Well ID	ft DTW (TOC)	ft TD (TOC)	7-9-12 Time
MPL-1	205.65	222.82	1231
MPL-2	199.17	221.00	1224
MPL-3 -QC	192.87	230.75	1121
MPL-4 MS/MSD	188.93	227.50	1128
MPL-5	186.28	208.01	1151
MPL-6	172.23	193.03	1143
MPL-7 -QC 13D	179.70	218.05	0926
✓MPL-10	241.64	278.26	1313
✓MPL-13 -QC	218.68	236.94	1331
MPL-16	235.15	257.65	1021
MPL-17	177.14	191.20	0935
MPL-18	172.03	231.02	1136
MPL-19 d	194.35	467.50	1111
MPL-20 d QC	193.38	322.78	1116
MPL-21 d MS/MSD	190.26	—	1156
MPL-22 d	189.50	311.15	1201
MPL-23 d	243.60	—	1256
MPL-24 d	239.17	317.11	1306
MPL-25 d	257.30	278.13	1034
MPL-26	217.39	257.90	1042
MPL-28	185.03	203.55	1104
MPL-29	215.95	228.02	1053
MPL-30	199.95	223.35	1014
SMW-1 d	212.20	288.93	0829
SMW-4 d	254.88	281.78	0848
T-40	128.78	143.60	0959

Well ID	ft DTW (TOC)	ft TD (TOC)	7-9-12 Time
MPL-11	244.99	329.00	1350
SMW-2	257.42	282.36	0835
SMW-3	259.41	278.30	0840
MPL-14	205.88	233.40	1400
T-35	216.75	271.65	0910
B-02	Dry	62.65	1246
B-04	212.83	252.80	1510
MPL-8	248.11	278.49	1028
T-29	209.02	253.04	1239
B-3	216.06	281.57	0905
T-11	281.28	—	0820
T-37	220.70	272.87	1420
T-34	199.77	365.65	0918
MPL-15	243.15	243.45	0854
B-5	195.93	242.92	0945
B-51	150.25	322.32	1530
T-41	—	—	
T-42	—	—	
B-10	308.80	385.84	1450
MPL-27	256.79	298.26	1340
MPL-9	234.68	—	1255
MPL-12	208.76	268.83	1321

Date: 7-10-12 Personnel: B. Davis, A. Jenness

Well ID: MPL-10

Air Temp: 75°F -

Weather: Cloudy - no breeze

Pump: 11287 Water Qual. Meter: YSI #12

Drum: 55 gal Comp Water Level Ind: #94

Turb. Meter: #11

Well TD: 278.26 ft DTW (bgs): 239.75 ft

DTW (Toc): 241.71 ft water Col: N/A

Loc: 1.96 ft Col. Vol: N/A

Well Size: 4"

Sample Parameters

Temp: 24.95°C Do: 543.21 mg/L Turb: 0.36 NTU

Cond: 0.494 mS/cm pH: 7.20 CO_2: 8.0 mg/L

TDS: 0.321 g/L ORP: -96.2 mV Ferrous Fe: 0.01 mg/L

Sample Date: 7-10-12

" Time: 1119

" ID: MPL10-0712-1

Date: 7-10-12 Well ID: MPL-10

Time	Vol (mL)	Temp (°C)	Cond (mS/cm)	TDS (g/L)	Do (mg/L)	pH	ORP (mV)	Turb (NTU)
10:45	1.01	25.10	0.001	0.00	6.173 ~~6.17~~	6.73	-103.2	0.44
10:56	300mL	25.09	0.496	0.323	5.5437 ~~5.54~~	7.01	-98.7	0.45
11:02	500mL	25.27	0.495	0.322	5.8422 ~~5.84~~	7.11	-101.3	0.51
1107	700mL	25.33	0.493 ~~0.322~~ BD	0.322	5.6944 ~~5.69~~	7.14	-95.9	0.49
1112	900mL	24.95	0.494	0.321	5.4321 ~~5.43~~	7.20	-96.2	0.36

↑ BTD

1119 - Sample

Setup: Pump set @ 258 drawdown set @ 242.71 Controller set @ MN

Refill BTD ~~15~~ 20 Discharge BTD 1820 PSI 1151 Start Purge 1033 1st water 1045

Finish time 1208 Total Time 1:35 Initial drawdown 241.81 Final drawdown 241.88

Used 700 Nitrogen

Date: 7-10-12 Personnel: B. Davis, A. Jenness
Well ID: MPL-13

Air Temp: 77°F
Weather: Cloudy - breeze - 5-10 mph

Pump: 11287 Water Qual. Meter: YSI # 12
Drum: 55 gal Comp. Water Level Ind.: #94
Turb. Meter: #12

Well TD: 236.94 ft DTW(bgs): 215.91
DTW(TOC): 218.73 ft Water Col.: N/A
LOC: 2.82 ft Col. Vol.: N/A
Well Size: 4"

Sample Parameters

Temp: 24.41°C Do.: 610.3 mg/L Turb.: 1.52 NTU
Cond.: 0.365 mS/cm pH: 7.37 CO_2: 8.0 mg/L
TDS.: 0.237 g/L ORP: -120.5 mV Ferrous Fe: 0.03 mg/L

Sample Date: 7-10-12
" Time: ~~14~~ BTD 1315
" ID: MPL13-0712-1
Field Duplicate: MPL13-0712-2

