US EPA ARCHIVE DOCUMENT

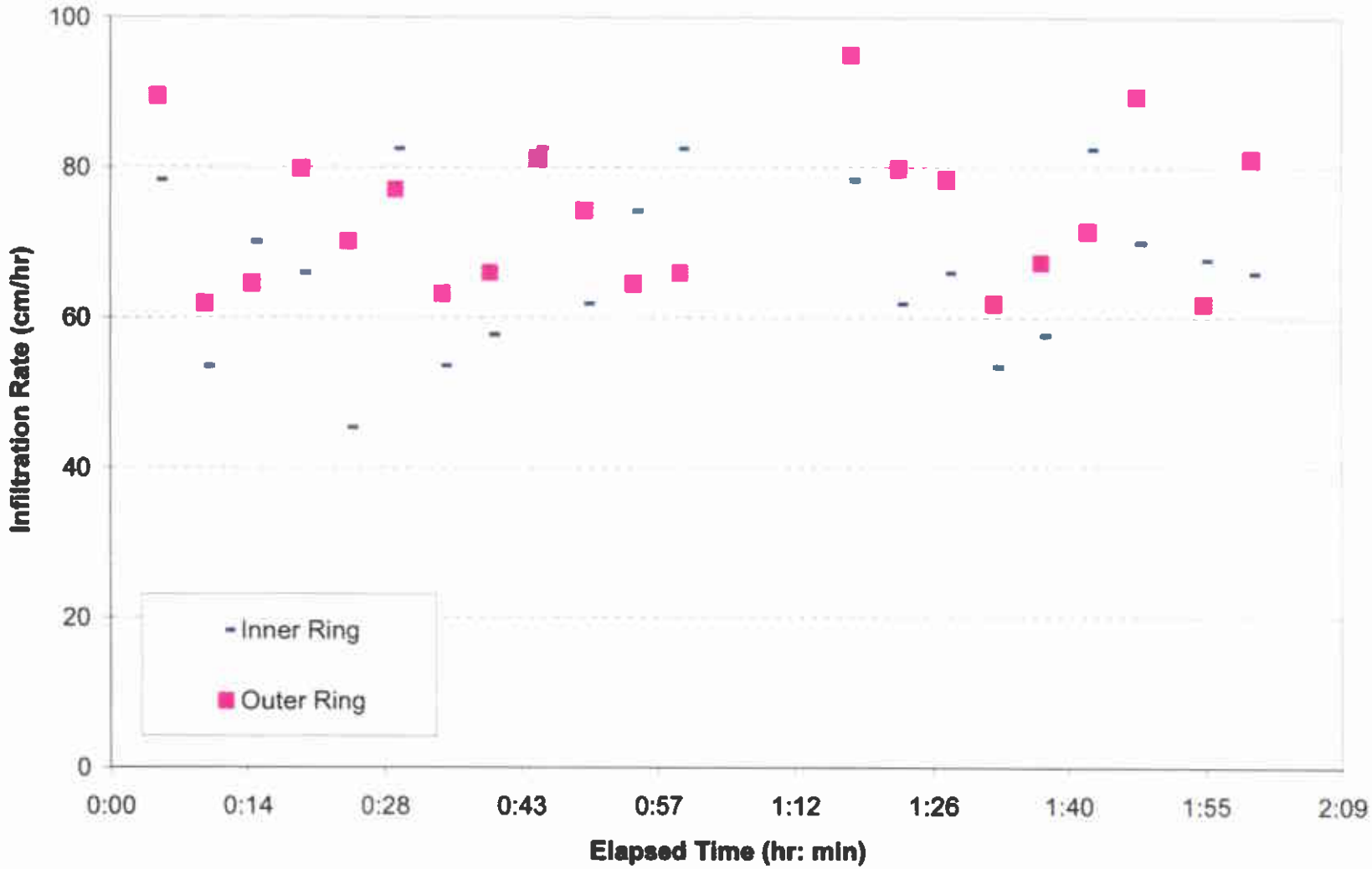
APPENDIX B

Infiltration Test Data and Soil Test Pit Logs

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL031
Eagle Project

Project Identification:		Eagle - Infiltrometer Tests								Constants	Area (cm^2)	Depth of Liquid (cm)	Liquid Container Number	Volume (cm^3/cm of drawdown in the drum)
Test Location:		QAL031								Inner Ring	730	7.6	1	2,507
Liquid Used:		Powell Twp. potable water				pH:	8.3			Annular Space	2,189	7.6	2	2,507
Tested By:		PMK, AJM								Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler				
Depth to GW:		~80 feet, see results from QAL008								Penetration of rings: Inner 12.7cm; Outer 15.3 cm				
Trial		Date	Time (hr:min)	Elapsed Time/Total (hr:min)	Total Time (hr:min)	Measurement for Inner Ring (cm)	Inner Ring Flow (cm^3)	Measurement for Outer Ring (cm)	Annular Space Flow (cm^3)	Liquid Temp (°C)	Inner Infiltration Rate (cm/hr)	Annular Infiltration Rate (cm/hr)	Ground Temp. / Remarks	
1	Start	7/14/05	9:31	0.05	0.05	11.9	4,763	10.6	16,296	22	78		Ground temp. of 20°C at a depth of 15 cm	
	End	7/14/05	9:36	0.05		13.8		17.1				89	Weather ~22°C, sunny, no precipitation	
2	Start	7/14/05	9:36	0.05	0.10	13.8	3,259	17.1	11,282	-	54			
	End	7/14/05	9:41	0.10		15.1		21.6				62		
3	Start	7/14/05	9:41	0.05	0.15	15.1	4,262	21.6	11,783	-	70			
	End	7/14/05	9:48	0.15		16.8		26.3				65		
4	Start	7/14/05	9:46	0.05	0.20	16.8	4,011	26.3	14,541	-	66			
	End	7/14/05	9:51	0.20		18.4		32.1				80		
5	Start	7/14/05	9:51	0.05	0.25	18.4	2,758	32.1	12,786	-	45			
	End	7/14/05	9:56	0.25		19.5		37.2				70		
6	Start	7/14/05	9:56	0.05	0.30	19.5	5,014	37.2	14,039	22	82			
	End	7/14/05	10:01	0.30		21.5		42.8				77		
7	Start	7/14/05	10:01	0.05	0.35	21.5	3,259	42.8	11,532	-	54			
	End	7/14/05	10:06	0.35		22.8		47.4				63		
8	Start	7/14/05	10:06	0.05	0.40	22.8	3,510	47.4	12,034	-	58			
	End	7/14/05	10:11	0.40		24.2		52.2				86		
9	Start	7/14/05	10:11	0.05	0.45	24.2	5,014	52.2	14,791	-	82			
	End	7/14/05	10:16	0.45		26.2		58.1				81		
10	Start	7/14/05	10:16	0.05	0.50	26.2	3,761	58.1	13,538	22	62			
	End	7/14/05	10:21	0.50		27.7		63.5				74		
11	Start	7/14/05	10:21	0.05	0.55	27.7	4,513	63.5	11,783	-	74			
	End	7/14/05	10:26	0.55		29.5		68.2				85		
12	Start	7/14/05	10:26	0.05	1.00	29.5	5,014	68.2	12,034	-	82			
	End	7/14/05	10:31	1.00		31.5		73.0				66		
13	Start	7/14/05	10:44	0.05	1.18	35.9	4,763	14.7	17,298	-	78		Refilled drum for outer ring. Kept head constant	
	End	7/14/05	10:49	1.18		37.8		21.6				95	during filling. Restarted trials after filling.	
14	Start	7/14/05	10:49	0.05	1.23	37.8	3,761	21.6	14,541	23	62			
	End	7/14/05	10:54	1.23		39.3		27.4				80		
15	Start	7/14/05	10:54	0.05	1.28	39.3	4,011	27.4	14,290	-	66			
	End	7/14/05	10:59	1.28		40.9		33.1				78		
16	Start	7/14/05	10:59	0.05	1.33	40.9	3,259	33.1	11,282	-	54			
	End	7/14/05	11:04	1.33		42.2		37.6				62		
17	Start	7/14/05	11:04	0.05	1.38	42.2	3,510	37.6	12,284	-	58			
	End	7/14/05	11:09	1.38		43.6		42.5				67		
18	Start	7/14/05	11:09	0.05	1.43	43.6	5,014	42.5	13,036	23	82			
	End	7/14/05	11:14	1.43		45.6		47.7				71		
19	Start	7/14/05	11:14	0.05	1.48	45.6	4,262	47.7	16,296	-	70			
	End	7/14/05	11:19	1.48		47.3		54.2				89		
20	Start	7/14/05	11:19	0.07	1.55	47.3	5,766	54.2	15,794	23	68			
	End	7/14/05	11:26	1.55		49.6		60.5				82		
21	Start	7/14/05	11:26	0.05	2.00	49.6	4,011	60.5	14,791	-	66			
	End	7/14/05	11:31	2.00		51.2		66.4				81		
										Mean:	67	73		
										St. Dev.:	11	10		

Appendix B
Infiltration Test Data and Soil Test **Pit Logs**
Infiltration Rate vs Time for Location **QAL031**
Eagle Project



