APPENDIX A

Field Forms

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/19/14

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 58522 (Edgar Well)

Initial Water Level: 39.40 ft BTOC

Well Diameter: 4 inches

Well Depth: 58.36 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 12.3 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1107

Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1056	39.40								Pump On
1058	<TOP	~~NM~~	23.13	1.14	1.72	6.98	242	0.0	
1100	<TOP	NM	23.08	1.14	1.50	6.97	241	0.0	
1102	<TOP	NM	23.06	1.14	1.44	6.96	241	0.5	
1104	<TOP	NM	23.04	1.14	1.38	6.95	240	0.3	measured flow rate at the end: 5 gal / 1 min 15 sec = 4 gal/min, but sprinklers were also running
1107	Sampled	CRCP-58522-110							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Monitoring We... urging Form

Project: Travis County - CRCP

Date: 5/19/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 221049 (Sarah King)

Initial Water Level: 32.27 ft BTOC

Well Diameter: 5 inches

Well Depth: 43.98 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 11.9 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1243

Analyses/Notes: TPH (TX1005) ~~and PAH (SW8270C)~~; Metals, NH_3, TSS, NO_3, Alk, Cl, F, SO_4

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1230	32.27								pump on; wl draws down to 32.45 when pump cycles 5gal/90sec
1232	32.[illegible]3	3.3	23.42	0.732	9.07	7.10	267	8.5	
1235	32.30	1	23.51	0.731	6.96	7.02	278	8.4	
1238	32.33	|	23.44	0.733	6.89	6.98	283	9.7	
1240	32.30	↓	23.45	0.733	6.68	6.96	285	8.4	
1243	Sampled		CRCP-221049-110						

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/20/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 5852213 (TXI)

Initial Water Level: 28.33 ft BTOC

Well Diameter: 5 inches

Well Depth: 36.38 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 9.7 gal

Pump/Purging Device: Submersible Pump

Pump Intake Depth: ~32 ft BTOC

Sample Time: 1235

Analyses/Notes: NH_3, TSS, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, Alk, NO_3, SO_4, Cl, F, a

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1207	28.33								Pump on
1212	28.45	200	22.40	1.11	0.38	6.75	-154	6.3	
1215	28.46	200	22.51	1.11	0.33	6.74	-165	5.6	
1218	28.44	200	22.61	1.11	0.42	6.73	-170	5.5	
1221	28.45	200	22.58	1.11	0.40	6.72	-175	5.5	
1224	28.45	200	22.54	1.10	0.34	6.71	-179	5.6	
1227	28.44	200	22.63	1.09	0.31	6.73	-185	5.3	
1230	2845	200	22.47	1.09	0.33	6.74	-186	5.3	
1235	Sampled	CRCP - 5852213 - 110							

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/19/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 5852314 (Mansville WSC)

Initial Water Level: 34.76 ft BTOC

Well Diameter: 12 inches

Well Depth: 60.00ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 148.2gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1018

Analyses/Notes: metals, TPH (TX1005) ~~and PAH (SW8270C)~~, TSS, NH_3, SO_4, NO_3, Alk, Cl, F

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1003	34.76								Pump on
1006	43.50	600	22.98	0.787	4.46	7.30	244	1.1	
1009	43.75	600	23.04	0.774	4.03	7.30	239	0.0	
1012	43.95	600	22.98	0.770	4.13	7.30	236	0.0	
1015	44.10	600	22.80	0.773	3.96	7.32	235	0.0	
1018		Sampled	CRCP-585	2314-	110				

Well Diameter (in)	1	2	3	4	6	8	10	12
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08	5.89
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44	

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/20/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: ATF Well 1

Initial Water Level: 27.22 ft BTOC

Well Diameter: 16 inches

Well Depth: 50.58 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 243.9 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1109

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, NO_3, SO_4, Cl, F, Alk

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1100	27.22								Pump on
1102	42.88	NM	22.82	1.40	1.15	6.76	244	1.6	
1103	42.76	↓	22.94	1.39	0.85	6.74	239	1.2	
1104	42.77		22.90	1.39	0.75	6.74	235	1.0	
1105	42.80		22.90	1.39	0.75	6.74	231	0.9	
1106	42.80	↓	22.89	1.39	0.74	6.74	227	0.7	
1109	Sampled		CRCP-ATF1-110 + CRCP-ATF1-111 (duplicate)						

Well Diameter (in)	1	2	3	4	6	8	10	16
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08	10.44
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44	

Monitoring We... urging Form

Project: Travis County - CRCP

Date: 5/19/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: Buchheit

Initial Water Level: 26.50 ft BTOC, well pumping when we arrived

Well Diameter: 4 inches

Well Depth: 30.75 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 2.8 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1455

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, SO_4, NO_3, Alk, Cl, F

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1429	26.50								Pump on, 5gal/3.5min
1431	26.52	1.4	25.21	0.920	4.94	6.97	277	0.0	6¼"
1434	26.54		24.99	0.921	4.34	6.96	281	0.0	6½"
1437	26.71		24.76	0.922	4.34	6.93	286	0.2	inc. flow rate, so that well will cycle on 8.5"
1439	26.71		24.24	0.922	4.43	6.92	250	0.0	8.5"
1441	26.67		23.89	0.922	4.44	6.91	159	0.0	8"
1443	26.69		23.75	0.923	4.43	6.89	132	0.0	8.25"
1445	26.67		23.70	0.923	4.45	6.87	172	0.0	inc. flow rate, 8"
1447	26.54		23.65	0.924	4.35	6.86	221	0.0	6.5"
1449	26.54		23.82	0.925	4.28	6.85	219	0.0	6.5"
1450	26.50		24.09	0.925	4.18	6.85	191	0.0	6"
1451	26.50		24.17	0.922	4.08	6.85	180	0.0	6"
1452	26.50		24.20	0.922	4.07	6.85	178	0.0	6"
1453	26.69	↓	24.25	0.922	4.04	6.86	174	0.0	8.25"
1455		Sampled CRCP - Buchheit-110							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Monitoring We... urging Form

Project: Travis County - CRCP

Date: 5/19/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: Holweger

Initial Water Level: 31.77 ft BTOC

Well Diameter: 5 inches

Well Depth: 39.75 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 8.1 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1353

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, Alk, SO_4, NO_3, Cl, F

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1337	31.77								Pump on
1340	32.91	4.6	23.53	0.754	5.54	7.05	262	0.0	5 gal / 1 min 5 sec
1342	31.77		23.21	0.755	4.76	7.03	269	0.0	
1344	31.78		22.97	0.755	4.92	7.01	274	0.0	drops to 31.95 when pump cycles on
1346	31.95		22.85	0.755	5.03	6.98	281	0.0	
1348	31.77		22.80	0.755	4.87	6.95	285	0.0	
1350	31.95	↓	22.75	0.756	4.90	6.92	290	0.0	
1353	Sampled	BCP - Holweger - 110							

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring We... urging Form

Project: Travis County - CRCP

Date: 5/20/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: NTN W2

Initial Water Level: 31.27 ft BTOC

Well Diameter: 18 inches

Well Depth: 40.77 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 125.5 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 1015

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, Alk, Cl, F, NO_3, SO_4

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1005	31.27								Pump on
1007	36.86	NM	23.04	1.82	8.40	6.87	233	5.9	
1008	36.85	↓	22.84	1.83	7.96	6.92	242	6.4	
1009	36.85		22.74	1.82	7.66	6.93	251	1.0	
1010	36.85		22.70	1.82	7.51	6.94	258	0.0	
1011	36.86		22.66	1.82	7.42	6.94	263	0.0	
1012	36.86	↓	22.66	1.82	7.31	6.95	267	0.0	
1015		Sampled	CRCP - NTNW2 - 113 (MS/MSD)						

Well Diameter (in)	1	2	3	4	6	8	10	18
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08	13.21
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44	

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/20/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: Wistan W1

Initial Water Level: 50.25

Well Diameter: 8 inches

Well Depth: 65.10 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 38.8 gal

Pump/Purging Device: Submersible Pump

Pump Intake Depth: ~57 ft BTOC

Sample Time: 1557

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, Cl, F, SO_4, NO_3, Alk

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1540	50.25								Pump on
1542	50.27	400	29.06	0.787	5.93	7.07	103	76.0	
1545	50.27	400	26.58	0.790	4.59	7.04	129	73.9	
1548	50.26	200	26.91	0.785	3.66	7.03	143	63.4	
1551	50.25	200	26.66	0.789	3.58	7.03	147	66.3	
1554	50.26	200	26.56	0.789	3.56	7.02	150	68.5	
1557		Sampled CRCP-WistanW1-110							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 5/20/2014