Date: 7-10-12 Well ID: MPL-13

DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
218.91	1248	init	25.10	0.371	0.241	7.7756 ~~7.7756~~	7.32	-102.4	2.96
218.83	1253	400	25.27	0.369	0.240	5.958 ~~5.958~~	7.33	-120.8	1.10
218.85	1258	600	25.93	0.367	0.239	5.7017 ~~5.7017~~	7.30	-115.9	1.61
218.89	1303	1000	24.88	0.366	0.238	6.289 ~~6.289~~	7.32	-104.9	1.45
219.95	1308	1750	24.41	0.365	0.237	6.103 ~~6.103~~	7.37	-120.5	1.52

1315 - Sample ↑ BTD

Set up: Pump set @ 224, drawdown set @ 214.73, Controller set @ MN
Refill 14, Discharge 16, PST 110, Start Purge 1240, 1st water 1249
Finish time 1354, Total Time, Initial drawdown 218.91, Final drawdown 218.92

Date: 7-11-12 Personnel: B. Davis
Well ID: MPL-05 A. Jenness

Airtemp: 73°F
Weather: Cloudy.

Pump: 11287 Water Qual. meter: YSI #12
Drum: 55 gal Water Level Ind.: #94
Comp. Turb. meter: #~~12~~11

Well TD: 208.01 ft DTW (bgs): 184.31 ft
DTW (TOC): 186.29 ft water Col.: N/A
LOC: 1.98 ft. Col. Vol: N/A
Well Size: 4"

Sample Parameters

Temp.: 23.52 °C DO: 5.69 mg/L Turb: 0.1 NTU
cond: 0.430 mS/cm pH: 7.05 CO2: 8.0 mg/L
TDS: 0.280 g/L ORP: -63.1 Ferrous Fe: 0.00 mg/L

Sample Date: 7-11-12
" Time: 0927
ID: MPL05-0712-1

Date: 7-11-12 Well ID: MPL-05

ft DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
186.39	0907	init.	23.49	0.426	0.277	6.46	6.92	-66.7	0.37
186.40	0911	750	23.50	0.425	0.276	6.06	6.96	-65.7	0.19
186.42	0915	1500	23.50	0.426	0.277	5.81	7.01	-65.4	0.13
186.41	0919	2250	23.52	0.428	0.278	5.67	7.04	-63.9	0.11
186.41	0923	3000	23.52	0.430	0.280	5.69	7.05	-63.1	~~0.0~~ 0.1 BSU

0927 Sample

Set up: Pump Set @ 193 ft drawdown set @ 187.29, Controller Set @ MN
Refill 14, Discharge 16, PSI 115, Start Purge 0903, 1st water 9:09
Finish time 0944, Total time 0:41, Initial drawdown 186.39, Final drawdown 186.39
Used 200 lb Nitrogen

Date: 7-11-12 Personnel: B. Davis
Well ID: MPL-18 A. Jennings

Air Temp: 75°F
Weather: Light breeze - 0-5 mph
Cloudy

Pump: 11287 Water Qual. Meter: YSI #12
Drum: 55gal Comp Water Level Ind.: #94
Turb. Meter: ~~#12~~ "

Well TD: 231.02 ft DTW (bgs): 170.51 ft.
DTW (TOC): 172.06 ft. Water Col: N/A
Loc: 1.55 ft. Col. Vol.: N/A
Well Size: 4"

Sample Parameters

Temp: 23.61°C DO: 4.91 mg/L Turb: 0.74 NTU
Cond: 0.287 mS/cm pH: 7.20 CO_2: 6.0 mg/L
TDS: 0.187 g/L ORP: -82.2 mV Ferrous Fe: 0.00 mg/L

Sample Date: 7-11-12
" Time: 1041
" ID: MPL 18-0712-1

Date: 7-11-12 Well ID: MPL-18

(TOC) DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
172.11	1019	init.	23.92 ~~23.92~~ BTD	0.291	0.189	5.36	7.23	-76.8	2.09
172.14	1025	750	23.92	0.290	0.188	5.34	7.27	-77.3	2.16
172.14	1030	1500	23.68	0.288	0.187	5.10	7.21	-83.2	0.54
172.15	1035	2250	23.64	0.287	0.187	4.97	7.20	-81.9	0.56
172.15	1040	3000	23.61	0.287	0.187	4.91	7.20	-82.2	0.74

1041 - Sample

Set up: Pump set @ 212 ft, drawdown set @ 173.06, Cont. set @ MN,
Refill 14, Discharge 16, PSI 95, Start Purge 1012, 1st Water 1018
Finish time 1100 total time 0:48, Initial drawdown 172.11, Final drawdown 172.16
Used 300 lb Nitrogen

Date: 7-11-12 Personnel: B. Davis
Well ID: MPL-16 A. Jenness

Air Temp: 80°F
Weather: Cloudy - breezy - 0-5 mph

Pump: 11287 Water Qual Meter: YSI #12
Drum: 55 gal Comp. Water Level Ind.: #94
Turb. Meter: #11

Well TD: 257.65 ft DTW (bgs): 233.78 ft
DTW (TOC): 235.13 ft + water Col.: N/A
LOC: 1.35 ft. Col. Vol.: N/A
Well Size: 4"

Sample Parameters

Temp: 24.91 °C DO: 5.92 mg/L Turb.: 0.01
Cond: 0.451 mS/cm pH: 7.17 CO2: 6.0 mg/L
TDS: 0.293 g/L ORP: -80.8 Ferrous Fe: 0.02 mg/L

