6
24	17	33	2	1657	3287	41	0.35	210	7
24	17	33	2	1670	3238	42	0.39	240	8
24	17	34	2	1683	3194	43	0.44	270	9
24	17	34	2	1692	3156	47	0.57	300	10
24	18	34	2	1700	3123	52	0.73	330	11
24	18	35	2	1708	3098	58	0.93	360	12
24	18	35	1	1713	3077	63	0.18	390	13
24	18	35	1	1717	3059	68	0.54	420	14
24	18	35	1	1722	3042	73	0.94	450	15
24	18	35	1	1722	3040	74	1.00	454	E

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
21	27	27	2	2603	3869	49	0.70	360	12
21	27	27	2	2627	3862	51	0.77	390	13
21	27	27	2	2649	3854	53	0.84	420	14
21	27	27	2	2671	3846	54	0.91	450	15
21	27	27	2	2692	3838	56	0.98	480	16
21	27	27	2	2699	3835	57	1.00	490	E
22	20	26	2	1925	4000	38	0.25	0	0
22	20	24	2	1934	4109	32	0.05	30	1
22	20	24	3	1977	4135	29	0.98	60	2
22	21	24	3	2041	4140	28	0.93	90	3
22	22	24	3	2121	4138	27	0.88	120	4
22	23	24	3	2213	4125	23	0.82	150	5
22	23	24	3	2276	4100	23	0.83	180	6
22	24	25	3	2325	4077	22	0.81	210	7
22	24	25	3	2370	4058	22	0.82	240	8
22	25	25	3	2413	4040	22	0.83	270	9
22	25	25	3	2452	4027	24	0.88	300	10
22	25	25	3	2487	4012	27	0.92	330	11
22	26	25	3	2525	4000	30	1.00	360	12
22	26	26	2	2558	3992	33	0.13	390	13
22	26	26	2	2591	3982	36	0.26	420	14
22	27	26	2	2618	3976	40	0.35	450	15
22	27	26	2	2644	3970	42	0.43	480	16
22	27	26	2	2669	3965	44	0.51	510	17
22	27	26	2	2694	3959	46	0.59	540	18
22	28	26	2	2719	3955	48	0.65	570	19
22	28	26	2	2743	3952	49	0.71	600	20
22	28	26	2	2768	3948	51	0.77	630	21
22	28	26	2	2793	3944	52	0.83	660	22
22	29	26	2	2816	3942	58	0.93	690	23
22	29	26	1	2833	3940	61	0.18	720	24
22	29	26	1	2846	3939	64	0.57	750	25
22	29	26	1	2864	3937	66	0.87	780	26
22	29	26	1	2876	3937	67	1.00	797	E
23	20	26	2	1900	3975	38	0.25	0	0
23	18	26	2	1772	3942	34	0.12	30	1
23	18	27	2	1722	3886	34	0.14	60	2
23	17	27	2	1700	3820	37	0.22	90	3
23	17	28	2	1688	3769	39	0.29	120	4
23	17	28	2	1684	3718	41	0.37	150	5
23	17	29	2	1688	3667	43	0.43	180	6
23	17	29	2	1697	3619	44	0.47	210	7
23	18	30	2	1712	3569	45	0.49	240	8
23	18	30	2	1730	3525	45	0.51	270	9
23	18	31	2	1752	3487	46	0.54	300	10
23	18	31	2	1779	3455	48	0.60	330	11
23	19	31	2	1809	3428	53	0.77	360	12
23	19	31	1	1846	3410	69	0.49	390	13
23	19	31	1	1858	3405	78	1.00	400	E
24	20	26	2	1900	3925	38	0.25	0	0
24	19	27	2	1821	3820	37	0.23	30	1
24	19	28	2	1821	3725	39	0.30	60	2
24	19	29	2	1838	3648	40	0.34	90	3
24	19	30	2	1864	3584	42	0.38	120	4
24	19	30	2	1895	3532	44	0.47	150	5
24	20	31	2	1926	3496	54	0.79	180	6
24	20	31	1	1942	3471	66	0.39	210	7
24	20	31	1	1949	3461	76	1.00	228	E
25	20	26	2	1925	3900	38	0.25	0	0
25	20	28	2	1951	3724	39	0.29	30	1
25	20	29	2	1996	3639	41	0.37	60	2
25	21	30	2	2034	3593	50	0.67	90	3
25	21	30	1	2051	3559	61	0.07	120	4
25	21	30	1	2054	3540	75	1.00	148	E
26	20	26	2	1983	3983	30	0.00	0	0

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
26	22	26	3	2137	3980	20	0.30	30	1
26	23	26	3	2222	3940	3	0.26	60	2
26	23	26	3	2267	3912	2	0.25	90	3
26	24	27	3	2308	3884	-2	0.24	120	4
26	24	27	3	2342	3861	-2	0.25	150	5
26	24	27	3	2376	3839	-1	0.25	180	6
26	25	27	3	2407	3818	-10	0.26	210	7
26	25	27	3	2432	3803	-10	0.27	240	8
26	25	28	3	2456	3784	-1	0.28	270	9
26	25	28	3	2478	3766	0	0.30	300	10
26	26	28	3	2501	3748	7	0.32	330	11
26	26	28	3	2528	3735	8	0.34	360	12
26	26	28	3	2552	3722	8	0.37	390	13
26	26	28	3	2575	3709	9	0.39	420	14
26	26	29	3	2596	3695	11	0.42	450	15
26	27	29	3	2614	3687	13	0.45	480	16
26	27	29	3	2632	3679	14	0.47	510	17
26	27	29	3	2649	3672	15	0.50	540	18
26	27	29	3	2665	3665	16	0.52	570	19
26	27	29	3	2680	3658	17	0.55	600	20
26	27	29	3	2695	3650	17	0.58	630	21
26	28	29	3	2709	3645	19	0.62	660	22
26	28	29	3	2723	3641	20	0.67	690	23
26	28	29	3	2735	3636	21	0.72	720	24
26	28	29	3	2748	3632	23	0.77	750	25
26	28	29	3	2759	3628	25	0.83	780	26
26	28	29	3	2770	3624	27	0.89	810	27
26	28	29	3	2780	3620	29	0.95	840	28
26	28	29	2	2793	3616	31	0.02	870	29
26	29	29	2	2814	3609	32	0.09	900	30
26	29	29	2	2837	3601	34	0.17	930	31
26	29	30	2	2862	3594	37	0.18	960	32
26	29	30	2	2888	3586	37	0.19	990	33
26	30	30	2	2909	3581	36	0.17	1020	34
26	30	30	2	2926	3578	34	0.12	1050	35
26	30	30	2	2943	3575	32	0.07	1080	36
26	30	30	2	2958	3571	31	0.02	1110	37
26	30	30	3	2966	3568	29	0.96	1140	38
26	30	30	3	2970	3565	27	0.91	1170	39
26	30	30	3	2974	3562	25	0.86	1200	40
26	30	30	3	2979	3559	24	0.82	1230	41
26	30	30	3	2984	3556	22	0.78	1260	42
26	30	30	3	2990	3553	21	0.73	1290	43
26	30	30	3	2995	3550	19	0.70	1320	44
26	31	30	3	3002	3548	20	0.67	1350	45
26	31	30	3	3009	3546	20	0.67	1380	46
26	31	30	3	3015	3545	20	0.68	1410	47
26	31	30	3	3022	3543	20	0.68	1440	48
26	31	30	3	3029	3542	20	0.69	1470	49
26	31	30	3	3035	3540	20	0.69	1500	50
26	31	30	3	3042	3539	21	0.69	1530	51
26	31	30	3	3048	3537	21	0.70	1560	52
26	31	30	3	3054	3535	21	0.70	1590	53
26	31	30	3	3061	3534	21	0.71	1620	54
26	31	30	3	3067	3532	21	0.71	1650	55
26	31	30	3	3073	3530	21	0.72	1680	56
26	31	30	3	3079	3529	21	0.72	1710	57
26	31	30	3	3085	3527	22	0.73	1740	58
26	31	30	3	3090	3525	22	0.73	1770	59
26	31	30	3	3096	3524	22	0.74	1800	60
26	32	30	3	3105	3522	27	0.77	1830	61
26	32	30	3	3119	3520	29	0.88	1860	62
26	32	30	2	3131	3519	30	0.00	1890	63
26	32	30	2	3144	3519	32	0.05	1920	64
26	32	30	2	3158	3519	33	0.10	1950	65

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
25	20	26	2	1925	3900	38	0.25	0	0
25	20	30	2	1941	3595	39	0.31	30	1
25	20	31	2	1974	3484	53	0.78	60	2
25	20	31	1	1983	3423	71	0.71	90	3
25	20	31	1	1983	3415	76	1.00	96	E
26	20	26	2	1983	3983	30	0.00	0	0
26	22	24	3	2160	4130	12	0.30	30	1
26	23	24	3	2271	4163	1	0.27	60	2
26	24	24	3	2350	4181	-1	0.27	90	3
26	25	24	3	2420	4194	2	0.28	120	4
26	25	23	3	2481	4205	6	0.33	150	5
26	26	23	3	2540	4216	14	0.42	180	6
26	26	23	3	2589	4228	18	0.54	210	7
26	27	23	3	2636	4236	23	0.66	240	8
26	27	23	3	2677	4244	26	0.79	270	9
26	28	23	3	2713	4251	28	0.91	300	10
26	28	23	2	2748	4255	30	0.00	330	11
26	28	23	2	2777	4259	32	0.06	360	12
26	29	23	2	2805	4263	34	0.12	390	13
26	29	23	2	2832	4266	35	0.16	420	14
26	29	23	2	2859	4269	36	0.21	450	15
26	29	23	2	2885	4271	38	0.25	480	16
26	30	23	2	2910	4274	39	0.32	510	17
26	30	23	2	2936	4276	42	0.40	540	18
26	30	23	2	2963	4277	44	0.48	570	19
26	30	23	2	2991	4279	46	0.55	600	20
26	31	23	2	3018	4280	46	0.58	630	21
26	31	23	2	3042	4281	46	0.59	660	22
26	31	23	2	3066	4282	46	0.60	690	23
26	31	23	2	3089	4282	47	0.61	720	24
26	32	23	2	3113	4283	48	0.62	750	25
26	32	23	2	3137	4284	48	0.63	780	26
26	32	23	2	3160	4285	49	0.64	810	27
26	32	23	2	3182	4287	49	0.65	840	28
26	33	23	2	3204	4288	48	0.66	870	29
26	33	23	2	3222	4290	48	0.67	900	30
26	33	23	2	3240	4292	49	0.68	930	31
26	33	23	2	3258	4294	49	0.69	960	32
26	33	23	2	3275	4296	49	0.70	990	33
26	33	23	2	3292	4298	50	0.71	1020	34
26	34	22	2	3309	4301	52	0.72	1050	35
26	34	22	2	3325	4305	52	0.75	1080	36
26	34	22	2	3342	4308	53	0.77	1110	37
26	34	22	2	3357	4312	54	0.79	1140	38
26	34	22	2	3372	4316	54	0.81	1170	39
26	34	22	2	3387	4320	55	0.84	1200	40
26	35	22	2	3400	4323	57	0.86	1230	41
26	35	22	2	3420	4327	58	0.92	1260	42
26	35	22	2	3438	4331	60	0.98	1290	43
26	35	22	1	3456	4335	61	0.05	1320	44
26	35	22	1	3474	4339	62	0.11	1350	45
26	35	22	1	3492	4343	63	0.17	1380	46
26	36	22	1	3511	4348	65	0.25	1410	47
26	36	22	1	3531	4353	67	0.33	1440	48
26	36	22	1	3552	4359	69	0.42	1470	49
26	36	22	1	3575	4364	70	0.49	1500	50
26	36	22	1	3598	4369	72	0.56	1530	51
26	37	22	1	3620	4375	71	0.58	1560	52
26	37	22	1	3641	4380	72	0.60	1590	53
26	37	22	1	3660	4386	72	0.62	1620	54
26	37	22	1	3679	4392	73	0.64	1650	55
26	37	22	1	3697	4397	73	0.66	1680	56
26	38	21	1	3719	4403	75	0.68	1710	57
26	38	21	1	3739	4408	76	0.71	1740	58
26	38	21	1	3758	4413	76	0.73	1770	59

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
26	38	21	1	3776	4418	77	0.76	1800	60
26	38	21	1	3793	4423	77	0.79	1830	61
26	39	21	1	3822	4430	80	0.84	1860	62
26	39	21	1	3858	4437	81	0.92	1890	63
26	39	21	1	3890	4444	81	1.00	1920	64
26	39	21	1	3891	4444	81	1.00	1921	E
27	20	26	2	1983	3950	30	0.00	0	0
27	23	26	3	2248	3942	-2	0.14	30	1
27	24	26	3	2342	3920	-6	0.13	60	2
27	25	27	3	2416	3900	-17	0.13	90	3
27	25	27	3	2463	3884	-17	0.13	120	4
27	26	27	3	2506	3867	3	0.14	150	5
27	26	27	3	2564	3852	4	0.17	180	6
27	27	27	3	2612	3838	7	0.19	210	7
27	27	27	3	2657	3828	8	0.21	240	8
27	27	27	3	2696	3817	8	0.23	270	9
27	28	27	3	2727	3811	6	0.25	300	10
27	28	27	3	2754	3806	7	0.27	330	11
27	28	28	3	2779	3800	1	0.29	360	12
27	28	28	3	2795	3795	2	0.30	390	13
27	29	28	3	2818	3789	17	0.37	420	14
27	29	28	3	2839	3782	20	0.48	450	15
27	29	28	3	2855	3775	23	0.63	480	16
27	29	28	3	2867	3767	26	0.82	510	17
27	29	28	2	2883	3760	32	0.06	540	18
27	30	28	2	2921	3753	42	0.17	570	19
27	30	28	2	2956	3746	42	0.20	600	20
27	30	28	2	2984	3738	43	0.24	630	21
27	31	28	2	3009	3732	45	0.27	660	22
27	31	28	2	3033	3728	45	0.28	690	23
27	31	28	2	3056	3724	45	0.30	720	24
27	31	28	2	3078	3720	46	0.31	750	25
27	31	28	2	3099	3716	46	0.33	780	26
27	32	28	2	3115	3715	41	0.33	810	27
27	32	28	2	3130	3713	41	0.34	840	28
27	32	28	2	3146	3712	41	0.34	870	29
27	32	28	2	3162	3710	41	0.35	900	30
27	32	28	2	3178	3709	41	0.35	930	31
27	32	28	2	3194	3707	41	0.35	960	32
27	33	28	2	3208	3706	36	0.36	990	33
27	33	28	2	3221	3704	36	0.36	1020	34
27	33	28	2	3234	3702	37	0.37	1050	35
27	33	28	2	3246	3701	37	0.38	1080	36
27	33	29	2	3261	3699	45	0.38	1110	37
27	33	29	2	3278	3696	45	0.39	1140	38
27	33	29	2	3294	3694	46	0.40	1170	39
27	34	29	2	3308	3692	42	0.41	1200	40
27	34	29	2	3320	3690	42	0.42	1230	41
27	34	29	2	3332	3688	42	0.43	1260	42
27	34	29	2	3344	3686	43	0.44	1290	43
27	34	29	2	3356	3684	43	0.45	1320	44
27	34	29	2	3368	3682	43	0.46	1350	45
27	34	29	2	3379	3680	44	0.47	1380	46
27	34	29	2	3391	3678	44	0.48	1410	47
27	35	29	2	3403	3676	49	0.49	1440	48
27	35	29	2	3419	3673	49	0.52	1470	49
27	35	29	2	3433	3671	50	0.54	1500	50
27	35	29	2	3447	3669	51	0.57	1530	51
27	35	29	2	3460	3666	51	0.60	1560	52
27	35	29	2	3473	3664	52	0.63	1590	53
27	35	29	2	3484	3662	53	0.66	1620	54
27	35	29	2	3496	3660	53	0.70	1650	55
27	36	29	2	3511	3656	57	0.79	1680	56
27	36	29	2	3527	3652	59	0.93	1710	57
27	36	29	1	3543	3649	61	0.05	1740	58

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
26	32	30	2	3173	3519	34	0.15	1980	66
26	32	30	2	3187	3519	36	0.19	2010	67
26	33	30	2	3202	3519	36	0.23	2040	68
26	33	30	2	3216	3520	36	0.24	2070	69
26	33	30	2	3230	3521	37	0.24	2100	70
26	33	30	2	3244	3522	37	0.25	2130	71
26	33	30	2	3257	3523	37	0.26	2160	72
26	33	30	2	3271	3523	37	0.26	2190	73
26	33	30	2	3284	3524	37	0.27	2220	74
26	33	30	2	3298	3525	37	0.27	2250	75
26	34	30	2	3311	3526	39	0.28	2280	76
26	34	30	2	3325	3526	39	0.29	2310	77
26	34	30	2	3338	3527	39	0.29	2340	78
26	34	30	2	3351	3527	40	0.30	2370	79
26	34	30	2	3364	3527	40	0.31	2400	80
26	34	30	2	3377	3528	40	0.32	2430	81
26	34	30	2	3389	3528	40	0.32	2460	82
26	35	30	2	3402	3529	46	0.33	2490	83
26	35	30	2	3418	3528	46	0.35	2520	84
26	35	30	2	3434	3528	47	0.36	2550	85
26	35	30	2	3449	3527	47	0.38	2580	86
26	35	30	2	3464	3526	47	0.39	2610	87
26	35	30	2	3478	3526	48	0.41	2640	88
26	35	30	2	3492	3525	48	0.43	2670	89
26	36	30	2	3509	3524	52	0.45	2700	90
26	36	30	2	3529	3523	53	0.47	2730	91
26	36	30	2	3548	3522	53	0.49	2760	92
26	36	30	2	3568	3521	53	0.51	2790	93
26	36	30	2	3587	3519	53	0.53	2820	94
26	37	30	2	3605	3519	53	0.55	2850	95
26	37	30	2	3623	3521	53	0.56	2880	96
26	37	30	2	3641	3522	53	0.56	2910	97
26	37	30	2	3659	3524	53	0.56	2940	98
26	37	30	2	3677	3526	53	0.56	2970	99
26	37	30	2	3696	3527	53	0.57	3000	100
26	38	30	2	3708	3530	47	0.57	3030	101
26	38	30	2	3718	3533	48	0.57	3060	102
26	38	30	2	3728	3537	48	0.57	3090	103
26	38	30	2	3737	3540	48	0.57	3120	104
26	38	30	2	3747	3543	48	0.57	3150	105
26	38	30	2	3757	3547	48	0.58	3180	106
26	38	30	2	3767	3550	48	0.58	3210	107
26	38	30	2	3777	3553	48	0.58	3240	108
26	38	30	2	3786	3556	48	0.58	3270	109
26	38	30	2	3796	3560	48	0.58	3300	110
26	39	30	2	3806	3563	49	0.59	3330	111
26	39	30	2	3816	3567	49	0.60	3360	112
26	39	30	2	3826	3570	50	0.62	3390	113
26	39	30	2	3836	3574	50	0.63	3420	114
26	39	30	2	3846	3578	50	0.65	3450	115
26	39	30	2	3855	3581	51	0.66	3480	116
26	39	30	2	3864	3585	51	0.67	3510	117
26	39	30	2	3873	3588	52	0.69	3540	118
26	39	30	2	3882	3592	52	0.70	3570	119
26	39	30	2	3891	3596	52	0.72	3600	120
26	39	30	2	3899	3599	53	0.74	3630	121
26	40	29	2	3911	3604	57	0.77	3660	122
26	40	29	2	3922	3608	57	0.80	3690	123
26	40	29	2	3933	3612	58	0.84	3720	124
26	40	29	2	3943	3617	58	0.88	3750	125
26	40	29	2	3953	3621	59	0.92	3780	126
26	40	29	2	3963	3625	60	0.96	3810	127
26	40	29	1	3973	3629	60	0.01	3840	128
26	40	29	1	3982	3633	61	0.03	3870	129
26	40	29	1	3990	3637	61	0.06	3900	130

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
26	40	29	1	3998	3641	62	0.09	3930	131
26	41	29	1	4007	3646	63	0.12	3960	132
26	41	29	1	4015	3652	63	0.15	3990	133
26	41	29	1	4022	3657	64	0.19	4020	134
26	41	29	1	4030	3663	65	0.22	4050	135
26	41	29	1	4037	3669	65	0.25	4080	136
26	41	29	1	4045	3674	66	0.28	4110	137
26	41	29	1	4052	3680	67	0.31	4140	138
26	41	29	1	4059	3687	67	0.34	4170	139
26	41	29	1	4066	3693	68	0.38	4200	140
26	41	29	1	4072	3699	69	0.41	4230	141
26	41	28	1	4079	3705	67	0.42	4260	142
26	41	28	1	4085	3710	67	0.43	4290	143
26	41	28	1	4092	3715	67	0.45	4320	144
26	41	28	1	4098	3721	68	0.46	4350	145
26	42	28	1	4105	3727	70	0.48	4380	146
26	42	28	1	4112	3734	71	0.51	4410	147
26	42	28	1	4119	3742	71	0.54	4440	148
26	42	28	1	4125	3749	72	0.57	4470	149
26	42	28	1	4132	3756	73	0.60	4500	150
26	42	28	1	4139	3764	73	0.63	4530	151
26	42	28	1	4145	3771	74	0.66	4560	152
26	42	28	1	4151	3779	75	0.69	4590	153
26	42	28	1	4157	3787	75	0.72	4620	154
26	42	28	1	4163	3795	76	0.75	4650	155
26	42	27	1	4169	3805	78	0.79	4680	156
26	42	27	1	4177	3818	79	0.83	4710	157
26	42	27	1	4184	3830	80	0.88	4740	158
26	42	27	1	4191	3843	80	0.92	4770	159
26	42	27	1	4197	3855	81	0.97	4800	160
26	43	27	1	4201	3862	81	1.00	4818	E
27	20	26	2	1983	3950	30	0.00	0	0
27	22	27	3	2124	3892	14	0.31	30	1
27	22	27	3	2184	3842	13	0.27	60	2
27	23	27	3	2229	3806	3	0.26	90	3
27	23	28	3	2261	3776	4	0.26	120	4
27	23	28	3	2291	3747	4	0.26	150	5
27	24	28	3	2318	3724	-1	0.27	180	6
27	24	28	3	2344	3704	0	0.28	210	7
27	24	29	3	2365	3682	4	0.30	240	8
27	24	29	3	2386	3661	5	0.31	270	9
27	25	29	3	2406	3642	7	0.33	300	10
27	25	29	3	2428	3626	7	0.35	330	11
27	25	29	3	2449	3611	8	0.38	360	12
27	25	30	3	2469	3595	11	0.40	390	13
27	25	30	3	2486	3580	12	0.42	420	14
27	26	30	3	2503	3565	12	0.44	450	15
27	26	30	3	2519	3554	13	0.46	480	16
27	26	30	3	2534	3543	13	0.48	510	17
27	26	30	3	2549	3533	14	0.50	540	18
27	26	30	3	2563	3522	15	0.52	570	19
27	26	30	3	2577	3512	15	0.55	600	20
27	26	30	3	2591	3502	16	0.57	630	21
27	27	31	3	2602	3492	18	0.60	660	22
27	27	31	3	2611	3485	19	0.63	690	23
27	27	31	3	2621	3478	20	0.67	720	24
27	27	31	3	2629	3471	21	0.71	750	25
27	27	31	3	2638	3464	22	0.75	780	26
27	27	31	3	2646	3457	24	0.79	810	27
27	27	31	3	2653	3450	25	0.84	840	28
27	27	31	3	2660	3443	27	0.89	870	29
27	27	31	3	2667	3437	28	0.94	900	30
27	27	31	3	2673	3430	30	1.00	930	31
27	27	31	2	2687	3422	32	0.05	960	32
27	28	31	2	2701	3414	33	0.11	990	33

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
27	36	29	1	3563	3647	63	0.14	1770	59
27	36	29	1	3584	3645	65	0.23	1800	60
27	37	29	1	3605	3643	63	0.29	1830	61
27	37	29	1	3622	3643	63	0.30	1860	62
27	37	29	1	3640	3643	63	0.31	1890	63
27	37	29	1	3656	3643	63	0.32	1920	64
27	37	29	1	3673	3643	63	0.32	1950	65
27	37	29	1	3689	3643	64	0.33	1980	66
27	38	29	1	3706	3643	67	0.33	2010	67
27	38	29	1	3724	3645	67	0.32	2040	68
27	38	29	1	3741	3646	66	0.30	2070	69
27	38	29	1	3758	3648	66	0.28	2100	70
27	38	29	1	3773	3649	65	0.26	2130	71
27	38	29	1	3787	3651	65	0.24	2160	72
27	39	29	1	3801	3652	65	0.22	2190	73
27	39	29	1	3814	3656	65	0.24	2220	74
27	39	29	1	3827	3659	66	0.27	2250	75
27	39	29	1	3840	3662	66	0.30	2280	76
27	39	29	1	3852	3665	67	0.32	2310	77
27	39	29	1	3863	3669	67	0.35	2340	78
27	39	29	1	3875	3672	68	0.37	2370	79
27	39	29	1	3886	3675	68	0.40	2400	80
27	39	29	1	3897	3678	69	0.43	2430	81
27	40	29	1	3907	3682	70	0.46	2460	82
27	40	29	1	3917	3686	70	0.49	2490	83
27	40	29	1	3927	3691	71	0.52	2520	84
27	40	29	1	3937	3695	72	0.55	2550	85
27	40	29	1	3947	3699	72	0.58	2580	86
27	40	28	1	3958	3704	73	0.61	2610	87
27	40	28	1	3969	3708	74	0.65	2640	88
27	40	28	1	3980	3713	74	0.68	2670	89
27	40	28	1	3991	3717	75	0.72	2700	90
27	41	28	1	4001	3721	75	0.75	2730	91
27	41	28	1	4010	3726	75	0.77	2760	92
27	41	28	1	4019	3731	76	0.79	2790	93
27	41	28	1	4027	3736	77	0.82	2820	94
27	41	28	1	4036	3741	77	0.84	2850	95
27	41	28	1	4044	3746	78	0.86	2880	96
27	41	28	1	4052	3751	78	0.89	2910	97
27	41	28	1	4059	3756	79	0.91	2940	98
27	41	28	1	4067	3761	80	0.94	2970	99
27	41	28	1	4074	3766	80	0.96	3000	100
27	41	28	1	4081	3770	81	0.99	3030	101
27	41	28	1	4084	3772	81	1.00	3043	E
28	20	26	2	1983	3917	30	0.00	0	0
28	22	28	3	2160	3753	10	0.27	30	1
28	23	29	3	2226	3679	8	0.26	60	2
28	23	29	3	2274	3623	8	0.28	90	3
28	24	30	3	2314	3576	9	0.30	120	4
28	24	30	3	2345	3538	10	0.33	150	5
28	24	30	3	2377	3503	11	0.36	180	6
28	25	31	3	2403	3464	15	0.41	210	7
28	25	31	3	2425	3436	16	0.45	240	8
28	25	31	3	2446	3410	17	0.48	270	9
28	25	32	3	2465	3383	20	0.52	300	10
28	25	32	3	2482	3355	21	0.55	330	11
28	25	32	3	2500	3330	21	0.58	360	12
28	26	32	3	2513	3309	19	0.61	390	13
28	26	33	3	2523	3289	19	0.62	420	14
28	26	33	3	2531	3269	19	0.63	450	15
28	26	33	3	2539	3250	20	0.64	480	16
28	26	33	3	2548	3231	20	0.65	510	17
28	26	33	3	2556	3212	20	0.66	540	18
28	26	34	3	2563	3194	19	0.67	570	19
28	26	34	3	2569	3177	20	0.68	600	20

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
28	26	34	3	2574	3161	20	0.69	630	21
28	26	34	3	2580	3145	20	0.69	660	22
28	26	34	3	2585	3129	20	0.70	690	23
28	26	34	3	2591	3114	21	0.71	720	24
28	26	35	3	2596	3099	20	0.72	750	25
28	27	35	3	2600	3085	23	0.73	780	26
28	27	35	3	2606	3071	24	0.76	810	27
28	27	35	3	2611	3058	25	0.80	840	28
28	27	35	3	2617	3046	26	0.83	870	29
28	27	35	3	2622	3034	27	0.87	900	30
28	27	35	3	2627	3022	28	0.90	930	31
28	27	35	3	2632	3011	29	0.94	960	32
28	27	35	3	2638	3000	30	0.98	990	33
28	27	36	2	2642	2989	31	0.02	1020	34
28	27	36	2	2647	2979	32	0.05	1050	35
28	27	36	2	2653	2968	32	0.08	1080	36
28	27	36	2	2658	2957	33	0.12	1110	37
28	27	36	2	2664	2947	34	0.15	1140	38
28	27	36	2	2669	2936	35	0.18	1170	39
28	27	36	2	2675	2925	36	0.20	1200	40
28	27	36	2	2681	2914	37	0.23	1230	41
28	27	36	2	2687	2903	38	0.26	1260	42
28	27	37	2	2693	2893	39	0.28	1290	43
28	27	37	2	2699	2882	40	0.31	1320	44
28	28	37	2	2704	2873	37	0.31	1350	45
28	28	37	2	2709	2864	37	0.31	1380	46
28	28	37	2	2713	2855	37	0.31	1410	47
28	28	37	2	2718	2845	37	0.31	1440	48
28	28	37	2	2723	2836	37	0.31	1470	49
28	28	37	2	2727	2826	37	0.31	1500	50
28	28	37	2	2732	2817	37	0.31	1530	51
28	28	37	2	2737	2807	37	0.30	1560	52
28	28	38	2	2741	2796	39	0.31	1590	53
28	28	38	2	2747	2783	40	0.33	1620	54
28	28	38	2	2753	2770	40	0.35	1650	55
28	28	38	2	2758	2757	41	0.37	1680	56
28	28	38	2	2763	2743	42	0.39	1710	57
28	28	38	2	2769	2729	42	0.41	1740	58
28	28	38	2	2774	2716	43	0.43	1770	59
28	28	38	2	2779	2702	43	0.45	1800	60
28	28	39	2	2784	2688	43	0.46	1830	61
28	28	39	2	2790	2675	43	0.48	1860	62
28	28	39	2	2795	2662	44	0.50	1890	63
28	29	39	2	2801	2649	51	0.51	1920	64
28	29	39	2	2810	2634	52	0.55	1950	65
28	29	39	2	2819	2619	53	0.59	1980	66
28	29	39	2	2827	2604	53	0.64	2010	67
28	29	40	2	2836	2589	55	0.68	2040	68
28	29	40	2	2844	2573	56	0.73	2070	69
28	29	40	2	2852	2557	56	0.78	2100	70
28	29	40	2	2859	2542	57	0.83	2130	71
28	29	40	2	2866	2526	58	0.88	2160	72
28	29	40	2	2873	2511	59	0.94	2190	73
28	29	41	2	2879	2496	60	1.00	2220	74
28	29	41	1	2886	2481	61	0.05	2250	75
28	29	41	1	2892	2466	62	0.10	2280	76
28	29	41	1	2898	2450	62	0.15	2310	77
28	30	41	1	2905	2434	63	0.18	2340	78
28	30	41	1	2910	2416	63	0.21	2370	79
28	30	42	1	2916	2397	64	0.24	2400	80
28	30	42	1	2923	2380	65	0.27	2430	81
28	30	42	1	2930	2362	65	0.31	2460	82
28	30	42	1	2936	2344	66	0.35	2490	83
28	30	42	1	2942	2324	66	0.38	2520	84
28	30	42	1	2948	2304	67	0.42	2550	85

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
27	28	31	2	2715	3407	35	0.18	1020	34
27	28	32	2	2729	3399	36	0.23	1050	35
27	28	32	2	2745	3391	36	0.24	1080	36
27	28	32	2	2760	3383	37	0.24	1110	37
27	28	32	2	2776	3376	37	0.25	1140	38
27	28	32	2	2792	3369	37	0.26	1170	39
27	29	32	2	2809	3364	39	0.26	1200	40
27	29	32	2	2828	3361	39	0.27	1230	41
27	29	32	2	2846	3358	39	0.27	1260	42
27	29	32	2	2864	3355	39	0.28	1290	43
27	29	32	2	2882	3352	40	0.28	1320	44
27	30	32	2	2900	3349	39	0.28	1350	45
27	30	32	2	2916	3348	37	0.24	1380	46
27	30	32	2	2931	3347	36	0.20	1410	47
27	30	32	2	2946	3346	35	0.15	1440	48
27	30	32	2	2959	3345	33	0.11	1470	49
27	30	32	2	2973	3344	32	0.05	1500	50
27	30	32	2	2985	3343	30	0.00	1530	51
27	30	32	3	2992	3344	28	0.94	1560	52
27	30	32	3	2999	3344	27	0.89	1590	53
27	31	32	3	3007	3342	27	0.87	1620	54
27	31	32	3	3016	3341	27	0.86	1650	55
27	31	32	3	3024	3339	26	0.84	1680	56
27	31	32	3	3033	3337	26	0.83	1710	57
27	31	32	3	3043	3336	26	0.82	1740	58
27	31	32	3	3052	3334	26	0.81	1770	59
27	31	32	3	3062	3333	25	0.80	1800	60
27	31	32	3	3072	3331	25	0.79	1830	61
27	31	32	3	3082	3329	25	0.78	1860	62
27	31	32	3	3092	3328	25	0.77	1890	63
27	32	32	3	3102	3326	25	0.77	1920	64
27	32	32	3	3113	3325	25	0.77	1950	65
27	32	32	3	3123	3323	25	0.78	1980	66
27	32	32	3	3133	3321	25	0.78	2010	67
27	32	32	3	3144	3319	25	0.79	2040	68
27	32	32	3	3154	3318	25	0.80	2070	69
27	32	32	3	3164	3316	25	0.80	2100	70
27	32	32	3	3173	3314	26	0.81	2130	71
27	32	32	3	3183	3312	26	0.82	2160	72
27	32	32	3	3193	3311	26	0.82	2190	73
27	33	32	3	3203	3309	27	0.84	2220	74
27	33	32	3	3213	3310	28	0.88	2250	75
27	33	32	3	3223	3310	29	0.93	2280	76
27	33	32	3	3233	3310	30	0.98	2310	77
27	33	32	2	3244	3310	31	0.02	2340	78
27	33	32	2	3257	3311	32	0.05	2370	79
27	33	32	2	3269	3312	33	0.09	2400	80
27	33	32	2	3282	3313	34	0.12	2430	81
27	33	32	2	3294	3313	35	0.16	2460	82
27	34	32	2	3307	3314	36	0.20	2490	83
27	34	32	2	3320	3316	37	0.24	2520	84
27	34	32	2	3332	3317	39	0.29	2550	85
27	34	32	2	3345	3318	40	0.33	2580	86
27	34	32	2	3358	3319	41	0.37	2610	87
27	34	32	2	3371	3320	42	0.42	2640	88
27	34	32	2	3384	3321	44	0.46	2670	89
27	34	32	2	3397	3322	45	0.50	2700	90
27	35	32	2	3414	3324	51	0.53	2730	91
27	35	32	2	3433	3325	51	0.54	2760	92
27	35	32	2	3452	3327	51	0.56	2790	93
27	35	32	2	3470	3328	52	0.58	2820	94
27	35	32	2	3488	3330	52	0.60	2850	95
27	36	32	2	3505	3331	52	0.62	2880	96
27	36	32	2	3520	3333	52	0.63	2910	97
27	36	32	2	3536	3335	52	0.64	2940	98

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
27	36	32	2	3552	3337	52	0.64	2970	99
27	36	32	2	3568	3339	52	0.65	3000	100
27	36	32	2	3584	3341	53	0.66	3030	101
27	37	32	2	3601	3343	51	0.67	3060	102
27	37	32	2	3613	3346	51	0.67	3090	103
27	37	32	2	3626	3349	51	0.68	3120	104
27	37	32	2	3639	3351	51	0.68	3150	105
27	37	32	2	3652	3354	51	0.69	3180	106
27	37	32	2	3665	3356	51	0.69	3210	107
27	37	32	2	3678	3359	51	0.70	3240	108
27	37	32	2	3690	3361	52	0.70	3270	109
27	38	32	2	3703	3364	51	0.70	3300	110
27	38	32	2	3715	3366	51	0.70	3330	111
27	38	32	2	3726	3369	51	0.71	3360	112
27	38	32	2	3738	3372	51	0.71	3390	113
27	38	32	2	3749	3375	51	0.71	3420	114
27	38	32	2	3759	3377	51	0.71	3450	115
27	38	32	2	3770	3380	51	0.71	3480	116
27	38	32	2	3780	3383	51	0.71	3510	117
27	38	32	2	3790	3386	51	0.71	3540	118
27	38	32	2	3800	3388	51	0.71	3570	119
27	39	32	2	3810	3392	52	0.73	3600	120
27	39	32	2	3819	3395	53	0.75	3630	121
27	39	32	2	3829	3398	53	0.77	3660	122
27	39	31	2	3838	3401	53	0.79	3690	123
27	39	31	2	3847	3404	53	0.80	3720	124
27	39	31	2	3856	3407	54	0.82	3750	125
27	39	31	2	3864	3410	54	0.83	3780	126
27	39	31	2	3873	3413	55	0.84	3810	127
27	39	31	2	3881	3416	55	0.86	3840	128
27	39	31	2	3889	3419	56	0.87	3870	129
27	39	31	2	3897	3422	56	0.89	3900	130
27	40	31	2	3908	3426	58	0.91	3930	131
27	40	31	2	3920	3429	59	0.94	3960	132
27	40	31	2	3932	3433	59	0.97	3990	133
27	40	31	2	3943	3437	60	1.00	4020	134
27	40	31	1	3952	3440	61	0.03	4050	135
27	40	31	1	3961	3444	61	0.06	4080	136
27	40	31	1	3969	3448	62	0.09	4110	137
27	40	31	1	3977	3451	63	0.12	4140	138
27	40	31	1	3985	3455	63	0.15	4170	139
27	40	31	1	3993	3458	64	0.18	4200	140
27	41	31	1	4000	3462	65	0.22	4230	141
27	41	31	1	4008	3465	65	0.23	4260	142
27	41	31	1	4015	3469	65	0.25	4290	143
27	41	31	1	4022	3472	66	0.27	4320	144
27	41	31	1	4029	3475	66	0.29	4350	145
27	41	31	1	4035	3479	67	0.31	4380	146
27	41	31	1	4042	3482	67	0.33	4410	147
27	41	31	1	4048	3486	67	0.35	4440	148
27	41	31	1	4054	3489	68	0.37	4470	149
27	41	31	1	4060	3493	68	0.39	4500	150
27	41	31	1	4066	3496	69	0.41	4530	151
27	41	31	1	4071	3500	69	0.44	4560	152
27	41	30	1	4077	3504	70	0.46	4590	153
27	41	30	1	4083	3507	70	0.48	4620	154
27	41	30	1	4088	3511	71	0.51	4650	155
27	41	30	1	4094	3515	71	0.54	4680	156
27	41	30	1	4099	3518	72	0.56	4710	157
27	42	30	1	4104	3523	72	0.59	4740	158
27	42	30	1	4109	3527	73	0.62	4770	159
27	42	30	1	4114	3531	74	0.64	4800	160
27	42	30	1	4119	3536	74	0.67	4830	161
27	42	30	1	4124	3540	75	0.70	4860	162
27	42	30	1	4128	3545	75	0.73	4890	163

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
28	30	43	1	2956	2285	69	0.46	2580	86
28	30	43	1	2965	2265	70	0.50	2610	87
28	30	43	1	2973	2245	70	0.54	2640	88
28	30	43	1	2981	2224	71	0.58	2670	89
28	30	43	1	2989	2202	72	0.62	2700	90
28	31	44	1	3003	2180	71	0.67	2730	91
28	31	44	1	3016	2154	72	0.69	2760	92
28	31	44	1	3028	2128	72	0.71	2790	93
28	31	44	1	3040	2102	73	0.73	2820	94
28	31	45	1	3054	2076	74	0.75	2850	95
28	31	45	1	3067	2050	74	0.77	2880	96
28	31	45	1	3080	2024	75	0.79	2910	97
28	31	46	1	3092	1997	77	0.82	2940	98
28	32	46	1	3108	1967	78	0.84	2970	99
28	32	46	1	3123	1937	78	0.87	3000	100
28	32	46	1	3138	1906	79	0.90	3030	101
28	32	47	1	3153	1876	80	0.92	3060	102
28	32	47	1	3168	1847	81	0.95	3090	103
28	32	47	1	3182	1817	81	0.98	3120	104
28	32	48	1	3190	1799	82	1.00	3137	E
29	20	26	2	1950	3983	30	0.00	0	0
29	20	23	3	1998	4224	4	0.26	30	1
29	21	22	3	2061	4316	-11	0.23	60	2
29	22	22	3	2117	4379	-7	0.22	90	3
29	22	21	3	2175	4426	-10	0.21	120	4
29	23	21	3	2227	4466	-12	0.21	150	5
29	23	20	3	2276	4502	-3	0.22	180	6
29	24	20	3	2322	4542	5	0.25	210	7
29	24	20	3	2369	4576	6	0.30	240	8
29	25	19	3	2411	4609	18	0.38	270	9
29	25	19	3	2448	4640	21	0.52	300	10
29	25	19	3	2479	4668	25	0.72	330	11
29	26	19	2	2506	4692	30	0.01	360	12
29	26	18	2	2528	4717	34	0.15	390	13
29	26	18	2	2548	4742	38	0.28	420	14
29	26	18	2	2569	4770	42	0.41	450	15
29	26	18	2	2589	4798	46	0.53	480	16
29	27	17	2	2603	4825	47	0.56	510	17
29	27	17	2	2617	4847	47	0.58	540	18
29	27	17	2	2630	4870	48	0.60	570	19
29	27	17	2	2643	4893	49	0.62	600	20
29	27	16	2	2654	4915	49	0.64	630	21
29	27	16	2	2663	4937	50	0.67	660	22
29	27	16	2	2672	4959	51	0.69	690	23
29	27	16	2	2681	4981	51	0.72	720	24
29	27	15	2	2690	5002	52	0.74	750	25
29	27	15	2	2698	5022	52	0.76	780	26
29	28	15	2	2707	5042	55	0.78	810	27
29	28	15	2	2717	5061	55	0.81	840	28
29	28	15	2	2726	5080	56	0.84	870	29
29	28	14	2	2734	5100	57	0.86	900	30
29	28	14	2	2744	5120	57	0.89	930	31
29	28	14	2	2753	5141	58	0.92	960	32
29	28	14	2	2761	5162	59	0.95	990	33
29	28	14	2	2769	5183	59	0.98	1020	34
29	28	13	1	2778	5204	60	0.01	1050	35
29	28	13	1	2789	5224	61	0.05	1080	36
29	29	13	1	2800	5245	62	0.09	1110	37
29	29	13	1	2811	5268	63	0.16	1140	38
29	29	13	1	2823	5292	65	0.22	1170	39
29	29	12	1	2836	5316	66	0.28	1200	40
29	29	12	1	2852	5340	67	0.35	1230	41
29	29	12	1	2868	5365	69	0.41	1260	42
29	29	12	1	2884	5390	70	0.47	1290	43
29	30	11	1	2904	5416	71	0.52	1320	44

