ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample H2-06GW05 Page 1 of 1 Field Staff: _____

Date Sampled 1/24/01
Stick-up Height 1.35 feet
Depth to Water 5.30 feet below top of casing
Total Depth 44.6 feet below top of casing
Depth of Tubing (sample interval) 42.6 feet below top of casing

Start purge 1340
Start parameters 1355
End purge 1500
Total purge time: 1 hours, 20 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1355		400		9.11	576	6.24	-346.6	1.47	168
1400		↓		9.49	580	6.24	-370.9	0.93	185
1405				9.97	587	6.22	-396.7	0.71	127
1410				10.09	588	6.21	-400.3	0.72	75.5
1415				10.22	587	6.21	-400.4	0.29	23.8
1420				10.23	587	6.20	-402.5	0.67	21.7
1425				10.18	587	6.20	-392.6	0.32	10.8
1430				10.20	587	6.20	-362.7	0.32	13.5
1435				10.23	587	6.20	-309.3	0.34	8.07
1440				10.23	587	6.20	-290.0	0.31	7.44
1445				10.25	586	6.20	-303.8	0.30	5.89
1450				10.25	587	6.20	-310.9	0.23	3.86
1455				10.24	587	6.19	-304.7	0.28	3.83
1500		↓		10.26	582	6.20	-314.9	0.27	3.59

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample H2-06-GW06 Page 1 of 1 Field Staff: _____

Date Sampled 1/24/01
Stick-up Height 0.66 feet
Depth to Water 4.43 feet below top of casing
Total Depth 57.5 feet below top of casing
Depth of Tubing (sample interval) 55.5 feet below top of casing

Start purge 0900
Start parameters 0955
End purge 1055
Total purge time: 1 hours, 55 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0955		400		10.19	566.0	6.29	-424.0	0.70	290
1000		↓		10.23	560	6.29	-425.1	0.45	166
1005				10.33	554	6.23	-399.3	0.39	31.9
1010				10.34	554	6.22	-364.7	0.34	20.6
1015				10.39	552	6.21	-383.3	0.32	14.4
1020				10.51	552	6.22	-402.0	0.32	11.5
1025				10.46	553	6.21	-397.8	0.32	10.1
1030				10.49	553	6.20	-361.1	0.31	6.73
1035				10.49	553	6.20	-374.8	0.30	6.01
1040				10.48	553	6.20	-371.4	0.30	6.71
1045				10.50	554	6.20	-379.4	0.29	4.92
1050				10.53	553	6.20	-378.4	0.29	4.88
1055		↓		10.54	554	6.20	-376.9	0.29	4.11

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample H2-06GW07 Page 1 of 1 Field Staff: LC

Date Sampled 1/30/01
Stick-up Height 0.75' feet
Depth to Water 4.48' feet below top of casing
Total Depth 45' feet below top of casing
Depth of Tubing (sample interval) 45' feet below top of casing

Start purge 0900
Start parameters 0940
End purge 1130
Total purge time: 2 hours, 30 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0940		400		9.80	548.0	6.22	-253.8	5.10	3.42
0945	5	400		9.43	553.0	6.18	-206.2	5.12	0.98
0950	10	400		9.41	554.0	6.16	-179.7	4.21	0.88
0955	15	400		9.45	553.0	6.14	-185.8	2.33	0.60
1000	20	400		9.83	553.0	6.11	-219.0	0.84	0.45
1005	25	400	3.5	9.85	553.0	6.11	-208.8	0.74	0.45
1010	30	400		9.84	554.0	6.10	-199.8	0.69	0.40
1015	35	400		9.82	554.0	6.10	-201.4	0.41	0.30
1020	40	400		9.90	554.0	6.10	-211.9	0.38	0.60
1025	45	400	5.0	9.93	554.0	6.09	-196.5	0.36	0.40
1030	50	400		9.91	554.0	6.09	-241.2	0.18	0.70
1035	55	400		9.89	554.0	6.09	-216.6	0.13	0.35
1040	60	400		9.80	553.0	6.08	-200.3	0.07	0.45
1045	65	400		9.82	554.0	6.09	-187.6	0.06	0.35
1050	70	400		9.81	554.0	6.09	-190.1	0.04	0.22
1055	75	400		9.80	554.0	6.09	-196.0	0.03	0.35
1100	80	400		9.79	553.0	6.10	-186.5	0.02	0.55
1105	85	400		9.81	553.0	6.10	-181.7	0.02	0.45
1110	90	400		9.80	554.0	6.10	-184.1	0.02	1.0