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: Wistan W2

Initial Water Level: 45.41 ft BTOC

Well Diameter: 6 inches

Well Depth: 62.18 ft BTOC - measured previously

Screen Interval: Unknown

Well Volume: 24.7 gal

Pump/Purging Device: Submersible Pump

Pump Intake Depth: ~ 53 ft BTOC

Sample Time: 1445

Analyses/Notes: TSS, NH_3, TPH (TX1005) ~~and PAH (SW8270C)~~, metals, Alk, Cl, F, SO_4, NO_3

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1414	45.41								Pump on
1418 ~~1415~~	45.44	250	25.18	0.959	6.82	6.95	53	68.1	turbidity high b/c tagged bottom
1421	45.45	250	25.50	0.973	6.28	6.94	31	162	
1424	45.45	250	25.33	0.984	6.15	6.93	29	89.3	
1427	45.45	250	24.95	0.988	6.08	6.93	30	72.5	
1430	45.45	250	25.18	0.984	5.80	6.91	33	70.3	
1433	45.45	250	25.05	0.988	5.80	6.90	38	59.4	
1436	45.45	250	25.12	0.985	5.67	6.89	44	53.6	
1439	45.45	250	25.20	0.986	5.57	6.93	45	48.1	
1442	45.45	250	25.44	0.984	5.44	6.94	48	43.8	
1445	Sampled	CRCP - Wistan W2 - 110							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

2.5 gal / 4.5 min

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 2/19/14

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 221049 (Sarah King)

Initial Water Level: 34.25 ft BTOC

Well Diameter: 5 inches

Well Depth: 43.98ft BTOC

Screen Interval: Unknown

Well Volume: 9.92 gal

Pump/Purging Device: Private Pump

Pump Intake Depth: Unknown

Sample Time: 0900

Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min or~~ GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/l or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
0847	34.25								Pump on
0849	34.25	0.6	22.44	0.694	5.87	6.76	214	24.4	water level drops to 34.30
0851	34.25	↓	22.66	0.689	5.36	6.95	198	27.4	when pump turns on
0853	34.25		22.58	0.689	4.93	7.05	189	26.3	
0855	34.25		22.62	0.689	4.66	7.07	184	25.2	
0857	34.25	↓	22.62	0.688	4.47	7.08	182	24.3	
0900		Sampled	CRLP-221049-100						

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP
Date: 2/18/14
Location: Austin, Texas
Field Personnel: Kevin Paternak/Liz Rinehart
Well Identification: 5852213 (TXI)
Initial Water Level: 30.23 ft BTOC
Well Diameter: 5 inches
Well Depth: 36.38 ft BTOC
Screen Interval: Unknown
Well Volume: 6.27 gal
Pump/Purging Device: Submersible Pump
Pump Intake Depth: ~4' off bottom
Sample Time: 1245
Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1213	30.23								Pump on
1216	~~30.40~~	450	22.50	1.20	1.96	6.87	-227	15.7	
1219	30.40	500	22.59	1.19	1.87	6.87	-249	15.7	
1223	30.40	440	22.66	1.19	1.84	6.86	-258	14.3	
1226	30.43	600	22.77	1.19	1.67	6.87	-270	11.2	
1229	30.45	700	22.73	1.19	1.64	6.86	-362	8.9	
1232	30.47	700	22.73	1.19	1.60	6.85	-385	8.5	
1235	30.45	400	22.68	1.18	1.56	6.86	-270	7.2	
1238	30.41	350	22.84	1.18	1.56	6.86	-261	6.1	
1241	30.41	450	22.87	1.18	1.54	6.86	-255	6.3	
1243	30.42	450	22.91	1.18	1.52	6.85	-255	5.5	purged ~5 gal
1245		Sampled CRCP-5852213-100							

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 2/19/14

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: 5852314 (Marsville WSC)

Initial Water Level: 36.15 ft BTOC

Well Diameter: 12 inches

Well Depth: 60.00 ft BTOC

Screen Interval: Unknown

Well Volume: 140 gal

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time:

Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min)~~ or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1015	36.15								Pump on
1017	44.23	470 ~~mL/min~~	22.09	0.798	2.53	6.98	194	3.7	
1019	44.47	↓	22.26	0.796	2.41	7.05	177	4.2	
1021	44.61		22.30	0.799	2.51	7.21	160	2.6	
1023	44.75		22.33	0.802	2.52	7.26	153	1.5	
1025	44.88	↓	22.34	0.805	2.52	7.28	150	1.0	
1027		Sampled	CRCP-5852314-100						

Well Diameter (in)	1	2	3	4	6	8	10	12
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08	5.87
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44	

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 2/18/14

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: ATF Well 1

Initial Water Level: 28.53 ft BTOC

Well Diameter: 16 inches

Well Depth: 50.58 ft BTOC

Screen Interval: Unknown

Well Volume: 230 gal

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time: 1055

Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min)~~ or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1035	28.53								Pump on
1037	42.50	NM	22.30	1.43	6.71	6.82	178	7.8	flow rate can't be measured
1039	42.50	↓	22.30	1.43	4.20	6.85	166	0.0	
1041	42.50		22.36	1.42	3.55	6.85	160	0.0	
1044	42.50		22.42	1.42	3.24	6.84	131	0.8	
1046	42.50		22.41	1.41	3.09	6.84	138	0.7	
1048	42.54		22.42	1.41	2.98	6.84	143	0.2	
1050	44.50	↓	22.41	1.41	2.91	6.84	145	0.0	
1055	Sampled		CRCP-ATF1-100						

Well Diameter (in)	1	2	3	4	6	8	10	16 10.44
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08	
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44	

Monitoring Well Purging Form

Project: Travis County - CRCP
Date: 2/19/14
Location: Austin, Texas
Field Personnel: Kevin Paternak/Liz Rinehart
Well Identification: Buchheit
Initial Water Level: 26ft + 2.5" = 26.21 ft BTOC
Well Diameter: 4 inches
Well Depth: 30.75 ft BTOC
Screen Interval: Unknown
Well Volume: 2.95 gal
Pump/Purging Device: Private pump
Pump Intake Depth: Unknown
Sample Time: 1155
Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min)~~ or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1141									Pump on
1143		5	22.83	0.884	3.80	6.76	187	1.0	
1145		5	23.06	0.882	3.49	6.90	183	0.9	25"
1147		5	23.05	0.881	3.38	6.94	181	0.7	26'5"
1149		5	23.06	0.881	3.24	6.95	179	0.5	26'5"
1155		Sampled CRCP-Buchheit-100 & CRCP-Buchheit-101							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP
Date: 2/19/14
Location: Austin, Texas
Field Personnel: Kevin Paternak/Liz Rinehart
Well Identification: Holweger
Initial Water Level: 33.50 ft BTOC
Well Diameter: 5 inches
Well Depth: 39.75 ft BTOC
Screen Interval: Unknown
Well Volume: 6.4 gal
Pump/Purging Device: Private pump
Pump Intake Depth: Unknown
Sample Time: 0940
Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min)~~ or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen ~~(mg/L)~~ or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
0927	33.50								Pump on
0933	33.60	10	22.18	0.708	3.89	6.89	178	0.5	
0935	33.60	10	22.23	0.708	3.93	6.98	170	0.6	
0937	33.60	10	22.23	0.707	3.89	7.03	165	0.6	
0939	33.64	10	22.26	0.708	3.90	7.04	162	0.5	
0940		Sampled CRCP - Holweger-100							

Well Diameter (in)	1	2	3	4	5	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.02	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	3.86	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP
Date: 2/18/14
Location: Austin, Texas
Field Personnel: Kevin Paternak/Liz Rinehart
Well Identification: NTNW2
Initial Water Level: 32.00 ft BTOC
Well Diameter: 18 inches
Well Depth: 40.77 ft BTOC
Screen Interval: Unknown
Well Volume: 116 gal
Pump/Purging Device: Private pump
Pump Intake Depth: Unknown
Sample Time: 1010
Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate ~~(mL/min)~~ or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) or ~~%~~ +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1000	32.00								Pump on
1002	38.75	NM	22.16	1.75	11.59	7.05	177	3.8	purge rate doesn't work
1004	38.80	↓	22.37	1.75	8.96	7.07	155	1.7	
1006	38.80	↓	22.41	1.75	8.55	7.08	160	3.7	
1008	38.80	↓	22.45	1.74	8.18	7.07	156	5.9	
1010	Sampled		CRCP-NTNW2-100						