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
29	30	11	1	2924	5446	71	0.54	1350	45
29	30	11	1	2943	5476	72	0.56	1380	46
29	30	10	1	2964	5506	72	0.59	1410	47
29	30	10	1	2995	5535	74	0.64	1440	48
29	31	10	1	3032	5570	76	0.67	1470	49
29	31	9	1	3067	5605	74	0.70	1500	50
29	32	9	1	3115	5629	78	0.73	1530	51
29	32	9	1	3182	5641	79	0.79	1560	52
29	33	9	1	3248	5652	81	0.87	1590	53
29	34	9	1	3313	5658	82	0.97	1620	54
29	34	9	1	3333	5657	82	1.00	1629	E
30	20	26	2	1950	3950	30	0.00	0	0
30	19	24	3	1886	4167	0	0.02	30	1
30	19	23	3	1889	4284	1	0.01	60	2
30	20	22	3	1910	4368	-8	0.01	90	3
30	20	21	3	1939	4437	-2	0.01	120	4
30	20	21	3	1979	4494	-2	0.01	150	5
30	21	20	3	2013	4549	-8	0.02	180	6
30	21	20	3	2043	4592	-8	0.02	210	7
30	21	19	3	2083	4639	9	0.02	240	8
30	22	19	3	2123	4684	-1	0.02	270	9
30	22	18	3	2143	4744	13	0.03	300	10
30	22	18	3	2156	4787	13	0.04	330	11
30	22	17	3	2173	4837	25	0.06	360	12
30	22	17	3	2194	4873	26	0.12	390	13
30	23	16	3	2207	4906	24	0.16	420	14
30	23	16	3	2208	4952	24	0.18	450	15
30	23	16	3	2209	4988	24	0.21	480	16
30	23	15	3	2211	5016	25	0.23	510	17
30	23	15	3	2213	5039	26	0.26	540	18
30	23	15	3	2216	5055	26	0.30	570	19
30	23	15	3	2220	5067	26	0.33	600	20
30	23	15	3	2224	5076	26	0.37	630	21
30	23	15	3	2230	5083	27	0.42	660	22
30	23	15	3	2236	5087	27	0.47	690	23
30	23	15	3	2244	5091	27	0.53	720	24
30	23	15	3	2254	5093	28	0.60	750	25
30	23	15	3	2266	5095	28	0.67	780	26
30	23	15	3	2280	5096	29	0.75	810	27
30	23	15	3	2297	5097	29	0.84	840	28
30	24	14	3	2301	5118	28	0.82	870	29
30	24	14	3	2302	5141	28	0.77	900	30
30	24	14	3	2302	5162	27	0.72	930	31
30	24	14	3	2302	5182	27	0.68	960	32
30	24	13	3	2302	5201	27	0.63	990	33
30	24	13	3	2303	5220	26	0.59	1020	34
30	24	13	3	2303	5237	26	0.54	1050	35
30	24	13	3	2303	5254	26	0.50	1080	36
30	24	13	3	2304	5271	25	0.46	1110	37
30	24	13	3	2304	5287	25	0.43	1140	38
30	24	12	3	2305	5302	25	0.40	1170	39
30	24	12	3	2305	5317	24	0.36	1200	40
30	24	12	3	2306	5331	24	0.33	1230	41
30	24	12	3	2307	5345	24	0.31	1260	42
30	24	12	3	2308	5359	24	0.28	1290	43
30	24	12	3	2309	5372	23	0.26	1320	44
30	24	12	3	2310	5385	23	0.24	1350	45
30	24	12	3	2311	5397	23	0.22	1380	46
30	24	11	3	2312	5410	24	0.20	1410	47
30	24	11	3	2314	5423	23	0.19	1440	48
30	24	11	3	2315	5436	23	0.17	1470	49
30	24	11	3	2317	5448	23	0.16	1500	50
30	24	11	3	2319	5459	23	0.15	1530	51
30	24	11	3	2322	5471	23	0.13	1560	52
30	24	11	3	2324	5482	23	0.12	1590	53

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
27	42	30	1	4133	3550	76	0.76	4920	164
27	42	30	1	4137	3554	77	0.79	4950	165
27	42	30	1	4142	3559	77	0.81	4980	166
27	42	30	1	4146	3564	78	0.85	5010	167
27	42	30	1	4150	3569	79	0.88	5040	168
27	42	30	1	4154	3573	79	0.91	5070	169
27	42	30	1	4158	3578	80	0.94	5100	170
27	42	30	1	4161	3583	81	0.97	5130	171
27	42	30	1	4165	3588	81	1.00	5158	E
28	20	26	2	1983	3917	30	0.00	0	0
28	22	27	3	2104	3805	18	0.46	30	1
28	22	28	3	2133	3760	15	0.46	60	2
28	22	28	3	2163	3719	15	0.46	90	3
28	22	29	3	2188	3682	15	0.47	120	4
28	23	29	3	2209	3652	15	0.50	150	5
28	23	29	3	2231	3628	16	0.52	180	6
28	23	29	3	2253	3605	16	0.54	210	7
28	23	30	3	2272	3582	19	0.57	240	8
28	23	30	3	2291	3560	20	0.60	270	9
28	24	30	3	2309	3541	19	0.63	300	10
28	24	30	3	2326	3525	20	0.67	330	11
28	24	30	3	2343	3510	21	0.70	360	12
28	24	31	3	2360	3495	25	0.74	390	13
28	24	31	3	2377	3477	26	0.80	420	14
28	24	31	3	2394	3460	27	0.86	450	15
28	25	31	3	2409	3446	28	0.92	480	16
28	25	31	3	2422	3435	29	0.96	510	17
28	25	31	2	2436	3423	30	0.01	540	18
28	25	31	2	2451	3413	32	0.06	570	19
28	25	31	2	2465	3403	33	0.10	600	20
28	25	32	2	2477	3394	35	0.14	630	21
28	25	32	2	2489	3386	36	0.17	660	22
28	26	32	2	2501	3378	37	0.20	690	23
28	26	32	2	2513	3371	38	0.23	720	24
28	26	32	2	2524	3365	39	0.27	750	25
28	26	32	2	2535	3359	40	0.30	780	26
28	26	32	2	2547	3352	41	0.34	810	27
28	26	32	2	2558	3346	43	0.37	840	28
28	26	32	2	2569	3341	44	0.41	870	29
28	26	32	2	2580	3335	45	0.45	900	30
28	26	32	2	2591	3329	47	0.49	930	31
28	27	32	2	2602	3324	48	0.53	960	32
28	27	32	2	2613	3318	49	0.58	990	33
28	27	32	2	2625	3312	51	0.63	1020	34
28	27	32	2	2637	3307	52	0.68	1050	35
28	27	32	2	2650	3301	54	0.73	1080	36
28	27	33	2	2662	3296	52	0.77	1110	37
28	27	33	2	2674	3290	53	0.81	1140	38
28	27	33	2	2686	3284	55	0.85	1170	39
28	27	33	2	2699	3278	56	0.89	1200	40
28	28	33	2	2713	3274	56	0.91	1230	41
28	28	33	2	2726	3270	57	0.94	1260	42
28	28	33	2	2741	3265	58	0.96	1290	43
28	28	33	2	2755	3261	59	0.99	1320	44
28	28	33	2	2762	3259	59	1.00	1335	E
29	20	26	2	1950	3983	30	0.00	0	0
29	20	25	3	1984	4045	10	0.25	30	1
29	21	25	3	2068	4061	14	0.22	60	2
29	22	25	3	2186	4043	19	0.19	90	3
29	23	25	3	2246	4015	0	0.18	120	4
29	23	26	3	2296	3988	-1	0.17	150	5
29	24	26	3	2338	3966	-4	0.17	180	6
29	24	26	3	2379	3944	-4	0.17	210	7
29	25	26	3	2415	3924	-11	0.17	240	8
29	25	26	3	2447	3908	-11	0.18	270	9

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
29	25	27	3	2473	3893	-14	0.19	300	10
29	25	27	3	2495	3878	-14	0.19	330	11
29	26	27	3	2527	3864	5	0.21	360	12
29	26	27	3	2560	3851	6	0.23	390	13
29	26	27	3	2589	3838	7	0.25	420	14
29	27	27	3	2617	3827	10	0.27	450	15
29	27	27	3	2644	3819	10	0.29	480	16
29	27	27	3	2670	3810	11	0.31	510	17
29	27	27	3	2695	3802	11	0.32	540	18
29	28	28	3	2711	3797	4	0.34	570	19
29	28	28	3	2724	3793	4	0.35	600	20
29	28	28	3	2737	3789	5	0.36	630	21
29	28	28	3	2749	3785	5	0.38	660	22
29	28	28	3	2761	3781	6	0.39	690	23
29	28	28	3	2772	3777	6	0.40	720	24
29	28	28	3	2783	3773	7	0.42	750	25
29	28	28	3	2794	3769	7	0.43	780	26
29	29	28	3	2808	3764	20	0.48	810	27
29	29	28	3	2825	3758	22	0.58	840	28
29	29	28	3	2839	3752	24	0.71	870	29
29	29	28	3	2850	3746	27	0.85	900	30
29	29	28	2	2862	3740	31	0.03	930	31
29	29	28	2	2888	3734	34	0.17	960	32
29	30	28	2	2916	3728	43	0.24	990	33
29	30	28	2	2944	3723	44	0.27	1020	34
29	30	28	2	2968	3719	45	0.30	1050	35
29	30	28	2	2990	3714	46	0.34	1080	36
29	31	28	2	3010	3711	47	0.37	1110	37
29	31	28	2	3030	3709	47	0.39	1140	38
29	31	28	2	3049	3708	47	0.40	1170	39
29	31	28	2	3069	3706	48	0.42	1200	40
29	31	28	2	3088	3705	48	0.44	1230	41
29	32	28	2	3104	3704	44	0.45	1260	42
29	32	28	2	3118	3705	44	0.46	1290	43
29	32	28	2	3132	3705	44	0.46	1320	44
29	32	28	2	3146	3705	45	0.47	1350	45
29	32	28	2	3160	3705	45	0.47	1380	46
29	32	28	2	3174	3705	45	0.48	1410	47
29	32	28	2	3189	3706	45	0.48	1440	48
29	33	28	2	3203	3706	41	0.49	1470	49
29	33	28	2	3214	3705	41	0.50	1500	50
29	33	28	2	3226	3704	42	0.50	1530	51
29	33	28	2	3238	3704	42	0.51	1560	52
29	33	28	2	3249	3703	42	0.52	1590	53
29	33	28	2	3260	3703	42	0.53	1620	54
29	33	28	2	3272	3702	43	0.53	1650	55
29	33	28	2	3283	3702	43	0.54	1680	56
29	33	28	2	3294	3701	43	0.55	1710	57
29	34	28	2	3307	3700	48	0.56	1740	58
29	34	29	2	3320	3699	47	0.57	1770	59
29	34	29	2	3331	3698	47	0.59	1800	60
29	34	29	2	3342	3697	48	0.60	1830	61
29	34	29	2	3354	3696	48	0.61	1860	62
29	34	29	2	3365	3695	48	0.62	1890	63
29	34	29	2	3376	3694	49	0.63	1920	64
29	34	29	2	3387	3693	49	0.65	1950	65
29	34	29	2	3397	3692	49	0.66	1980	66
29	35	29	2	3411	3691	53	0.69	2010	67
29	35	29	2	3426	3690	54	0.72	2040	68
29	35	29	2	3439	3689	55	0.76	2070	69
29	35	29	2	3452	3688	55	0.79	2100	70
29	35	29	2	3464	3687	56	0.83	2130	71
29	35	29	2	3476	3686	57	0.87	2160	72
29	35	29	2	3487	3685	58	0.92	2190	73
29	35	29	2	3497	3683	59	0.96	2220	74

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	24	11	3	2327	5492	23	0.11	1620	54
30	24	10	3	2331	5503	24	0.10	1650	55
30	24	10	3	2334	5514	24	0.10	1680	56
30	24	10	3	2339	5525	24	0.09	1710	57
30	24	10	3	2344	5536	24	0.08	1740	58
30	24	10	3	2349	5546	24	0.07	1770	59
30	24	10	3	2355	5556	23	0.07	1800	60
30	24	10	3	2362	5565	23	0.06	1830	61
30	24	10	3	2370	5574	23	0.06	1860	62
30	24	10	3	2379	5583	23	0.05	1890	63
30	24	10	3	2389	5592	23	0.05	1920	64
30	25	10	3	2400	5600	23	0.05	1950	65
30	25	10	3	2412	5600	23	0.06	1980	66
30	25	10	3	2421	5600	23	0.07	2010	67
30	25	10	3	2430	5600	24	0.09	2040	68
30	25	10	3	2438	5600	24	0.11	2070	69
30	25	10	3	2445	5600	24	0.14	2100	70
30	25	10	3	2451	5600	24	0.17	2130	71
30	25	10	3	2457	5600	25	0.22	2160	72
30	25	10	3	2461	5600	25	0.27	2190	73
30	25	10	3	2466	5600	25	0.34	2220	74
30	25	10	3	2470	5600	26	0.42	2250	75
30	25	10	3	2473	5600	27	0.53	2280	76
30	25	10	3	2476	5600	28	0.66	2310	77
30	25	10	3	2479	5600	29	0.82	2340	78
30	25	9	2	2484	5602	25	0.00	2370	79
30	26	9	2	2505	5615	26	0.00	2400	80
30	26	9	2	2528	5629	26	0.00	2430	81
30	26	9	2	2551	5643	26	0.00	2460	82
30	26	9	2	2575	5657	26	0.00	2490	83
30	26	9	2	2598	5671	26	0.00	2520	84
30	27	9	2	2621	5688	25	0.00	2550	85
30	27	8	2	2645	5705	25	0.00	2580	86
30	27	8	2	2670	5723	25	0.00	2610	87
30	27	8	2	2695	5742	25	0.00	2640	88
30	28	8	2	2721	5761	28	0.00	2670	89
30	28	8	2	2747	5782	28	0.00	2700	90
30	28	7	2	2773	5802	27	0.00	2730	91
30	28	7	2	2799	5821	27	0.00	2760	92
30	29	7	2	2827	5840	30	0.00	2790	93
30	29	7	2	2855	5859	30	0.00	2820	94
30	29	7	2	2883	5878	30	0.00	2850	95
30	30	7	2	2913	5896	35	0.00	2880	96
30	30	6	2	2945	5913	32	0.00	2910	97
30	30	6	2	2975	5929	32	0.00	2940	98
30	31	6	2	3007	5944	39	0.00	2970	99
30	31	6	2	3045	5957	39	0.00	3000	100
30	31	6	2	3082	5970	39	0.00	3030	101
30	32	6	2	3123	5980	44	0.00	3060	102
30	32	6	2	3167	5987	44	0.00	3090	103
30	33	6	2	3209	5993	46	0.00	3120	104
30	33	6	2	3255	5995	46	0.00	3150	105
30	33	6	2	3299	5997	46	0.00	3180	106
30	34	6	2	3338	5996	44	0.00	3210	107
30	34	6	2	3375	5995	44	0.00	3240	108
30	35	6	2	3412	5993	44	0.00	3270	109
30	35	6	2	3447	5989	44	0.00	3300	110
30	35	6	2	3481	5985	44	0.00	3330	111
30	36	6	2	3517	5980	49	0.00	3360	112
30	36	6	2	3560	5973	49	0.00	3390	113
30	37	6	2	3601	5967	47	0.00	3420	114
30	37	6	2	3634	5960	47	0.00	3450	115
30	37	6	2	3667	5954	47	0.00	3480	116
30	38	6	2	3700	5947	42	0.00	3510	117
30	38	6	2	3724	5943	42	0.00	3540	118

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	38	6	2	3745	5938	42	0.00	3570	119
30	38	6	2	3766	5933	42	0.00	3600	120
30	38	6	2	3785	5928	42	0.00	3630	121
30	39	6	2	3806	5923	50	0.00	3660	122
30	39	6	2	3832	5918	50	0.00	3690	123
30	39	6	2	3851	5913	50	0.00	3720	124
30	39	6	2	3864	5907	50	0.00	3750	125
30	39	6	2	3874	5902	50	0.00	3780	126
30	39	7	2	3882	5894	54	0.00	3810	127
30	39	7	2	3887	5886	54	0.00	3840	128
30	39	7	2	3891	5878	54	0.01	3870	129
30	39	7	2	3894	5871	54	0.01	3900	130
30	39	7	2	3896	5865	54	0.02	3930	131
30	39	7	2	3897	5860	54	0.03	3960	132
30	39	7	2	3898	5854	54	0.05	3990	133
30	39	7	2	3899	5850	54	0.07	4020	134
30	39	7	2	3899	5845	55	0.12	4050	135
30	39	7	2	3899	5841	55	0.19	4080	136
30	39	7	2	3900	5838	56	0.30	4110	137
30	39	7	2	3900	5834	57	0.47	4140	138
30	39	7	2	3900	5831	58	0.74	4170	139
30	40	7	1	3911	5828	60	0.00	4200	140
30	40	7	1	3942	5822	60	0.00	4230	141
30	40	7	1	3971	5817	60	0.00	4260	142
30	40	7	1	4000	5811	60	0.00	4290	143
30	41	7	1	4034	5808	65	0.00	4320	144
30	41	7	1	4067	5804	65	0.00	4350	145
30	41	7	1	4098	5800	65	0.00	4380	146
30	42	7	1	4132	5800	67	0.00	4410	147
30	42	7	1	4164	5801	67	0.00	4440	148
30	42	7	1	4195	5801	67	0.00	4470	149
30	43	7	1	4227	5805	68	0.00	4500	150
30	43	7	1	4258	5809	68	0.00	4530	151
30	43	7	1	4288	5813	68	0.00	4560	152
30	44	7	1	4318	5820	69	0.00	4590	153
30	44	7	1	4347	5829	69	0.00	4620	154
30	44	7	1	4376	5838	69	0.00	4650	155
30	45	7	1	4405	5847	69	0.00	4680	156
30	45	7	1	4432	5858	69	0.00	4710	157
30	45	7	1	4459	5869	69	0.00	4740	158
30	45	7	1	4485	5880	69	0.00	4770	159
30	46	7	1	4512	5892	70	0.00	4800	160
30	46	6	1	4541	5905	70	0.00	4830	161
30	46	6	1	4570	5917	70	0.00	4860	162
30	46	6	1	4599	5930	70	0.00	4890	163
30	47	6	1	4630	5943	71	0.00	4920	164
30	47	6	1	4660	5956	71	0.00	4950	165
30	47	6	1	4690	5968	71	0.00	4980	166
30	48	6	1	4721	5981	72	0.00	5010	167
30	48	6	1	4753	5993	72	0.00	5040	168
30	48	5	1	4784	6005	72	0.00	5070	169
30	49	5	1	4818	6017	75	0.00	5100	170
30	49	5	1	4851	6030	75	0.00	5130	171
30	49	5	1	4879	6042	75	0.00	5160	172
30	50	5	1	4906	6053	80	0.01	5190	173
30	50	5	1	4940	6061	80	0.01	5220	174
30	50	5	1	4962	6069	80	0.02	5250	175
30	50	5	1	4976	6077	80	0.02	5280	176
30	50	5	1	4985	6085	80	0.04	5310	177
30	50	5	1	4990	6093	80	0.06	5340	178
30	50	4	1	4994	6101	81	0.10	5370	179
30	50	4	1	4996	6110	82	0.18	5400	180
30	50	4	1	4998	6119	82	0.32	5430	181
30	50	4	1	4999	6126	83	0.57	5460	182
30	50	4	1	4999	6133	85	1.00	5489	E

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
31	20	26	2	1950	3917	30	0.00	0	0
31	21	29	3	2002	3624	15	0.25	30	1
31	21	30	3	2037	3536	15	0.30	60	2
31	21	31	3	2055	3468	16	0.37	90	3
31	21	31	3	2065	3413	17	0.46	120	4
31	21	32	3	2073	3365	21	0.56	150	5
31	21	32	3	2079	3324	23	0.67	180	6
31	21	33	3	2084	3288	27	0.82	210	7
31	21	33	2	2088	3254	30	0.01	240	8
31	21	33	2	2092	3224	34	0.14	270	9
31	21	34	2	2097	3196	38	0.27	300	10
31	22	34	2	2102	3170	40	0.37	330	11
31	22	34	2	2107	3147	41	0.40	360	12
31	22	34	2	2112	3126	42	0.44	390	13
31	22	34	2	2117	3106	43	0.48	420	14
31	22	35	2	2123	3082	50	0.53	450	15
31	22	35	2	2128	3058	51	0.58	480	16
31	22	35	2	2134	3037	52	0.64	510	17
31	22	35	2	2139	3017	54	0.71	540	18
31	22	36	2	2145	3000	57	0.78	570	19
31	22	36	2	2152	2974	58	0.83	600	20
31	22	36	2	2160	2950	58	0.88	630	21
31	22	36	2	2167	2927	59	0.94	660	22
31	22	36	2	2174	2906	60	1.00	690	23
31	22	37	1	2175	2892	60	0.05	720	24
31	22	37	1	2176	2879	61	0.06	750	25
31	22	37	1	2177	2867	61	0.08	780	26
31	22	37	1	2178	2856	61	0.11	810	27
31	22	37	1	2179	2844	61	0.13	840	28
31	22	37	1	2180	2833	62	0.15	870	29
31	22	37	1	2181	2823	62	0.18	900	30
31	22	37	1	2182	2813	62	0.21	930	31
31	22	37	1	2183	2803	62	0.24	960	32
31	22	38	1	2183	2794	63	0.26	990	33
31	22	38	1	2184	2785	63	0.26	1020	34
31	22	38	1	2185	2776	63	0.27	1050	35
31	22	38	1	2185	2768	63	0.27	1080	36
31	22	38	1	2186	2760	63	0.28	1110	37
31	22	38	1	2186	2751	63	0.29	1140	38
31	22	38	1	2187	2743	63	0.30	1170	39
31	22	38	1	2187	2735	63	0.30	1200	40
31	22	38	1	2188	2727	63	0.31	1230	41
31	22	38	1	2188	2720	64	0.32	1260	42
31	22	38	1	2188	2712	64	0.33	1290	43
31	22	38	1	2189	2705	64	0.34	1320	44
31	22	39	1	2189	2697	64	0.36	1350	45
31	22	39	1	2189	2690	64	0.39	1380	46
31	22	39	1	2190	2683	65	0.42	1410	47
31	22	39	1	2190	2676	65	0.46	1440	48
31	22	39	1	2190	2669	65	0.50	1470	49
31	22	39	1	2191	2662	66	0.53	1500	50
31	22	39	1	2191	2655	66	0.58	1530	51
31	22	39	1	2191	2649	67	0.62	1560	52
31	22	39	1	2191	2643	67	0.66	1590	53
31	22	39	1	2192	2636	68	0.71	1620	54
31	22	39	1	2192	2630	68	0.76	1650	55
31	22	39	1	2192	2624	69	0.81	1680	56
31	22	39	1	2192	2618	70	0.87	1710	57
31	22	39	1	2193	2613	70	0.92	1740	58
31	22	39	1	2193	2607	71	0.98	1770	59
31	22	39	1	2193	2606	71	1.00	1778	E
32	20	26	2	1917	3983	30	0.00	0	0
32	19	24	3	1811	4154	10	0.34	30	1
32	18	23	3	1776	4249	10	0.33	60	2
32	18	22	3	1761	4324	8	0.33	90	3

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
32	18	22	3	1758	4384	8	0.34	120	4
32	18	21	3	1760	4440	11	0.37	150	5
32	18	21	3	1764	4486	13	0.42	180	6
32	18	20	3	1773	4533	22	0.57	210	7
32	18	20	3	1786	4564	27	0.86	240	8
32	18	19	2	1797	4609	30	0.11	270	9
32	19	19	2	1807	4664	36	0.21	300	10
32	19	18	2	1821	4720	43	0.31	330	11
32	19	18	2	1838	4773	44	0.34	360	12
32	19	17	2	1857	4826	51	0.39	390	13
32	19	17	2	1878	4879	52	0.45	420	14
32	20	16	2	1902	4932	55	0.52	450	15
32	20	16	2	1923	4988	55	0.54	480	16
32	20	15	2	1940	5029	53	0.53	510	17
32	20	15	2	1958	5066	53	0.51	540	18
32	20	15	2	1978	5099	53	0.48	570	19
32	20	14	2	1994	5130	53	0.47	600	20
32	21	14	2	2009	5157	50	0.47	630	21
32	21	14	2	2022	5182	50	0.46	660	22
32	21	13	2	2036	5205	50	0.45	690	23
32	21	13	2	2047	5228	50	0.45	720	24
32	21	13	2	2059	5250	49	0.45	750	25
32	21	13	2	2071	5271	49	0.44	780	26
32	21	13	2	2084	5291	49	0.44	810	27
32	21	12	2	2096	5311	50	0.44	840	28
32	22	12	2	2106	5329	46	0.44	870	29
32	22	12	2	2115	5346	46	0.43	900	30
32	22	12	2	2124	5363	46	0.42	930	31
32	22	12	2	2134	5379	46	0.42	960	32
32	22	12	2	2144	5395	46	0.41	990	33
32	22	11	2	2153	5410	45	0.40	1020	34
32	22	11	2	2161	5425	45	0.40	1050	35
32	22	11	2	2170	5439	45	0.39	1080	36
32	22	11	2	2180	5452	45	0.39	1110	37
32	22	11	2	2190	5466	45	0.38	1140	38
32	22	11	2	2200	5479	44	0.38	1170	39
32	23	11	2	2208	5491	40	0.36	1200	40
32	23	10	2	2217	5502	40	0.35	1230	41
32	23	10	2	2225	5513	39	0.33	1260	42
32	23	10	2	2234	5525	39	0.32	1290	43
32	23	10	2	2244	5536	38	0.30	1320	44
32	23	10	2	2254	5547	38	0.28	1350	45
32	23	10	2	2266	5557	37	0.27	1380	46
32	23	10	2	2278	5568	37	0.25	1410	47
32	23	10	2	2291	5578	36	0.24	1440	48
32	24	10	2	2304	5589	38	0.22	1470	49
32	24	10	2	2317	5599	37	0.20	1500	50
32	24	9	2	2332	5611	36	0.21	1530	51
32	24	9	2	2349	5622	37	0.21	1560	52
32	24	9	2	2366	5634	37	0.22	1590	53
32	24	9	2	2385	5646	37	0.23	1620	54
32	25	9	2	2404	5657	33	0.23	1650	55
32	25	9	2	2422	5670	33	0.22	1680	56
32	25	9	2	2441	5683	32	0.21	1710	57
32	25	9	2	2461	5696	32	0.20	1740	58
32	25	8	2	2481	5708	33	0.19	1770	59
32	26	8	2	2503	5720	33	0.18	1800	60
32	26	8	2	2528	5736	32	0.16	1830	61
32	26	8	2	2554	5753	32	0.14	1860	62
32	26	8	2	2582	5771	31	0.12	1890	63
32	27	8	2	2610	5790	29	0.11	1920	64
32	27	7	2	2636	5810	29	0.12	1950	65
32	27	7	2	2661	5829	29	0.12	1980	66
32	27	7	2	2687	5848	29	0.12	2010	67
32	28	7	2	2713	5866	31	0.13	2040	68

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
32	28	7	2	2739	5884	31	0.13	2070	69
32	28	6	2	2765	5902	31	0.13	2100	70
32	28	6	2	2792	5919	32	0.14	2130	71
32	29	6	2	2820	5936	33	0.14	2160	72
32	29	6	2	2848	5952	33	0.14	2190	73
32	29	6	2	2876	5968	34	0.15	2220	74
32	30	6	2	2905	5984	36	0.15	2250	75
32	30	6	2	2936	5998	36	0.16	2280	76
32	30	5	2	2967	6012	35	0.16	2310	77
32	30	5	2	2997	6025	35	0.17	2340	78
32	31	5	2	3031	6035	38	0.17	2370	79
32	31	5	2	3064	6044	38	0.18	2400	80
32	31	5	2	3096	6053	38	0.18	2430	81
32	32	5	2	3134	6059	42	0.19	2460	82
32	32	5	2	3171	6064	42	0.20	2490	83
32	33	5	2	3208	6069	46	0.20	2520	84
32	33	5	2	3250	6070	46	0.21	2550	85
32	33	5	2	3291	6071	46	0.22	2580	86
32	34	5	2	3329	6070	44	0.22	2610	87
32	34	5	2	3366	6068	44	0.22	2640	88
32	35	5	2	3402	6066	42	0.23	2670	89
32	35	5	2	3433	6064	42	0.23	2700	90
32	35	5	2	3463	6061	43	0.24	2730	91
32	35	5	2	3492	6059	43	0.25	2760	92
32	36	5	2	3530	6055	49	0.27	2790	93
32	36	5	2	3569	6050	49	0.29	2820	94
32	37	5	2	3605	6046	50	0.30	2850	95
32	37	5	2	3642	6040	50	0.31	2880	96
32	37	5	2	3676	6035	50	0.32	2910	97
32	38	5	2	3708	6029	49	0.33	2940	98
32	38	5	2	3735	6025	50	0.35	2970	99
32	38	5	2	3760	6021	50	0.36	3000	100
32	38	5	2	3784	6016	50	0.38	3030	101
32	39	5	2	3808	6012	53	0.42	3060	102
32	39	5	2	3831	6009	55	0.55	3090	103
32	39	5	2	3849	6005	57	0.72	3120	104
32	39	5	2	3862	6002	59	0.94	3150	105
32	39	6	1	3891	5998	62	0.10	3180	106
32	40	6	1	3924	5995	61	0.13	3210	107
32	40	6	1	3955	5993	61	0.14	3240	108
32	40	6	1	3985	5990	61	0.14	3270	109
32	41	6	1	4017	5988	66	0.15	3300	110
32	41	6	1	4052	5987	66	0.15	3330	111
32	41	6	1	4085	5985	66	0.16	3360	112
32	42	6	1	4120	5985	69	0.16	3390	113
32	42	6	1	4156	5985	69	0.17	3420	114
32	42	6	1	4191	5986	69	0.18	3450	115
32	43	6	1	4227	5988	71	0.18	3480	116
32	43	6	1	4263	5991	71	0.19	3510	117
32	43	6	1	4298	5993	71	0.20	3540	118
32	44	6	1	4330	5999	71	0.21	3570	119
32	44	5	1	4364	6004	71	0.22	3600	120
32	44	5	1	4399	6010	71	0.23	3630	121
32	45	5	1	4432	6018	73	0.24	3660	122
32	45	5	1	4464	6026	73	0.25	3690	123
32	45	5	1	4496	6034	73	0.26	3720	124
32	46	5	1	4526	6042	73	0.28	3750	125
32	46	5	1	4556	6050	73	0.29	3780	126
32	46	5	1	4586	6059	74	0.30	3810	127
32	47	5	1	4617	6067	75	0.32	3840	128
32	47	5	1	4649	6076	75	0.34	3870	129
32	47	5	1	4680	6085	76	0.35	3900	130
32	48	5	1	4712	6093	76	0.37	3930	131
32	48	4	1	4745	6102	77	0.40	3960	132
32	48	4	1	4777	6111	78	0.42	3990	133

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
32	49	4	1	4809	6120	80	0.47	4020	134
32	49	4	1	4843	6127	81	0.61	4050	135
32	49	4	1	4871	6133	83	0.78	4080	136
32	49	4	1	4894	6138	85	1.00	4109	E
33	20	26	2	1917	3950	30	0.00	0	0
33	17	26	3	1689	3955	11	0.23	30	1
33	16	26	3	1589	3934	16	0.25	60	2
33	16	26	3	1520	3901	17	0.32	90	3
33	15	27	3	1466	3859	27	0.51	120	4
33	15	27	2	1427	3813	30	0.01	150	5
33	14	28	2	1380	3764	36	0.10	180	6
33	14	28	2	1339	3714	36	0.11	210	7
33	14	29	2	1307	3660	35	0.11	240	8
33	13	29	2	1270	3608	44	0.12	270	9
33	13	30	2	1241	3562	42	0.13	300	10
33	13	30	2	1215	3518	42	0.14	330	11
33	12	31	2	1191	3472	48	0.15	360	12
33	12	31	2	1165	3432	48	0.17	390	13
33	12	32	2	1142	3392	49	0.18	420	14
33	12	32	2	1122	3350	49	0.19	450	15
33	12	32	2	1102	3311	50	0.20	480	16
33	11	33	2	1082	3279	52	0.24	510	17
33	11	33	2	1067	3248	53	0.28	540	18
33	11	33	2	1055	3216	53	0.34	570	19
33	11	34	2	1041	3186	53	0.39	600	20
33	11	34	2	1024	3157	54	0.42	630	21
33	11	34	2	1008	3130	54	0.45	660	22
33	10	34	2	986	3107	57	0.49	690	23
33	10	35	2	968	3088	57	0.57	720	24
33	10	35	2	955	3069	58	0.69	750	25
33	10	35	2	944	3050	59	0.83	780	26
33	10	35	1	935	3031	60	0.00	810	27
33	10	35	1	913	3011	61	0.07	840	28
33	9	36	1	892	2992	59	0.11	870	29
33	9	36	1	873	2973	60	0.11	900	30
33	9	36	1	853	2956	60	0.11	930	31
33	9	36	1	834	2938	60	0.12	960	32
33	9	36	1	816	2921	60	0.12	990	33
33	8	36	1	796	2904	63	0.12	1020	34
33	8	37	1	776	2889	63	0.13	1050	35
33	8	37	1	756	2875	63	0.13	1080	36
33	8	37	1	736	2860	63	0.14	1110	37
33	8	37	1	717	2846	63	0.14	1140	38
33	7	37	1	698	2832	66	0.14	1170	39
33	7	37	1	676	2819	67	0.15	1200	40
33	7	37	1	654	2807	67	0.16	1230	41
33	7	38	1	634	2796	66	0.16	1260	42
33	7	38	1	617	2784	66	0.17	1290	43
33	7	38	1	601	2773	66	0.18	1320	44
33	6	38	1	578	2765	71	0.19	1350	45
33	6	38	1	557	2757	71	0.20	1380	46
33	6	38	1	537	2749	71	0.21	1410	47
33	6	38	1	518	2741	72	0.22	1440	48
33	6	38	1	500	2733	72	0.24	1470	49
33	5	38	1	469	2733	77	0.26	1500	50
33	5	38	1	441	2733	77	0.30	1530	51
33	5	38	1	417	2734	77	0.33	1560	52
33	4	38	1	389	2736	80	0.39	1590	53
33	4	38	1	351	2746	80	0.53	1620	54
33	4	38	1	329	2759	81	0.72	1650	55
33	4	38	1	317	2776	81	0.99	1680	56
33	4	38	1	316	2776	81	1.00	1681	E
34	20	26	2	1917	3917	30	0.00	0	0
34	18	28	3	1798	3709	24	0.43	30	1
34	18	30	3	1792	3577	21	0.42	60	2

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
29	36	29	1	3512	3682	61	0.05	2250	75
29	36	29	1	3529	3681	63	0.14	2280	76
29	36	29	1	3547	3680	65	0.22	2310	77
29	36	29	1	3566	3678	66	0.30	2340	78
29	36	29	1	3586	3677	68	0.37	2370	79
29	37	29	1	3605	3677	66	0.42	2400	80
29	37	29	1	3622	3677	66	0.43	2430	81
29	37	29	1	3639	3678	67	0.45	2460	82
29	37	29	1	3655	3679	67	0.46	2490	83
29	37	29	1	3670	3679	67	0.47	2520	84
29	37	29	1	3686	3680	68	0.48	2550	85
29	38	29	1	3701	3681	70	0.50	2580	86
29	38	29	1	3718	3683	70	0.50	2610	87
29	38	29	1	3735	3684	70	0.50	2640	88
29	38	29	1	3751	3686	70	0.49	2670	89
29	38	29	1	3766	3688	70	0.49	2700	90
29	38	29	1	3780	3690	70	0.49	2730	91
29	38	29	1	3794	3692	70	0.49	2760	92
29	39	29	1	3807	3694	71	0.51	2790	93
29	39	29	1	3819	3698	71	0.54	2820	94
29	39	28	1	3833	3702	72	0.56	2850	95
29	39	28	1	3847	3705	72	0.58	2880	96
29	39	28	1	3861	3709	73	0.60	2910	97
29	39	28	1	3874	3713	73	0.62	2940	98
29	39	28	1	3886	3716	73	0.64	2970	99
29	39	28	1	3898	3720	74	0.66	3000	100
29	40	28	1	3909	3725	75	0.69	3030	101
29	40	28	1	3920	3730	75	0.73	3060	102
29	40	28	1	3931	3734	76	0.76	3090	103
29	40	28	1	3941	3739	77	0.80	3120	104
29	40	28	1	3952	3744	78	0.83	3150	105
29	40	28	1	3963	3749	78	0.87	3180	106
29	40	28	1	3973	3754	79	0.90	3210	107
29	40	28	1	3983	3758	80	0.93	3240	108
29	40	28	1	3993	3763	80	0.97	3270	109
29	41	28	1	4003	3768	81	1.00	3300	110
29	41	28	1	4003	3768	81	1.00	3302	E
30	20	26	2	1950	3950	30	0.00	0	0
30	20	27	3	1976	3865	17	0.02	30	1
30	21	28	3	2056	3745	21	0.02	60	2
30	22	29	3	2105	3680	2	0.03	90	3
30	22	29	3	2123	3648	2	0.03	120	4
30	22	29	3	2142	3619	2	0.03	150	5
30	22	30	3	2161	3591	6	0.03	180	6
30	22	30	3	2176	3564	6	0.03	210	7
30	22	30	3	2192	3539	6	0.04	240	8
30	23	30	3	2208	3519	5	0.04	270	9
30	23	30	3	2224	3502	5	0.04	300	10
30	23	31	3	2240	3483	11	0.05	330	11
30	23	31	3	2256	3464	11	0.05	360	12
30	23	31	3	2272	3448	11	0.05	390	13
30	23	31	3	2288	3432	11	0.06	420	14
30	24	31	3	2305	3418	10	0.06	450	15
30	24	31	3	2321	3406	10	0.06	480	16
30	24	32	3	2336	3394	14	0.07	510	17
30	24	32	3	2351	3382	14	0.07	540	18
30	24	32	3	2366	3370	14	0.08	570	19
30	24	32	3	2381	3359	14	0.08	600	20
30	24	32	3	2397	3349	15	0.09	630	21
30	25	32	3	2410	3340	11	0.09	660	22
30	25	32	3	2422	3330	11	0.10	690	23
30	25	32	3	2435	3322	11	0.10	720	24
30	25	32	3	2447	3313	11	0.10	750	25
30	25	32	3	2460	3305	11	0.11	780	26
30	25	33	3	2472	3297	14	0.11	810	27