Comments

- encounter refusal of tubing at 45', possibly joint in casing
- Collect duplicate H2-06GW0799

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-016W01 Page 1 of 1 Field Staff: LC

Date Sampled 2/15/01
Stick-up Height 1.5' feet
Depth to Water 7.43' feet below top of casing
Total Depth 12.0' feet below top of casing
Depth of Tubing (sample interval) 11.0' feet below top of casing

Sulfide: 0.07mg/L
Ferrous Iron: 0.67mg/L

Start purge 1030
Start parameters 1055
End purge 1125
Total purge time: 0 hours, 55 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1055		400		8.56	569	6.20	112.6	3.59	9.76
1100	5	400		8.27	575	6.18	109.0	5.76	1.87
1105	10	400		8.19	576	6.18	109.9	3.60	0.75
1110	15	400		8.19	576	6.16	110.7	3.57	0.52
1115	20	400		8.18	577	6.16	111.6	3.50	0.46
1120	25	400		8.20	575	6.17	112.3	3.55	0.27
1125	30	400		8.21	576	6.16	113.9	3.44	0.36

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-016W02 Page 1 of 1 Field Staff: MH

Date Sampled 2/15/01
Stick-up Height 1.0' feet
Depth to Water 6.75' feet below top of casing
Total Depth 22.0' feet below top of casing
Depth of Tubing (sample interval) 21.0' feet below top of casing

Sulfide: 0.0 mg/L
Ferrous Iron: 0.91 mg/L

Start purge 1030
Start parameters 1055
End purge 1140
Total purge time: 1 hours, 10 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1055		400		11.62	916	5.73	36.9	1.79	108.5
1100	5	400		11.63	933	5.71	24.1	1.48	34.1
1105	10	400		11.68	918	5.71	11.3	1.38	21.0
1110	15	400		11.69	919	5.72	8.3	1.43	17.3
1115	20	400		11.72	919	5.71	5.1	1.49	12.6
1120	25	400		11.71	920	5.71	3.2	1.55	5.36
1125	30	400		11.68	920	5.71	-4.2	1.23	6.17
1130	35	400		11.72	921	5.70	-2.4	1.11	5.76
1135	40	400		11.74	921	5.72	-6.5	1.15	5.61
1140	45	400		11.75	921	5.72	-4.4	1.14	5.61

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-01GW03 Page 1 of 1 Field Staff: LC

Date Sampled 2/20/01
Stick-up Height 1.56' feet
Depth to Water 7.51' feet below top of casing
Total Depth 31.7' feet below top of casing
Depth of Tubing (sample interval) 30.7' feet below top of casing

Sulfide: 0.02mg/L
Ferrous Iron: 1.66mg/L

Start purge 0910
Start parameters 0950
End purge 1025
Total purge time: 1 hours, 15 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0950		400		12.71	467	6.20	16.9	2.79	8.65
0955	5	400		12.30	459	6.01	-167.8	1.25	3.73
1000	10	400		12.29	458	6.01	-182.6	1.11	3.18
1005	15	400		12.26	456	6.02	-178.3	0.92	3.21
1010	20	400		12.23	456	6.02	-181.5	0.94	3.25
1015	25	400		12.23	455	6.02	-175.2	0.87	3.12
1020	30	400		12.22	454	6.00	-170.4	0.80	3.16
1025	35	400		12.22	454	6.02	-166.1	0.81	2.76

Comments
collect sample and duplicate L2-01GW0399

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-016W04 Page 1 of 1 Field Staff: MH

Date Sampled 2/20/01
Stick-up Height 0.73' feet
Depth to Water 6.20' feet below top of casing
Total Depth 41.25' feet below top of casing
Depth of Tubing (sample interval) 40.25' feet below top of casing