QAL031: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL031
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL031
Soil Logged By:	PMK
Date:	7/14/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177744 / 432923

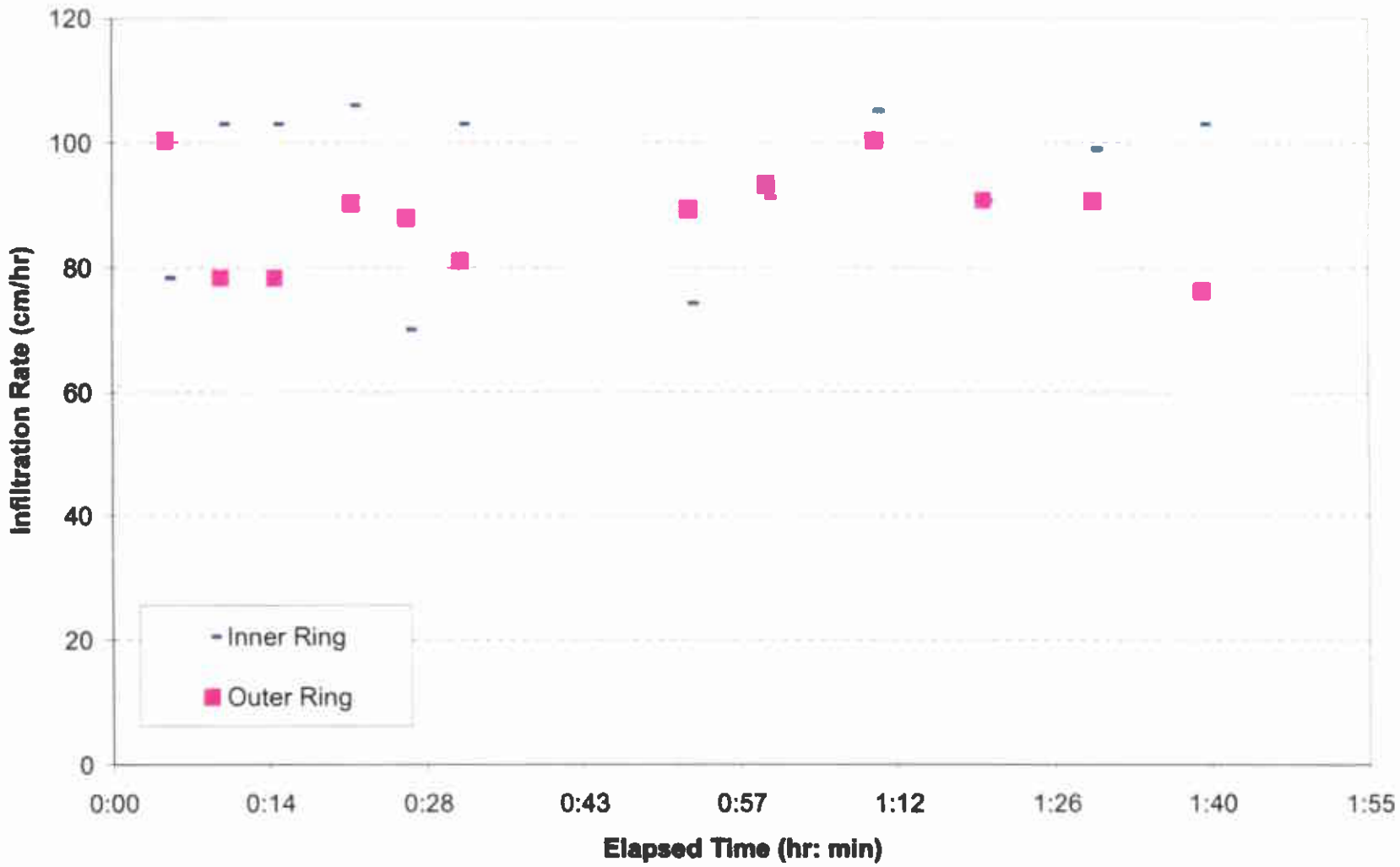
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, dark yellowish-brown. Saturated from infiltration test.	No	10 YR, 3/6
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and trace organics (roots), brown. Blocky structures of weakly cemented sand grains, wet to saturated from infiltration test.	No	7.5 YR, 4/4
2	SAA	No	7.5 YR, 4/4
3	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
4	SAA	No	7.5 YR, 4/4
5	SAA	Yes	7.5 YR, 4/4
6	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 10-20% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
7	SAA	No	7.5 YR, 4/4
8	SAA	No	7.5 YR, 4/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL036
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests								**Constants**	**Area (cm^2)**	**Depth of Liquid (cm)**	**Liquid Container Number**	**Volume (cm^3/cm of drawdown in the drum)**
Test Location:	QAL036								**Inner Ring**	730	7.6	1	2,507
Liquid Used:	Powell Twp. potable water				**pH:**	8.1			**Annular Space**	2,189	7.6	2	2,507
Tested By:	PMK, RRE								**Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler**				
Depth to GW:	~80 feet, see results from QAL008								**Penetration of rings: Inner 12.7cm; Outer 15.3 cm**				
Trial		**Date**	**Time (hr:min)**	**Elapsed Time/Total (hr:min)**	**Total Time (hr:min)**	**Measurement for Inner Ring (cm)**	**Inner Ring Flow (cm^3)**	**Measurement for Outer Ring (cm)**	**Annular Space Flow (cm^3)**	**Liquid Temp (°C)**	**Inner Infiltration Rate (cm/hr)**	**Annular Infiltration Rate (cm/hr)**	**Ground Temp. / Remarks**
1	Start	7/12/05	11:26	0.05	0.05	15.8	4,763	14.7	18,301	22	78	100	Ground temp. of 20°C at a depth of 15 cm
	End	7/12/05	11:31	0.05		17.7		22.0					Weather: ~32° C, sunny, no precipitation
2	Start	7/12/05	11:31	0.05	0.10	17.7	6,268	22.0	14,290	-	103	78	
	End	7/12/05	11:36	0.10		20.2		27.7					
3	Start	7/12/05	11:36	0.05	0.15	20.2	6,268	27.7	14,290	-	103	78	
	End	7/12/05	11:41	0.15		22.7		33.4					
4	Start	7/12/05	11:41	0.07	0.22	22.7	9,025	33.4	23,064	23	106	90	
	End	7/12/05	11:48	0.22		26.3		42.6					
5	Start	7/12/05	11:48	0.05	0.27	26.3	4,262	42.6	16,045	-	70	88	
	End	7/12/05	11:53	0.27		28.0		49.0					
6	Start	7/12/05	11:53	0.05	0.32	28.0	6,268	49.0	14,791	24	103	81	
	End	7/12/05	11:58	0.32		30.5		54.9					
7	Start	7/12/05	12:14	0.05	0.53	38.0	4,513	21.8	16,296	-	74	89	Refilled drum for outer ring. Kept head constant
	End	7/12/05	12:19	0.53		39.8		28.3					during filling. Restarted trials after filling
8	Start	7/12/05	12:19	0.07	1.00	39.8	7,772	28.3	23,817	-	91	93	
	End	7/12/05	12:26	1.00		42.9		37.8					
9	Start	7/12/05	12:26	0.10	1.10	42.9	12,786	37.8	36,602	-	105	100	
	End	7/12/05	12:36	1.10		48.0		52.4					
10	Start	7/12/05	12:36	0.10	1.20	48.0	11,031	52.4	33,092	-	91	91	
	End	7/12/05	12:46	1.20		52.4		65.6					
11	Start	7/12/05	12:46	0.10	1.30	52.4	12,034	65.6	33,092	-	99	91	
	End	7/12/05	12:56	1.30		57.2		78.8					
12	Start	7/12/05	12:56	0.10	1.40	57.2	12,535	78.9	27,828	-	103	76	
	End	7/12/05	13:06	1.40		62.2		90.0					
										Mean:	94	88	
										St. Dev.:	13	8	

Appendix B
Infiltration Test Data and Soil Test **Pit Logs**
Infiltration Rate vs Time for Location **QAL036**
Eagle Project



QAL036: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL036
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL036
Soil Logged By:	PMK
Date:	7/12/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177838 / 432770

