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North Anna COL Project
Hydraulic Conductivity (K) Calculation Worksheet
MACTEC Job Number: 6468-06-1472

Well: OW-947
Test Date: 11/13/2006
Test Type: Recovery (slug in)
Test Name: OW-947-in

Conducted by: Grimes & Charles-Smith
Entered/date: ewg 12/12-4-06
Checked/date: JCP by [signature] with permission 12/12/06

WELL DATA

SWL =	18.03	(ft BTOC)
WD =	60.00	(ft BTOC)
WD =	58.00	(ft BGS)
DTSP =	41.00	(ft BGS)
rc =	0.08	(ft)
n =	0.30	
rw =	0.35	(ft)
rc (adjusted) =	0.08	(ft)
Le =	10	(ft)
Lw =	38.97	(ft)
Le/rw =	28.57	
H =	62.67	(ft)

H is depth from SWL to top of bedrock (no recovery zone) as listed on boring logs

CALCULATION OF K

K = [(rc^2 ln(Re/rw))/2Le]*(1/t)ln(yo/yt)

yo =	2.38	(ft) from plot
yt =	1.07	(ft) from plot
t =	1.55	(minutes) from plot
ln(Re/rw) =	2.70	
K =	6.7E-01	(ft/day)
K =	2.4E-04	(cm/sec)

Calculation of ln(Re/rw)

Where: Lw < H;

ln(Re/rw) = [{1.1/(ln(Lw/rw))}+{A+Bln((H-Lw)/rw)}/(Le/rw)]^-1= 2.70

Where: Lw = H;