Sample Date: 7-11-12
" Time: 1212
" ID: MPL 16-0712-1

Date: 7-11-12 Well ID: MPL-16

DTW	Time	mL Vol	°C Temp	ms/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
235.32	1152	init	25.41	0.449	0.292	6.29	7.21	-84.5	0.53
235.32	1157	500	25.15	0.451	0.293	6.06	7.21	-83.4	0.15
235.32	1202	1000	25.20	0.451	0.293	5.70	7.18	-82.4	0.06
235.33	1207	1500	25.06	0.451	0.293	5.88	7.17	-81.6	0.11
235.34	1211	2250	24.91	0.451	0.293	5.92	7.17	-80.8	0.01

1212 - Sample

Setup: Pump Set @ 242 ft. drawdown Set @ 236.13, Controller Set @ MN
Refill 14 Discharge 16 PSI 115 Start Purge 1136, 1st water 1146
Finish time 1242, Total time 1.06, Initial drawdown 235.32, Final drawdown 235.31

Date: 7-11-12 Personnel: B. Davis, A. Jenness
Well ID: MPL-17

Air Temp.: 75°F
Weather: Cloudy breezy - 5-10 mph
Sprinkle -

Pump: 11287 Water Qual. Meter: YSI #2
Drum: 55 gal Water Level Ind.: #94
Comp. Turb. Meter: #11

Well TD: 191.20 ft.
DTW (TOC): 177.14 DTW (bgs): 176.00 ft
LOC: 1.14 ft. Water Col.: N/A
Well size: 4" Col. Vol.: N/A

Sample Parameters

Temp.: 23.93°C Do: 5.52 mg/L Turb.: 0.20 NTU
Cond.: 0.427 mS/cm pH: 7.18 CO_2: 6.0 mg/L
TDS: 0.278 g/L ORP: -99.2 mV Ferrous Fe: 0.00 mg/L

Sample Date: 7-11-12
" Time: 1400
" ID: MPL 17-0712-1
MPL 17-0712-MS
MPL 17-0712-MSD

Date: 7-11-12 Well ID: MPL-17

TOC DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb.
177.19	1333	Init.	25.95	0.432	0.281	7.43	7.14	-85.3	0.98
177.18	1337	750	24.58	0.429	0.279	6.31	7.25	-82.3	0.53
177.19	1341	1500	24.13	0.428	0.278	5.68	7.26	-83.8	0.57
177.18	1346	2250	23.95	0.428	0.278	5.67	7.23	-97.8	0.38
177.18	1350	3000	23.93	0.427	0.278	5.44	7.22	-97.8	0.32
	1355	3750	23.93	0.427	0.278	5.52	7.18	-99.2	0.20
	1400 - Sample								

Setup: Pump set @ 206 ft, drawdown set @ 178.14 ft, Controller Set @ MN
Refill 14, Discharge 16, PSI 90, Start Purge 1325 1314 1st Water 1330
Finish time 1438, Total time 1:13, Initial drawdown 177.19, Final drawdown 177.19 ft

Date: 7-12-12 Personnel: B. Davis, A. Jenness

Well ID: T-40

Air Temp: 77°F

Weather: p. Cloudy - no breeze.

Pump: 11287 Water Qual. meter: YSI #12

Drum: 55 gal Comp. Water Level Ind.: #94

Turb. meter: #11

Well TD: 143.60 ft. DTW (bgs): 126.37 ft

DTW (TOC): 128.81 ft. Water Col.: N/A

Loc: 2.44 ft. Col. Vol.: N/A

Well Size: 4"

Sample Parameters

Temp.: 22.59°C Do: 5.63 mg/L Turb.: 0.32 NTU

Cond.: 0.368 mS/cm pH: 7.05 CO_2: 16. mg/L

TDS: 0.239 g/L ORP: -79.6 mV Ferrous Fe: 0.00 mg/L

Sample Date: 7-12-12

" Time: 0955

" ID: T40-0712-1

Date: 7-12-12 Well ID: T-40

ft. DTW	Time	mL Vol	°C Temp.	mS/cm Cond.	g/L TDS	mg/L Do	pH	mV ORP	NTU Turb.
129.02	0935	Init.	23.70	0.371	0.241	6.93	6.82	-75.2	0.66
129.22	0939	750	22.79	0.369	0.240	6.26	6.90	-72.9	0.65
129.37	0944	1500	22.59	0.369	0.240	5.86	7.00	-75.2	0.49
129.45	0949	2250	22.54	0.368	0.239	5.69	7.02	-82.6	0.62
129.50	0953	3000	22.59	0.368	0.239	5.63	7.05	-79.6	0.32

0955 - Sample

Set up: Pump set @ 131, drawdown set @ 129.81, Controller set @ MN

Refill 14, Discharge 16, PSI BTD 90 80 Start purge 0928, 1st Water 0932

Finish time 1009, Total time 0:41, Initial drawdown 129.02, Final drawdown 129.55

Used 200 PSI Nitrogen

Date: 7-12-12 Personnel: B. Davis, A. Jennings

Well ID: MPL-7

Air Temp: 80°F

Weather: p.Cloudy - no bronze

Pump: 11287 Water Qud. meter # 12

Drum: 55 gal Comp. Water Level Indi. # 94

Turb. meter: # 11

Well TD: 218.05 ft. DTW (bgs): 177.26 ft.

DTW (toc): 179.68 ft.

LOC: 2.42 ft.