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

18
13.21

Monitoring Well Purging Form

Project: Travis County - CRCP
Date: 2/18/14
Location: Austin, Texas
Field Personnel: Kevin Paternak/Liz Rinehart
Well Identification: Wisian W1
Initial Water Level: ~~53.23~~ 52.23 ft BTOC
Well Diameter: 8 inches
Well Depth: 65.10 ft BTOC
Screen Interval: Unknown
Well Volume: 33.6 gal
Pump/Purging Device: Submersible pump
Pump Intake Depth: ~55 ft BTOC
Sample Time: 1455
Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min or ~~gpm~~)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1432	~~53.23~~	480							Pump on
1435	52.24	480	23.17	0.757	6.49	7.15	71	0.9	
1437									pump off
1439	~~52.24~~ 52.25								pump on
1441	~~52.24~~	260	23.46	0.755	6.17	7.17	77	6.5	
1444	52.25	230	23.45	0.751	5.64	7.13	90	5.1	
1447	52.25	230	23.54	0.753	5.46	7.14	94	4.7	
1450	52.25	240	23.62	0.751	5.24	7.11	98	4.2	
1455	Sampled	CRCP-WisianW1-100							

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Monitoring Well Purging Form

Project: Travis County - CRCP

Date: 2/18/14

Location: Austin, Texas

Field Personnel: Kevin Paternak/Liz Rinehart

Well Identification: Wisian W2

Initial Water Level: 47.21 ft BTOC

Well Diameter: 6 inches

Well Depth: 62.18 ft BTOC

Screen Interval: Unknown

Well Volume: 22 gal

Pump/Purging Device: Submersible pump

Pump Intake Depth: ~50 ft BTOC

Sample Time: 1550

Analyses/Notes: TPH (TX1005) and PAH (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min) or (GPM)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/l) or %) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10 mV	Turbidity (NTU) +/- 10%	Comments
1533	47.21								Pump on
1536	47.23	700	23.44	0.853	3.73	7.03	50	0.6	
1539	47.23	250	23.60	0.862	3.46	7.03	63	0.2	
1542	47.23	425	23.69	0.866	3.28	6.99	74	0.4	
1545	47.23	500	23.65	0.869	3.26	7.02	78	0.3	
1548	47.23	500	23.63	0.873	3.22	7.03	83	0.2	
1550		Sampled	CRCP -	Wisian	W2 -	100			

Well Diameter (in)	1	2	3	4	6	8	10
Volume (gal/ft)	0.04	0.16	0.37	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	0.61	1.40	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Date: 11/18/13

Location: Austin, Texas

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Rinehart

Well Identification: 221049 (King)

Initial Water Level: 32.18 ft BTOC NH 11/21/13

Well Diameter: 5 inches

Well Depth: 43.98 ft BTOC

Screen Interval: Unknown

Volume Purged:

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time: 0940

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solids (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	GPM Purge Rate ~~(calculate)~~	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
0925									Pump on
0927	32.18	10	20.88	0.786	8.50	6.16	203	0.0	
0929	32.18	10	20.98	0.783	8.47	6.33	203	0.0	
0931	32.18	10	21.16	0.779	8.38	6.54	199	0.0	
0933	32.18	10	21.23	0.778	8.32	6.61	147	0.0	
0935	32.18	10	21.31	0.778	8.26	6.66	194	0.0	
0937	32.18	10	21.40	0.778	8.19	6.69	142	0.0	
0940	Sampled		CRCP-221049-090						

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Date: 11/18/13

Location: Austin, Texas

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Rinehart

Well Identification: Holweger Well

Initial Water Level: 32.15 ft BTOC NH 11/21/13

Well Diameter: 5 inches

Well Depth: 39.75 ft BTOC

Screen Interval: Unknown

Volume Purged:

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time: 1009

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solidss (SM 2540D), VOCs (SW8260B),~~ TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turbidity (NTU) +/- 10%	Comments
0958									Pump on
1000	32.34	NM	20.79	0.810	5.90	6.87	171	0.0	
1002	32.32	↓	21.04	0.812	5.81	6.76	171	0.0	
1004	32.32	↓	21.13	0.813	5.88	6.76	166	0.0	
1006	32.30	↓	21.17	0.814	5.89	6.79	162	0.0	
1009	Sampled		CRCP - Holweger - 090						

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: **Travis County - CRCP** Date: 11/18/2013

Location: **Austin, Texas** Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Bingham

Well Identification: 5852213 (TXI) Initial Water Level: 29.30 ft BTOC WL 11/21/13

Well Diameter: 5 inches Well Depth: 36.38 ft BTOC

Screen Interval: unknown Volume Purged:

Pump/Purging Device: Tempest Twister (undedicated) Pump Intake Depth: ~ 3' above bottom

Sample Time: 1200 Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turbidity (NTU) +/- 10%	Comments
1126	~~30.70~~								Pump on
1130 ~~1128~~	~~30~~.57	120	20.16	1.35	1.67	6.68	-156	2.1	strong sulfer smell
1133	30.45	120	20.25	1.35	1.14	6.68	-166	2.0	
1136	30.44	120	20.48	1.34	0.90	6.62	-179	2.7	
1139	30.40	100	20.78	1.34	0.64	6.70	-205	1.7	
1142	30.40	100	20.79	1.33	0.46	6.71	-215	1.8	
1145	30.40	100	20.82	1.33	0.25	6.72	-226	1.6	
1148	30.40	100	20.85	1.33	0.24	6.72	-240	1.3	
1151	30.40	100	20.88	1.32	0.20	6.72	-247	1.2	
1154	30.40	100	20.93	1.31	0.21	6.73	-251	1.2	
1157	30.40	100	20.98	1.30	0.20	6.73	-253	1.0	
1200	Sampled CRCP-58 52213-090								
	29.	All	DTW's	corrected	for	spiked	WLM	tape	
	on 11/21/13								

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Date: 11/18/2013

Location: Austin, Texas

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Bhehart

Well Identification: Wisian Well 1

Initial Water Level: 50.05 ft BTOC NH 11/22/13

Well Diameter: 8 inches

Well Depth: 65.10 ft BTOC

Screen Interval: unknown

Volume Purged:

Pump/Purging Device: Tempest Twister (undedicated)

Pump Intake Depth: ~55 ft BTOC

Sample Time: 1329

Analyses/Notes: ~~Ammonia (EPA 350.1), CWF/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
1312	50.05								Pump on
1317	50.05	500	22.39	0.823	4.49	6.88	69	0.2	
1320	50.05	500	22.58	0.821	4.44	6.87	75	0.0	
1323	50.05	500	22.58	0.823	4.31	6.88	80	0.0	
1326	50.05	500	22.60	0.824	4.34	6.91	83	0.0	
1329		Sampled	CRCP-Wisian W1-090						

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Location: Austin, Texas

Well Identification: Wisian Well 2

Well Diameter: 6 inches

Screen Interval: Unknown

Pump/Purging Device: Tempest Twister (undedicated)

Sample Time: 1412

Date: 11/18/13

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Rinehart

Initial Water Level: 45.00 ft BTOC NH 11/21/13

Well Depth: 62.18 ft BTOC

Volume Purged:

Pump Intake Depth: ~50 ft BTOC

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	Purge Rate (mL/min)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
1355	45.00								Pump on
1400	45.00	750	23.20	0.989	3.13	6.81	73	0.0	
1403	45.01	750	22.66	0.988	2.60	6.77	86	0.0	NH 11/21/13
1406	45.01	750	22.56	0.989	2.59	6.75	90	0.0	
1409	45.01	750	22.40	0.989	2.57	6.73	95	0.0	
1412	Sampled	CRCP-Wisian W2-090							

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Location: Austin, Texas

Well Identification: 58522 (Edgar)

Well Diameter: 4 inches

Screen Interval: Unknown

Pump/Purging Device: Private pump

Sample Time: 1503

Date: 11/18/13

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry/Liz Rinehart

Initial Water Level: NM, Water level below pump

Well Depth: 58.36 ft BTOC

Volume Purged:

Pump Intake Depth: Unknown

~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Analyses/Notes

Time	Water Level (ft BTOC)	GPM Purge Rate ~~(mL/min)~~	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
1449									pump on
1453	NM	3.16	22.27	1.17	2.18	6.95	74	0.0	
1455	NM	3.16	22.06	1.17	1.87	6.83	96	0.0	
1457	NM	3.16	21.99	1.17	1.72	6.83	99	0.0	
1459	NM	3.16	21.95	1.17	1.62	6.84	99	0.0	
1501	NM	3.16	21.94	1.17	1.57	6.84	100	0.0	
1503	Sampled		CRCP-58522-090				and	CRCP-58522-091	

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Date: 11/19/13

Location: Austin, Texas

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry / Liz Bingham

Well Identification: NTNW2

Initial Water Level: 30.45 ft BTOC

Well Diameter: 18 inches

Well Depth: 40.77 ft BTOC

Screen Interval: Unknown

Volume Purged:

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time: 0910

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	GPM Purge Rate ~~(mL/min)~~	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
0854									pump on
0856	36.80	300	19.98	1.95	9.49	6.22	157	0.0	
0857	36.80	|	20.74	1.90	8.17	6.54	151	0.0	
0858	36.84	|	20.99	1.89	7.53	6.63	135	0.0	
0859	36.80	|	21.04	1.88	7.85	6.73	138	0.0	
0900	36.80	|	20.93	1.88	7.52	6.80	145	0.0	
0901	36.81	|	20.98	1.88	7.64	6.84	145	0.0	
0902	36.80	↓	20.95	1.87	7.88	6.81	143	0.0	
0910	Sampled CRCP-NTNW2-090								