ln(Re/rw) = [{1.1/(ln(Lw/rw))}+{C/(Le/rw)}]^-1 = 3.33

Calculation of Coefficients

Value range for Le/rw from Table of Coefficients

Le/rw	A	B	C
25	2.4	0.31	1.9
30	2.5	0.35	2.1

Interpolated values of A, B and C for Le/rw

28.57	2.47	0.34	2.04

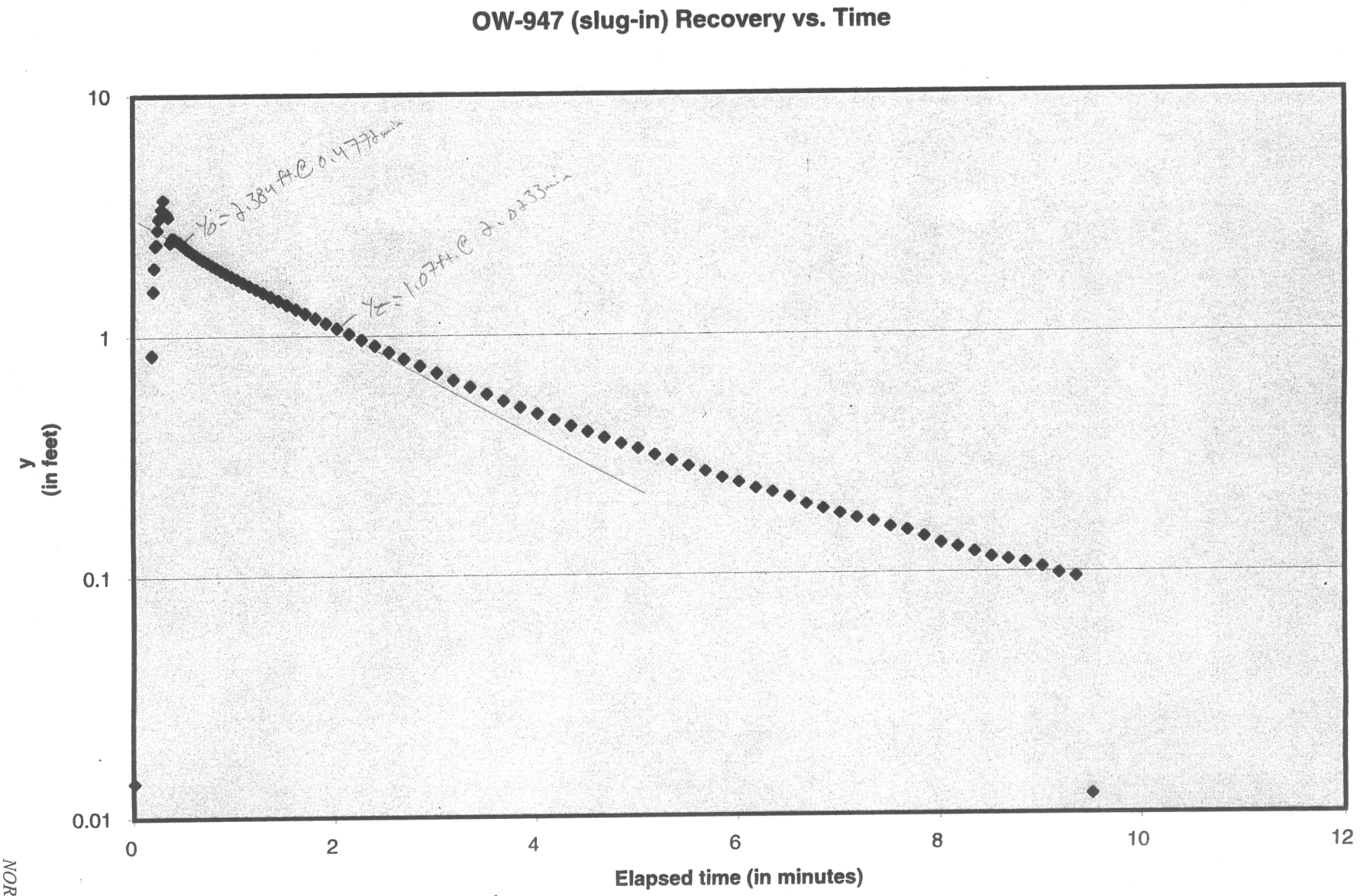
Coefficients Table

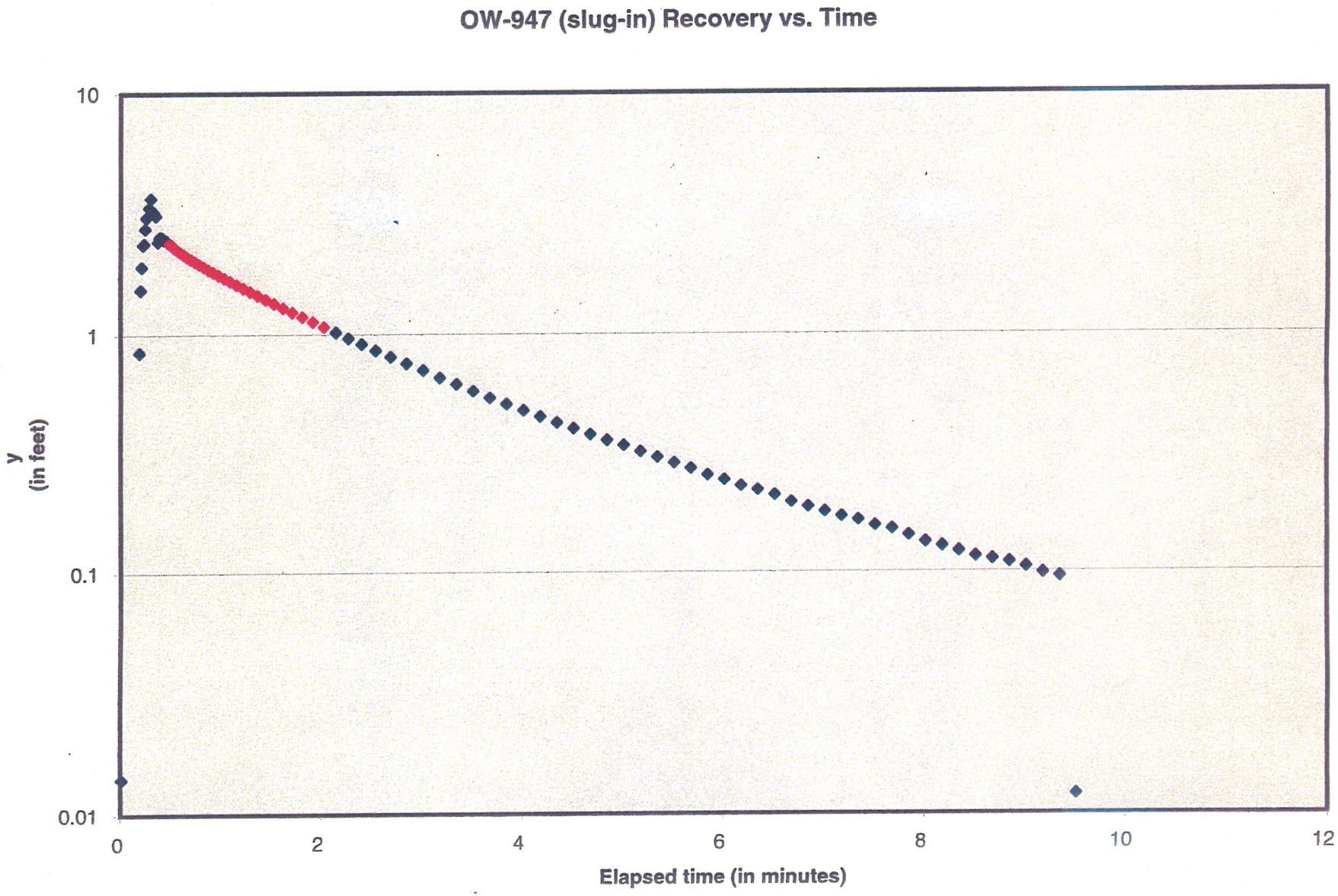
Le/rw	A	Le/rw	B	Le/rw	C
4	1.75	4	0.25	4	0.75
5	1.76	5	0.25	5	0.85
6	1.77	6	0.25	6	0.90
7	1.80	7	0.25	7	1.00
8	1.83	8	0.25	8	1.10
9	1.90	9	0.25	9	1.20
10	1.95	10	0.25	10	1.30
15	2.10	15	0.27	15	1.50
20	2.23	20	0.29	20	1.75
25	2.40	25	0.31	25	1.90
30	2.50	30	0.35	30	2.10
40	2.75	40	0.45	40	2.45
50	3.00	50	0.50	50	2.70
60	3.45	60	0.52	60	3.00
70	3.70	70	0.60	70	3.40
80	3.90	80	0.65	80	3.60
90	4.20	90	0.70	90	3.85
100	4.50	100	0.75	100	4.20
150	5.45	150	0.98	150	5.70
200	6.10	200	1.20	200	7.00
250	6.70	250	1.30	250	8.00
300	7.10	300	1.50	300	8.80
400	7.75	400	1.90	400	9.90
500	8.20	500	2.20	500	10.60
600	8.50	600	2.33	600	11.10
700	8.70	700	2.50	700	11.50
800	8.90	800	2.70	800	11.80
900	9.00	900	2.75	900	12.00
1000	9.20	1000	2.83	1000	12.40
1500	9.50	1500	3.18	1500	12.90

Reference: Bouwer(1989), Bouwer and Rice(1976)

