

US EPA ARCHIVE DOCUMENT

Appendix C

Data Chem Laboratory Reports

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.



ANALYTICAL REPORT

Form ARF-AL

Page 1 of 3

Part 1 of 1

06230312005398RX

Date JUN 24 2003Laboratory Group Name 03I-1506-01Account No. 07003

Booz Allen Hamilton
Attention: Steve Coffee
5299 DTC Bldg.
Suite 840
Greenwood Village, CO 80111

FAX (303) 694-7367

Telephone (303) 221-7559

E-mail coffee_stephen@bah.com

Sampling Collection and Shipment

Sampling Site AERC Ashland Trip#4 Date of Collection _____Date Samples Received at Laboratory June 16, 2003

Analysis

Method of Analysis NMAM 6009Date(s) of Analysis June 19, 2003

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Mercury ug/sample	Mercury mg/m ³	Air Volume L					
3705BA6/9-01	03I19545	TUBE	0.77	0.013	58.3					
3705BA6/9-03	03I19546	TUBE	0.46	0.0086	54.1					
LAB BLANK	03I19547	TUBE	0.040	**	0.00					
LAB BLANK	03I19548	TUBE	0.047	**	0.00					
LAB BLANK	03I19549	TUBE	0.040	**	0.00					
FB 6/10	03I19550	TUBE	0.039	**	0.00					
FB 6/10	03I19551	TUBE	0.041	**	0.00					
FB 6/11	03I19552	TUBE	0.041	**	0.00					
FB 6/11	03I19553	TUBE	0.038	**	0.00					
FB 6/12	03I19554	TUBE	0.040	**	0.00					
FB 6/12	03I19555	TUBE	0.038	**	0.00					
FB 6/13	03I19556	TUBE	0.036	**	0.00					
FB 6/13	03I19557	TUBE	0.043	**	0.00					

† See comment on last page.

ND Parameter not detected above LOD.

NR Parameter not requested.

NA Parameter not applicable.

** See comment on last page.

() Parameter between LOD and LOQ.

Analyst: Jose G. RochaReviewer: Neil A. Edwards

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com



ANALYTICAL REPORT

Form ARF-C

Page 3 of 3
06230312005398RX

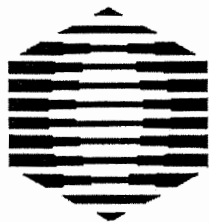
Date JUN 24 2003
Laboratory Group Name 03I-1506-01

General Set Comments

Method Reference: NIOSH Manual of Analytical Methods(NMAM), 4th ed., 08/15/94.
Results are not blank-corrected.
Results obtained for media blanks prepared from SKC Carulite tubes are typically found to have concentrations approximately 0.035-0.045 ug/Sample above the reporting limit.
Results cannot be reported in mg/m³ or ppm for samples with no air volume.

General Lab Comments

The results provided in this report relate only to the items tested.
This page is the concluding page of the report.



DATA CHEM LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03I-1506-01

☐ RUSH Status Requested - ADDITIONAL CHARGE
RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13/03 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device

Telephone (303) 221-7559

Date of Collection 6/9 + 6/10 + 6/11 + 6/12

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 1

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03I19545	3705-B-A-6/9-01	Hydrar	58.3 L	N 10SH 6009	2
546	" - 03		54.1 L		
547	LAB Blank		na		
548	LAB Blank		na		
549	LAB Blank		na		
550	Field Blank 6/10		na		
551	Field Blank 6/10		na		
552	Field Blank 6/11		na		
553	Field Blank 6/11		na		
554	Field Blank 6/12		na		
555	Field Blank 6/12		na		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

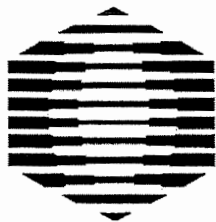
** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by	<u>Steve Coffee</u>	Date/Time	<u>6/13/03 10:03</u>
Received by	<u>Rand Potter</u>	Date/Time	<u>6/14</u>
Relinquished by	<u>Rand Potter</u>	Date/Time	<u>6/16/03</u>
Received by	_____	Date/Time	_____
Relinquished by	_____	Date/Time	_____
Received by	_____	Date/Time	_____



