Moore&VanAllen

By Hand Delivery

September 8, 2010

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Re: Assessment Monitoring Report—Swift Creek Coal Combustion By-products Structural Fill Site

Dear Ms. Drummond:

Enclosed please find the completed Assessment Monitoring Report for The Swift Creek Project, Highway 301, Nash County Rocky Mount, North Carolina. This report is dated September, 2010. It was prepared for REUSE TECHNOLOGY, INC., Charlotte, North Carolina, by Sherrill Environmental, Inc., Durham, North Carolina.

We will be happy to respond to any questions you may have concerning the report.

Very truly yours,

Moore & Van Allen PLLC

William A. White

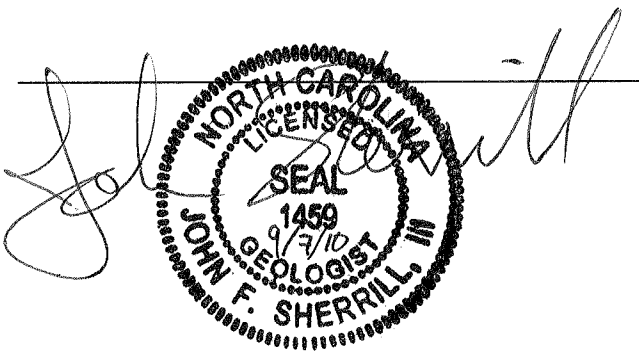
cc: Robert Waldrop
Rick Neff

Assessment Monitoring Report
June 30, 2010
Swift Creek Project
Highway 301

Nash County
Rocky Mount, North Carolina

Prepared for:
REUSE TECHNOLOGY, INC.
Charlotte, North Carolina

September 2010



Prepared by:

Sherrill Environmental, Inc.

Durham, North Carolina

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1.0 INTRODUCTION

Sherrill Environmental, Inc. (Sherrill) was contracted by ReUse Technology, Inc. (ReUse) to perform Semi-Annual Groundwater and Surface Water Monitoring at the Swift Creek Project. The Swift Creek Project is a "Beneficial Use" fill utilizing coal combustion by-products (CCBs) in the development of a commercial property. The Project is located on the east side on US Highway 301 at Swift Creek near Battleboro, North Carolina (Figure 1). As determined by a review of historical DOT aerial photographs the property was previously developed as a motel with a restaurant (1961). A 1981 aerial photograph shows the project area to consist of the motel and restaurant with the remaining portion of the project area in agricultural use.

On November 11, 1991, ReUse Technology, Inc. submitted a letter to the Solid Waste Management Section seeking approval to use coal ash as structural fill material in the development of 25 acres of commercial property along Highway 301 at Swift Creek. On December 3, 1991, the Solid Waste Section issued a letter to ReUse that stated "Based upon the information received, the project appears to meet the guidelines previously agreed to for such reuse." In September 1992, ReUse began placement of coal ash at the site. In January 2003, the last shipment of coal ash was accepted at the site. On March 23, 2003, the site had been graded, compacted, covered with an 18 inch soil cap and planted with grass seed. On November 4, 2004, the Closure Notice was forwarded to the Solid Waste Section. In March 2006, a Comprehensive Site Assessment (CSA) for the Swift Creek Project was submitted to the Solid Waste Section. In December 2006, an Assessment Monitoring Plan was submitted to the Solid Waste Section. On February 22, 2007, the Assessment Monitoring Plan was approved by the Solid Waste Section.

Eight sampling events have indicated that groundwater associated with the deeper monitoring wells (MW-1D, MW-2D, MW-5D) have not shown any impact from the CCB structural fill. The deeper wells were not sampled for this sampling event as Sherrill believes the existing analytical database is sufficient.

2.0 CORRECTIVE MEASURES

A corrective measure designed by Appian Consulting Engineers, P.A. consisting of a longitudinal subsurface drain along the western portion of the site was completed in January 2008. The purpose of the measure is to intercept groundwater flowing from west to east and therefore reduce the groundwater level in the area of the site. To monitor the effectiveness of the corrective measure, two piezometers (P-23 and P-24) were installed at 20 feet east and west of the cut-off drain. These piezometers monitor the effect of the cut-off drain in reducing the groundwater level at the project. The location of the cut-off drain (6" Lateral Subsurface Drain) and the new piezometers are shown on the site map (Figure 2).

