Date: 1-27-12 Personnel: B. Davis, A. Jennings, R. Wu

Well ID: MPL21

Air Temp: 63°F

Weather: Clear - Wind - 5-10 mph

Pump: 90 Water Qual. Meter: 79

Drum: 55gal Comp Water Level Ind: 94

Cont. Box: 83 Turb Meter: 78

TD: 445.0 ft DTW (bgs): 187.94 ft.

DTW (TOC) 190.04 ft Water Col: 254.96 ft

LOC: 2.10 ft. Col. Vol: 260.06 gal

Well Size: 5"

Sample Parameters

Temp: 21.50C DO: 4.22 mg/L Turb: 0.34 NTU

Cond: 0.266 mS/cm pH: 8.00 CO_2: 8.0 mg/L

TDS: 0.173 g/L ORP: -36.3 mV Ferrous Fe: 0.03 mg/L

Sample Date: 1-27-12

Time: 1445

ID: MPL21-0112-1

MPL-21-0112-ms

MPL21-0112-msd

Date: 1-27-12 Well ID: MPL 21

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1407	init	20.96	0.238	0.155	12.05	7.99	-10.9	0.72
1410	750	21.16	0.255	0.166	7.20	8.00	-19.4	0.32
1420	1500	21.32	0.262	0.171	4.66	8.03	-30.7	0.14
1425	2250	21.33	0.265	0.173	4.55	8.06	-33.8	0.20
1430	3000	21.21	0.266	0.173	4.24	8.08	-35.5	0.40
1435	3750	21.50	0.266	0.173	4.22	8.00	-36.3	0.34
1445	Sample							

Setup: Pump Set @ 432 Drawdown Set @ 191.04 Cont. set @ MN

Refill 50, Discharge 50, PSI 180, Start Purge 1310, 1st Water 1604,

Finish 1600, Total Time 2:50, Initial Drawdown 190.14, Final Drawdown 190.26

DATE: 1-~~29~~ 30 BTD-2012 PERSONNEL: A JENNESS B DAVIS R WU

WELL ID: MPL 22

AIR TEMP: 48°F

WEATHER: CLEAR WIND 5-10 MPH

PUMP: 89 WATER QUALITY METER: 79

DRUM: 55 GALLON WATER LEVEL IND: 94

CONT BOX: B3 TURB METER: 78

TD: 310.00 ft DTW(logs): 187.38 ft

DTW(TOC): [illegible] ft WATER COL: 120.09 ft

COC: 2.53 ft. CON VOL: 122.49 gal

WELL SIZE: 5"

SAMPLE PARAMETERS

TEMP: 16.67°C DO: 1.96 mg/L TURB: 0.91 NTU

COND: 0.193 mS/cm pH: 8.38 COL: 10 mg/L

TDS: 0.126 g/L ORP: mV FERROUS FE: 0.01 mg/L

SAMPLE DATE: 1-30-2012

SAMPLE TIME: 1155

SAMPLE ID: MPL 22-0112-1

DATE: 1-30-2012 WELL ID: MPL-22 PERSONNEL: A JENNESS B DAVIS R WU

TIME	mL VOL	°C TEMP	mS/cm COND	g/L TDS	mg/L DO	pH	mV ORP	NTU TURB
1044	[illegible]	9.76	0.276	0.180	21.07	7.53	-5.1	1.13
1049	750	9.93	0.265	0.173	1.73	7.68	-6.3	1.22
1054	1500	10.47	0.267	0.173	1.25	7.79	-9.9	0.56
1100	2250	11.62	0.279	0.182	3.45	7.97	-13.2	0.68
1107	3000	13.07	0.285	0.185	5.45	8.20	-17.4	0.42
1132	3750	15.96	0.196	0.128	2.37	8.81	-25.3	0.84
1140	4500	16.48	0.193	0.126	2.13	8.85	-27.8	1.08
1147	5250	16.67	0.193	0.126	1.96	8.35	-22.0	0.91

1155 Sample

NOTES: SET-UP: PUMP SET @ 297.53, DRAW DOWN SET @ 190.91 CONTROLLER SET @ MIN

REFILL 50, DISCHARGE: 50, PSI: 130, START PURGE: ~~1355~~ 1008, 1ST WATER 1039

FINISH 1210, TOTAL: 2:02, INITIAL DRAWDOWN 190.06, FINAL: 189.25

Date: 1-30-12 Personnel: B. Davis, A. Jennes, R. Wine

Well ID: MPL-4

Air Temp: 61°F

Weather: Clear

Pump: 11290 Water Qual Meter: 79

Drum: 55 gallon Water Level Ind.: 94

Turb. Meter: 78

TD: 224.62 ft. DTW (bgs): 186.32 ft.