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	25	33	3	2484	3288	14	0.11	840	28
30	25	33	3	2496	3280	14	0.11	870	29
30	26	33	3	2505	3272	4	0.11	900	30
30	26	33	3	2513	3266	4	0.11	930	31
30	26	33	3	2520	3259	4	0.12	960	32
30	26	33	3	2528	3253	4	0.12	990	33
30	26	33	3	2536	3247	4	0.12	1020	34
30	26	33	3	2544	3241	5	0.12	1050	35
30	26	33	3	2552	3235	5	0.13	1080	36
30	26	33	3	2559	3229	5	0.13	1110	37
30	26	33	3	2567	3223	5	0.13	1140	38
30	26	33	3	2575	3218	5	0.13	1170	39
30	26	33	3	2583	3212	5	0.13	1200	40
30	26	33	3	2591	3207	5	0.14	1230	41
30	26	33	3	2599	3202	5	0.14	1260	42
30	27	34	3	2607	3196	6	0.15	1290	43
30	27	34	3	2616	3191	6	0.15	1320	44
30	27	34	3	2624	3185	6	0.16	1350	45
30	27	34	3	2632	3180	7	0.17	1380	46
30	27	34	3	2640	3175	7	0.18	1410	47
30	27	34	3	2648	3170	7	0.18	1440	48
30	27	34	3	2655	3165	7	0.19	1470	49
30	27	34	3	2662	3160	8	0.20	1500	50
30	27	34	3	2670	3155	8	0.21	1530	51
30	27	34	3	2677	3151	8	0.22	1560	52
30	27	34	3	2684	3146	9	0.23	1590	53
30	27	34	3	2690	3142	9	0.25	1620	54
30	27	34	3	2697	3138	9	0.26	1650	55
30	28	34	3	2711	3134	24	0.28	1680	56
30	28	34	3	2732	3132	24	0.30	1710	57
30	28	34	3	2751	3129	25	0.34	1740	58
30	28	34	3	2769	3126	25	0.37	1770	59
30	28	34	3	2785	3123	25	0.41	1800	60
30	28	34	3	2800	3121	26	0.45	1830	61
30	29	34	3	2816	3121	26	0.44	1860	62
30	29	34	3	2833	3121	26	0.44	1890	63
30	29	34	3	2850	3122	26	0.43	1920	64
30	29	34	3	2867	3122	26	0.42	1950	65
30	29	34	3	2885	3122	26	0.42	1980	66
30	30	34	3	2902	3123	23	0.41	2010	67
30	30	34	3	2914	3123	23	0.39	2040	68
30	30	34	3	2926	3124	23	0.37	2070	69
30	30	34	3	2939	3124	23	0.35	2100	70
30	30	34	3	2952	3124	23	0.33	2130	71
30	30	34	3	2965	3125	22	0.31	2160	72
30	30	34	3	2980	3125	22	0.29	2190	73
30	30	34	3	2994	3126	22	0.28	2220	74
30	31	34	3	3007	3124	20	0.26	2250	75
30	31	34	3	3020	3122	19	0.25	2280	76
30	31	34	3	3033	3119	19	0.24	2310	77
30	31	34	3	3046	3116	19	0.22	2340	78
30	31	34	3	3060	3113	19	0.21	2370	79
30	31	34	3	3074	3110	19	0.20	2400	80
30	31	34	3	3090	3107	19	0.19	2430	81
30	32	34	3	3102	3104	2	0.18	2460	82
30	32	34	3	3109	3101	2	0.18	2490	83
30	32	35	3	3114	3098	-6	0.18	2520	84
30	32	35	3	3119	3096	-6	0.17	2550	85
30	32	35	3	3124	3094	-6	0.17	2580	86
30	32	35	3	3129	3092	-7	0.17	2610	87
30	32	35	3	3134	3090	-7	0.16	2640	88
30	32	35	3	3139	3087	-7	0.16	2670	89
30	32	35	3	3144	3085	-7	0.16	2700	90
30	32	35	3	3150	3083	-7	0.16	2730	91
30	32	35	3	3155	3081	-7	0.15	2760	92

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	32	35	3	3160	3078	-7	0.15	2790	93
30	32	35	3	3166	3076	-8	0.15	2820	94
30	32	35	3	3171	3074	-8	0.14	2850	95
30	32	35	3	3177	3071	-8	0.14	2880	96
30	32	35	3	3183	3069	-8	0.14	2910	97
30	32	35	3	3188	3067	-8	0.14	2940	98
30	32	35	3	3194	3064	-8	0.13	2970	99
30	33	35	3	3200	3062	-16	0.13	3000	100
30	33	35	3	3205	3061	-16	0.13	3030	101
30	33	35	3	3210	3060	-16	0.13	3060	102
30	33	35	3	3215	3058	-16	0.13	3090	103
30	33	35	3	3220	3057	-16	0.13	3120	104
30	33	35	3	3224	3056	-16	0.13	3150	105
30	33	35	3	3229	3054	-16	0.13	3180	106
30	33	35	3	3234	3053	-16	0.13	3210	107
30	33	35	3	3239	3052	-16	0.13	3240	108
30	33	35	3	3244	3051	-16	0.13	3270	109
30	33	35	3	3248	3049	-16	0.13	3300	110
30	33	35	3	3253	3048	-16	0.13	3330	111
30	33	35	3	3258	3047	-16	0.13	3360	112
30	33	35	3	3263	3045	-16	0.13	3390	113
30	33	35	3	3267	3044	-16	0.13	3420	114
30	33	35	3	3272	3043	-16	0.13	3450	115
30	33	35	3	3277	3042	-16	0.13	3480	116
30	33	35	3	3281	3040	-16	0.13	3510	117
30	33	35	3	3286	3039	-16	0.13	3540	118
30	33	35	3	3291	3038	-16	0.13	3570	119
30	33	35	3	3295	3036	-16	0.13	3600	120
30	34	35	3	3300	3035	13	0.13	3630	121
30	34	35	3	3313	3035	14	0.13	3660	122
30	34	35	3	3326	3034	14	0.13	3690	123
30	34	35	3	3338	3034	14	0.14	3720	124
30	34	35	3	3350	3033	14	0.14	3750	125
30	34	35	3	3362	3033	14	0.14	3780	126
30	34	35	3	3374	3033	14	0.14	3810	127
30	34	35	3	3385	3032	14	0.14	3840	128
30	34	35	3	3397	3032	14	0.14	3870	129
30	35	35	3	3407	3033	12	0.15	3900	130
30	35	35	3	3417	3034	12	0.15	3930	131
30	35	35	3	3427	3035	12	0.15	3960	132
30	35	35	3	3437	3036	12	0.16	3990	133
30	35	35	3	3446	3037	12	0.16	4020	134
30	35	35	3	3456	3038	12	0.17	4050	135
30	35	35	3	3465	3039	13	0.17	4080	136
30	35	35	3	3475	3040	13	0.17	4110	137
30	35	35	3	3484	3040	13	0.18	4140	138
30	35	35	3	3493	3041	13	0.18	4170	139
30	36	35	3	3505	3043	21	0.19	4200	140
30	36	35	3	3522	3045	21	0.21	4230	141
30	36	35	3	3538	3048	22	0.23	4260	142
30	36	35	3	3554	3050	22	0.25	4290	143
30	36	35	3	3568	3053	22	0.28	4320	144
30	36	35	3	3582	3055	22	0.30	4350	145
30	36	35	3	3596	3057	23	0.33	4380	146
30	37	35	3	3612	3059	25	0.36	4410	147
30	37	35	3	3630	3061	25	0.39	4440	148
30	37	35	3	3647	3063	25	0.42	4470	149
30	37	35	3	3663	3065	26	0.45	4500	150
30	37	35	3	3680	3067	26	0.49	4530	151
30	37	35	3	3696	3069	26	0.53	4560	152
30	38	35	3	3709	3073	25	0.54	4590	153
30	38	35	3	3722	3078	26	0.55	4620	154
30	38	35	3	3734	3083	26	0.56	4650	155
30	38	35	3	3746	3088	26	0.57	4680	156
30	38	35	3	3758	3093	26	0.58	4710	157

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	38	35	3	3770	3098	26	0.59	4740	158
30	38	34	3	3779	3104	27	0.56	4770	159
30	38	34	3	3787	3110	26	0.53	4800	160
30	38	34	3	3797	3116	26	0.49	4830	161
30	39	34	3	3805	3120	24	0.49	4860	162
30	39	34	3	3813	3123	24	0.49	4890	163
30	39	34	3	3820	3126	25	0.50	4920	164
30	39	34	3	3828	3129	25	0.51	4950	165
30	39	34	3	3835	3132	25	0.52	4980	166
30	39	34	3	3843	3135	25	0.53	5010	167
30	39	34	3	3850	3137	25	0.54	5040	168
30	39	34	3	3858	3140	25	0.55	5070	169
30	39	34	3	3865	3143	25	0.56	5100	170
30	39	34	3	3873	3145	25	0.58	5130	171
30	39	34	3	3880	3148	25	0.59	5160	172
30	39	34	3	3887	3150	26	0.60	5190	173
30	39	34	3	3895	3153	26	0.61	5220	174
30	40	34	3	3903	3155	27	0.63	5250	175
30	40	34	3	3915	3157	28	0.67	5280	176
30	40	34	3	3926	3158	28	0.71	5310	177
30	40	34	3	3936	3159	28	0.75	5340	178
30	40	34	3	3947	3160	29	0.79	5370	179
30	40	34	3	3957	3162	29	0.84	5400	180
30	40	34	3	3967	3163	29	0.89	5430	181
30	40	34	3	3976	3164	30	0.94	5460	182
30	40	34	2	3986	3165	30	0.00	5490	183
30	40	34	2	3994	3168	30	0.01	5520	184
30	41	34	2	4003	3171	31	0.02	5550	185
30	41	34	2	4012	3173	31	0.02	5580	186
30	41	34	2	4020	3175	31	0.02	5610	187
30	41	34	2	4029	3178	31	0.02	5640	188
30	41	34	2	4037	3180	31	0.03	5670	189
30	41	34	2	4044	3182	31	0.03	5700	190
30	41	34	2	4052	3185	31	0.03	5730	191
30	41	34	2	4059	3187	31	0.03	5760	192
30	41	34	2	4067	3189	31	0.03	5790	193
30	41	34	2	4074	3192	31	0.03	5820	194
30	41	34	2	4081	3194	31	0.03	5850	195
30	41	34	2	4087	3197	31	0.03	5880	196
30	41	34	2	4094	3199	31	0.03	5910	197
30	41	33	2	4100	3202	31	0.02	5940	198
30	42	33	2	4105	3203	31	0.02	5970	199
30	42	33	2	4109	3205	30	0.02	6000	200
30	42	33	2	4114	3206	30	0.02	6030	201
30	42	33	2	4119	3207	30	0.01	6060	202
30	42	33	2	4124	3209	30	0.01	6090	203
30	42	33	2	4128	3210	30	0.01	6120	204
30	42	33	2	4132	3211	30	0.01	6150	205
30	42	33	2	4137	3213	30	0.01	6180	206
30	42	33	2	4141	3214	30	0.01	6210	207
30	42	33	2	4145	3216	30	0.01	6240	208
30	42	33	2	4149	3217	30	0.01	6270	209
30	42	33	2	4152	3219	30	0.01	6300	210
30	42	33	2	4156	3220	30	0.01	6330	211
30	42	33	2	4160	3222	30	0.01	6360	212
30	42	33	2	4163	3223	30	0.01	6390	213
30	42	33	2	4167	3225	30	0.01	6420	214
30	42	33	2	4170	3226	30	0.00	6450	215
30	42	33	2	4173	3228	30	0.00	6480	216
30	42	33	2	4177	3229	30	0.00	6510	217
30	42	33	2	4180	3231	30	0.00	6540	218
30	42	33	2	4183	3233	30	0.00	6570	219
30	42	33	3	4185	3234	30	1.00	6600	220
30	42	33	3	4187	3236	30	1.00	6630	221
30	42	33	3	4189	3238	30	0.99	6660	222

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	42	33	3	4191	3240	30	0.99	6690	223
30	42	33	3	4193	3242	30	0.99	6720	224
30	42	33	3	4195	3244	30	0.99	6750	225
30	42	33	3	4197	3246	30	0.98	6780	226
30	42	33	3	4199	3248	30	0.98	6810	227
30	43	33	3	4201	3250	30	0.98	6840	228
30	43	33	3	4204	3251	30	0.99	6870	229
30	43	33	2	4207	3252	30	0.00	6900	230
30	43	33	2	4209	3253	30	0.00	6930	231
30	43	33	2	4211	3254	30	0.00	6960	232
30	43	33	2	4213	3255	30	0.01	6990	233
30	43	33	2	4215	3256	30	0.01	7020	234
30	43	33	2	4218	3257	30	0.01	7050	235
30	43	33	2	4220	3258	30	0.01	7080	236
30	43	33	2	4222	3259	30	0.02	7110	237
30	43	33	2	4223	3260	31	0.02	7140	238
30	43	33	2	4225	3261	31	0.02	7170	239
30	43	33	2	4227	3262	31	0.02	7200	240
30	43	33	2	4229	3263	31	0.03	7230	241
30	43	33	2	4230	3264	31	0.03	7260	242
30	43	33	2	4232	3265	31	0.03	7290	243
30	43	33	2	4234	3266	31	0.03	7320	244
30	43	33	2	4235	3267	31	0.04	7350	245
30	43	33	2	4237	3268	31	0.04	7380	246
30	43	33	2	4238	3269	31	0.04	7410	247
30	43	33	2	4239	3271	31	0.04	7440	248
30	43	33	2	4241	3272	31	0.05	7470	249
30	43	33	2	4242	3273	31	0.05	7500	250
30	43	33	2	4243	3274	32	0.05	7530	251
30	43	33	2	4245	3276	32	0.06	7560	252
30	43	33	2	4246	3277	32	0.06	7590	253
30	43	33	2	4247	3278	32	0.06	7620	254
30	43	33	2	4248	3280	32	0.06	7650	255
30	43	33	2	4249	3281	32	0.07	7680	256
30	43	33	2	4250	3282	32	0.07	7710	257
30	43	33	2	4251	3284	32	0.07	7740	258
30	43	33	2	4252	3285	32	0.08	7770	259
30	43	33	2	4253	3287	32	0.08	7800	260
30	43	33	2	4254	3288	32	0.08	7830	261
30	43	33	2	4255	3290	33	0.08	7860	262
30	43	33	2	4256	3291	33	0.09	7890	263
30	43	33	2	4257	3293	33	0.09	7920	264
30	43	33	2	4258	3294	33	0.09	7950	265
30	43	33	2	4258	3296	33	0.10	7980	266
30	43	33	2	4259	3298	33	0.10	8010	267
30	43	33	2	4260	3300	33	0.10	8040	268
30	43	32	2	4260	3301	33	0.11	8070	269
30	43	32	2	4261	3303	33	0.11	8100	270
30	43	32	2	4261	3305	33	0.11	8130	271
30	43	32	2	4261	3307	33	0.11	8160	272
30	43	32	2	4261	3309	33	0.11	8190	273
30	43	32	2	4261	3310	33	0.11	8220	274
30	43	32	2	4262	3312	34	0.12	8250	275
30	43	32	2	4262	3314	34	0.12	8280	276
30	43	32	2	4262	3316	34	0.12	8310	277
30	43	32	2	4262	3318	34	0.12	8340	278
30	43	32	2	4262	3320	34	0.12	8370	279
30	43	32	2	4262	3322	34	0.13	8400	280
30	43	32	2	4263	3325	34	0.13	8430	281
30	43	32	2	4263	3327	34	0.13	8460	282
30	43	32	2	4263	3329	34	0.13	8490	283
30	43	32	2	4263	3331	34	0.13	8520	284
30	43	32	2	4263	3333	34	0.14	8550	285
30	43	32	2	4263	3336	34	0.14	8580	286
30	43	32	2	4263	3338	34	0.14	8610	287

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	43	32	2	4263	3340	34	0.14	8640	288
30	43	32	2	4264	3343	34	0.14	8670	289
30	43	32	2	4264	3345	34	0.15	8700	290
30	43	32	2	4264	3348	34	0.15	8730	291
30	43	32	2	4264	3350	34	0.15	8760	292
30	43	32	2	4264	3353	35	0.15	8790	293
30	43	32	2	4264	3355	35	0.15	8820	294
30	43	32	2	4264	3358	35	0.16	8850	295
30	43	32	2	4264	3361	35	0.16	8880	296
30	43	32	2	4264	3363	35	0.16	8910	297
30	43	32	2	4264	3366	35	0.16	8940	298
30	43	32	2	4265	3369	35	0.17	8970	299
30	43	32	2	4265	3372	35	0.17	9000	300
30	43	32	2	4265	3375	35	0.17	9030	301
30	43	32	2	4265	3378	35	0.17	9060	302
30	43	32	2	4265	3381	35	0.17	9090	303
30	43	32	2	4265	3384	35	0.18	9120	304
30	43	32	2	4265	3387	35	0.18	9150	305
30	43	32	2	4265	3390	35	0.18	9180	306
30	43	32	2	4265	3393	36	0.19	9210	307
30	43	32	2	4265	3396	36	0.19	9240	308
30	43	32	2	4265	3400	36	0.19	9270	309
30	43	31	2	4266	3403	36	0.19	9300	310
30	43	31	2	4266	3406	36	0.19	9330	311
30	43	31	2	4266	3410	36	0.19	9360	312
30	43	31	2	4266	3413	36	0.19	9390	313
30	43	31	2	4267	3417	36	0.19	9420	314
30	43	31	2	4267	3420	36	0.20	9450	315
30	43	31	2	4267	3424	36	0.20	9480	316
30	43	31	2	4267	3428	36	0.20	9510	317
30	43	31	2	4268	3431	36	0.20	9540	318
30	43	31	2	4268	3435	36	0.20	9570	319
30	43	31	2	4268	3439	36	0.20	9600	320
30	43	31	2	4268	3443	36	0.20	9630	321
30	43	31	2	4269	3446	36	0.20	9660	322
30	43	31	2	4269	3450	36	0.20	9690	323
30	43	31	2	4269	3454	36	0.20	9720	324
30	43	31	2	4269	3458	36	0.20	9750	325
30	43	31	2	4269	3462	36	0.21	9780	326
30	43	31	2	4270	3466	36	0.21	9810	327
30	43	31	2	4270	3471	36	0.21	9840	328
30	43	31	2	4270	3475	36	0.21	9870	329
30	43	31	2	4270	3479	36	0.21	9900	330
30	43	31	2	4270	3483	36	0.21	9930	331
30	43	31	2	4270	3488	36	0.21	9960	332
30	43	31	2	4271	3492	36	0.21	9990	333
30	43	31	2	4271	3496	36	0.21	10020	334
30	43	30	2	4271	3501	36	0.22	10050	335
30	43	30	2	4272	3505	37	0.22	10080	336
30	43	30	2	4273	3510	37	0.23	10110	337
30	43	30	2	4274	3515	37	0.23	10140	338
30	43	30	2	4275	3519	37	0.24	10170	339
30	43	30	2	4275	3524	37	0.25	10200	340
30	43	30	2	4276	3529	38	0.25	10230	341
30	43	30	2	4277	3534	38	0.26	10260	342
30	43	30	2	4278	3539	38	0.26	10290	343
30	43	30	2	4278	3544	38	0.27	10320	344
30	43	30	2	4279	3549	38	0.28	10350	345
30	43	30	2	4280	3554	38	0.28	10380	346
30	43	30	2	4281	3559	39	0.29	10410	347
30	43	30	2	4281	3564	39	0.30	10440	348
30	43	30	2	4282	3570	39	0.30	10470	349
30	43	30	2	4283	3575	39	0.31	10500	350
30	43	30	2	4283	3580	39	0.32	10530	351
30	43	30	2	4284	3586	40	0.32	10560	352

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
34	19	31	3	1807	3476	19	0.44	90	3
34	19	32	3	1825	3398	19	0.53	120	4
34	19	32	3	1837	3344	21	0.61	150	5
34	19	33	3	1849	3297	22	0.69	180	6
34	19	33	3	1854	3258	24	0.77	210	7
34	19	33	3	1860	3223	26	0.86	240	8
34	19	34	3	1865	3191	29	0.95	270	9
34	19	34	2	1868	3163	31	0.04	300	10
34	19	34	2	1871	3137	34	0.13	330	11
34	19	34	2	1874	3113	37	0.23	360	12
34	19	35	2	1877	3090	40	0.34	390	13
34	19	35	2	1880	3068	43	0.43	420	14
34	19	35	2	1883	3047	46	0.54	450	15
34	19	35	2	1885	3028	49	0.65	480	16
34	19	35	2	1888	3009	53	0.76	510	17
34	19	36	2	1891	2991	56	0.87	540	18
34	19	36	2	1895	2974	59	0.96	570	19
34	19	36	1	1898	2959	62	0.14	600	20
34	20	36	1	1901	2946	64	0.37	630	21
34	20	36	1	1904	2932	67	0.59	660	22
34	20	36	1	1907	2919	70	0.81	690	23
34	20	36	1	1910	2909	72	1.00	714	E

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
1	20	26	2	1983	3983	60	1.00	0	0
1	22	27	1	2155	3894	67	0.57	30	1
1	22	27	1	2164	3878	73	1.00	33	E
2	20	26	2	1983	3950	60	1.00	0	0
2	22	27	1	2120	3872	73	1.00	19	E
3	20	26	2	1983	3917	60	1.00	0	0
3	22	27	1	2122	3822	73	1.00	22	E
4	20	26	2	1950	3983	60	1.00	0	0
4	22	26	1	2130	3963	71	0.92	30	1
4	22	27	1	2170	3896	73	1.00	44	E
5	20	26	2	1950	3950	60	1.00	0	0
5	22	27	1	2104	3837	73	1.00	26	E
6	20	26	2	1950	3917	60	1.00	0	0
6	21	28	1	2099	3771	68	0.63	30	1
6	22	28	1	2118	3764	72	1.00	34	E
7	20	26	2	1917	3983	60	1.00	0	0
7	19	26	1	1848	3979	70	0.93	30	1
7	18	26	1	1797	3913	71	0.97	60	2
7	18	27	1	1788	3834	71	0.99	90	3
7	18	28	1	1796	3776	72	1.00	111	E
8	20	26	2	1917	3950	60	1.00	0	0
8	20	27	1	1908	3810	70	0.92	30	1
8	20	29	1	1990	3691	72	0.95	60	2
8	21	29	1	2098	3628	72	0.96	90	3
8	22	29	1	2102	3627	72	1.00	91	E
9	20	26	2	1917	3917	60	1.00	0	0
9	20	28	1	1985	3750	68	0.66	30	1
9	22	29	1	2111	3674	71	0.90	60	2
9	22	29	1	2116	3673	72	1.00	61	E
10	20	26	2	1975	3900	53	0.75	0	0
10	22	28	2	2126	3759	58	0.95	30	1
10	22	28	1	2168	3734	72	1.00	44	E
11	20	26	2	2000	3925	53	0.75	0	0
11	22	27	1	2174	3816	71	0.86	30	1
11	22	27	1	2175	3813	73	1.00	31	E
12	20	26	2	2000	3975	53	0.75	0	0
12	23	26	2	2222	3903	53	0.69	30	1
12	24	27	2	2314	3847	51	0.97	60	2
12	24	27	2	2327	3841	52	1.00	64	E
13	20	26	2	1975	4000	53	0.75	0	0
13	22	25	2	2134	4021	51	0.71	30	1
13	23	26	2	2277	3967	55	0.75	60	2
13	24	26	2	2366	3925	53	1.00	85	E
14	20	26	2	1925	4000	53	0.75	0	0
14	21	25	2	2017	4097	56	0.85	30	1
14	22	25	2	2183	4067	51	0.69	60	2
14	23	25	2	2294	4024	64	1.00	86	E
15	20	26	2	1900	3975	53	0.75	0	0
15	18	26	2	1786	3915	55	0.84	30	1
15	18	27	2	1772	3836	57	0.88	60	2
15	18	28	2	1784	3753	58	0.92	90	3
15	19	29	2	1816	3671	59	0.95	120	4
15	19	30	2	1868	3599	59	0.96	150	5
15	20	30	2	1932	3543	59	0.96	180	6
15	21	31	2	2007	3500	59	0.95	210	7
15	21	31	2	2085	3466	60	0.99	240	8
15	22	31	1	2168	3430	61	0.08	270	9
15	23	32	1	2252	3394	63	0.31	300	10
15	24	32	1	2308	3374	69	1.00	324	E
16	20	26	2	1900	3925	53	0.75	0	0
16	19	27	2	1855	3802	55	0.83	30	1
16	20	29	2	1904	3698	56	0.87	60	2
16	20	29	2	1981	3616	56	0.87	90	3
16	21	30	2	2066	3566	56	0.86	120	4
16	22	30	2	2152	3532	56	0.87	150	5

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
30	43	30	2	4284	3591	40	0.33	10590	353
30	43	30	2	4285	3597	40	0.34	10620	354
30	43	29	2	4286	3603	40	0.35	10650	355
30	43	29	2	4288	3608	41	0.37	10680	356
30	43	29	2	4289	3614	42	0.39	10710	357
30	43	29	2	4291	3620	42	0.40	10740	358
30	43	29	2	4292	3626	43	0.42	10770	359
30	43	29	2	4294	3632	43	0.44	10800	360
30	43	29	2	4295	3639	44	0.46	10830	361
30	43	29	2	4297	3645	44	0.48	10860	362
30	43	29	2	4298	3652	45	0.50	10890	363
30	43	29	2	4299	3658	45	0.51	10920	364
30	44	29	2	4301	3666	46	0.53	10950	365
30	44	29	2	4302	3674	47	0.55	10980	366
30	44	29	2	4303	3682	47	0.57	11010	367
30	44	29	2	4305	3691	48	0.59	11040	368
30	44	29	2	4306	3699	48	0.61	11070	369
30	44	28	2	4308	3708	49	0.64	11100	370
30	44	28	2	4310	3717	50	0.66	11130	371
30	44	28	2	4313	3726	51	0.69	11160	372
30	44	28	2	4315	3735	51	0.72	11190	373
30	44	28	2	4317	3745	52	0.74	11220	374
30	44	28	2	4320	3755	53	0.77	11250	375
30	44	28	2	4322	3765	54	0.79	11280	376
30	44	28	2	4324	3775	55	0.82	11310	377
30	44	28	2	4326	3786	55	0.85	11340	378
30	44	28	2	4328	3797	56	0.87	11370	379
30	44	27	2	4330	3808	57	0.89	11400	380
30	44	27	2	4332	3818	57	0.92	11430	381
30	44	27	2	4334	3828	58	0.94	11460	382
30	44	27	2	4336	3839	59	0.96	11490	383
30	44	27	2	4338	3848	60	0.99	11520	384
30	44	27	1	4340	3859	60	0.01	11550	385
30	44	27	1	4342	3871	61	0.05	11580	386
30	44	27	1	4344	3884	62	0.08	11610	387
30	44	27	1	4346	3896	63	0.12	11640	388
30	44	26	1	4349	3909	63	0.16	11670	389
30	44	26	1	4352	3922	64	0.20	11700	390
30	44	26	1	4354	3935	65	0.24	11730	391
30	44	26	1	4357	3949	66	0.28	11760	392
30	44	26	1	4360	3962	67	0.32	11790	393
30	44	26	1	4362	3976	68	0.36	11820	394
30	44	26	1	4365	3990	68	0.40	11850	395
30	44	25	1	4367	4005	69	0.44	11880	396
30	44	25	1	4370	4020	70	0.48	11910	397
30	44	25	1	4372	4035	71	0.53	11940	398
30	44	25	1	4375	4050	72	0.57	11970	399
30	44	25	1	4377	4066	73	0.62	12000	400
30	44	25	1	4380	4083	74	0.66	12030	401
30	44	25	1	4382	4100	75	0.70	12060	402
30	44	24	1	4384	4114	75	0.72	12090	403
30	44	24	1	4386	4129	75	0.74	12120	404
30	44	24	1	4387	4143	76	0.76	12150	405
30	44	24	1	4389	4157	76	0.78	12180	406
30	44	24	1	4391	4170	77	0.81	12210	407
30	44	24	1	4392	4184	77	0.83	12240	408
30	44	24	1	4394	4197	78	0.85	12270	409
30	44	23	1	4397	4212	79	0.88	12300	410
30	45	23	1	4401	4228	79	0.91	12330	411
30	45	23	1	4404	4241	80	0.94	12360	412
30	45	23	1	4407	4255	81	0.96	12390	413
30	45	23	1	4410	4267	81	0.99	12420	414
30	45	23	1	4411	4272	82	1.00	12430	E
31	20	26	2	1950	3917	30	0.00	0	0
31	20	28	3	1991	3767	23	0.41	30	1

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
31	21	29	3	2051	3687	19	0.47	60	2
31	21	29	3	2080	3647	21	0.53	90	3
31	22	29	3	2105	3611	18	0.58	120	4
31	22	30	3	2120	3584	21	0.63	150	5
31	22	30	3	2135	3557	22	0.68	180	6
31	22	30	3	2149	3533	23	0.73	210	7
31	22	30	3	2164	3512	25	0.79	240	8
31	22	31	3	2179	3492	27	0.86	270	9
31	22	31	3	2192	3472	29	0.94	300	10
31	23	31	2	2206	3455	30	0.01	330	11
31	23	31	2	2219	3439	32	0.06	360	12
31	23	31	2	2233	3424	33	0.11	390	13
31	23	31	2	2247	3410	35	0.16	420	14
31	23	32	2	2262	3397	37	0.22	450	15
31	23	32	2	2275	3384	39	0.29	480	16
31	23	32	2	2289	3372	41	0.36	510	17
31	24	32	2	2303	3362	43	0.44	540	18
31	24	32	2	2317	3353	45	0.49	570	19
31	24	32	2	2331	3344	46	0.54	600	20
31	24	32	2	2345	3336	48	0.60	630	21
31	24	32	2	2359	3328	50	0.66	660	22
31	24	32	2	2373	3320	52	0.72	690	23
31	24	32	2	2387	3312	53	0.78	720	24
31	25	32	2	2401	3305	58	0.84	750	25
31	25	33	2	2414	3300	54	0.91	780	26
31	25	33	2	2427	3293	55	0.95	810	27
31	25	33	2	2439	3287	56	1.00	836	E
32	20	26	2	1917	3983	30	0.00	0	0
32	19	26	3	1835	3988	15	0.28	30	1
32	18	26	3	1778	3963	10	0.21	60	2
32	18	26	3	1735	3920	10	0.21	90	3
32	18	27	3	1706	3867	13	0.22	120	4
32	17	27	3	1683	3818	14	0.24	150	5
32	17	28	3	1672	3771	15	0.27	180	6
32	17	28	3	1669	3733	16	0.32	210	7
32	17	28	3	1665	3703	17	0.36	240	8
32	17	29	3	1679	3633	27	0.46	270	9
32	17	30	3	1697	3579	26	0.48	300	10
32	18	30	3	1709	3537	22	0.46	330	11
32	18	31	3	1721	3498	21	0.45	360	12
32	18	31	3	1739	3468	21	0.47	390	13
32	18	31	3	1758	3442	21	0.49	420	14
32	18	31	3	1780	3420	22	0.51	450	15
32	19	31	3	1803	3400	21	0.54	480	16
32	19	32	3	1821	3390	21	0.64	510	17
32	19	32	3	1839	3381	24	0.75	540	18
32	19	32	3	1857	3373	27	0.89	570	19
32	19	32	2	1875	3366	31	0.05	600	20
32	19	32	2	1894	3358	37	0.22	630	21
32	20	32	2	1912	3353	43	0.42	660	22
32	20	32	2	1928	3350	49	0.65	690	23
32	20	32	2	1944	3348	58	0.92	720	24
32	20	32	1	1955	3349	67	0.53	750	25
32	20	32	1	1961	3351	74	1.00	768	E
33	20	26	2	1917	3950	30	0.00	0	0
33	19	27	3	1841	3889	16	0.30	30	1
33	19	27	3	1820	3807	16	0.30	60	2
33	19	28	3	1824	3706	21	0.34	90	3
33	19	29	3	1843	3632	21	0.35	120	4
33	19	30	3	1867	3573	20	0.37	150	5
33	19	30	3	1894	3526	20	0.40	180	6
33	20	31	3	1920	3493	21	0.48	210	7
33	20	31	3	1941	3468	23	0.60	240	8
33	20	31	3	1961	3448	26	0.75	270	9
33	20	31	3	1979	3430	29	0.94	300	10

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
33	20	31	2	1996	3415	33	0.10	330	11
33	21	31	2	2010	3404	38	0.26	360	12
33	21	32	2	2024	3394	42	0.41	390	13
33	21	32	2	2037	3386	48	0.59	420	14
33	21	32	2	2050	3378	54	0.79	450	15
33	21	32	1	2062	3371	60	0.03	480	16
33	21	32	1	2070	3368	68	0.62	510	17
33	21	32	1	2074	3366	73	1.00	527	E
34	20	26	2	1917	3917	30	0.00	0	0
34	19	27	3	1892	3803	19	0.47	30	1
34	20	29	3	1913	3697	24	0.53	60	2
34	20	29	3	1951	3620	24	0.57	90	3
34	20	30	3	1983	3568	25	0.67	120	4
34	21	30	3	2007	3531	26	0.81	150	5
34	21	30	3	2025	3507	29	0.94	180	6
34	21	31	2	2039	3485	32	0.07	210	7
34	21	31	2	2051	3466	36	0.20	240	8
34	21	31	2	2062	3449	41	0.36	270	9
34	21	31	2	2073	3434	47	0.55	300	10
34	21	31	2	2082	3421	53	0.78	330	11
34	21	31	1	2089	3410	62	0.13	360	12
34	21	31	1	2085	3404	72	0.85	390	13
34	21	31	1	2085	3403	74	1.00	396	E
35	19	38	2	1883	2783	60	1.00	0	0
35	21	36	1	2035	2900	69	0.75	30	1
35	21	36	1	2047	2913	72	1.00	37	E
36	19	38	2	1883	2750	60	1.00	0	0
36	21	37	1	2074	2818	73	0.93	30	1
36	21	37	1	2077	2821	74	1.00	31	E
37	19	38	2	1883	2717	60	1.00	0	0
37	21	38	1	2085	2700	68	0.52	30	1
37	22	38	1	2161	2710	71	1.00	56	E
38	19	38	2	1850	2783	60	1.00	0	0
38	20	36	1	1913	2936	72	1.00	22	E
39	19	38	2	1850	2750	60	1.00	0	0
39	21	37	1	2007	2876	74	1.00	29	E
40	19	38	2	1850	2717	60	1.00	0	0
40	21	39	1	2036	2667	74	0.91	30	1
40	22	39	1	2138	2651	70	0.91	60	2
40	22	39	1	2180	2644	70	0.91	90	3
40	22	39	1	2193	2634	70	0.91	120	4
40	22	39	1	2198	2619	70	0.90	150	5
40	22	40	1	2199	2597	69	0.89	180	6
40	22	40	1	2200	2565	69	0.89	210	7
40	22	40	1	2200	2525	69	0.89	240	8
40	23	41	1	2208	2500	65	1.00	261	E
41	19	38	2	1817	2783	60	1.00	0	0
41	19	36	1	1812	2940	73	1.00	20	E
42	19	38	2	1817	2750	60	1.00	0	0
42	18	36	1	1781	2905	74	1.00	25	E
43	19	38	2	1817	2717	60	1.00	0	0
43	20	39	1	1943	2602	75	0.99	30	1
43	20	40	1	1973	2568	75	1.00	38	E
44	19	38	2	1875	2700	52	0.75	0	0
44	21	39	2	2067	2622	55	0.84	30	1
44	22	40	2	2156	2593	49	0.64	60	2
44	23	40	2	2216	2570	48	0.53	90	3
44	23	40	2	2262	2553	50	0.59	120	4
44	23	40	2	2300	2534	52	0.65	150	5
44	24	40	2	2342	2516	48	0.69	180	6
44	24	41	2	2377	2498	51	0.73	210	7
44	25	41	2	2405	2481	57	0.76	240	8
44	25	41	2	2428	2467	58	0.79	270	9
44	25	41	2	2450	2453	59	0.82	300	10
44	25	41	2	2471	2438	60	0.84	330	11

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
44	25	41	2	2492	2422	61	0.87	360	12
44	26	41	2	2513	2406	58	0.95	390	13
44	26	42	1	2530	2393	61	0.05	420	14
44	26	42	1	2543	2381	63	0.15	450	15
44	26	42	1	2556	2368	65	0.25	480	16
44	26	42	1	2569	2355	66	0.34	510	17
44	26	42	1	2582	2341	68	0.42	540	18
44	26	42	1	2596	2326	70	0.50	570	19
44	27	42	1	2611	2310	70	0.56	600	20
44	27	43	1	2626	2294	72	0.61	630	21
44	27	43	1	2641	2279	73	0.65	660	22
44	27	43	1	2656	2263	74	0.69	690	23
44	27	43	1	2671	2247	75	0.73	720	24
44	27	43	1	2686	2230	75	0.77	750	25
44	28	43	1	2701	2213	75	0.81	780	26
44	28	44	1	2717	2195	77	0.85	810	27
44	28	44	1	2734	2177	78	0.89	840	28
44	28	44	1	2750	2158	78	0.92	870	29
44	28	44	1	2767	2140	79	0.96	900	30
44	28	44	1	2783	2121	80	1.00	930	31
44	28	44	1	2786	2118	80	1.00	934	E
45	19	38	2	1900	2725	52	0.75	0	0
45	22	38	2	2104	2730	54	0.81	30	1
45	22	38	2	2183	2736	51	0.71	60	2
45	23	38	2	2240	2740	54	0.73	90	3
45	23	38	2	2283	2742	56	0.82	120	4
45	24	38	2	2322	2742	50	0.89	150	5
45	24	38	2	2361	2742	52	0.96	180	6
45	24	38	2	2382	2741	53	1.00	198	E
46	19	38	2	1900	2775	52	0.75	0	0
46	21	37	1	2084	2856	69	0.62	30	1
46	22	37	1	2106	2871	70	1.00	39	E
47	19	38	2	1875	2800	52	0.75	0	0
47	20	36	2	1961	2956	60	0.99	30	1
47	21	35	1	2011	3024	70	0.85	60	2
47	21	35	1	2017	3030	72	1.00	65	E
48	19	38	2	1825	2800	52	0.75	0	0
48	19	35	1	1840	3006	65	0.42	30	1
48	19	35	1	1847	3049	72	1.00	45	E
49	19	38	2	1800	2775	52	0.75	0	0
49	18	36	1	1743	2968	64	0.32	30	1
49	18	35	1	1743	3010	74	1.00	42	E
50	19	38	2	1800	2725	52	0.75	0	0
50	17	36	1	1682	2916	64	0.27	30	1
50	17	35	1	1681	3005	70	0.65	60	2
50	17	35	1	1682	3024	75	1.00	67	E
51	19	38	2	1825	2700	52	0.75	0	0
51	21	40	1	2006	2539	63	0.25	30	1
51	21	41	1	2070	2460	65	0.43	60	2
51	21	41	1	2093	2412	72	1.00	82	E
52	19	38	2	1875	2700	36	0.25	0	0
52	21	39	2	2067	2622	37	0.28	30	1
52	22	40	2	2156	2593	33	0.10	60	2
52	23	40	3	2212	2571	29	0.89	90	3
52	23	40	3	2264	2554	29	0.87	120	4
52	24	40	3	2308	2538	28	0.86	150	5
52	24	40	3	2336	2523	27	0.84	180	6
52	24	40	3	2363	2508	27	0.83	210	7
52	24	41	3	2389	2491	28	0.83	240	8
52	25	41	3	2412	2473	28	0.88	270	9
52	25	41	3	2435	2457	29	0.96	300	10
52	25	41	2	2457	2441	31	0.02	330	11
52	25	41	2	2478	2426	32	0.05	360	12
52	25	41	2	2498	2409	33	0.08	390	13
52	26	42	2	2519	2394	35	0.16	420	14

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
52	26	42	2	2536	2378	37	0.24	450	15
52	26	42	2	2554	2362	40	0.32	480	16
52	26	42	2	2571	2345	42	0.40	510	17
52	26	42	2	2588	2328	44	0.48	540	18
52	27	42	2	2605	2311	46	0.54	570	19
52	27	43	2	2622	2295	49	0.56	600	20
52	27	43	2	2639	2277	50	0.59	630	21
52	27	43	2	2655	2259	50	0.61	660	22
52	27	43	2	2670	2241	51	0.64	690	23
52	27	43	2	2686	2224	52	0.67	720	24
52	28	43	2	2700	2206	54	0.70	750	25
52	28	44	2	2718	2188	55	0.74	780	26
52	28	44	2	2735	2170	56	0.78	810	27
52	28	44	2	2751	2151	57	0.83	840	28
52	28	44	2	2767	2133	58	0.88	870	29
52	28	44	2	2782	2115	59	0.93	900	30
52	28	45	2	2796	2097	60	0.98	930	31
52	29	45	1	2814	2076	61	0.05	960	32
52	29	45	1	2833	2053	62	0.12	990	33
52	29	45	1	2852	2030	64	0.19	1020	34
52	29	45	1	2871	2007	65	0.25	1050	35
52	29	46	1	2895	1983	67	0.33	1080	36
52	30	46	1	2918	1958	64	0.36	1110	37
52	30	46	1	2939	1933	65	0.37	1140	38
52	30	46	1	2960	1907	65	0.38	1170	39
52	30	47	1	2982	1880	67	0.39	1200	40
52	31	47	1	3004	1851	68	0.40	1230	41
52	31	47	1	3026	1821	68	0.41	1260	42
52	31	48	1	3048	1790	70	0.43	1290	43
52	31	48	1	3070	1757	70	0.44	1320	44
52	31	48	1	3091	1724	70	0.45	1350	45
52	32	49	1	3112	1690	72	0.47	1380	46
52	32	49	1	3134	1652	73	0.49	1410	47
52	32	49	1	3154	1614	73	0.51	1440	48
52	32	50	1	3174	1574	74	0.53	1470	49
52	32	50	1	3192	1533	75	0.55	1500	50
52	33	51	1	3209	1493	76	0.58	1530	51
52	33	51	1	3223	1452	76	0.60	1560	52
52	33	51	1	3236	1411	77	0.63	1590	53
52	33	52	1	3244	1367	78	0.66	1620	54
52	33	52	1	3250	1323	78	0.70	1650	55
52	33	53	1	3253	1277	80	0.74	1680	56
52	33	53	1	3251	1229	80	0.79	1710	57
52	33	54	1	3245	1178	82	0.85	1740	58
52	33	54	1	3232	1123	82	0.93	1770	59
52	33	55	1	3216	1081	83	1.00	1792	E
53	19	38	2	1900	2725	36	0.25	0	0
53	21	38	2	2100	2729	43	0.27	30	1
53	22	38	2	2180	2735	32	0.06	60	2
53	23	38	3	2230	2738	28	0.90	90	3
53	23	38	3	2274	2741	27	0.84	120	4
53	24	38	3	2314	2743	26	0.79	150	5
53	24	38	3	2347	2743	25	0.77	180	6
53	24	38	3	2378	2743	25	0.75	210	7
53	25	38	3	2407	2742	23	0.73	240	8
53	25	38	3	2430	2739	24	0.75	270	9
53	25	38	3	2451	2736	24	0.76	300	10
53	25	38	3	2471	2733	25	0.78	330	11
53	25	38	3	2490	2730	25	0.80	360	12
53	26	38	3	2509	2726	26	0.83	390	13
53	26	38	3	2527	2721	27	0.88	420	14
53	26	38	3	2543	2715	28	0.93	450	15
53	26	38	3	2558	2710	30	0.98	480	16
53	26	38	2	2574	2703	31	0.03	510	17
53	26	39	2	2590	2696	32	0.08	540	18

