B. Davis

Well Measurements

3-16-12

Well ID	DTW (TOC) ft	TD (TOC) ft	Time
HMW-48	93.26	111.35	0840
HMW-49	93.45	112.85	0830
HMW-50	93.31	113.10	0833
HMW-52	90.04	99.35	0850

Date: 3-16-12 SWMD: 197
Well ID: HMW-49 Personnel: B. Davis

Air Temp: 55°F
Weather Cond: P. Cloudy - 0-5mph breeze.

Pump#: 000034 Water Qual. Meter: 000011
Drum: Comp. Water Level Ind.: 000018
Turbidity meter: 000012

Well TD: 112.85 ft DTW(bgs): 90.54 ft
DTW(TOC): 93.45 ft
LOC: 2.91 ft.
Well Size: 4"

Sample Parameters

Temp: 19.43°C DO: 1.98 mg/L Turb: 3.66 NTU
Cond: 9.904 mS/cm pH: 7.98
TDS: 6.437 g/L ORP: -31.2 mV

Sample Date: 3-16-12
Time: 1000
ID: HTSA-0197-HMW-049-0312
Duplicate HTSA-0197-HMW-149-0312
Field Blank: HTSA-0197-FB-001-0312

Date: 3-16-12 Well ID: HMW-49

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb.
0932	init	17.02	9.772	6.352	3.17	7.80	-32.5	4.18
0937	750	18.33	9.826	6.387	2.74	7.85	-27.5	5.53
0942	1500	19.08	9.885	6.426	2.52	7.86	-26.5	4.63
0947	2250	19.32	9.905	6.438	2.29	7.80	-22.8	3.95
0952	3000	19.47	9.905	6.438	2.10	7.78	-29.0	2.98
0958	3750	19.43	9.904	6.437	1.98	7.98	-31.2	3.66
1000 - Sample								

Notes: Setup: Pump Set @ 98 ft, Drawdown Set @ 94.45, Cont. Set @ MW
Refill 15, discharge 15, PSI 50, Stackpage 0917, 1st Water 0925
Finish 1010, Total Time 0:53, Initial drawdown 93.48, Final drawdown 93.52

Date: 3-16-12 SWMU: 197

Well ID: HMW-50 Personnel: B. Davis

Air Temp: 65°F

Weather: P. Cloudy - 0.5 mph breeze.

Pump #: 000034 Water Qual. meter: 000011

Drum: Comp Water Level Ind: 000018

Turbidity meter: 000012

Well TD: 113.10 ft. DTW (bgs): 91.24 ft.

DTW (TOC): 93.31 ft.

LOC: ~~2.91~~ ft 2.07 ft.

Well size: 4"

Sample Parameters

Temp: 21.34°C DO: 1.63 mg/L Turb: 0.54

Cond: 9.685 mS/cm pH: 7.68 NTU

TDS: 6.295 g/L ORP: ~~-33.0~~ -33.0 mV

Sample Date: 3-16-12

Time: 1135

ID: HTSA-0197-HMW-050-0312

HTSA-0197-HMW-050-0312-ms/msd

1155 HTSA-0197-RB-001-0312

Date: 3-16-12 Well ID: HMW-50

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1107	init	19.77	5.376	3.495	5.24	7.97	-37.9	0.97
1112	750	20.70	9.577	6.225	~~5.40~~ 2.37 BTD	7.87	-28.1	0.61
1117	1500	21.01	9.626	6.257	2.04	7.88	-28.0	0.61
1122	2250	21.15	9.659	6.279	1.90	7.77	-29.2	0.55
1127	3000	21.27	9.670	6.286	1.78	7.74	-31.1	0.66
1132	3750	21.34	9.685	6.295	1.63	7.68	-33.0	0.54

1135 - Sample

Setup: Pump set @ 98 ft. Drawdown set @ 94.31 Cont. set @ MN

Refill 15 Discharge 15 PSI 50, Start Purge 1053 1st water 1104

Finish 1140, Total time 0:47, Initial drawdown 93.65, final drawdown 94.20

Date: 3-16-12 SWMU: 197
Well ID: HMW-48 personnel: B. Davis
Air Temp: 72°F
Weather: P.Cloudy - 0-5 mph breeze.
Pump: 000034 Water Qual. meter: 000012
Drum: Comp. Water Level Ind.: 000018
Turbidity meter: 000011
Well TD: 111.35 ft DTW (bgs): 90.53 ft.
DTW (TOC): 93.26 ft.
Loc: 2.73 ft
Well size: 4"

Sample Parameters

Temp: 23.24°C DO: 0.36 mg/L Turb: 8.63
Cond: 9.231 mS/cm pH: 7.47 NTU
TDS: 6.000 g/L ORP: -43.6 mV

Sample Date: 3-16-12
Time: 1325
ID: HTSA-0197-HMW-048-0312

Date: 3-16-12 Well ID: HMW-48

Time	Vol (mL)	Temp (°C)	Cond (mS/cm)	TDS (g/L)	DO (mg/L)	pH	ORP (mV)	Turb. (NTU)
1257	init	23.04	6.101	3.966	5.14	7.99	-38.5	12.0
1302	750	22.73	9.218	5.992	0.97	7.72	-36.5	11.3
1307	1500	22.74	9.227	5.997	0.55	7.68	-39.9	10.9
1312	2250	22.73	9.240	6.006	0.38	7.54	-41.6	10.5
1317	3000	22.92	9.228	5.998	0.35	7.60	-43.6	10.5
1322	3750	23.24	9.231	6.000	0.36	7.47	-43.6	8.63

1325 - Sample

Setup: Pump set @ 98 ft, Drawdown set @ 94.26 ft, Cont. set @ MN
Refill 15, Discharge 15, PSI 50, Start Purge 1247, 1st water 1256
Finish 1330, Total time 0:43, Initial drawdown 93.33, Final drawdown 93.41

Date: 3-20-12 SWMU: 197
Well ID: HMW-52 Personnel: B. Davis, A. Jenness

Air Temp: 41° F
Weather: Clear - 0-5 mph breeze

Pump: 000034 Water Qual. Meter: 0000 12
Drum: Comp. Water Level Ind. 0000 18
0000 11

Well TD: 99.35 ft. DTW (bgs): 90.06 ft.
DTW (TOC): 90.06 ft.
LOC: Flush
Well size: 4"

Sample Parameters

Temp: 19.20°C DO: 3.80 mg/L Turb: 1.32 NTU
Cond: 37.83 mS/cm pH: 7.68
TDS: 24.59 g/L ORP: -39.4 mV

Sample Date: 3-20-12
Time: 1035
ID: HTSA-0197-HMW-052-0310

Date: 3-20-12 Well ID: HMW-52

Time	mL Vol	°C Temp	mS/cm Cond	g/L TDS	mg/L DO	pH	mV ORP	NTU Turb
1012	init.	16.29	36.95	24.02	7.93	7.32	-55.6	2.2
1016	750	17.75	37.71	24.51	5.73	7.67	-33.3	3.43
1020	1500	18.65	37.93	24.65	4.21	7.70	-26.7	1.3
1026	2250	18.96	37.83	24.59	3.96	7.61	-33.5	1.03
1032	3000	19.20	37.83	24.59	3.80	7.68	-39.4	1.32
	3750							

1035 - Sample

Setup: Pump set @ 92 ft, Drawdown set @ 91.06, Cont. Set @ MN,
Refill 15, Discharge 15, PSI 50, Start purge 1005, 1st water 1008
Finish 1040, Total time 0:35, Initial Drawdown 90.10, Final drawdown 90.18