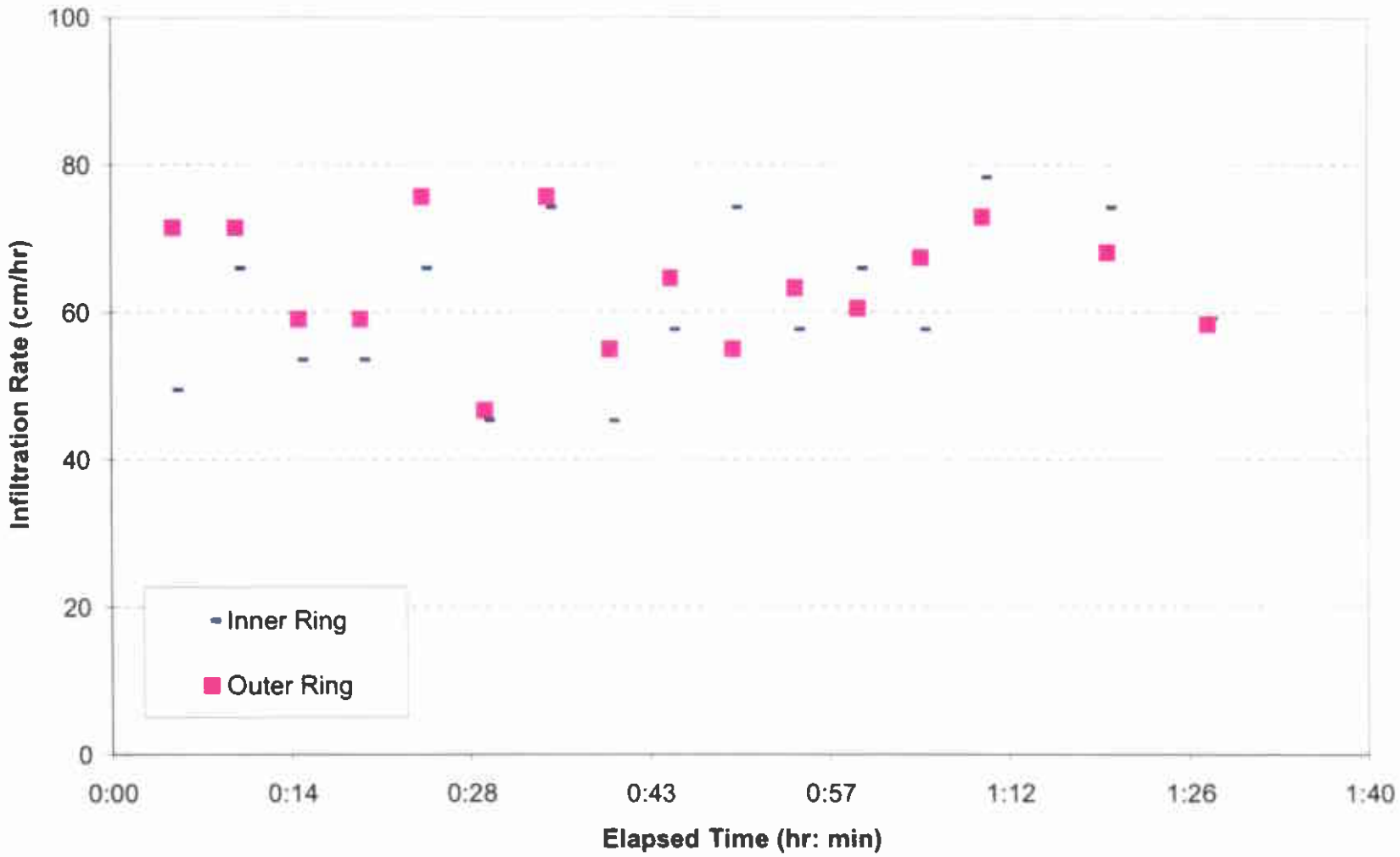
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, dark brown. Wet to saturated from infiltration test.	No	7.5 YR, 3/4
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and trace organics (roots), brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
2	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
3	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/3
4	SAA	No	7.5 YR, 4/3
5	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, brown. Saturated from infiltration test.	No	7.5 YR, 4/3
6	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/3
7	SAA	Yes	7.5 YR, 4/3
8	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded to subrounded coarse gravel and cobbles, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/3
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL037
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests								**Constants**	**Area (cm^2)**	**Depth of Liquid (cm)**	**Liquid Container Number**	**Volume (cm^3/cm of drawdown in the drum)**	
Test Location:	QAL037								**Inner Ring**	730	7.6	1	2,507	
Liquid Used:	Powell Twp. potable water				**pH:**	7.9			**Annular Space**	2,189	7.6	2	2,507	
Tested By:	PMK, RRE								Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler					
Depth to GW:	~80 feet, see results from QAL008								Penetration of rings: Inner 12.7cm; Outer 15.3 cm					
Trial		**Date**	**Time (hr:min)**	**Elapsed Time/Total (hr:min)**	**Total Time (hr:min)**	**Measurement for Inner Ring (cm)**	**Inner Ring Flow (cm^3)**	**Measurement for Outer Ring (cm)**	**Annular Space Flow (cm^3)**	**Liquid Temp (°C)**	**Inner Infiltration Rate (cm/hr)**	**Annular Infiltration Rate (cm/hr)**	**Ground Temp. / Remarks**	
1	Start	7/12/05	9:12	0:05	0:05	12.0	3,008	12.0	13,036	17	49	71	Ground temp. of 17°C at a depth of 15 cm	
	End	7/12/05	9:17	0:05		13.2		17.2					Weather: ~32°C, sunny, no precipitation	
2	Start	7/12/05	9:17	0:05	0:10	13.2	4,011	17.2	13,036	-	66	71		
	End	7/12/05	9:22	0:10		14.8		22.4						
3	Start	7/12/05	9:22	0:05	0:15	14.8	3,259	22.4	10,780	17	54	59		
	End	7/12/05	9:27	0:15		16.1		26.7						
4	Start	7/12/05	9:27	0:05	0:20	16.1	3,259	26.7	10,780	17	54	59		
	End	7/12/05	9:32	0:20		17.4		31.0						
5	Start	7/12/05	9:32	0:05	0:25	17.4	4,011	31.0	13,789	18	66	76		
	End	7/12/05	9:37	0:25		19.0		36.5						
6	Start	7/12/05	9:37	0:05	0:30	19.0	2,758	36.5	8,524	-	45	47		
	End	7/12/05	9:42	0:30		20.1		39.9						
7	Start	7/12/05	9:42	0:05	0:35	20.1	4,513	39.9	13,789	18	74	76		
	End	7/12/05	9:47	0:35		21.9		45.4						
8	Start	7/12/05	9:47	0:05	0:40	21.9	2,758	45.4	10,028	-	45	55		
	End	7/12/05	9:52	0:40		23.0		49.4						
9	Start	7/12/05	9:52	0:05	0:45	23.0	3,510	49.4	11,783	-	58	65		
	End	7/12/05	9:57	0:45		24.4		54.1						
10	Start	7/12/05	9:57	0:05	0:50	24.4	4,513	54.1	10,028	19	74	55		
	End	7/12/05	10:02	0:50		26.2		58.1						
11	Start	7/12/05	10:02	0:05	0:55	26.2	3,510	58.1	11,532	-	58	63		
	End	7/12/05	10:07	0:55		27.6		62.7						
12	Start	7/12/05	10:07	0:05	1:00	27.6	4,011	62.7	11,031	20	66	60		
	End	7/12/05	10:12	1:00		29.2		67.1						
13	Start	7/12/05	10:12	0:05	1:05	29.2	3,510	67.1	12,284	-	58	67		
	End	7/12/05	10:17	1:05		30.6		72.0						
14	Start	7/12/05	10:17	0:05	1:10	30.6	4,763	72.0	13,287	23	78	73		
	End	7/12/05	10:22	1:10		32.5		77.3						
15	Start	7/12/05	10:22	0:10	1:20	32.5	9,025	77.3	24,819	-	74	68		
	End	7/12/05	10:32	1:20		36.1		87.2						
16	Start	7/12/05	10:32	0:08	1:28	36.1	5,766	87.2	17,048	23	59	58		
	End	7/12/05	10:40	1:28		38.4		94.0						
										Mean:	61	64		
										St. Dev.:	11	8		

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Infiltration Rate vs Time for Location QAL037
Eagle Project



QAL037: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL037
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL037
Soil Logged By:	PMK
Date:	7/12/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177876 / 432814