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
53	27	39	2	2607	2688	34	0.13	570	19
53	27	39	2	2624	2678	36	0.21	600	20
53	27	39	2	2640	2668	38	0.28	630	21
53	27	39	2	2656	2659	41	0.36	660	22
53	27	39	2	2671	2649	43	0.43	690	23
53	27	39	2	2687	2638	45	0.51	720	24
53	28	39	2	2701	2628	46	0.58	750	25
53	28	39	2	2715	2618	47	0.60	780	26
53	28	39	2	2728	2608	48	0.63	810	27
53	28	40	2	2741	2597	51	0.66	840	28
53	28	40	2	2755	2583	52	0.69	870	29
53	28	40	2	2768	2570	53	0.73	900	30
53	28	40	2	2780	2557	54	0.77	930	31
53	28	40	2	2792	2543	55	0.82	960	32
53	29	40	2	2805	2530	58	0.87	990	33
53	29	40	2	2821	2516	59	0.94	1020	34
53	29	40	1	2835	2501	60	0.01	1050	35
53	29	41	1	2848	2487	61	0.07	1080	36
53	29	41	1	2860	2473	62	0.13	1110	37
53	29	41	1	2872	2459	63	0.19	1140	38
53	29	41	1	2884	2443	64	0.25	1170	39
53	29	41	1	2896	2427	65	0.31	1200	40
53	30	41	1	2908	2410	65	0.35	1230	41
53	30	42	1	2919	2393	67	0.39	1260	42
53	30	42	1	2931	2376	67	0.43	1290	43
53	30	42	1	2942	2359	68	0.47	1320	44
53	30	42	1	2953	2340	69	0.51	1350	45
53	30	42	1	2963	2321	69	0.55	1380	46
53	30	42	1	2973	2301	70	0.59	1410	47
53	30	43	1	2985	2282	72	0.63	1440	48
53	30	43	1	2997	2262	73	0.68	1470	49
53	31	43	1	3010	2237	73	0.73	1500	50
53	31	43	1	3021	2207	74	0.78	1530	51
53	31	44	1	3036	2180	75	0.81	1560	52
53	31	44	1	3051	2155	75	0.84	1590	53
53	31	44	1	3065	2129	76	0.86	1620	54
53	31	44	1	3079	2102	76	0.89	1650	55
53	31	45	1	3094	2076	78	0.91	1680	56
53	32	45	1	3109	2047	79	0.94	1710	57
53	32	45	1	3124	2016	79	0.97	1740	58
53	32	46	1	3139	1987	81	1.00	1768	E
54	19	38	2	1900	2775	36	0.25	0	0
54	21	37	2	2092	2842	49	0.44	30	1
54	22	37	2	2157	2860	45	0.48	60	2
54	23	37	2	2214	2874	45	0.50	90	3
54	23	37	2	2258	2886	46	0.50	120	4
54	23	37	2	2292	2899	46	0.51	150	5
54	24	36	2	2322	2908	41	0.52	180	6
54	24	36	2	2350	2915	41	0.51	210	7
54	24	36	2	2374	2922	40	0.49	240	8
54	24	36	2	2395	2929	40	0.47	270	9
54	25	36	2	2415	2932	40	0.48	300	10
54	25	36	2	2434	2933	40	0.50	330	11
54	25	36	2	2452	2934	41	0.53	360	12
54	25	36	2	2470	2935	41	0.55	390	13
54	25	36	2	2487	2936	42	0.58	420	14
54	26	36	2	2502	2937	45	0.61	450	15
54	26	36	2	2515	2935	46	0.64	480	16
54	26	36	2	2528	2933	47	0.67	510	17
54	26	36	2	2540	2931	48	0.71	540	18
54	26	36	2	2553	2930	48	0.74	570	19
54	26	36	2	2565	2928	49	0.77	600	20
54	26	36	2	2578	2926	50	0.81	630	21
54	26	36	2	2590	2924	51	0.84	660	22
54	27	36	2	2602	2922	55	0.88	690	23

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
54	27	36	2	2612	2918	56	0.90	720	24
54	27	36	2	2623	2915	57	0.93	750	25
54	27	36	2	2634	2911	58	0.96	780	26
54	27	36	2	2645	2907	59	0.99	810	27
54	27	36	2	2650	2906	59	1.00	823	E
55	19	38	2	1875	2800	36	0.25	0	0
55	20	36	2	1961	2956	33	0.17	30	1
55	21	35	2	2013	3017	37	0.22	60	2
55	21	35	2	2050	3048	38	0.28	90	3
55	21	35	2	2083	3077	40	0.34	120	4
55	22	35	2	2118	3099	48	0.41	150	5
55	22	34	2	2141	3110	42	0.45	180	6
55	22	34	2	2163	3120	44	0.49	210	7
55	22	34	2	2184	3129	45	0.54	240	8
55	23	34	2	2205	3137	51	0.59	270	9
55	23	34	2	2226	3139	53	0.65	300	10
55	23	34	2	2246	3140	55	0.72	330	11
55	23	34	2	2265	3142	57	0.79	360	12
55	23	34	2	2283	3144	59	0.87	390	13
55	23	34	2	2299	3145	62	0.96	420	14
55	24	34	2	2312	3144	52	1.00	439	E
56	19	38	2	1825	2800	36	0.25	0	0
56	19	35	2	1843	3008	36	0.20	30	1
56	19	35	2	1868	3089	42	0.40	60	2
56	19	34	2	1889	3140	49	0.64	90	3
56	20	34	2	1909	3174	57	0.91	120	4
56	20	34	1	1929	3198	65	0.50	150	5
56	20	33	1	1937	3212	72	1.00	170	E
57	19	38	2	1800	2775	36	0.25	0	0
57	18	36	2	1740	2965	38	0.25	30	1
57	18	35	2	1741	3060	47	0.55	60	2
57	18	34	2	1749	3119	59	0.98	90	3
57	18	34	1	1754	3156	75	1.00	117	E
58	19	38	2	1800	2725	36	0.25	0	0
58	17	36	2	1683	2923	33	0.10	30	1
58	17	35	2	1663	3009	37	0.25	60	2
58	17	35	2	1665	3073	46	0.54	90	3
58	17	34	2	1671	3118	59	0.95	120	4
58	17	34	1	1686	3141	76	1.00	146	E
59	19	38	2	1825	2700	36	0.25	0	0
59	21	40	2	2021	2548	39	0.38	30	1
59	21	41	2	2089	2483	39	0.37	60	2
59	22	41	2	2134	2435	42	0.40	90	3
59	22	42	2	2175	2394	40	0.42	120	4
59	23	42	2	2204	2360	43	0.42	150	5
59	23	42	2	2232	2334	43	0.44	180	6
59	23	42	2	2258	2309	44	0.46	210	7
59	23	43	2	2281	2284	45	0.48	240	8
59	24	43	2	2303	2259	46	0.49	270	9
59	24	43	2	2324	2239	46	0.50	300	10
59	24	43	2	2345	2219	46	0.50	330	11
59	24	44	2	2365	2198	45	0.51	360	12
59	24	44	2	2384	2175	47	0.58	390	13
59	25	44	2	2403	2154	48	0.64	420	14
59	25	44	2	2419	2137	49	0.68	450	15
59	25	44	2	2436	2121	50	0.71	480	16
59	25	44	2	2452	2106	52	0.75	510	17
59	25	45	2	2468	2089	54	0.79	540	18
59	25	45	2	2485	2072	55	0.82	570	19
59	26	45	2	2501	2056	56	0.86	600	20
59	26	45	2	2519	2038	57	0.89	630	21
59	26	45	2	2536	2021	58	0.92	660	22
59	26	45	2	2553	2005	59	0.96	690	23
59	26	46	2	2571	1987	60	0.99	720	24
59	26	46	1	2590	1969	61	0.03	750	25

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
59	27	46	1	2609	1951	62	0.08	780	26
59	27	46	1	2628	1931	63	0.14	810	27
59	27	46	1	2648	1910	64	0.19	840	28
59	27	47	1	2668	1889	65	0.25	870	29
59	27	47	1	2690	1868	66	0.31	900	30
59	28	47	1	2712	1845	68	0.38	930	31
59	28	47	1	2734	1820	70	0.45	960	32
59	28	48	1	2758	1794	71	0.53	990	33
59	28	48	1	2786	1766	73	0.62	1020	34
59	29	48	1	2815	1737	73	0.67	1050	35
59	29	48	1	2841	1707	74	0.69	1080	36
59	29	49	1	2869	1674	76	0.71	1110	37
59	29	49	1	2895	1641	76	0.74	1140	38
59	30	49	1	2923	1605	77	0.76	1170	39
59	30	50	1	2951	1564	79	0.80	1200	40
59	30	50	1	2978	1522	79	0.83	1230	41
59	31	51	1	3003	1475	80	0.87	1260	42
59	31	51	1	3027	1424	81	0.92	1290	43
59	31	52	1	3045	1365	82	0.98	1320	44
59	31	52	1	3050	1344	82	1.00	1330	E
60	19	38	2	1883	2783	28	0.00	0	0
60	19	37	3	1886	2807	22	0.10	30	1
60	19	37	3	1883	2865	21	0.01	60	2
60	19	35	3	1884	3000	7	0.01	90	3
60	20	35	3	1920	3055	18	0.01	120	4
60	20	35	3	1954	3086	18	0.01	150	5
60	20	34	3	1976	3118	10	0.01	180	6
60	20	34	3	1997	3143	10	0.01	210	7
60	21	34	3	2027	3152	20	0.01	240	8
60	21	34	3	2050	3160	20	0.02	270	9
60	21	34	3	2066	3169	20	0.02	300	10
60	21	34	3	2076	3179	20	0.03	330	11
60	21	34	3	2084	3190	20	0.03	360	12
60	21	33	3	2092	3202	14	0.04	390	13
60	22	33	3	2111	3206	21	0.05	420	14
60	22	33	3	2133	3206	21	0.06	450	15
60	22	33	3	2153	3205	21	0.07	480	16
60	22	33	3	2171	3205	21	0.09	510	17
60	22	33	3	2187	3205	21	0.10	540	18
60	23	33	3	2201	3204	25	0.12	570	19
60	23	33	3	2223	3204	25	0.14	600	20
60	23	33	3	2244	3204	25	0.16	630	21
60	23	33	3	2265	3203	25	0.18	660	22
60	23	33	3	2285	3203	25	0.21	690	23
60	24	33	3	2303	3201	23	0.24	720	24
60	24	34	3	2307	3195	24	0.21	750	25
60	24	34	3	2309	3189	23	0.19	780	26
60	24	34	3	2310	3184	23	0.16	810	27
60	24	34	3	2312	3178	23	0.14	840	28
60	24	34	3	2315	3173	23	0.12	870	29
60	24	34	3	2318	3168	23	0.11	900	30
60	24	34	3	2321	3164	23	0.09	930	31
60	24	34	3	2326	3159	23	0.08	960	32
60	24	34	3	2331	3155	23	0.07	990	33
60	24	34	3	2337	3151	22	0.06	1020	34
60	24	34	3	2345	3147	22	0.05	1050	35
60	24	34	3	2354	3143	22	0.05	1080	36
60	24	34	3	2365	3140	22	0.04	1110	37
60	24	34	3	2378	3137	22	0.04	1140	38
60	24	34	3	2394	3133	22	0.03	1170	39
60	25	34	3	2405	3130	11	0.03	1200	40
60	25	34	3	2413	3127	11	0.03	1230	41
60	25	34	3	2421	3124	11	0.03	1260	42
60	25	34	3	2429	3121	11	0.03	1290	43
60	25	34	3	2438	3118	11	0.03	1320	44

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	25	34	3	2447	3115	11	0.03	1350	45
60	25	34	3	2457	3112	11	0.03	1380	46
60	25	34	3	2467	3110	11	0.03	1410	47
60	25	34	3	2477	3107	11	0.03	1440	48
60	25	34	3	2488	3104	11	0.03	1470	49
60	25	34	3	2499	3102	11	0.03	1500	50
60	26	35	3	2507	3099	-3	0.03	1530	51
60	26	35	3	2515	3097	-3	0.03	1560	52
60	26	35	3	2523	3094	-3	0.03	1590	53
60	26	35	3	2531	3092	-3	0.03	1620	54
60	26	35	3	2539	3090	-3	0.03	1650	55
60	26	35	3	2547	3087	-3	0.03	1680	56
60	26	35	3	2555	3085	-3	0.03	1710	57
60	26	35	3	2563	3083	-3	0.03	1740	58
60	26	35	3	2571	3080	-3	0.03	1770	59
60	26	35	3	2579	3078	-3	0.03	1800	60
60	26	35	3	2586	3076	-3	0.03	1830	61
60	26	35	3	2594	3074	-3	0.03	1860	62
60	27	35	3	2602	3071	6	0.03	1890	63
60	27	35	3	2612	3068	6	0.03	1920	64
60	27	35	3	2622	3065	6	0.04	1950	65
60	27	35	3	2631	3062	6	0.04	1980	66
60	27	35	3	2640	3059	6	0.04	2010	67
60	27	35	3	2649	3056	6	0.04	2040	68
60	27	35	3	2657	3053	6	0.04	2070	69
60	27	35	3	2665	3050	6	0.05	2100	70
60	27	35	3	2673	3047	6	0.05	2130	71
60	27	35	3	2680	3045	6	0.05	2160	72
60	27	35	3	2688	3042	6	0.06	2190	73
60	27	35	3	2695	3039	6	0.06	2220	74
60	28	35	3	2703	3037	22	0.06	2250	75
60	28	35	3	2723	3035	23	0.07	2280	76
60	28	35	3	2740	3033	23	0.08	2310	77
60	28	35	3	2756	3031	23	0.09	2340	78
60	28	35	3	2770	3030	23	0.10	2370	79
60	28	35	3	2783	3028	23	0.11	2400	80
60	28	35	3	2795	3026	23	0.12	2430	81
60	29	35	3	2807	3026	25	0.13	2460	82
60	29	35	3	2819	3026	25	0.15	2490	83
60	29	35	3	2830	3026	25	0.18	2520	84
60	29	35	3	2839	3026	25	0.20	2550	85
60	29	35	3	2847	3026	25	0.23	2580	86
60	29	35	3	2854	3026	26	0.27	2610	87
60	29	35	3	2860	3026	26	0.30	2640	88
60	29	35	3	2866	3027	26	0.35	2670	89
60	29	35	3	2870	3027	26	0.40	2700	90
60	29	35	3	2874	3027	27	0.46	2730	91
60	29	35	3	2878	3027	27	0.53	2760	92
60	29	35	3	2880	3027	28	0.60	2790	93
60	29	35	3	2883	3027	28	0.69	2820	94
60	29	35	3	2885	3027	29	0.79	2850	95
60	29	35	3	2887	3027	29	0.91	2880	96
60	29	35	2	2893	3027	30	0.01	2910	97
60	30	35	2	2906	3025	29	0.02	2940	98
60	30	35	2	2920	3024	29	0.02	2970	99
60	30	35	2	2933	3022	29	0.02	3000	100
60	30	35	2	2946	3020	29	0.02	3030	101
60	30	35	2	2960	3019	29	0.02	3060	102
60	30	35	2	2973	3017	29	0.02	3090	103
60	30	35	2	2986	3016	29	0.02	3120	104
60	30	35	2	2999	3014	29	0.02	3150	105
60	31	35	3	3006	3013	29	0.93	3180	106
60	31	35	3	3007	3013	28	0.82	3210	107
60	31	35	3	3008	3012	26	0.73	3240	108
60	31	35	3	3009	3012	25	0.64	3270	109

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	31	35	3	3011	3011	24	0.57	3300	110
60	31	35	3	3013	3011	23	0.50	3330	111
60	31	35	3	3015	3011	23	0.44	3360	112
60	31	35	3	3018	3010	22	0.39	3390	113
60	31	35	3	3021	3010	21	0.34	3420	114
60	31	35	3	3025	3009	21	0.30	3450	115
60	31	35	3	3029	3009	20	0.27	3480	116
60	31	35	3	3034	3009	20	0.24	3510	117
60	31	35	3	3040	3009	20	0.21	3540	118
60	31	35	3	3046	3008	19	0.18	3570	119
60	31	35	3	3055	3008	19	0.16	3600	120
60	31	35	3	3064	3008	19	0.14	3630	121
60	31	35	3	3075	3007	19	0.13	3660	122
60	31	35	3	3088	3007	18	0.11	3690	123
60	32	35	3	3101	3006	-10	0.10	3720	124
60	32	35	3	3106	3004	-10	0.10	3750	125
60	32	35	3	3110	3001	-10	0.10	3780	126
60	32	36	3	3112	2998	-12	0.09	3810	127
60	32	36	3	3113	2996	-12	0.09	3840	128
60	32	36	3	3113	2993	-12	0.09	3870	129
60	32	36	3	3114	2990	-12	0.09	3900	130
60	32	36	3	3115	2988	-12	0.09	3930	131
60	32	36	3	3115	2986	-12	0.08	3960	132
60	32	36	3	3116	2983	-12	0.08	3990	133
60	32	36	3	3117	2981	-12	0.08	4020	134
60	32	36	3	3117	2978	-12	0.08	4050	135
60	32	36	3	3118	2976	-12	0.08	4080	136
60	32	36	3	3119	2974	-13	0.07	4110	137
60	32	36	3	3120	2972	-13	0.07	4140	138
60	32	36	3	3120	2970	-13	0.07	4170	139
60	32	36	3	3121	2967	-13	0.07	4200	140
60	32	36	3	3122	2965	-13	0.07	4230	141
60	32	36	3	3123	2963	-13	0.07	4260	142
60	32	36	3	3124	2961	-13	0.06	4290	143
60	32	36	3	3125	2959	-13	0.06	4320	144
60	32	36	3	3126	2957	-13	0.06	4350	145
60	32	36	3	3127	2955	-13	0.06	4380	146
60	32	36	3	3128	2954	-13	0.06	4410	147
60	32	36	3	3130	2952	-13	0.06	4440	148
60	32	36	3	3131	2950	-13	0.06	4470	149
60	32	36	3	3132	2948	-13	0.05	4500	150
60	32	36	3	3133	2946	-14	0.05	4530	151
60	32	36	3	3135	2945	-14	0.05	4560	152
60	32	36	3	3136	2943	-14	0.05	4590	153
60	32	36	3	3138	2941	-14	0.05	4620	154
60	32	36	3	3139	2940	-14	0.05	4650	155
60	32	36	3	3141	2938	-14	0.05	4680	156
60	32	36	3	3143	2936	-14	0.05	4710	157
60	32	36	3	3145	2935	-14	0.05	4740	158
60	32	36	3	3147	2933	-14	0.04	4770	159
60	32	36	3	3149	2932	-14	0.04	4800	160
60	32	36	3	3151	2930	-14	0.04	4830	161
60	32	36	3	3153	2929	-14	0.04	4860	162
60	32	36	3	3155	2927	-14	0.04	4890	163
60	32	36	3	3157	2926	-14	0.04	4920	164
60	32	36	3	3160	2925	-14	0.04	4950	165
60	32	36	3	3162	2923	-14	0.04	4980	166
60	32	36	3	3165	2922	-14	0.04	5010	167
60	32	36	3	3168	2921	-14	0.04	5040	168
60	32	36	3	3170	2919	-14	0.03	5070	169
60	32	36	3	3173	2918	-14	0.03	5100	170
60	32	36	3	3177	2917	-14	0.03	5130	171
60	32	36	3	3180	2916	-15	0.03	5160	172
60	32	36	3	3183	2915	-15	0.03	5190	173
60	32	36	3	3187	2913	-15	0.03	5220	174

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	32	36	3	3190	2912	-15	0.03	5250	175
60	32	36	3	3194	2911	-15	0.03	5280	176
60	32	36	3	3198	2910	-15	0.03	5310	177
60	33	36	3	3202	2909	-12	0.03	5340	178
60	33	36	3	3207	2908	-12	0.03	5370	179
60	33	36	3	3211	2907	-12	0.03	5400	180
60	33	36	3	3216	2906	-12	0.03	5430	181
60	33	36	3	3221	2905	-12	0.03	5460	182
60	33	36	3	3226	2904	-12	0.03	5490	183
60	33	36	3	3231	2903	-12	0.03	5520	184
60	33	36	3	3236	2903	-12	0.03	5550	185
60	33	36	3	3241	2902	-12	0.03	5580	186
60	33	36	3	3246	2901	-12	0.03	5610	187
60	33	37	3	3251	2900	8	0.03	5640	188
60	33	37	3	3258	2898	8	0.03	5670	189
60	33	37	3	3265	2897	8	0.03	5700	190
60	33	37	3	3272	2895	8	0.02	5730	191
60	33	37	3	3279	2894	8	0.02	5760	192
60	33	37	3	3287	2892	8	0.02	5790	193
60	33	37	3	3295	2891	8	0.02	5820	194
60	34	37	3	3302	2890	0	0.02	5850	195
60	34	37	3	3309	2889	0	0.02	5880	196
60	34	37	3	3315	2888	0	0.02	5910	197
60	34	37	3	3321	2887	0	0.02	5940	198
60	34	37	3	3328	2886	0	0.02	5970	199
60	34	37	3	3334	2885	0	0.02	6000	200
60	34	37	3	3341	2884	0	0.02	6030	201
60	34	37	3	3348	2883	0	0.02	6060	202
60	34	37	3	3355	2882	0	0.02	6090	203
60	34	37	3	3361	2881	0	0.02	6120	204
60	34	37	3	3368	2880	0	0.02	6150	205
60	34	37	3	3375	2879	0	0.02	6180	206
60	34	37	3	3382	2879	0	0.02	6210	207
60	34	37	3	3390	2878	0	0.02	6240	208
60	34	37	3	3397	2877	0	0.02	6270	209
60	35	37	3	3404	2876	1	0.02	6300	210
60	35	37	3	3412	2877	1	0.02	6330	211
60	35	37	3	3419	2877	1	0.02	6360	212
60	35	37	3	3427	2877	1	0.02	6390	213
60	35	37	3	3434	2878	1	0.02	6420	214
60	35	37	3	3441	2878	1	0.02	6450	215
60	35	37	3	3449	2878	1	0.02	6480	216
60	35	37	3	3456	2878	1	0.02	6510	217
60	35	37	3	3463	2879	1	0.02	6540	218
60	35	37	3	3470	2879	0	0.02	6570	219
60	35	37	3	3477	2879	0	0.02	6600	220
60	35	37	3	3484	2880	0	0.02	6630	221
60	35	37	3	3491	2880	0	0.02	6660	222
60	35	37	3	3498	2880	0	0.02	6690	223
60	36	37	3	3509	2882	14	0.02	6720	224
60	36	37	3	3522	2883	14	0.02	6750	225
60	36	37	3	3534	2885	14	0.02	6780	226
60	36	37	3	3547	2887	14	0.02	6810	227
60	36	37	3	3560	2889	14	0.02	6840	228
60	36	37	3	3572	2890	14	0.02	6870	229
60	36	37	3	3585	2892	14	0.02	6900	230
60	36	37	3	3597	2894	14	0.02	6930	231
60	37	37	3	3610	2897	15	0.02	6960	232
60	37	37	3	3623	2900	15	0.02	6990	233
60	37	36	3	3639	2903	18	0.02	7020	234
60	37	36	3	3655	2907	18	0.02	7050	235
60	37	36	3	3670	2910	18	0.02	7080	236
60	37	36	3	3685	2914	18	0.02	7110	237
60	37	36	3	3698	2918	18	0.02	7140	238
60	38	36	3	3713	2923	19	0.02	7170	239

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	38	36	3	3727	2929	19	0.02	7200	240
60	38	36	3	3740	2934	19	0.02	7230	241
60	38	36	3	3754	2939	19	0.02	7260	242
60	38	36	3	3766	2944	19	0.02	7290	243
60	38	36	3	3779	2950	19	0.02	7320	244
60	38	36	3	3791	2955	19	0.02	7350	245
60	39	36	3	3803	2960	20	0.03	7380	246
60	39	36	3	3815	2964	20	0.03	7410	247
60	39	36	3	3827	2967	20	0.03	7440	248
60	39	36	3	3838	2971	20	0.03	7470	249
60	39	36	3	3849	2975	20	0.03	7500	250
60	39	36	3	3859	2979	20	0.03	7530	251
60	39	36	3	3868	2983	20	0.04	7560	252
60	39	36	3	3877	2987	20	0.04	7590	253
60	39	36	3	3886	2991	20	0.04	7620	254
60	39	36	3	3894	2995	20	0.04	7650	255
60	40	36	3	3904	2998	25	0.05	7680	256
60	40	35	3	3916	3001	23	0.05	7710	257
60	40	35	3	3925	3002	23	0.06	7740	258
60	40	35	3	3934	3004	23	0.06	7770	259
60	40	35	3	3941	3006	23	0.07	7800	260
60	40	35	3	3947	3008	24	0.08	7830	261
60	40	35	3	3953	3010	24	0.09	7860	262
60	40	35	3	3958	3011	24	0.09	7890	263
60	40	35	3	3963	3013	24	0.10	7920	264
60	40	35	3	3967	3015	24	0.12	7950	265
60	40	35	3	3970	3017	24	0.13	7980	266
60	40	35	3	3974	3019	24	0.14	8010	267
60	40	35	3	3976	3021	24	0.16	8040	268
60	40	35	3	3979	3023	24	0.17	8070	269
60	40	35	3	3981	3026	24	0.19	8100	270
60	40	35	3	3983	3028	24	0.21	8130	271
60	40	35	3	3985	3030	25	0.23	8160	272
60	40	35	3	3987	3032	25	0.26	8190	273
60	40	35	3	3988	3034	25	0.29	8220	274
60	40	35	3	3989	3036	25	0.32	8250	275
60	40	35	3	3991	3039	25	0.35	8280	276
60	40	35	3	3992	3041	26	0.39	8310	277
60	40	35	3	3993	3043	26	0.43	8340	278
60	40	35	3	3993	3046	26	0.47	8370	279
60	40	35	3	3994	3048	27	0.52	8400	280
60	40	35	3	3995	3051	27	0.58	8430	281
60	40	35	3	3995	3053	27	0.64	8460	282
60	40	35	3	3996	3056	28	0.71	8490	283
60	40	35	3	3996	3058	29	0.79	8520	284
60	40	35	3	3997	3061	29	0.87	8550	285
60	40	35	3	3997	3063	30	0.96	8580	286
60	41	35	2	4003	3065	27	0.01	8610	287
60	41	35	2	4013	3067	27	0.01	8640	288
60	41	35	2	4022	3068	27	0.01	8670	289
60	41	35	2	4031	3069	27	0.01	8700	290
60	41	35	2	4040	3070	27	0.01	8730	291
60	41	35	2	4048	3072	27	0.01	8760	292
60	41	35	2	4057	3073	27	0.01	8790	293
60	41	35	2	4065	3074	27	0.01	8820	294
60	41	35	2	4074	3076	27	0.01	8850	295
60	41	35	2	4082	3077	27	0.01	8880	296
60	41	35	2	4090	3078	27	0.01	8910	297
60	41	35	2	4097	3080	27	0.01	8940	298
60	42	35	2	4105	3080	29	0.01	8970	299
60	42	35	2	4113	3080	29	0.01	9000	300
60	42	35	2	4121	3079	29	0.01	9030	301
60	42	35	2	4128	3079	29	0.01	9060	302
60	42	35	2	4136	3079	29	0.01	9090	303
60	42	35	2	4143	3078	29	0.01	9120	304

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	42	35	2	4150	3078	29	0.01	9150	305
60	42	35	2	4157	3078	29	0.01	9180	306
60	42	35	2	4163	3077	29	0.01	9210	307
60	42	35	2	4170	3077	29	0.01	9240	308
60	42	35	2	4176	3077	29	0.01	9270	309
60	42	35	2	4182	3077	29	0.01	9300	310
60	42	35	2	4188	3076	29	0.01	9330	311
60	42	35	2	4194	3076	29	0.01	9360	312
60	42	35	2	4199	3076	29	0.01	9390	313
60	43	35	2	4205	3074	30	0.01	9420	314
60	43	35	2	4210	3071	30	0.01	9450	315
60	43	35	2	4216	3069	30	0.01	9480	316
60	43	35	2	4221	3067	30	0.01	9510	317
60	43	35	2	4226	3064	30	0.01	9540	318
60	43	35	2	4231	3062	30	0.01	9570	319
60	43	35	2	4236	3060	30	0.01	9600	320
60	43	35	2	4240	3057	30	0.01	9630	321
60	43	35	2	4245	3055	30	0.01	9660	322
60	43	35	2	4249	3052	30	0.01	9690	323
60	43	35	2	4253	3050	30	0.01	9720	324
60	43	35	2	4257	3047	30	0.01	9750	325
60	43	35	2	4261	3044	30	0.01	9780	326
60	43	35	2	4265	3042	30	0.01	9810	327
60	43	35	2	4269	3039	30	0.01	9840	328
60	43	35	2	4272	3036	30	0.01	9870	329
60	43	35	2	4276	3033	30	0.01	9900	330
60	43	35	2	4279	3031	30	0.01	9930	331
60	43	35	2	4282	3028	30	0.01	9960	332
60	43	35	2	4286	3025	30	0.01	9990	333
60	43	35	2	4289	3022	30	0.01	10020	334
60	43	35	2	4292	3019	30	0.01	10050	335
60	43	35	2	4295	3016	30	0.01	10080	336
60	43	35	2	4298	3013	30	0.01	10110	337
60	44	35	2	4300	3009	30	0.01	10140	338
60	44	35	2	4303	3004	30	0.01	10170	339
60	44	36	2	4306	2998	30	0.01	10200	340
60	44	36	2	4311	2993	31	0.02	10230	341
60	44	36	2	4316	2987	31	0.04	10260	342
60	44	36	2	4320	2981	32	0.05	10290	343
60	44	36	2	4324	2975	32	0.06	10320	344
60	44	36	2	4329	2969	32	0.08	10350	345
60	44	36	2	4333	2962	33	0.09	10380	346
60	44	36	2	4337	2956	33	0.11	10410	347
60	44	36	2	4341	2949	34	0.12	10440	348
60	44	36	2	4345	2943	34	0.14	10470	349
60	44	36	2	4349	2936	34	0.15	10500	350
60	44	36	2	4352	2929	35	0.16	10530	351
60	44	36	2	4356	2922	35	0.18	10560	352
60	44	36	2	4360	2914	36	0.19	10590	353
60	44	36	2	4363	2907	36	0.21	10620	354
60	44	37	2	4367	2900	36	0.22	10650	355
60	44	37	2	4372	2892	36	0.23	10680	356
60	44	37	2	4378	2885	36	0.23	10710	357
60	44	37	2	4384	2877	36	0.23	10740	358
60	44	37	2	4389	2870	36	0.24	10770	359
60	44	37	2	4395	2862	37	0.24	10800	360
60	44	37	2	4400	2855	37	0.25	10830	361
60	45	37	2	4406	2843	41	0.25	10860	362
60	45	37	2	4412	2830	41	0.26	10890	363
60	45	37	2	4418	2818	41	0.26	10920	364
60	45	37	2	4424	2806	41	0.27	10950	365
60	45	38	2	4431	2793	42	0.27	10980	366
60	45	38	2	4440	2780	42	0.28	11010	367
60	45	38	2	4448	2767	42	0.28	11040	368
60	45	38	2	4456	2753	42	0.29	11070	369

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
60	45	38	2	4465	2740	42	0.29	11100	370
60	45	38	2	4472	2727	42	0.30	11130	371
60	45	38	2	4480	2713	43	0.30	11160	372
60	45	39	2	4488	2699	43	0.30	11190	373
60	45	39	2	4498	2686	43	0.31	11220	374
60	46	39	2	4507	2670	39	0.31	11250	375
60	46	39	2	4515	2654	39	0.31	11280	376
60	46	39	2	4523	2638	39	0.31	11310	377
60	46	39	2	4531	2622	39	0.31	11340	378
60	46	39	2	4539	2605	39	0.32	11370	379
60	46	40	2	4547	2589	38	0.32	11400	380
60	46	40	2	4555	2573	38	0.32	11430	381
60	46	40	2	4564	2557	38	0.33	11460	382
60	46	40	2	4572	2541	38	0.33	11490	383
60	46	40	2	4580	2524	38	0.34	11520	384
60	46	40	2	4587	2508	38	0.34	11550	385
60	46	41	2	4596	2489	42	0.35	11580	386
60	47	41	2	4604	2468	40	0.36	11610	387
60	47	41	2	4612	2447	41	0.37	11640	388
60	47	41	2	4620	2425	41	0.39	11670	389
60	47	41	2	4628	2403	41	0.40	11700	390
60	47	42	2	4637	2375	48	0.43	11730	391
60	47	42	2	4646	2347	48	0.47	11760	392
60	47	42	2	4655	2319	49	0.51	11790	393
60	47	43	2	4664	2288	55	0.58	11820	394
60	47	43	2	4674	2249	57	0.74	11850	395
60	47	43	2	4683	2216	59	0.94	11880	396
60	48	44	1	4701	2167	63	0.14	11910	397
60	48	45	1	4724	2089	69	0.14	11940	398
60	48	46	1	4770	1936	75	0.17	11970	399
60	49	50	1	4876	1527	81	0.26	12000	400
60	50	52	1	4912	1387	80	0.33	12030	401
60	50	52	1	4921	1316	81	0.39	12060	402
60	50	53	1	4929	1253	83	0.53	12090	403
60	50	53	1	4936	1203	86	0.75	12120	404
60	50	54	1	4943	1169	89	1.00	12140	E
61	19	38	2	1883	2750	28	0.00	0	0
61	21	37	2	2084	2824	41	0.00	30	1
61	22	37	2	2153	2844	32	0.00	60	2
61	23	37	3	2202	2858	30	0.96	90	3
61	23	37	3	2202	2863	27	0.75	120	4
61	23	37	3	2204	2868	25	0.58	150	5
61	23	37	3	2205	2872	24	0.46	180	6
61	23	37	3	2208	2876	23	0.36	210	7
61	23	37	3	2211	2879	22	0.28	240	8
61	23	37	3	2217	2881	21	0.22	270	9
61	23	37	3	2225	2884	21	0.17	300	10
61	23	37	3	2236	2886	20	0.13	330	11
61	23	37	3	2253	2888	20	0.10	360	12
61	23	37	3	2278	2889	20	0.08	390	13
61	24	37	3	2308	2893	13	0.07	420	14
61	24	36	3	2329	2901	15	0.06	450	15
61	24	36	3	2336	2910	15	0.06	480	16
61	24	36	3	2344	2919	15	0.05	510	17
61	24	36	3	2353	2927	15	0.04	540	18
61	24	36	3	2365	2934	15	0.04	570	19
61	24	36	3	2379	2941	15	0.03	600	20
61	24	36	3	2396	2947	14	0.03	630	21
61	25	36	3	2410	2949	5	0.03	660	22
61	25	36	3	2422	2951	5	0.03	690	23
61	25	36	3	2435	2952	5	0.03	720	24
61	25	36	3	2448	2953	5	0.03	750	25
61	25	36	3	2460	2955	5	0.03	780	26
61	25	36	3	2473	2956	5	0.03	810	27
61	25	36	3	2487	2957	5	0.03	840	28

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
61	25	36	3	2500	2959	5	0.03	870	29
61	26	36	3	2510	2957	-3	0.03	900	30
61	26	36	3	2520	2956	-3	0.03	930	31
61	26	36	3	2530	2955	-3	0.03	960	32
61	26	36	3	2539	2953	-3	0.03	990	33
61	26	36	3	2548	2952	-3	0.03	1020	34
61	26	36	3	2557	2951	-3	0.03	1050	35
61	26	36	3	2566	2949	-3	0.03	1080	36
61	26	36	3	2575	2948	-3	0.03	1110	37
61	26	36	3	2583	2947	-3	0.03	1140	38
61	26	36	3	2591	2945	-3	0.04	1170	39
61	26	36	3	2599	2944	-3	0.04	1200	40
61	27	36	3	2611	2942	9	0.04	1230	41
61	27	36	3	2622	2939	9	0.04	1260	42
61	27	36	3	2632	2937	9	0.04	1290	43
61	27	36	3	2642	2934	9	0.05	1320	44
61	27	36	3	2651	2932	9	0.05	1350	45
61	27	36	3	2659	2930	9	0.05	1380	46
61	27	36	3	2667	2927	9	0.06	1410	47
61	27	36	3	2675	2925	9	0.06	1440	48
61	27	36	3	2682	2922	9	0.07	1470	49
61	27	36	3	2688	2920	10	0.07	1500	50
61	27	36	3	2694	2918	10	0.08	1530	51
61	27	36	3	2700	2915	10	0.08	1560	52
61	28	36	3	2718	2915	25	0.10	1590	53
61	28	36	3	2733	2915	25	0.12	1620	54
61	28	36	3	2745	2914	25	0.15	1650	55
61	28	36	3	2755	2914	25	0.19	1680	56
61	28	36	3	2763	2914	25	0.24	1710	57
61	28	36	3	2770	2914	26	0.30	1740	58
61	28	36	3	2775	2913	26	0.37	1770	59
61	28	36	3	2780	2913	27	0.47	1800	60
61	28	36	3	2784	2913	27	0.58	1830	61
61	28	36	3	2787	2913	28	0.72	1860	62
61	28	36	3	2789	2912	29	0.90	1890	63
61	28	36	2	2796	2910	31	0.02	1920	64
61	29	36	2	2808	2906	35	0.04	1950	65
61	29	36	2	2821	2904	35	0.04	1980	66
61	29	36	2	2834	2902	35	0.04	2010	67
61	29	37	2	2846	2899	39	0.04	2040	68
61	29	37	2	2856	2896	39	0.04	2070	69
61	29	37	2	2866	2894	39	0.04	2100	70
61	29	37	2	2875	2891	39	0.04	2130	71
61	29	37	2	2883	2888	39	0.04	2160	72
61	29	37	2	2891	2885	39	0.04	2190	73
61	29	37	2	2899	2882	39	0.04	2220	74
61	30	37	2	2919	2876	52	0.04	2250	75
61	30	37	2	2941	2870	52	0.04	2280	76
61	30	37	2	2962	2864	52	0.04	2310	77
61	30	37	2	2984	2858	52	0.04	2340	78
61	31	37	2	3002	2852	36	0.04	2370	79
61	31	37	2	3010	2846	36	0.03	2400	80
61	31	37	2	3018	2840	36	0.03	2430	81
61	31	37	2	3027	2834	36	0.03	2460	82
61	31	37	2	3035	2827	36	0.03	2490	83
61	31	37	2	3043	2821	36	0.03	2520	84
61	31	37	2	3052	2814	36	0.03	2550	85
61	31	37	2	3061	2808	36	0.03	2580	86
61	31	37	2	3069	2801	36	0.03	2610	87
61	31	38	2	3077	2793	40	0.03	2640	88
61	31	38	2	3083	2785	40	0.03	2670	89
61	31	38	2	3090	2778	40	0.03	2700	90
61	31	38	2	3096	2770	40	0.04	2730	91
61	32	38	2	3102	2764	31	0.04	2760	92
61	32	38	2	3106	2760	31	0.05	2790	93

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
61	32	38	2	3110	2756	32	0.06	2820	94
61	32	38	2	3114	2752	32	0.06	2850	95
61	32	38	2	3119	2749	32	0.07	2880	96
61	32	38	2	3123	2745	32	0.08	2910	97
61	32	38	2	3127	2741	33	0.09	2940	98
61	32	38	2	3131	2737	33	0.10	2970	99
61	32	38	2	3135	2734	33	0.11	3000	100
61	32	38	2	3139	2730	34	0.12	3030	101
61	32	38	2	3143	2727	34	0.13	3060	102
61	32	38	2	3147	2723	34	0.14	3090	103
61	32	38	2	3151	2720	34	0.15	3120	104
61	32	38	2	3155	2717	35	0.16	3150	105
61	32	38	2	3159	2713	35	0.17	3180	106
61	32	38	2	3163	2710	35	0.18	3210	107
61	32	38	2	3167	2707	36	0.19	3240	108
61	32	38	2	3171	2704	36	0.20	3270	109
61	32	38	2	3175	2701	36	0.21	3300	110
61	32	39	2	3177	2697	41	0.21	3330	111
61	32	39	2	3178	2693	41	0.21	3360	112
61	32	39	2	3180	2689	41	0.22	3390	113
61	32	39	2	3181	2685	41	0.22	3420	114
61	32	39	2	3182	2682	41	0.22	3450	115
61	32	39	2	3184	2678	41	0.22	3480	116
61	32	39	2	3185	2674	41	0.23	3510	117
61	32	39	2	3186	2671	41	0.23	3540	118
61	32	39	2	3188	2667	42	0.23	3570	119
61	32	39	2	3189	2663	42	0.23	3600	120
61	32	39	2	3190	2660	42	0.24	3630	121
61	32	39	2	3192	2656	42	0.24	3660	122
61	32	39	2	3193	2653	42	0.24	3690	123
61	32	39	2	3194	2649	42	0.24	3720	124
61	32	39	2	3196	2646	42	0.25	3750	125
61	32	39	2	3197	2642	42	0.25	3780	126
61	32	39	2	3198	2639	42	0.25	3810	127
61	32	39	2	3200	2635	42	0.25	3840	128
61	33	39	2	3201	2631	49	0.24	3870	129
61	33	39	2	3204	2625	48	0.21	3900	130
61	33	39	2	3206	2619	48	0.18	3930	131
61	33	39	2	3209	2613	47	0.16	3960	132
61	33	39	2	3211	2606	47	0.14	3990	133
61	33	40	2	3214	2600	42	0.12	4020	134
61	33	40	2	3218	2594	41	0.11	4050	135
61	33	40	2	3222	2589	41	0.10	4080	136
61	33	40	2	3226	2583	41	0.09	4110	137
61	33	40	2	3230	2576	41	0.08	4140	138
61	33	40	2	3234	2570	41	0.07	4170	139
61	33	40	2	3238	2563	40	0.07	4200	140
61	33	40	2	3243	2555	40	0.06	4230	141
61	33	40	2	3247	2547	40	0.05	4260	142
61	33	40	2	3252	2538	40	0.05	4290	143
61	33	40	2	3258	2529	40	0.04	4320	144
61	33	40	2	3263	2519	40	0.04	4350	145
61	33	40	2	3268	2509	40	0.04	4380	146
61	33	41	2	3274	2497	42	0.03	4410	147
61	33	41	2	3279	2484	42	0.03	4440	148
61	33	41	2	3283	2470	41	0.03	4470	149
61	33	41	2	3288	2454	41	0.02	4500	150
61	33	41	2	3293	2436	41	0.02	4530	151
61	33	41	2	3298	2417	41	0.02	4560	152
61	34	42	2	3303	2398	40	0.02	4590	153
61	34	42	2	3303	2375	40	0.02	4620	154
61	34	42	2	3303	2352	40	0.01	4650	155
61	34	42	2	3304	2329	40	0.01	4680	156
61	34	42	2	3304	2304	40	0.01	4710	157
61	34	43	2	3308	2262	50	0.01	4740	158