Well size: 4"

Sample Parameters

Temp.: 24.21°C DO: 4.27 mg/L Turb.: 0.20 NTU

Cond.: 0.841 ms/cm pH: 6.93 CO_2: 12.0 mg/L

TDS: 0.546 g/L ORP: -43.0 mV Ferrous Fe: 0.03 mg/L

Sample Date: 7-12-12

" Time: 1110

" ID: MPL 07-0712-1

Date: 7-12-12 Well ID: MPL-07

ft DTW	Time	mL Vol	°C Temp	ms/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
179.75	1046	init.	25.37	0.820	0.533	5.70	6.97	-49.6	0.85
179.75	1051	750	24.62	0.835	0.543	4.69	7.00	-45.1	0.85
179.75	1056	1500	24.25	0.838	0.545	4.50	6.98	-41.7	0.10
179.75	1102	2250	24.19	0.838	0.545	4.33	6.94	-41.3	0.11
179.75	1107	3000	24.21	0.841	0.546	4.27	6.93	-43.0	0.20

1110 - Sample

Set up: Pump set @ 199 ft., drawdown set @ 180.68 Cont. set @ MN

Refill 14 Discharge 16, PSI 95 Start purge 1035 1st water 1042

Finish time 1128 Total time 0:53, Initial drawdown 179.75, Final drawdown 179.75

used 250' nitrogen

Date: 7-12-12 Personnel: A. Jennings, B. Davis
Well ID: MPL-6

Air Temp: 82°F
Weather: p. Cloudy - no breeze

Pump #: 11287 Water Qual Meter: #12
Drum: 55gal Comp Water Level Ind: #94
Turb. Meter: #11

Well TD: 193.03 ft. well size: 4"
DTW (TOC): 172.25 ft. DTW (bgs): 169.64
LOC: 2.61 ft.

Sample Parameters

Temp: 24.63°C DO: 5.31 mg/L Turb: 0.17 NTU
Cond: 0.304 ms/cm pH: 7.22 CO_2: 2.0 mg/L
TDS: 0.198 g/L ORP: -76.2 mV Ferrous Fe: 0.02 mg/L

Sample Date: 7-12-12
Time: 1218
ID: MPL06-0712-1

Date: 7-12-12 Well ID: MPL-6

ft DTW	Time	mL Vol	°C Temp	ms/cm Cond	g/L TDS	mg/L DO	pH	nV ORP	NTU Turb
172.47	1200	init.	26.92	0.331	0.215	5.54	6.96	-77.1	0.74
172.60	1205	750	24.91	0.307	0.200	5.45	7.13	-74.7	0.26
172.69	1209	1500	24.77	0.304	0.198	5.36	7.19	-78.6	0.14
172.75	1214	2250	24.74	0.304	0.198	5.27	7.16	-76.1	0.21
172.80	1218	3000	24.63	0.304	0.198	5.31	7.22	-76.2	0.17

1220 - Sample

Set up: Pump set @ 178 ft. Drawdown Set @ 173.25 Cont. Set @ MN
Refill 14 Discharge 16 PSI 95 Start Purge 1152 1st water 1158
Finish Time 1235 total time 0:43 Initial drawdown 172.47 Final drawdown 172.85

Date: 7-12-12 personnel: B. Davis, A. Jenness

Well ID: MPL-26

Air Temp: 90°F

Weather: p. Cloudy - Little breeze 0-5mph

Pump#: 11287 Water Qual. Meter: #12

Drum: 55gal Comp Water Level Ind.: #94

Turbidity meter: #11

Well TD: 257.90 ft Well Size: 4"

DTW (TOC): 217.35 ft DTW (bgs): 214.93 ft

LOC: 2.42 ft

Sample Parameters

Temp: 28.40°C DO: 5.23 Turb.: 4.01 NTU

Cond: 1.405 mS/cm pH: 6.59 CO_2: 6.0 mg/L

TDS: 0.913 g/L ORP: -87.4 Ferrous Fe: 0.10 mg/L

Sample Date: 7-12-12

Time: Sample 1350

ID: MPL 26-0712-1

Date: 7-12-12 Well ID: MPL-26

ft DTW	Time	(mL) VOL ~~Temp~~	Temp ~~mL~~ ~~VOL~~	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
217.35	1329	init	28.59	1.363	0.886	5.76	6.52	-83.8	3.83
217.36	1334	350	28.85	1.376	0.895	5.54	6.62	-84.9	2.85
217.36	1339	600	28.62	1.401	0.911	5.70	6.59	-86.3	3.15
217.36	1344	900	28.18	1.407	0.914	5.43	6.59	-86.7	3.31
217.36	1349	1200	28.40	1.405	0.913	5.23	6.59	-87.4	4.01

1350 - Sample

Setup: Pump Set @ 237.4 ft drawdown Set @ 218.35 ft Cont. Set @ MN

Refill 15 discharge 15 PSI 115 Start purge 1311 1st water 1319

Finish time 1442 total time 1:23 Initial drawdown 217.35 Final drawdown 217.36

used 1600 nitrogen

Date: 7-13-12 Personnel: B. Davis, A. Jenness
Well ID: MPL-29

Air Temp: 85°F
Weather: P.Cloudy - 5-10 mph breeze

Pump #: 11287 Water Qual. Meter: #12
Drum: 55gal Comp. Water Level Ind.: #94
Turbidity Meter: #11

Well TD: 228.02 ft. Well Size: 4"
DTW (TOC): 215.91 ft. DTW (bgs): 213.64 ft.
LOC: 2.27 ft.