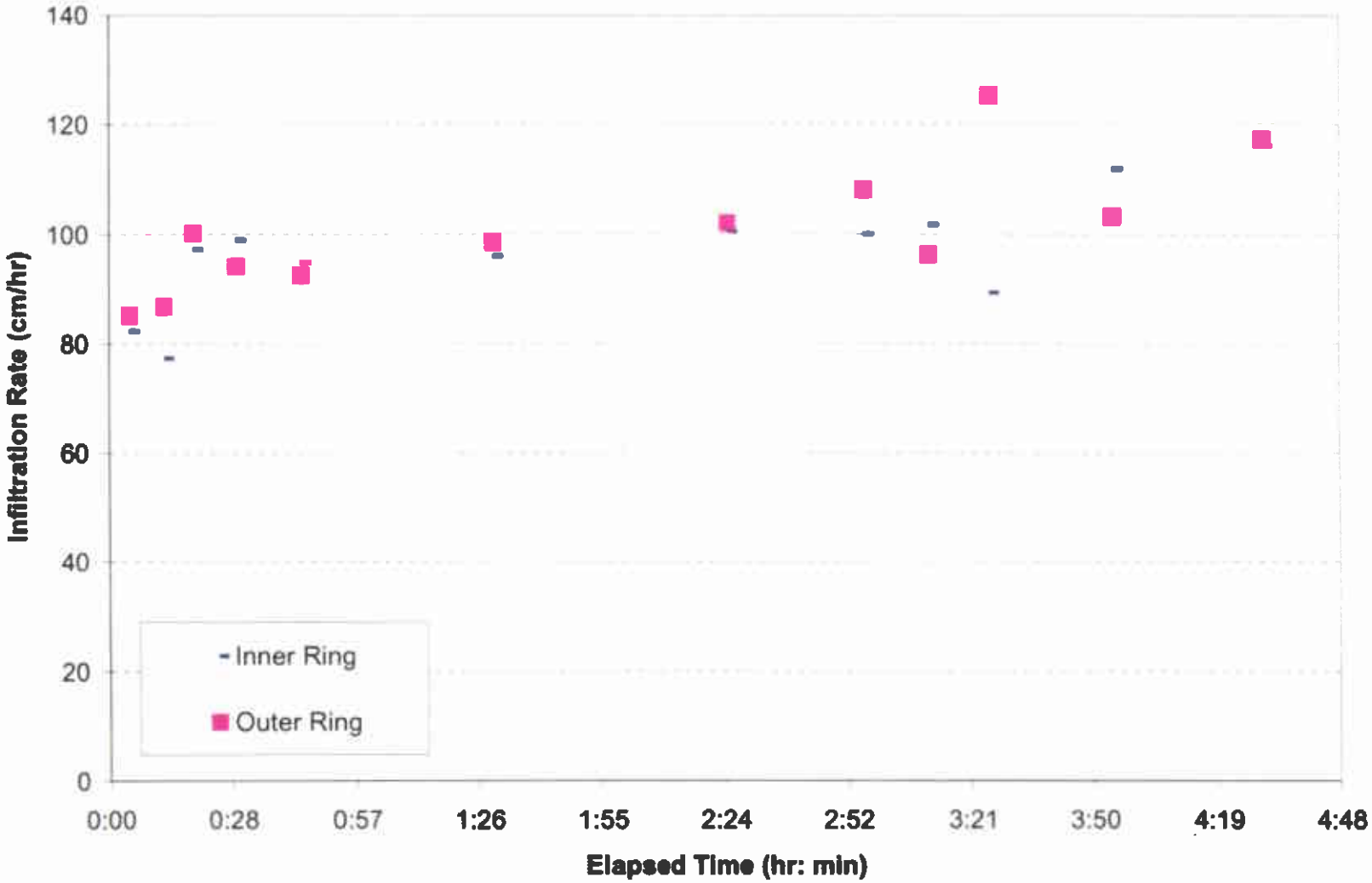
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
1	SAA	No	7.5 YR, 4/4
2	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, dark yellowish-brown. Wet to saturated from infiltration test.	No	10 YR, 4/4
3	SAA	No	10 YR, 4/4
4	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded course sand, dark yellowish-brown. Wet to saturated from infiltration test.	No	10 YR, 4/4
5	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded course sand and gravel, dark yellowish-brown. Moist to saturated from infiltration test.	No	10 YR, 4/4
6	SAA	Yes	10 YR, 4/4
7	SAA	No	10 YR, 4/4
8	SAA	No	10 YR, 4/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL038
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests								**Constants**	**Area (cm^2)**	**Depth of Liquid (cm)**	**Liquid Container Number**	**Volume (cm^3/cm of drawdown in the drum)**
Test Location:	QAL038								**Inner Ring**	730	7.6	1	2,507
Liquid Used:	Powell Twp. potable water				**pH:**	8.0			**Annular Space**	2,189	7.6	2	2,507
Tested By:	PMK, AJM								**Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler**				
Depth to GW:	~80 feet, see results from QAL008								**Penetration of rings: Inner 12.7cm; Outer 15.3 cm**				
Trial		**Date**	**Time (hr:min)**	**Elapsed Time/Total (hr:min)**	**Total Time (hr:min)**	**Measurement for Inner Ring (cm)**	**Inner Ring Flow (cm^3)**	**Measurement for Outer Ring (cm)**	**Annular Space Flow (cm^3)**	**Liquid Temp (°C)**	**Inner Infiltration Rate (cm/hr)**	**Annular Infiltration Rate (cm/hr)**	**Ground Temp. / Remarks**
1	Start	7/13/05	9:27	0:05	0:05	12.3	5,014	10.2	15,543	-	82	85	Ground temp. of 16°C at a depth of 15 cm.
	End	7/13/05	9:32	0:05		14.3		16.4					Weather: ~27°C, sunny, no precipitation.
2	Start	7/13/05	9:32	0:08	0:13	14.3	7,521	16.4	25,321	25	77	87	
	End	7/13/05	9:40	0:13		17.3		26.5					
3	Start	7/13/05	9:40	0:07	0:20	17.3	8,273	26.5	25,571	-	97	100	
	End	7/13/05	9:47	0:20		20.6		36.7					
4	Start	7/13/05	9:47	0:10	0:30	20.6	12,034	36.7	34,346	-	99	94	
	End	7/13/05	9:57	0:30		25.4		50.4					
5	Start	7/13/05	9:57	0:15	0:45	25.4	17,298	50.4	50,641	-	95	93	
	End	7/13/05	10:12	0:45		32.3		70.6					
6	Start	7/13/05	10:28	0:29	1:30	40.2	33,845	23.2	104,291	24	96	99	Refilled both drums. Kept head constant
	End	7/13/05	10:57	1:30		53.7		64.8					during filling. Restarted trials after filling.
7	Start	7/13/05	11:27	0:25	2:25	15.3	30,585	38.5	93,010	-	101	102	Refilled drum for outer ring. Kept head constant
	End	7/13/05	11:52	2:25		27.5		75.6					during filling. Restarted trials after filling.
8	Start	7/13/05	11:56	0:28	2:57	30.2	34,095	10.2	110,308	-	100	108	
	End	7/13/05	12:24	2:57		43.8		54.2					
9	Start	7/13/05	12:24	0:15	3:12	43.8	18,552	54.2	52,647	26	102	96	
	End	7/13/05	12:39	3:12		51.2		75.2					
10	Start	7/13/05	12:44	0:09	3:26	54.3	9,777	11.5	41,115	-	89	125	Refilled drum for outer ring. Kept head constant
	End	7/13/05	12:53	3:26		58.2		27.9					during filling. Restarted trials after filling.
11	Start	7/13/05	12:56	0:26	3:55	14.0	35,349	33.0	97,773	-	112	103	
	End	7/13/05	13:22	3:55		28.1		72.0					
12	Start	7/13/05	13:27	0:30	4:30	30.4	42,368	12.4	128,358	27	116	117	Refilled drum for outer ring. Kept head constant
	End	7/13/05	13:57	4:30		47.3		63.6					during filling. Restarted trials after filling.
										Mean:	97	101	
										St. Dev.:	11	12	

Appendix B
Infiltration Test Data and Soil Test **Pit Logs**
Infiltration Rate vs Time for Location **QAL038**
Eagle Project



QAL038: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL038
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL038
Soil Logged By:	PMK
Date:	7/13/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177772 / 432824

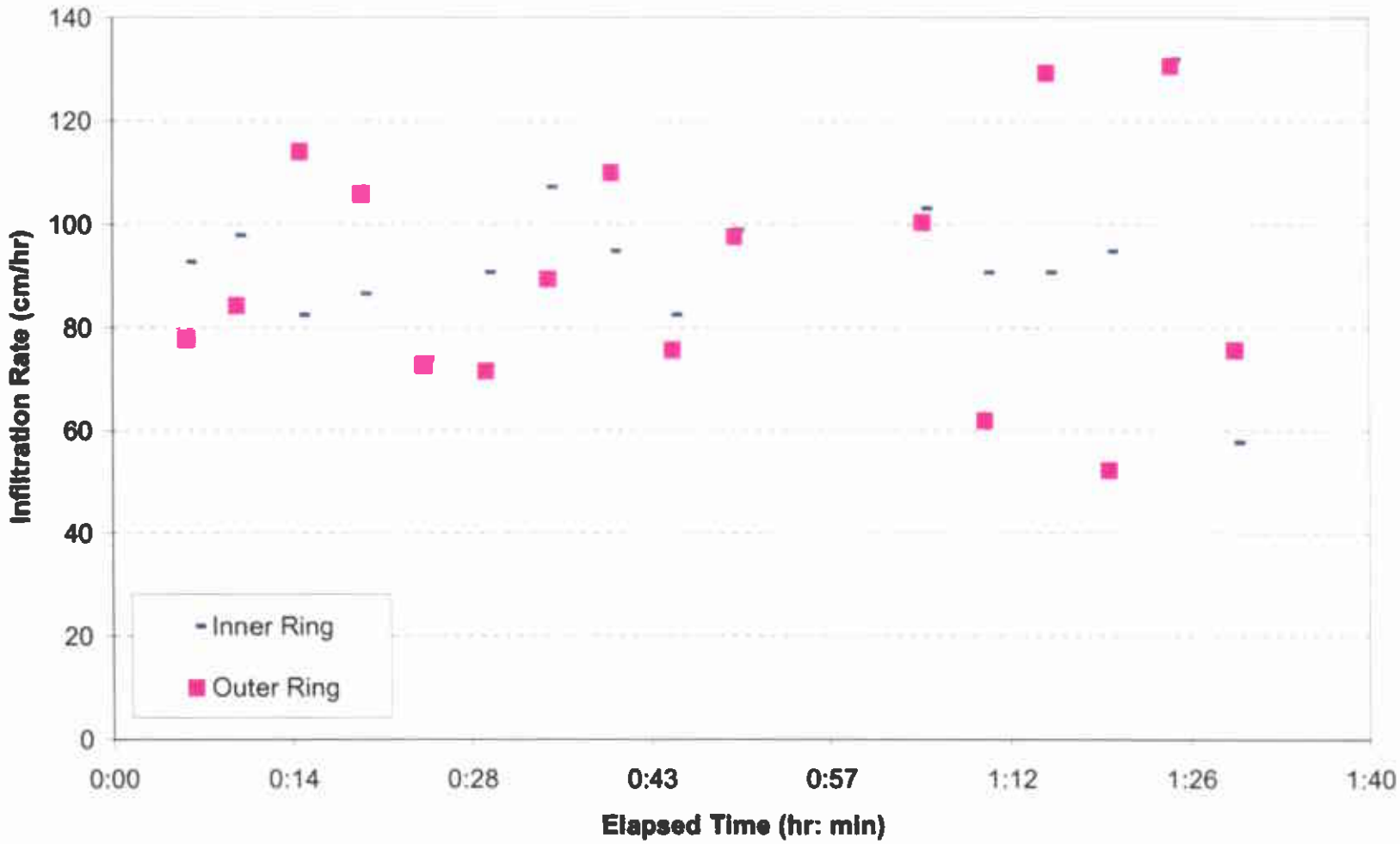
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and trace organics (roots), dark yellowish-brown. Wet to saturated from infiltration test.	Yes	10 YR, 3/4
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Blocky structures of weakly cemented sand grains. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
2	SAA	Yes	7.5 YR, 4/4
3	SAA	No	7.5 YR, 4/4
4	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 10-20% rounded coarse sand, brown. Wet to saturated from infiltration test.	Yes	7.5 YR, 4/4
5	SAA	No	7.5 YR, 4/4
6	SAA	Yes	7.5 YR, 4/4
7	SAA	No	7.5 YR, 4/4
8	SAA	Yes	7.5 YR, 4/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL039
Eagle Project