TEST DATA

	Elapsed time (min)	Log y	y (ft)	WL (ft BTOC)
	0	#NUM!	0	18.03
	0.011	-1.85	0.014	18.02
	0.022	-2.52	0.003	18.03
	0.033	#NUM!	0	18.03
	0.044	-2.52	0.003	18.03
	0.055	-2.52	0.003	18.03
	0.066	-2.52	0.003	18.03
	0.077	-2.22	0.006	18.02
	0.088	-2.52	0.003	18.03
	0.099	-2.22	0.006	18.02
	0.11	-2.22	0.006	18.02
	0.121	-2.52	0.003	18.03
	0.132	-2.22	0.006	18.02
	0.143	-2.52	0.003	18.03
	0.154	-2.22	0.006	18.02
	0.165	-2.05	0.009	18.02
	0.176	-2.22	0.006	18.02
	0.187	-0.07	0.843	17.19
	0.198	0.18	1.53	16.50
	0.209	0.28	1.901	16.13
	0.22	0.37	2.35	15.68
	0.231	0.38	2.381	15.65
	0.2427	0.44	2.747	15.28
	0.2552	0.48	3.049	14.98
	0.2683	0.49	3.109	14.92
	0.2823	0.53	3.365	14.67
	0.2972	0.57	3.678	14.35
	0.3128	0.51	3.261	14.77
	0.3295	0.50	3.195	14.84
	0.3472	0.49	3.109	14.92
	0.3658	0.38	2.422	15.61
	0.3857	0.40	2.534	15.50
	0.4067	0.40	2.525	15.51
	0.4288	0.39	2.476	15.55
	0.4523	0.39	2.45	15.58
Test initialization	0.4772	0.38	2.384	15.65
	0.5035	0.37	2.355	15.68
	0.5315	0.36	2.281	15.75
	0.5612	0.35	2.237	15.79
	0.5925	0.34	2.186	15.84
	0.6257	0.33	2.14	15.89
	0.6608	0.32	2.088	15.94
	0.6982	0.31	2.045	15.99
	0.7377	0.30	1.996	16.03
	0.7795	0.29	1.947	16.08
	0.8238	0.28	1.901	16.13
	0.8708	0.27	1.852	16.18
	0.9207	0.26	1.803	16.23
	0.9733	0.24	1.754	16.28
	1.0292	0.23	1.705	16.33
	1.0883	0.22	1.654	16.38
	1.151	0.20	1.602	16.43
	1.2173	0.19	1.55	16.48
	1.2877	0.18	1.501	16.53
	1.3622	0.16	1.447	16.58
	1.4412	0.14	1.392	16.64
	1.5248	0.13	1.34	16.69
	1.6133	0.11	1.283	16.75
	1.7072	0.09	1.231	16.80
	1.8065	0.07	1.179	16.85
	1.9118	0.05	1.124	16.91
Test completion	2.0233	0.03	1.07	16.96
	2.1415	0.01	1.018	17.01
	2.2667	-0.02	0.963	17.07
	2.3992	-0.04	0.909	17.12
	2.5397	-0.07	0.857	17.17
	2.6885	-0.09	0.805	17.23
	2.846	-0.12	0.756	17.27
	3.0127	-0.15	0.707	17.32
	3.1793	-0.18	0.659	17.37
	3.346	-0.21	0.618	17.41
	3.5127	-0.24	0.578	17.45
	3.6793	-0.27	0.541	17.49
	3.846	-0.29	0.509	17.52
	4.0127	-0.32	0.48	17.55
	4.1793	-0.34	0.452	17.58
	4.346	-0.37	0.426	17.60
	4.5127	-0.39	0.403	17.63
	4.6793	-0.42	0.38	17.65
90% recovery	4.846	-0.44	0.359	17.67


OW-947 (slug-in) Recovery vs. Time
10
1
0.1
0.01
y
(in feet)
0
2
4
6
8
10
12
Elapsed time (in minutes)


OW-947 (slug-in) Recovery vs. Time
10
1
0.1
0.01
y
(in feet)
0
2
4
6
8
10
12
Elapsed time (in minutes)

MACTEC

MACTEC Engineering and Consulting
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Raleigh, North Carolina

Slug Test Data Sheet

MACTEC Job Name: North Anna COL	**MACTEC Job Number:** 6468-06-1472
Date: 11-13-06 **Time:** 1504	**Observation Well No.:** OW947IM
Weather Conditions: Cloudy Appx 48°F	
Method of Slug Withdrawl (circle one): water, (mechanical), or pressure	**Test Method:** Rising Head or (Falling Head) (circle)
Diameter of Screen: 2 in.	**Diameter of Casing:** 2 in.
Total Well Depth: 58 ft below reference point	**Reference Point:** Permanent mark on top of casing
Length of Screened Section: 10 ft	**Depth interval of screened portion:** 45-55' ft
Depth to Groundwater: 18.03 ft below reference point	

Groundwater Measurements Collected Prior to Slug Test

Depth to Groundwater	Date
16.02 (Pre-Development)	11-8-06
18.24 (Post Development)	11-9-06
18.03 (OW947IM test)	11-13-06

KAB 11-13-06

Comments/Remarks

NSED Transducer
SN D00513 Hermit 3000
Set Transducer 30' below TOC KAB 11-13-06
- ~~STA~~ Transducer read 12.022 vs. 11.97
OFFSET = 3.678
Final Hermit reading =
~0% Recovery

In-Situ Inc. Hermit 3000

Report generated: 12/11/06 17:39:41
Report from file: P:\6468\2006 Projects\1472 North Anna COL\Slug Test Data\Raw data logger fil
DataMgr Version 3.71

ial number: 00045369
nware Version 7.08
Unit name: HERMIT 3000

Test name: OW947IN PAGE 1 OF 3

Test defined on: 11/13/06 16:12:30
Test started on: 11/13/06 16:22:50
Test stopped on: 11/13/06 16:32:18
Test extracted on: 11/13/06 18:03:00

Data gathered using Logarithmic testing
Maximum time between data points: 0.1667 Minutes.
Number of data samples: 107

TOTAL DATA SAMPLES 107

Channel number [1]
Measurement type: Pressure
Channel name: D00513
Linearity: 0.0212000
Scale: 19.9368000
Offset: 0.1304000
Warmup: 50
Specific gravity: 1.000
Mode: TOC
User-defined reference: 0.000 Feet H2O
Referenced on: test start
ressure head at reference: 12.014 Feet H2O

Channel number [0]
Measurement type: Barometric Pressure
Channel name: Barometric
Linearity: 0.0000000
Scale: 0.0000000
Offset: 0.0000000
Warmup: 50