Sample Parameters

Temp: 25.23°C DO: 4.52 mg/L Turb: 0.14 NTU
Cond: 0.679 mS/cm pH: 6.96 CO2: 8.0 mg/L
TDS: 0.441 g/L ORP: 1.1 mV Ferrous Fe: 0.02 mg/L

Sample Date: 7-13-12
" Time: 1143
" ID: MPL29-0712-1

Date: 7-13-12 Well ID: MPL-29

ft (TOC) DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
216.35	1122	init	25.52	0.681	0.443	7.89	6.92	92.7	0.57
216.45	1126	750	25.27	0.678	0.441	5.36	6.99	67.6	0.18
216.55	1132	1500	25.35	0.679	0.441	5.89	7.00	-9.5	0.14
216.60	1136	2250	25.22	0.679	0.442	4.80	6.94	14.9	0.31
216.65	1141	3000	25.23	0.679	0.441	4.52	6.96	1.1	0.14

1143 - Sample

Setup: Pump set @ 219 ft, Drawdown Set @ 216.91 ft. Cont. Set @ MN
Refill 15, Discharge 15, PSI 105, Start Purge 1107, 1st water 1118
Finish Time 1205, total time 0:58, Init. Drawdown 216.35, Final drawdown 216.75
used 300 nitrogen

Date: 7-13-12 personnel: B. Davis
Well ID: MPL-30 A. Jenness

Air Temp: 90°F
Weather: P. Cloudy - 0-5 mph breeze

Pump#: 11287 Water Qual. Meter: #12
Drum: 55 gal Comp Water Level Ind.: #94
Turbidity meter: #11

Well TD: 223.35 ft. Well Size: 4"
DTW (Toc): 199.97 ft. DTW (bgs): 197.49 ft.
Loc: 2.48 ft.

Sample Parameters

Temp: 25.59°c Do: 4.76 mg/L Turb: 1.93
Cond.: 0.625 mS/cm pH: 7.02 CO_2: 6.0 mg/L
TDS: 0.406 g/L ORP: -18.5 mV Ferrous Fe: 0.05 mg/L

Sample Date: 7-13-12
" Time: 1323
" ID: MPL 30-0712-1

Date: 7-13-12 Well ID: MPL-30

ft Toc DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
200.25	1301	init.	27.34	0.632	0.411	8.51	6.72	5.1	1.68
200.33	1306	700	25.93	0.628	0.408	5.57	7.04	6.7	0.98
200.57	1311	1400	25.94	0.624	0.406	4.98	7.03	16.9	0.96
200.70	1316	2100	25.84	0.625	0.406	4.90	6.99	14.5	1.20
200.80	1321	2800	25.59	0.625	0.406	4.74	7.02	-18.5	1.93

1323 - Sample

Setup: Pump set @ 206 ft, Drawdown Set @ 200.97, Cont. Set @ MN
Refill 14, Discharge 16, PSI 95, Start Purge 1246, 1st water 1256
Finish time 1345, total time 0:59, Init. drawdown 200.25, Final drawdown 200.85
Used 250 Nitrogen.

Date: 7-17-12 personnel: B. Davis, A. Jenness
Well ID: MPL-23

Air temp: 84°F
Weather: P. Cloudy - 0-5mph breeze

Pump#: #90 Water Qual. Meter: #12
Drum: 55gal Comp. Water Level Ind.: #94
Turbidity meter: #11

Well TD: 545 ft. well size: 5"
DTW (TOC): 243.55 DTW (bgs): 240.44'
LOC: 3.11 ft.

Sample Parameters

Temp: 28.96°C Do: 2.10 mg/L Turbidity: 0.11
Cond.: 0.293 mS/cm pH: 7.44 CO_2: 8.0 mg/L
TDS: 0.190 g/L ORP: -30.6 mV Ferrous Fe: 0.01 mg/L

Sample Date: 7-17-12
" Time: 1242
" ID: MPL23-0712-1
Field duplicate MPL 23-0712-2

Date: 7-17-12 Well ID: MPL-23

ft TOC DTW	Time	mL Vol	°C T@mp	mS/cm Cond	g/L TDS	mg/L Do	mV ORP	NTU Turb	pH
243.57	1149	init.	28.24	0.295	0.191	4.50	~~7.07~~ -28.9	0.14	7.07
243.59	1153	25.750	25.29	0.292	0.190	3.69	-23.1	—	7.33
243.59	1157	1500	25.43	0.282	0.183	1.18	-30.6	—	7.56
243.62	1223	2250	28.82	0.293	0.190	0.31	-35.8	0.21	7.65
243.64	1228	3000	28.56	0.292	0.190	0.88	-30.2	0.32	7.58
243.66	1233	3750	29.15	0.293	0.190	1.56	-28.8	0.30	7.49
243.68	1239	4500	28.96	0.293	0.190	2.10	-30.6	0.11	7.44
	1242 Sample								

Notes: @ 1157 had PSI too high - backed down to 150.

Setup: Pump set @ 527 ft, drawdown set @ 244.55, Cont. set @ MN
Refill 50, discharge 50, PSI ~~230~~ 140 150, Start purge 1112, 1st water 1146
Finish time 1308, total time 1:56, Init. drawdown 243.57, Final drawdown 243.69

Date: 7-18-12 personnel: B. Davis
Well ID: MPL-24

Air Temp: 83°F
Weather: Clear.

Pump#: 90 Water Qual. meter: #12
Drum: 55gal comp Water Level Ind.: #94
Turbidity meter: #11

Well TD: 317.21ft. Well size: 5"
DTW(TOC): 238.91ft DTW(bgs): 236.75
LOC: 2.16ft.

