

Appendix 3

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pail Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
1-21-09	10:40	MW-989	850.30	23.72	826.58	Mini troll set w/ 25' Cable.
	11:39	MW-1205	930.07	57.41	872.66	Level Troll
	11:40	MW-1202	930.03	60.22	869.81	Level Troll
	13:27	MW-1225	941.37	72.25	869.12	Level Troll
	13:28	MW-1222	941.31	72.09	869.22	Level Troll
	13:58	MW-1215	938.83	66.66	872.17	Level Troll
	13:59	MW-1218	938.88	68.09	870.79	Level Troll
	1437	1B-1	941.69	77.83	863.86	Mini Troll
	1450	1B-3	941.68	NA	Dry	-
	1500	A-23		NA	Dry	-
	1555	MW-17	930.26	62.09	868.17	MCD
	1609	1BOW-1	940.56	72.68	867.88	Level Troll
	1620	MW-113	944.36	75.59	868.77	Level Troll
	1633	MW-107		75.43		Level Troll
	1652	MW-99		38.19		-
	1708	MW-47d	948.15	80.73	867.42	Level Troll
✓	1719	MW-90	945.90	78.67	867.23	Level Troll
				78.05		

Completed by: *[Signature]* (signature)
 1-21-09 (date)

ATTN: TODD CAMPBELL

269-375-2889 1-21-09 Data Collected by Bob from fall

From: BOB URSWA PALL CORP

72.31
72.19
✓
✓
-
74.32
77.82
78.76
80.77
60.70
60.79

Transducer Measured	Electric Tape Measured
MW-122s - Kuehnle and Dexter	MW-47s 79.57
MW-122d - Kuehnle and Dexter	MW-54s&d 54d 70.42
MW-120s - Kuehnle and Sequoia	MW-55
MW-120d - Kuehnle and Sequoia	MW-54
New Well(s) - Dexter and Landings Blvd.	MW-100 69.04
MW-KD-1d	MW-107 75.48
MW-BE-1s	MW-117 55.57
MW-92	MW-KD-1s 74.56
MW-47d	MW-KZ-1 54.75
MW-77	MW-BE-1d 77.74
MW-113	MW-400 Clarendon 62.58
373 Pinewood - Shallow	MW-81 53.93
LBOW-1	MW-91 60.88
LB-1	MW-101 65.61
LB-3	MW-104 79.22
AE-3	MW-110 74.43
MW-98s (for background purposes)	MW-118 56.60

54s 69.83

Note: MW-98s is not shown on Attachment 1.

DATA ANALYSIS

MW-72d 71.08
MW 72s 70.95
MW 88 52.01

PLS will collect the water level data and prepare hydrographs using said data. The data will be compared to the timing of the flow rate reductions to determine if there are any relationships.

Barometric pressure data for the area will be monitored during the testing period. These data will also be plotted and compared to water level trends.

Potentiometric surface maps will be prepared using data collected before pumping rates are adjusted and after the two testing stages.

MW-121s 66.74 10:39
MW-121d 68.22 10:42

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pall Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
1-22-09	9:05	373 Ruesh	929.86	60.70	869.16	Mini Troll
1-26-09	8:45	11	929.86	61.09	868.77	Mini Troll / ✓
	9:32	MW-77	931.47	60.98	870.49	
	9:48	KD-10	942.66	74.63	868.03	
	10:00	MW-8E15	945.92	78.06	867.86	
	10:25	MW-100	940.87	69.27	871.60	
	10:33	MW-K21	930.58	54.77	875.81	875.75
	10:45	MW-117	930.26	55.62	874.64	
	11:40	MW-98	950.30	23.73	826.57	Mini Troll / ✓
	12:22	LB-1	941.69	78.15	863.54	" / ✓
	12:32	MW-42	948.15	81.07	867.08	Level Troll / 867.56
	12:47	MW-92	945.90	79.08	866.82	Level Troll / 867.47
13-28-09	13:28	MW-113	944.36	75.91	868.45	2 Level Troll / 869.04
	13:44	KD-10	942.66	74.54	868.12	Level Troll
	13:57	MW-100	940 940.87	69.23	871.50	69 Level Troll /
	14:08	MW-K2	930.58	54.79	875.79	Level Troll
	14:20	MW-117	930.26	55.57	874.69	Level Troll
	14:30	MW-107	943.66	75.67	867.99	Level Troll / 868.54
	14:46	MW-8E15	945.92	78.03	867.89	Level Troll / 867.93
	14:55	LBow-1	940.56	72.97	867.59	Level Troll / 868.16
	15:09	MW-77	931.47	60.85	870.62	Level Troll / 870.56
	15:19	MW-121	938.83	67.03	871.80	Level Troll / 872.36
✓	15:20	MW-121	938.88	68.34	870.54	Level Troll / 871.105

Completed by: Stoddard Campbell (signature)
 1-26-09 (date)

871.85

10:00AM will lower LB-3 to 756PM today.