3.0 SITE GEOLOGY

The site surficial geology consists of an alluvial terrace constructed by the fluvial deposition silts, sands and gravels. The sequence coarsens downward with some coarse sand with gravel present near the base. The terrace deposit overlies the massive and extensive Yorktown Formation. The Yorktown Formation is Pliocene in age and was deposited in the Pliocene Yorktown Sea that covered the entire coastal plain and the eastern most portions of the Piedmont. Depositional environments were back barrier lagoons, shallow inner-bay and estuarine environments and on the open shallow shelf (The Geology of the Carolinas, Horton and Zullo, 1991). The Yorktown in the region of the site is generally described as blueish-gray fine to very fine, silty sands, sandy silt or silty clay, well-sorted and very shelly.

4.0 MONITORING WELLS

A total of 11 monitoring wells are located around the perimeter of the Swift Creek Project (Figure 2). Monitoring wells MW-1S (shallow) and MW-1D (deep) are paired monitoring wells located near the center of the project approximately 25 feet east from the edge of the CCB fill. The MW-1S is completed in alluvial sediments and MW-1D is completed in the deeper marine sediments of the Yorktown Formation.

The paired monitoring wells MW-2S (shallow) and MW-2D (deep) are constructed similar to the MW-1 pair. The MW-2 pair is located on a roadway constructed into the swamp and is approximately 160 feet downgradient from the edge of the CCB fill and 135 feet downgradient of MW-1S and MW-1D.

Another paired monitoring well set, MW-5S (shallow) and MW-5D (deep), is located upgradient of the Swift Creek Project on the west side of US Highway 301. Again, the

construction of this monitoring well set is similar with the shallow well screened in alluvial sandy sediments and the deeper well screened in the massive marine sediments.

Monitoring wells MW-3, MW-4, MW-6, MW-7 and MW-8 are shallow wells located at the southeast, southwest, northwest and northeast corners of the project. The borings were advanced through the alluvial material until the underlying marine unit was encountered as determined by split-spoon sampling. The alluvial material varied from a silty fine sand and clayey silty fine sand in the upper portion that generally coarsened downward. Borings at MW-5S, MW-6, MW-7 and MW-8 encountered medium to coarse quartz sand above the contact with the underlying marine unit.

All of the eleven borings were completed using 2-inch schedule 40 PVC with 10-foot slotted screens. The monitoring wells were completed with stick-up casing and 4-inch schedule 40 PVC protective casings with lockable caps.

5.0 GROUNDWATER TABLE

The average groundwater elevation as measured in the site monitoring wells from 2005 to 2010 ranged from a high of 93.45 feet to a low of 88.89 feet (Table 1). The average groundwater elevation at the site is 91.60 feet with a standard deviation of 1.25 feet.

The average water elevation as measured in piezometers screened in the coal ash fill (P-12 through P-20) from 2005 to 2010 have ranged from a high of 98.41 feet to a low of 90.65 feet (Table 2). The average water elevation measured in the ash fill is 95.19 feet with a standard deviation of 2.28 feet.

	12/1/05 to 10/22/07		3/22/08 to 6/30/10	
	Average	Stand. Dev.	Average	Stand. Dev.
Elevation of Water in Ash Fill (P-12 to P-20)	93.72	2.29	96.13	1.93
Elevation of Groundwater (MW-1 to MW-8)	91.56	1.82	91.66	0.95

The corrective measure of the longitudinal subsurface drain along the western portion of the site was completed in January 2008. As shown on the above table, the water elevations in the ash fill appear to have risen since the installation of the corrective measure. This rise is not believed to be a result of the corrective measure but due to precipitation, infiltration and holding. The elevation of groundwater appears to be approximately the same with a lower standard deviation suggesting that the 6" Lateral Subsurface Drain along the western edge of the project has served to reduce site groundwater fluctuation. The difference in the water elevation in the CCB fill and the elevation of the shallow groundwater table suggests that they are not connected. The

separation is; however, not complete as evident from the detection of CCB related contaminants in the shallow groundwater table.