Sulfide : 0.03 mg/L
Ferrous Iron : 1.06 mg/L

Start purge 0910
Start parameters 0950
End purge 1055
Total purge time: 1 hours, 45 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0950		400		11.66	425	6.04	31.1	3.47	7.1
0955	5	400		11.56	423	5.96	14.4	1.98	7.02
1000	10	400		11.59	422	5.94	12.5	1.23	7.59
1005	15	400		11.59	423	5.94	13.2	0.32	9.80
1010	20	400		11.57	423	5.94	14.0	0.15	9.28
1015	25	400		11.57	423	5.95	14.2	0.07	11.0
1020	30	400		11.58	422	5.96	15.7	0.05	10.67
1025	35	400		11.61	423	5.95	17.1	0.05	8.24
1030	40	400		11.61	423	5.95	17.5	0.05	7.26
1035	45	400		11.61	423	5.95	18.4	0.05	6.05
1040	50	400		11.64	422	5.95	18.3	0.05	5.28
1045	55	400		11.60	422	5.94	19.3	0.04	4.70
1050	60	400		11.64	422	5.94	18.8	0.04	4.12
1055	65	400		11.65	423	5.94	19.3	0.04	3.65

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-01GW05 Page 1 of 1 Field Staff: LC

Date Sampled 2/23/01
Stick-up Height 1.9' feet
Depth to Water 7.30' feet below top of casing
Total Depth 51.5' feet below top of casing
Depth of Tubing (sample interval) 50.5' feet below top of casing

Sulfide: 0.0 mg/L
ferrous iron: 1.87 mg/L

Start purge 1000
Start parameters 1040
End purge 1140
Total purge time: 1 hours, 40 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1040		400		11.92	532	5.63	-18.9	2.29	4.54
1045	5	400		11.11	531	5.47	-13.6	3.51	2.86
1050	10	400		11.05	532	5.46	-10.5	3.61	3.83
1055	15	400		11.00	632	5.44	-9.2	3.60	9.38
1100	20	400		11.02	633	5.44	-7.8	3.59	20.6
1105	25	400		10.98	532	5.44	-3.6	3.58	19.2
1110	30	400		10.95	632	5.43	-0.4	3.63	15.4
1115	35	400		10.97	531	5.43	1.3	3.60	12.4
1120	40	400		10.87	532	5.43	5.0	3.70	9.50
1125	45	400		10.98	532	5.43	7.3	3.72	6.39
1130	50	400		10.98	532	5.43	10.5	3.72	4.94
1135	55	400		10.88	530	5.41	12.6	3.78	4.61
1140	60	400		10.96	530	5.44	13.8	3.75	3.6

Comments
collect sample and duplicate, L2-01GW0599

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-016W06 Page 1 of 1 Field Staff: MH

Date Sampled 2/23/01
Stick-up Height 0.8" feet
Depth to Water 6.30' feet below top of casing
Total Depth 62.0' feet below top of casing
Depth of Tubing (sample interval) 61.0' feet below top of casing

sulfide: 0.03 mg/L
ferrous iron: 3.30 mg/L

Start purge 1000
Start parameters 1040
End purge 1125
Total purge time: 1 hours, 25 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1040		400		11.55	263	6.09	-65.9	0.04	11.2
1045	5	400		11.25	264	6.06	-63.1	0.02	10.93
1050	10	400		11.27	264	6.05	-60.4	0.01	7.48
1055	15	400		11.2	264	6.05	-60.2	0.01	9.19
1100	20	400		11.26	264	6.04	-54.7	0.01	10.63
1105	25	400		11.27	263	6.03	-51.4	0.01	9.52
1110	30	400		11.24	264	6.03	-52.3	0.01	9.04
1115	35	400		11.25	264	6.02	-52.1	0.01	6.44
1120	40	400		11.15	263	6.02	-52.4	0.01	6.43
1125	45	400		11.27	263	6.02	-49.1	0.01	6.46

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-01GW07 Page 1 of 1 Field Staff: HT

Date Sampled 3/1/01
Stick-up Height 1.2' feet
Depth to Water 6.73' feet below top of casing
Total Depth 75.0' feet below top of casing
Depth of Tubing (sample interval) 72.0' feet below top of casing