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: Travis County - CRCP

Date: 11/19/13

Location: Austin, Texas

Field Personnel: ~~Kevin Pasternak~~/Nathan Henry/Liz Rinehart

Well Identification: ATF1

Initial Water Level: 25.28 ft BTOC

Well Diameter: 16 inches

Well Depth: 50.58 ft BTOC

Screen Interval: Unknown

Volume Purged:

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Sample Time: 0950

Analyses/Note:

Time	Water Level (ft BTOC)	GPM Purge Rate ~~(mL/min)~~	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turbidity (NTU) +/- 10%	Comments
0933									Pump on
0935	41.55	3.75	21.11	1.50	2.02	6.58	110	0.0	
0937	41.57	"	21.16	1.50	1.74	6.61	108	0.0	
0939	41.58	"	21.25	1.49	1.16	6.66	106	0.0	
0941	41.58	"	21.30	1.49	0.99	6.67	106	0.0	
0943	41.60	"	21.29	1.49	0.91	6.68	106	0.0	
0945	41.62	↓	21.29	1.49	0.91	6.68	107	0.0	
0950		Sampled	CRCP - ATF1 - 093						MS/MD

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

setup at 1048
55:05 - 52:30

Manville

Project: Travis County - CRCP
Location: Austin, Texas
Well Identification: 5852314 (Manville WSC)
Well Diameter: ? inches
Screen Interval: Unknown
Pump/Purging Device: Private Pump

Date: 11/19/13
Field Personnel: ~~Kevin Pasternak~~/Nathan Henry/Liz Rinehart
Initial Water Level: 34.32 ft BTOC
Well Depth: 60.00 ft BTOC
Volume Purged: Unknown
Pump Intake Depth: Unknown

Sample Time: 1105

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solids (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	GPM Purge Rate ~~(mL/min)~~	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turbidity (NTU) +/- 10%	Comments
1051									Pump on
1053	34.42	1.9	20.35	0.988	4.02	7.18	169	0.0	
1055	34.44	1	20.67	0.989	4.02	7.09	170	0.0	
1057	34.~~45~~ 55	↓	20.80	0.994	3.95	7.05	167	0.0	
1059	34.71	↓	20.82	1.00	4.06	7.05	164	0.0	
1105	Sampled		CRCP-5852314-090						

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.56	2.46	5.56	9.88	15.44

Project: **Travis County - CRCP**

Location: **Austin, Texas**

Well Identification: Buccheit Well

Well Diameter: 4 inches

Screen Interval: Unknown

Pump/Purging Device: Private pump

Sample Time: 1135

Date: 11/19/13

Field Personnel: ~~Kevin Pesternak~~/Nathan Henry / Liz Rinehart

Initial Water Level: ~~25~~ ER 26.25 ft BTOC

Well Depth: 30.75 ft BTOC

Volume Purged:

Pump Intake Depth: Unknown

Analyses/Notes: ~~Ammonia (EPA 350.1), Cl/F/SO4/NO3 (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO3/CO3 (SM2320B), Total Suspended Solides (SM 2540D), VOCs (SW8260B)~~, TPH (TX1005), SVOCs (SW8270C)

Time	Water Level (ft BTOC)	GPM Purge Rate (~~mL/min~~)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	Dissolved Oxygen (mg/L) +/- 10%	pH (SU) +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV	Turdbidity (NTU) +/- 10%	Comments
1126									Pump on
1128	~~26.40~~ 26.42	7.5	22.01	0.975	4.73	6.72	203	0.0	sampled through hose on spicket, because ~~it~~ was stuck on and couldn't be removed
1130	26.42	1	22.06	0.974	4.88	6.72	202	0.0	
1132	26.42	1	22.26	0.974	5.02	6.76	196	0.0	
1135	Sampled CRCP - Buccheit - 090								

Well Diameter (in)	1	3	6	4	6	8	10
Volume (gal/ft)	0.04	0.37	1.47	0.65	1.47	2.61	4.08
Volume (L/ft)	0.15	1.40	5.58	2.46	5.56	9.88	15.44

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: NTNW2
Site Location: Travis County, Austin, TX	Well Diameter (in): 18
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 32.47
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 40.77
Sample ID/Date/Time: CRCP-NTNW2-080 / 9-10-13 / 1100	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = (40.77 / 1) − (32.47 / 2) = 8.3 / 3 ft

Purge Volume = (NA / 3) x (NA gal/ft) x (3 Casing volumes) = NA gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type Well Pump	Type
( ) Purged Dry	( ) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
0953	—	300 gpm	22.29	5.94	1.78	5.93	190	0.0	clear	na
0955	37.90	↓	21.70	6.30	1.75	8.10	180	0.0	"	"
0956	36.90		22.03	6.40	1.35	8.93	175	3.9		
0957	36.90		21.48	6.47	1.75	10.86	194	4.5		
0958	36.90		21.54	6.57	1.74	8.57	194	6.4		

Required to meet the Temp, pH, and SC stability parameters

Gallons purged Unknown

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: ATF1
Site Location: Travis County, Austin, TX	Well Diameter (in): 16
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 29.96
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 50.25
Sample ID/Date/Time: CRCP-ATF1-083/ 9-10-13/ ~~1040~~ 1120 ##9/10/13	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 50.25 (1) - 29.96 (2) = 20.29 (3) ft

Purge Volume= 20.29 (3) x Unknown gal/ft x 3 Casing volumes = Unknown gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
( ) Grab Sample	~~(X) Dedicated Bailer~~ #4 9/10/13	Type_____	Type_____
( ) Purged Dry	( ) Submersible Pump	( ) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other_____	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1112	45.40	800gpm	25.08	7.61	1.33	6.87	219	204	Clear	na
1113	44.15		21.70	6.96	1.37	5.90	232	58.5	"	"
1114	44.82		21.46	6.94	1.36	5.84	229	20.8	"	"
1115	43.77	↓	21.38	6.97	1.36	5.55	222	12.0	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged Unknown

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: MWC, 5852314
Site Location: Travis County, Austin, TX	Well Diameter (in): Unknown
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 40.12
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 60.00
Sample ID/Date/Time: CRCP-5852314-080/9-10-13/1155	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 60.00 (1) − 40.12 (2) = 19.88 (3) ft

Purge Volume = NA (3) × — (gal/ft) × 3 (Casing volumes) = — gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type Well pump	Type
( ) Purged Dry	( ) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
---	---	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	---	---
1149	—	>400 ml/min	23.96	7.30	1.29	6.17	745	10.2	clear	n/a
1150	49.80	↓	21.89	7.36	1.33	7.00	724	4.4	"	"
1151	—		21.42	7.37	1.33	7.09	701	2.4	"	"
1151:30	51.85		21.16	7.36	1.34	7.12	684	1.9	"	"
1152	52.08	↓	20.95	7.36	1.34	7.08	663	0.6	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged Unknown

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: TX1, 5852213
Site Location: Travis County, Austin, TX	Well Diameter (in): 5.5
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 29.79
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 36.10
Sample ID/Date/Time: CRCP/5852213-080/9-10-13/1355	Screen Interval (ft bgs): Unknown
Analyses: TX 1005/ Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 36.10 (1) − 29.79 (2) = 6.31 (3) ft

Purge Volume = 6.31 (3) × 1.469 (gal/ft) × 3 (Casing volumes) = 27.3 gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
~~(X) Low Flow/Micro~~ NH 9/10/13	( ) Disposable Bailer	~~(X) Dedicated Pump~~ 9/11/13	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type Twister	Type
( ) Purged Dry	(X) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1308	–	1500	20.62	7.50	0.962	9.44	-89	1.9	Clear	na
1310	32.14	↓	20.40	7.28	0.951	7.13	-111	6.1	"	"
1312	31.55	↓	20.35	7.29	0.944	0.69	-114	41.0	"	"
1314	31.85	2200	20.39	7.33	0.939	0.60	-118	57.1	"	"
1316	32.03	1600	20.41	7.29	0.93	0.54	-117	54.3	"	"
1317	–	–	20.32	7.14	0.924	0.57	-98	106	"	"
1323	32.90	2400	20.36	7.23	0.903	0.95	-60	92.1	"	"
1336	33.63	2000	20.30	7.30	0.876	2.42	-6	50.4	"	"
1347	34.45	2400	20.41	7.57	0.874	3.47	-1	62.3	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged 727 gallons

Notes Unable to low-flow well due to exceeding drawdown

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: Wisian Well 1
Site Location: Travis County, Austin, TX	Well Diameter (in): 8
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 50.80
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 65.10
Sample ID/Date/Time: CRCP- Wisian W1 -080 / 9-10-13 / 1530	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): ~~~~ ~55