Date	Time	ET (min)	Chan[1] Feet H2O	Chan[0] Inches Hg
11/13/06	16:22:50	0.0000	0.000	29.703
11/13/06	16:22:50	0.0110	0.014	29.705
11/13/06	16:22:51	0.0220	0.003	29.705
11/13/06	16:22:51	0.0330	0.000	29.707
11/13/06	16:22:52	0.0440	-0.003	29.705
11/13/06	16:22:53	0.0550	-0.003	29.705
11/13/06	16:22:53	0.0660	-0.003	29.705
11/13/06	16:22:54	0.0770	0.006	29.705
11/13/06	16:22:55	0.0880	0.003	29.705
11/13/06	16:22:55	0.0990	0.006	29.705
11/13/06	16:22:56	0.1100	0.006	29.707
11/13/06	16:22:57	0.1210	-0.003	29.705
11/13/06	16:22:57	0.1320	-0.006	29.707
11/13/06	16:22:58	0.1430	-0.003	29.703
'13/06	16:22:59	0.1540	-0.006	29.705
/13/06	16:22:59	0.1650	0.009	29.705
11/13/06	16:23:00	0.1760	-0.006	29.705
11/13/06	16:23:01	0.1870	-0.843	29.705
11/13/06	16:23:01	0.1980	-1.530	29.705
11/13/06	16:23:02	0.2090	-1.901	29.703
11/13/06	16:23:03	0.2200	-2.350	29.705

OW947IN PAGE 2 OF 3

11/13/06	16:23:03	0.2310	-2.381	29.703
11/13/06	16:23:04	0.2427	-2.747	29.703
11/13/06	16:23:05	0.2552	-3.049	29.707
11/13/06	16:23:06	0.2683	-3.109	29.705
11/13/06	16:23:06	0.2823	-3.365	29.707
11/13/06	16:23:07	0.2972	-3.678	29.705
11/13/06	16:23:08	0.3128	-3.261	29.703
11/13/06	16:23:09	0.3295	-3.195	29.703
11/13/06	16:23:10	0.3472	-3.109	29.703
11/13/06	16:23:11	0.3658	-2.422	29.707
11/13/06	16:23:13	0.3857	-2.534	29.705
11/13/06	16:23:14	0.4067	-2.525	29.705
11/13/06	16:23:15	0.4288	-2.476	29.707
11/13/06	16:23:17	0.4523	-2.450	29.705
11/13/06	16:23:18	0.4772	-2.384	29.705
11/13/06	16:23:20	0.5035	-2.355	29.705
11/13/06	16:23:21	0.5315	-2.281	29.705
11/13/06	16:23:23	0.5612	-2.237	29.705
11/13/06	16:23:25	0.5925	-2.186	29.709
11/13/06	16:23:27	0.6257	-2.140	29.707
11/13/06	16:23:29	0.6608	-2.088	29.707
11/13/06	16:23:31	0.6982	-2.045	29.707
11/13/06	16:23:34	0.7377	-1.996	29.709
11/13/06	16:23:36	0.7795	-1.947	29.711
11/13/06	16:23:39	0.8238	-1.901	29.711
11/13/06	16:23:42	0.8708	-1.852	29.709
11/13/06	16:23:45	0.9207	-1.803	29.707
11/13/06	16:23:48	0.9733	-1.754	29.709
11/13/06	16:23:51	1.0292	-1.705	29.709
11/13/06	16:23:55	1.0883	-1.654	29.709
11/13/06	16:23:59	1.1510	-1.602	29.709
11/13/06	16:24:03	1.2173	-1.550	29.711
11/13/06	16:24:07	1.2877	-1.501	29.709
11/13/06	16:24:11	1.3622	-1.447	29.709
11/13/06	16:24:16	1.4412	-1.392	29.711
11/13/06	16:24:21	1.5248	-1.340	29.711
11/13/06	16:24:26	1.6133	-1.283	29.707
11/13/06	16:24:32	1.7072	-1.231	29.709
11/13/06	16:24:38	1.8065	-1.179	29.711
11/13/06	16:24:44	1.9118	-1.124	29.711
11/13/06	16:24:51	2.0233	-1.070	29.711
11/13/06	16:24:58	2.1415	-1.018	29.713
11/13/06	16:25:06	2.2667	-0.963	29.713
11/13/06	16:25:13	2.3992	-0.909	29.717
11/13/06	16:25:22	2.5397	-0.857	29.717
11/13/06	16:25:31	2.6885	-0.805	29.715
11/13/06	16:25:40	2.8460	-0.756	29.711
11/13/06	16:25:50	3.0127	-0.707	29.713
11/13/06	16:26:00	3.1793	-0.659	29.713
11/13/06	16:26:10	3.3460	-0.618	29.715
11/13/06	16:26:20	3.5127	-0.578	29.715
11/13/06	16:26:30	3.6793	-0.541	29.715
11/13/06	16:26:40	3.8460	-0.509	29.715
11/13/06	16:26:50	4.0127	-0.480	29.715
11/13/06	16:27:00	4.1793	-0.452	29.713
11/13/06	16:27:10	4.3460	-0.426	29.713
11/13/06	16:27:20	4.5127	-0.403	29.715
11/13/06	16:27:30	4.6793	-0.380	29.713
11/13/06	16:27:40	4.8460	-0.359	29.715
11/13/06	16:27:50	5.0127	-0.342	29.713
11/13/06	16:28:00	5.1793	-0.322	29.715
11/13/06	16:28:10	5.3460	-0.305	29.717
11/13/06	16:28:20	5.5127	-0.288	29.715
11/13/06	16:28:30	5.6793	-0.273	29.715
11/13/06	16:28:40	5.8460	-0.256	29.715
11/13/06	16:28:50	6.0127	-0.244	29.715
11/13/06	16:29:00	6.1793	-0.230	29.717
11/13/06	16:29:10	6.3460	-0.221	29.717
11/13/06	16:29:20	6.5127	-0.210	29.715
11/13/06	16:29:30	6.6793	-0.196	29.713

11/13/06	16:29:40	6.8460	-0.187	29.713
11/13/06	16:29:50	7.0127	-0.178	29.715
11/13/06	16:30:00	7.1793	-0.170	29.715
11/13/06	16:30:10	7.3460	-0.164	29.715
11/13/06	16:30:20	7.5127	-0.155	29.715
11/13/06	16:30:30	7.6793	-0.150	29.717
'13/06	16:30:40	7.8460	-0.141	29.713
13/06	16:30:50	8.0127	-0.132	29.717
11/13/06	16:31:00	8.1793	-0.127	29.713
11/13/06	16:31:10	8.3460	-0.121	29.717
11/13/06	16:31:20	8.5127	-0.115	29.715
11/13/06	16:31:30	8.6793	-0.112	29.717
11/13/06	16:31:40	8.8460	-0.109	29.715
11/13/06	16:31:50	9.0127	-0.104	29.709
11/13/06	16:32:00	9.1793	-0.098	29.715
11/13/06	16:32:10	9.3460	-0.095	29.717