DTW (TOC) 188.59 ft. Water Col: 36.03

LOC: 2.27 ft. Col Vol: 23.52 gal

Well Size: 4"

Sample Parameters

Temp: 21.61 °C DO: 4.45 mg/L Turb: 2.36

Cond: 0.669 mS/cm pH: 8.03 CO_2: 18

TDS: 0.435 g/L ORP: 134.9 mV Ferrous Fe: 0.02

Sample Date: 1-30-12

Sample Time: 1355

ID: MPL4-0112-1

MPL4-0112-ms

MPL4-0112-msd

Date: 1-30-12 Well ID: MPL-4

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1335	init	19.66	0.669	0.422	16.60	7.98	120.5	2.93
1340	750	20.76	0.662	0.430	5.21	8.04	113.4	2.41
1343	1500	21.23	0.666	0.433	4.72	7.81	126.6	2.35
1347	2250	21.42	0.668	0.434	4.58	8.04	118.1	3.04
1352	3000	21.51	0.668	0.434	4.47	8.00	130.0	1.87
1354	3360	21.61	0.669	0.435	4.45	8.03	134.9	2.36
1355	SAMPLE							

Setup: Pump Set @ 114 Drawdown Set @ 149.54 Cont. Set @ 56

Refill 14 Discharge 16 PSI 100 Start Purge 1520 1st Stabilized 1337

Finish 1604 Total 2:44 Initial Drawdown 188.75 Final 188.48

Date: 1-30-12 Personnel: B. Davis, A. Jenness, R. Wu

Well ID: MPL-2

Air Temp: 58°F

Weather: Clear - Cold

Pump: 11289 Water Qual Meter: 79

Drum: 55gal comp Water Level Ind: 94

Turb Meter: 78

TD: 220.99 ft DTW (bgs): 196.53 ft

DTW (TOC) 198.72 ft Water Col.: 22.27 ft

LOC: 2.19 ft Col. Vol.: 14.54 gal

Well size: 4"

Sample Parameters

Temp: 20.99°C DO: 4.46 mg/L Turb: 1.26 NTU

Cond: 0.465 mS/cm pH: 8.40 CO2: 8.0 mg/L

TDS: 0.302 g/L ORP: 129.3 mV Ferrous Fe: 0.01 mg/L

Sample Date: 1-30-12

Time: 1705

ID: MPL 2-0112-1

Date: 1-30-12 Well ID: MPL-2

Time	Vol (mL)	Temp (°C)	Cond (mS/cm)	TDS (g/L)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)
1645	Init	20.89	0.470	0.305	6.26	8.47	92.8	4.40
1649	750	21.24	0.465	0.303	4.90	8.44	103.8	3.03
1653	1500	21.09	0.465	0.303	4.55	8.42	114.9	2.00
1658	2250	20.99	0.465	0.302	4.46	8.40	129.3	1.26

1705 - sample

Setup: Pump set @ 208, Drawdown set @ 199.72, Cont. set @ 56

Refill 14, Discharge 16, PSI 100, Start Purge 1629, 1st water 1641

Finish 1745, Total 1:16, Initial Drawdown 198.85, Final Drawdown 198.78

1-31-12

Date: ~~MPL 3~~ BTD Personnel: B. Davis

Well ID: MPL-3

Air Temp: 46°F

Weather: clear

Pump: 11286 Water Qual. Meter: 79

Drum: 55gal Comp Water Level Indr: 94

Turb. Meter: 78

TD: 230.65 ft DTW (bgs): 190.52 ft

DTW (TOC) 192.49 ft Water Col: 38.16 ft.