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pall Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
1-26-09	1540	MW-122	941.37	72.45	868.92	Level 1 Trull / 869.39
	1542	MW-122	941.31	72.36	868.95	Level 1 Trull / 869.42
	1602	MW-123	930.07	57.72	872.35	Level 1 Trull / 872.86
	1604	MW-121	930.03	60.45	869.58	Level 1 Trull / 869.58 872.0
1637	MW-101	932.98	65.83	867.15	Mini Trull	

Completed by: [Signature] (signature)
1-26-09 (date)

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pall Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
2-3-09	9:31	373 Pinewood-Shallow	929.86	60.17	869.69	Mini Troll ✓
		AE-3	953.86			
	10:32	LB-1	941.69	74.84	866.85	Mini Troll ✓
		LB-3	941.68			
	10:41	LBOW-1	940.56	71.78	868.78	Level Troll ✓
	8:50	MW-17	934.27	61.87	872.40	
	12:49	MW-47d	948.15	80.14	868.01	Level Troll ✓
	16:43	MW-47s	947.30	78.93	868.37	see
	10:20	MW-54d	940.31	69.96	870.35	
	10:45	MW-54s	940.39	69.44	870.95	
	13:41	MW-72d	942.49	70.95	871.54	
	13:37	MW-72s	942.93	70.82	872.11	
	13:47	MW-77	931.47	60.28	871.19	Level Troll ✓
	14:00	MW79s	906.30	37.85	868.45	
	11:24	MW-81	920.15	53.61	866.54	
	11:56	MW-88	920.76	51.69	869.07	
	11:31	MW-91	913.37	60.91	852.46	
	13:18	MW-92	945.90	78.16	867.74	Level Troll ✓
	10:04	MW-98s	850.30	23.75	826.55	Mini Troll ✓
	10:57	MW-100	940.87	68.75	872.12	Level Troll ✓
	10:21	MW-101	932.98	65.08	867.90	Mini Troll ✓
	11:48	MW-104	938.69	79.16	859.53	
	12:00	MW-107	943.66	74.81	868.85	Level Troll ✓
	11:42	MW-110	940.57	74.09	866.48	
	13:45	MW-113	944.36	74.95	869.41	Level Troll ✓
	11:44	MW-117	930.26	55.59	874.67	Level Troll ✓
	13:27	MW-118	930.11	56.44	873.67	
	10:54	MW-120d	930.03	59.82	870.21	Level Troll - Bob ✓
	10:50	MW-120s	930.07	57.11	872.96	Level Troll ✓
	10:04	MW-121d	938.88	67.82	871.06	Level Troll ✓
	10:08	MW-121s	938.83	66.48	872.35	Level Troll ✓
	10:32	MW-122d	941.31	71.56	869.75	Level Troll ✓
	10:28	MW-122s	941.37	71.68	869.69	Level Troll - ✓
	11:05	MW-400 Clarendon	930.53	61.93	868.60	Level Troll
	13:01	MW-BE-1d	945.65	76.98	868.67	Level Troll
	13:04	MW-BE-1s	945.92	77.03	868.89	Level Troll ✓
	13:25	MW-KD-1d	942.66	73.58	869.08	Level Troll ✓
	14:36	MW-KD-1s	942.82	73.83	868.99	see
	11:18	MW-KZ-1	930.58	54.27	875.81	Level Troll ✓

Completed by: [Signature] (signature)
2-3-09 (date)

2-3-09

Data Collected by Bob

Transducer Measured	Electric Tape Measured
MW-122s - Kuehnle and Dexter	MW-91 60.91 11:31
MW-122d - Kuehnle and Dexter	MW-100
MW-120s - Kuehnle and Sequoia	MW-107
MW-120d - Kuehnle and Sequoia	MW-117
MW-121s, MW-121d - Dexter and Landings Blvd.	MW-KD-1s
MW-KD-1d	MW-KZ-1 54.79 11:16
MW-BE-1s	MW-BE-1d
MW-92	MW-400 Clarendon 61.93
MW-47d	MW-81 53.61 11:24
MW-77	MW-81
MW-113	MW-101
373 Pinewood - Shallow	MW-104 79.16 11:48
LBOW-1	MW-110 74.09 11:42
LB-1	
LB-1 (water level too low)	
AE-3 (water level too low)	
MW-98s (for background purposes)	

from
Bill
TEC
Entered
Data
of Statz Sheets
1105

Mw-72s 70.80 13:37
 Mw-72d 70.95 13:41
 Mw-79s 37.85 14:00
 Mw-118 56.44 13:27
 Mw-122s 71.68 10:28
 Mw-122d 71.56 10:32
 Mw-120s ~~71.68~~ 57.11 10:50
 Mw-120d 59.82 10:54
 Mw-121s 66.48 10:08
 Mw-121d 67.82 10:04
 Mw-54s 69.44 10:15
 Mw-54d 69.96 10:20
 Mw-88 51.69 11:56