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
61	34	43	2	3313	2222	50	0.02	4770	159
61	34	44	2	3320	2184	53	0.02	4800	160
61	34	44	2	3328	2142	53	0.02	4830	161
61	34	44	2	3336	2104	53	0.02	4860	162
61	34	45	2	3343	2078	51	0.03	4890	163
61	34	45	2	3350	2059	51	0.03	4920	164
61	34	45	2	3358	2045	51	0.04	4950	165
61	34	45	2	3365	2034	52	0.06	4980	166
61	34	45	2	3373	2026	52	0.07	5010	167
61	34	45	2	3381	2019	52	0.09	5040	168
61	34	45	2	3389	2015	52	0.12	5070	169
61	34	45	2	3398	2011	52	0.15	5100	170
61	35	45	2	3407	2008	54	0.22	5130	171
61	35	45	2	3417	2005	55	0.32	5160	172
61	35	45	2	3427	2003	56	0.47	5190	173
61	35	45	2	3438	2002	57	0.68	5220	174
61	35	45	2	3449	2002	60	1.00	5250	175
61	35	46	1	3458	1968	56	0.01	5280	176
61	35	46	1	3467	1935	56	0.01	5310	177
61	35	46	1	3476	1901	56	0.01	5340	178
61	35	47	1	3486	1867	58	0.01	5370	179
61	35	47	1	3496	1833	58	0.01	5400	180
61	36	47	1	3505	1800	57	0.01	5430	181
61	36	48	1	3514	1765	59	0.01	5460	182
61	36	48	1	3522	1730	59	0.01	5490	183
61	36	49	1	3530	1695	58	0.01	5520	184
61	36	49	1	3537	1662	58	0.01	5550	185
61	36	49	1	3544	1629	58	0.01	5580	186
61	36	50	1	3551	1597	60	0.01	5610	187
61	36	50	1	3556	1563	60	0.01	5640	188
61	36	50	1	3561	1529	60	0.01	5670	189
61	36	51	1	3565	1496	60	0.01	5700	190
61	36	51	1	3568	1463	60	0.01	5730	191
61	36	51	1	3570	1431	60	0.01	5760	192
61	36	52	1	3572	1399	61	0.01	5790	193
61	36	52	1	3572	1366	61	0.01	5820	194
61	36	52	1	3572	1333	61	0.01	5850	195
61	36	52	1	3573	1301	61	0.01	5880	196
61	36	53	1	3571	1267	63	0.01	5910	197
61	36	53	1	3568	1233	63	0.01	5940	198
61	36	54	1	3566	1199	64	0.01	5970	199
61	36	54	1	3561	1164	64	0.01	6000	200
61	36	54	1	3556	1130	64	0.01	6030	201
61	36	55	1	3552	1096	66	0.01	6060	202
61	36	55	1	3545	1060	66	0.01	6090	203
61	36	55	1	3538	1025	66	0.01	6120	204
61	36	56	1	3530	990	67	0.02	6150	205
61	36	56	1	3521	956	67	0.02	6180	206
61	36	56	1	3512	922	67	0.02	6210	207
61	36	57	1	3502	888	69	0.02	6240	208
61	35	57	1	3483	848	75	0.02	6270	209
61	35	57	1	3464	809	75	0.02	6300	210
61	35	58	1	3446	765	77	0.03	6330	211
61	35	58	1	3433	723	77	0.05	6360	212
61	35	59	1	3423	680	79	0.08	6390	213
61	35	59	1	3414	634	80	0.14	6420	214
61	35	60	1	3408	592	81	0.26	6450	215
61	35	60	1	3405	549	82	0.54	6480	216
61	35	60	1	3403	518	84	1.00	6506	E
62	19	38	2	1883	2717	28	0.00	0	0
62	21	39	2	2067	2673	28	0.00	30	1
62	22	39	3	2101	2664	25	0.68	60	2
62	22	39	3	2101	2659	20	0.39	90	3
62	22	39	3	2101	2653	17	0.22	120	4
62	22	39	3	2102	2646	16	0.12	150	5

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
62	22	39	3	2104	2639	15	0.07	180	6
62	22	39	3	2106	2631	15	0.04	210	7
62	22	39	3	2109	2623	14	0.02	240	8
62	22	39	3	2115	2613	14	0.01	270	9
62	22	39	3	2123	2602	14	0.01	300	10
62	22	40	3	2135	2586	18	0.00	330	11
62	22	40	3	2152	2569	18	0.00	360	12
62	22	40	3	2177	2550	18	0.00	390	13
62	23	40	3	2216	2531	21	0.00	420	14
62	23	40	3	2269	2513	21	0.00	450	15
62	24	41	3	2310	2496	16	0.00	480	16
62	24	41	3	2334	2477	16	0.00	510	17
62	24	41	3	2357	2459	16	0.00	540	18
62	24	41	3	2381	2441	16	0.00	570	19
62	25	41	3	2404	2424	17	0.00	600	20
62	25	41	3	2428	2408	17	0.00	630	21
62	25	42	3	2447	2389	20	0.00	660	22
62	25	42	3	2464	2370	20	0.00	690	23
62	25	42	3	2479	2352	20	0.00	720	24
62	25	42	3	2493	2335	20	0.00	750	25
62	26	42	3	2510	2325	24	0.00	780	26
62	26	42	3	2527	2320	24	0.01	810	27
62	26	42	3	2541	2316	24	0.01	840	28
62	26	42	3	2552	2314	24	0.01	870	29
62	26	42	3	2561	2311	24	0.02	900	30
62	26	42	3	2569	2309	24	0.03	930	31
62	26	42	3	2575	2307	24	0.04	960	32
62	26	42	3	2579	2306	24	0.06	990	33
62	26	42	3	2583	2305	25	0.09	1020	34
62	26	42	3	2587	2304	25	0.14	1050	35
62	26	42	3	2589	2303	25	0.21	1080	36
62	26	42	3	2591	2303	26	0.31	1110	37
62	26	42	3	2593	2302	27	0.48	1140	38
62	26	42	3	2594	2302	28	0.72	1170	39
62	26	43	2	2598	2298	28	0.01	1200	40
62	27	43	2	2615	2280	35	0.01	1230	41
62	27	43	2	2632	2262	35	0.01	1260	42
62	27	43	2	2649	2244	35	0.01	1290	43
62	27	43	2	2664	2227	35	0.01	1320	44
62	27	43	2	2680	2209	35	0.01	1350	45
62	27	44	2	2695	2192	36	0.01	1380	46
62	28	44	2	2711	2173	41	0.01	1410	47
62	28	44	2	2729	2155	41	0.01	1440	48
62	28	44	2	2745	2137	41	0.01	1470	49
62	28	44	2	2761	2119	41	0.01	1500	50
62	28	44	2	2776	2102	41	0.01	1530	51
62	28	45	2	2791	2081	44	0.01	1560	52
62	29	45	2	2810	2060	50	0.01	1590	53
62	29	45	2	2831	2038	50	0.02	1620	54
62	29	45	2	2850	2017	50	0.02	1650	55
62	29	46	2	2866	1996	52	0.02	1680	56
62	29	46	2	2874	1972	52	0.03	1710	57
62	29	46	2	2880	1950	52	0.04	1740	58
62	29	46	2	2884	1929	52	0.06	1770	59
62	29	46	2	2888	1908	53	0.08	1800	60
62	29	47	2	2891	1884	56	0.13	1830	61
62	29	47	2	2893	1862	56	0.24	1860	62
62	29	47	2	2895	1845	57	0.45	1890	63
62	29	47	2	2896	1833	59	0.83	1920	64
62	30	47	1	2914	1810	58	0.02	1950	65
62	30	48	1	2939	1780	60	0.02	1980	66
62	30	48	1	2964	1749	60	0.02	2010	67
62	30	48	1	2988	1718	60	0.02	2040	68
62	31	49	1	3012	1684	63	0.02	2070	69
62	31	49	1	3036	1648	63	0.02	2100	70

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
62	31	49	1	3059	1612	63	0.02	2130	71
62	31	50	1	3081	1571	66	0.02	2160	72
62	32	50	1	3103	1529	66	0.02	2190	73
62	32	51	1	3122	1487	68	0.02	2220	74
62	32	51	1	3139	1442	68	0.03	2250	75
62	32	52	1	3156	1398	72	0.03	2280	76
62	32	52	1	3165	1341	72	0.03	2310	77
62	32	53	1	3171	1284	73	0.03	2340	78
62	32	53	1	3169	1227	73	0.03	2370	79
62	32	54	1	3160	1163	76	0.04	2400	80
62	32	55	1	3142	1090	79	0.04	2430	81
62	32	56	1	3104	985	81	0.05	2460	82
62	31	57	1	3088	860	83	0.13	2490	83
62	32	57	1	3136	811	85	1.00	2504	E
63	19	38	2	1850	2783	28	0.00	0	0
63	19	37	3	1838	2807	22	0.10	30	1
63	19	37	3	1825	2865	21	0.01	60	2
63	19	35	3	1828	3000	7	0.01	90	3
63	19	35	3	1848	3075	7	0.01	120	4
63	19	34	3	1867	3125	1	0.01	150	5
63	19	34	3	1886	3162	1	0.01	180	6
63	20	34	3	1908	3189	10	0.01	210	7
63	20	33	3	1931	3208	5	0.01	240	8
63	20	33	3	1949	3223	5	0.01	270	9
63	20	33	3	1967	3236	5	0.02	300	10
63	20	33	3	1984	3248	5	0.02	330	11
63	21	33	3	2001	3258	13	0.02	360	12
63	21	33	3	2024	3261	13	0.03	390	13
63	21	33	3	2045	3264	14	0.03	420	14
63	21	33	3	2064	3267	14	0.04	450	15
63	21	33	3	2082	3270	14	0.05	480	16
63	21	33	3	2097	3273	14	0.05	510	17
63	22	33	3	2120	3270	21	0.06	540	18
63	22	33	3	2141	3266	21	0.08	570	19
63	22	33	3	2160	3262	21	0.09	600	20
63	22	33	3	2177	3259	21	0.11	630	21
63	22	33	3	2192	3256	21	0.13	660	22
63	23	33	3	2209	3251	25	0.15	690	23
63	23	33	3	2231	3246	25	0.17	720	24
63	23	33	3	2252	3241	25	0.20	750	25
63	23	33	3	2273	3237	25	0.23	780	26
63	23	33	3	2292	3233	26	0.26	810	27
63	24	33	3	2308	3227	23	0.28	840	28
63	24	33	3	2322	3220	24	0.28	870	29
63	24	33	3	2336	3213	24	0.29	900	30
63	24	33	3	2351	3207	24	0.29	930	31
63	24	33	3	2367	3201	24	0.29	960	32
63	24	34	3	2382	3195	24	0.27	990	33
63	24	34	3	2398	3190	24	0.23	1020	34
63	25	34	3	2407	3185	15	0.23	1050	35
63	25	34	3	2415	3180	14	0.22	1080	36
63	25	34	3	2423	3175	14	0.22	1110	37
63	25	34	3	2431	3171	14	0.22	1140	38
63	25	34	3	2440	3167	14	0.21	1170	39
63	25	34	3	2449	3162	14	0.21	1200	40
63	25	34	3	2459	3158	14	0.21	1230	41
63	25	34	3	2469	3154	14	0.21	1260	42
63	25	34	3	2480	3150	14	0.20	1290	43
63	25	34	3	2491	3147	14	0.20	1320	44
63	26	34	3	2501	3143	4	0.20	1350	45
63	26	34	3	2508	3140	4	0.20	1380	46
63	26	34	3	2516	3136	5	0.21	1410	47
63	26	34	3	2523	3133	5	0.21	1440	48
63	26	34	3	2530	3130	5	0.21	1470	49
63	26	34	3	2538	3126	5	0.22	1500	50

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	26	34	3	2545	3123	5	0.22	1530	51
63	26	34	3	2552	3120	5	0.22	1560	52
63	26	34	3	2560	3117	5	0.23	1590	53
63	26	34	3	2567	3114	5	0.23	1620	54
63	26	34	3	2575	3111	5	0.23	1650	55
63	26	34	3	2582	3108	6	0.24	1680	56
63	26	34	3	2590	3106	6	0.24	1710	57
63	26	34	3	2597	3103	6	0.25	1740	58
63	27	35	3	2606	3100	11	0.25	1770	59
63	27	35	3	2615	3096	12	0.27	1800	60
63	27	35	3	2625	3093	12	0.28	1830	61
63	27	35	3	2634	3089	12	0.30	1860	62
63	27	35	3	2643	3086	13	0.31	1890	63
63	27	35	3	2652	3083	13	0.33	1920	64
63	27	35	3	2660	3079	14	0.35	1950	65
63	27	35	3	2668	3076	14	0.37	1980	66
63	27	35	3	2675	3073	15	0.39	2010	67
63	27	35	3	2683	3070	15	0.41	2040	68
63	27	35	3	2690	3067	16	0.43	2070	69
63	27	35	3	2697	3063	16	0.45	2100	70
63	28	35	3	2710	3061	26	0.49	2130	71
63	28	35	3	2728	3059	26	0.55	2160	72
63	28	35	3	2745	3057	27	0.61	2190	73
63	28	35	3	2760	3055	27	0.68	2220	74
63	28	35	3	2774	3053	28	0.76	2250	75
63	28	35	3	2787	3051	29	0.84	2280	76
63	28	35	3	2798	3049	30	0.94	2310	77
63	29	35	2	2811	3048	30	0.01	2340	78
63	29	35	2	2823	3046	31	0.04	2370	79
63	29	35	2	2836	3045	32	0.07	2400	80
63	29	35	2	2848	3043	33	0.10	2430	81
63	29	35	2	2861	3041	34	0.12	2460	82
63	29	35	2	2874	3039	34	0.15	2490	83
63	29	35	2	2887	3038	35	0.17	2520	84
63	30	35	2	2900	3036	34	0.20	2550	85
63	30	35	2	2914	3034	34	0.20	2580	86
63	30	35	2	2927	3033	33	0.20	2610	87
63	30	35	2	2941	3031	33	0.20	2640	88
63	30	35	2	2954	3030	33	0.19	2670	89
63	30	35	2	2967	3028	33	0.19	2700	90
63	30	35	2	2980	3027	33	0.19	2730	91
63	30	35	2	2993	3025	33	0.19	2760	92
63	31	35	2	3007	3024	34	0.16	2790	93
63	31	35	2	3022	3022	32	0.10	2820	94
63	31	35	2	3036	3021	31	0.03	2850	95
63	31	35	3	3046	3020	29	0.94	2880	96
63	31	35	3	3054	3019	28	0.83	2910	97
63	31	35	3	3064	3018	26	0.73	2940	98
63	31	35	3	3075	3018	25	0.64	2970	99
63	31	35	3	3088	3017	24	0.57	3000	100
63	32	35	3	3101	3016	9	0.51	3030	101
63	32	35	3	3106	3013	8	0.50	3060	102
63	32	35	3	3110	3011	8	0.49	3090	103
63	32	35	3	3115	3008	7	0.49	3120	104
63	32	35	3	3120	3005	7	0.48	3150	105
63	32	35	3	3125	3002	7	0.47	3180	106
63	32	36	3	3130	3000	5	0.46	3210	107
63	32	36	3	3131	2997	5	0.45	3240	108
63	32	36	3	3132	2994	4	0.44	3270	109
63	32	36	3	3134	2992	4	0.43	3300	110
63	32	36	3	3135	2989	3	0.42	3330	111
63	32	36	3	3137	2987	3	0.41	3360	112
63	32	36	3	3138	2984	2	0.40	3390	113
63	32	36	3	3140	2982	2	0.39	3420	114
63	32	36	3	3141	2980	1	0.38	3450	115

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	32	36	3	3143	2977	1	0.37	3480	116
63	32	36	3	3145	2975	1	0.36	3510	117
63	32	36	3	3147	2973	0	0.35	3540	118
63	32	36	3	3149	2971	0	0.34	3570	119
63	32	36	3	3151	2969	-1	0.34	3600	120
63	32	36	3	3153	2966	-1	0.33	3630	121
63	32	36	3	3155	2964	-1	0.32	3660	122
63	32	36	3	3158	2962	-2	0.31	3690	123
63	32	36	3	3160	2960	-2	0.31	3720	124
63	32	36	3	3163	2958	-2	0.30	3750	125
63	32	36	3	3165	2956	-3	0.29	3780	126
63	32	36	3	3168	2955	-3	0.28	3810	127
63	32	36	3	3171	2953	-3	0.28	3840	128
63	32	36	3	3174	2951	-4	0.27	3870	129
63	32	36	3	3177	2949	-4	0.26	3900	130
63	32	36	3	3180	2947	-4	0.26	3930	131
63	32	36	3	3184	2945	-4	0.25	3960	132
63	32	36	3	3187	2944	-5	0.25	3990	133
63	32	36	3	3191	2942	-5	0.24	4020	134
63	32	36	3	3195	2940	-5	0.23	4050	135
63	32	36	3	3199	2939	-5	0.23	4080	136
63	33	36	3	3203	2937	-3	0.23	4110	137
63	33	36	3	3208	2936	-3	0.22	4140	138
63	33	36	3	3212	2935	-3	0.22	4170	139
63	33	36	3	3217	2934	-3	0.22	4200	140
63	33	36	3	3222	2933	-4	0.22	4230	141
63	33	36	3	3226	2932	-4	0.22	4260	142
63	33	36	3	3231	2930	-4	0.22	4290	143
63	33	36	3	3236	2929	-4	0.21	4320	144
63	33	36	3	3241	2928	-4	0.21	4350	145
63	33	36	3	3247	2927	-4	0.21	4380	146
63	33	36	3	3252	2926	-4	0.21	4410	147
63	33	36	3	3257	2925	-4	0.21	4440	148
63	33	36	3	3263	2924	-4	0.21	4470	149
63	33	36	3	3268	2923	-4	0.20	4500	150
63	33	36	3	3274	2922	-4	0.20	4530	151
63	33	36	3	3280	2921	-4	0.20	4560	152
63	33	36	3	3285	2920	-4	0.20	4590	153
63	33	36	3	3291	2919	-4	0.20	4620	154
63	33	36	3	3297	2917	-5	0.20	4650	155
63	34	36	3	3305	2917	7	0.19	4680	156
63	34	36	3	3314	2916	7	0.19	4710	157
63	34	36	3	3324	2915	7	0.19	4740	158
63	34	36	3	3333	2914	6	0.19	4770	159
63	34	36	3	3342	2913	6	0.19	4800	160
63	34	36	3	3352	2913	6	0.18	4830	161
63	34	36	3	3361	2912	6	0.18	4860	162
63	34	36	3	3371	2911	6	0.18	4890	163
63	34	36	3	3381	2910	6	0.18	4920	164
63	34	36	3	3390	2909	6	0.17	4950	165
63	35	36	3	3400	2908	0	0.17	4980	166
63	35	36	3	3408	2909	0	0.17	5010	167
63	35	36	3	3416	2910	0	0.17	5040	168
63	35	36	3	3424	2910	0	0.17	5070	169
63	35	36	3	3432	2911	0	0.17	5100	170
63	35	36	3	3440	2911	0	0.17	5130	171
63	35	36	3	3448	2912	0	0.17	5160	172
63	35	36	3	3456	2912	0	0.17	5190	173
63	35	36	3	3463	2913	0	0.17	5220	174
63	35	36	3	3471	2913	0	0.17	5250	175
63	35	36	3	3479	2914	0	0.17	5280	176
63	35	36	3	3487	2915	0	0.17	5310	177
63	35	36	3	3495	2915	0	0.17	5340	178
63	36	36	3	3505	2916	13	0.17	5370	179
63	36	36	3	3518	2918	13	0.17	5400	180

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	36	36	3	3532	2920	13	0.17	5430	181
63	36	36	3	3545	2921	14	0.18	5460	182
63	36	36	3	3557	2923	14	0.18	5490	183
63	36	36	3	3569	2925	14	0.19	5520	184
63	36	36	3	3581	2927	14	0.19	5550	185
63	36	36	3	3592	2928	14	0.20	5580	186
63	37	36	3	3605	2931	20	0.20	5610	187
63	37	36	3	3622	2934	21	0.21	5640	188
63	37	36	3	3638	2938	21	0.22	5670	189
63	37	36	3	3654	2942	21	0.23	5700	190
63	37	36	3	3669	2945	21	0.24	5730	191
63	37	36	3	3684	2949	21	0.25	5760	192
63	37	36	3	3698	2953	21	0.26	5790	193
63	38	36	3	3712	2958	22	0.27	5820	194
63	38	36	3	3726	2963	22	0.29	5850	195
63	38	36	3	3740	2968	22	0.30	5880	196
63	38	36	3	3753	2973	22	0.31	5910	197
63	38	36	3	3766	2978	23	0.32	5940	198
63	38	36	3	3778	2982	23	0.34	5970	199
63	38	36	3	3790	2987	23	0.35	6000	200
63	39	36	3	3802	2992	24	0.37	6030	201
63	39	36	3	3815	2996	24	0.39	6060	202
63	39	36	3	3826	3000	24	0.41	6090	203
63	39	35	3	3837	3003	24	0.42	6120	204
63	39	35	3	3847	3007	24	0.44	6150	205
63	39	35	3	3856	3011	25	0.45	6180	206
63	39	35	3	3865	3015	25	0.47	6210	207
63	39	35	3	3874	3019	25	0.48	6240	208
63	39	35	3	3883	3022	25	0.50	6270	209
63	39	35	3	3892	3026	25	0.51	6300	210
63	39	35	3	3900	3030	25	0.53	6330	211
63	40	35	3	3910	3032	27	0.59	6360	212
63	40	35	3	3920	3035	28	0.65	6390	213
63	40	35	3	3929	3037	28	0.72	6420	214
63	40	35	3	3937	3039	29	0.79	6450	215
63	40	35	3	3944	3041	29	0.88	6480	216
63	40	35	3	3950	3044	30	0.97	6510	217
63	40	35	2	3959	3046	30	0.02	6540	218
63	40	35	2	3969	3049	31	0.04	6570	219
63	40	35	2	3980	3051	32	0.06	6600	220
63	40	35	2	3990	3053	33	0.09	6630	221
63	41	35	2	4000	3056	31	0.11	6660	222
63	41	35	2	4010	3057	31	0.11	6690	223
63	41	35	2	4019	3058	31	0.11	6720	224
63	41	35	2	4028	3059	31	0.11	6750	225
63	41	35	2	4037	3061	31	0.12	6780	226
63	41	35	2	4046	3062	31	0.12	6810	227
63	41	35	2	4054	3063	31	0.12	6840	228
63	41	35	2	4063	3064	31	0.12	6870	229
63	41	35	2	4071	3066	31	0.12	6900	230
63	41	35	2	4079	3067	31	0.12	6930	231
63	41	35	2	4087	3068	31	0.13	6960	232
63	41	35	2	4095	3069	31	0.13	6990	233
63	42	35	2	4103	3070	33	0.13	7020	234
63	42	35	2	4111	3070	33	0.13	7050	235
63	42	35	2	4119	3069	33	0.13	7080	236
63	42	35	2	4126	3069	33	0.14	7110	237
63	42	35	2	4134	3069	33	0.14	7140	238
63	42	35	2	4141	3068	33	0.14	7170	239
63	42	35	2	4148	3068	33	0.15	7200	240
63	42	35	2	4155	3068	34	0.15	7230	241
63	42	35	2	4161	3067	34	0.15	7260	242
63	42	35	2	4168	3067	34	0.15	7290	243
63	42	35	2	4174	3066	34	0.16	7320	244
63	42	35	2	4180	3066	34	0.16	7350	245

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	42	35	2	4186	3066	34	0.16	7380	246
63	42	35	2	4192	3065	34	0.17	7410	247
63	42	35	2	4198	3065	34	0.17	7440	248
63	43	35	2	4203	3063	35	0.17	7470	249
63	43	35	2	4209	3061	35	0.17	7500	250
63	43	35	2	4214	3059	35	0.18	7530	251
63	43	35	2	4219	3056	35	0.18	7560	252
63	43	35	2	4225	3054	35	0.18	7590	253
63	43	35	2	4229	3051	36	0.19	7620	254
63	43	35	2	4234	3048	36	0.19	7650	255
63	43	35	2	4239	3046	36	0.19	7680	256
63	43	35	2	4243	3043	36	0.19	7710	257
63	43	35	2	4248	3041	36	0.20	7740	258
63	43	35	2	4252	3038	36	0.20	7770	259
63	43	35	2	4256	3035	36	0.20	7800	260
63	43	35	2	4260	3032	36	0.21	7830	261
63	43	35	2	4264	3029	36	0.21	7860	262
63	43	35	2	4268	3026	36	0.21	7890	263
63	43	35	2	4271	3024	37	0.22	7920	264
63	43	35	2	4275	3021	37	0.22	7950	265
63	43	35	2	4278	3018	37	0.22	7980	266
63	43	35	2	4282	3015	37	0.23	8010	267
63	43	35	2	4285	3011	37	0.23	8040	268
63	43	35	2	4288	3008	37	0.23	8070	269
63	43	35	2	4291	3005	37	0.24	8100	270
63	43	35	2	4294	3002	37	0.24	8130	271
63	43	36	2	4298	2999	38	0.25	8160	272
63	44	36	2	4303	2994	38	0.26	8190	273
63	44	36	2	4308	2988	38	0.27	8220	274
63	44	36	2	4312	2982	39	0.29	8250	275
63	44	36	2	4317	2976	39	0.30	8280	276
63	44	36	2	4321	2970	39	0.32	8310	277
63	44	36	2	4326	2964	40	0.33	8340	278
63	44	36	2	4330	2957	40	0.35	8370	279
63	44	36	2	4334	2951	41	0.36	8400	280
63	44	36	2	4338	2944	41	0.38	8430	281
63	44	36	2	4342	2937	42	0.39	8460	282
63	44	36	2	4346	2930	42	0.41	8490	283
63	44	36	2	4350	2923	43	0.42	8520	284
63	44	36	2	4353	2916	43	0.44	8550	285
63	44	36	2	4357	2909	44	0.45	8580	286
63	44	36	2	4360	2901	44	0.47	8610	287
63	44	37	2	4366	2894	44	0.48	8640	288
63	44	37	2	4372	2886	44	0.49	8670	289
63	44	37	2	4378	2879	44	0.50	8700	290
63	44	37	2	4383	2872	45	0.51	8730	291
63	44	37	2	4389	2864	45	0.52	8760	292
63	44	37	2	4394	2857	45	0.53	8790	293
63	44	37	2	4400	2849	46	0.54	8820	294
63	45	37	2	4406	2837	48	0.55	8850	295
63	45	37	2	4412	2825	49	0.56	8880	296
63	45	37	2	4417	2812	49	0.57	8910	297
63	45	37	2	4423	2800	49	0.59	8940	298
63	45	38	2	4432	2787	50	0.59	8970	299
63	45	38	2	4441	2774	50	0.60	9000	300
63	45	38	2	4449	2761	50	0.61	9030	301
63	45	38	2	4457	2747	51	0.62	9060	302
63	45	38	2	4465	2734	51	0.63	9090	303
63	45	38	2	4473	2721	51	0.64	9120	304
63	45	38	2	4481	2707	51	0.65	9150	305
63	45	39	2	4490	2693	51	0.66	9180	306
63	46	39	2	4501	2679	50	0.66	9210	307
63	46	39	2	4509	2664	50	0.67	9240	308
63	46	39	2	4517	2648	50	0.67	9270	309
63	46	39	2	4525	2631	50	0.67	9300	310

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	46	39	2	4533	2615	50	0.68	9330	311
63	46	40	2	4540	2598	50	0.68	9360	312
63	46	40	2	4549	2583	50	0.69	9390	313
63	46	40	2	4557	2567	50	0.70	9420	314
63	46	40	2	4566	2550	50	0.71	9450	315
63	46	40	2	4574	2534	51	0.72	9480	316
63	46	40	2	4581	2517	51	0.73	9510	317
63	46	40	2	4589	2501	51	0.73	9540	318
63	46	41	2	4598	2481	53	0.75	9570	319
63	47	41	2	4607	2459	53	0.78	9600	320
63	47	41	2	4615	2438	54	0.81	9630	321
63	47	41	2	4622	2416	55	0.84	9660	322
63	47	42	2	4630	2393	57	0.88	9690	323
63	47	42	2	4640	2363	59	0.96	9720	324
63	47	42	1	4650	2333	61	0.05	9750	325
63	47	43	1	4660	2298	63	0.13	9780	326
63	47	43	1	4674	2258	65	0.25	9810	327
63	47	43	1	4687	2211	68	0.36	9840	328
63	48	44	1	4708	2151	70	0.45	9870	329
63	48	45	1	4734	2061	74	0.48	9900	330
63	48	47	1	4790	1867	82	0.59	9930	331
63	49	51	1	4890	1477	86	0.89	9960	332
63	50	51	1	4908	1410	89	1.00	9975	E
64	19	38	2	1850	2750	28	0.00	0	0
64	19	37	3	1828	2808	22	0.14	30	1
64	19	37	3	1813	2879	21	0.01	60	2
64	19	35	3	1819	3007	7	0.01	90	3
64	19	35	3	1839	3080	7	0.01	120	4
64	19	34	3	1857	3129	1	0.01	150	5
64	19	34	3	1874	3164	1	0.02	180	6
64	19	34	3	1893	3193	2	0.02	210	7
64	20	33	3	1912	3212	6	0.02	240	8
64	20	33	3	1931	3227	6	0.03	270	9
64	20	33	3	1949	3239	6	0.03	300	10
64	20	33	3	1967	3250	6	0.03	330	11
64	20	33	3	1984	3260	6	0.04	360	12
64	21	33	3	2001	3269	14	0.05	390	13
64	21	33	3	2024	3272	14	0.06	420	14
64	21	33	3	2045	3274	14	0.07	450	15
64	21	33	3	2064	3276	14	0.08	480	16
64	21	33	3	2081	3279	15	0.09	510	17
64	21	33	3	2097	3281	15	0.11	540	18
64	22	33	3	2119	3277	21	0.13	570	19
64	22	33	3	2141	3273	22	0.16	600	20
64	22	33	3	2160	3269	22	0.19	630	21
64	22	33	3	2177	3265	22	0.22	660	22
64	22	33	3	2192	3262	23	0.26	690	23
64	23	33	3	2209	3257	26	0.31	720	24
64	23	33	3	2231	3251	26	0.35	750	25
64	23	33	3	2252	3246	26	0.40	780	26
64	23	33	3	2272	3241	27	0.47	810	27
64	23	33	3	2292	3236	27	0.53	840	28
64	24	33	3	2308	3230	26	0.57	870	29
64	24	33	3	2322	3223	26	0.58	900	30
64	24	33	3	2336	3216	26	0.59	930	31
64	24	33	3	2351	3210	26	0.59	960	32
64	24	33	3	2367	3204	26	0.60	990	33
64	24	34	3	2383	3198	27	0.59	1020	34
64	24	34	3	2400	3192	26	0.51	1050	35
64	25	34	3	2407	3187	20	0.50	1080	36
64	25	34	3	2415	3182	20	0.50	1110	37
64	25	34	3	2423	3178	20	0.49	1140	38
64	25	34	3	2432	3173	20	0.48	1170	39
64	25	34	3	2441	3169	20	0.48	1200	40
64	25	34	3	2450	3165	19	0.47	1230	41

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	25	34	3	2460	3160	19	0.46	1260	42
64	25	34	3	2470	3156	19	0.46	1290	43
64	25	34	3	2480	3153	19	0.45	1320	44
64	25	34	3	2491	3149	19	0.45	1350	45
64	26	34	3	2502	3145	12	0.44	1380	46
64	26	34	3	2509	3142	12	0.45	1410	47
64	26	34	3	2516	3138	13	0.46	1440	48
64	26	34	3	2523	3135	13	0.47	1470	49
64	26	34	3	2531	3131	13	0.47	1500	50
64	26	34	3	2538	3128	13	0.48	1530	51
64	26	34	3	2546	3125	14	0.49	1560	52
64	26	34	3	2553	3122	14	0.50	1590	53
64	26	34	3	2560	3119	14	0.50	1620	54
64	26	34	3	2568	3116	14	0.51	1650	55
64	26	34	3	2575	3113	15	0.52	1680	56
64	26	34	3	2583	3110	15	0.53	1710	57
64	26	34	3	2590	3107	15	0.54	1740	58
64	26	34	3	2598	3105	16	0.55	1770	59
64	27	34	3	2606	3101	18	0.57	1800	60
64	27	35	3	2615	3098	20	0.60	1830	61
64	27	35	3	2625	3094	21	0.63	1860	62
64	27	35	3	2634	3091	22	0.66	1890	63
64	27	35	3	2643	3088	23	0.70	1920	64
64	27	35	3	2652	3084	23	0.74	1950	65
64	27	35	3	2660	3081	24	0.78	1980	66
64	27	35	3	2668	3078	26	0.82	2010	67
64	27	35	3	2675	3074	27	0.86	2040	68
64	27	35	3	2683	3071	28	0.91	2070	69
64	27	35	3	2690	3068	29	0.96	2100	70
64	27	35	2	2698	3065	30	0.01	2130	71
64	28	35	2	2709	3062	31	0.04	2160	72
64	28	35	2	2720	3060	32	0.07	2190	73
64	28	35	2	2732	3057	33	0.10	2220	74
64	28	35	2	2743	3055	34	0.13	2250	75
64	28	35	2	2755	3052	35	0.16	2280	76
64	28	35	2	2767	3050	35	0.19	2310	77
64	28	35	2	2779	3047	36	0.21	2340	78
64	28	35	2	2791	3045	37	0.24	2370	79
64	29	35	2	2803	3042	38	0.27	2400	80
64	29	35	2	2815	3041	38	0.29	2430	81
64	29	35	2	2828	3039	39	0.31	2460	82
64	29	35	2	2841	3037	40	0.33	2490	83
64	29	35	2	2853	3035	40	0.36	2520	84
64	29	35	2	2866	3033	41	0.38	2550	85
64	29	35	2	2879	3031	42	0.40	2580	86
64	29	35	2	2892	3029	42	0.42	2610	87
64	30	35	2	2906	3028	40	0.43	2640	88
64	30	35	2	2919	3026	40	0.43	2670	89
64	30	35	2	2933	3025	40	0.43	2700	90
64	30	35	2	2946	3023	40	0.42	2730	91
64	30	35	2	2959	3022	40	0.42	2760	92
64	30	35	2	2972	3020	40	0.42	2790	93
64	30	35	2	2985	3018	40	0.42	2820	94
64	30	35	2	2998	3017	40	0.42	2850	95
64	31	35	2	3013	3015	39	0.38	2880	96
64	31	35	2	3028	3014	38	0.33	2910	97
64	31	35	2	3042	3012	36	0.27	2940	98
64	31	35	2	3055	3011	35	0.22	2970	99
64	31	35	2	3067	3009	34	0.16	3000	100
64	31	35	2	3079	3007	32	0.09	3030	101
64	31	35	2	3090	3006	31	0.02	3060	102
64	32	35	3	3101	3005	28	0.95	3090	103
64	32	35	3	3106	3002	27	0.93	3120	104
64	32	36	3	3109	2999	26	0.91	3150	105
64	32	36	3	3110	2996	25	0.89	3180	106

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	32	36	3	3110	2994	24	0.87	3210	107
64	32	36	3	3110	2991	23	0.85	3240	108
64	32	36	3	3111	2989	22	0.83	3270	109
64	32	36	3	3111	2986	21	0.81	3300	110
64	32	36	3	3112	2984	20	0.79	3330	111
64	32	36	3	3112	2982	19	0.77	3360	112
64	32	36	3	3113	2979	19	0.75	3390	113
64	32	36	3	3113	2977	18	0.73	3420	114
64	32	36	3	3114	2975	17	0.72	3450	115
64	32	36	3	3114	2972	16	0.70	3480	116
64	32	36	3	3115	2970	15	0.68	3510	117
64	32	36	3	3116	2968	15	0.67	3540	118
64	32	36	3	3116	2966	14	0.65	3570	119
64	32	36	3	3117	2964	13	0.64	3600	120
64	32	36	3	3118	2962	13	0.62	3630	121
64	32	36	3	3119	2960	12	0.61	3660	122
64	32	36	3	3119	2958	11	0.59	3690	123
64	32	36	3	3120	2956	11	0.58	3720	124
64	32	36	3	3121	2954	10	0.56	3750	125
64	32	36	3	3122	2952	9	0.55	3780	126
64	32	36	3	3123	2950	9	0.54	3810	127
64	32	36	3	3124	2949	8	0.53	3840	128
64	32	36	3	3125	2947	8	0.51	3870	129
64	32	36	3	3126	2945	7	0.50	3900	130
64	32	36	3	3127	2943	6	0.49	3930	131
64	32	36	3	3128	2942	6	0.48	3960	132
64	32	36	3	3129	2940	5	0.47	3990	133
64	32	36	3	3131	2938	5	0.46	4020	134
64	32	36	3	3132	2937	4	0.44	4050	135
64	32	36	3	3133	2935	4	0.43	4080	136
64	32	36	3	3135	2934	3	0.42	4110	137
64	32	36	3	3136	2932	3	0.41	4140	138
64	32	36	3	3138	2931	3	0.40	4170	139
64	32	36	3	3139	2929	2	0.39	4200	140
64	32	36	3	3141	2928	2	0.39	4230	141
64	32	36	3	3142	2927	1	0.38	4260	142
64	32	36	3	3144	2925	1	0.37	4290	143
64	32	36	3	3146	2924	0	0.36	4320	144
64	32	36	3	3148	2922	0	0.35	4350	145
64	32	36	3	3150	2921	0	0.34	4380	146
64	32	36	3	3152	2920	-1	0.33	4410	147
64	32	36	3	3154	2919	-1	0.33	4440	148
64	32	36	3	3157	2917	-1	0.32	4470	149
64	32	36	3	3159	2916	-2	0.31	4500	150
64	32	36	3	3162	2915	-2	0.30	4530	151
64	32	36	3	3164	2914	-2	0.30	4560	152
64	32	36	3	3167	2913	-3	0.29	4590	153
64	32	36	3	3170	2911	-3	0.28	4620	154
64	32	36	3	3173	2910	-3	0.28	4650	155
64	32	36	3	3176	2909	-4	0.27	4680	156
64	32	36	3	3179	2908	-4	0.26	4710	157
64	32	36	3	3182	2907	-4	0.26	4740	158
64	32	36	3	3186	2906	-4	0.25	4770	159
64	32	36	3	3189	2905	-5	0.24	4800	160
64	32	36	3	3193	2904	-5	0.24	4830	161
64	32	36	3	3197	2903	-5	0.23	4860	162
64	33	36	3	3201	2902	-3	0.23	4890	163
64	33	36	3	3206	2901	-3	0.23	4920	164
64	33	36	3	3210	2900	-3	0.23	4950	165
64	33	37	3	3215	2899	12	0.22	4980	166
64	33	37	3	3221	2897	12	0.22	5010	167
64	33	37	3	3226	2896	12	0.21	5040	168
64	33	37	3	3232	2894	12	0.21	5070	169
64	33	37	3	3238	2893	12	0.20	5100	170
64	33	37	3	3244	2891	12	0.20	5130	171