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03I-1506-01

☐ RUSH Status Requested - ADDITIONAL CHARGE
RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date _____ Purchase Order No. _____ 4. Quote No. _____

3. Company Name Booz Allen Hamilton DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

Greenwood Village, CO 80111

Person to Contact Steve Coffee

Telephone (303) 221-7559

Fax Telephone (303) 694-7367

E-mail Address coffee_stephen@bah.com

Billing Address (if different from above) refer to contract

5. Sample Collection

Sampling Site AERC Ashland Trip #4

Industrial Process DTC Device RTI

Date of Collection 6/13 & 6/10

Time Collected _____

Date of Shipment 6/13/03

Chain of Custody No. 2

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03I19556	Field Blank 6/13	Hydrar	na	N105H 6009	2
557	Field Blank 6/13		na		
03I19885	Field Blank 6/13				
558	3705-R-A-6/10-05		25.2 L		
559	" -07		13.4 L		
560	" -09		13.5 L		
561	" -11		29.1 L		
562	" -13		29.1 L		
563	" -15		3.1 L		
564	" -17		3.1 L		
565	" -19		1.0 L		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. (other) Please indicate one or more units in the column entitled Units**

Comments field Blank facility - 03I19885

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by	<u>Steve D. Coffey</u>	Date/Time	<u>6/13/03</u>	<u>10:00</u>
Received by	<u>Rand Potter</u>	Date/Time	<u>6/14</u>	
Relinquished by	<u>Rand Potter</u>	Date/Time	<u>6/16/</u>	
Received by		Date/Time		
Relinquished by		Date/Time		
Received by		Date/Time		



ANALYTICAL REPORT

Form ARF-AL

Page 1 of 3

Part 1 of 1

JUN 24 2003 0600312244758RX

Date _____

Laboratory Group Name 03I-1506-02

Account No. 07003

Booz Allen Hamilton
Attention: Steve Coffee
5299 DTC Bldg.
Suite 840
Greenwood Village, CO 80111

FAX (303) 694-7367

Telephone (303) 221-7559

E-mail coffee_stephen@bah.com

Sampling Collection and Shipment

Sampling Site AERC Ashland Trip#4 Date of Collection June 10, 2003

Date Samples Received at Laboratory June 16, 2003

Analysis

Method of Analysis NMAM 6009

Date(s) of Analysis June 19, 2003

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Mercury ug/sample	Mercury mg/m ³	Air Volume L					
3705RA6/1021	03I19566	TUBE	0.047	0.047	1.0					
3705RA6/1023	03I19567	TUBE	0.19	0.015	12.3					
3705RA6/1025	03I19568	TUBE	0.19	0.015	12.3					
3705RA6/1027	03I19569	TUBE	0.37	0.0066	55.8					
3705RA6/1029	03I19570	TUBE	0.68	0.012	54.7					
3705RA6/1031	03I19571	TUBE	0.95	0.017	56.2					
3705RA6/1033	03I19572	TUBE	0.15	0.012	12.5					
3705RA6/1035	03I19573	TUBE	0.16	0.013	12.5					
3705RA6/1037	03I19574	TUBE	0.17	0.015	11.4					
3705RA6/1039	03I19575	TUBE	0.16	0.014	11.5					
3705RA6/1041	03I19576	TUBE	0.17	0.015	11.6					
3705RA6/1043	03I19577	TUBE	0.14	0.013	10.8					
3705RA6/1045	03I19578	TUBE	0.096	0.031	3.1					

† See comment on last page.

ND Parameter not detected above LOD.

NR Parameter not requested.

NA Parameter not applicable.

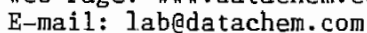
** See comment on last page.

() Parameter between LOD and LOQ.