Project Identification:		Eagle - Infiltrometer Tests								Constants	Area (cm^2)	Depth of Liquid (cm)	Liquid Container Number	Volume (cm^3/cm of drawdown in the drum)	
Test Location:		QAL039								Inner Ring	730	7.6	1	2,507	
Liquid Used:		Powell Twp potable water				pH:		8.1		Annular Space	2,189	7.6	2	2,507	
Tested By:		PMK, RRE								Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler					
Depth to GW:		~80 feet, see results from QAL008								Penetration of rings: Inner 12.7cm; Outer 15.3 cm					
Trial		Date	Time (hr:min)	Elapsed Time/Total (hr:min)	Total Time (hr:min)	Measurement for Inner Ring (cm)	Inner Ring Flow (cm^3)	Measurement for Outer Ring (cm)	Annular Space Flow (cm^3)	Liquid Temp (°C)	Inner Infiltration Rate (cm/hr)	Annular Infiltration Rate (cm/hr)	Ground Temp. / Remarks		
1	Start	7/12/05	13:52	0:06	0:06	15.6	6,769	12.6	17,048	25	93	78	Ground temp. of 30°C at a depth of 15 cm		
	End	7/12/05	13:58	0:06		18.3		19.4					Weather: ~32°C, sunny, no precipitation		
2	Start	7/12/05	13:58	0:04	0:10	18.3	4,763	19.4	12,284	-	98	84			
	End	7/12/05	14:02	0:10		20.2		24.3							
3	Start	7/12/05	14:02	0:05	0:15	20.2	5,014	24.3	20,808	-	82	114			
	End	7/12/05	14:07	0:15		22.2		32.6							
4	Start	7/12/05	14:07	0:05	0:20	22.2	5,265	32.6	19,304	-	87	106			
	End	7/12/05	14:12	0:20		24.3		40.3							
5	Start	7/12/05	14:12	0:05	0:25	24.3	4,513	40.3	13,287	-	74	73			
	End	7/12/05	14:17	0:25		26.1		45.6							
6	Start	7/12/05	14:17	0:05	0:30	26.1	5,515	45.6	13,036	-	91	71			
	End	7/12/05	14:22	0:30		28.3		50.8							
7	Start	7/12/05	14:22	0:05	0:35	28.3	6,518	50.8	16,296	-	107	89			
	End	7/12/05	14:27	0:35		30.9		57.3							
8	Start	7/12/05	14:27	0:05	0:40	30.9	5,766	57.3	20,056	-	95	110			
	End	7/12/05	14:32	0:40		33.2		65.3							
9	Start	7/12/05	14:32	0:05	0:45	33.2	5,014	65.3	13,789	-	82	76			
	End	7/12/05	14:37	0:45		35.2		70.8							
10	Start	7/12/05	14:37	0:05	0:50	35.2	6,017	70.8	17,800	-	99	98			
	End	7/12/05	14:42	0:50		37.6		77.9							
11	Start	7/12/05	14:52	0:05	1:05	41.5	6,268	22.8	18,301	-	103	100	Refilled drum for outer ring. Kept head constant		
	End	7/12/05	14:57	1:05		44.0		30.1					during filling. Restarted trials after filling		
12	Start	7/12/05	14:57	0:05	1:10	44.0	5,515	30.1	11,282	-	91	62			
	End	7/12/05	15:02	1:10		46.2		34.6							
13	Start	7/12/05	15:02	0:05	1:15	46.2	5,515	34.6	23,566	26	91	129			
	End	7/12/05	15:07	1:15		48.4		44.0							
14	Start	7/12/05	15:07	0:05	1:20	48.4	5,766	44.0	9,527	-	95	52			
	End	7/12/05	15:12	1:20		50.7		47.8							
15	Start	7/12/05	15:12	0:05	1:25	50.7	8,022	47.8	23,817	-	132	131			
	End	7/12/05	15:17	1:25		53.9		57.3							
16	Start	7/12/05	15:17	0:05	1:30	53.9	3,510	57.3	13,789	-	58	76			
	End	7/12/05	15:22	1:30		55.3		62.8							
										Mean:	92	91			
										St. Dev.:	16	23			

Appendix B
Infiltration Test Data and Soil Test **Pit Logs**
Infiltration Rate vs Time for Location **QAL039**
Eagle Project



QAL039: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL039
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL039
Soil Logged By:	PMK
Date:	7/12/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177810 / 432870

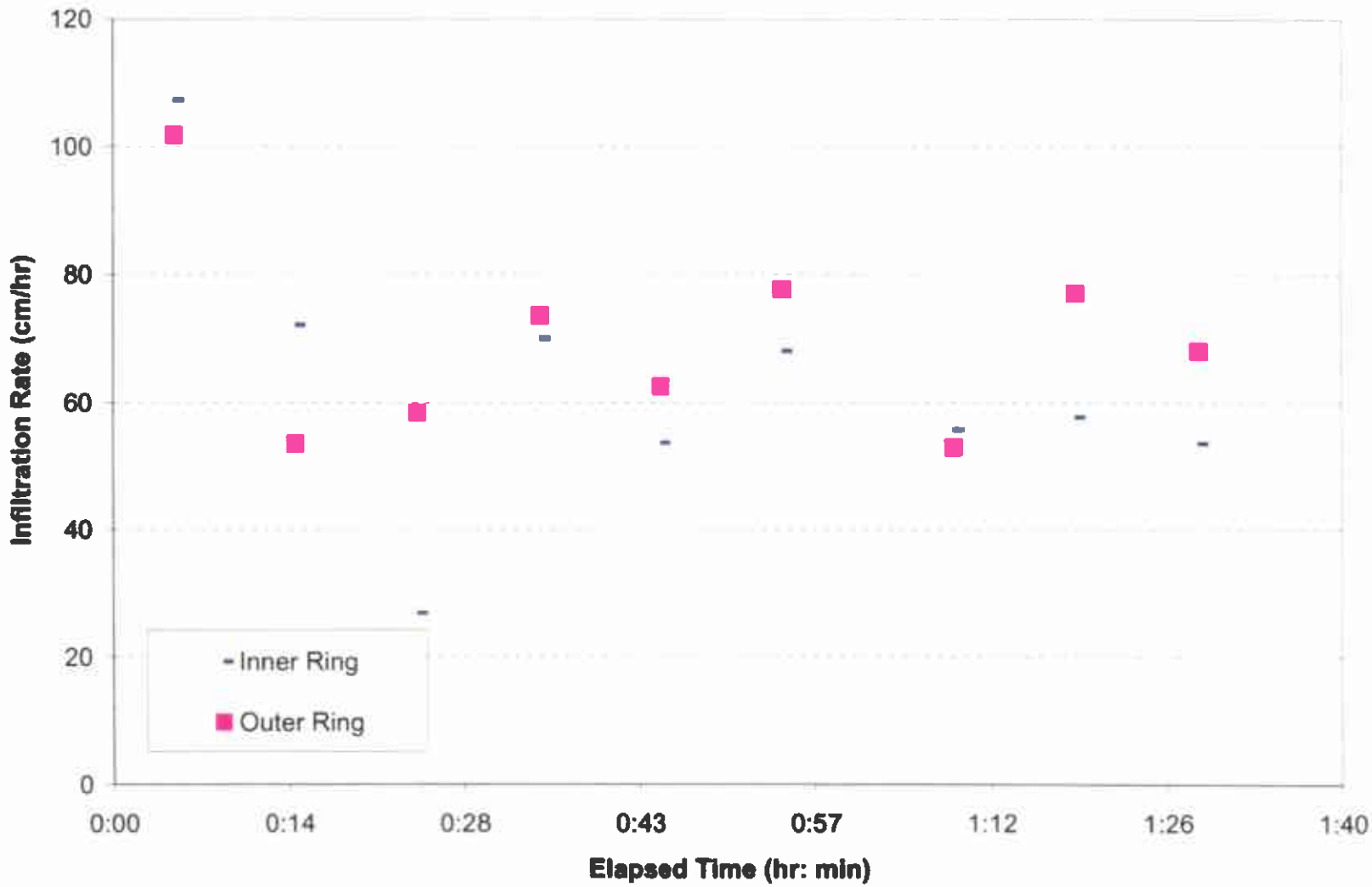
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, dark yellowish-brown. Wet to saturated from infiltration test.	No	10 YR, 3/6
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, brown. Wet to saturated from infiltration test.	No	7.5 YR, 4/4
2	SAA	No	7.5 YR, 4/4
3	SAA	No	7.5 YR, 4/4
4	SAA	No	7.5 YR, 4/4
5	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	Yes	7.5 YR, 4/4
6	SAA	No	7.5 YR, 4/4
7	SAA	No	7.5 YR, 4/4
8	SAA. Moist to saturated from infiltration test.	No	7.5 YR, 4/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL040
Eagle Project