sulfide = 0.06 mg/L
Ferrous iron = 3.30 mg/L

Start purge 1320
Start parameters 1330
End purge 1440
Total purge time: 1 hours, 20 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1330	0	400		10.67	440	6.25	-34.4	7.77	608
1335	Stopped to fix.								
1340	0	400		10.87	438	6.18	-43.2	6.98	201
1345	5			10.90	433	6.19	-48.1	6.59	200
1350	10			10.92	427	6.12	-53.2	5.22	105.4
1355	15			10.85	426	6.19	-57.0	5.22	84.5
1400	20			11.05	426	6.22	-57.8	4.90	38.6
1405	25			10.91	425	6.23	-55.5	5.08	28.4
1410	30			10.77	424	6.25	-53.7	4.80	25.7
1415	35			10.63	425	6.26	-52.0	5.41	19.3
1420	40			10.66	424	6.26	-50.1	5.02	15.8
1425	45			10.60	424	6.25	-49.0	5.11	14.3
1430	50			10.51	424	6.25	-47.7	5.65	~~14.0~~ 14.6 HAT
1435	55			10.32	424	6.25	-47.8	6.13	13.8
1440	60			10.35	424	6.26	-46.2	6.09	13.6
~~1~~ HAT									

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-02GW01 Page ___ of ___ Field Staff: MH

Date Sampled 2/9/01
Stick-up Height 1.8' feet
Depth to Water 12.09' feet below top of casing
Total Depth 14.8' feet below top of casing
Depth of Tubing (sample interval) 13.8' feet below top of casing

Start purge 1040
Start parameters 1115
End purge 1145
Total purge time: 1 hours, 5 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1115	5	400		10.08	1367	6.35	50.0	2.08	0.70
1120	10			10.38	1420	6.26	43.0	3.31	0.25
1125	15			10.36	1432	6.22	40.8	3.53	0.00
1130	20			10.31	1445	6.21	38.8	3.69	0.00
1135	25			10.23	1452	6.20	36.7	3.80	0.10
1140	30			10.19	1455	6.20	37.0	3.84	0.00
1145	35			10.12	1457	6.20	37.2	3.82	0.15

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample 12-02GW02 Page 1 of ___ Field Staff: LC

Date Sampled 2/9/01
Stick-up Height 0.75' feet
Depth to Water 10.91' feet below top of casing
Total Depth 24.3' feet below top of casing
Depth of Tubing (sample interval) 23.3' feet below top of casing

Start purge 1040
Start parameters 1105
End purge 1135
Total purge time: ____ hours, 55 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1105		400		14.54	847.0	6.27	-247.7	0.54	0.50
1110	5	400		14.00	846.0	6.27	-269.5	0.52	0.10
1115	10	400		14.04	845.0	6.27	-257.5	0.50	0.45
1120	15	400		13.91	845.0	6.26	-228.0	0.50	0.15
1125	20	400		13.88	845.0	6.26	-213.5	0.49	0.48
1130	25	400		13.81	845.0	6.28	-210.9	0.49	0.20
1135	30	400		13.78	844.0	6.26	-205.7	0.48	0.25

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-026WQ3 Page 1 of 1 Field Staff: LC

Date Sampled 2/15/01
Stick-up Height 2.0' feet
Depth to Water 11.85' feet below top of casing
Total Depth 35.0' feet below top of casing
Depth of Tubing (sample interval) 34.0' feet below top of casing

Sulfide: 0.06 mg/L
Ferrous Iron: 0.93 mg/L

Start purge 1340
Start parameters 1435
End purge 1505
Total purge time: 1 hours, 25 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1435		400		14.37	1056	5.96	-37.4	2.23	13.4
1440	5	400		14.40	1067	5.97	-58.3	2.20	6.80
1445	10	400		14.45	1070	5.98	-67.3	2.28	4.47
1450	15	400		14.58	1073	5.99	-71.5	2.05	2.79
1455	20	400		14.52	1072	5.99	-77.7	2.27	3.10
1500	25	400		14.47	1072	6.00	-83.1	2.17	4.48
1505	30	400		14.44	1073	6.00	-83.3	2.21	3.15

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-02GW04NS Page 1 of 1 Field Staff: LC

Date Sampled 2/20/01
Stick-up Height 0.85' feet
Depth to Water 10.61' feet below top of casing
Total Depth 44.5' feet below top of casing
Depth of Tubing (sample interval) 43.5' feet below top of casing

Sulfide: 0.69 mg/L
Ferrous Iron: 3.30 mg/L

Start purge 1215 (on 2/20), 1340 (2/16)
Start parameters
End purge 1530 (2/20), 1530 (2/16)
Total purge time: 5 hours, 5 minutes
Parameters Stabilized? N

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)