OW947 IN PAGE 3 OF 3

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North Anna COL Project
Hydraulic Conductivity (K) Calculation Worksheet
MACTEC Job Number: 6468-06-1472

Well: OW-947
Test Date: 11/13/2006
Test Type: Recovery (slug in)
Test Name: OW-947-in2

Conducted by: Grimes & Charles-Smith
Entered/date: WJC 11-4-06
Checked/date: SCD by GJM with permission 12/12/06

WELL DATA

SWL =	18.08	(ft BTOC)
WD =	60.00	(ft BTOC)
WD =	58.00	(ft BGS)
DTSP =	41.00	(ft BGS)
rc =	0.08	(ft)
n =	0.30	
rw =	0.35	(ft)
rc (adjusted) =	0.08	(ft)
Le =	10	(ft)
Lw =	38.92	(ft)
Le/rw =	28.57	
H =	62.62	(ft)

H is depth from SWL to top of bedrock (no recovery zone) as listed on boring logs

CALCULATION OF K

K = [(rc^2 ln(Re/rw))/2Le]*(1/t)ln(yo/yt)

yo =	2.29	(ft) from plot
yt =	0.85	(ft) from plot
t =	2.16	(minutes) from plot
ln(Re/rw) =	2.70	
K =	5.9E-01	(ft/day)
K =	2.1E-04	(cm/sec)

Calculation of ln(Re/rw)

Where: Lw < H;

ln(Re/rw) = [{1.1/(ln(Lw/rw))}+{A+Bln((H-Lw)/rw)}/(Le/rw)}^-1= 2.70

Where: Lw = H;