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pall Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
2-10-09	9:35	373 Pinewood-Shallow	929.86	59.23	870.63	Mini Troll ✓
		AE-3	953.86	Water Level Below Top of Pump		
	9:45	LB-1	941.69	71.79	869.90	Mini Troll ✓
	11:53	LB-3	941.68	71.62	870.06	
	12:43	LBOW-1	940.56	70.60	869.96	Level Troll ✓
	9:05	MW-17	934.27	61.31	872.96	
	10:08	MW-47d	948.15	78.68	869.47	Level Troll ✓
	10:10	MW-47s	947.30	78.12	869.18	
	10:16	MW-54d	940.31	69.26	871.05	
	10:19	MW-54s	940.39	68.74	871.65	
	13:45	MW-72d	942.49	68.95	873.54	
	13:49	MW-72s	942.93	70.36	872.57	872.57 (MOD)
	12:01	MW-77	931.47	59.57	871.90	Level Troll ✓
	13:37	MW79s	906.30	37.20	869.10	
	11:01	MW-81	920.15	52.92	867.23	
	11:24	MW-88	920.76	51.06	869.70	
	11:16	MW-91	913.37	60.76	852.61	
	10:18	MW-92	945.90	77.42	868.48	Level/Troll ✓
	9:18	MW-98s	850.30	23.67	826.63	Mini Troll ✓
	12:21	MW-100	940.87	68.09	872.78	Level Troll ✓
	9:55	MW-101	932.98	64.18	868.80	Mini Troll ✓
	10:54	MW-104	938.89	78.54	860.35	
	10:34	MW-107	943.66	73.95	869.71	Level/Troll ✓
	10:49	MW-110	940.57	73.34	867.23	
	10:59	MW-113	944.36	73.96	870.40	Level Troll ✓
	12:54	MW-117	930.26	55.37	874.89	Level Troll ✓
	13:21	MW-118	930.11	55.93	874.18	
	10:37	MW-120d	930.03	59.21	870.82	Level/Troll ✓
	10:39	MW-120s	930.07	56.59	873.48	Level/Troll ✓
	10:04	MW-121d	938.88	67.35	871.53	Level/Troll ✓
	10:23	MW-121s	938.83	70.78	869.89	Level/Troll ✓
	11:20	MW-122d	941.31	+0.05	NA	+0.05 Above Top of Casing ✓
	10:23	MW-122s	941.37	70.78	870.59	Level/Troll ✓
	11:39	MW-400 Clarendon	930.53	61.02	869.51	
	10:48	MW-BE-1d	945.65	75.70	869.95	
	10:48	MW-BE-1s	945.92	76.12	869.80	Level/Troll ✓
	11:08	MW-KD-1d	942.66	72.52	870.14	Level/Troll ✓
	11:06	MW-KD-1s	942.82	72.73	870.09	
	12:30	MW-KZ-1	930.58	54.59	875.99	Level/Troll ✓

Completed by:

[Signature]
2-10-09

(signature)

(date)

* Water - C from Melting Ice/Rain fresh
 Running Down Well Casing.

2-10-09

Transducer Measured	Electric Tape Measured
MW-122s - Kuehnle and Dexter	MW-47s
MW-122d - Kuehnle and Dexter	MW-54s
MW-120s - Kuehnle and Sequoia	MW-55
MW-120d - Kuehnle and Sequoia	MW-91 60.76 1116
MW-121s, MW-121d - Dexter and Landings Blvd.	- MW-100
MW-KD-1d	- MW-107
MW-BE-1s	- MW-117
MW-92	- MW-KD-1s
MW-47d	MW-KZ-1 54.61 1145
MW-77	- MW-BE-1d 61.02 1139
MW-113	MW-400 Clarendon 52.92 1101
373 Pinewood - Shallow	MW-81
LBOW-1	MW-84
LB-1	- MW-101
LB-1 (water level too low)	MW-104 78.54* 1054
AE-3 (water level too low)	MW-110 73.34* 1049
MW-98s (for background purposes)	

MW-54s 68.74 1014
 MW-54d 69.26 1018
 MW-88 51.06 1124
 MW-121s 65.89 1010
 MW-121d 67.35 1004
 MW-122s 70.78 1023
 MW-122d *28.95 1027
 MW-120s ~~56.59~~ 1039
 MW-120d 59.21 1034
 MW-118 *55.93 1321
 MW-79s 37.20 1334
 MW-72s 70.36 1349
 MW-72d 68.95 1345
 LB-3 71.62 1153
 AE-3 WATER LEVEL BELOW PUMP