Comments

- Purge water extremely silty, purged 1hr 50min on 2/16 and 3hr 15min on 2/20 w/out change in silt levels
- Collected sample L2-02GW04NS

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-026W05 Page 1 of 1 Field Staff: LC/MH

Date Sampled 2/23/01
Stick-up Height 0.91' feet
Depth to Water 9.81' feet below top of casing
Total Depth 52.3' feet below top of casing
Depth of Tubing (sample interval) 51.3' feet below top of casing

sulfide: 0.03mg/L
ferrous iron: 0.68mg/L

Start purge 1400
Start parameters 1435
End purge 1510
Total purge time: 1 hours, 10 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1435		400		14.21	999	5.80	-10.2	3.91	317
1440	5	400		14.06	1000	5.87	-16.5	3.85	178
1445	10	400		14.14	1001	5.87	-18.8	3.66	152
1450	15	400		14.20	1001	5.90	-20.1	3.51	21.3
1455	20	400		14.16	1002	5.90	-19.1	3.35	5.96
1500	25	400		14.26	1002	5.90	-18.8	3.33	2.74
1505	30	400		14.25	1001	5.92	-18.4	3.37	2.58
1510	35	400		14.16	1001	5.91	-17.7	3.26	0.92

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-036W01NS Page 1 of ___ Field Staff: LC

Date Sampled 2/6/01
Stick-up Height 1.17' feet
Depth to Water 14.45' feet below top of casing
Total Depth 16.5' feet below top of casing
Depth of Tubing (sample interval) 15.5' feet below top of casing

Start purge 1130
Start parameters 1240, 1435
End purge 1530
Total purge time: 4 hours, ___ minutes
Parameters Stabilized? N

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1240				12.41	1231.0	5.53	119.0	1.32	307
1245				12.37	1208.0	5.49	56.0	0.79	—
discontinue parameters → too much sand in cell, continue purging to clear silt									
1435		400		12.22	1221.0	5.50	165.3	0.96	165
1440				12.22	1219.0	5.49	146.3	0.79	261
1445				12.16	1214.0	5.47	102.3	0.70	124
1450				12.05	1211.0	5.47	72.3	0.69	232
1455				12.08	1210.0	5.46	61.3	0.68	259
1500				12.08	1210.0	5.47	60.2	0.68	224
1505				12.08	1213.0	5.48	57.8	0.68	193
1510				12.10	1212.0	5.48	55.9	0.70	175
1515				12.05	1210.0	5.47	52.3	0.69	97.4
1520				12.03	1209.0	5.47	53.5	0.68	82.1
1525				12.03	1208.0	5.47	54.5	0.68	76.5
1530				11.95	1208.0	5.46	54.5	0.68	63.9
~~15~~									

Comments

- extremely turbid purge water – purged 4 hours, extreme turbidity did not stabilize
- Sample collected

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-03GW02NS Page 1 of 1 Field Staff: MH

Date Sampled 2/6/01
Stick-up Height ~~1.55~~ .35 feet
Depth to Water ~~14.45~~ 13.15 feet below top of casing
Total Depth 17 feet below top of casing
Depth of Tubing (sample interval) 16 feet below top of casing

Start purge 1130
Start parameters 1415
End purge 1535
Total purge time: 4 hours, 0 minutes
Parameters Stabilized? N

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1415		400		14.58	1138	5.70	62.4	0.15	511
1420	5	400		14.59	1136	5.61	58.1	0.12	426
1425	10	400		14.32	1133	5.51	53.1	0.12	—
1430	15	400		14.17	1135	5.48	50.9	0.13	—
1435	20	400		14.14	1133	5.46	44.5	0.14	—
1440	25	400		14.06	1131	5.45	43.5	0.14	—
1445	30	400		14.13	1132	5.44	12.7	0.17	—
1450	35	400		13.91	1148	5.44	2.2	0.21	—
1455	40	400		13.90	1155	5.45	1.0	0.20	—
1500	45	400		13.90	1174	5.44	-8.9	0.20	—
1505	50	400		13.87	1170	5.44	-4.3	0.24	—
1510	55	400		13.87	1181	5.44	-15.7	0.21	—
1515	60	400		13.87	1177	5.44	-17.2	0.20	—
1520	65	400		13.86	1183	5.45	-17.9	0.21	—
1525	70	400		13.87	1185	5.44	-19.3	0.25	—
1530	75	400		13.85	1190	5.44	-19.8	0.25	—
1535	80	400		13.84	1191	5.44	-19.1	0.24	—

Comments

TUBING DID NOT REACH FULL DEPTH DUE TO FIRM RESISTANCE. PROBABLY A COLLAR. EXTREMELY SILTY THROUGHOUT PURGE. NOW STABILIZED DUE TO EXTREME SILTINESS AND TURBIDITY.