Water Column = (65.10 (1) − 50.80 (2)) = 14.3 (3) ft

Purge Volume = 14.3 (3) × Unknown (gal/ft) × 3 (Casing volumes) = NA gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
(X) Low Flow/Micro	( ) Disposable Bailer	~~(X) Dedicated Pump~~ NH 9/11/13	( ) YSI
( ) Grab Sample	~~(X) Dedicated Bailer~~ NA	Type Twister	Type
( ) Purged Dry	(X) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
( ) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1520	50.80	800	22.35	7.83	0.814	3.35	148	2.2	Clear	na
1522	50.80	600	22.62	7.75	0.814	3.33	162	1.9	"	"
1524	50.80	600	22.60	7.71	0.814	3.38	163	0.9	"	"
1526	50.80	700	22.62	7.70	0.814	3.36	166	0.9	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged > 7 gal

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: Wisian Well 2
Site Location: Travis County, Austin, TX	Well Diameter (in): 6
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 45.40
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 62.18
Sample ID/Date/Time: CRCP-Wisian W2-080/9-10-13/1615	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): ~50

Water Column = 62.18 (1) − 45.40 (2) = 16.78 (3) ft

Purge Volume = 16.78 (3) × 1.469 (gal/ft) × 3 (Casing volumes) = 24.65 gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
(X) Low Flow/Micro	( ) Disposable Bailer	~~(X) Dedicated Pump~~ Oil	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type ~~Typhoon~~ 9/11/13	Type
( ) Purged Dry	(X) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
( ) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1607	45.40	1200	22.20	7.57	0.945	1.91	166	2.4	clear	none
1608	45.40	1200	22.20	7.66	0.951	1.60	160	1.7	"	"
1610	45.40	~~1200~~ 600 set 9/10/13	22.35	7.51	0.952	1.52	166	1.0	"	"
1612	45.40	600	22.41	7.71	0.955	1.60	159	1.1	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged > 6 gal

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: 221049, Sara King
Site Location: Travis County, Austin, TX	Well Diameter (in): 5
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 32.74
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 43.98
Sample ID/Date/Time: CRCP-221049-080/9-11-13/0940	Screen Interval (ft bgs): Unknown
Analyses: TX 1005/Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 43.98 (1) − 32.74 (2) = 11.24 (3) ft

Purge Volume = 11.24 (3) × 1.023 gal/ft × 3 Casing volumes = 34.49 gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
(X) Grab Sample	(_) Dedicated Bailer	Type Well Pump	Type
( ) Purged Dry	( ) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
~~(X) Purged 3 Well Volumes~~ NH 9/11/13	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
0934	32.79	~~72~~ 5.5 gpm NH 9/11/13	21.81	6.18	0.760	7.61	196	1.3	Clear	na
0935	32.80	↓	21.71	6.33	0.759	~~6.36~~ NH 9/11/13	193	1.0	"	"
0936	32.81		21.66	6.42	0.757	7.68	193	0.7	"	"
0937	32.81		21.65	6.47	0.757	7.72	193	0.8	"	"
0938	32.81		21.65	6.51	0.757	7.76	193	0.6	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged > 10 gal

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: Holwager
Site Location: Travis County, Austin, TX	Well Diameter (in): 5
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 33.21
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 46.74
Sample ID/Date/Time: CRCP-Holwager-080/ 9-11-13 / 1015	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 46.74 (1) − 33.21 (2) = 13.53 (3) ft

Purge Volume= 13.53 (3) x 1.023 gal/ft x 3 Casing volumes = 13.84 gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
(/) Grab Sample	( ) Dedicated Bailer	Type well	Type
( ) Purged Dry	( ) Submersible Pump	( ) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1008	33.21	7.2 gpm	21.01	6.75	0.828	8.88	175	0.0	Clear	na
1010	33.36	↓	20.97	6.75	0.829	8.90	176	0.0	"	"
1011	33.40		20.98	6.75	0.829	8.89	178	0.0	"	"
1012	33.40	↓	20.98	6.74	0.829	8.86	179	0.0	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged >18 gal

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: Edgar, 58522
Site Location: Travis County, Austin, TX	Well Diameter (in): 4
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): NM
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): Top of pump @ 39.3 ft btoc
Sample ID/Date/Time: CRCP-58522-080/081 / 9-11-13 / 1115	Screen Interval (ft bgs): Unknown
Analyses: TX 1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = NA (1) - – (2) = – (3) ft

Purge Volume= NA (3) x – (gal/ft) x 3 (Casing volumes) = – gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
(X) ~~Low Flow/Micro~~ pH 9/11/13	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type Well	Type
( ) Purged Dry	( ) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1104	NA	800 ml	22.56	6.87	1.13	5.38	~~176~~ NH 9/11/13	1.3	clear	"
1105	NA	↓	22.43	6.82	1.12	4.78	179	0.2	"	"
1107	NA	↓	22.48	6.83	1.12	4.51	179	0.0	"	"
1108	NA	↓	22.51	6.83	1.12	4.44	179	0.0	"	"
1109	NA	↓	22.52	6.83	1.12	4.54	179	0.0	"	"
1112	NA	↓	22.51	6.81	1.12	4.40	180	0.0	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged > 8 gal

Notes

Groundwater Purging and Sampling Log

Project Name: Travis County – Colorado River Corridor Plan	Well ID: Bucheit
Site Location: Travis County, Austin, TX	Well Diameter (in): 4
Project No./Task No.: 41010113/103	(2) Depth to water (ft BTOC): 26.79
Sampler(s): Nathan Henry/Kevin Pasternak	(1) Total Well Depth (ft BTOC): 30.5
Sample ID/Date/Time: CRCP-Bucheit-080/9-11-13/1225	Screen Interval (ft bgs): Unknown
Analyses: TX1005 / Hold for PAH	Approximate Pump/Tubing Intake (ft BTOC): Unknown

Water Column = 30.5 (1) − 26.79 (2) = 3.71 (3) ft

Purge Volume = 3.71 (3) × 0.653 (gal/ft) × 3 (Casing volumes) = 7.26 gal

Well Diameter (inches)	gal/ft
1	0.041
2	0.163
3	0.367
4	0.653
5	1.023
6	1.469

Purging Method	Equipment		Water Quality Meter
( ) Low Flow/Micro	( ) Disposable Bailer	(X) Dedicated Pump	( ) YSI
( ) Grab Sample	( ) Dedicated Bailer	Type well pump	Type
( ) Purged Dry	( ) Submersible Pump	(X) Dedicated Tubing	(X) Horiba
(X) Purged 3 Well Volumes	( ) Peristaltic Pump	( ) Other	Type U-52

Time	Water Level (ft)	Purge Rate (ml/min)	Temp (°C or °F)	pH (SU)	Spec Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Color	Odor
----	----	100-500	±0.5°C	±0.5	±10%	±0.3	±10mV	±10%	----	----
1215	26'11.5"	NM	24.22	6.88	0.941	7.81	195	0.0	clear	na
1216	26'11.5"	↓	23.53	6.83	0.942	7.64	196	0.0	"	"
1218	26'11.5"	↓	23.30	6.81	0.940	7.71	196	0.0	"	"
1220	26'11.5"	↓	23.27	6.79	0.939	7.60	197	0.0	"	"

Required to meet the Temp, pH, and SC stability parameters

Gallons purged > 8 gal

Notes

Project No.
Book No. 00835

TITLE CRCP - May 2014 GW Monitoring

May 19, 2014

Task: Quarterly groundwater monitoring event. Interim Year 2.
Personnel: Kevin Pasternak (KP) & Liz Rinehart (LR)

0915 KP and LR meet at the Texaco near the Sites. KP calls Tom Webber & finds out he will not be coming. Call Blake Winberley & find out he will not be available until later today. Call Richard Brown from Mansville WSC & he says he is available today at 10pm.
0950 R. Brown arrives at the entrance to the Mansville WSC well.
0956 Setup on 585~~2213~~314 (EP) (Mansville WSC) for sampling.
1003 Pump on at 585~~2213~~314 (EP)
1018 Sampled ~~CRCP-585 2213-110~~ 585314-110 (EP) for TPH, metals, anions, NH_3, TSS. Decon WL meter & brass fitting.
1043 Setup at Edgar well (585
1056 Pump on at 58522 (Edgar).
1107 Sampled CRCP-58522-110 for TPH, metals, anions, NH_3, & TSS. Decon WL meter & brass fitting.
1133 Head to Winberley property to check out their private well.
1140 Arrive at Winberley property.
- well info:
  - off for about 10 days
  - wells don't have ID's
  - well located off of main road through orchard
  - well reportedly can run 6 units straight 24/7 w/o drawing down
  - based on Winberley account water not from the river, LCRA tried to prove that Winberleys were pulling river water, but not successful
  - DTW - 33.82 ft BTOC
  - TD - 51.75 ft BTOC
  - 16" well - Decon probe

1221 Setup on 221049 (King well) for sampling.
1230 Pump on at 221049.
1243 Sampled CRCP-221049-110 for TPH, metals, anions, TSS, NH_3. Decon wl. meter & brass fitting.
1255 Take lunch break.