LOC: 1.97 ft Col. Vol: 24.9 gal

Well Size: 4"

Sample Parameters

Temp: 20.22°C DO: 3.67 mg/L Turb: 1.00 NTU

Cond: 0.565 mS/cm pH: 8.04 CO2: 10 mg/L

TDS: 0.367 g/L ORP: 149.0 mV Ferrous Fe: 0.00

Sample Date: 1-31-12

Time: 1015

ID: MPL 3-0112-1

MPL 3-0112-2

Date: 1-31-12 Well ID: MPL-3

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ~~mg/L~~ ORP	NTU TURB
0935	init	16.79	0.580	0.377	4.67	7.27	141.4	4.66
0941	750	18.68	0.565	0.367	3.91	7.74	147.3	3.63
0947	1500	19.45	0.566	0.368	3.77	7.89	134.3	2.66
0953	2250	19.55	0.566	0.368	3.71	7.94	130.8	1.71
0959	3000	19.56	0.566	0.368	3.65	7.99	150.7	1.34
1005	3750	20.22	0.565	0.367	3.67	8.04	149.0	1.00
1015 - Sample								

Setup: Pump set @ 215, Drawdown set @ 193.49, Cont. Set @ 56

Refill 14, Discharge 16, PSI ~~90~~ 100, Start Purge 0914, 1st water 0931

Finish 1330, Total Time 3:44, Initial Drawdown 192.55, Final Drawdown 192.60

Date: 1-31-12
Well ID: MPL-1

Air Temp: 63°F
Weather: overcast

Pump: 11289 Water Qual Meter: 79
Drum: 55gal Water Level Ind: 94
Turb Meter: 78

TD: 222.75 ft DTW(bgs): 203.28 ft
DTW(TOC): 205.25 ft Water Col: 17.5 ft
LOC: 1.97 ft Col Vol: 11.4 gal
Well size: 4"

Sample Parameters

Temp 21.89°C DO 4.18 mg/L Turb 2.03 NTU
Cond 0.341 mS/cm pH 8.48 CO_2: 8.0 mg/L
TDS 0.222 g/L ORP 57.9 Ferrous Fe: 0.01 mg/L

Sample Date: 1-31-12
Time: 1500
ID: MPL 1-0112-1

Date: 1-31-12 Well ID: MPL-1

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ~~mg/L~~ ORP	NTU Turb
1426	init	20.78	0.352	0.229	4.77	8.42	45.5	2.40
1430	750	21.54	0.343	0.223	4.33	8.49	41.2	1.88
1435	1500	21.80	0.341	0.222	4.24	8.49	54.0	2.06
1440	2250	21.89	0.341	0.222	4.19	8.50	60.2	2.01
1445	3000	21.96	0.341	0.221	4.11	8.49	58.4	1.94
1450	3750	21.89	0.341	0.222	4.18	8.48	57.9	2.03

1500 - Sample

Setup: pump set @ 210, Drawdown set @ 206.25, Cont. set @ 56
Refill 14, Discharge 16, PSI 100, Start purge 1405, 1st water 1422
Finish 1545, Total time 1:40, Initial Drawdown 203.30, Final 205.30

Personnel: B. Davis
R. Wu

Date: 2-1-12
Well ID: MPL-19

Air Temp: 48°F
Weather: Clear

Pump: 89
Drum: 55 gal Comp

Water Quality Meter: 79
Water Level Ind: 94
Turb meter: 78

TD: 475.0 ft
DTW(TOC): 194.0 ft
LOC: 2.53 ft
Well Size: 5"

DTW(bgs): 191.47 ft
Water Col.: 281 ft
Col. Vol: 286.6 gal

Sample parameters

Temp: 18.23°C DO: 3.87 mg/L Turb: 0.13 NTU
Cond: 0.273 mS/cm pH: 8.35 CO_2: 6.0 mg/L
TDS: 0.178 g/L ORP: -30.9 mV Ferrous Fe: 0.00 mg/L