Analyst: Jose G. Rocha

Reviewer: Neil A. Edwards

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com





ANALYTICAL REPORT

Form ARF-C

Page 3 of 3
06240312244758RX

JUN 24 2003

Date _____

Laboratory Group Name 03I-1506-02

General Set Comments

Method Reference: NIOSH Manual of Analytical Methods(NMAM), 4th ed., 08/15/94.

Results are not blank-corrected.

Results obtained for media blanks prepared from SKC Carulite tubes are typically found to have concentrations approximately 0.035-0.045 ug/Sample above the reporting limit.

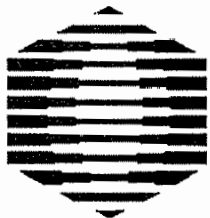
The result for sample 03I19580 exceeded the calibration range of the instrument. Due to an oversight, the sample was not diluted and reanalyzed. The reported result for this sample is therefore estimated.

Sample Comments

Laboratory Number	Comment
03I19580	See set comments.

General Lab Comments

The results provided in this report relate only to the items tested.
This page is the concluding page of the report.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03L-1506-02

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date _____ Purchase Order No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device RTD

Telephone (303) 221-7559

Date of Collection 6/10/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 3

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03L19566	3705-R-A-6/10-21	Hydrar	1.0 L	NIOSH 6009	2
567	" -23.		12.3 L		
568	" -25.		12.3 L		
569	" -27.		55.8 L		
570	" -29.		54.7 L		
571	" -31.		56.2 L		
572	" -33.		12.5 L		
573	" -35.		12.5 L		
574	" -37.		11.4 L		
575	" -39.		11.5 L		
576	" -41.		11.6 L		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

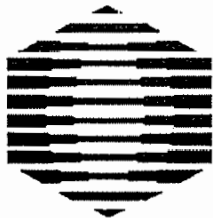
7. Chain of Custody (Optional)

Relinquished by	<u>Stephen Coffee</u>	Date/Time	<u>6/13/03</u> <u>10:01</u>
Received by	<u>Rand Potter</u>	Date/Time	<u>6/14</u>
Relinquished by	<u>Rand Potter</u>	Date/Time	<u>6/16/03</u>
Received by	_____	Date/Time	_____
Relinquished by	_____	Date/Time	_____
Received by	_____	Date/Time	_____

960 West LeVoy Drive / Salt Lake City, UT 84123

800-356-9135 or 801-266-7700 / FAX: 801-268-9992

DATACHEM LABORATORIES, INC.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03T-1506-02

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date _____ Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device RTI

Telephone (303) 221-7559

Date of Collection 6/10/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 4

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03T19577	3705-R-A-6/10-43	Hydra	10.8 L	N165H 6009	2
578	" -45.		3.1 L		
579	" -47.		12.7 L		
580	" -49.		13.0 L		
581	" -51.		1.0 L		
582	" -53.	↓	1.0 L	↓	↓
582					

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by <u>Steve D. Coffey</u>	Date/Time <u>6/13/03 10:00</u>
Received by <u>Rand Potter</u>	Date/Time <u>6/14</u>
Relinquished by <u>Rand Potter</u>	Date/Time <u>6/16/03</u>
Received by _____	Date/Time _____
Relinquished by _____	Date/Time _____
Received by _____	Date/Time _____



ANALYTICAL REPORT

Form ARF-AL

Page 1 of 3

Part 1 of 1

06230316244303RX

Date JUN 24 2003

Laboratory Group Name 03I-1506-04

Account No. 07003

Booz Allen Hamilton
Attention: Steve Coffee
5299 DTC Bldg.
Suite 840
Greenwood Village, CO 80111