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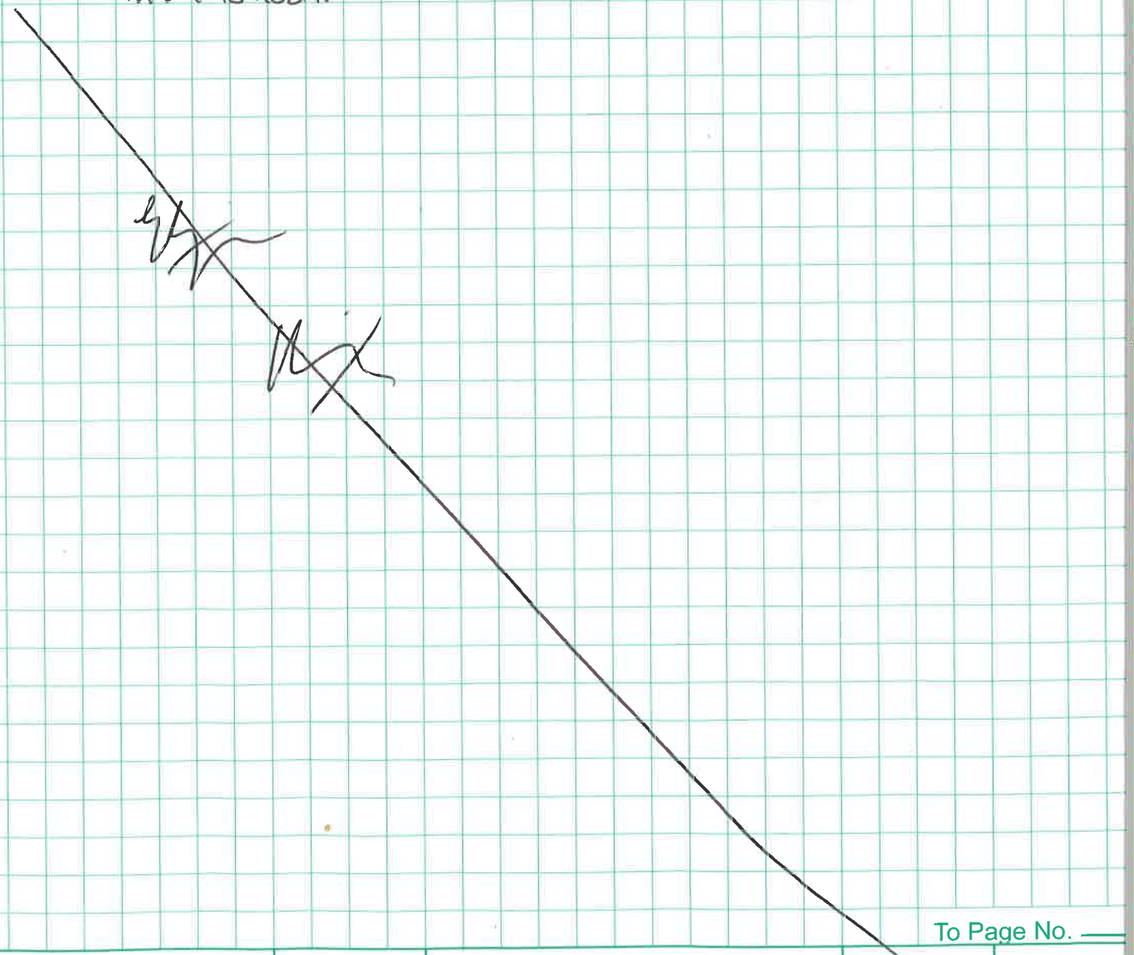
ed & Understood by me, | Date | Invented by: | Date
Recorded by:

May 19, 2014

1315 Return from lunch.
1323 Stop at Holweger residence & let them know we are here to sample.
1330 Setup on Holweger well.
1337 Pump on at Holweger well.
1353 Sampled CRCP-Holweger-110 for TPH, metals, anions, NH_3, TSS. Decon WL meter & brass fitting.
1419 Setup on Buchheit well for sampling.
1429 Pump on at Buchheit.
1455 Sampled CRCP-Buchheit-110 for TPH, metals, anions, NH_3, TSS.
1530 Finish for the day. KP to deliver samples to the lab (DHL) this afternoon.



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Witnessed & Understood by me, | Date | Invented by: | Date 5/19/14
Recorded by:

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May 20, 2014

Task: Quarterly groundwater monitoring event. Interim Year 2.
Personnel: Kevin Pasternak (KP) & Liz Rinehart (LR)

0835 LR arrives on Site & begins getting equipment ready & gets ice for samples.
0845 KP arrives on Site.
0904 Auto calibrate Horiba U-52.
pH: 4.01 SU
Cond: 4.49 mS/cm
Turb.: 0.0 NTU
DO: 8.07 mg/L
0932 Arrive at TXI to sign in.
0937 Head to NTNW2. Call Emily Brown
0952 Arrive at NTNW2 & setup for sampling.
1005 Pump on at NTNW2.
1015 Sampled CRCP-NTNW2-113 (MS/MSD) for TPH, metals, anions, TSS, NH_3. Decon WL meter.
1025 Gauge NTNW1. DTW = 28'7" = 28.58 ft BTOC
1037 Setup on ATF well for sampling.
1100 Pump on at ATF Well 1.
1109 Sampled CRCP-ATF1-110 & CRCP-ATF1-111 (duplicate) for metals, anions, TSS, NH_3. Decon WL meter & brass fitting.
1135 Setup on 5852213 (TXI well) for sampling.
1207 Pump on at 5852213.
1235 Sampled @ CRCP-5852213-110 for metals, anions, TPH, NH_3, TSS. Decon WL meter & submersible pump.
1255 Go to see is Jack Sharp & students will be joining us to observe sampling of the Wisian wells.
1305 Take lunch break while waiting to see if J. Sharp is coming.
1310 J. Sharp arrives with one student.
1335 Head to Wisian Well 2.
1346 Stop inside Wisian property and do HSE discussion w/ J. Sharp and his student.
1357 Setup on Wisian Well 2 for sampling.
1414 Pump on at Wisian Well 2.
1445 Sampled CRCP-WisianW2-110 for metals, anions, TPH, TSS, & NH_3. Decon WL meter & pump.

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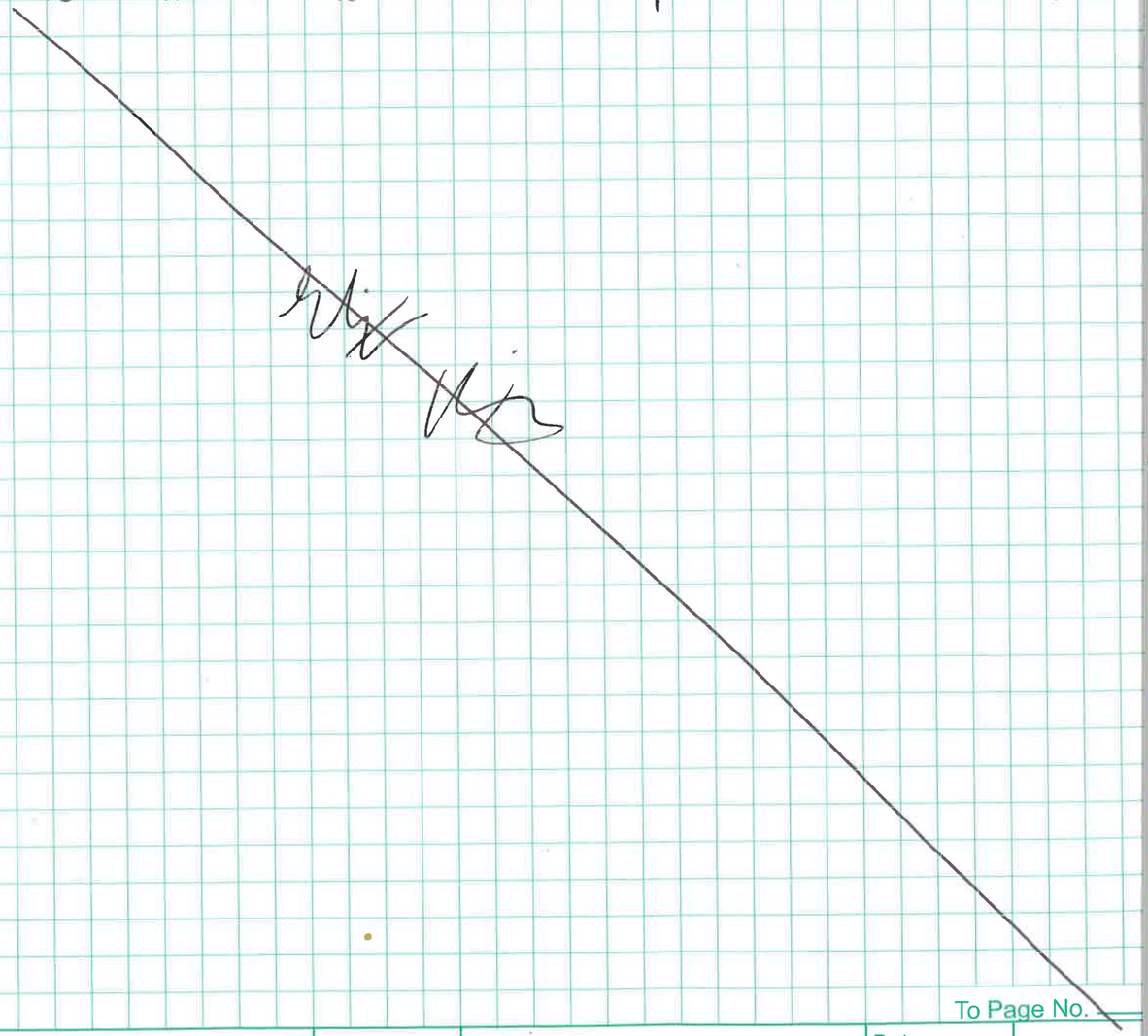
May 20, 2014