Sample Date: 2-1-12
ID: ~~Time~~ MPL 19-0212-1
~~ID~~ Time: 1143

Well ID: MPL-19

Date: 2-1-12								
	mL	°C	mS/cm	g/L	mg/L		mV	NTU
Time	Vol	Temp	Cond	TDS	DO	pH	ORP	Turb
1118	init	17.04	0.269	0.175	5.49	8.17	-21.3	0.50
1123	750	17.71	0.271	0.176	4.11	8.37	-27.2	0.24
1128	1500	18.03	0.272	0.177	3.86	8.30	-29.7	0.18
1133	2250	18.16	0.273	0.178	3.88	8.24	-27.7	0.17
1138	3000	18.23	0.273	0.178	3.87	8.35	-30.9	0.13

1143 - Sample

Setup: Pump Set @ 454, Drawdown Set @ 195.0, Cont. Set @ MN
Refill 50, Discharge 50, PSI 215, Start Purge 0952 1st Water 1111
Finish 1200, Total Time 2:08, Initial Drawdown 194.0, Final drawdown 194.04

Date: 2-1-12 personnel: B. Davis, R. Wu
Well ID- MPL-20

Air Temp:
Weather: p. Cloudy - 5-10mph wind

Pump: 90 Water quality Meter: 79
Drum: 55gal Comp. Water Level Ind: 94
Turb. meter: 78

TD: 322.60 ft DTW(bgs): 190.63 ft
DTW(Toc): 193.10 ft Water Col.: 129.5 ft.
LOC: 2.47 ft. Col. Vol.: 132.1 gal
Well Size: 5"

Sample Parameters

Temp: 19.22°C DO: 3.95 mg/L Turb: 0.19 NTU
Cond: 0.549 mS/cm pH: 8.40 Cl: 10.0 mg/L
TDS: 0.357 g/L ORP: 103.8 Ferrous Fe: 0.02 mg/L

Sample Date: 2-1-12
Time: 1455
ID: MPL 20-0212-1
MPL 20-0212-2

Date: 2-1-12 Well ID: MPL-20

Time	Vol mL	Temp °C	Cond mS/cm	TDS g/L	DO mg/L	pH	ORP mV	Turb NTU
1429	init	18.24	0.534	0.334	4.39	8.33	56.2	0.18
1433	750	18.69	0.535	0.348	4.27	8.20	112.5	0.15
1438	1500	18.93	0.543	0.353	4.22	8.36	98.8	0.24
1443	2250	19.15	0.546	0.355	4.17	8.34	98.5	0.12
1448	3000	19.22	0.549	0.357	3.95	8.40	103.8	0.19
1455	Sample							

Set up: Pump Set @ 310 Drawdown Set @ 194.10 Cont. Set @ MN
Refill 50 Discharge 50 PSI 135/165 Start Purge 1325 1st Water 1419
Finish 1525 Total time 8:26 Initial Drawdown 193.15 Final Drawdown 193.22

Date: 2-2-12 Personnel: B. Davis
Well ID: MPL-23 R. Wu

Air Temp. 540F
Weather: Clear 5-10 mph wind

Pump: 90 Water Qual. Meter: 79
Drum: 55 gal Comp Water Level Ind.: 94
Turb. Meter: 78

TD: 545.00 ft DTW (bgs): 240.09 ft
DTW (TOC): 243.20 ft Water Col: 301.80 ft
LOC: 3.11 ft Col. Vol: 307.83 gal
Well size: 5"

Sample Parameters

Temp: 20.97 °C DO 2.98 mg/L Turb: 0.16 NTU
Cond: 0.265 ms/cm pH 8.40 CO2: 6.0 mg/L
TDS: 0.172 g/L ORP -15.0 mV Ferrous Fe: 0.00 mg/L

Sample Date: 2-2-12
Time: 1140
ID: MPL23-0212-1

Date: 2-2-12 Well ID: MPL-23

Time	mL Vol	°C Temp	ms/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1112	Init	19.97	0.262	0.170	4.31	8.22	-15.7	0.19
1116	750	20.32	0.263	0.171	3.47	8.34	-16.1	0.13
1121	1500	20.51	0.264	0.172	3.18	8.38	-17.6	0.14
1126	2250	20.69	0.264	0.172	3.08	8.37	-16.2	0.12
1131	3000	20.83	0.265	0.172	3.15	8.48	-17.6	0.12
1136	3750	20.97	0.265	0.172	2.98	8.40	-15.0	0.16