FAX (303) 694-7367

Telephone (303) 221-7559

E-mail coffee_stephen@bah.com

Sampling Collection and Shipment

Sampling Site AERC Ashland Trip#4 Date of Collection June 11, 2003

Date Samples Received at Laboratory June 16, 2003

Analysis

Method of Analysis NMAM 6009

Date(s) of Analysis June 20, 2003

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Mercury ug/sample	Mercury mg/m ³	Air Volume L					
3705DA61155	03I19603	TUBE	1.2	0.064	19.20					
3705DA61157	03I19604	TUBE	0.68	0.058	11.7					
3705DA61159	03I19605	TUBE	0.90	0.076	11.8					
3705DA61161	03I19606	TUBE	1.5	0.074	20.1					
3705DA61163	03I19607	TUBE	0.98	0.047	20.8					
3705DA61165	03I19608	TUBE	1.0	0.20	5.2					
3705DA61167	03I19609	TUBE	0.20	0.065	3.1					
3705DA61169	03I19610	TUBE	0.10	0.10	1.0					
3705DA61171	03I19611	TUBE	0.19	0.19	1.0					
3705DA61173	03I19612	TUBE	0.62	0.081	7.7					
3705DA61175	03I19613	TUBE	0.59	0.11	5.5					
3705AA612117	03I19615	TUBE	0.77	0.029	26.5					
3705AA612119	03I19616	TUBE	0.77	0.049	15.8					

See comment on last page.

ND Parameter not detected above LOD.

NR Parameter not requested.

NA Parameter not applicable.

** See comment on last page.

() Parameter between LOD and LOQ.

Jose G. Rocha
Analyst: Jose G. Rocha

Reviewer: Neil A. Edwards

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

E-mail: lab@datachem.com



ANALYTICAL REPORT

Form ARF-C

Page 3 of 3
06230316244303RX

JUN 24 2003

Date _____

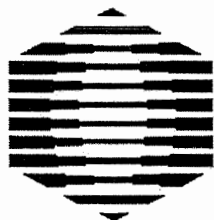
Laboratory Group Name 03I-1506-04

General Set Comments

Method Reference: NIOSH Manual of Analytical Methods(NMAM), 4th ed., 08/15/94.
Results are not blank-corrected.
Results obtained for media blanks prepared from SKC Carulite tubes are typically found to have concentrations approximately 0.035-0.045 ug/Sample above the reporting limit.
Samples 03I19603,606 required a 10X dilution.

General Lab Comments

The results provided in this report relate only to the items tested.
This page is the concluding page of the report.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status 03I-1506-04

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13/03 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device Dextrin

Telephone (303) 221-7559

Date of Collection 6/11/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 9

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
<u>03I19603</u>	<u>3705-D-A-6/11-55</u>	<u>Hydrar</u>	<u>19.2 L</u>	<u>NIOSH 6009</u>	<u>2</u>
<u>604</u>	<u>" - 57</u>		<u>11.7 L</u>		
<u>605</u>	<u>" - 59</u>		<u>11.8 L</u>		
<u>606</u>	<u>" - 61</u>		<u>20.1 L</u>		
<u>607</u>	<u>" - 63</u>		<u>20.8 L</u>		
<u>608</u>	<u>" - 65</u>		<u>5.2 L</u>		
<u>609</u>	<u>" - 67</u>		<u>3.1 L</u>		
<u>610</u>	<u>" - 69</u>		<u>1.0 L</u>		
<u>611</u>	<u>" - 71</u>		<u>1.0 L</u>		
<u>612</u>	<u>" - 73</u>		<u>7.7 L</u>		
<u>613</u>	<u>" - 75</u>	<u>✓</u>	<u>5.5 L</u>	<u>✓</u>	<u>✓</u>

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

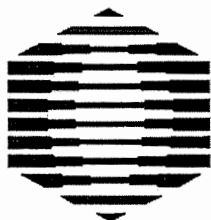
** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by <u>Steve J. Coffee</u>	Date/Time <u>6/13/03 10:00</u>
Received by <u>Rand Potter</u>	Date/Time <u>6/14</u>
Relinquished by <u>Rand Potter</u>	Date/Time <u>6/16</u>
Received by _____	Date/Time _____
Relinquished by _____	Date/Time _____
Received by _____	Date/Time _____



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03I-1506-04

☐ RUSH Status Requested - ADDITIONAL CHARGE
RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device

Telephone (303) 221-7559

Date of Collection 6/12/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. _____