Sample Parameters

Temp.: 27.68°C Do: 3.05 mg/L Turbid.: 2.33 NTU
Cond: 0.415 mS/cm pH: 7.71 CO_2: 8.0 mg/L
TDS: 0.269 g/L ORP: -33.5 Ferrous Fe: 0.00 mg/L

Sample Date: 7-18-12
Time: 1200
ID: MPL 24-0712-1

Date: 7-18-12 Well ID: MPL-24

ft (TOC) DTW	Time	mL Vol	°C temp	mS/cm Cond	g/L TDS	mg/L DO	mV ORP	pH	NTU Turbidity
238.97	1141	init	29.65	0.396	0.257	3.65	-34.0	7.87	5.73
239.01	1145	750	28.73	0.414	0.269	3.06	-31.0	7.74	5.85
239.07	1150	1500	28.16	0.415	0.269	3.23	-33.9	7.73	2.53
239.04	1154	2250	27.91	0.414	0.269	3.02	-32.9	7.72	3.14
	1158	3000	27.68	0.415	0.269	3.05	-33.5	7.71	2.33

1200 - Sample

Note: took out 1gal decon water from hose. Blew bladder.
Setup: Pump set @ 302 drawdown set @ 239.91 Cont. Set @ MN
Refill 50, Discharge 50 TSI ~~145~~ 150, Start purge 0930 1/2 1st Water ~~1005~~ 1137
Finish time 1218 total time 11:06, Initial drawdown 288.97, Final drawdown 238.92
Used 600 165

Date: 7-18-12 Personnel: B. Davis
Well ID: SMW-1

Air temp: 91°F
Weather: P. Cloudy Slight breeze

Pump #: 90 Water Qual. Meter: #12
Drum: 55gal Comp. Water Level Ind.: #94
Turbidity meter: #11

Well TD: 288.93 ft. Well Size: 5"
DTW (TOC): 211.86 ft DTW (bgs): 209.25 ft
LOC: 2.61 ft

Sample Parameters

Temp: 31.34°C DO: 4.63 mg/L Turbid: 0.40
Cond: 0.325 mS/cm pH: 6.99 CO_2: 4.0 mg/L
TDS: 0.211 g/L ORP: -38.4 Fe^{2+}: 0.02 mg/L

Sample Date: 7-18-12
" Time: 1502
" ID: SMW1-0712-1

Date: 7-18-12 Well ID: SMW-1

ft. (TOC) DTW	time	mL Vol	°C temp	mS/cm Cond.	g/L TDS	mg/L DO	MV pH	MV ORP	NTU Turb
212.25	1436	init.	32.66	0.338	0.220	5.91	7.30	-33.0	8.88
212.42	1441	500	32.19	0.333	0.217	7.96	7.38	-32.4	~~8.88~~ 2.81
212.56	1446	1000	31.33	0.328	0.213	6.08	7.23	-33.3	0.56
212.57	1451	1500	31.36	0.326	0.212	5.45	7.11	-40.4	0.34
212.57	1456	2000	31.29	0.326	0.212	4.95	7.04	-39.7	0.16
212.57	1501	2500	31.34	0.325	0.211	4.63	6.99	-38.4	0.40
	1502 - Sample								

Set up: Pump set @ 275 ft. drawdown set @ 212.86 Cont. set @ MN
Refill 30 discharge 20 PSI 120-130 Start pump 1419 ~~1331~~ 1st water 1425
Finish time 1323 total time 1:13 Initial drawdown 212.25 Final drawdown 212.57
used Nitrogen 600 lbs 600 lbs.

Date: 7-18-12 Personnel: B. Davis
Well ID: SMW-4

Air Temp: 95°F
Weather: p. cloudy

Pump #: 90 Water Qual. Meter: #12
Drum: 55 gal Comp. Water Level Ind: #94
Turbid. Meter: #11

Well TD: 281.78 ft. Well size: 5"
DTW (TOC): 254.42 ft. DTW (bgs): 251.61 ft.
LOC: 2.81 ft.

Sample Parameters

Temp.: 31.03°C DO: 5.27 mg/L Turbid.: 0.12 NTU
Cond.: 0.326 mS/cm pH: 7.12 CO_2: 6.0 mg/L
TDS: 0.212 g/L ORP: -45.1 mV Fe^{2+}: 0.0 mg/L

Sample date: 7-18-12
" Time: 1723
" ID: SMW 4-0712-1

Date: 7-18-12 Well ID: SMW-4

ft. (TOC) DTW	Time	mL Vol	°C Temp	mS/cm Cond.	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb.
255.00	1701	init.	30.14	0.326	0.212	4.10	7.25	-43.9	0.19
255.10	1706	600	29.88	0.325	0.211	5.75	7.24	-43.6	0.17
255.12	1711	1200	30.24	0.324	0.211	4.83	7.22	-40.0	0.17
255.14	1716	1600	30.82	0.324	0.211	4.73	7.19	-42.9	0.14
255.16	1721	2000	31.03	0.326	0.212	5.27	7.12	-45.1	0.12

1723 - Sample

Removed 3L from line. deconwater.

Set up: Pump set @ 264 ft. drawdown set @ 255.42 Cont. set @ MN
Refill 50, discharge 30, PSI 120, Start purge 1631, 1st water 1648
Finish time 1750, total time 1:19, Initial drawdown 255.00, final drawdown 255.25

Date: 7-19-12 personnel: B. Davis, A. Jenness
Well ID: MPL-21

Air Temp: 79°F
Weather: Clear - 0-5 mph breeze

Pump#: 90 Water Qual Meter: #12
Drum: 55gal comp. Water Level Ind.: #94
Turbid. meter: #11

Well TD: 445 ft. Well Size: 5"
DTW (TOC): 190.27 ft. DTW (bgs): 188.17 ft
LOC: 2.10 ft.