ln(Re/rw) = [{1.1/(ln(Lw/rw))}+{C/(Le/rw)}]^-1 = 3.33

Calculation of Coefficients

Value range for Le/rw from Table of Coefficients

Le/rw	A	B	C
25	2.4	0.31	1.9
30	2.5	0.35	2.1

Interpolated values of A, B and C for Le/rw

28.57	2.47	0.34	2.04

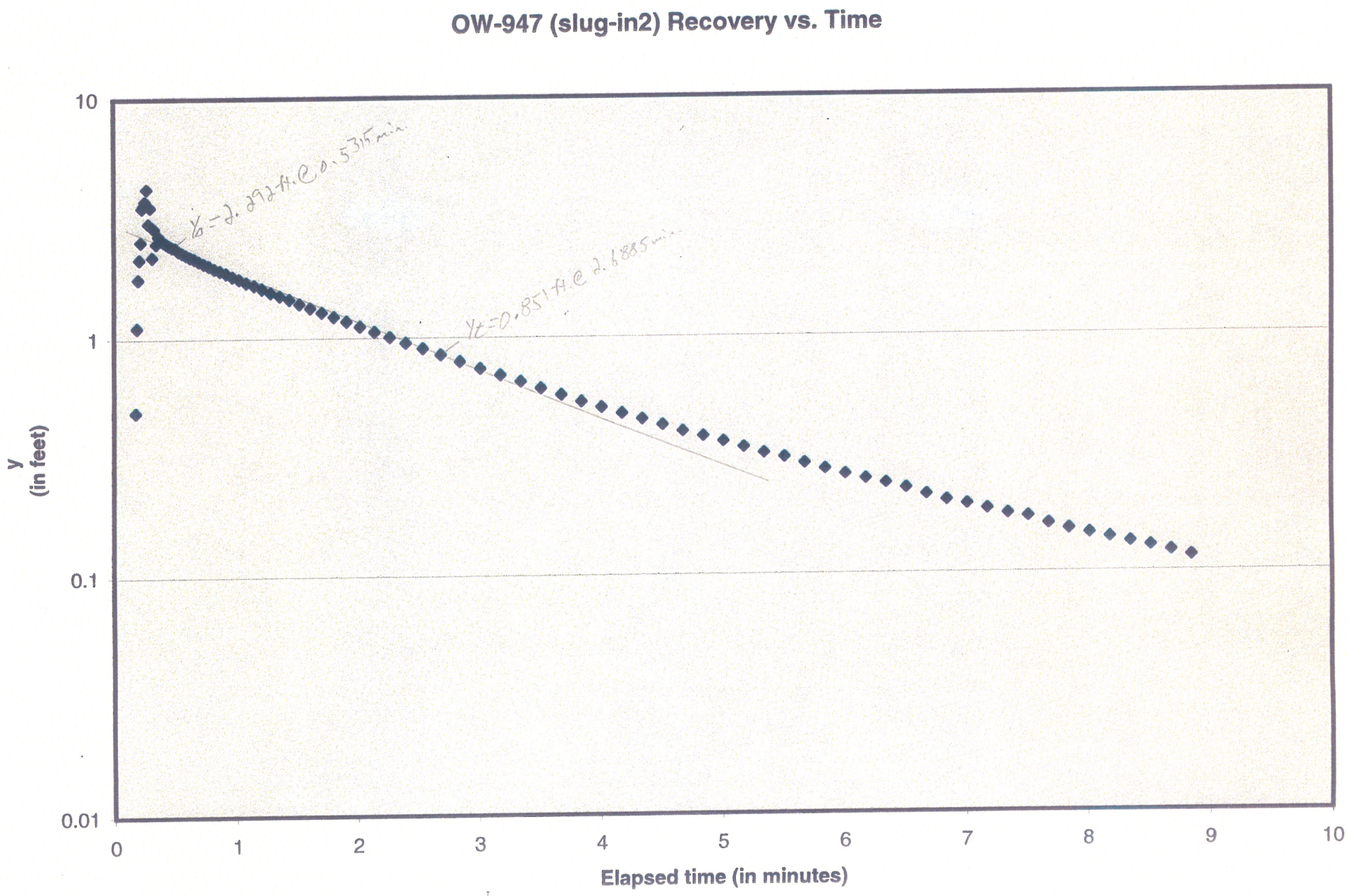
Coefficients Table

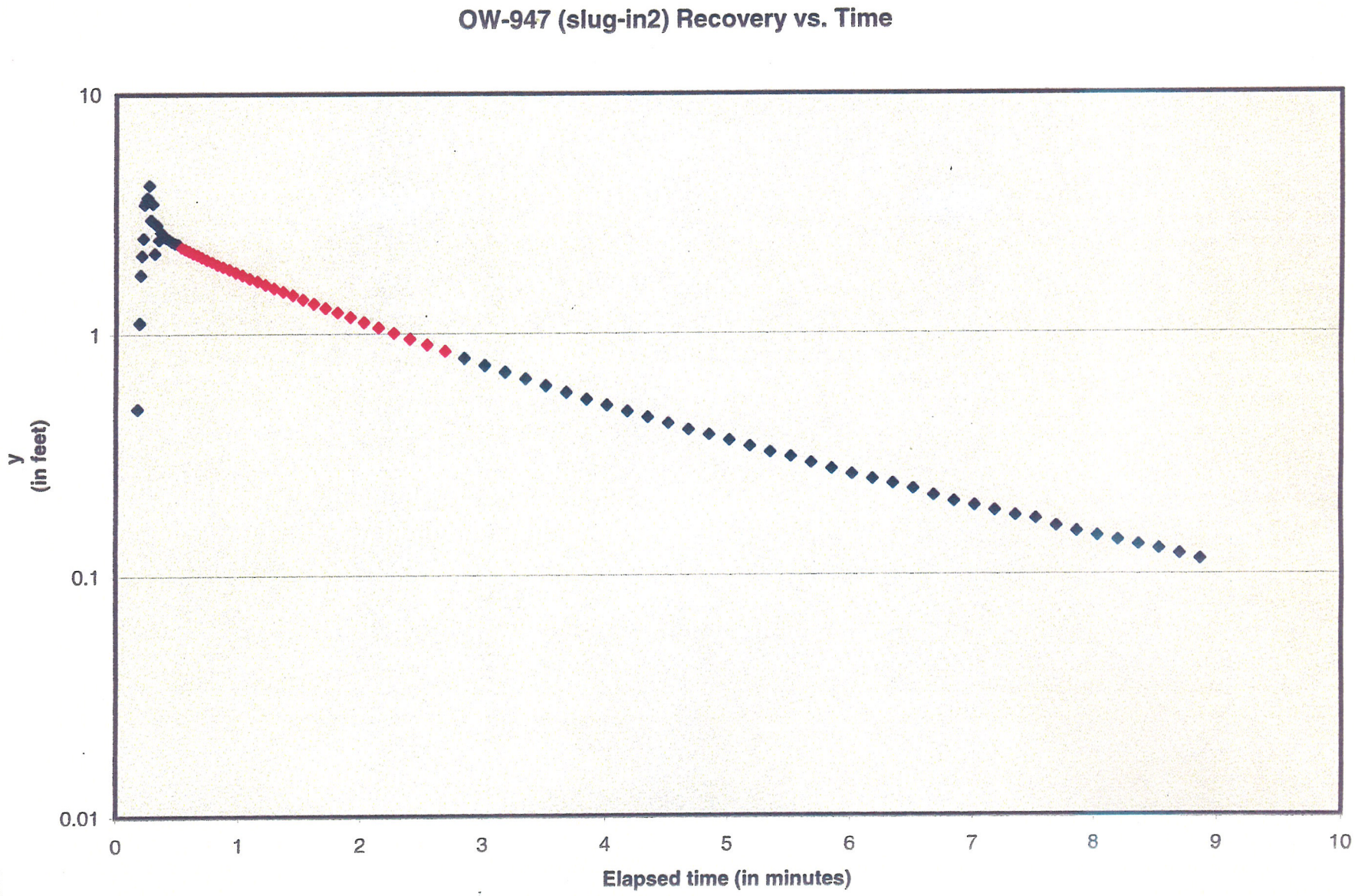
Le/rw	A	Le/rw	B	Le/rw	C
4	1.75	4	0.25	4	0.75
5	1.76	5	0.25	5	0.85
6	1.77	6	0.25	6	0.90
7	1.80	7	0.25	7	1.00
8	1.83	8	0.25	8	1.10
9	1.90	9	0.25	9	1.20
10	1.95	10	0.25	10	1.30
15	2.10	15	0.27	15	1.50
20	2.23	20	0.29	20	1.75
25	2.40	25	0.31	25	1.90
30	2.50	30	0.35	30	2.10
40	2.75	40	0.45	40	2.45
50	3.00	50	0.50	50	2.70
60	3.45	60	0.52	60	3.00
70	3.70	70	0.60	70	3.40
80	3.90	80	0.65	80	3.60
90	4.20	90	0.70	90	3.85
100	4.50	100	0.75	100	4.20
150	5.45	150	0.98	150	5.70
200	6.10	200	1.20	200	7.00
250	6.70	250	1.30	250	8.00
300	7.10	300	1.50	300	8.80
400	7.75	400	1.90	400	9.90
500	8.20	500	2.20	500	10.60
600	8.50	600	2.33	600	11.10
700	8.70	700	2.50	700	11.50
800	8.90	800	2.70	800	11.80
900	9.00	900	2.75	900	12.00
1000	9.20	1000	2.83	1000	12.40
1500	9.50	1500	3.18	1500	12.90

Reference: Bouwer(1989), Bouwer and Rice(1976)