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	33	37	3	3251	2890	12	0.20	5160	172
64	33	37	3	3257	2888	11	0.19	5190	173
64	33	37	3	3264	2887	11	0.19	5220	174
64	33	37	3	3271	2886	11	0.19	5250	175
64	33	37	3	3279	2884	11	0.18	5280	176
64	33	37	3	3286	2883	11	0.18	5310	177
64	33	37	3	3294	2882	11	0.17	5340	178
64	34	37	3	3302	2880	4	0.17	5370	179
64	34	37	3	3308	2880	4	0.17	5400	180
64	34	37	3	3315	2879	4	0.17	5430	181
64	34	37	3	3321	2878	4	0.16	5460	182
64	34	37	3	3327	2877	4	0.16	5490	183
64	34	37	3	3334	2876	4	0.16	5520	184
64	34	37	3	3341	2875	4	0.15	5550	185
64	34	37	3	3347	2874	4	0.15	5580	186
64	34	37	3	3354	2873	4	0.15	5610	187
64	34	37	3	3361	2872	4	0.15	5640	188
64	34	37	3	3368	2871	3	0.14	5670	189
64	34	37	3	3375	2870	3	0.14	5700	190
64	34	37	3	3382	2869	3	0.14	5730	191
64	34	37	3	3389	2868	3	0.14	5760	192
64	34	37	3	3396	2867	3	0.13	5790	193
64	35	37	3	3404	2866	4	0.13	5820	194
64	35	37	3	3411	2867	4	0.13	5850	195
64	35	37	3	3419	2867	4	0.13	5880	196
64	35	37	3	3426	2867	4	0.13	5910	197
64	35	37	3	3434	2867	4	0.13	5940	198
64	35	37	3	3441	2867	4	0.13	5970	199
64	35	37	3	3448	2867	4	0.13	6000	200
64	35	37	3	3455	2867	4	0.13	6030	201
64	35	37	3	3462	2868	4	0.13	6060	202
64	35	37	3	3470	2868	4	0.12	6090	203
64	35	37	3	3477	2868	4	0.12	6120	204
64	35	37	3	3484	2868	4	0.12	6150	205
64	35	37	3	3491	2868	4	0.12	6180	206
64	35	37	3	3497	2868	4	0.12	6210	207
64	36	37	3	3508	2869	16	0.12	6240	208
64	36	37	3	3521	2871	16	0.12	6270	209
64	36	37	3	3533	2873	16	0.12	6300	210
64	36	37	3	3546	2874	16	0.12	6330	211
64	36	37	3	3559	2876	16	0.12	6360	212
64	36	37	3	3571	2877	16	0.12	6390	213
64	36	37	3	3584	2879	16	0.12	6420	214
64	36	37	3	3596	2881	16	0.11	6450	215
64	37	37	3	3609	2883	17	0.11	6480	216
64	37	37	3	3622	2886	17	0.11	6510	217
64	37	37	3	3636	2889	17	0.11	6540	218
64	37	37	3	3649	2892	17	0.11	6570	219
64	37	37	3	3663	2895	17	0.11	6600	220
64	37	37	3	3676	2898	17	0.11	6630	221
64	37	36	3	3690	2901	19	0.11	6660	222
64	38	36	3	3704	2905	20	0.12	6690	223
64	38	36	3	3718	2911	20	0.12	6720	224
64	38	36	3	3732	2916	20	0.13	6750	225
64	38	36	3	3746	2922	20	0.13	6780	226
64	38	36	3	3759	2927	20	0.14	6810	227
64	38	36	3	3772	2933	21	0.14	6840	228
64	38	36	3	3784	2938	21	0.15	6870	229
64	38	36	3	3796	2943	21	0.15	6900	230
64	39	36	3	3808	2948	22	0.16	6930	231
64	39	36	3	3820	2952	22	0.17	6960	232
64	39	36	3	3831	2956	22	0.18	6990	233
64	39	36	3	3842	2960	22	0.19	7020	234
64	39	36	3	3853	2964	22	0.20	7050	235
64	39	36	3	3863	2968	22	0.21	7080	236

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	39	36	3	3872	2972	22	0.22	7110	237
64	39	36	3	3881	2975	22	0.24	7140	238
64	39	36	3	3889	2979	22	0.25	7170	239
64	39	36	3	3897	2983	23	0.26	7200	240
64	40	36	3	3909	2986	26	0.29	7230	241
64	40	36	3	3922	2988	27	0.33	7260	242
64	40	36	3	3933	2990	27	0.38	7290	243
64	40	36	3	3943	2993	27	0.43	7320	244
64	40	36	3	3951	2995	27	0.49	7350	245
64	40	36	3	3958	2997	28	0.56	7380	246
64	40	36	3	3964	3000	28	0.63	7410	247
64	40	35	3	3968	3001	28	0.70	7440	248
64	40	35	3	3972	3003	28	0.78	7470	249
64	40	35	3	3975	3005	29	0.86	7500	250
64	40	35	3	3977	3007	30	0.95	7530	251
64	40	35	2	3984	3009	30	0.01	7560	252
64	40	35	2	3994	3011	31	0.04	7590	253
64	41	35	2	4004	3013	29	0.05	7620	254
64	41	35	2	4014	3014	29	0.05	7650	255
64	41	35	2	4023	3015	29	0.05	7680	256
64	41	35	2	4032	3016	29	0.05	7710	257
64	41	35	2	4041	3017	29	0.05	7740	258
64	41	35	2	4049	3018	29	0.05	7770	259
64	41	35	2	4058	3019	29	0.05	7800	260
64	41	35	2	4066	3020	29	0.05	7830	261
64	41	35	2	4075	3022	29	0.05	7860	262
64	41	35	2	4083	3023	29	0.05	7890	263
64	41	35	2	4091	3024	29	0.06	7920	264
64	41	35	2	4098	3025	29	0.06	7950	265
64	42	35	2	4106	3024	31	0.06	7980	266
64	42	35	2	4114	3024	31	0.06	8010	267
64	42	35	2	4122	3023	31	0.06	8040	268
64	42	35	2	4129	3022	31	0.06	8070	269
64	42	35	2	4137	3022	31	0.06	8100	270
64	42	35	2	4144	3021	31	0.06	8130	271
64	42	35	2	4151	3020	31	0.06	8160	272
64	42	35	2	4158	3019	31	0.07	8190	273
64	42	35	2	4164	3019	31	0.07	8220	274
64	42	35	2	4171	3018	31	0.07	8250	275
64	42	35	2	4177	3017	31	0.07	8280	276
64	42	35	2	4183	3016	31	0.07	8310	277
64	42	35	2	4189	3016	31	0.07	8340	278
64	42	35	2	4194	3015	31	0.07	8370	279
64	43	35	2	4200	3014	32	0.08	8400	280
64	43	35	2	4206	3011	32	0.08	8430	281
64	43	35	2	4211	3008	32	0.08	8460	282
64	43	35	2	4217	3005	32	0.08	8490	283
64	43	35	2	4222	3001	32	0.08	8520	284
64	43	36	2	4228	2998	33	0.08	8550	285
64	43	36	2	4235	2995	33	0.08	8580	286
64	43	36	2	4241	2991	33	0.08	8610	287
64	43	36	2	4248	2988	34	0.09	8640	288
64	43	36	2	4254	2984	34	0.09	8670	289
64	43	36	2	4261	2981	34	0.09	8700	290
64	43	36	2	4267	2977	34	0.09	8730	291
64	43	36	2	4273	2974	34	0.09	8760	292
64	43	36	2	4278	2970	34	0.10	8790	293
64	43	36	2	4284	2966	34	0.10	8820	294
64	43	36	2	4289	2963	34	0.10	8850	295
64	43	36	2	4295	2959	34	0.10	8880	296
64	43	36	2	4300	2955	34	0.10	8910	297
64	44	36	2	4305	2949	33	0.12	8940	298
64	44	36	2	4309	2942	34	0.13	8970	299
64	44	36	2	4314	2935	34	0.14	9000	300
64	44	36	2	4318	2928	35	0.16	9030	301

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	44	36	2	4323	2921	35	0.17	9060	302
64	44	36	2	4327	2914	36	0.19	9090	303
64	44	36	2	4331	2907	36	0.20	9120	304
64	44	37	2	4336	2899	36	0.22	9150	305
64	44	37	2	4342	2892	36	0.22	9180	306
64	44	37	2	4349	2884	36	0.22	9210	307
64	44	37	2	4355	2877	36	0.23	9240	308
64	44	37	2	4361	2870	36	0.23	9270	309
64	44	37	2	4367	2862	36	0.24	9300	310
64	44	37	2	4373	2855	37	0.24	9330	311
64	44	37	2	4379	2847	37	0.25	9360	312
64	44	37	2	4384	2840	37	0.25	9390	313
64	44	37	2	4390	2832	37	0.26	9420	314
64	44	37	2	4395	2825	37	0.26	9450	315
64	45	37	2	4401	2817	41	0.27	9480	316
64	45	37	2	4407	2804	41	0.27	9510	317
64	45	38	2	4415	2791	42	0.28	9540	318
64	45	38	2	4424	2778	42	0.28	9570	319
64	45	38	2	4433	2765	42	0.29	9600	320
64	45	38	2	4441	2752	42	0.29	9630	321
64	45	38	2	4450	2738	42	0.29	9660	322
64	45	38	2	4458	2725	42	0.30	9690	323
64	45	38	2	4466	2711	43	0.30	9720	324
64	45	39	2	4474	2698	43	0.31	9750	325
64	45	39	2	4485	2684	43	0.31	9780	326
64	45	39	2	4496	2670	43	0.31	9810	327
64	46	39	2	4505	2655	39	0.31	9840	328
64	46	39	2	4513	2639	39	0.32	9870	329
64	46	39	2	4521	2623	39	0.32	9900	330
64	46	39	2	4529	2606	39	0.32	9930	331
64	46	40	2	4537	2590	38	0.32	9960	332
64	46	40	2	4546	2574	38	0.33	9990	333
64	46	40	2	4554	2558	38	0.33	10020	334
64	46	40	2	4563	2542	38	0.34	10050	335
64	46	40	2	4571	2525	38	0.34	10080	336
64	46	40	2	4579	2508	38	0.34	10110	337
64	46	41	2	4587	2490	42	0.35	10140	338
64	46	41	2	4597	2470	42	0.36	10170	339
64	47	41	2	4605	2449	41	0.37	10200	340
64	47	41	2	4613	2427	41	0.39	10230	341
64	47	41	2	4621	2406	41	0.40	10260	342
64	47	42	2	4630	2379	47	0.43	10290	343
64	47	42	2	4640	2350	48	0.47	10320	344
64	47	42	2	4649	2322	49	0.51	10350	345
64	47	43	2	4658	2293	54	0.57	10380	346
64	47	43	2	4668	2254	56	0.72	10410	347
64	47	43	2	4678	2220	59	0.92	10440	348
64	47	44	1	4694	2174	63	0.12	10470	349
64	48	44	1	4716	2103	64	0.18	10500	350
64	48	46	1	4759	1966	75	0.21	10530	351
64	49	50	1	4862	1569	82	0.31	10560	352
64	50	52	1	4909	1396	81	0.40	10590	353
64	50	52	1	4918	1324	82	0.47	10620	354
64	50	53	1	4926	1259	84	0.63	10650	355
64	50	53	1	4933	1208	88	0.89	10680	356
64	50	54	1	4936	1194	89	1.00	10690	E
65	19	38	2	1850	2717	28	0.00	0	0
65	21	40	2	2032	2579	26	0.00	30	1
65	22	40	3	2101	2525	30	0.96	60	2
65	22	40	3	2101	2503	25	0.60	90	3
65	22	41	3	2102	2474	26	0.56	120	4
65	22	41	3	2102	2453	26	0.56	150	5
65	22	41	3	2103	2437	26	0.56	180	6
65	22	41	3	2105	2426	26	0.56	210	7
65	22	41	3	2107	2419	26	0.55	240	8

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
65	22	41	3	2110	2413	26	0.55	270	9
65	22	41	3	2114	2409	26	0.55	300	10
65	22	41	3	2120	2407	26	0.55	330	11
65	22	41	3	2128	2405	26	0.54	360	12
65	22	41	3	2140	2403	26	0.54	390	13
65	22	41	3	2157	2402	26	0.54	420	14
65	22	41	3	2181	2402	26	0.54	450	15
65	23	41	3	2216	2401	27	0.57	480	16
65	23	41	3	2259	2401	28	0.67	510	17
65	24	42	3	2301	2399	28	0.77	540	18
65	24	42	3	2301	2378	28	0.79	570	19
65	24	42	3	2302	2361	28	0.81	600	20
65	24	42	3	2302	2348	28	0.83	630	21
65	24	42	3	2303	2338	29	0.85	660	22
65	24	42	3	2303	2330	29	0.87	690	23
65	24	42	3	2304	2323	29	0.89	720	24
65	24	42	3	2305	2318	29	0.92	750	25
65	24	42	3	2306	2314	29	0.94	780	26
65	24	42	3	2308	2311	30	0.96	810	27
65	24	42	3	2309	2309	30	0.99	840	28
65	24	43	2	2325	2296	28	0.00	870	29
65	24	43	2	2345	2276	28	0.00	900	30
65	24	43	2	2365	2256	28	0.00	930	31
65	24	43	2	2385	2236	28	0.00	960	32
65	25	43	2	2405	2216	30	0.01	990	33
65	25	44	2	2426	2197	29	0.05	1020	34
65	25	44	2	2443	2179	29	0.06	1050	35
65	25	44	2	2459	2161	29	0.06	1080	36
65	25	44	2	2474	2145	29	0.06	1110	37
65	25	44	2	2490	2128	29	0.06	1140	38
65	26	44	2	2505	2112	34	0.07	1170	39
65	26	45	2	2522	2095	36	0.07	1200	40
65	26	45	2	2540	2077	36	0.07	1230	41
65	26	45	2	2557	2060	36	0.08	1260	42
65	26	45	2	2573	2042	36	0.08	1290	43
65	26	45	2	2589	2025	36	0.08	1320	44
65	27	45	2	2606	2008	40	0.08	1350	45
65	27	46	2	2625	1989	42	0.09	1380	46
65	27	46	2	2644	1970	42	0.09	1410	47
65	27	46	2	2662	1950	42	0.10	1440	48
65	27	46	2	2679	1931	42	0.11	1470	49
65	27	46	2	2695	1912	42	0.11	1500	50
65	28	47	2	2717	1891	51	0.13	1530	51
65	28	47	2	2741	1867	52	0.16	1560	52
65	28	47	2	2762	1844	52	0.19	1590	53
65	28	47	2	2781	1823	52	0.23	1620	54
65	28	47	2	2797	1804	53	0.28	1650	55
65	29	47	2	2822	1801	57	0.48	1680	56
65	29	47	2	2843	1800	59	0.89	1710	57
65	29	48	1	2867	1776	58	0.00	1740	58
65	29	48	1	2892	1746	58	0.00	1770	59
65	30	48	1	2918	1716	60	0.00	1800	60
65	30	49	1	2944	1682	63	0.00	1830	61
65	30	49	1	2970	1646	63	0.00	1860	62
65	30	49	1	2996	1611	63	0.00	1890	63
65	31	50	1	3020	1570	66	0.00	1920	64
65	31	50	1	3044	1528	66	0.00	1950	65
65	31	51	1	3067	1482	69	0.00	1980	66
65	31	51	1	3087	1431	69	0.00	2010	67
65	32	52	1	3103	1377	72	0.00	2040	68
65	32	52	1	3114	1320	72	0.00	2070	69
65	32	53	1	3117	1263	73	0.00	2100	70
65	32	53	1	3117	1207	73	0.00	2130	71
65	32	54	1	3103	1137	76	0.00	2160	72
65	31	55	1	3081	1039	78	0.00	2190	73

Scenario 1

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
65	31	56	1	3054	920	80	0.01	2220	74
65	31	57	1	3070	819	83	0.03	2250	75
65	32	57	1	3141	801	85	0.70	2280	76
65	32	57	1	3146	801	85	1.00	2281	E
66	19	38	2	1817	2783	28	0.00	0	0
66	18	36	3	1794	2900	16	0.32	30	1
66	19	35	3	1802	3014	16	0.37	60	2
66	19	35	3	1819	3085	17	0.43	90	3
66	19	34	3	1834	3132	15	0.50	120	4
66	19	34	3	1849	3167	18	0.57	150	5
66	19	34	3	1866	3195	20	0.66	180	6
66	19	33	3	1883	3219	24	0.77	210	7
66	20	33	3	1901	3239	28	0.91	240	8
66	20	33	2	1919	3251	31	0.04	270	9
66	20	33	2	1935	3262	36	0.18	300	10
66	20	33	2	1952	3272	40	0.35	330	11
66	20	33	2	1969	3281	46	0.54	360	12
66	20	33	2	1985	3288	53	0.76	390	13
66	21	33	1	2002	3294	60	0.01	420	14
66	21	33	1	2016	3298	67	0.58	450	15
66	21	32	1	2023	3301	73	1.00	470	E
67	19	38	2	1817	2750	28	0.00	0	0
67	18	36	3	1794	2926	22	0.64	30	1
67	19	35	3	1803	3029	24	0.75	60	2
67	19	35	3	1821	3097	27	0.87	90	3
67	19	34	3	1835	3139	30	1.00	120	4
67	19	34	2	1851	3177	34	0.15	150	5
67	19	33	2	1868	3205	40	0.33	180	6
67	19	33	2	1884	3227	47	0.58	210	7
67	20	33	2	1900	3245	56	0.88	240	8
67	20	33	1	1913	3259	65	0.39	270	9
67	20	33	1	1922	3269	72	1.00	295	E
68	19	38	2	1817	2717	28	0.00	0	0
68	18	37	3	1794	2887	19	0.40	30	1
68	18	35	3	1799	3007	17	0.45	60	2
68	19	35	3	1815	3081	19	0.52	90	3
68	19	34	3	1831	3129	18	0.60	120	4
68	19	34	3	1846	3165	21	0.69	150	5
68	19	34	3	1862	3193	24	0.79	180	6
68	19	33	3	1879	3217	28	0.93	210	7
68	19	33	2	1896	3237	33	0.09	240	8
68	20	33	2	1912	3251	37	0.24	270	9
68	20	33	2	1928	3263	42	0.41	300	10
68	20	33	2	1945	3273	48	0.61	330	11
68	20	33	2	1962	3281	55	0.85	360	12
68	20	33	1	1977	3290	63	0.29	390	13
68	20	33	1	1989	3299	72	1.00	419	E

Scenario 2

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
1	20	26	2	1983	3983	60	1.00	0	0
1	22	25	1	2165	4058	69	0.51	30	1
1	22	25	1	2195	4083	60	0.01	60	2
1	23	25	2	2204	4085	64	1.00	62	E
2	20	26	2	1983	3950	60	1.00	0	0
2	22	26	1	2119	3919	75	1.00	10	E
3	20	26	2	1983	3917	60	1.00	0	0
3	21	28	1	2083	3781	79	1.00	13	E
4	20	26	2	1950	3983	60	1.00	0	0
4	21	23	1	2030	4216	75	0.83	30	1
4	21	22	1	2084	4318	75	0.84	60	2
4	22	22	1	2124	4392	74	0.82	90	3
4	22	21	1	2147	4453	73	0.77	120	4
4	22	20	1	2163	4513	71	0.71	150	5
4	22	20	1	2174	4580	70	0.67	180	6
4	22	19	1	2182	4654	71	0.68	210	7
4	22	18	1	2187	4713	78	1.00	229	E
5	20	26	2	1950	3950	60	1.00	0	0
5	21	27	1	2035	3871	77	1.00	11	E
6	20	26	2	1950	3917	60	1.00	0	0
6	21	28	1	2009	3754	79	1.00	13	E
7	20	26	2	1917	3983	60	1.00	0	0
7	18	24	1	1789	4142	73	0.75	30	1
7	18	23	1	1734	4230	74	0.79	60	2
7	18	22	1	1703	4310	75	0.84	90	3
7	17	22	1	1686	4371	76	0.88	120	4
7	17	21	1	1672	4427	77	0.93	150	5
7	17	21	1	1662	4482	78	0.97	180	6
7	17	20	1	1656	4528	79	1.00	206	E
8	20	26	2	1917	3950	60	1.00	0	0
8	17	27	1	1694	3870	75	0.87	30	1
8	17	28	1	1606	3793	77	0.92	60	2
8	16	28	1	1556	3720	78	0.96	90	3
8	16	29	1	1522	3643	79	1.00	120	4
8	16	29	1	1521	3642	79	1.00	120	E
9	20	26	2	1917	3917	60	1.00	0	0
9	19	29	1	1851	3684	74	0.74	30	1
9	19	30	1	1900	3530	76	0.83	60	2
9	20	30	1	1904	3523	78	1.00	62	E
10	20	26	2	1975	3900	53	0.75	0	0
10	21	28	1	2065	3717	79	1.00	16	E
11	20	26	2	2000	3925	53	0.75	0	0
11	22	28	1	2192	3788	72	1.00	30	E
12	20	26	2	2000	3975	53	0.75	0	0
12	22	26	1	2192	3968	75	1.00	20	E
13	20	26	2	1975	4000	53	0.75	0	0
13	22	23	2	2121	4209	51	0.69	30	1
13	23	23	2	2222	4272	47	0.49	60	2
13	23	22	2	2298	4311	52	0.70	90	3
13	24	22	2	2375	4340	51	0.92	120	4
13	25	22	2	2401	4350	62	1.00	130	E
14	20	26	2	1925	4000	53	0.75	0	0
14	19	23	2	1894	4250	56	0.87	30	1
14	20	22	2	1906	4351	56	0.87	60	2
14	20	21	2	1928	4431	56	0.88	90	3
14	20	21	2	1955	4499	57	0.90	120	4
14	20	20	2	1984	4561	59	0.96	150	5
14	21	19	1	2016	4621	60	0.01	180	6
14	21	19	1	2048	4685	62	0.11	210	7
14	22	18	1	2101	4748	65	0.26	240	8
14	22	18	1	2129	4773	78	1.00	254	E
15	20	26	2	1900	3975	53	0.75	0	0
15	17	25	2	1684	4044	57	0.91	30	1
15	16	25	2	1593	4072	59	0.98	60	2
15	16	25	1	1522	4090	62	0.10	90	3

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
28	26	29	3	2543	3614	18	0.63	180	6
28	27	30	3	2608	3588	22	0.75	210	7
28	27	30	3	2661	3570	27	0.90	240	8
28	28	30	2	2718	3551	34	0.13	270	9
28	29	30	2	2806	3526	44	0.50	300	10
28	30	31	2	2913	3499	50	0.60	330	11
28	30	31	2	2973	3475	52	0.66	360	12
28	31	31	2	3025	3454	57	0.90	390	13
28	31	31	1	3050	3449	69	1.00	419	E
29	20	26	2	1950	3983	30	0.00	0	0
29	21	25	3	2052	4011	14	0.21	30	1
29	23	26	3	2215	3960	-1	0.15	60	2
29	24	26	3	2305	3908	-5	0.14	90	3
29	24	27	3	2389	3862	-6	0.14	120	4
29	25	27	3	2456	3825	-16	0.15	150	5
29	26	28	3	2524	3789	2	0.17	180	6
29	26	28	3	2599	3754	3	0.21	210	7
29	27	28	3	2681	3724	11	0.26	240	8
29	28	28	3	2735	3703	2	0.31	270	9
29	28	29	3	2780	3680	12	0.41	300	10
29	29	29	3	2870	3643	29	0.93	330	11
29	30	29	2	2956	3601	31	0.04	360	12
29	30	30	3	2981	3577	25	0.86	390	13
29	30	30	3	2999	3556	19	0.70	420	14
29	31	30	3	3020	3535	22	0.75	450	15
29	31	30	3	3039	3514	24	0.81	480	16
29	31	31	3	3059	3492	26	0.89	510	17
29	31	31	3	3083	3472	30	0.99	540	18
29	32	31	2	3113	3446	34	0.13	570	19
29	32	31	2	3138	3418	40	0.35	600	20
29	32	32	2	3160	3395	49	0.64	630	21
29	32	32	2	3183	3373	58	0.94	660	22
29	32	32	1	3190	3365	67	1.00	685	E
30	20	26	2	1950	3950	30	0.00	0	0
30	22	27	3	2101	3845	8	0.06	30	1
30	23	28	3	2204	3779	-3	0.05	60	2
30	23	28	3	2285	3738	-3	0.05	90	3
30	24	28	3	2362	3703	-10	0.05	120	4
30	25	29	3	2438	3666	-3	0.06	150	5
30	26	29	3	2515	3631	-1	0.07	180	6
30	26	29	3	2586	3603	0	0.09	210	7
30	27	30	3	2643	3583	2	0.11	240	8
30	27	30	3	2690	3566	3	0.13	270	9
30	28	30	3	2745	3544	18	0.26	300	10
30	28	30	3	2775	3522	24	0.61	330	11
30	29	31	2	2829	3499	40	0.08	360	12
30	30	31	2	2928	3471	31	0.04	390	13
30	30	31	3	2952	3456	27	0.93	420	14
30	30	31	3	2964	3444	23	0.83	450	15
30	30	31	3	2978	3433	19	0.75	480	16
30	30	31	3	2995	3423	16	0.67	510	17
30	31	31	3	3020	3408	21	0.70	540	18
30	31	32	3	3051	3389	25	0.77	570	19
30	31	32	3	3087	3368	26	0.82	600	20
30	32	32	3	3122	3348	28	0.91	630	21
30	32	32	2	3152	3326	31	0.03	660	22
30	32	32	2	3177	3305	34	0.14	690	23
30	33	33	2	3204	3283	38	0.26	720	24
30	33	33	2	3228	3255	45	0.50	750	25
30	33	33	2	3248	3229	55	0.82	780	26
30	33	33	1	3250	3213	69	0.66	810	27
30	33	33	1	3249	3211	73	1.00	816	E
31	20	26	2	1950	3917	30	0.00	0	0
31	21	28	3	2090	3766	24	0.39	30	1
31	22	28	3	2171	3717	12	0.35	60	2

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
31	23	29	3	2255	3679	10	0.34	90	3
31	24	29	3	2336	3645	6	0.36	120	4
31	25	29	3	2412	3613	9	0.39	150	5
31	25	30	3	2487	3580	13	0.44	180	6
31	26	30	3	2554	3552	14	0.51	210	7
31	27	30	3	2614	3527	17	0.59	240	8
31	27	30	3	2666	3509	21	0.70	270	9
31	28	31	3	2711	3488	30	1.00	300	10
31	28	31	2	2789	3461	40	0.33	330	11
31	30	31	2	2904	3435	45	0.46	360	12
31	30	31	2	2966	3419	45	0.46	390	13
31	31	31	2	3019	3406	47	0.57	420	14
31	31	32	2	3065	3393	55	0.81	450	15
31	32	32	1	3104	3380	61	0.07	480	16
31	32	32	1	3105	3376	67	1.00	498	E
32	20	26	2	1917	3983	30	0.00	0	0
32	20	25	3	1921	4033	9	0.18	30	1
32	20	25	3	1982	4066	7	0.12	60	2
32	22	25	3	2126	4051	18	0.10	90	3
32	23	26	3	2262	3990	-4	0.09	120	4
32	24	26	3	2352	3938	-8	0.08	150	5
32	25	27	3	2433	3893	-19	0.09	180	6
32	25	27	3	2495	3856	-19	0.10	210	7
32	26	27	3	2585	3816	3	0.13	240	8
32	27	28	3	2667	3782	8	0.16	270	9
32	28	28	3	2727	3757	-3	0.19	300	10
32	28	28	3	2769	3736	-1	0.22	330	11
32	29	28	3	2814	3714	16	0.29	360	12
32	30	29	3	2912	3659	28	0.73	390	13
32	30	30	3	2989	3598	14	0.53	420	14
32	31	30	3	3008	3578	14	0.48	450	15
32	31	30	3	3029	3557	15	0.52	480	16
32	31	30	3	3047	3536	17	0.57	510	17
32	31	30	3	3063	3515	18	0.61	540	18
32	31	31	3	3081	3493	20	0.67	570	19
32	32	31	3	3107	3472	26	0.77	600	20
32	32	31	3	3142	3446	29	0.96	630	21
32	32	31	2	3163	3419	34	0.12	660	22
32	32	32	2	3180	3395	39	0.31	690	23
32	32	32	2	3199	3374	45	0.51	720	24
32	33	32	2	3215	3344	48	0.60	750	25
32	33	32	2	3230	3312	50	0.68	780	26
32	33	33	2	3247	3281	58	0.93	810	27
32	33	33	1	3243	3249	73	1.00	837	E
33	20	26	2	1917	3950	30	0.00	0	0
33	19	27	3	1883	3867	14	0.18	30	1
33	20	28	3	1908	3758	20	0.19	60	2
33	20	29	3	1999	3650	19	0.17	90	3
33	21	29	3	2092	3606	13	0.14	120	4
33	22	30	3	2173	3574	8	0.14	150	5
33	23	30	3	2256	3545	8	0.14	180	6
33	24	30	3	2338	3518	4	0.14	210	7
33	25	31	3	2416	3489	8	0.16	240	8
33	25	31	3	2487	3458	9	0.17	270	9
33	26	31	3	2548	3433	6	0.20	300	10
33	27	31	3	2601	3409	7	0.24	330	11
33	27	32	3	2639	3393	8	0.32	360	12
33	27	32	3	2659	3376	12	0.43	390	13
33	27	32	3	2673	3358	16	0.58	420	14
33	27	32	3	2682	3337	23	0.78	450	15
33	28	32	2	2701	3316	30	0.05	480	16
33	28	32	2	2788	3301	31	0.06	510	17
33	29	33	2	2872	3292	29	0.08	540	18
33	30	33	3	2938	3286	29	0.91	570	19
33	30	33	3	2962	3283	24	0.60	600	20

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
33	31	33	3	3003	3279	20	0.41	630	21
33	31	33	3	3048	3260	20	0.41	660	22
33	31	33	3	3096	3243	20	0.41	690	23
33	32	33	3	3130	3220	16	0.44	720	24
33	32	34	3	3158	3197	12	0.47	750	25
33	32	34	3	3181	3178	12	0.48	780	26
33	33	34	3	3203	3159	10	0.49	810	27
33	33	34	3	3220	3142	12	0.53	840	28
33	33	34	3	3236	3123	14	0.58	870	29
33	33	34	3	3250	3104	15	0.63	900	30
33	33	35	3	3263	3089	12	0.67	930	31
33	33	35	3	3276	3075	14	0.70	960	32
33	33	35	3	3289	3061	16	0.74	990	33
33	34	35	3	3301	3046	26	0.78	1020	34
33	34	35	3	3331	3030	28	0.87	1050	35
33	34	35	3	3358	3014	30	0.98	1080	36
33	34	36	2	3373	2998	32	0.06	1110	37
33	34	36	2	3386	2984	34	0.13	1140	38
33	34	36	2	3397	2971	37	0.20	1170	39
33	35	36	2	3410	2958	38	0.26	1200	40
33	35	36	2	3422	2945	40	0.32	1230	41
33	35	36	2	3434	2932	42	0.38	1260	42
33	35	36	2	3445	2921	44	0.45	1290	43
33	35	36	2	3456	2909	46	0.53	1320	44
33	35	37	2	3467	2898	45	0.61	1350	45
33	35	37	2	3479	2884	47	0.70	1380	46
33	35	37	2	3492	2871	49	0.79	1410	47
33	36	37	2	3503	2858	59	0.88	1440	48
33	36	37	2	3511	2846	62	0.98	1470	49
33	36	37	2	3513	2844	63	1.00	1477	E
34	20	26	2	1917	3917	30	0.00	0	0
34	20	28	3	1966	3751	23	0.45	30	1
34	21	29	3	2065	3672	18	0.38	60	2
34	22	29	3	2151	3635	11	0.36	90	3
34	23	29	3	2232	3605	11	0.36	120	4
34	24	30	3	2317	3574	11	0.37	150	5
34	24	30	3	2395	3543	12	0.40	180	6
34	25	30	3	2471	3513	13	0.44	210	7
34	26	31	3	2536	3485	15	0.51	240	8
34	26	31	3	2590	3458	18	0.60	270	9
34	27	31	3	2637	3439	23	0.77	300	10
34	27	31	2	2675	3422	30	0.01	330	11
34	28	32	2	2752	3393	37	0.25	360	12
34	29	32	2	2845	3371	40	0.30	390	13
34	30	32	2	2932	3359	39	0.30	420	14
34	30	32	2	2996	3349	36	0.19	450	15
34	31	32	2	3045	3337	38	0.26	480	16
34	31	32	2	3089	3326	41	0.35	510	17
34	32	32	2	3126	3307	46	0.53	540	18
34	32	33	2	3160	3287	52	0.73	570	19
34	32	33	2	3190	3268	57	0.92	600	20
34	33	33	1	3201	3242	70	0.79	630	21
34	33	33	1	3201	3239	73	1.00	634	E
35	19	38	2	1883	2783	60	1.00	0	0
35	21	37	1	2050	2870	73	1.00	21	E
36	19	38	2	1883	2750	60	1.00	0	0
36	21	37	1	2094	2817	73	1.00	25	E
37	19	38	2	1883	2717	60	1.00	0	0
37	22	38	1	2135	2732	67	0.65	30	1
37	22	38	1	2157	2739	71	1.00	37	E
38	19	38	2	1850	2783	60	1.00	0	0
38	20	36	1	1981	2922	72	1.00	21	E
39	19	38	2	1850	2750	60	1.00	0	0
39	21	37	1	2012	2838	73	1.00	17	E
40	19	38	2	1850	2717	60	1.00	0	0

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
40	22	38	1	2114	2714	71	1.00	29	E
41	19	38	2	1817	2783	60	1.00	0	0
41	20	36	1	1916	2985	72	0.99	30	1
41	20	36	1	1917	2986	72	1.00	30	E
42	19	38	2	1817	2750	60	1.00	0	0
42	19	36	1	1881	2968	71	0.96	30	1
42	20	36	1	1902	2987	72	1.00	34	E
43	19	38	2	1817	2717	60	1.00	0	0
43	21	39	1	2018	2636	72	0.99	30	1
43	22	39	1	2152	2629	71	1.00	57	E
44	19	38	2	1875	2700	52	0.75	0	0
44	22	39	2	2116	2660	52	0.73	30	1
44	23	39	2	2246	2667	45	0.47	60	2
44	24	39	2	2346	2672	41	0.47	90	3
44	25	39	2	2440	2675	42	0.51	120	4
44	26	39	2	2522	2678	49	0.61	150	5
44	26	39	2	2586	2681	53	0.73	180	6
44	27	39	1	2650	2684	61	0.08	210	7
44	27	39	1	2682	2684	68	1.00	238	E
45	19	38	2	1900	2725	52	0.75	0	0
45	22	38	2	2143	2744	53	0.77	30	1
45	23	38	2	2256	2757	53	0.73	60	2
45	24	38	2	2353	2769	48	0.77	90	3
45	25	38	2	2445	2778	48	0.83	120	4
45	26	38	2	2524	2784	56	0.92	150	5
45	26	38	2	2580	2787	58	1.00	175	E
46	19	38	2	1900	2775	52	0.75	0	0
46	22	37	1	2105	2842	70	1.00	24	E
47	19	38	2	1875	2800	52	0.75	0	0
47	21	36	1	2037	2936	65	0.40	30	1
47	21	36	1	2070	2948	72	1.00	40	E
48	19	38	2	1825	2800	52	0.75	0	0
48	20	35	1	1917	3005	60	0.00	30	1
48	20	35	1	1987	3041	72	1.00	52	E
49	19	38	2	1800	2775	52	0.75	0	0
49	18	36	2	1762	2965	55	0.83	30	1
49	18	35	2	1800	3057	57	0.89	60	2
49	19	34	1	1876	3109	69	0.80	90	3
49	19	34	1	1893	3117	71	1.00	97	E
50	19	38	2	1800	2725	52	0.75	0	0
50	17	36	2	1692	2927	57	0.88	30	1
50	17	36	2	1663	3000	59	0.96	60	2
50	17	35	2	1667	3055	60	0.98	90	3
50	17	35	1	1673	3097	60	0.03	120	4
50	17	34	1	1697	3130	61	0.06	150	5
50	18	34	1	1729	3163	62	0.12	180	6
50	18	34	1	1776	3189	62	0.19	210	7
50	19	33	1	1843	3201	68	0.60	240	8
50	20	33	1	1918	3205	70	0.84	270	9
50	20	33	1	1933	3206	72	1.00	276	E
51	19	38	2	1825	2700	52	0.75	0	0
51	21	40	2	2076	2589	60	0.99	30	1
51	23	40	2	2212	2575	54	0.71	60	2
51	24	40	2	2311	2570	51	0.79	90	3
51	25	40	2	2409	2565	53	0.86	120	4
51	25	40	2	2492	2565	56	0.95	150	5
51	26	40	1	2517	2569	66	0.78	180	6
51	26	40	1	2522	2570	68	1.00	189	E
52	19	38	2	1875	2700	36	0.25	0	0
52	22	39	2	2116	2660	36	0.21	30	1
52	23	39	3	2230	2668	25	0.69	60	2
52	24	39	3	2327	2674	22	0.58	90	3
52	25	39	3	2410	2679	20	0.54	120	4
52	25	39	3	2484	2685	21	0.59	150	5
52	26	39	3	2549	2690	25	0.73	180	6

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
52	26	39	3	2599	2694	29	0.94	210	7
52	27	39	2	2667	2697	38	0.25	240	8
52	28	38	2	2731	2702	44	0.46	270	9
52	28	38	2	2795	2711	51	0.71	300	10
52	29	38	2	2874	2723	56	0.82	330	11
52	30	38	2	2944	2731	65	1.00	349	E
53	19	38	2	1900	2725	36	0.25	0	0
53	22	38	2	2143	2744	35	0.16	30	1
53	23	38	3	2252	2758	27	0.84	60	2
53	24	38	3	2345	2773	24	0.70	90	3
53	25	38	3	2427	2784	21	0.66	120	4
53	25	38	3	2494	2794	22	0.69	150	5
53	26	38	3	2557	2800	26	0.82	180	6
53	27	37	3	2601	2804	29	0.94	210	7
53	27	37	2	2667	2807	38	0.25	240	8
53	28	37	2	2736	2812	40	0.39	270	9
53	28	37	2	2795	2818	43	0.45	300	10
53	29	37	2	2871	2826	52	0.56	330	11
53	30	37	2	2983	2829	59	0.79	360	12
53	31	37	2	3044	2824	59	0.95	390	13
53	31	37	2	3061	2823	60	1.00	400	E
54	19	38	2	1900	2775	36	0.25	0	0
54	22	37	2	2139	2827	45	0.45	30	1
54	23	37	2	2251	2839	42	0.38	60	2
54	24	37	2	2345	2853	35	0.24	90	3
54	25	37	2	2433	2865	33	0.15	120	4
54	26	37	2	2511	2872	35	0.18	150	5
54	26	37	2	2578	2875	38	0.32	180	6
54	27	37	2	2644	2877	46	0.51	210	7
54	28	37	2	2716	2878	52	0.69	240	8
54	28	37	2	2776	2880	56	0.79	270	9
54	29	37	2	2847	2888	62	0.95	300	10
54	29	37	2	2863	2890	63	1.00	307	E
55	19	38	2	1875	2800	36	0.25	0	0
55	21	36	2	2046	2935	45	0.29	30	1
55	22	36	2	2178	2956	52	0.40	60	2
55	23	36	2	2266	2960	43	0.43	90	3
55	24	36	2	2358	2966	36	0.30	120	4
55	25	36	2	2439	2971	32	0.12	150	5
55	26	36	2	2512	2973	32	0.09	180	6
55	26	36	2	2574	2973	35	0.21	210	7
55	27	36	2	2637	2972	41	0.38	240	8
55	28	36	2	2705	2972	47	0.58	270	9
55	28	36	2	2779	2973	52	0.75	300	10
55	29	36	2	2866	2975	57	0.90	330	11
55	30	36	2	2928	2974	59	1.00	350	E
56	19	38	2	1825	2800	36	0.25	0	0
56	20	35	2	1917	3005	38	0.26	30	1
56	21	35	2	2016	3055	48	0.60	60	2
56	22	35	2	2105	3072	57	0.85	90	3
56	23	35	2	2212	3077	58	0.89	120	4
56	24	35	2	2323	3066	51	0.99	150	5
56	24	35	2	2334	3065	51	1.00	154	E
57	19	38	2	1800	2775	36	0.25	0	0
57	18	36	2	1762	2965	34	0.14	30	1
57	18	35	2	1800	3057	35	0.16	60	2
57	19	34	2	1864	3115	41	0.35	90	3
57	20	34	2	1938	3148	47	0.58	120	4
57	21	34	2	2020	3166	57	0.90	150	5
57	21	34	1	2091	3172	68	0.70	180	6
57	22	34	1	2112	3175	69	1.00	190	E
58	19	38	2	1800	2725	36	0.25	0	0
58	17	36	2	1692	2927	31	0.02	30	1
58	17	36	2	1663	3000	32	0.08	60	2
58	17	35	2	1667	3055	33	0.11	90	3

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
58	17	35	2	1672	3098	34	0.13	120	4
58	17	34	2	1694	3131	34	0.13	150	5
58	18	34	2	1724	3165	34	0.14	180	6
58	18	34	2	1763	3192	34	0.15	210	7
58	19	33	2	1812	3211	35	0.16	240	8
58	19	33	2	1870	3224	36	0.21	270	9
58	20	33	2	1940	3231	40	0.33	300	10
58	21	33	2	2016	3235	46	0.54	330	11
58	21	33	2	2096	3235	55	0.83	360	12
58	22	33	1	2176	3234	61	0.11	390	13
58	23	33	1	2241	3236	65	0.66	420	14
58	23	33	1	2261	3236	67	1.00	434	E
59	19	38	2	1825	2700	36	0.25	0	0
59	21	40	2	2088	2595	37	0.32	30	1
59	23	40	2	2221	2585	31	0.02	60	2
59	24	40	3	2322	2582	28	0.88	90	3
59	24	40	3	2397	2578	26	0.77	120	4
59	25	40	3	2468	2579	27	0.86	150	5
59	26	40	2	2536	2580	31	0.05	180	6
59	27	40	2	2601	2582	37	0.25	210	7
59	27	40	2	2661	2587	45	0.50	240	8
59	28	40	2	2719	2593	53	0.72	270	9
59	28	39	2	2777	2601	54	0.82	300	10
59	29	39	2	2843	2607	59	0.95	330	11
59	30	39	1	2933	2615	61	0.13	360	12
59	31	39	2	3036	2628	60	0.98	390	13
59	32	39	2	3106	2636	56	0.85	420	14
59	32	39	2	3153	2627	58	0.90	450	15
59	32	39	2	3194	2616	59	0.96	480	16
59	33	39	1	3239	2603	68	0.63	510	17
59	33	40	1	3249	2598	72	1.00	520	E
60	19	38	2	1883	2783	28	0.00	0	0
60	19	37	3	1890	2808	22	0.12	30	1
60	19	37	3	1891	2879	21	0.01	60	2
60	20	35	3	1901	3011	18	0.01	90	3
60	20	35	3	1968	3017	18	0.03	120	4
60	20	35	3	1990	3026	19	0.06	150	5
60	20	35	3	1997	3039	19	0.11	180	6
60	20	35	3	1999	3060	21	0.23	210	7
60	20	35	3	2000	3092	24	0.46	240	8
60	21	34	2	2064	3102	31	0.05	270	9
60	22	34	2	2151	3110	34	0.18	300	10
60	23	34	2	2242	3109	40	0.19	330	11
60	24	35	2	2336	3099	32	0.10	360	12
60	25	35	3	2408	3086	21	0.64	390	13
60	25	35	3	2453	3080	19	0.58	420	14
60	26	35	3	2506	3075	14	0.53	450	15
60	26	35	3	2551	3071	15	0.57	480	16
60	26	35	3	2595	3067	17	0.61	510	17
60	27	35	3	2648	3062	25	0.79	540	18
60	27	35	2	2699	3057	31	0.04	570	19
60	28	35	2	2774	3056	36	0.21	600	20
60	29	35	2	2855	3055	41	0.38	630	21
60	30	35	2	2940	3051	42	0.49	660	22
60	31	35	2	3018	3044	42	0.53	690	23
60	31	35	2	3085	3031	41	0.48	720	24
60	32	35	2	3136	3017	41	0.52	750	25
60	32	35	2	3179	3002	43	0.60	780	26
60	33	36	2	3212	2989	53	0.73	810	27
60	33	36	2	3237	2975	60	0.93	840	28
60	33	36	2	3245	2971	62	1.00	849	E
61	19	38	2	1883	2750	28	0.00	0	0
61	22	37	2	2124	2811	32	0.00	30	1
61	23	37	3	2201	2827	27	0.76	60	2
61	23	37	3	2203	2845	23	0.35	90	3