0.80
0.91

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-036W03 Page 1 of ___ Field Staff: LC

Date Sampled 2/8/01
Stick-up Height 2.1' feet
Depth to Water 13.36' feet below top of casing
Total Depth 36.4' feet below top of casing
Depth of Tubing (sample interval) 35.4' feet below top of casing

Start purge 1245
Start parameters 1305
End purge 1400
Total purge time: 1 hours, 15 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1305		400		13.52	1617.0	6.15	-41.5	0.66	100
1310	5	400		13.57	1619.0	6.13	-118.5	0.56	31
1315	10	400		13.50	1622.0	6.13	-194.3	0.45	28
1320	15	400		13.54	1620.0	6.13	-203.5	0.47	27
1325	20	400		13.50	1624.0	6.12	-223.6	0.40	20
1330	25	400		13.53	1621.0	6.10	-236.3	0.37	11
1335	30	400		13.57	1620.0	6.12	-237.1	0.36	9.7
1340	35	400		13.53	1620.0	6.11	-240.4	0.36	7.1
1345	40	400		13.45	1620.0	6.11	-242.7	0.35	5.4
1350	45	400		13.46	1619.0	6.11	-244.0	0.33	3.7
1355	50	400		13.45	1615.0	6.12	-245.1	0.32	2.8
1400	55	400		13.47	1615.0	6.11	-246.0	0.32	2.5

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-036W04 Page 1 of 1 Field Staff: MH

Date Sampled 2/8/01
Stick-up Height .95 feet
Depth to Water 12.81 feet below top of casing
Total Depth 41 feet below top of casing
Depth of Tubing (sample interval) 40 feet below top of casing

Start purge 1240
Start parameters 1310
End purge 1405
Total purge time: 1 hours, 25 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1310	5	400		13.84	1662	6.62	-161.2	0.64	11.2
1315	10			13.34	1661	6.63	-151.1	0.67	12.1
1320	15			13.26	1660	6.63	-152.8	0.66	6.27
1325	20			13.30	1660	6.63	-152.0	0.52	6.74
1330	25			13.33	1659	6.63	-152.5	0.50	6.19
1335	30			13.32	1659	6.62	-160.6	0.46	3.84
1340	35			13.36	1659	6.63	-177.6	0.42	2.49
1345	40			13.33	1658	6.63	-177.1	0.39	3.08
1350	45			13.26	1658	6.63	-176.8	0.36	3.04
1355	50			13.21	1661	6.63	-179.7	0.32	2.41
1400	55			13.18	1662	6.64	-182.6	0.31	2.30
1405	60			13.26	1660	6.63	-175.5	0.30	2.19

Comments

COLLECTED DUPLICATE SAMPLE.

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-04GW01NS Page 1 of 1 Field Staff: MH

Date Sampled 2/7/01
Stick-up Height ~~11.89~~ MH 2.01 feet
Depth to Water 11.89 feet below top of casing
Total Depth 15.0 feet below top of casing
Depth of Tubing (sample interval) 14.0 feet below top of casing

Start purge 910
Start parameters —
End purge 1050
Total purge time: 1 hours, 40 minutes
Parameters Stabilized? N

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)

Comments

VERY LOW FLOW, HIGH TURBIDITY. SAMPLED FOR TSS, 2 VOCS, 500 ml UNFILTERED UNPRESERVED METALS SAMPLE, TOTAL AS/AS SPECIES UNFILTERED AND SULFIDE/FERROUS IRON.