1140 - Sample

Set up: Pump set @ 527, Drawdown set @ 244.20 Cont. Set @ MN
Refill 50 Discharge 50, PSI 230, Start purge 1020, 1st water 1106
Finish 1200, Total Time 1:40, Initial Drawdown 243.20, Final Drawdown 243.22

Date: 2-3-12 B. Davis
Well ID: MPL-24 Personnel: A. Jenness

Air Temp: 48°F
Weather: Clear - 5-10mph wind

Pump: 90 Water Quality Meter: 79
Drum: 55 gal Temp Water Level Ind: 94
Turb. Meter: 78

TD: 317.21 ft DTW (bgs): 236.49 ft
DTW (TOC) 238.65 ft Water Col: 78.56 ft
LOC: 2.16 ft Col. Vol: 80.1 gal
Well Size: 5"

Sample Parameters

Temp: 17.82°C DO: 1.66 mg/L Turb: 0.48
Cond: 0.376 ms/cm pH: 8.26 CO2: 8.0 mg/L
TDS: 0.244 g/L ORP: 83.2 Ferrous Fe 0.00 mg/L

Sample Date: 2-3-12
Time: 1030
ID: MPL24-0212-1

Date: Well ID: MPL-24

Time	mL Vol	°C Temp	ms/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
0959	init.	13.58	0.344	0.223	8.53	7.61	66.6	1.01
1003	750	14.80	0.366	0.238	3.69	7.89	62.0	0.50
1006	1500	16.11	0.373	0.242	4.82	7.91	117.8	0.43
1011	2250	17.02	0.372	0.242	3.70	8.00	87.7	0.40
1016	3000	17.41	0.374	0.243	2.52	8.20	128.2	0.41
1021	3750	17.82	0.376	0.244	1.66	8.26	83.2	0.48

1030 - Sample

Set up: Pump Set @ 302, Drawdown Set @ 239.65, Cont. Set @ MN,
Refill 50, Discharge 50, PSI 125, Start Purge 0926, 1st Water 0956
Finish 1034, Total Time 1:08, Initial Drawdown 238.70, Final Drawdown 238.75

Date: 2-3-12 + 2-6-12 personnel: B. Davis, A. Jennings, B. Davis, R. Wu

Well ID: MPL-25

Air Temp: 53°F

Weather: Clear - 5-10 mph wind

2-6-12 - overcast

Pump: 90 | Water Quality meter: 79

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

Turb Meter: 78

TD: 278.17 ft | DTW (bgs): 254.39 ft

DTW (TOC): 256.24 | Water Col: 21.93 ft

LOC: 1.85 ft | Col Vol.: 14.32 gal

Well Size: 4"

Sample Parameters

Temp: 16.67°C | DO: 1.96 mg/L | Turb: 2.04

Cond: 0.395 mS/cm | pH: 8.17 | CO_2: 6.0 mg/L

TDS: 0.257 g/L | ORP -3.2 | Ferrous Fe: 0.02 mg/L

Sample Date: 2-6-12

Time: 1505

ID: MPL 25-0212-1

Date: ~~2-3-12~~ 2-6-12 | Well ID: MPL-25

	Time	Vol (mL)	Temp (°C)	Cond (mS/cm)	TDS (g/L)	DO (mg/L)	pH	ORP (mV)	NTU Turb
2-6-12	1433	Init.	16.16	0.397	0.258	20.00	7.77	12.7	3.05
	1438	750	16.11	0.397	0.258	4.34	8.03	-1.1	3.03
	1443	1500	16.15	0.397	0.258	2.39	8.08	-1.7	2.95
	1448	2250	16.23	0.396	0.257	1.65	8.13	-2.8	2.70
	1453	3000	16.44	0.395	0.257	1.78	8.13	-2.9	2.49
	1458	3750	16.67	0.395	0.257	1.96	8.17	-3.2	2.04
2-6-12	1505 - Sample								

Note: blew out bladder first attempt. Blew second bladder. Endy Lax.