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
61	23	37	3	2208	2859	21	0.16	120	4
61	23	37	3	2224	2869	20	0.08	150	5
61	23	37	3	2268	2877	19	0.03	180	6
61	24	37	3	2344	2892	12	0.02	210	7
61	25	36	3	2411	2912	4	0.02	240	8
61	25	36	3	2464	2921	4	0.02	270	9
61	26	36	3	2519	2927	-3	0.02	300	10
61	26	36	3	2563	2930	-3	0.02	330	11
61	27	36	3	2608	2933	8	0.02	360	12
61	27	36	3	2661	2936	9	0.03	390	13
61	27	36	3	2700	2939	9	0.04	420	14
61	28	36	3	2771	2941	25	0.12	450	15
61	28	36	3	2791	2944	26	0.39	480	16
61	29	36	2	2814	2947	34	0.01	510	17
61	30	36	2	2903	2952	36	0.01	540	18
61	30	36	2	2997	2945	36	0.01	570	19
61	31	36	2	3066	2930	29	0.02	600	20
61	32	36	3	3115	2916	30	0.99	630	21
61	32	36	3	3117	2908	28	0.96	660	22
61	32	36	3	3120	2901	27	0.92	690	23
61	32	37	3	3123	2891	27	0.89	720	24
61	32	37	3	3127	2881	26	0.85	750	25
61	32	37	3	3132	2872	25	0.81	780	26
61	32	37	3	3138	2865	24	0.77	810	27
61	32	37	3	3145	2858	23	0.74	840	28
61	32	37	3	3154	2852	22	0.71	870	29
61	32	37	3	3163	2847	21	0.67	900	30
61	32	37	3	3175	2843	20	0.65	930	31
61	32	37	3	3189	2838	19	0.62	960	32
61	33	37	3	3206	2834	21	0.62	990	33
61	33	37	3	3227	2829	23	0.71	1020	34
61	33	37	3	3249	2824	26	0.82	1050	35
61	33	37	3	3271	2821	29	0.94	1080	36
61	33	37	2	3292	2816	32	0.06	1110	37
61	34	37	2	3309	2805	34	0.15	1140	38
61	34	38	2	3328	2793	36	0.19	1170	39
61	34	38	2	3347	2780	37	0.22	1200	40
61	34	38	2	3364	2767	38	0.25	1230	41
61	34	38	2	3379	2754	39	0.29	1260	42
61	34	38	2	3392	2741	40	0.33	1290	43
61	35	38	2	3404	2727	40	0.38	1320	44
61	35	38	2	3417	2715	42	0.44	1350	45
61	35	38	2	3430	2703	43	0.51	1380	46
61	35	39	2	3440	2691	46	0.57	1410	47
61	35	39	2	3450	2680	48	0.64	1440	48
61	35	39	2	3460	2669	50	0.70	1470	49
61	35	39	2	3469	2658	52	0.77	1500	50
61	35	39	2	3478	2647	54	0.84	1530	51
61	35	39	2	3487	2636	56	0.92	1560	52
61	35	39	2	3496	2625	58	0.99	1590	53
61	35	39	2	3496	2625	58	1.00	1592	E
62	19	38	2	1883	2717	28	0.00	0	0
62	22	38	3	2101	2704	28	0.88	30	1
62	22	38	3	2101	2714	20	0.39	60	2
62	22	38	3	2103	2723	17	0.17	90	3
62	22	38	3	2108	2731	15	0.08	120	4
62	22	38	3	2121	2738	15	0.03	150	5
62	22	38	3	2152	2745	14	0.01	180	6
62	23	38	3	2229	2753	14	0.01	210	7
62	24	38	3	2325	2767	10	0.01	240	8
62	25	38	3	2410	2780	5	0.01	270	9
62	25	38	3	2478	2789	5	0.01	300	10
62	26	38	3	2543	2796	7	0.01	330	11
62	26	37	3	2595	2801	2	0.01	360	12
62	27	38	3	2649	2798	15	0.01	390	13

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
62	27	38	3	2696	2794	15	0.02	420	14
62	28	38	3	2763	2793	25	0.06	450	15
62	28	38	3	2788	2793	26	0.17	480	16
62	28	38	3	2796	2793	28	0.51	510	17
62	29	38	2	2829	2797	38	0.01	540	18
62	30	37	2	2901	2804	52	0.01	570	19
62	31	37	2	3017	2805	35	0.01	600	20
62	31	37	2	3068	2805	35	0.01	630	21
62	32	37	3	3115	2803	30	1.00	660	22
62	32	37	3	3118	2804	29	0.95	690	23
62	32	37	3	3122	2804	28	0.91	720	24
62	32	37	3	3126	2805	26	0.87	750	25
62	32	37	3	3130	2805	25	0.83	780	26
62	32	37	3	3136	2805	24	0.80	810	27
62	32	37	3	3142	2805	23	0.76	840	28
62	32	37	3	3150	2806	22	0.73	870	29
62	32	37	3	3159	2806	21	0.70	900	30
62	32	37	3	3170	2806	21	0.67	930	31
62	32	37	3	3183	2806	20	0.64	960	32
62	32	37	3	3198	2806	19	0.61	990	33
62	33	37	3	3219	2805	23	0.68	1020	34
62	33	37	3	3240	2804	25	0.78	1050	35
62	33	37	3	3262	2804	28	0.90	1080	36
62	33	37	2	3284	2802	31	0.02	1110	37
62	34	38	2	3307	2794	32	0.07	1140	38
62	34	38	2	3328	2782	33	0.08	1170	39
62	34	38	2	3347	2769	33	0.10	1200	40
62	34	38	2	3363	2756	34	0.12	1230	41
62	34	38	2	3378	2742	35	0.15	1260	42
62	34	38	2	3391	2728	35	0.17	1290	43
62	35	38	2	3404	2715	35	0.21	1320	44
62	35	38	2	3417	2702	37	0.27	1350	45
62	35	39	2	3427	2691	39	0.32	1380	46
62	35	39	2	3438	2679	40	0.37	1410	47
62	35	39	2	3447	2668	42	0.43	1440	48
62	35	39	2	3457	2657	44	0.49	1470	49
62	35	39	2	3466	2646	45	0.55	1500	50
62	35	39	2	3476	2636	47	0.61	1530	51
62	35	39	2	3485	2625	49	0.68	1560	52
62	35	39	2	3493	2615	51	0.75	1590	53
62	36	39	2	3502	2604	53	0.82	1620	54
62	36	40	2	3511	2593	56	0.87	1650	55
62	36	40	2	3520	2583	57	0.92	1680	56
62	36	40	2	3530	2574	59	0.97	1710	57
62	36	40	2	3535	2569	60	1.00	1727	E
63	19	38	2	1850	2783	28	0.00	0	0
63	19	37	3	1852	2808	22	0.12	30	1
63	19	37	3	1855	2879	21	0.01	60	2
63	19	35	3	1872	3011	7	0.01	90	3
63	20	35	3	1944	3063	18	0.02	120	4
63	20	35	3	1982	3097	19	0.04	150	5
63	21	34	3	2050	3108	21	0.09	180	6
63	21	34	3	2083	3109	22	0.24	210	7
63	21	34	3	2094	3110	26	0.64	240	8
63	22	34	2	2143	3114	28	0.01	270	9
63	23	34	2	2233	3114	34	0.01	300	10
63	24	34	3	2306	3103	28	0.81	330	11
63	24	35	3	2316	3089	23	0.34	360	12
63	24	35	3	2341	3076	22	0.15	390	13
63	25	35	3	2404	3066	7	0.07	420	14
63	25	35	3	2448	3062	7	0.06	450	15
63	26	35	3	2502	3059	-2	0.06	480	16
63	26	35	3	2546	3056	-2	0.06	510	17
63	26	35	3	2590	3053	-2	0.07	540	18
63	27	35	3	2642	3050	7	0.08	570	19

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	27	35	3	2689	3046	8	0.11	600	20
63	28	35	3	2776	3045	24	0.19	630	21
63	29	35	3	2848	3048	26	0.42	660	22
63	29	35	3	2879	3053	30	0.97	690	23
63	30	35	2	2960	3048	29	0.05	720	24
63	31	35	3	3020	3040	29	0.89	750	25
63	31	35	3	3040	3032	24	0.57	780	26
63	31	35	3	3078	3025	22	0.37	810	27
63	32	35	3	3112	3012	0	0.31	840	28
63	32	36	3	3126	2994	-2	0.30	870	29
63	32	36	3	3130	2977	-3	0.29	900	30
63	32	36	3	3135	2963	-3	0.28	930	31
63	32	36	3	3140	2950	-3	0.27	960	32
63	32	36	3	3147	2938	-4	0.26	990	33
63	32	36	3	3154	2928	-4	0.25	1020	34
63	32	36	3	3162	2919	-5	0.24	1050	35
63	32	36	3	3172	2910	-5	0.24	1080	36
63	32	36	3	3183	2902	-6	0.23	1110	37
63	32	37	3	3197	2893	8	0.22	1140	38
63	33	37	3	3217	2879	13	0.24	1170	39
63	33	37	3	3239	2867	13	0.28	1200	40
63	33	37	3	3261	2857	14	0.32	1230	41
63	33	37	3	3283	2848	15	0.36	1260	42
63	34	37	3	3305	2839	12	0.41	1290	43
63	34	37	3	3322	2828	12	0.43	1320	44
63	34	37	3	3338	2816	13	0.46	1350	45
63	34	37	3	3353	2805	14	0.48	1380	46
63	34	38	3	3364	2788	23	0.50	1410	47
63	34	38	3	3372	2768	23	0.51	1440	48
63	34	38	3	3382	2751	23	0.52	1470	49
63	34	38	3	3392	2736	23	0.53	1500	50
63	35	38	3	3402	2723	20	0.55	1530	51
63	35	38	3	3411	2712	21	0.58	1560	52
63	35	38	3	3419	2702	22	0.62	1590	53
63	35	39	3	3425	2688	25	0.67	1620	54
63	35	39	3	3431	2675	26	0.73	1650	55
63	35	39	3	3438	2663	27	0.80	1680	56
63	35	39	3	3444	2652	28	0.87	1710	57
63	35	39	3	3450	2641	29	0.94	1740	58
63	35	39	2	3457	2632	30	0.01	1770	59
63	35	39	2	3467	2621	32	0.06	1800	60
63	35	39	2	3476	2611	33	0.10	1830	61
63	35	39	2	3485	2600	34	0.15	1860	62
63	35	40	2	3495	2592	36	0.18	1890	63
63	36	40	2	3505	2583	33	0.20	1920	64
63	36	40	2	3515	2573	33	0.21	1950	65
63	36	40	2	3524	2564	34	0.23	1980	66
63	36	40	2	3533	2555	34	0.24	2010	67
63	36	40	2	3542	2547	35	0.25	2040	68
63	36	40	2	3550	2539	35	0.27	2070	69
63	36	40	2	3559	2531	36	0.28	2100	70
63	36	40	2	3567	2523	36	0.30	2130	71
63	36	40	2	3575	2516	37	0.31	2160	72
63	36	40	2	3583	2509	37	0.33	2190	73
63	36	40	2	3591	2502	38	0.35	2220	74
63	37	41	2	3600	2495	46	0.37	2250	75
63	37	41	2	3612	2483	47	0.42	2280	76
63	37	41	2	3623	2471	48	0.47	2310	77
63	37	41	2	3634	2461	49	0.53	2340	78
63	37	41	2	3645	2451	51	0.59	2370	79
63	37	41	2	3654	2442	52	0.67	2400	80
63	37	41	2	3664	2433	54	0.75	2430	81
63	37	41	2	3673	2425	56	0.84	2460	82
63	37	41	2	3681	2417	59	0.94	2490	83
63	37	41	1	3688	2411	61	0.22	2520	84

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
63	37	41	1	3693	2404	64	0.61	2550	85
63	38	42	1	3702	2397	67	0.89	2580	86
63	38	42	1	3709	2392	68	1.00	2599	E
64	19	38	2	1850	2750	28	0.00	0	0
64	19	37	3	1849	2809	22	0.16	30	1
64	19	37	3	1852	2887	21	0.02	60	2
64	19	35	3	1872	3015	7	0.02	90	3
64	20	35	3	1944	3067	18	0.03	120	4
64	20	34	3	1985	3102	11	0.06	150	5
64	21	34	3	2055	3110	21	0.14	180	6
64	21	34	3	2085	3111	24	0.37	210	7
64	21	34	3	2095	3112	30	0.98	240	8
64	22	34	2	2179	3117	29	0.02	270	9
64	23	34	2	2271	3112	35	0.02	300	10
64	24	35	3	2313	3098	26	0.56	330	11
64	24	35	3	2334	3084	22	0.25	360	12
64	24	35	3	2389	3073	21	0.11	390	13
64	25	35	3	2437	3067	7	0.09	420	14
64	25	35	3	2490	3063	7	0.08	450	15
64	26	35	3	2537	3060	-1	0.08	480	16
64	26	35	3	2580	3057	-1	0.09	510	17
64	27	35	3	2631	3053	8	0.11	540	18
64	27	35	3	2680	3049	9	0.14	570	19
64	28	35	3	2757	3048	24	0.23	600	20
64	29	35	3	2836	3050	27	0.48	630	21
64	29	35	2	2882	3054	31	0.02	660	22
64	30	35	2	2965	3049	30	0.06	690	23
64	31	35	3	3028	3040	29	0.90	720	24
64	31	35	3	3055	3032	25	0.58	750	25
64	32	35	3	3102	3024	3	0.39	780	26
64	32	35	3	3122	3005	3	0.39	810	27
64	32	36	3	3131	2988	1	0.38	840	28
64	32	36	3	3136	2972	1	0.36	870	29
64	32	36	3	3141	2959	0	0.35	900	30
64	32	36	3	3148	2946	0	0.34	930	31
64	32	36	3	3155	2935	-1	0.33	960	32
64	32	36	3	3164	2925	-2	0.31	990	33
64	32	36	3	3173	2916	-2	0.30	1020	34
64	32	36	3	3185	2907	-3	0.29	1050	35
64	32	36	3	3198	2900	-3	0.28	1080	36
64	33	37	3	3218	2885	14	0.32	1110	37
64	33	37	3	3239	2872	15	0.36	1140	38
64	33	37	3	3261	2861	17	0.41	1170	39
64	33	37	3	3284	2852	18	0.47	1200	40
64	34	37	3	3306	2842	15	0.53	1230	41
64	34	37	3	3322	2831	16	0.56	1260	42
64	34	37	3	3339	2819	17	0.59	1290	43
64	34	37	3	3354	2808	18	0.63	1320	44
64	34	38	3	3367	2794	25	0.66	1350	45
64	34	38	3	3375	2773	25	0.67	1380	46
64	34	38	3	3385	2755	25	0.68	1410	47
64	34	38	3	3396	2740	25	0.70	1440	48
64	35	38	3	3405	2727	24	0.73	1470	49
64	35	38	3	3413	2716	25	0.78	1500	50
64	35	38	3	3422	2706	26	0.82	1530	51
64	35	39	3	3429	2693	28	0.88	1560	52
64	35	39	3	3435	2679	29	0.96	1590	53
64	35	39	2	3443	2667	31	0.02	1620	54
64	35	39	2	3453	2656	32	0.07	1650	55
64	35	39	2	3462	2646	33	0.11	1680	56
64	35	39	2	3472	2635	34	0.16	1710	57
64	35	39	2	3481	2624	36	0.21	1740	58
64	35	39	2	3489	2614	37	0.26	1770	59
64	35	39	2	3498	2603	39	0.31	1800	60
64	36	40	2	3507	2593	38	0.34	1830	61

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
64	36	40	2	3517	2584	38	0.36	1860	62
64	36	40	2	3526	2574	39	0.38	1890	63
64	36	40	2	3535	2565	40	0.40	1920	64
64	36	40	2	3544	2556	40	0.42	1950	65
64	36	40	2	3553	2548	41	0.45	1980	66
64	36	40	2	3561	2540	42	0.47	2010	67
64	36	40	2	3569	2532	43	0.50	2040	68
64	36	40	2	3577	2524	44	0.53	2070	69
64	36	40	2	3585	2517	45	0.56	2100	70
64	36	40	2	3593	2510	46	0.59	2130	71
64	37	40	2	3601	2503	49	0.62	2160	72
64	37	41	2	3611	2491	53	0.69	2190	73
64	37	41	2	3623	2480	55	0.77	2220	74
64	37	41	2	3634	2468	57	0.86	2250	75
64	37	41	2	3644	2458	59	0.97	2280	76
64	37	41	1	3649	2453	62	0.32	2310	77
64	37	41	1	3652	2450	64	0.69	2340	78
64	37	41	1	3655	2446	66	1.00	2368	E
65	19	38	2	1850	2717	28	0.00	0	0
65	21	39	2	2086	2624	28	0.00	30	1
65	22	39	3	2101	2628	20	0.40	60	2
65	22	39	3	2103	2634	16	0.14	90	3
65	22	39	3	2108	2641	15	0.05	120	4
65	22	39	3	2119	2648	14	0.02	150	5
65	22	39	3	2150	2656	14	0.01	180	6
65	23	39	3	2226	2663	14	0.00	210	7
65	24	39	3	2323	2669	10	0.00	240	8
65	25	39	3	2407	2673	9	0.00	270	9
65	25	39	3	2481	2679	9	0.00	300	10
65	26	39	3	2547	2683	11	0.00	330	11
65	26	39	3	2598	2687	11	0.00	360	12
65	27	39	3	2654	2690	20	0.01	390	13
65	27	39	3	2680	2693	20	0.02	420	14
65	27	39	3	2691	2696	20	0.04	450	15
65	27	39	3	2696	2699	21	0.10	480	16
65	28	38	3	2749	2700	26	0.25	510	17
65	28	38	3	2783	2700	29	0.76	540	18
65	29	38	2	2844	2709	39	0.04	570	19
65	30	38	2	2943	2722	56	0.05	600	20
65	31	38	2	3036	2732	40	0.07	630	21
65	31	38	2	3095	2737	41	0.08	660	22
65	32	38	2	3136	2735	32	0.08	690	23
65	32	38	2	3174	2731	32	0.07	720	24
65	33	38	2	3209	2726	33	0.07	750	25
65	33	38	2	3242	2714	33	0.08	780	26
65	33	38	2	3271	2701	33	0.08	810	27
65	34	39	2	3301	2679	34	0.12	840	28
65	34	39	2	3312	2666	35	0.15	870	29
65	34	39	2	3324	2655	36	0.18	900	30
65	34	39	2	3335	2644	37	0.21	930	31
65	34	39	2	3345	2634	38	0.24	960	32
65	34	39	2	3356	2624	39	0.28	990	33
65	34	39	2	3366	2615	41	0.32	1020	34
65	34	39	2	3376	2606	42	0.37	1050	35
65	34	40	2	3386	2598	42	0.41	1080	36
65	34	40	2	3398	2589	44	0.45	1110	37
65	35	40	2	3409	2581	46	0.50	1140	38
65	35	40	2	3420	2573	48	0.55	1170	39
65	35	40	2	3431	2566	49	0.60	1200	40
65	35	40	2	3441	2558	51	0.66	1230	41
65	35	40	2	3452	2551	53	0.72	1260	42
65	35	40	2	3462	2545	55	0.78	1290	43
65	35	40	2	3473	2538	57	0.85	1320	44
65	35	40	2	3483	2532	59	0.91	1350	45
65	35	40	2	3494	2527	62	0.99	1380	46

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
65	35	40	2	3495	2526	62	1.00	1385	E
66	19	38	2	1817	2783	28	0.00	0	0
66	19	37	3	1814	2808	22	0.12	30	1
66	19	37	3	1819	2879	21	0.01	60	2
66	19	35	3	1844	3011	7	0.01	90	3
66	19	35	3	1899	3086	7	0.02	120	4
66	20	34	3	1975	3117	11	0.03	150	5
66	21	34	3	2046	3129	21	0.05	180	6
66	21	34	3	2082	3133	21	0.14	210	7
66	21	34	3	2094	3137	24	0.36	240	8
66	21	34	3	2098	3142	29	0.94	270	9
66	22	34	2	2179	3145	28	0.01	300	10
66	23	34	2	2271	3139	34	0.01	330	11
66	24	34	3	2305	3122	26	0.53	360	12
66	24	34	3	2315	3103	24	0.20	390	13
66	24	35	3	2341	3088	21	0.09	420	14
66	25	35	3	2403	3077	6	0.04	450	15
66	25	35	3	2447	3071	6	0.04	480	16
66	26	35	3	2501	3067	-3	0.03	510	17
66	26	35	3	2545	3064	-3	0.03	540	18
66	26	35	3	2589	3060	-3	0.04	570	19
66	27	35	3	2642	3056	6	0.05	600	20
66	27	35	3	2689	3052	7	0.06	630	21
66	28	35	3	2775	3051	23	0.11	660	22
66	29	35	3	2847	3054	25	0.23	690	23
66	29	35	3	2879	3059	27	0.54	720	24
66	30	35	2	2912	3062	29	0.02	750	25
66	30	35	2	2992	3056	29	0.03	780	26
66	31	35	3	3015	3045	26	0.71	810	27
66	31	35	3	3030	3036	23	0.46	840	28
66	31	35	3	3058	3028	21	0.29	870	29
66	32	35	3	3104	3020	-5	0.21	900	30
66	32	35	3	3123	3002	-5	0.20	930	31
66	32	36	3	3129	2985	-7	0.20	960	32
66	32	36	3	3133	2970	-7	0.19	990	33
66	32	36	3	3139	2956	-8	0.18	1020	34
66	32	36	3	3144	2944	-8	0.18	1050	35
66	32	36	3	3151	2933	-8	0.17	1080	36
66	32	36	3	3159	2923	-8	0.16	1110	37
66	32	36	3	3169	2914	-9	0.16	1140	38
66	32	36	3	3179	2906	-9	0.15	1170	39
66	32	37	3	3192	2898	6	0.15	1200	40
66	33	37	3	3210	2885	11	0.15	1230	41
66	33	37	3	3231	2872	11	0.18	1260	42
66	33	37	3	3253	2861	12	0.20	1290	43
66	33	37	3	3275	2851	12	0.23	1320	44
66	33	37	3	3299	2844	13	0.26	1350	45
66	34	37	3	3316	2832	8	0.28	1380	46
66	34	37	3	3332	2821	8	0.30	1410	47
66	34	37	3	3348	2810	9	0.31	1440	48
66	34	38	3	3362	2797	20	0.33	1470	49
66	34	38	3	3370	2776	20	0.34	1500	50
66	34	38	3	3379	2757	20	0.34	1530	51
66	34	38	3	3389	2742	20	0.35	1560	52
66	35	38	3	3400	2728	16	0.36	1590	53
66	35	38	3	3408	2717	16	0.38	1620	54
66	35	38	3	3416	2706	17	0.40	1650	55
66	35	39	3	3424	2694	22	0.43	1680	56
66	35	39	3	3430	2680	23	0.47	1710	57
66	35	39	3	3436	2668	23	0.51	1740	58
66	35	39	3	3442	2656	24	0.56	1770	59
66	35	39	3	3448	2645	24	0.61	1800	60
66	35	39	3	3455	2636	25	0.66	1830	61
66	35	39	3	3461	2627	26	0.72	1860	62
66	35	39	3	3468	2619	27	0.78	1890	63

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
66	35	39	3	3474	2612	28	0.85	1920	64
66	35	39	3	3481	2606	29	0.92	1950	65
66	35	40	2	3488	2600	30	0.00	1980	66
66	35	40	2	3498	2591	31	0.03	2010	67
66	36	40	2	3508	2582	27	0.03	2040	68
66	36	40	2	3517	2572	27	0.03	2070	69
66	36	40	2	3527	2563	27	0.04	2100	70
66	36	40	2	3536	2555	27	0.04	2130	71
66	36	40	2	3544	2546	27	0.04	2160	72
66	36	40	2	3553	2538	27	0.04	2190	73
66	36	40	2	3561	2530	28	0.04	2220	74
66	36	40	2	3570	2523	28	0.05	2250	75
66	36	40	2	3578	2515	28	0.05	2280	76
66	36	40	2	3586	2508	28	0.05	2310	77
66	36	40	2	3594	2501	28	0.06	2340	78
66	37	41	2	3603	2493	38	0.06	2370	79
66	37	41	2	3615	2481	39	0.07	2400	80
66	37	41	2	3626	2470	39	0.08	2430	81
66	37	41	2	3637	2459	39	0.09	2460	82
66	37	41	2	3647	2449	39	0.10	2490	83
66	37	41	2	3657	2440	39	0.11	2520	84
66	37	41	2	3666	2432	40	0.12	2550	85
66	37	41	2	3675	2424	40	0.14	2580	86
66	37	41	2	3683	2416	41	0.15	2610	87
66	37	41	2	3691	2409	41	0.17	2640	88
66	37	41	2	3699	2402	41	0.19	2670	89
66	38	42	2	3710	2392	50	0.21	2700	90
66	38	42	2	3723	2381	50	0.23	2730	91
66	38	42	2	3735	2370	50	0.25	2760	92
66	38	42	2	3746	2360	51	0.28	2790	93
66	38	42	2	3758	2351	51	0.30	2820	94
66	38	42	2	3768	2342	51	0.33	2850	95
66	38	42	2	3779	2333	52	0.36	2880	96
66	38	42	2	3788	2325	52	0.40	2910	97
66	38	42	2	3798	2317	53	0.43	2940	98
66	39	42	2	3808	2308	54	0.47	2970	99
66	39	43	2	3817	2299	55	0.51	3000	100
66	39	43	2	3828	2289	55	0.53	3030	101
66	39	43	2	3839	2279	55	0.54	3060	102
66	39	43	2	3849	2268	55	0.56	3090	103
66	39	43	2	3858	2258	55	0.58	3120	104
66	39	43	2	3868	2247	56	0.60	3150	105
66	39	43	2	3876	2237	56	0.62	3180	106
66	39	43	2	3885	2226	56	0.64	3210	107
66	39	43	2	3893	2215	56	0.66	3240	108
66	40	43	2	3900	2204	57	0.68	3270	109
66	40	44	2	3910	2191	57	0.70	3300	110
66	40	44	2	3919	2177	57	0.71	3330	111
66	40	44	2	3929	2163	58	0.73	3360	112
66	40	44	2	3937	2148	58	0.75	3390	113
66	40	44	2	3945	2132	58	0.76	3420	114
66	40	44	2	3953	2117	58	0.78	3450	115
66	40	44	2	3961	2100	58	0.79	3480	116
66	40	45	2	3968	2087	58	0.81	3510	117
66	40	45	2	3975	2072	58	0.82	3540	118
66	40	45	2	3981	2057	58	0.83	3570	119
66	40	45	2	3987	2042	58	0.84	3600	120
66	40	45	2	3993	2026	58	0.86	3630	121
66	40	45	2	3998	2009	59	0.87	3660	122
66	41	46	2	4006	1993	59	0.90	3690	123
66	41	46	2	4013	1978	59	0.93	3720	124
66	41	46	2	4020	1962	60	0.96	3750	125
66	41	46	2	4027	1946	60	1.00	3780	126
66	41	46	1	4034	1927	60	0.01	3810	127
66	41	46	1	4042	1908	61	0.03	3840	128

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
66	41	47	1	4049	1889	61	0.05	3870	129
66	41	47	1	4055	1870	61	0.08	3900	130
66	41	47	1	4062	1849	62	0.10	3930	131
66	41	47	1	4068	1829	62	0.12	3960	132
66	41	47	1	4075	1808	63	0.14	3990	133
66	41	48	1	4080	1787	63	0.17	4020	134
66	41	48	1	4086	1765	63	0.18	4050	135
66	41	48	1	4091	1743	64	0.20	4080	136
66	41	48	1	4095	1720	64	0.22	4110	137
66	42	49	1	4100	1698	63	0.24	4140	138
66	42	49	1	4103	1676	63	0.24	4170	139
66	42	49	1	4106	1654	63	0.24	4200	140
66	42	49	1	4109	1632	63	0.25	4230	141
66	42	49	1	4111	1610	63	0.25	4260	142
66	42	50	1	4113	1587	65	0.25	4290	143
66	42	50	1	4115	1562	65	0.25	4320	144
66	42	50	1	4116	1538	65	0.25	4350	145
66	42	50	1	4117	1514	65	0.26	4380	146
66	42	51	1	4119	1487	67	0.26	4410	147
66	42	51	1	4119	1459	67	0.26	4440	148
66	42	51	1	4120	1430	67	0.27	4470	149
66	42	51	1	4121	1402	67	0.27	4500	150
66	42	52	1	4120	1369	70	0.28	4530	151
66	42	52	1	4119	1336	70	0.28	4560	152
66	42	52	1	4118	1305	70	0.29	4590	153
66	42	53	1	4117	1269	72	0.30	4620	154
66	42	53	1	4116	1235	72	0.30	4650	155
66	42	53	1	4116	1203	72	0.31	4680	156
66	42	54	1	4113	1157	75	0.32	4710	157
66	42	54	1	4111	1116	75	0.34	4740	158
66	42	55	1	4111	1063	77	0.36	4770	159
66	42	55	1	4114	1007	77	0.39	4800	160
66	42	56	1	4127	945	78	0.42	4830	161
66	42	57	1	4141	886	78	0.46	4860	162
66	42	57	1	4157	828	78	0.51	4890	163
66	42	58	1	4167	785	77	0.54	4920	164
66	42	58	1	4174	755	77	0.56	4950	165
66	42	58	1	4180	720	77	0.58	4980	166
66	42	59	1	4184	685	75	0.59	5010	167
66	42	59	1	4187	650	75	0.61	5040	168
66	42	59	1	4189	610	75	0.62	5070	169
66	43	60	1	4212	579	79	0.64	5100	170
66	43	60	1	4249	569	79	0.68	5130	171
66	43	60	1	4271	555	79	0.72	5160	172
66	43	60	1	4283	533	80	0.76	5190	173
66	43	60	1	4290	501	80	0.80	5220	174
66	44	61	1	4353	496	80	0.83	5250	175
66	45	60	1	4404	545	83	1.00	5276	E
67	19	38	2	1817	2750	28	0.00	0	0
67	19	36	3	1806	2914	18	0.24	30	1
67	19	35	3	1842	3029	14	0.31	60	2
67	19	35	3	1897	3099	16	0.38	90	3
67	20	34	3	1967	3125	21	0.53	120	4
67	21	34	3	2038	3141	30	0.98	150	5
67	22	34	2	2125	3148	35	0.22	180	6
67	23	34	2	2213	3149	41	0.23	210	7
67	24	34	2	2305	3140	36	0.25	240	8
67	25	34	3	2401	3122	27	0.87	270	9
67	25	34	3	2450	3111	25	0.73	300	10
67	26	34	3	2508	3101	19	0.64	330	11
67	26	35	3	2552	3096	19	0.69	360	12
67	26	35	3	2596	3090	21	0.74	390	13
67	27	35	3	2650	3083	29	0.96	420	14
67	28	35	2	2720	3078	36	0.19	450	15
67	28	35	2	2797	3076	40	0.36	480	16

Scenario 3

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
67	29	35	2	2879	3075	45	0.52	510	17
67	30	35	2	2962	3071	45	0.61	540	18
67	31	35	2	3040	3061	45	0.65	570	19
67	32	35	2	3101	3048	44	0.66	600	20
67	32	35	2	3149	3033	47	0.77	630	21
67	32	35	2	3190	3017	50	0.92	660	22
67	33	35	2	3205	3010	60	1.00	674	E
68	19	38	2	1817	2717	28	0.00	0	0
68	19	37	3	1802	2889	23	0.24	30	1
68	19	35	3	1833	3016	13	0.28	60	2
68	19	35	3	1886	3090	15	0.34	90	3
68	20	34	3	1955	3122	19	0.46	120	4
68	21	34	3	2024	3140	28	0.76	150	5
68	22	34	2	2107	3148	34	0.20	180	6
68	22	34	2	2194	3151	35	0.21	210	7
68	23	34	2	2286	3143	41	0.23	240	8
68	24	34	3	2382	3127	30	0.95	270	9
68	25	34	3	2439	3113	24	0.69	300	10
68	25	34	3	2500	3102	22	0.58	330	11
68	26	35	3	2544	3097	17	0.62	360	12
68	26	35	3	2588	3092	19	0.67	390	13
68	27	35	3	2640	3085	26	0.83	420	14
68	27	35	2	2697	3079	32	0.09	450	15
68	28	35	2	2772	3076	37	0.26	480	16
68	29	35	2	2853	3074	42	0.42	510	17
68	30	35	2	2938	3071	43	0.54	540	18
68	31	35	2	3016	3064	44	0.59	570	19
68	31	35	2	3084	3052	43	0.57	600	20
68	32	35	2	3135	3037	44	0.62	630	21
68	32	35	2	3178	3021	46	0.73	660	22
68	33	35	2	3211	3006	57	0.89	690	23
68	33	36	2	3223	2999	62	1.00	705	E

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
1	20	26	2	1983	3983	60	1.00	0	0
1	23	25	2	2213	4053	64	0.99	30	1
1	23	25	2	2216	4053	64	1.00	30	E
2	20	26	2	1983	3950	60	1.00	0	0
2	22	27	1	2133	3892	72	1.00	9	E
3	20	26	2	1983	3917	60	1.00	0	0
3	22	27	1	2114	3826	72	1.00	9	E
4	20	26	2	1950	3983	60	1.00	0	0
4	22	24	1	2118	4198	68	0.75	30	1
4	22	23	1	2174	4254	61	0.10	60	2
4	23	23	2	2213	4264	64	1.00	69	E
5	20	26	2	1950	3950	60	1.00	0	0
5	22	27	1	2100	3866	72	1.00	9	E
6	20	26	2	1950	3917	60	1.00	0	0
6	22	28	1	2108	3718	72	1.00	18	E
7	20	26	2	1917	3983	60	1.00	0	0
7	19	24	1	1810	4175	67	0.72	30	1
7	19	23	1	1803	4287	67	0.73	60	2
7	19	22	1	1825	4362	68	0.74	90	3
7	19	21	1	1860	4417	68	0.76	120	4
7	20	21	1	1906	4459	68	0.77	150	5
7	20	21	1	1961	4493	68	0.77	180	6
7	21	20	1	2019	4516	68	0.77	210	7
7	21	20	1	2077	4530	68	0.75	240	8
7	22	20	1	2130	4536	67	0.59	270	9
7	22	20	1	2160	4537	62	0.16	300	10
7	23	20	2	2217	4534	58	1.00	322	E
8	20	26	2	1917	3950	60	1.00	0	0
8	17	27	1	1691	3836	69	0.86	30	1
8	17	28	1	1629	3728	69	0.90	60	2
8	17	29	1	1607	3607	70	0.92	90	3
8	17	31	1	1605	3497	71	0.94	120	4
8	17	31	1	1612	3404	71	0.95	150	5
8	17	32	1	1623	3326	72	0.96	180	6
8	17	33	1	1635	3259	72	0.98	210	7
8	17	34	1	1648	3200	73	0.99	240	8
8	17	34	1	1657	3152	73	1.00	267	E
9	20	26	2	1917	3917	60	1.00	0	0
9	19	29	1	1885	3654	68	0.74	30	1
9	20	30	1	1953	3508	69	0.76	60	2
9	21	31	1	2032	3406	70	0.79	90	3
9	21	32	1	2047	3389	73	1.00	95	E
10	20	26	2	1975	3900	53	0.75	0	0
10	22	28	1	2158	3709	72	1.00	22	E
11	20	26	2	2000	3925	53	0.75	0	0
11	22	27	1	2170	3836	72	1.00	12	E
12	20	26	2	2000	3975	53	0.75	0	0
12	24	26	2	2305	3962	53	1.00	26	E
13	20	26	2	1975	4000	53	0.75	0	0
13	23	24	2	2212	4171	49	0.55	30	1
13	24	24	2	2338	4172	53	1.00	54	E
14	20	26	2	1925	4000	53	0.75	0	0
14	20	23	2	1957	4270	52	0.74	30	1
14	21	22	2	2041	4349	50	0.68	60	2
14	22	22	2	2149	4387	46	0.53	90	3
14	23	22	2	2279	4394	54	0.74	120	4
14	24	22	2	2338	4391	53	1.00	134	E
15	20	26	2	1900	3975	53	0.75	0	0
15	17	25	2	1690	4042	53	0.78	30	1
15	17	25	2	1606	4060	54	0.81	60	2
15	16	25	2	1541	4061	56	0.87	90	3
15	15	25	2	1486	4056	57	0.92	120	4
15	15	25	2	1445	4044	58	0.94	150	5
15	15	25	2	1411	4029	59	0.97	180	6
15	14	25	1	1375	4005	60	0.03	210	7

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
15	14	26	1	1336	3973	62	0.17	240	8
15	13	26	1	1298	3934	63	0.29	270	9
15	13	27	1	1260	3885	65	0.45	300	10
15	13	27	1	1217	3829	66	0.58	330	11
15	12	28	1	1176	3763	67	0.62	360	12
15	12	29	1	1135	3698	67	0.61	390	13
15	11	29	1	1096	3639	66	0.67	420	14
15	11	30	1	1065	3586	68	0.67	450	15
15	11	30	1	1030	3524	68	0.66	480	16
15	10	31	1	996	3471	67	0.68	510	17
15	10	31	1	969	3429	68	0.69	540	18
15	10	32	1	942	3384	69	0.71	570	19
15	10	32	1	914	3332	69	0.75	600	20
15	9	33	1	889	3288	69	0.77	630	21
15	9	33	1	869	3253	69	0.78	660	22
15	9	33	1	851	3217	69	0.79	690	23
15	9	34	1	836	3182	70	0.80	720	24
15	9	34	1	824	3148	70	0.81	750	25
15	9	34	1	813	3116	70	0.81	780	26
15	9	35	1	802	3083	70	0.82	810	27
15	8	35	1	791	3051	71	0.83	840	28
15	8	35	1	778	3020	71	0.85	870	29
15	8	36	1	767	2990	72	0.86	900	30
15	8	36	1	758	2963	72	0.87	930	31
15	8	36	1	749	2936	72	0.88	960	32
15	8	36	1	740	2910	72	0.89	990	33
15	8	37	1	733	2885	72	0.91	1020	34
15	8	37	1	727	2862	72	0.92	1050	35
15	8	37	1	721	2840	72	0.93	1080	36
15	8	37	1	715	2818	73	0.94	1110	37
15	8	38	1	709	2796	73	0.95	1140	38
15	8	38	1	706	2776	73	0.96	1170	39
15	8	38	1	702	2756	73	0.97	1200	40
15	7	38	1	698	2739	73	0.99	1230	41
15	7	38	1	695	2726	74	1.00	1254	E
16	20	26	2	1900	3925	53	0.75	0	0
16	18	28	2	1722	3745	55	0.85	30	1
16	18	30	2	1706	3592	56	0.88	60	2
16	18	31	2	1720	3472	56	0.87	90	3
16	18	32	2	1742	3380	56	0.86	120	4
16	18	32	2	1770	3305	55	0.85	150	5
16	18	33	2	1798	3243	55	0.84	180	6
16	19	34	2	1830	3196	55	0.84	210	7
16	19	34	2	1860	3155	52	0.74	240	8
16	19	34	2	1898	3117	50	0.66	270	9
16	20	35	2	1940	3089	52	0.73	300	10
16	20	35	2	1989	3060	53	0.77	330	11
16	21	35	2	2045	3035	55	0.83	360	12
16	22	35	2	2100	3012	58	0.89	390	13
16	23	36	2	2200	2979	51	0.68	420	14
16	23	36	2	2261	2957	51	0.69	450	15
16	24	36	2	2334	2941	43	0.64	480	16
16	25	36	2	2406	2932	40	0.51	510	17
16	25	36	2	2472	2924	40	0.49	540	18
16	26	36	2	2530	2917	44	0.54	570	19
16	26	36	2	2588	2910	46	0.63	600	20
16	27	36	2	2645	2903	52	0.76	630	21
16	28	37	2	2710	2897	60	0.89	660	22
16	28	37	2	2763	2893	64	1.00	688	E
17	20	26	2	1925	3900	53	0.75	0	0
17	21	30	2	2004	3585	57	0.90	30	1
17	22	31	2	2106	3485	58	0.92	60	2
17	22	31	1	2199	3415	60	0.01	90	3
17	23	32	1	2278	3358	71	0.98	120	4
17	23	32	1	2279	3357	71	1.00	120	E