RAIN WATER RUNNING DOWN CASING

STATIC WATER LEVEL DOCUMENTATION

PROJECT NAME: Pall Life Sciences
 PROJECT NUMBER: F96502
 SITE LOCATION: Ann Arbor, Michigan

Date	Time	Well Number	Top of Casing Elevation (ft)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)	Remarks
2-16-09	1524	373 Pinewood-Shallow	929.86	59.64	870.22	MiniTroll
	1910	AE-3	953.86	84.61	869.25	
	1300	LB-1	941.69	72.25	869.44	MiniTroll ✓
	1400	LB-3	941.68	72.06	869.62	
	1339	LBOW-1	940.56	71.08	869.48	Level Troll ✓
	9200	MW-17	934.27	61.65	872.62	
	9:58	MW-47d	948.15	78.57 79.70	868.45	79.70 Level/Troll
	9:55	MW-47s	947.30	78.57	868.73	
	10:28	MW-54d	940.31	69.64	870.67	
	10:24	MW-54s	940.39	69.18	871.21	
	13:16	MW-72d	942.49	70.87	871.62	
	13:11	MW-72s	942.93	70.82	872.11	
	13:55	MW-77	931.47	60.00	871.47	Level Troll ✓
	13:29	MW79s	906.30	37.67	868.63	
	11:17	MW-81	920.15	53.32	866.83	
	11:35	MW-88	920.76	51.49	869.27	
	14:36	MW-91	913.37	60.95	852.42	
	10:13	MW-92	945.90	71.77	868.13	Level Troll ✓
	9:37	MW-98s	850.30	28.68	826.62	MiniTroll ✓
	14:16	MW-100	940.87	68.51	872.36	Level Troll ✓
	11:15	MW-101	932.98	64.63	868.35	MiniTroll ✓
	11:08	MW-104	938.69	79.09	859.60	
	10:28	MW-107	943.66	74.45	869.21	Level Troll ✓
	11:01	MW-110	940.57	73.75	866.82	
	10:51	MW-113	944.36	74.41	869.95	Level Troll ✓
	14:53	MW-117	930.26	55.57	874.69	Level Troll ✓
	10:02	MW-118	930.11	56.34	873.77	
	10:50	MW-120d	930.03	59.46	870.57	Level Troll ✓
	10:48	MW-120s	930.07	56.96	873.11	Level Troll ✓
	10:14	MW-121d	938.88	67.58	871.30	Level Troll ✓
	10:18	MW-121s	938.83	66.32	872.51	Level Troll ✓
	10:39	MW-122d	941.31	NA 71.00	870.31	
	10:36	MW-122s	941.87	71.27	870.20	Level Troll ✓
	1337	MW-400 Clarendon	930.53	61.43	869.10	
	10:37	MW-BE-1d	945.65	76.53	869.12	
	10:40	MW-BE-1s	945.92	76.57	869.35	Level Troll ✓
	11:02	MW-KD-1d	942.66	73.00	869.66	Level Troll ✓
	11:06	MW-KD-1s	942.82	73.26	869.56	
	14:31	MW-KZ-1	930.58	54.82	875.76	Level Troll ✓

Completed by:

[Signature]
 2-16-09

(signature)

(date)

2-16-09

Transducer Measured	Electric Tape Measured
MW-122s - Kuehnlle and Dexter	MW-47s
MW-122d - Kuehnlle and Dexter	MW-54s&d
MW-120s - Kuehnlle and Sequoia	MW-85
MW-120d - Kuehnlle and Sequoia	MW-91 FROLED OVER
MW-121s, MW-121d- Dexter and Landings Blvd.	* MW-100
MW-KD-1d	* MW-107
MW-BE-1s	* MW-117
MW-92	* MW-KD-1s
MW-47d	MW-KZ-1 54.84 1345
MW-77	∞ MW-BE-1d
MW-113	MW-400 Clarendon 61.43 1337
373 Pinewood - Shallow	MW-81 53.32 11:17
LBOW-1	MW-94
LB-1	* MW-101
LB-1 (water level too low)	MW-104 79.09 1108
AE-3 (water level too low)	MW-110 73.75 1101
MW-98s (for background purposes)	

60.95 1436

Mw-72s 70.82 1311
 Mw-72d 70.87 1316
 Mw-79 37.67 1327
 Mw-118 56.34 1002
 Mw-122s 71.17 1036
 Mw-122d 71.00 1039
 Mw-120s 56.96 1048
 Mw-120d 59.46 1052
 Mw-121s 66.32 10:18
 Mw-121d 67.58 10:14
 Mw-54s 69.18 10:24
 Mw-54d 69.64 10:28
 Mw-88 51.49 11:35

M

761-9790

LB-3 72.06 1400
 AE-3 84.61 1410