Sample Parameters

Temp: 24.80°C Do: 3.01 mg/L Turbid: 0.10 NTU
Cond: 0.290 mS/cm pH: 7.79 CO_2: 8.0 mg/L
TDS: 0.188 g/L ORP: -24.3 mV Fe^{2+}: 0.03 mg/L

Sample Date: 7-19-12
Time: 1106
ID: MPL 21-0712-1

Date: 7-19-12 Well ID: MPL-21

DTW (TOC) ft	Time	Vol mL	Temp °C	Cond mS/cm	TDS g/L	DO mg/L	pH	ORP mV	Turb NTU
190.34	1044	init.	24.63	0.299	0.194	7.80	7.80	-25.2	0.29
190.34	1049	750	24.01	0.291	0.189	5.36	7.83	-28.1	0.14
190.35	1053	1750	24.88	0.291	0.189	5.38	7.83	-28.3	2.43
190.35	1057	2500	24.52	0.291	0.189	2.88	7.83	-24.0	0.23
190.35	1100	3250	24.54	0.290	0.189	2.90	7.80	-23.6	0.07
190.35	1104	4000	24.80	0.290	0.188	3.01	7.79	-24.3	0.10

1106 ~ Sample

Setup: Pump set @ 432 drawdown set @ 191.27 Cont. set @ MN
Refill 50 discharge 50 PSI ~~480~~ 145 Start purge 1020 1st water 1043
Finish time 1120 total time 1:00 initial drawdown 190.34 Final drawdown 190.35

Date: 7-19-12 Personnel: B. Davis
Well ID: MPL-22 A. Jenness

Air Temp.: 88°F
Weather: P. Cloudy

Pump#: 90 Water Qual Meter: #12
Drum: 55 gal Comp. Water Level Ind: #94
Turbid. Meter: #11

Well TD: 311.15 ft. Well size: 5"
DTW(Toc): 189.46 ft. DTW(bgs): 186.93
LOC: 2.53 ft.

Sample Parameters

Temp.: 26.98°C Do: 0.24 mg/L Turbid: 5.42 NTU
Cond.: 0.216 mS/cm pH: 7.99 CO_2: 4.0 mg/L
TDS: 0.140 g/L ORP: -19.8 mV Fe^{2+}: 0.00 mg/L

Sample Date: 7-19-12
Sample Time: 1245
Sample ID: MPL 22-0712-1

Date: 7-19-12 Well ID: MPL-22

ft (Toc) DTW	time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	Turbid
189.52	1223	init	30.62	0.223	0.145	2.99	7.64	-24.2	0.28
189.45	1227	1000	28.21	0.217	0.141	0.67	7.83	-16.7	4.63
189.37	1231	2000	27.47	0.216	0.140	0.41	7.95	-16.4	0.65
189.41	1234	2800	27.07	0.216	0.140	0.30	8.00	-18.0	6.52
189.54	1239	3600	26.99	0.216	0.140	0.25	7.99	-19.3	3.67
	1243	4400	26.98	0.216	0.140	0.24	7.99	-19.8	5.42

1245 - Sample

Setup: pump set @ 297. Drawdown set @ 190.46 Cont. set @ MN
Refill 50 Discharge 50 PSI 130 Start purge 1200 1st Water 1220
Finish time 1255 total time 0:55 initial drawdown 189.52 final drawdown 189.51

Date: 7-19-12 Personnel: B. Davis, A. Jenness

Well ID: MPL-25

Air Temp: 92°F

Weather: p. Cloudy

Pump #: 90 Water Qual. Meter: #12

Drum: 55 gal comp. Water Level Ind.: #94

Turbid. meter: #11

Well TD: 278.13 ft Well size: 4"

DTW (TOC): 257.03 ft DTW (bgs): 255.18 ft

LOC: 1.85 ft.

Sample Parameters

Temp: 29.62°C DO: 0.47 mg/L Turbid: 1.4 NTU

Cond.: 0.443 mS/cm pH: 7.54 Ca: 6.0 mg/L

TDS: 0.288 g/L ORP: -24.7 mV Fe 2+: 0.02 mg/L

Sample Date: 7-19-12

Time: 1540

ID: MPL 25-0712-1

Date: 7-19-12 Well ID: MPL-25

ft (TOC) DTW	time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	Turbid
258.03	1517	init.	30.44	0.432	0.281	1.90	7.51	-30.6	0.77
258.23	1522	800	29.57	0.444	0.289	1.00	7.61	-31.5	1.27
258.40	1526	1450	29.36	0.444	0.289	0.82	7.53	-31.2	1.33
258.61	1532	2000	29.51	0.443	0.288	0.61	7.48	-31.2	1.84
258.70	1537	2750	29.62	0.443	0.288	0.47	7.54	-24.7	1.4

1540 - Sample

- poor producer. Lowered pressure. Small decrease - did not produce water - raised pressure.
- removed 1L prior to initial reading due to some decon water in line.

Setup: Pump set @ 263, drawdown set @ 258.03 ft, Cont. Set @ MN,

Refill 50, discharge 50, PSI ~~125~~ 135, Start purge 1448 ~~1434~~ BTD, 1st Water ~~1444~~ 1514

Finish time 1600, total time 1:12, Initial drawdown 258.03, Final drawdown 258.75

Date: 7-20-12 Personnel: B. Davis, A. Jenness
Well ID: MPL-19

Air Temp: 87°F
Weather: p. Cloudy

Pump#: #90 Water Qual. Meter: #12
Drum: 55gal comp. Water Level Ind.: #94
Turbid. Meter: #11

Well TD: 467.50 ft. Well Size: 5"
DTW (TOC): 194.37 ft. DTW (bgs): 191.84 ft
LOC: 2.53 ft.