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
18	20	26	2	1975	3900	38	0.25	0	0
18	22	29	2	2198	3677	38	0.27	30	1
18	24	29	2	2314	3613	39	0.32	60	2
18	25	30	2	2422	3565	45	0.49	90	3
18	26	30	2	2513	3523	51	0.69	120	4
18	26	31	2	2590	3484	60	1.00	150	5
18	27	31	1	2623	3454	68	1.00	174	E
19	20	26	2	2000	3925	38	0.25	0	0
19	23	28	2	2283	3789	37	0.22	30	1
19	25	28	2	2418	3726	41	0.43	60	2
19	26	29	2	2524	3680	55	0.83	90	3
19	26	29	1	2554	3672	71	1.00	111	E
20	20	26	2	2000	3975	38	0.25	0	0
20	24	26	3	2303	3957	25	0.87	30	1
20	25	26	3	2430	3913	24	0.88	60	2
20	26	27	2	2525	3874	31	0.04	90	3
20	27	27	2	2620	3833	41	0.40	120	4
20	28	28	2	2703	3797	48	0.69	150	5
20	28	28	2	2785	3767	56	0.99	180	6
20	28	28	2	2788	3766	56	1.00	181	E
21	20	26	2	1975	4000	38	0.25	0	0
21	23	24	3	2211	4166	25	0.88	30	1
21	24	24	3	2350	4148	27	0.92	60	2
21	25	24	2	2475	4123	34	0.18	90	3
21	26	24	2	2568	4101	51	0.60	120	4
21	27	25	1	2649	4058	64	0.60	150	5
21	27	25	1	2655	4052	66	1.00	154	E
22	20	26	2	1925	4000	38	0.25	0	0
22	20	23	3	1964	4257	25	0.85	30	1
22	21	22	3	2054	4330	18	0.77	60	2
22	22	22	3	2156	4364	17	0.72	90	3
22	23	22	3	2264	4369	16	0.75	120	4
22	24	22	3	2367	4361	25	0.89	150	5
22	25	22	2	2458	4346	38	0.25	180	6
22	26	22	2	2532	4315	50	0.67	210	7
22	26	23	1	2569	4266	71	1.00	234	E
23	20	26	2	1900	3975	38	0.25	0	0
23	17	25	3	1696	4043	29	0.96	30	1
23	17	25	2	1621	4061	30	0.01	60	2
23	16	25	2	1554	4068	34	0.15	90	3
23	15	25	2	1496	4068	35	0.29	120	4
23	15	25	2	1453	4057	35	0.30	150	5
23	15	25	2	1418	4045	36	0.31	180	6
23	14	25	2	1382	4026	44	0.32	210	7
23	14	26	2	1347	3998	44	0.34	240	8
23	14	26	2	1316	3965	45	0.36	270	9
23	13	26	2	1285	3923	53	0.41	300	10
23	13	27	2	1254	3872	53	0.51	330	11
23	13	27	2	1235	3812	55	0.62	360	12
23	13	28	2	1205	3747	55	0.67	390	13
23	12	29	2	1164	3695	56	0.66	420	14
23	12	29	2	1144	3638	58	0.79	450	15
23	12	30	2	1123	3574	59	0.89	480	16
23	11	30	2	1095	3514	60	0.93	510	17
23	11	31	1	1068	3466	60	0.01	540	18
23	11	31	1	1039	3412	61	0.11	570	19
23	11	32	1	1015	3360	62	0.17	600	20
23	10	32	1	992	3307	63	0.23	630	21
23	10	33	1	975	3267	59	0.25	660	22
23	10	33	1	959	3231	59	0.25	690	23
23	10	34	1	942	3194	63	0.25	720	24
23	10	34	1	928	3149	62	0.19	750	25
23	10	34	1	913	3108	62	0.12	780	26
23	10	35	1	903	3072	62	0.12	810	27
23	9	35	1	894	3038	59	0.13	840	28

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
23	9	35	1	886	3006	59	0.13	870	29
23	9	36	1	880	2974	59	0.13	900	30
23	9	36	1	875	2944	59	0.13	930	31
23	9	36	1	869	2915	59	0.14	960	32
23	9	37	1	865	2887	59	0.14	990	33
23	9	37	1	863	2860	59	0.14	1020	34
23	9	37	1	860	2834	59	0.14	1050	35
23	9	37	1	858	2809	59	0.14	1080	36
23	9	38	1	858	2785	60	0.14	1110	37
23	9	38	1	859	2761	60	0.14	1140	38
23	9	38	1	860	2738	60	0.15	1170	39
23	9	38	1	862	2717	60	0.15	1200	40
23	9	39	1	864	2696	62	0.15	1230	41
23	9	39	1	869	2674	62	0.15	1260	42
23	9	39	1	875	2654	62	0.15	1290	43
23	9	39	1	880	2634	62	0.15	1320	44
23	9	39	1	887	2616	62	0.16	1350	45
23	9	40	1	893	2599	64	0.16	1380	46
23	10	40	1	903	2580	60	0.16	1410	47
23	10	40	1	911	2563	60	0.16	1440	48
23	10	40	1	919	2547	60	0.16	1470	49
23	10	40	1	927	2531	60	0.17	1500	50
23	10	40	1	936	2515	60	0.17	1530	51
23	10	40	1	945	2500	60	0.17	1560	52
23	10	41	1	952	2483	62	0.17	1590	53
23	10	41	1	960	2466	62	0.17	1620	54
23	10	41	1	967	2450	62	0.17	1650	55
23	10	41	1	975	2433	62	0.18	1680	56
23	10	41	1	983	2417	62	0.18	1710	57
23	10	41	1	990	2402	62	0.18	1740	58
23	10	42	1	996	2382	65	0.18	1770	59
23	11	42	1	1001	2365	59	0.19	1800	60
23	11	42	1	1004	2352	59	0.19	1830	61
23	11	42	1	1007	2338	59	0.19	1860	62
23	11	42	1	1010	2324	59	0.19	1890	63
23	11	42	1	1012	2310	59	0.19	1920	64
23	11	43	1	1014	2295	59	0.19	1950	65
23	11	43	1	1013	2279	60	0.20	1980	66
23	11	43	1	1012	2263	60	0.20	2010	67
23	11	43	1	1011	2246	60	0.20	2040	68
23	11	43	1	1010	2229	60	0.20	2070	69
23	11	43	1	1009	2212	60	0.20	2100	70
23	11	44	1	1007	2194	60	0.21	2130	71
23	11	44	1	1004	2175	61	0.21	2160	72
23	11	44	1	1000	2155	61	0.21	2190	73
23	10	44	1	994	2132	68	0.22	2220	74
23	10	44	1	988	2108	68	0.23	2250	75
23	10	45	1	980	2083	68	0.25	2280	76
23	10	45	1	972	2058	68	0.26	2310	77
23	10	45	1	965	2031	68	0.28	2340	78
23	10	45	1	958	2003	68	0.29	2370	79
23	10	46	1	950	1973	69	0.31	2400	80
23	10	46	1	942	1940	69	0.33	2430	81
23	10	46	1	936	1904	69	0.35	2460	82
23	10	47	1	925	1870	68	0.36	2490	83
23	10	47	1	915	1833	68	0.36	2520	84
23	10	48	1	905	1791	67	0.37	2550	85
23	9	48	1	872	1767	72	0.40	2580	86
23	9	48	1	843	1745	73	0.45	2610	87
23	9	48	1	826	1713	73	0.51	2640	88
23	9	49	1	818	1679	72	0.56	2670	89
23	9	49	1	812	1640	73	0.61	2700	90
23	9	50	1	807	1592	72	0.65	2730	91
23	9	50	1	800	1549	72	0.69	2760	92
23	8	50	1	763	1544	75	1.00	2771	E

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
24	20	26	2	1900	3925	38	0.25	0	0
24	18	28	2	1722	3745	35	0.17	30	1
24	18	30	2	1706	3592	35	0.18	60	2
24	18	31	2	1720	3472	33	0.11	90	3
24	18	32	2	1742	3380	32	0.05	120	4
24	18	32	3	1770	3305	30	0.99	150	5
24	18	33	3	1797	3247	29	0.94	180	6
24	19	33	3	1824	3201	28	0.94	210	7
24	19	34	3	1844	3163	29	0.95	240	8
24	19	34	3	1865	3128	29	0.96	270	9
24	19	35	3	1888	3097	30	0.98	300	10
24	20	35	2	1915	3064	33	0.10	330	11
24	20	35	2	1958	3033	39	0.29	360	12
24	21	35	2	2010	3004	42	0.41	390	13
24	21	36	2	2069	2974	48	0.41	420	14
24	22	36	2	2146	2937	51	0.33	450	15
24	23	36	2	2233	2908	39	0.27	480	16
24	23	37	2	2294	2892	35	0.17	510	17
24	24	37	2	2366	2886	30	0.00	540	18
24	25	37	3	2424	2886	28	0.89	570	19
24	25	37	3	2477	2883	27	0.88	600	20
24	26	37	3	2525	2879	28	0.94	630	21
24	26	37	2	2575	2874	32	0.07	660	22
24	27	37	2	2633	2869	38	0.26	690	23
24	27	37	2	2699	2864	45	0.48	720	24
24	28	37	2	2756	2862	46	0.54	750	25
24	29	37	2	2816	2862	54	0.62	780	26
24	29	37	2	2886	2868	57	0.77	810	27
24	30	37	2	2974	2864	61	1.00	832	E
25	20	26	2	1925	3900	38	0.25	0	0
25	21	30	2	2004	3585	33	0.11	30	1
25	22	31	2	2106	3485	32	0.05	60	2
25	22	31	2	2199	3416	35	0.15	90	3
25	23	32	2	2288	3364	40	0.32	120	4
25	24	32	2	2378	3325	42	0.41	150	5
25	25	33	2	2461	3295	43	0.50	180	6
25	26	33	2	2535	3263	43	0.54	210	7
25	27	33	2	2609	3234	49	0.66	240	8
25	27	33	2	2680	3211	54	0.84	270	9
25	28	34	2	2760	3192	59	1.00	300	E
26	20	26	2	1983	3983	30	0.00	0	0
26	23	25	3	2247	4076	4	0.28	30	1
26	24	25	3	2383	4046	-2	0.26	60	2
26	25	25	3	2491	4013	-2	0.30	90	3
26	26	26	3	2600	3979	9	0.39	120	4
26	27	26	3	2699	3944	16	0.52	150	5
26	28	26	3	2781	3910	22	0.69	180	6
26	29	27	2	2840	3887	32	0.07	210	7
26	30	27	2	2915	3859	48	0.47	240	8
26	30	27	2	2982	3809	56	0.82	270	9
26	31	28	1	3005	3751	68	0.51	300	10
26	31	29	1	3018	3691	70	0.58	330	11
26	31	29	1	3036	3616	71	0.68	360	12
26	31	30	1	3038	3589	75	1.00	369	E
27	20	26	2	1983	3950	30	0.00	0	0
27	23	27	3	2289	3900	-1	0.14	30	1
27	25	27	3	2412	3851	-16	0.14	60	2
27	25	27	3	2498	3809	-15	0.16	90	3
27	26	28	3	2599	3767	3	0.22	120	4
27	27	28	3	2697	3732	11	0.28	150	5
27	28	28	3	2752	3710	3	0.33	180	6
27	28	29	3	2798	3686	13	0.43	210	7
27	30	29	2	2926	3630	31	0.04	240	8
27	30	30	3	2975	3590	26	0.88	270	9
27	30	30	3	2992	3568	20	0.71	300	10

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
27	31	30	3	3013	3546	20	0.68	330	11
27	31	30	3	3034	3523	22	0.74	360	12
27	31	30	3	3053	3500	24	0.81	390	13
27	31	31	3	3079	3477	27	0.90	420	14
27	32	31	2	3104	3454	30	0.01	450	15
27	32	31	2	3131	3423	35	0.18	480	16
27	32	32	2	3154	3397	43	0.42	510	17
27	32	32	2	3179	3374	50	0.66	540	18
27	32	32	2	3199	3351	59	0.97	570	19
27	33	32	1	3203	3310	62	0.14	600	20
27	33	33	1	3203	3270	73	1.00	624	E
28	20	26	2	1983	3917	30	0.00	0	0
28	23	28	3	2225	3758	5	0.27	30	1
28	24	29	3	2345	3699	4	0.28	60	2
28	25	29	3	2445	3645	7	0.34	90	3
28	26	29	3	2540	3600	11	0.43	120	4
28	27	30	3	2612	3564	15	0.51	150	5
28	27	30	3	2671	3538	18	0.63	180	6
28	28	30	2	2731	3512	31	0.02	210	7
28	29	31	2	2832	3479	46	0.37	240	8
28	30	31	2	2933	3450	44	0.42	270	9
28	30	31	2	2993	3430	44	0.41	300	10
28	31	31	2	3045	3413	51	0.69	330	11
28	31	31	1	3085	3402	64	0.43	360	12
28	32	31	1	3101	3401	74	1.00	372	E
29	20	26	2	1950	3983	30	0.00	0	0
29	21	23	3	2079	4207	-1	0.24	30	1
29	23	23	3	2224	4243	-11	0.22	60	2
29	24	23	3	2341	4234	-6	0.24	90	3
29	25	23	3	2453	4210	5	0.31	120	4
29	26	24	3	2558	4181	12	0.43	150	5
29	27	24	3	2651	4145	20	0.58	180	6
29	28	25	3	2732	4099	23	0.72	210	7
29	29	25	3	2806	4055	30	0.98	240	8
29	29	25	2	2869	4002	45	0.50	270	9
29	30	26	1	2923	3952	76	1.00	297	E
30	20	26	2	1950	3950	30	0.00	0	0
30	21	24	3	2018	4198	0	0.01	30	1
30	22	23	3	2148	4270	-8	0.01	60	2
30	23	23	3	2280	4278	-21	0.01	90	3
30	24	23	3	2393	4263	-16	0.01	120	4
30	26	23	3	2501	4237	3	0.02	150	5
30	26	23	3	2597	4204	4	0.03	180	6
30	27	24	3	2686	4165	7	0.03	210	7
30	28	24	3	2763	4116	10	0.04	240	8
30	29	25	3	2829	4067	7	0.05	270	9
30	29	25	3	2879	4023	8	0.09	300	10
30	30	26	3	2942	3969	25	0.28	330	11
30	30	26	2	2986	3922	37	0.23	360	12
30	31	27	2	3018	3875	52	0.65	390	13
30	31	27	2	3051	3820	53	0.72	420	14
30	31	28	2	3080	3762	56	0.80	450	15
30	32	28	2	3104	3700	56	0.87	480	16
30	32	29	2	3118	3652	57	0.91	510	17
30	32	29	2	3132	3604	58	0.95	540	18
30	32	30	1	3128	3546	63	0.16	570	19
30	32	31	1	3117	3484	71	0.76	600	20
30	32	31	1	3120	3477	74	1.00	603	E
31	20	26	2	1950	3917	30	0.00	0	0
31	21	29	3	2095	3650	13	0.17	30	1
31	23	30	3	2207	3577	9	0.18	60	2
31	24	30	3	2313	3520	6	0.20	90	3
31	25	31	3	2409	3467	10	0.23	120	4
31	25	31	3	2491	3423	11	0.27	150	5
31	26	32	3	2555	3386	10	0.32	180	6

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
31	27	32	3	2604	3351	10	0.37	210	7
31	27	32	3	2638	3320	14	0.50	240	8
31	27	33	3	2667	3285	20	0.68	270	9
31	27	33	3	2699	3252	26	0.87	300	10
31	28	33	2	2793	3233	37	0.23	330	11
31	29	33	2	2878	3222	35	0.28	360	12
31	30	33	2	2958	3214	35	0.19	390	13
31	31	33	2	3022	3203	32	0.07	420	14
31	31	34	2	3084	3187	31	0.04	450	15
31	32	34	2	3133	3168	31	0.05	480	16
31	32	34	2	3174	3149	32	0.08	510	17
31	33	34	2	3207	3131	35	0.14	540	18
31	33	34	2	3229	3114	40	0.27	570	19
31	33	35	2	3249	3096	43	0.43	600	20
31	33	35	2	3269	3078	48	0.59	630	21
31	33	35	2	3287	3060	53	0.78	660	22
31	34	35	2	3303	3042	59	0.98	690	23
31	34	35	1	3305	3028	66	0.59	720	24
31	34	35	1	3306	3023	70	1.00	735	E
32	20	26	2	1917	3983	30	0.00	0	0
32	19	24	3	1847	4162	9	0.30	30	1
32	19	23	3	1868	4275	9	0.27	60	2
32	20	22	3	1921	4350	1	0.25	90	3
32	20	21	3	1998	4402	5	0.23	120	4
32	21	21	3	2059	4434	-14	0.22	150	5
32	22	21	3	2139	4454	-10	0.21	180	6
32	23	21	3	2234	4458	-12	0.22	210	7
32	24	21	3	2327	4451	-2	0.25	240	8
32	25	21	3	2420	4438	8	0.34	270	9
32	25	21	3	2495	4419	16	0.58	300	10
32	26	22	3	2579	4384	28	0.90	330	11
32	27	22	2	2640	4338	32	0.08	360	12
32	27	23	2	2698	4287	36	0.19	390	13
32	28	23	2	2758	4233	37	0.23	420	14
32	29	24	2	2819	4177	39	0.30	450	15
32	29	24	2	2876	4108	43	0.44	480	16
32	30	25	2	2920	4038	58	0.94	510	17
32	30	26	1	2935	3975	76	1.00	528	E
33	20	26	2	1917	3950	30	0.00	0	0
33	17	26	3	1692	3940	10	0.18	30	1
33	16	27	3	1598	3890	15	0.19	60	2
33	16	27	3	1539	3825	16	0.24	90	3
33	16	28	3	1506	3748	17	0.30	120	4
33	15	29	3	1468	3682	26	0.56	150	5
33	15	29	2	1445	3632	33	0.09	180	6
33	15	30	2	1420	3534	44	0.21	210	7
33	15	31	2	1411	3448	38	0.21	240	8
33	15	32	2	1407	3373	36	0.20	270	9
33	15	32	2	1405	3303	36	0.20	300	10
33	15	33	2	1405	3243	33	0.20	330	11
33	15	34	2	1404	3186	33	0.20	360	12
33	15	34	2	1403	3132	33	0.20	390	13
33	15	35	2	1403	3080	35	0.18	420	14
33	15	35	2	1404	3028	33	0.11	450	15
33	15	36	2	1406	2980	32	0.06	480	16
33	15	36	2	1408	2934	31	0.05	510	17
33	15	37	2	1410	2890	31	0.04	540	18
33	15	37	2	1413	2848	32	0.06	570	19
33	15	37	2	1415	2810	32	0.08	600	20
33	15	38	2	1413	2774	35	0.15	630	21
33	15	38	2	1409	2743	38	0.25	660	22
33	15	38	2	1405	2714	41	0.37	690	23
33	15	39	2	1400	2690	42	0.47	720	24
33	14	39	2	1394	2667	46	0.53	750	25
33	14	39	2	1388	2647	49	0.60	780	26

Scenario 4

PARTICLE NO.	J	I	K	MODEL X (FT)	MODEL Y (FT)	MODEL Z (FT MSL)	LOCAL Z	TIME (DAYS)	TIME INDEX
33	14	39	2	1381	2630	51	0.69	810	27
33	14	39	2	1375	2614	54	0.78	840	28
33	14	39	2	1369	2601	57	0.89	870	29
33	14	40	2	1361	2588	58	0.93	900	30
33	14	40	2	1353	2575	59	0.96	930	31
33	14	40	2	1345	2563	60	0.99	960	32
33	14	40	1	1332	2553	61	0.09	990	33
33	14	40	1	1316	2544	61	0.22	1020	34
33	13	40	1	1299	2535	64	0.36	1050	35
33	13	40	1	1289	2530	69	0.85	1080	36
33	13	40	1	1286	2529	70	1.00	1088	E
34	20	26	2	1917	3917	30	0.00	0	0
34	19	29	3	1838	3683	21	0.38	30	1
34	19	30	3	1882	3522	19	0.34	60	2
34	20	31	3	1943	3420	17	0.30	90	3
34	21	32	3	2002	3352	15	0.31	120	4
34	21	32	3	2069	3305	17	0.40	150	5
34	22	33	3	2140	3265	27	0.70	180	6
34	23	33	2	2219	3234	33	0.09	210	7
34	24	33	2	2305	3201	35	0.17	240	8
34	24	34	3	2395	3158	27	0.68	270	9
34	25	34	3	2445	3128	21	0.54	300	10
34	26	34	3	2503	3101	13	0.46	330	11
34	26	35	3	2544	3085	13	0.49	360	12
34	26	35	3	2585	3070	14	0.53	390	13
34	27	35	3	2634	3055	21	0.64	420	14
34	27	35	3	2680	3042	26	0.85	450	15
34	28	35	2	2739	3033	32	0.08	480	16
34	29	35	2	2816	3027	37	0.25	510	17
34	29	35	2	2898	3022	42	0.41	540	18
34	30	35	2	2978	3012	41	0.47	570	19
34	31	36	2	3053	2999	41	0.45	600	20
34	32	36	2	3110	2987	43	0.51	630	21
34	32	36	2	3158	2973	45	0.57	660	22
34	32	36	2	3196	2959	47	0.64	690	23
34	33	36	2	3223	2945	56	0.82	720	24
34	33	36	2	3243	2935	62	1.00	745	E

SMITH

ATTACHMENT D

EXCERPT FROM SHARP MANUAL

THE COMPUTER MODEL SHARP, A QUASI-THREE-DIMENSIONAL FINITE-DIFFERENCE MODEL TO SIMULATE FRESHWATER AND SALTWATER FLOW IN LAYERED COASTAL AQUIFER SYSTEMS

By Hedeff I. Essaid

U. S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 90-4130

Menlo Park, California

1990

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THE COMPUTER MODEL SHARP, A QUASI-THREE-DIMENSIONAL FINITE-DIFFERENCE MODEL TO SIMULATE FRESHWATER AND SALTWATER FLOW IN LAYERED COASTAL AQUIFER SYSTEMS

by H. I. Essaid

ABSTRACT

This report documents the quasi-three-dimensional, finite-difference model, SHARP, which simulates freshwater and saltwater flow separated by a sharp interface in layered coastal aquifer systems. The model accommodates multiple aquifers separated by confining layers, with spatially variable porous media properties. The uppermost aquifer can be confined, unconfined or semi-confined with areally distributed recharge. Temporal variations in recharge and pumping are accounted for by multiple pumping periods. The boundary conditions which can be simulated in the model are: prescribed flux boundaries, constant freshwater head and/or constant saltwater head boundaries, and leaky head-dependent boundaries.

For each aquifer, the vertically integrated freshwater and saltwater flow equations are solved. These two equations are coupled by the boundary condition at the interface. Leakage between aquifers is calculated by applying Darcy's law. The resulting system of coupled, non-linear partial differential equations is discretized using an implicit finite-difference scheme. The discretized system of equations is solved using the strongly implicit procedure (SIP). The positions of the interface tip and toe, within the discretized finite-difference grid blocks, are tracked using linear extrapolation of the interface elevations calculated at grid points.

This documentation includes an overview of saltwater intrusion modeling approaches and the mathematical formulation of SHARP. The model is verified against experimental and analytical solutions, and sample areal and cross-sectional applications are presented.

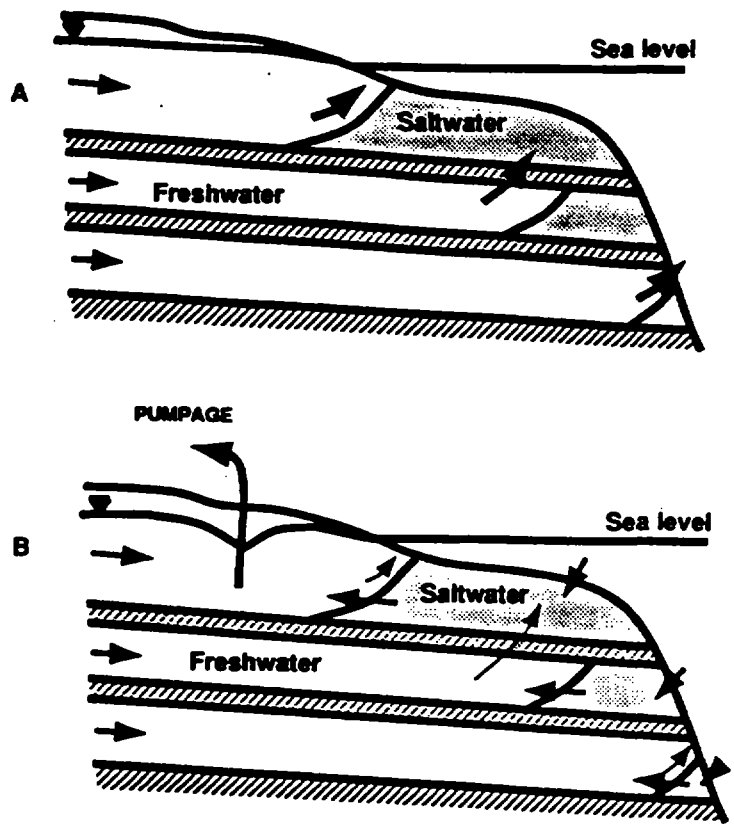

Figure 2.--Idealized cross-section of a layered coastal aquifer system showing paths of freshwater discharge and potential paths for saltwater intrusion:
A. steady-state system with constant freshwater discharge offshore,
B. transient system with intruding saltwater and inland interface movement.

In reality, the interface separating fresh and saltwater is a transition zone created by the mixing of waters due to the effects of diffusion and mechanical dispersion. Cooper (1959) and Kohout (1964) have shown that in the zone of mixing, the diluted saltwater is less dense than the original sea water, causing it to rise and move seaward along the interface (fig. 3). This induces a cyclic flow of saltwater from the sea, through the ocean floor, to the zone of mixing, and back to the sea. This cyclic flow occurs even under steady-state conditions.

Inland changes in recharge or discharge modify the flow within the freshwater region, inducing movement of the interface. Reduction in freshwater flow towards the sea causes the interface to move inland and results in the intrusion of saltwater into the aquifer. Conversely, an increase in freshwater flow pushes the interface seaward. The rate of

interface movement and the transient aquifer head response will depend on the boundary conditions and aquifer properties on both sides of the interface. The ease with which saltwater can move into, or out of, an aquifer system affects the rate of interface movement in response to changes in offshore freshwater discharge. In a layered system, saltwater can enter an aquifer by flowing through the aquifer outcrop, and/or leaking across the confining layers and ocean floor (fig. 2b). Therefore, in order to understand coastal systems, it is necessary to examine the dynamics of both the freshwater and saltwater flow domains.

Management of coastal ground-water resources requires an understanding of the physical dynamics of the phenomenon of saltwater intrusion. For this reason, considerable effort has been put into developing numerical models for saltwater intrusion that can represent the physical complexities, as well as the spatial and temporal variations inherent in coastal systems.

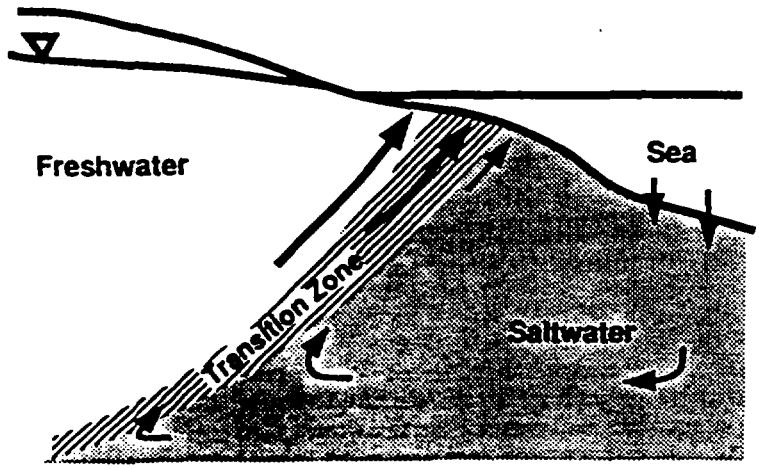

Figure 3.--Circulation of saltwater from the sea to the transition zone and back to the sea induced by mixing at the interface.

Saltwater Intrusion Modeling Approaches

Disperse and sharp interface approaches have been used t analyze saltwater intrusion in coastal aquifers (Reilly and Goodman, 1985). The disperse interface approach explicitly represents the transition zone, where there is mixing of freshwater and saltwater due to the effects of hydrodynamic dispersion (molecular diffusion and mechanical dispersion). The sharp interface approach simplifies the analysis by assuming that freshwater and saltwater do not mix and are separated by an abrupt interface. Both approaches have been used to develop numerical models to study and predict the flow of ground water in coastal aquifers. A summary of the numerical models that have been developed for simulation of saltwater intrusion problems is given in table 1.

.able 1.--Summary of numerical salt water intrusion models (DI-disperse interface, DD-density dependent, NDD-non-density-dependent, SI-sharp interface, F-fresh water only, FS-fresh and salt water, FD-finite difference, FE-finite element, BIM-boundary integral method, A2-D-areal two-dimensional, VCS-vertical cross-section, Q3-D-quasi-three-dimensional, 3-D-three-dimensional, TIME DEP.-time dependence, TR-transient, SS-steady state, DUP. APP.-Dupuit approximation, G-H APP.-Ghyben-Herzberg approximation)

GROUP	AUTHOR	APPROACH	METHOD	GEOMETRY	TIME DEP.	DUP. APP.	G-H APP.	FIELD APPLICATION
	Reddell & Sunada, 1970	DI-NDD	FD	A2-D	TR	YES	NO	
I-1	Bredehoeft & Pinder, 1973	DI-NDD	FD	A2-D	TR	YES	NO	Brunswick, Georgia
	Andrews, 1981	DI-NDD	FE	A2-D	TR	YES	NO	Costa de Hermosillo, Mexico
	Pinder & Cooper, 1970	DI-DD	FD	VCS	TR	NO	NO	
	Volker & Rushton, 1982	DI-DD	FD	VCS	SS	NO	NO	
	Sanford & Konikow, 1985	DI-DD	FD	VCS	TR	NO	NO	
	Segol and others, 1975	DI-DD	FE	VCS	TR	NO	NO	Biscayne aquifer, Florida (Segol & Pinder, 1976)
	Lee & Cheng, 1974	DI-DD	FE	VCS	SS	NO	NO	Biscayne aquifer, Florida
I-2	Frind, 1982a,b	DI-DD	FE	VCS	TR	NO	NO	
	Voss, 1984b	DI-DD	FE	VCS	TR	NO	NO	Southern Oahu, Hawaii (Souza & Voss, 1986)
	INTERA, 1979	DI-DD	FD	3-D	TR	NO	NO	
	Kipp, 1987	DI-DD	FD	3-D	TR	NO	NO	
	Huyakorn and others, 1987	DI-DD	FE	3-D	TR	NO	NO	
	Fetter, 1972	SI-F	FD	A2-D	SS	YES	YES	South Fork, Long Island
	Anderson, 1976	SI-F	FD	VCS	TR	YES	YES	South Fork, Long Island
II-1	Ayers & Vacher, 1983	SI-F	FD	A2-D	TR	YES	YES	Somerset Island, Bermuda
	Guswa & LeBlanc, 1985	SI-F	FD	3-D	SS	NO	YES	Cape Cod, Massachusetts
	Sapik, 1988	SI-F	FD	Q3-D	SS	YES	YES	
	Voss, 1984a	SI-F	FE	A2-D	TR	YES	YES	Southeast Oahu, Hawaii (Eyre, 1985)
	Taigbenu and others, 1984	SI-F	BIM	A2-D	TR	YES	YES	
	Volker & Rushton, 1982	SI-F	BIM	VCS	SS	NO	YES	
	Shamir & Dagan, 1971	SI-FS	FD	VCS	TR	YES	NO	
	Bonnet & Sauty, 1975	SI-FS	FD	A2-D	TR	YES	NO	Morrocan Atlantic Coast
	Mercer and others, 1980a,b	SI-FS	FD	A2-D	TR	YES	NO	Maui, Hawaii
II-2	Polo & Ramis, 1983	SI-FS	FD	A2-D	TR	YES	NO	Spain
	Pinder & Page, 1977	SI-FS	FE	A2-D	TR	YES	NO	North Haven, New York
	Wilson & Sa da Costa, 1982	SI-FS	FE	A2-D	TR	YES	NO	Algarve, Portugal (Sa da Costa, 1986)
	Contractor, 1983	SI-FS	FE	A2-D	TR	YES	NO	North Guam
	Liu and others, 1981	SI-FS	BIM	VCS	TR	NO	NO	

Disperse Interface Approach

To represent the physics of a disperse interface separating freshwater and saltwater, the equations governing fluid flow must be solved in conjunction with the solute transport equation for a conservative chemical species (Bear, 1979):

$$\frac{\partial(n\rho)}{\partial t} = -\nabla.\rho q \qquad \text{fluid mass balance,} \qquad (1)$$

$$q = -\frac{\underline{k}}{\mu}(\nabla p + \rho g \nabla z) \qquad \text{Darcy's law,} \qquad (2)$$

$$\frac{\partial(nc)}{\partial t} = \nabla.n\underline{D}_h.\nabla c - \nabla.qc \qquad \text{transport equation,} \qquad (3)$$

where: $\underline{k}$ = permeability tensor (L^2);

μ = $\mu(c)$ is dynamic viscosity ($ML^{-1}T^{-1}$);

ρ = $\rho(c)$ is fluid density (ML^{-3});

p = pressure ($ML^{-1}T^{-2}$);

z = the vertical dimension (L);

g = gravitational acceleration (LT^{-2});

n = porosity;

c = concentration (ML^{-3});

$\underline{D}_h$ = the hydrodynamic dispersion coefficient tensor (L^2T^{-1});

q = the specific discharge or Darcy velocity (LT^{-1});

t = time (T); and

$\nabla(\ ) = \frac{\partial(\ )}{\partial x}\mathbf{x} + \frac{\partial(\ )}{\partial y}\mathbf{y} + \frac{\partial(\ )}{\partial z}\mathbf{z}$, where $\mathbf{x}$, $\mathbf{y}$ and $\mathbf{z}$ are unit vectors in the x-, y- and z- directions.

Because density is a function of concentration, these equations must be solved simultaneously to simulate coupled density-dependent fluid flow and solute transport. If the transition zone is very disperse and chloride concentrations gradients are low, the effects of variable density may be neglected. This simplification makes it possible to decouple the equations, solving first for the flow field and subsequently for the concentration field. Use of this approach, in conjunction with the Dupuit assumption of horizontal flow, is suitable for areal modeling of aquifer systems with low chloride concentration gradients, or when vertical resolution is not needed (Group I-1, table 1).

In many cases, however, the density gradient is significant and must be accounted for (Group I-2, table 1). Generally, the flow and transport equations are solved simultaneously by iterating between the two equations, increasing computational effort considerably. This has limited most solutions to two-dimensional vertical cross-sections. Three-dimensional,

density-dependent solute transport codes have been developed (INTERA, 1979; Huyakorn and others, 1987; Kipp, 1987; Andersen and others, 1988) but have restricted applicability for regional studies due to computational constraints.

Sharp Interface Approach

When the width of the transition zone is small relative to the thickness of the aquifer it can be assumed, for the purpose of analysis, that the saltwater and freshwater are immiscible fluids separated by a sharp interface. This approach reproduces the general position, shape, and behavior of the interface. These models couple the freshwater and saltwater flow domains through the interfacial boundary condition of continuity of flux and pressure. In three dimensions this boundary condition is highly non-linear (Bear, 1979), making the solution difficult. The problem can be simplified, however, by integrating the flow equations over the vertical and assuming horizontal flow within the aquifer. Sharp interface models generally fall into two categories: those that model coupled freshwater and saltwater flow (two-fluid approach), and those that model freshwater flow only (one-dynamic-fluid approach).

Badon-Ghyben (1889) and Herzberg (1901) related the freshwater head above sea level (Φ_f) to the depth to the interface below sea level (h_s) for a system in static equilibrium; that is, steady horizontal freshwater flow and stationary saltwater (fig. 4). At the interface, the pressure due to the overlying column of freshwater must be equivalent to that due to the column of saltwater; therefore, the following relation must hold:

$$h_s \gamma_s = (h_s + \Phi_f)\gamma_f \ , \tag{4}$$

or

$$h_s = \delta \Phi_f \ , \tag{5}$$

where $\delta = \gamma_f/(\gamma_s - \gamma_f)$ and γ_f, γ_s are the fresh and saltwater specific weights, respectively. For the common values of freshwater and saltwater densities (1.0 gm/cm^3 and 1.025 gm/cm^3, respectively) the value of δ is 40, that is, the depth to the interface below sea level, is forty times the freshwater head. The sharp interface models that simulate flow in the freshwater region only, (Group II-1, table 1) incorporate the Ghyben-Herzberg relation (5) assuming that at each time step saltwater adjusts instantaneously to changes in the freshwater zone, and an equilibrium interface position is achieved.

In the two-fluid approach the freshwater and the saltwater flow equations, which are coupled by the interface boundary condition, are solved simultaneously (Group II-2, table 1). On the basis of the principle of continuity of pressure, the interface elevation can be expressed as a function of the freshwater head and the saltwater head. The movement of the interface is dictated by the freshwater and saltwater flow dynamics.

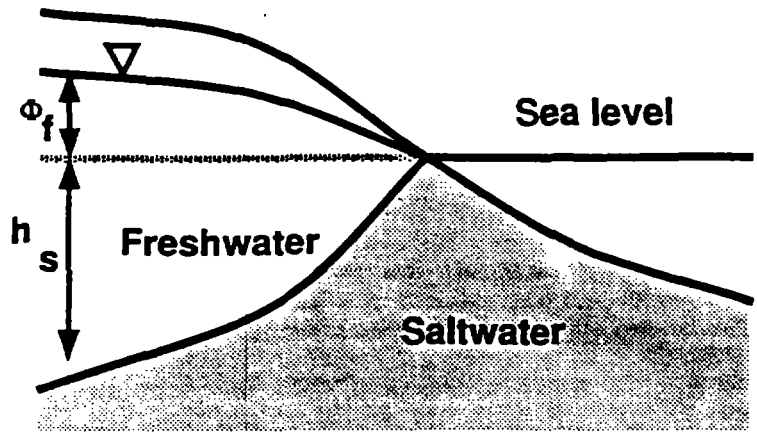

Figure 4.--The Ghyben-Herzberg interface model.

Discussion of Approaches

Each of the above approaches has advantages and limitations, and can be employed successfully only under the appropriate conditions. The disperse interface is necessary in areas where the transition zone is wide. Density effects can be neglected when chloride concentration gradients are low and the governing equations can be solved areally on a basin-wide scale. However, when the flow is density-dependent, the vertical dimension must be included. Studies using this approach generally have been limited to two-dimensional vertical cross-sections due to computational constraints. There are also numerical instabilities and errors which are encountered when simulating the movement of a narrow concentration front, especially in zones where the transition zone approaches a sharp interface. Frind (1982a) showed that when a velocity-dependent dispersion coefficient is used, instabilities are encountered in areas of stagnant saltwater. Voss and Souza (1986, 1987) indicate that when flow is predominantly horizontal, the vertical discretization must be of the same order of magnitude as the transverse dispersivity in order to avoid introducing numerical dispersion.

The sharp interface approach, in conjunction with the application of the hydraulic approach (integration of the flow equations over the vertical), allows the problem to be reduced by one dimension. Thus, it can be applied areally to large physical systems. This approach does not give information concerning the nature of the transition zone; however, it does represent the overall flow dynamics of the system and will reproduce the general response of the interface to applied stresses. Volker and Rushton (1982) compared steady-state solutions for both the disperse interface and the sharp interface approaches and showed that as the coefficient of hydrodymic dispersion decreases, the two solutions approach each other.

Sharp interface models that simulate flow in the freshwater region only by incorporating the Ghyben-Herzberg approximation assume that the saltwater zone adjusts rapidly to the applied stresses. This may be a reasonable assumption in long-term studies if the interface can respond quickly to applied stresses. However, to reproduce the short-term response of a coastal aquifer, it is necessary to include the influence of saltwater flow (Essaid, 1986).

Individually, none of the above approaches can fully characterize the behavior and complexities of coastal aquifer systems. The choice of the approach used to model a particular system will depend on the nature of the system as well as the goals of the modeling effort. The sharp interface approach can represent the overall flow characteristics of the system, but cannot give details concerning the nature of the transition zone. When studying an aquifer system, it is important to first understand its overall behavior before examining smaller scale effects. Therefore, the ideal characterization of such systems may involve a two-step process integrating the sharp interface and disperse interface modeling approaches.

The Multilayer Freshwater - Saltwater Flow Model SHARP

Saltwater intrusion models have generally been limited to single aquifer problems, although a few have been developed for more complicated geometries (table 1). The two-dimensional, areal, sharp interface, numerical models of Mercer and others (1980a,b) and Voss (1984a) allow for an overlying leaky confining unit. Fetter (1972) and Anderson (1976) represented layers with different hydraulic conductivities by a single layer with an averaged conductivity value. Density-dependent solute transport models that can handle an overlying leaky confining unit have been developed (Frind, 1982a,b; Voss, 1984b; Huyakorn and others, 1987). Mercer and others (1986) used the INTERA (1979) code to build a quasi-three-dimensional solute transport model of Volusia County, Florida by neglecting the density dependence of the problem. Some analytical solutions have dealt with the problem of the position of a steady-state, sharp interface in a layered or stratified aquifer (Collins and others, 1972; Rumer and Shiau, 1968; Mualem, 1973; Collins and Gelhar, 1971 and 1977; Mualem and Bear, 1974). The only sharp interface model of coupled freshwater and saltwater flow presented for a multilayered case is that of Bear and Kapuler (1981), a cross-sectional model for two aquifers separated by a thin impervious layer. Sapik (1988) has developed a multilayered model for freshwater flow only by incorporating the Ghyben-Herzberg approximation into a three-dimensional ground-water flow model.

SHARP is a quasi-three-dimensional, finite-difference model that simulates coupled freshwater and saltwater flow separated by a sharp interface in multilayered coastal systems. It can be used for both areal (regional) and cross-sectional studies.