Project Identification:		Eagle - Infiltrometer Tests								Constants:	Area (cm^2)	Depth of Liquid (cm)	Liquid Container Number	Volume (cm^3/cm of drawdown in the drum)	
Test Location:		QAL040								Inner Ring	730	7.6	1	2.507	
Liquid Used:		Powell Twp. potable water				pH:	8.2			Annular Space	2.189	7.6	2	2.507	
Tested By:		PMK, AJM								Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler					
Depth to GW:		~80 feet, see results from QAL008								Penetration of rings: Inner 12.7cm, Outer 15.3 cm					
Trial		Date	Time (hr:min)	Elapsed Time/Total (hr:min)	Total Time (hr:min)	Measurement for Inner Ring (cm)	Inner Ring Flow (cm^3)	Measurement for Outer Ring (cm)	Annular Space Flow (cm^3)	Liquid Temp (°C)	Inner Infiltration Rate (cm/hr)	Annular Infiltration Rate (cm/hr)	Ground Temp. / Remarks		
1	Start	7/13/2005	14:53	0:05	0:05	12.8	6.518	12.0	18.552	27	107	102	Ground temp. of 21°C at a depth of 15 cm		
	End	7/13/2005	14:58	0:05		15.4		19.4					Weather ~32°C, sunny, no precipitation		
2	Start	7/13/2005	14:58	0:10	0:15	15.4	8.775	19.4	19.555	-	72	54			
	End	7/13/2005	15:08	0:15		18.9		27.2							
3	Start	7/13/2005	15:08	0:10	0:25	18.9	3.259	27.2	21.310	-	27	58			
	End	7/13/2005	15:18	0:25		20.2		35.7							
4	Start	7/13/2005	15:18	0:10	0:35	20.2	8.524	35.7	26.825	-	70	74			
	End	7/13/2005	15:28	0:35		23.6		46.4							
5	Start	7/13/2005	15:28	0:10	0:45	23.6	6.518	46.4	22.814	-	54	63			
	End	7/13/2005	15:38	0:45		26.2		55.5							
6	Start	7/13/2005	15:38	0:10	0:55	26.2	8.273	55.5	28.329	-	68	78			
	End	7/13/2005	15:48	0:55		29.5		66.8							
7	Start	7/13/2005	15:52	0:10	1:09	30.7	6.769	12.0	19.304	-	56	53	Refilled drum for outer ring. Kept head constant		
	End	7/13/2005	16:02	1:09		33.4		19.7					during filling. Restarted trials after filling		
8	Start	7/13/2005	16:02	0:10	1:19	33.4	7.020	19.7	28.078	-	58	77			
	End	7/13/2005	16:12	1:19		36.2		30.9							
9	Start	7/13/2005	16:12	0:10	1:29	36.2	6.518	30.9	24.819	-	54	68			
	End	7/13/2005	16:22	1:29		38.8		40.8							
										Mean:	63	69			
										Std. Dev.:	21	15			

Appendix B
Infiltration Test Data and Soil Test **Pit Logs**
Infiltration Rate vs Time for Location **QAL040**
Eagle Project



QAL040: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL040
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL040
Soil Logged By:	PMK
Date:	7/13/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177706 / 432878

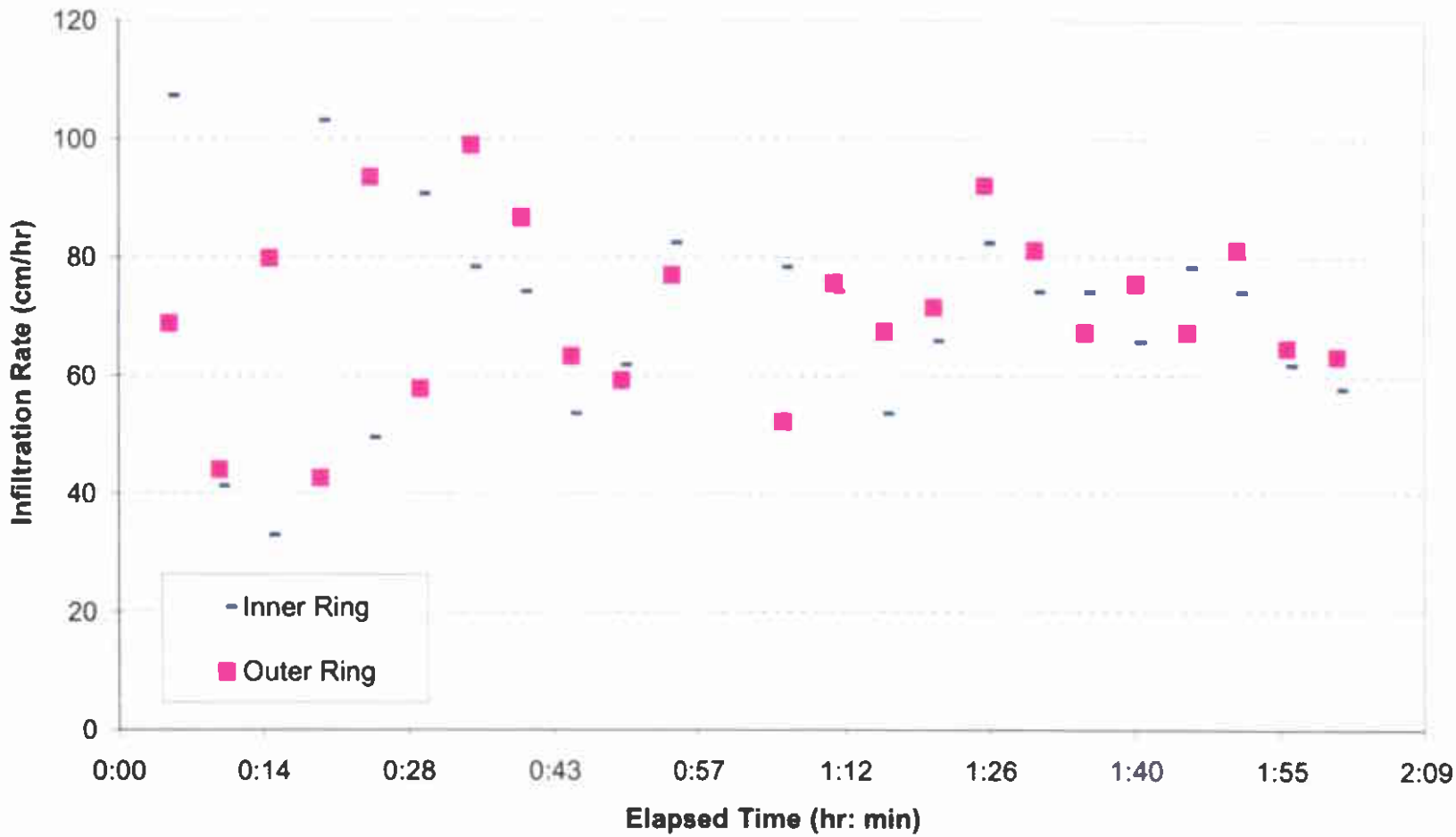
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand, dark yellowish-brown. Wet to saturated from infiltration test.	No	10 YR, 3/6
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 5/4
2	SAA	No	7.5 YR, 5/4
3	SAA	No	7.5 YR, 5/4
4	SAA	No	7.5 YR, 5/4
5	SAA	No	7.5 YR, 5/4
6	SAA	No	7.5 YR, 5/4
7	SAA	Yes	7.5 YR, 5/4
8	SAA	No	7.5 YR, 5/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Lots
Field Infiltration Form for Location QAL041
Eagle Project