A map of the shallow groundwater table is shown on Figure 3. The map shows that the shallow groundwater flow is in an east northeast direction.

6.0 SAMPLE COLLECTION

On June 29, 2010, the site monitoring wells were purged using a new disposable polyethylene bailer for each well. On June 30, 2010, groundwater samples were collected within 24 hours after purging. The resting period allowed for possible particulate in the water to settle prior to sampling. Samples were collected into laboratory prepared glassware, placed in an iced cooler and transferred to Enco Laboratories in Cary, North Carolina. Groundwater samples were analyzed for the Division's requested parameters of sulfate and total RCRA metals.

On June 30, 2010, Sherrill collected a surface water sample at station SW-1 located at the Highway 301 bridge over Swift Creek. Due to low surface water levels, no water was present at locations SW-2 and SW-3 that was sufficient to sample. The Lane Swamp sample (SW-3) was collected at the Highway 301 bridge over Lane Swamp.

7.0 GROUNDWATER ANALYSIS

The analytical results for this and the previous groundwater sampling event are summarized on Table 3 and the laboratory report is included in the Appendix. On January 1, 2010, the North Carolina Administrative Code – Title 15A Subchapter 2L Groundwater Standard was revised. The new 2L Standards allows for more exceedances to be reported at the site. Exceedences of the NCAC 2L Groundwater Standard were detected in the groundwater samples from the shallow downgradient monitoring wells MW-1S, MW-3, MW-6, MW-7 and MW-8 (Figure 4). No exceedences of the 2L Groundwater Standard were detected in the groundwater samples from the shallow upgradient monitoring wells MW-4 and MW-5S.

Arsenic – The 2L Standard for arsenic is 0.010 mg/L. Concentrations of arsenic were detected in the eastern downgradient monitoring wells MW-1S and MW-3 at 0.012 mg/L and 0.011 mg/L, respectively. Arsenic concentrations in the northern downgradient monitoring wells were considerably higher and increased in concentrations from west to east. Arsenic concentrations were 0.109 mg/L at MW-6, 0.208 mg/L at MW-7, and 0.366 mg/L at MW-8.

Lead – The 2L Standard for lead is 0.015 mg/L. Lead concentrations that exceeded the 2L Standard were limited to the northern portion of the site. Lead concentrations were 0.155 mg/L at MW-6, 0.379 mg/L at MW-7 and 0.283 mg/L at MW-8.

Sulfate – The 2L Standard for sulfate is 250 mg/L. Concentrations of sulfate were detected in the eastern downgradient monitoring wells MW-1S and MW-3 at 280 mg/L and 840 mg/L, respectively. Sulfate concentrations in the northern portion of the site were 300 mg/L at MW-6, 530 mg/L at MW-7 and 500 mg/L at MW-8.

Constituents detected in concentrations less than the 2L Standard and above the NC Solid Waste Section Limit (SWSL) were barium, cadmium, chromium and mercury. Silver and selenium were not detected in any concentrations above the Solid Waste Section SWSLs.

8.0 SURFACE WATER ANALYSIS

The analytical results for this and the previous surface water sampling events are summarized on Table 4 and the laboratory report is included in the Appendix. Surface water samples were collected at the Highway 301 bridge over Swift Creek (SW-1) and at the Highway 301 bridge over Lane Swamp. Due to low surface water levels, no surface water was present in a quantity that could be sampled at the end of the roadway for MW-2 (SW-2), and northeast of MW-8 in Lane Swamp (SW-3). Some water was present at these locations in shallow stagnant pools.

None of the tested parameters exceeded the NCAC 2B Surface Water Standard. Barium was detected at 0.032 mg/L at SW-1 and at 0.328 mg/L at SW-3. Sulfate concentrations were less than 5 mg/L at SW-1 and 47 mg/L at SW-3.

9.0 DISCUSSION AND SUMMARY

Exceedances of the 2L Groundwater Standard were detected in the samples from monitoring wells MW-1S, MW-3, MW-6, MW-7 and MW-8. These wells monitor shallow groundwater downgradient of the CCB fill. No exceedance of a 2L Standard was detected in the upgradient monitoring wells (MW-4, MW-5S). The deeper monitoring wells (MW-1D, MW-2D and MW-5D) were not sampled as it has been demonstrated that they are not in connection with the shallow site contamination. No exceedance of a 2B Surface Water Standard was detected.