1505 Sampled CRCP-WisianW2-115 (equipment blank) for the same parameters as the normal.
1525 J. Sharp and student leave the Site.
1530 Setup on Wisian W1 for sampling.
1540 Pump on at Wisian W1.
1557 Sampled CRCP-WisianW1-110 for TPH, metals, anions, TSS, & NH_3. Decon WL meter & pump.
1620 Go to TXI to sign out.
1650 K. Pasternak leaves and delivers samples to DHL. LR off Site.



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Project No.
Book No. 00835 TITLE CRCP - Feb. 2014 GW Monitoring

February 18, 2014

Task: Quarterly groundwater monitoring event. Interim Year 2.
Personnel: Kevin Pasternak (KP) & Liz Rinehart (LR)

0830 Pick up bottles and supplies from LCRA lab.
0910 Arrive at Exxon for ice and to meet w/Chuck Abolt, student of Jack Sharp, who will be joining us for sampling.
0925 C. Abolt arrives. KP discusses the work and HSE.
0930 Auto calibrate Horiba U52.
pH: 4.00
Cond.: 4.51 mS/cm
Twb.: 0.0 NTU
DO: 9.70 mg/L
0950 Arrive at NTNW2 for sampling.
0952 Setup at NTNW2 for sampling.
1000 Pump on at NTNW2.
1010 Sampled CRCP-NTNW2-100 for TPH + Pah. Decon w/ meter.
1023 Measure fluid levels at NTNW1. Decon w/ meter.
DTW: 27ft 8"
1030 Setup on ATFW1 for sampling.
1035 Pump on ATFW1.
1055 Sampled CRCP-ATF1-100 for TPH + Pah. Decon w/ meter.
1120 Check in at TXI. (sign-in)
1143 Setup on 5852213 (TXI) for sampling and the installation of a new transducer.
1245 Sampled CRCP-5852213-100 for TPH + Pah. Decon w/ meter+pump.
1310 Sign out at TXI.
1315 Go to lunch.
1412 Setup on Wisian well 1 for sampling.
1432 Pump on at Wisian well 1.
1455 Sampled CRCP-Wisian W1-100 for TPH + Pah. Decon w/ meter + pump.
1510 Sampled CRCP-Wisian W1-105 for TPH + Pah. Equip blank.
1523 Setup on Wisian well 2 for sampling.
1533 Pump on at Wisian well 2.
1550 Sampled CRCP-Wisian W2-100
1625 Sampling completed for the day.

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ed & Understood by me, | Date | Invented by: | Date 2/18/14 | Recorded by:

TITLE CRCP - Feb. 2014 GW Monitoring Project No.
Book No. 00835

February 19, 2014

Task: Quarterly groundwater monitoring event. Interim Year 2.
Personnel: Kevin Pasternak (KP) & Liz Rinehart (LR)

0750 LR arrives ~~on Site and begins untoa~~ (ER) at Texaco and begins prepping equipment and gets ice.
0810 KP arrives ~~on Site~~ (ER) at Texaco.
0820 Auto calibrate Horiba U52.
pH: 4.00
Cond: 4.49 mS/cm
Twb: 0.0 NTU
DO: 8.95 mg/L
0837 Setup on 221049 (Sarah King's well) for sampling.
0847 Pump on at 221049.
0900 Sampled CRCP-221049-100 for TPH & Pah. Decon w/ meter.
0912 Arrive at Holweger residence and let them know we are sampling
0917 Setup on Holweger well.
0927 Pump on at Holweger well.
0940 Sampled TCRCP-Holweger-100 for TPH + Pah. Decon w/ meter.
1010 Setup on 5852314 (Mansville WSL well) for sampling.
1015 Pump on at 5852314.
1027 Sampled CRCP-5852314-100 for TPH & Pah. Decon w/ meter.
1050 Setup on 58522 (Edgar) for TPH + Pah.
~~Pump on at 58522.~~ (ER)
~~Sampled CRCP-58522-103 for TPH + Pah. Decon w/ meter.~~ (ER)
1100 Well 58522 (Edgar well) is currently not operational. Call Edgar to confirm. No answer, but left message. Will collect sample once well is fixed. DTW = 41.40 ft BTOC
1125 Setup on Buchheit well for sampling.
1141 Pump on at Buchheit well.
1155 Sampled CRCP-Buchheit-100 and CRCP-Buchheit-101 (dup) for TPH + Pah.
1250 Drop off samples at the LCRA lab.
1320 Drop off KP at his vehicle.

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Witnessed & Understood by me, | Date | Invented by: | Date 2/19/14 | Recorded by:

November 18, 2013

Task: November quarterly groundwater monitoring event, Interim Year 2

Personnel: Nate Henry and Liz Rinehart

0835 Pick up coolers from lab and stop for ice for samples.
0855 Go to Sara King's to confirm gate will be open for us.
0900 Arrive at Native Tree Nursery Well 2 for sampling. Realize this well is scheduled for Tuesday, so leave and head back to Sara King's well to sample.
0905 Arrive at Sara King residence.
0910 Setup on well, 221049 DTW: 32.18 ft BTOC NH 11/21/13
Calibrate Horiba U-52:
pH = 3.99
Conductivity = 4.49 mS/cm
Turbidity = 0.0 NTU
DO = 8.95 mg/L @ 21.22°C
0925 Pump on at 221049
0940 Sampled CRCP-221049-090 for low level detection TPH + PAH and SVOCs. Decon WL meter.
0947 Arrive at Holweger residence.
0955 Setup at Holweger well for sampling. DTW = ~~33.15~~ 32.15 NH 11/21/13 ft BTOC.
0958 Pump on at Holweger well.
1009 Sampled CRCP-Holweger-090 for low level detection TPH + PAH and SVOCs. Decon WL meter
1015 Leave Holweger property to go sign-in at TXI.
1025 Sign in at TXI
1044 Arrive at TXI well 5852213 for sampling. DTW = ~~30.30~~ 29.30 NH 11/21/13 ft BTOC
1126 Pump on at TXI well 5852213
1200 Sampled CRCP-5852213-090 for low level detection TPH + PAH and SVOCs. Decon WL meter and submersible pump
1220 Go to lunch.
1240 Arrive at the Wisian property to sample.
1250 Call Richard Brown; he agrees to meet us at 11am tomorrow to get access to well.
1252 Setup on Wisian well 1. Realize lab didn't get us lab grade DI water. Will get some tomorrow and do the EB on Wisian Well 2. Wisian well 1 DTW = 50.05 ft BTOC