Sample Parameters

Temp: 25.96 °C DO: 4.20 mg/L Turbid.: 0.27 NTU
Cond: 0.304 mS/cm pH: 7.71 CO_2 0 mg/L
TDS: 0.197 g/L ORP: -28.7 Fe^{2+} 0.06

Sample Date: 7-20-12
Time: 1135
ID: MPL19-0712-1

Date: 7-20-12 Well ID: MPL-19

DTW (ft TOC)	time	Vol init	temp	Cond.	TDS	DO	pH	ORP	Turbid.
194.56	1116		27.12	0.309	0.201	6.60	7.77	-34.1	0.51
194.53	1120	900 ml	26.05	0.307	0.200	5.47	7.75	-25.1	0.39
194.51	1124	1800	25.78	0.305	0.198	4.65	7.76	-24.5	0.77
194.60	1128	2700	25.80	0.304	0.198	4.36	7.87	-27.4	0.40
194.63	1132	3600	25.96	0.304	0.197	4.20	7.71	-28.7	0.27

1135 - Sample

Setup: Pump set @ 454 ft drawdown set @ 195.37 cont set @ MN
refill 50, discharge 50, PSI 170, Start purge 1053, 1st water 1113
Finish time 1150, total time 0:57, initial drawdown 194.56, final drawdown 194.67

Date: 7-20-12 personnel: B. Davis, A. Jennes

Well ID: MPL-20

Air Temp: 90°F

Weather: P. Cloudy

Pump #: 90 Water Qual. Meter:

Drum: 55gal Water Level Ind.:

Comp. Turbid. Meter:

Well TD: 322.78 ft. Well Size: 5"

DTW (TOC): 193.34 ft. DTW (bgs): 190.87 ft.

LOC: 2.47 ft.

Sample Parameters

Temp: 27.83°C ORP: -35.6 mV

Cond: 0.608 mS/cm Turbidity: 0.23 NTU

TDS: 0.395 g/L CO_2: 10.0 mg/L

DO: 4.91 mg/L Fe^{2+}: 0.02 mg/L

pH: 7.62

Sample Date: 7-20-12

" Time: 1335

" ID: MPL 20-0712-1

Date: 7-20-12 - Well ID: MPL-20

ft. (TOC) DTW	time	mL Vol	°C temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turbid.
193.45	1317	init	29.98	0.591	0.384	5.16	7.40	-23.0	0.86
193.47	1321	750	28.50	0.607	0.395	5.15	7.56	-26.4	0.35
193.49	1325	1500	28.25	0.608	0.395	4.92	7.63	-25.5	0.20
193.49	1328	2250	28.06	0.608	0.395	4.79	7.62	-36.2	0.26
193.49	1332	3000	27.83	0.608	0.395	4.91	7.62	-35.6	0.23

1335 - Sample

Setup: Pumpset @ 310 ft, drawdown set @ 194.34, Cont. set @ MN

Refill 50, Discharge 50, PSI 135, Start purge 1252, 1st water 1312

Finish time 1350, total time 0:53, initial drawdown 193.45, final drawdown 193.49

7-23-12 - Replaced Line tubing

Date: 7-13-12 Personnel: B. Davis, A. Jennes

Well ID: MPL-28

Air Temp: 81°F

Weather: Mostly clear - 0.5 mph breeze

Pump#: 11287 Water Qual. Meter: #12

Drum: 55gal Comp Water Level Ind.: #94

Turbidity meter: #11

Well TD: 203.55 ft. Well size: 4"

DTW (TOC): 185.02 ft. DTW (bgs):

Loc: 2.55 ft. DTW (TOC) 184.97 7-13-12

Sample Parameters

Temp: 26.70°C Do: 3.77 mg/L Turb: 1.34 NTU

Cond: 0.697 mS/cm pH: 7.45 CO_2: 10.0 mg/L

TDS: 0.453 g/L ORP: -44.3 mV Ferrous Fe: 0.16 mg/L

Sample Date: ~~7-13-12~~ BTD 7-23-12

Time: 1025

ID: MPL 28-0712-1

Date: 7-~~13~~ 23-12 BTD

Well ID: MPL-28

ft DTW	Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	MV ORP	NTU Turb
185.19	1007	1.21	26.94	0.696	0.452	4.68	7.32	-45.0	1.87
185.17	1012	750	26.28	0.698	0.454	4.21	7.42	-41.8	1.31
185.18	1017	1500	26.53	0.696	0.452	4.01	7.44	-44.1	1.57
185.18	1022	2250	26.70	0.697	0.453	3.77	7.45	-44.3	1.34

1025 - Sample

Notes: Could not produce water on 7-13-12. Probably need to replace line. Will come back complete at later date. - Replaced tubing on 7-23-12 - Sample.

Setup: Pump Set @ 188 drawdown Set @ ~~186.02~~ 185.97 Cont. Set @ MV

Refill 14 (1050), Discharge 16 / PSI 95, Start pump ~~0959~~ 0954 PSI, 1st water ~~1000~~ BTD 1002

Finish time ~~1205~~ total time ~~1050~~ Init. drawdown 185.19, final drawdown 185.17

~~used 300 nitrogen~~ Used 300 ft nit-sen