TEST DATA

Elapsed time (min)	Log y	y (ft)	WL (ft BTOC)	
0	#NUM!	0	18.08	
0.011	#NUM!	0	18.08	
0.022	-2.52	0.003	18.08	
0.033	-2.52	0.003	18.08	
0.044	#NUM!	0	18.08	
0.055	-2.22	0.006	18.07	
0.066	-2.52	0.003	18.08	
0.077	-2.22	0.006	18.07	
0.088	-2.52	0.003	18.08	
0.099	-2.52	0.003	18.08	
0.11	-2.22	0.006	18.07	
0.121	-2.52	0.003	18.08	
0.132	#NUM!	0	18.08	
0.143	-2.05	0.009	18.07	
0.154	-2.52	0.003	18.08	
0.165	-2.52	0.003	18.08	
0.176	-0.30	0.5	17.58	
0.187	0.05	1.113	16.97	
0.198	0.24	1.754	16.33	
0.209	0.33	2.117	15.96	
0.22	0.40	2.502	15.58	
0.231	0.54	3.474	14.61	
0.2427	0.55	3.578	14.50	
0.2552	0.57	3.716	14.36	
0.2683	0.62	4.185	13.90	
0.2823	0.48	2.991	15.09	
0.2972	0.54	3.503	14.58	
0.3128	0.34	2.163	15.92	
0.3295	0.45	2.847	15.23	
0.3472	0.39	2.465	15.62	
0.3658	0.42	2.646	15.43	
0.3857	0.41	2.545	15.54	
0.4067	0.40	2.511	15.57	
0.4288	0.39	2.468	15.61	
0.4523	0.38	2.424	15.66	
0.4772	0.38	2.387	15.69	
0.5035	0.37	2.361	15.72	
0.5315	0.36	2.292	15.79	Test initialization
0.5612	0.35	2.252	15.83	
0.5925	0.34	2.206	15.87	
0.6257	0.34	2.163	15.92	
0.6608	0.33	2.125	15.96	
0.6982	0.32	2.076	16.00	
0.7377	0.31	2.03	16.05	
0.7795	0.30	1.987	16.09	
0.8238	0.29	1.933	16.15	
0.8708	0.28	1.892	16.19	
0.9207	0.27	1.849	16.23	
0.9733	0.25	1.797	16.28	
1.0292	0.24	1.749	16.33	
1.0883	0.23	1.694	16.39	
1.151	0.22	1.651	16.43	
1.2173	0.20	1.599	16.48	
1.2877	0.19	1.544	16.54	
1.3622	0.17	1.493	16.59	
1.4412	0.16	1.444	16.64	
1.5248	0.14	1.386	16.69	
1.6133	0.12	1.332	16.75	
1.7072	0.11	1.277	16.80	
1.8065	0.09	1.225	16.86	
1.9118	0.07	1.173	16.91	
2.0233	0.05	1.116	16.96	
2.1415	0.03	1.061	17.02	
2.2667	0.00	1.007	17.07	
2.3992	-0.02	0.952	17.13	
2.5397	-0.04	0.903	17.18	
2.6885	-0.07	0.851	17.23	Test completion
2.846	-0.10	0.797	17.28	
3.0127	-0.13	0.745	17.34	
3.1793	-0.16	0.699	17.38	
3.346	-0.18	0.656	17.42	
3.5127	-0.21	0.615	17.47	
3.6793	-0.24	0.578	17.50	
3.846	-0.27	0.541	17.54	
4.0127	-0.29	0.512	17.57	
4.1793	-0.32	0.483	17.60	
4.346	-0.34	0.457	17.62	
4.5127	-0.37	0.431	17.65	
4.6793	-0.39	0.405	17.68	90% recovery
4.846	-0.41	0.385	17.70	


OW-947 (slug-in2) Recovery vs. Time
10
1
0.1
0.01
y
(in feet)
0
1
2
3
4
5
6
7
8
9
10
Elapsed time (in minutes)


OW-947 (slug-in2) Recovery vs. Time
y
(in feet)
10
1
0.1
0.01
0
1
2
3
4
5
6
7
8
9
10
Elapsed time (in minutes)

MACTEC

MACTEC Engineering and Consulting
3301 Atlantic Avenue
Raleigh, North Carolina

Slug Test Data Sheet

MACTEC Job Name: North Anna COL	**MACTEC Job Number:** 6468-06-1472
Date: 11-13-06 **Time:** 1600	**Observation Well No.:** OW947IN2
Weather Conditions: Cloudy Approx 40°F	
Method of Slug Withdrawl (circle one): (K) water, (mechanical) or pressure	**Test Method:** Rising Head or (Falling Head) (circle)
Diameter of Screen: 2 in.	**Diameter of Casing:** 2 in.
Total Well Depth: 58 ft below reference point	**Reference Point:** Permanent mark on top of casing
Length of Screened Section: 10 ft	**Depth interval of screened portion:** 45-55 ft
Depth to Groundwater: 18.08 ft below reference point	

Groundwater Measurements Collected Prior to Slug Test

Depth to Groundwater	Date
16.02 (pre-Development)	11-8-06
18.24 (Post Development)	11-9-06
18.03 (OW947IN)	11-13-06
18.02 (OW947out test)	11-13-06
18.08 (OW947IN2 test)	11-13-06

Comments/Remarks

USED Transducer SN D00513 Horiz 3000

Set Transducer 30' below TOC

Transducer read 11.984 VS: 11.92

offset = 4.185

Final Horiz reading =

No Recovery

In-Situ Inc. Hermit 3000

Report generated: 12/11/06 17:39:58
Report from file: P:\6468\2006 Projects\1472 North Anna COL\Slug Test Data\Raw data logger fil
DataMgr Version 3.71

ial number: 00045369
mware Version 7.08
Unit name: HERMIT 3000

Test name: OW947IN2 PAGE 1 OF 2

Test defined on: 11/13/06 16:56:10
Test started on: 11/13/06 17:00:49
Test stopped on: 11/13/06 17:09:42
Test extracted on: 11/13/06 18:03:50

Data gathered using Logarithmic testing
Maximum time between data points: 0.1667 Minutes.
Number of data samples: 104

TOTAL DATA SAMPLES 104

Channel number [1]
Measurement type: Pressure
Channel name: D00513
Linearity: 0.0212000
Scale: 19.9368000
Offset: 0.1304000
Warmup: 50
Specific gravity: 1.000
Mode: TOC
User-defined reference: 0.000 Feet H2O
eferenced on: test start
ressure head at reference: 11.988 Feet H2O

Channel number [0]
Measurement type: Barometric Pressure
Channel name: Barometric
Linearity: 0.0000000
Scale: 0.0000000
Offset: 0.0000000
Warmup: 50