Project Identification:		Eagle - Infiltrometer Tests								**Constants**	**Area (cm^2)**	**Depth of Liquid (cm)**	**Liquid Container Number**	**Volume (cm^3/cm of drawdown in the drum)**	
Test Location:		QAL041								**Inner Ring**	730	7.6	1	2,507	
Liquid Used:		Powell Twp. potable water			**pH:**	8.3				**Annular Space**	2,189	7.6	2	2,507	
Tested By:		PMK, AJM								Liquid **level mai**ntained using: **Open-topped 55-gallon drums with mounted engineer's ruler**					
Depth to GW:		~80 feet, see results from QAL008								**Penetration of rings: Inner 12.7cm; Outer 15.3 cm**					
Trial		**Date**	**Time (hr:min)**	**Elapsed Time/Total (hr:min)**	**Total Time (hr:min)**	**Measurement for Inner Ring (cm)**	**Inner Ring Flow (cm^3)**	**Measurement for Outer Ring (cm)**	**Annular Space Flow (cm^3)**	**Liquid Temp (°C)**	**Inner Infiltration Rate (cm/hr)**	**Annular Infiltration Rate (cm/hr)**	**Ground Temp. / Remarks**		
1	Start	7/14/05	16:14	0:05	0.05	13.5	6.518	18.4	12.535	25	**107**	**69**	Ground temp. of 30°C at a depth of 15 cm		
	End	7/14/05	16:19	0:05		16.1		21.4					Weather: ~32°C, sunny, no precipitation		
2	Start	7/14/05	16:19	0:05	0.10	16.1	2.507	21.4	8.022	-	**41**	**44**			
	End	7/14/05	16:24	0:10		17.1		24.6							
3	Start	7/14/05	16:24	0:05	0.15	17.1	2.006	24.6	14.541	-	**33**	**80**			
	End	7/14/05	16:29	0:15		17.9		30.4							
4	Start	7/14/05	16:29	0:05	0.20	17.9	6.268	30.4	7.772	-	**103**	**43**			
	End	7/14/05	16:34	0:20		20.4		33.5							
5	Start	7/14/05	16:34	0:05	0.25	20.4	3.008	33.5	17.048	-	**49**	**93**			
	End	7/14/05	16:39	0:25		21.6		40.3							
6	Start	7/14/05	16:39	0:05	0.30	21.6	5.515	40.3	10.529	-	**91**	**58**			
	End	7/14/05	16:44	0:30		23.8		44.5							
7	Start	7/14/05	16:44	0:05	0.35	23.8	4.763	44.5	18.050	-	**78**	**99**			
	End	7/14/05	16:49	0:35		25.7		51.7							
8	Start	7/14/05	16:49	0:05	0.40	25.7	4.513	51.7	15.794	-	**74**	**87**			
	End	7/14/05	16:54	0:40		27.5		58.0							
9	Start	7/14/05	16:54	0:05	0.45	27.5	3.259	58.0	11.532	-	**54**	**63**			
	End	7/14/05	16:59	0:45		28.8		62.8							
10	Start	7/14/05	16:59	0:05	0.50	28.8	3.761	62.8	10.780	-	**62**	**59**			
	End	7/14/05	17:04	0:50		30.3		66.9							
11	Start	7/14/05	17:04	0:05	0.55	30.3	5.014	66.9	14.039	-	**82**	**77**			
	End	7/14/05	17:09	0:55		32.3		72.5							
12	Start	7/14/05	17:15	0:05	1.06	34.6	4.763	22.0	9.527	-	**78**	**52**	Refilled drum for outer ring. Kept head constant		
	End	7/14/05	17:20	1:06		36.5		25.8					during filling. Restarted trials after filling.		
13	Start	7/14/05	17:20	0:05	1.11	36.5	4.513	25.8	13.789	26	**74**	**76**			
	End	7/14/05	17:25	1:11		38.3		31.3							
14	Start	7/14/05	17:25	0:05	1.16	38.3	3.259	31.3	12.284	-	**54**	**67**			
	End	7/14/05	17:30	1:16		39.6		36.2							
15	Start	7/14/05	17:30	0:05	1.21	39.6	4.011	36.2	13.036	-	**66**	**71**			
	End	7/14/05	17:35	1:21		41.2		41.4							
16	Start	7/14/05	17:35	0:05	1.26	41.2	5.014	41.4	16.797	-	**82**	**92**			
	End	7/14/05	17:40	1:26		43.2		48.1							
17	Start	7/14/05	17:40	0:05	1.31	43.2	4.513	48.1	14.791	-	**74**	**81**			
	End	7/14/05	17:45	1:31		45.0		54.0							
18	Start	7/14/05	17:45	0:05	1.36	45.0	4.513	54.0	12.284	-	**74**	**67**			
	End	7/14/05	17:50	1:36		46.8		58.9							
19	Start	7/14/05	17:50	0:05	1.41	46.8	4.011	58.9	13.789	26	**66**	**76**			
	End	7/14/05	17:55	1:41		48.4		64.4							
20	Start	7/14/05	17:55	0:05	1.46	48.4	4.763	64.4	12.284	-	**78**	**67**			
	End	7/14/05	18:00	1:46		50.3		69.3							
21	Start	7/14/05	18:00	0:05	1.51	50.3	4.513	69.3	14.791	27	**74**	**81**			
	End	7/14/05	18:05	1:51		52.1		75.2							
22	Start	7/14/05	18:05	0:05	1.56	52.1	3.761	75.2	11.783	-	**62**	**65**			
	End	7/14/05	18:10	1:56		53.6		79.9							
23	Start	7/14/05	18:10	0:05	2.01	53.6	3.510	79.9	11.532	27	**58**	**63**			
	End	7/14/05	18:15	2:01		55.0		84.5							
										Mean:	70	71			
										St. Dev.:	18	15			

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Infiltration Rate vs Time for Location QAL041
Eagle Project



QAL041: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Lots
Soil Test Pit Log for Location QAL041
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests
Test Location:	QAL041
Soil Logged By:	PMK
Date:	7/14/05
Excavation Method:	Rubber-tired backhoe
Northing/Easting:	5177640 / 432931