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-040W02 Page 1 of ___ Field Staff: LC

Date Sampled 2/7/01
Stick-up Height 0.95' feet
Depth to Water 11.11' feet below top of casing
Total Depth 25.0' feet below top of casing
Depth of Tubing (sample interval) 24.0' feet below top of casing

Start purge 0905
Start parameters 0950
End purge 1045
Total purge time: 1 hours, 40 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0950		400		11.79	1744.0	6.14	10.4	0.75	11.0
0955	5	400		12.11	1758.0	6.19	-67.3	0.52	6.8
1000	10	400		12.09	1767.0	6.17	-111.2	0.42	7.4
1005	15	400		12.05	1765.0	6.18	-125.4	0.36	6.5
1010	20	400		12.20	1764.0	6.17	-143.7	0.33	5.4
1015	25	400		12.23	1771.0	6.17	-159.0	0.31	5.7
1020	30	400		12.27	1771.0	6.16	-165.3	0.30	3.1
1025	35	400		12.28	1769.0	6.16	-167.0	0.30	2.6
1030	40	400		12.18	1763.0	6.17	-174.1	0.30	1.9
1035	45	400		12.16	1761.0	6.16	-148.6	0.26	1.1
1040	50	400		12.13	1759.0	6.15	-156.0	0.26	0.90
1045	55	400		12.10	1759.0	6.16	-148.4	0.26	0.75

Comments

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-046W03 Page 1 of 1 Field Staff: MH

Date Sampled 2/14/01
Stick-up Height 1.6 feet
Depth to Water 10.9 feet below top of casing
Total Depth 34.0 feet below top of casing
Depth of Tubing (sample interval) 33.0 feet below top of casing

SULFIDE = 0.02 mg/L
FERROUS = 1.12 mg/L

Start purge 1010
Start parameters 1030
End purge 1125
Total purge time: 1 hours, 15 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1030		400		11.89	2049	6.46	-23.5	1.17	19.5
1035	5	400		11.90	2063	6.44	-70.0	0.72	10.4
1040	10	400		11.90	2064	6.44	-70.4	0.71	6.35
1045	15	400		11.89	2063	6.44	-72.0	0.68	6.73
1050	20	400		11.92	2065	6.45	-74.8	0.60	8.20
1055	25	400		11.88	2066	6.47	-76.7	0.57	7.32
1100	30	400		11.91	2066	6.47	-77.4	0.54	7.34
1105	35	400		11.90	2066	6.48	-77.[illegible]	0.55	5.92
1110	40	400		11.94	2065	6.48	-78.0	0.55	5.07
1115	45	400		11.97	2067	6.48	-79.2	0.53	4.61
1120	50	400		12.06	2066	6.48	-80.2	0.49	3.87
1125	55	400		12.03	2067	6.49	-81.2	0.49	3.71

Comments
Collect MS/MSD → L2-046W03MS and L2-046W03MSD

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-05GW01 Page ___ of ___ Field Staff: MH

Date Sampled 2/13/01
Stick-up Height 1.85 feet
Depth to Water 9.13 feet below top of casing
Total Depth 14.3 feet below top of casing
Depth of Tubing (sample interval) 13.3 feet below top of casing

Start purge 0935
Start parameters 1010
End purge 1050
Total purge time: 1 hours, 15 minutes
Parameters Stabilized? 4

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1010	0	55		7.09	1332	6.28	-54.7	11.41	15
1015	5			6.94	1335	6.30	-56.5	11.47	8.9
1020	10			7.11	1334	6.31	-57.0	11.46	7.8
1025	15			7.10	1335	6.31	-57.9	11.48	7.7
1030	20			7.06	1336	6.32	-58.3	11.45	9.6
1035	25			7.19	1336	6.31	-58.4	11.44	20
1040	30			7.41	1336	6.36	-59.4	11.33	7.9
1045	35			7.36	1337	6.32	-59.0	11.31	7.8
1050	40			7.47	1337	6.32	-59.1	11.30	7.3

Comments

FLOW VERY SLOW AND AERATED.