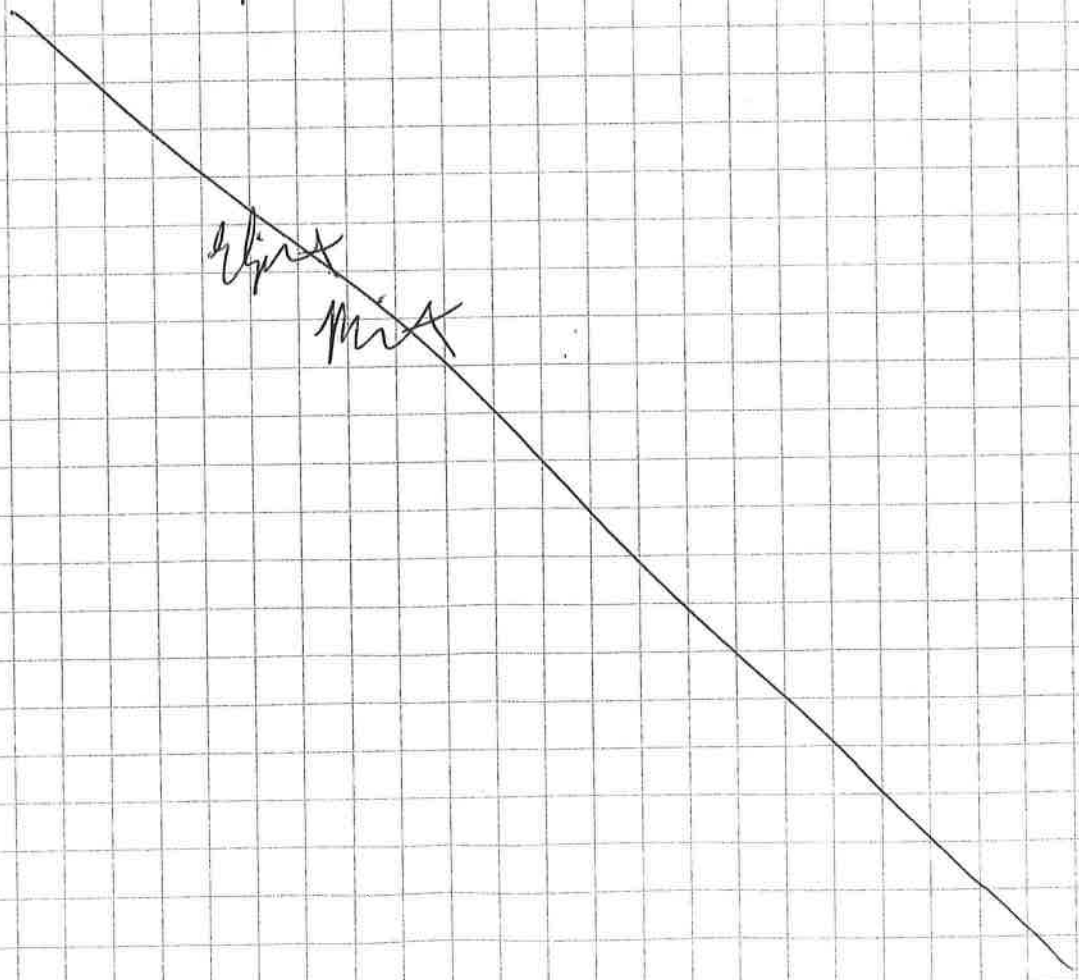
To Page No. ____

Witnessed & Understood by me,	Date	Invented by: NH 11/21/13	Date
	11/18/13	Recorded by: Liz Rinehart	

Project No.
Book No. 00835 TITLE CRCP - Nov. 2013 GW Monitoring

age No. ____

1312 Pump on at Wisian Well 1
1329 Sampled CRCP-WisianW1-090 for low level detection TPH + PAH + SVOCs. Decon w/ meter and Tempest Twister pump.
1340 Setup on Wisian Well 2 for sampling. DTW = ~~46.00~~ 45.00 ft BTOC NH 11/21/13
1355 Pump on at Wisian Well 2.
1412 Sampled CRCP-WisianW2-090 for low level detection TPH + PAH and SVOCs. Decon w/ meter and Tempest Twister pump.
1420 Leave Wisian property and head to Douglas Edgar property.
1437 Arrive at Edgar property and setup on 58522 well. Gate locked. Tried to call Edgar, no one answers, so will walk in.
1449 Pump on at well 58522 (Edgar).
1503 Sampled CRCP-58522-090 and CRCP-58522-091 (dup) for low level detection TPH and PAH and SVOCs. Decon w/ meter.
1541 Drop off samples at the lab and pick-up DI water for EB and bubble wraps for SVOC bottles.



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ssed & Understood by me, | Date | Invented by: | Date 11/18/13

November 19, 2013

Task: November quarterly groundwater monitoring event, Interim Year 2
Personnel: Nate Henry & Liz Rinehart

0823 Stop and get ice for sample cooling
0838 Arrive at Native Tree Nursery to sample NTNW2.
0844 Setup on NTNW2 for sampling. DTW = 30.45' BTOC
0850 Auto calibrate Horiba 452
pH: 4.00
Conductivity: 4.51 mS/cm
Turbidity: 0.0 NTU
DO: 11.63 mg/L at 13.32°C
0854 Pump on at NTNW2.
0910 Sampled CRCP-NTNW2-090 for low level detection TPH + PAH and SVOCs. Decon w/ meter. ~~and~~ ER
0915 Gauge DTW on NTNW1 = 28.00 ft BTOC.
0920 Wait at gate to Austin Tree Farm to be let in to access ATF1.
0928 Setup on ATF1. DTW = 25.28 ft BTOC
0933 Pump on at ~~09~~ ER ATF1.
0950 Sampled CRCP-ATF1-093 ~~(DUP)~~ ER (MS/MSD) for low level detection TPH + PAH and SVOCs. Decon w/ meter.
1005 Leave ATF to go signout at TXI.
1024 Arrive at Manville WSC gate. Wait for Richard Brown to come let us in.
1030 Sampled CRCP-WisianW2-095 (equipment blank) for low level detection TPH + PAH and SVOCs.
1040 Richard Brown arrives to let us onto the Manville WSC property.
1048 Setup on well 5852314 for sampling.
1051 Pump on at 5852314.
1105 Sampled ~~58~~ ER CRCP-5852314-090 for low level detection
1112 Leave Manville WSC property and head to Buccheit property.
1115 Arrive at Buccheit residence and set up on well for sampling
1126 Pump on at Buccheit well.
1135 Sampled CRCP-Buccheit-090 for low level detection TPH + PAH and SVOCs.

TITLE CRCP - September 2013 GW Monitoring

Project No.

Book No. 00835

From Page No. ____

Task: September quarterly groundwater monitoring event, Interim Year 2
Personnel: Kevin Pasternak and Nathan Henry

0935 Arrive at Native Tree Nursery. Contact Emily Brown
0940 Calibrate Horiba U-52

pH: 4.01
Conductivity: 4.49 mS/cm
Turbidity: 0.0 NTU
DO: 9.56 mg/L
Temp: 20.91° C

0953 Turned on pump at NTNW2
1000 Collect sample CRCP-NTNW2-080
1027 Set up at ATF1, DTW = 29.96 ft btoc, TD = 50.25 ft btoc
1112 Pump on at ATF1, B. Heathenly arrived to activate pump, tripped breaker
1120 Collected sample CRCP-ATF1-083, MS/MSD, sample bottles labeled with sample time @ 1040
1142 Set up at MW5 Well 5852314
1155 Collect sample CRCP-5852314-080
1220 Signed in at TX1 site trailer
1235 Set up at TX1 well, 5852213
1303 Pump on at 5852213, Dedicated Twister
1355 Collected sample CRCP-5852213-080, 3-well volumes due to exceeding max drawdown, sign out at TX1 @ 1420
1457 Arrived at Wisian Well 1
1530 Collected sample CRCP-WisianW1-080
1540 Collected sample CRCP-WisianW1-085, EB
1605 Pump on at Wisian Well 2
1615 Collect sample CRCP-WisianW2-080
1625 Lock Wisian gate. Offsite for the day

DH

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Witnessed & Understood by me,	Date Tue 9/10/13	Invented by:	Date
		Recorded by:	

0915 Arrive at Sara King residence, purchased simple ice prior to arrival.
0925 Set up on well, 221049 DTW =
Calibrate Horiba U-52:

pH: 4.01
Conductivity: 4.49 mS/cm
Turbidity: 0.0 NTU
DO: 9.22 mg/L
Temp: 23.22

0932 Pump on at 221049
0940 Collect sample CRCP-221049-080
0955 Arrive at Holweger residence
1006 Pump on at Holweger Well
1015 Collect sample CRCP-Holweger-080
1030 Gauge NTW Holweger well, DTW = 30' 10"
1045 Arrive at Edgar residence.
1100 Gauged depth to water, static water level below top of pump.
1103 Pump on at 58522
1115 Collected samples CRCP-58522-080/081
1140 Arrive at Buccheit residence. Attempt to call Mrs. Buccheit but no answer, left voicemail
1205 Set up on Buccheit well. Unable to remove hose from spigot. Will sample through
DTW = 26'9.5", 30' 6" ft btoc
1211 Pump on at Buccheit well
1225 Collected sample CRCP-Buccheit-080
1240 Packed coolers and conducted housekeeping, left site.
1300 Relinquished samples at ELS.

Dt

Witnessed & Understood by me, | Date Wed | Invented by: Dt | Recorded by: | Date