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03I-19614	5405-A-A-412	HYDRAR		NAAM (600 g)	2
615	117.		26.5 L		
616	119.		15.8 L		
617	121.		16.7 L		
618	123.		26.4 L		
619	125.		26.5 L		
620	127.		3.1 L		
621	129.		3.1 L		
622	131.		1.0 L		
623	133.		1.0 L		
624	135.		10.3 L		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by <u>Steve D. Coffee</u>	Date/Time <u>6/13/03</u> <u>10:01</u>
Received by <u>Rand Potter</u>	Date/Time <u>6/14/</u>
Relinquished by <u>Rand Potter</u>	Date/Time <u>6/16/03</u>
Received by _____	Date/Time _____
Relinquished by _____	Date/Time _____
Received by _____	Date/Time _____



ANALYTICAL REPORT

Form ARF-AL
Page 1 of 3
Part 1 of 1
06240312455882RX

JUN 24 2003

Date _____
Laboratory Group Name 03I-1506-03
Account No. 07003

Booz Allen Hamilton
Attention: Steve Coffee
5299 DTC Blvd.
Suite 840
Greenwood Village, CO 80111

FAX (303) 694-7367
Telephone (303) 221-7559
E-mail coffee_stephen@bah.com

Sampling Collection and Shipment

Sampling Site AERC Ashland Trip#4 Date of Collection June 11, 2003Date Samples Received at Laboratory June 16, 2003

Analysis

Method of Analysis NMAM 6009Date(s) of Analysis June 19, 2003

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Mercury ug/Sample	Mercury mg/m ³	Air Volume L					
3705DA61199	03I19583	TUBE	0.23	0.033	6.9					
3705DA611101	03I19584	TUBE	0.23	0.034	6.8					
3705DA611103	03I19585	TUBE	0.23	0.074	3.1					
3705DA611105	03I19586	TUBE	0.094	0.094	1.0					
3705DA611107	03I19587	TUBE	0.11	0.11	1.0					
3705DA611109	03I19588	TUBE	0.89	0.12	7.2					
3705DA611111	03I19589	TUBE	0.85	0.12	7.2					
3705DA611113	03I19590	TUBE	1.6	0.089	18.0					
3705DA611115	03I19591	TUBE	1.3	0.073	18.0					
3705DA61177	03I19592	TUBE	0.065	0.00052	125.9					
3705DA61179	03I19593	TUBE	6.0	0.049	123.5					
3705DA61181	03I19594	TUBE	0.059	0.00052	113.1					
3705DA61183	03I19595	TUBE	0.24	0.10	2.4					

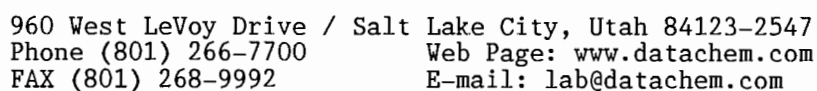
† See comment on last page.
ND Parameter not detected above LOD.
NR Parameter not requested.
NA Parameter not applicable.

** See comment on last page.
() Parameter between LOD and LOQ.

Analyst: Jose G. Rocha

Reviewer: Neil A. Edwards

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com





ANALYTICAL REPORT

Form ARF-C

Page 3 of 3
06240312455882RX

JUN 24 2003

Date _____

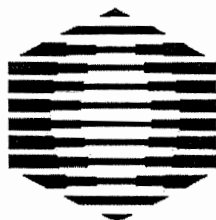
Laboratory Group Name 03I-1506-03

General Set Comments

Method Reference: NIOSH Manual of Analytical Methods(NMAM), 4th ed., 08/15/94.
Results are not blank-corrected.
Results obtained for media blanks prepared from SKC Carulite tubes are typically found to have concentrations approximately 0.035-0.045 ug/Sample above the reporting limit.
Samples 03I19590, 91 and 93 required a 10X dilution.