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L-2-05GW02 Page 1 of 2 Field Staff: LC

Date Sampled 2/13/2001
Stick-up Height 0.75' feet
Depth to Water 8.65' feet below top of casing
Total Depth 24.7' feet below top of casing
Depth of Tubing (sample interval) 23.7' feet below top of casing

Start purge 0920
Start parameters 0950
End purge 1135
Total purge time: 2 hours, 15 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0950		400		12.24	1340.0	5.99	12.5	0.51	260
0955	5	400		12.19	1346.0	5.99	-4.1	0.43	450
1000	10	400		12.09	1349.0	5.98	-16.7	0.37	320
1005	15	400		12.12	1349.0	5.98	-19.4	0.34	280
1010	20	400		12.07	1347.0	5.98	-25.9	0.33	190
1015	25	400		12.14	1347.0	5.98	-31.5	0.31	130
1020	30	400		12.21	1348.0	5.98	-33.7	0.31	120
1025	35	400		12.26	1349.0	5.98	-35.9	0.30	100
1030	40	400		12.14	1346.0	5.98	-40.2	0.29	110
1035	45	400		12.11	1345.0	5.97	-41.4	0.29	55
1040	50	400		12.08	1345.0	5.97	-42.0	0.28	36
1045	55	400		12.06	1344.0	5.98	-41.9	0.28	28
1050	60	400		12.24	1346.0	5.98	-42.1	0.28	17
1055	65	400		12.33	1343.0	5.97	-41.3	0.28	14
1100	70	400		12.44	1344.0	5.97	-42.8	0.29	8.5
1105	75	400		12.33	1345.0	5.97	-42.1	0.29	6.7
1110	80	400		12.36	1342.0	5.97	-41.7	0.29	5.3
1115	85	400		12.37	1341.0	5.97	-39.1	0.29	4.9
1120	90	400		12.37	1341.0	5.97	-37.6	0.29	7.7

Comments
Collected duplicate sample L2-05GW0299

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-05GW02 Page 2 of 2 Field Staff: LC

Date Sampled 2/13/01
Stick-up Height 0.75' feet
Depth to Water 8.65' feet below top of casing
Total Depth 24.7' feet below top of casing
Depth of Tubing (sample interval) 23.7' feet below top of casing

Start purge 0820
Start parameters 0950
End purge 1135
Total purge time: 2 hours, 15 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1125	95	400		12.27	1341.0	5.97	-37.9	0.28	4.7
1130	100	400		12.31	1346.0	5.97	-36.5	0.28	4.2
1135	105	400		12.30	1343.0	5.97	-38.1	0.28	4.5

Comments
Collected duplicate sample L2-05GW0299

CLICK TO CONTINUE

ROUX ASSOCIATES, INC.
Final GSIP SOW Soil/Groundwater Investigation
Groundwater Sampling Form

Sample L2-05GW03 Page 1 of 1 Field Staff: LC

Date Sampled 2/14/01
Stick-up Height 0.75' feet
Depth to Water 10.61' feet below top of casing
Total Depth 34.3' feet below top of casing
Depth of Tubing (sample interval) 33.3' feet below top of casing

Hach Colorimeter Test
Sulfide = 0.06 mg/L
Ferrous Iron = 0.59 mg/L

Start purge 1420
Start parameters 1445
End purge 1605
Total purge time: 1 hours, 45 minutes
Parameters Stabilized? Y

Purging Information

Time of Day	Elapsed Time (min)	Purge Rate (mL/min)	Cumulative Volume Purged (gallons)	Temperature (degrees C)	Spec. Cond. (uS)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
1445		400		12.20	2257	6.18	-28.1	0.81	~~52~~ 22.7 LC
1450	5	400		12.09	2323	6.14	-33.7	0.85	35.8
1455	10	400		12.09	2328	6.13	-38.1	0.90	25.8
1500	15	400		12.03	2336	6.12	-42.8	0.79	48.5
1505	20	400		12.07	2340	6.11	-46.7	0.76	29.4
1510	25	400		12.05	2341	6.11	-50.4	0.66	19.3
1515	30	400		12.05	2347	6.11	-54.5	0.67	15.0
1520	35	400		12.02	2345	6.11	-60.0	0.73	12.5
1525	40	400		12.05	2347	6.11	-64.8	0.70	11.3
1530	45	400		12.05	2345	6.11	-70.6	0.72	12.4
1535	50	400		12.04	2347	6.10	-80.1	0.70	10.4
1540	55	400		12.04	2356	6.10	-87.2	0.60	64.9
1545	60	400		12.03	2356	6.10	-92.8	0.53	14.5
1550	65	400		12.04	2355	6.10	-97.1	0.64	8.07
1555	70	400		12.01	2356	6.10	-103.2	0.61	4.57
1600	75	400		12.03	2356	6.10	-105.1	0.62	4.79
1605	80	400		12.03	2356	6.10	-107.2	0.63	3.08

Comments