The corrective measure of the longitudinal subsurface drain along the western portion of the site was completed in January 2008. The water elevations in the ash fill appear to have risen since the installation of the corrective measure. The elevation of groundwater appears to be approximately the same with a lower standard deviation suggesting that the

subsurface drain has served to reduce site groundwater fluctuation. This data suggests a separation between the CCB fill and the shallow groundwater table. The separation is, however, not complete as evident from the detection of ash related contaminants in the shallow groundwater table. This information also suggests that the source of the water present in the CCB fill is from on site precipitation.

In summary, some shallow groundwater contamination is present adjacent and downgradient of the CCB fill. The contamination appears limited vertically as has been shown by no contaminants detected in the deeper monitoring well. The contamination appears limited to the east side of Highway 301 as no contaminants were detected in the upgradient shallow and deep pair of monitoring wells MW-5S and MW-5D on the west side of Highway 301. The direction of groundwater flow is to the east and northeast. The shallow groundwater associated with the site is likely to discharge to the surface water of Lane Creek Swamp and the Swift Creek Swamp. Analysis of surface water samples has not indicated any contamination. No receptors are identifiable for this site and the low level of contamination attenuates as it migrates from the project area into the adjacent swamp.

A trend of increasing concentrations of arsenic and lead has been observed at the northeast monitoring wells MW-7 and MW-8. At this location the concentrations of arsenic and lead are approximately an order of magnitude greater that their respective 2L Standard.

10.0 RECOMMENDATIONS

Sherrill recommends continuing with the Assessment Monitoring. The next quarterly event for measuring water levels is scheduled for September 2010. The next semiannual event for measuring water levels and collecting groundwater and surface water samples is scheduled for December 2010.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
SWIFT CREEK PROJECT

Sherrill Environmental, Inc.