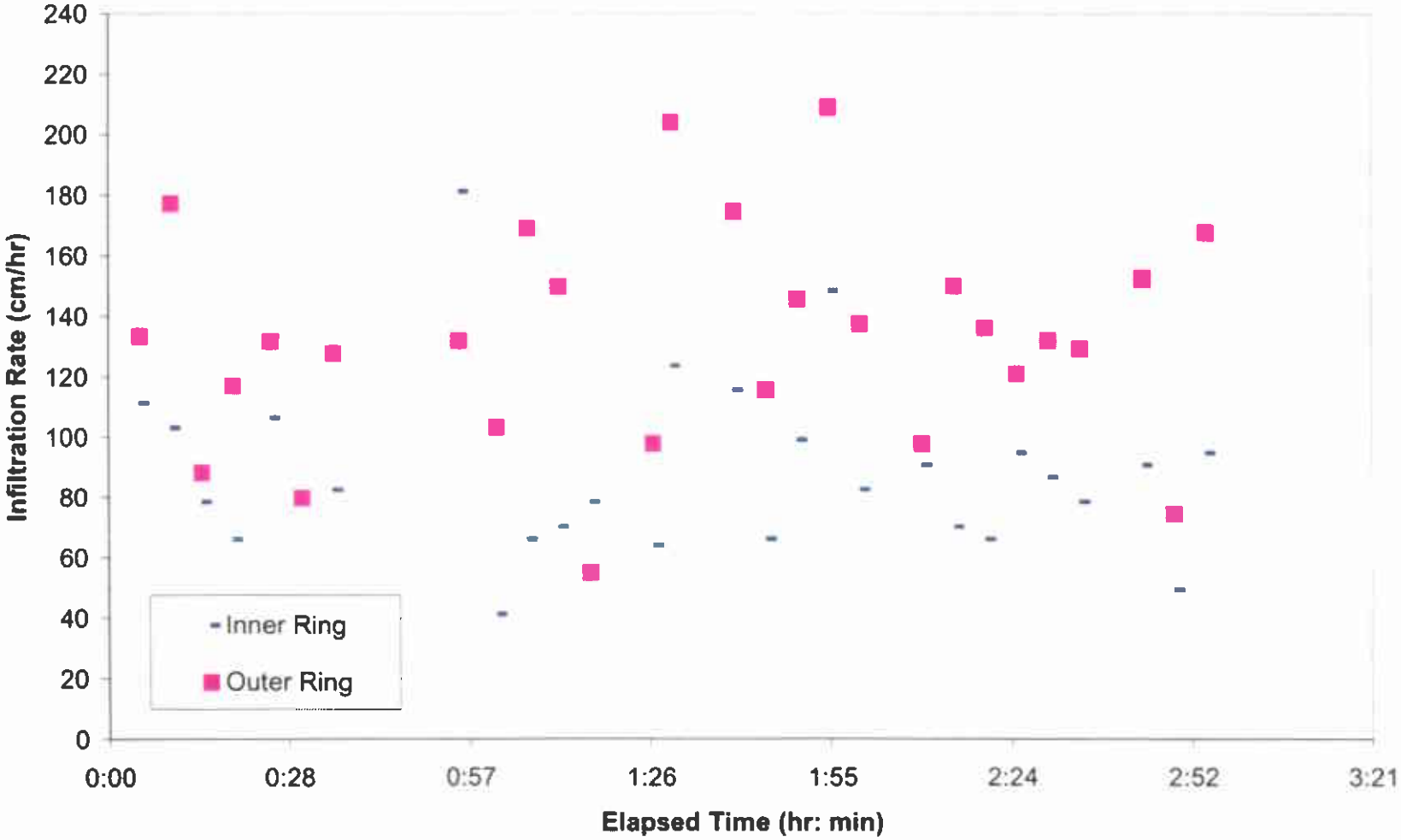
Depth* (ft. bgs)	USCS Description	Soil Sample Collected?	Munsell Soil Color
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and trace organics (roots), dark yellowish-brown. Wet to saturated from infiltration test.	No	10 YR, 3/4
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Blocky structures of weakly cemented sand grains. Wet to saturated from infiltration test.	No	7.5 YR, 5/4
2	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 5/4
3	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 10-20% rounded coarse sand and rounded gravel, brown. Wet to saturated from infiltration test.	No	7.5 YR, 5/4
4	SAA, with fine dark brown to reddish brown laminated sand layers (approx 1-2 mm thick)	No	7.5 YR, 5/4
5	SAA	Yes	7.5 YR, 5/4
6	SAA	No	7.5 YR, 5/4
7	SAA	No	7.5 YR, 5/4
8	SAA	No	7.5 YR, 5/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Field Infiltration Form for Location QAL042
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests									Constants	Area (cm^2)	Depth of Liquid (cm)	Liquid Container Number	Volume (cm^3/cm of drawdown in the drum)	
Test Location:	QAL042									Inner Ring	730	7.6	1	2,507	
Liquid Used:	Powell Twp. potable water					pH:	8.2			Annular Space	2,189	7.6	2	2,507	
Tested By:	Pluto, A/M									Liquid level maintained using: Open-topped 55-gallon drums with mounted engineer's ruler					
Depth to GW:	>82 feet, see results from QAL008									Penetration of rings: Inner 12.7cm, Outer 15.3 cm					
Trial		Date	Time (hr:min)	Elapsed Time Clog/Total (hr:min)	Total Time Clog (hr:min)	Measurement for Inner Ring (cm)	Inner Ring Flow (cm^3)	Measurement for Outer Ring (cm)	Annular Space Flow (cm^3)	Liquid Temp (°C)	Inner Infiltration Rate (cm/hr)	Annular Infiltration Rate (cm/hr)	Ground Temp. / Remarks		
1	Start	7/14/05	12:30	0:05	0:05	11.5	6,769	13.4	24,318		111	133	Ground temp. of 24°C at a depth of 15 cm		
	End	7/14/05	12:35	0:05		14.2		23.1					Weather: ~27°C, sunny, no precipitation		
2	Start	7/14/05	12:35	0:05	0:10	14.2	6,268	23.1	32,340		103	177			
	End	7/14/05	12:40	0:10		16.7		36.0							
3	Start	7/14/05	12:40	0:05	0:15	16.7	4,763	36.0	16,045		78	88			
	End	7/14/05	12:45	0:15		18.8		42.4							
4	Start	7/14/05	12:45	0:05	0:20	18.8	4,011	42.4	21,310	23	66	117			
	End	7/14/05	12:50	0:20		20.2		50.8							
5	Start	7/14/05	12:50	0:05	0:26	20.2	7,172	50.8	28,831		108	132			
	End	7/14/05	12:56	0:26		23.1		62.4							
6	Start	7/14/05	12:56	0:05	0:31	23.1	2,006	62.4	14,541		33	80			
	End	7/14/05	13:01	0:31		24.1		66.2							
7	Start	7/14/05	13:01	0:05	0:36	24.1	5,014	66.2	23,315		82	128			
	End	7/14/05	13:06	0:36		26.1		77.5							
8	Start	7/14/05	13:21	0:05	0:56	32.4	11,031	21.8	24,087		181	132	Refilled drum for outer ring. Kept head constant		
	End	7/14/05	13:26	0:56		36.8		30.8					during filling. Restarted trials after filling		
9	Start	7/14/05	13:26	0:05	1:02	36.8	3,008	30.8	22,563		41	103			
	End	7/14/05	13:32	1:02		38.0		39.9							
10	Start	7/14/05	13:32	0:05	1:07	38.0	4,011	39.9	30,836		66	100			
	End	7/14/05	13:37	1:07		39.8		52.2							
11	Start	7/14/05	13:37	0:05	1:12	39.8	4,262	52.2	27,326		70	150			
	End	7/14/05	13:42	1:12		41.3		63.1							
12	Start	7/14/05	13:42	0:05	1:17	41.3	4,763	63.1	10,028		78	55			
	End	7/14/05	13:47	1:17		43.2		67.1							
13	Start	7/14/05	13:47	0:10	1:27	43.2	7,172	67.1	35,599		64	98			
	End	7/14/05	13:57	1:27		46.3		81.3							
14	Start	7/14/05	13:57	0:03	1:30	46.3	4,513	81.3	22,312		124	204			
	End	7/14/05	14:00	1:30		48.1		90.2							
15	Start	7/14/05	14:00	0:05	1:40	48.1	7,020	24.3	31,839		115	175	Refilled drum for outer ring. Kept head constant		
	End	7/14/05	14:10	1:40		50.9		37.5					during filling. Restarted trials after filling		
16	Start	7/14/05	14:10	0:05	1:45	50.9	4,011	37.5	21,059		66	115			
	End	7/14/05	14:15	1:45		52.2		45.4							
17	Start	7/14/05	14:15	0:05	1:50	52.5	6,017	45.4	26,574		99	148			
	End	7/14/05	14:20	1:50		54.9		58.1							
18	Start	7/14/05	14:20	0:05	1:55	54.9	9,025	58.1	38,108		148	209			
	End	7/14/05	14:25	1:55		58.5		71.2							
19	Start	7/14/05	14:25	0:05	2:00	58.5	5,014	71.2	25,070		82	137			
	End	7/14/05	14:30	2:00		60.5		81.2							
20	Start	7/14/05	14:35	0:05	2:10	17.3	5,515	25.9	17,600		91	98	Refilled both drums. Kept head constant		
	End	7/14/05	14:40	2:10		19.5		28.0					during filling. Restarted trials after filling		
21	Start	7/14/05	14:40	0:05	2:15	19.5	4,262	28.0	27,326		70	150			
	End	7/14/05	14:45	2:15		21.2		38.9							
22	Start	7/14/05	14:45	0:05	2:20	21.2	4,011	38.9	24,819		66	136			
	End	7/14/05	14:50	2:20		22.8		48.8							
23	Start	7/14/05	14:50	0:05	2:25	22.8	5,766	48.8	22,062		95	121			
	End	7/14/05	14:55	2:25		25.1		57.8							
24	Start	7/14/05	14:55	0:05	2:30	25.1	5,265	57.8	24,087		87	132			
	End	7/14/05	15:00	2:30		27.2		67.2							
25	Start	7/14/05	15:00	0:05	2:35	27.2	4,763	67.2	23,566		78	129			
	End	7/14/05	15:05	2:35		29.1		76.8							
26	Start	7/14/05	15:10	0:05	2:45	30.8	5,515	22.7	27,828		91	153	Refilled drum for outer ring. Kept head constant		
	End	7/14/05	15:15	2:45		33.0		33.8					during filling. Restarted trials after filling		
27	Start	7/14/05	15:15	0:05	2:50	33.0	3,008	33.8	13,538		49	74			
	End	7/14/05	15:20	2:50		34.2		39.2							
28	Start	7/14/05	15:20	0:05	2:55	34.2	5,766	39.2	30,585	23	95	168			
	End	7/14/05	15:25	2:55		36.5		51.4							
										Mean	87	132			
										St. Dev	31	37			

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Infiltration Rate vs Time for Location QAL042
Eagle Project



QAL042: Infiltration Rate vs Time

Appendix B
Infiltration Test Data and Soil Test Pit Logs
Soil Test Pit Log for Location QAL042
Eagle Project

Project Identification:	Eagle - Infiltrometer Tests		
Test Location:	QAL042		
Soil Logged By:	PMK		
Date:	7/14/05		
Excavation Method:	Rubber-tired backhoe		
Depth* (ft. bgs)	**USCS Description**	**Soil Sample Collected?**	**Munsell Soil Color**
0	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and trace organics (roots), dark yellowish-brown. Weak cementation of sand grains possibly due to iron. Saturated from infiltration test.	No	10 YR, 3/4
1	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 5-10% rounded coarse sand and rounded gravel, brown. Saturated from infiltration test.	No	7.5 YR, 4/4
2	SAA	No	7.5 YR, 4/4
3	SAA	No	7.5 YR, 4/4
4	SAA	No	7.5 YR, 4/4
5	Unsaturated Zone Outwash, Sand, SP, mostly fine-medium grained, 10-20% rounded coarse sand and rounded gravel, brown. Saturated from infiltration test.	No	7.5 YR, 4/4
6	SAA	No	7.5 YR, 4/4
7	SAA	Yes	7.5 YR, 4/4
8	SAA	No	7.5 YR, 4/4
End of Excavation			

SAA Same as above.
USCS Unified Soil Classification System.
* Ground surface is base of preparation site, approximately 2 feet below natural ground surface.