General Lab Comments

The results provided in this report relate only to the items tested.
This page is the concluding page of the report.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03E-1506-03

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13/03 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device Dextrite

Telephone (303) 221-7559

Date of Collection 6/11/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 11

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03E19583	3705-D-A-6/11-99	Hydrar	6.9 L	N105H 6009	2
584	" -101	.	6.8 L		
585	" -103	.	3.1 L		
586	" -105	.	1.0 L		
587	" -107	.	1.0 L		
588	" -109	.	7.2 L		
589	" -111	.	7.2 L		
590	" -113	.	18.0 L		
591	" -115	✓	18.0 L	✓	✓

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

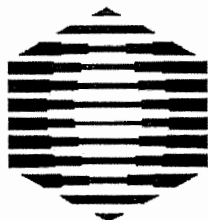
7. Chain of Custody (Optional)

Relinquished by	<u>Stephen D. Coffee</u>	Date/Time	<u>6/13/03</u> <u>10:00</u>
Received by	<u>Rand Potter</u>	Date/Time	<u>6/14</u>
Relinquished by	<u>Rand Potter</u>	Date/Time	<u>6/16/03</u>
Received by		Date/Time	
Relinquished by		Date/Time	
Received by		Date/Time	

960 West LeVoy Drive / Salt Lake City, UT 84123

800-356-9135 or 801-266-7700 / FAX: 801-268-9992

DATACHEM LABORATORIES, INC.



DATA CHEM LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03I-1506-03

☐ RUSH Status Requested - ADDITIONAL CHARGE
RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13/03 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device

Telephone (303) 221-7559

Date of Collection 6/11/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. 10

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03I19592	3705-D-A-6/11-77	Hydrar	125.9 L	N105H 6009	2
593	" - 79		123.5 L		
594	" - 81		113.1 L		
595	" - 83		2.4 L		
596	" - 85		2.4 L		
597	" - 87		2.4 L		
598	" - 89		2.5 L		
599	" - 91		6.8 L		
600	" - 93		6.8 L		
601	" - 95		7.2 L		
602	" - 97	✓	6.7 L	✓	✓

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. ____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by <u>Steve R. Coffee</u>	Date/Time <u>6/13/03 10:00</u>
Received by <u>Rand Potter</u>	Date/Time <u>6/14</u>
Relinquished by <u>Rand Potter</u>	Date/Time <u>6/16/03</u>
Received by _____	Date/Time _____
Relinquished by _____	Date/Time _____
Received by _____	Date/Time _____



ANALYTICAL REPORT

Form ARF-AL

Page 1 of 3

Part 1 of 1

06230316253074RX

Date JUN 24 2003Laboratory Group Name 03I-1506-05Account No. 07003

Booz Allen Hamilton
Attention: Steve Coffee
5299 DTC Bldg.
Suite 840
Greenwood Village, CO 80111

FAX (303) 694-7367

Telephone (303) 221-7559

E-mail coffee_stephen@bah.com

Sampling Collection and Shipment

Sampling Site AERC Ashland Trip#4 Date of Collection June 11, 2003Date Samples Received at Laboratory June 16, 2003

Analysis

Method of Analysis NMAM 6009Date(s) of Analysis June 20, 2003

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Mercury ug/Sample	Mercury mg/m ³	Air Volume L					
3705AA612137	03I19626	TUBE	0.43	0.039	11.0					
3705AA612139	03I19627	TUBE	6.8	0.057	118.2					
3705AA612141	03I19628	TUBE	7.4	0.058	128.9					
3705AA612143	03I19629	TUBE	5.5	0.044	123.1					
3705AA612145	03I19630	TUBE	0.13	TBA	TBA					
3705AA612147	03I19631	TUBE	0.29	TBA	TBA					
3705AA612149	03I19632	TUBE	0.29	TBA	TBA					
3705AA612151	03I19633	TUBE	0.32	TBA	TBA					
3705AA612153	03I19634	TUBE	0.32	0.042	7.7					
3705AA612155	03I19635	TUBE	0.29	0.039	7.5					
3705AA612157	03I19637	TUBE	0.12	0.039	3.1					
3705AA612159	03I19638	TUBE	0.26	0.072	3.6					
3705AA612161	03I19639	TUBE	0.10	0.10	1.0					

† See comment on last page.

ND Parameter not detected above LOD.

NR Parameter not requested.

NA Parameter not applicable.