Date	Time	ET (min)	Chan[1] Feet H2O	Chan[0] Inches Hg
11/13/06	17:00:49	0.0000	0.000	29.717
11/13/06	17:00:49	0.0110	0.000	29.719
11/13/06	17:00:50	0.0220	-0.003	29.719
11/13/06	17:00:50	0.0330	-0.003	29.722
11/13/06	17:00:51	0.0440	0.000	29.719
11/13/06	17:00:52	0.0550	-0.006	29.722
11/13/06	17:00:52	0.0660	-0.003	29.722
11/13/06	17:00:53	0.0770	-0.006	29.719
11/13/06	17:00:54	0.0880	-0.003	29.719
11/13/06	17:00:54	0.0990	-0.003	29.719
11/13/06	17:00:55	0.1100	-0.006	29.719
11/13/06	17:00:56	0.1210	-0.003	29.722
11/13/06	17:00:56	0.1320	0.000	29.726
'13/06	17:00:57	0.1430	-0.009	29.722
13/06	17:00:58	0.1540	-0.003	29.719
11/13/06	17:00:58	0.1650	-0.003	29.719
11/13/06	17:00:59	0.1760	-0.500	29.719
11/13/06	17:01:00	0.1870	-1.113	29.722
11/13/06	17:01:00	0.1980	-1.754	29.719
11/13/06	17:01:01	0.2090	-2.117	29.724
11/13/06	17:01:02	0.2200	-2.502	29.717

OW947 IN 2 PAGE 2 OF 2

11/13/06	17:01:02	0.2310	-3.474	29.717
11/13/06	17:01:03	0.2427	-3.578	29.719
11/13/06	17:01:04	0.2552	-3.716	29.719
11/13/06	17:01:05	0.2683	-4.185	29.719
11/13/06	17:01:05	0.2823	-2.991	29.722
11/13/06	17:01:06	0.2972	-3.503	29.719
[illegible]/13/06	17:01:07	0.3128	-2.163	29.719
13/06	17:01:08	0.3295	-2.847	29.717
11/13/06	17:01:09	0.3472	-2.465	29.719
11/13/06	17:01:10	0.3658	-2.646	29.717
11/13/06	17:01:12	0.3857	-2.545	29.724
11/13/06	17:01:13	0.4067	-2.511	29.719
11/13/06	17:01:14	0.4288	-2.468	29.719
11/13/06	17:01:16	0.4523	-2.424	29.724
11/13/06	17:01:17	0.4772	-2.387	29.722
11/13/06	17:01:19	0.5035	-2.361	29.717
11/13/06	17:01:20	0.5315	-2.292	29.719
11/13/06	17:01:22	0.5612	-2.252	29.717
11/13/06	17:01:24	0.5925	-2.206	29.719
11/13/06	17:01:26	0.6257	-2.163	29.722
11/13/06	17:01:28	0.6608	-2.125	29.724
11/13/06	17:01:30	0.6982	-2.076	29.722
11/13/06	17:01:33	0.7377	-2.030	29.715
11/13/06	17:01:35	0.7795	-1.987	29.722
11/13/06	17:01:38	0.8238	-1.933	29.722
11/13/06	17:01:41	0.8708	-1.892	29.722
11/13/06	17:01:44	0.9207	-1.849	29.722
11/13/06	17:01:47	0.9733	-1.797	29.719
11/13/06	17:01:50	1.0292	-1.749	29.719
11/13/06	17:01:54	1.0883	-1.694	29.719
11/13/06	17:01:58	1.1510	-1.651	29.722
11/13/06	17:02:02	1.2173	-1.599	29.722
11/13/06	17:02:06	1.2877	-1.544	29.722
11/13/06	17:02:10	1.3622	-1.493	29.722
[illegible]/13/06	17:02:15	1.4412	-1.444	29.719
13/06	17:02:20	1.5248	-1.386	29.722
[illegible]/13/06	17:02:25	1.6133	-1.332	29.722
11/13/06	17:02:31	1.7072	-1.277	29.719
11/13/06	17:02:37	1.8065	-1.225	29.719
11/13/06	17:02:43	1.9118	-1.173	29.719
11/13/06	17:02:50	2.0233	-1.116	29.724
11/13/06	17:02:57	2.1415	-1.061	29.724
11/13/06	17:03:05	2.2667	-1.007	29.717
11/13/06	17:03:12	2.3992	-0.952	29.719
11/13/06	17:03:21	2.5397	-0.903	29.722
11/13/06	17:03:30	2.6885	-0.851	29.719
11/13/06	17:03:39	2.8460	-0.797	29.722
11/13/06	17:03:49	3.0127	-0.745	29.724
11/13/06	17:03:59	3.1793	-0.699	29.719
11/13/06	17:04:09	3.3460	-0.656	29.722
11/13/06	17:04:19	3.5127	-0.615	29.717
11/13/06	17:04:29	3.6793	-0.578	29.719
11/13/06	17:04:39	3.8460	-0.541	29.719
11/13/06	17:04:49	4.0127	-0.512	29.719
11/13/06	17:04:59	4.1793	-0.483	29.717
11/13/06	17:05:09	4.3460	-0.457	29.719
11/13/06	17:05:19	4.5127	-0.431	29.719
11/13/06	17:05:29	4.6793	-0.405	29.722
11/13/06	17:05:39	4.8460	-0.385	29.719
11/13/06	17:05:49	5.0127	-0.365	29.693
11/13/06	17:05:59	5.1793	-0.345	29.673
11/13/06	17:06:09	5.3460	-0.325	29.671
11/13/06	17:06:19	5.5127	-0.311	29.689
'13/06	17:06:29	5.6793	-0.293	29.695
[illegible]/13/06	17:06:39	5.8460	-0.276	29.699
11/13/06	17:06:49	6.0127	-0.262	29.705
11/13/06	17:06:59	6.1793	-0.250	29.707
11/13/06	17:07:09	6.3460	-0.239	29.711
11/13/06	17:07:19	6.5127	-0.227	29.707
11/13/06	17:07:29	6.6793	-0.213	29.709