Set up: Pump Set @ 2603 Drawdown set @ 257.24 Cont. Set @ MW

Refill 50, Discharge 50, PSI 125, Start Purge 1235 ~~1255~~ 1305 ~~1458~~ 1505, 1st Water 1356

Finish 1515, Total Time 2:40, Initial Drawdown 256.38, Final Drawdown 256.45

Date: 2-7-12 Personnel: B. Davis R. Wu
Well ID: SMW-1

Air Temp: 50°F
Weather: P. Cloudy 10-15mph wind.

Pump: 90 Water Quality meter: 79
Drum: 55 gal Comp. Water Level Ind: 94
Turb. meter: 78

TD: 288.95 ft DTW (bgs): 209.17 ft
DTW (TOC): 211.78 ft Water Col: 77.17 ft
LOC: 2.61 ft Col. Vol: 78.7 gal
Well size: 5"

Sample Parameters
Temp: 18.06°C DO: 6.90 mg/L Turb: 0.80 NTU
Cond: 0.291 mS/cm pH: 7.50 CO2: 10.0 mg/L
TDS: 0.189 g/L ORP: 50.7 mV Ferrous Fe: 0.05 mg/L

Sample Date: 2-7-12
Time: 0950
ID: SMW 1-0212-1

Date: 2-7-12 Well ID: SMW-1

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
0920	init	11.83	0.270	0.175	13.68	7.32	57.4	0.90
0925	750	13.46	0.285	0.185	9.16	7.23	53.0	0.48
0929	1500	15.09	0.289	0.188	8.22	7.32	49.3	0.44
0934	2250	16.39	0.289	0.188	7.88	7.39	45.5	0.40
0938	3000	17.17	0.290	0.188	7.46	7.49	44.6	0.51
0942	3750	17.70	0.291	0.189	7.26	7.55	45.9	~~0.78~~ 0.67
0946	4250	18.06	0.291	0.189	6.90	7.50	50.7	0.80

0950 - Sample

Setup: Pump Set @ 275, Drawdown 212.78, Cont. set @ MN
Refill 30, Discharge 20, PSI 120-145, Start Purge 0850, 1st water 0916
Finish 1001, Total Time 1:11, Initial Drawdown 212.35, Final Drawdown 212.65

Date: 2-7-12 personnel: B. Davis, R. Wu
Well ID: SMW-4

Air Temp: 57°F
Weather: p.cloudy - 15-20 mph wind.

Pump: 90 Water Qual. Meter: 79
Drum: 55gal Water Level Ind: 94
Turb Meter: 78

TD: 281.90 ft DTW(bgs): 251.69 ft
DTW(TOC): 254.50 ft Water Col: 27.4 ft
LOC: 2.81 ft Col. Vol: 27.95 gal
Well Size: 5"

Sample Parameters

Temp: 17.70 °C DO 2.96 mg/L Turb: 3.65
Cond: 0.307 mS/cm pH 7.85 CO_2: 6.0 mg/L
TDS: 0.199 g/L ORP: 46.5 Ferrous Fe: 0.03 mg/L

Sample Date: 2-7-12
Time: 1205
ID: SMW4-0212-1

Date 2-7-12 Well ID: SMW-4

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1137	init	15.19	0.302	0.190	6.71	7.63	43.6	2.41
1141	750	16.70	0.305	0.198	5.55	7.76	40.6	2.52
1145	1500	17.17	0.307	0.200	4.71	7.79	41.4	2.87
1149	2250	17.52	0.307	0.200	2.95	7.82	43.4	3.04
1153	3000	17.67	0.307	0.199	2.49	7.85	46.6	3.28
1157	3750	17.70	0.307	0.199	2.96	7.85	46.5	3.65
1205	Sample							

Setup: Pump Set @ 264 Drawdown Set @ 255.50 Cont. Set @ MW
Refill 50 Discharge 30 PST 120-135 Start Purge 1109 1st Water 1130
Finish 1212, Total time 1:03, Initial Drawdown 254.52, Final Drawdown 255.12