** See comment on last page.

() Parameter between LOD and LOQ.

TBA Parameter to be analyzed.

Analyst: Jose G. RochaReviewer: Neil A. Edwards

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547
Phone (801) 266-7700 Web Page: www.datachem.com
FAX (801) 268-9992 E-mail: lab@datachem.com



ANALYTICAL REPORT

Form ARF-C

Page 3 of 3
06230316253074RX

JUN 24 2003

Date _____

Laboratory Group Name 03I-1506-05

General Set Comments

Method Reference: NIOSH Manual of Analytical Methods(NMAM), 4th ed., 08/15/94.

Results are not blank-corrected.

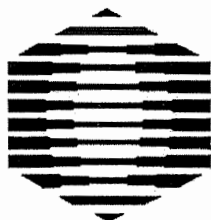
Results obtained for media blanks prepared from SKC Carulite tubes are typically found to have concentrations approximately 0.035-0.045 ug/Sample above the reporting limit.

Samples 03I19627, 28 and 29 required a 10X dilution.

General Lab Comments

The results provided in this report relate only to the items tested.

This page is the concluding page of the report.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03E-1506-05

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device

Telephone (303) 221-7559

Date of Collection 6/12/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. _____

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03E-19625-2	3705-A-A-9/2	HYDRAL		<u>NAM 6009</u>	<u>2</u>
626	137.		11.0 l		
627	139.		118.2 l		
628	141.		128.9 l		
629	143.		123.1 l		
630	145.		77.2 l		
631	147.				
632	149.				
633	151.				
634	153.		7.7 l		
635	155.		7.5 l		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. ____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

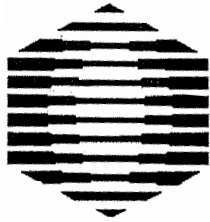
7. Chain of Custody (Optional)

Relinquished by	<u>Step D. Coffey</u>	Date/Time	<u>6/13/03 10:00</u>
Received by	<u>Rand Potter</u>	Date/Time	<u>6/14</u>
Relinquished by	<u>Rand Potter</u>	Date/Time	<u>6/16</u>
Received by		Date/Time	
Relinquished by		Date/Time	
Received by		Date/Time	

960 West LeVoy Drive / Salt Lake City, UT 84123

800-356-9135 or 801-266-7700 / FAX: 801-268-9992

DATACHEM LABORATORIES, INC.



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status

03E-1506-05

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

2. Date 6/13 Purchase Order No. _____

4. Quote No. _____

3. Company Name Booz Allen Hamilton

DCL Project Manager Rand Potter

Address 5299 DTC Blvd., Suite 840

5. Sample Collection

Greenwood Village, CO 80111

Sampling Site AERC Ashland Trip #4

Person to Contact Steve Coffee

Industrial Process DTC Device AIR CYCLE

Telephone (303) 221-7559

Date of Collection 6/12/03

Fax Telephone (303) 694-7367

Time Collected _____

E-mail Address coffee_stephen@bah.com

Date of Shipment 6/13/03

Billing Address (if different from above) refer to contract

Chain of Custody No. _____

6. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
03E19636	3705-A-A-6/12	HYDRAN		NAM 6007	2
19637	157.		3.1 l		
19638	159.		3.6 l		
19639	161.		1.0 l		
19640	163.		1.0 l		
19641	165.		3.1 l		
19642	167.		3.3 l		
19643	3705-T-A-6/12				
19644	167.		9.0 l		
19645	169.		9.0 l		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

** 1. mg/sample 2. mg/m³ 3. ppm 4. % 5. _____ (other) Please indicate one or more units in the column entitled Units**

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Chain of Custody (Optional)

Relinquished by <u>Steph. Coffee</u>	Date/Time <u>6/13/03 10:00</u>
Received by <u>Rand Potter</u>	Date/Time <u>6/14</u>
Relinquished by <u>Rand Potter</u>	Date/Time <u>6/16/03</u>
Received by _____	Date/Time _____
Relinquished by _____	Date/Time _____
Received by _____	Date/Time _____