	MW-1S	MW-1D	MW-2S	MW-2D	MW-3	MW-4	MW-5S	MW-5D	MW-6	MW-7	MW-8	Average	Lane Swamp Bridge
TOC ELV.	99.54	99.90	94.87	95.22	102.15	106.06	102.68	102.67	98.41	98.63	95.42		92.25
12/1/2005	8.21	8.57	4.72	4.70	9.65	11.24	6.01	6.40	7.17	7.63			
GW ELV.	91.33	91.33	90.15	90.52	92.50	94.82	96.67	96.27	91.24	91.00		92.58	
1/8/2006	8.11	8.28	NM	NM	9.48	10.15	5.86	5.68	7.18	7.74			
GW ELV.	91.43	91.62			92.67	95.91	96.82	96.99	91.23	90.89		93.45	
6/9/2006	8.69	9.05	4.83	4.87	10.32	11.41	6.94	6.84	7.74	8.66			
GW ELV.	90.85	90.85	90.04	90.35	91.83	94.65	95.74	95.83	90.67	89.97		92.08	
4/4/2007	7.80	8.18	4.40	4.75	9.31	9.96	6.12	5.96	7.28	7.80	4.84		
GW ELV.	91.74	91.72	90.47	90.47	92.84	96.10	96.56	96.71	91.13	90.83	90.58	92.65	
8/21/2007	10.89	11.30	6.77	6.82	11.40	13.28	9.57	9.42	10.80	10.71	7.67		
GW ELV.	88.65	88.60	88.10	88.40	90.75	92.78	93.11	93.25	87.61	87.92	87.75	89.72	
10/21/2007	11.40	11.76	7.31	7.43	12.98	14.06	10.62	10.63	11.90	11.41	8.30		
GW ELV.	88.14	88.14	87.56	87.79	89.17	92.00	92.06	92.04	86.51	87.22	87.12	88.89	
1/31/2008	9.13	9.42	4.86	5.02	10.70	14.11	7.65	8.11	8.44	8.71	5.57		
GW ELV.	90.41	90.48	90.01	90.20	91.45	91.95	95.03	94.56	89.97	89.92	89.85	91.26	
3/22/2008	8.10	8.44	4.40	4.54	9.18	13.28	6.98	7.34	7.18	7.79	4.78		2.51
GW ELV.	91.44	91.46	90.47	90.68	92.97	92.78	95.70	95.33	91.23	90.84	90.64	92.14	89.74
6/17/2008	9.12	9.42	5.03	5.23	10.54	14.05	8.93	8.92	8.36	9.06	6.09		3.20
GW ELV.	90.42	90.48	89.84	89.99	91.61	92.01	93.75	93.75	90.05	89.57	89.33	90.98	89.05
9/4/2008	9.26	9.47	4.58	5.02	10.98	14.82	10.87	10.72	8.92	9.06	5.97		3.10
GW ELV.	90.28	90.43	90.29	90.20	91.17	91.24	91.81	91.95	89.49	89.57	89.45	90.53	89.15
1/13/2009	8.22	8.55	4.26	4.46	9.35	13.41	7.16	7.54	7.02	7.60	4.58		2.52
GW ELV.	91.32	91.35	90.61	90.76	92.80	92.65	95.52	95.13	91.39	91.03	90.84	92.13	89.73
3/31/2009	7.60	7.96	4.36	4.38	6.74	12.43	5.98	6.22	6.81	7.20	4.21		2.50
GW ELV.	91.94	91.94	90.51	90.84	95.41	93.63	96.70	96.45	91.60	91.43	91.21	92.88	89.75
6/23/2009	8.62	8.92	4.41	4.77	10.06	13.86	9.83	9.63	7.72	8.52	5.56		2.90
GW ELV.	90.92	90.98	90.46	90.45	92.09	92.20	92.85	93.04	90.69	90.11	89.86	91.24	89.35
9/30/2009	8.86	9.18	4.64	5.00	10.82	14.70	10.40	10.26	8.08	8.51	5.50		3.15
GW ELV.	90.68	90.72	90.23	90.22	91.33	91.36	92.28	92.41	90.33	90.12	89.92	90.87	89.10
12/15/2009	7.54	NM	4.22	NM	8.68	12.85	6.30	NM	6.78	7.13	4.21		2.60
GW ELV.	92.00		90.65		93.47	93.21	96.38		91.63	91.50	91.21	92.51	89.65
3/31/2010	7.37	7.74	2.42	4.46	8.64	12.52	5.80	6.19	6.77	7.93	3.96		2.14
GW ELV.	92.17	92.16	92.45	90.76	93.51	93.54	96.88	96.48	91.64	90.70	91.46	92.89	90.11
6/29/2010	9.35	NM	4.94	NM	10.66	14.62	9.97	NM	9.21	9.25	6.31		3.35
GW ELV.	90.19		89.93		91.49	91.44	92.71		89.20	89.38	89.11	90.43	88.90

Average Groundwater Elevation (12/05 to 10/07)	91.56	
Standard Deviation	1.82	
Average Groundwater Elevation (3/08 to 6/10)	91.66	
Standard Deviation	0.95	

Average Groundwater Elevation	91.60	
Standard Deviation	1.25	
Average Lane Swamp Elv.		89.45
Standard Deviation		0.40

TABLE 2
PIEZOMETER WATER ELEVATIONS
SWIFT CREEK PROJECT

	P-12	P-13	P-14	P-15	P-16	P-17	P-18	P-19	P-20	Average	St. Dev.
12/1/05	96.00	96.71	93.08	93.83	93.64	94.23	95.12	98.41	94.61	95.07	1.70
6/10/06	95.93	97.23	91.60	92.19	92.89	93.80	95.51	97.82	94.66	94.63	2.19
9/25/06	97.92	98.89	93.43	94.75	94.16	95.11	97.04	99.56	95.24	96.23	2.19
8/21/07	93.11	95.09	88.16	90.18		88.59	93.67	94.80	93.20	92.10	2.74
10/22/07	91.60	93.45	87.67	87.09		87.69	93.07	93.11	91.54	90.65	2.72
1/31/08	94.47	94.43	89.93	92.15	91.13	93.96	93.33	94.93	94.2	93.17	1.72
3/22/08	97.84	98.56	95.17	96.47	95	94.93	95.64	102.24	96.27	96.90	2.37
6/17/08	96.04	97.04	92.68	91.66	93.58	94.14	94.99	99.23	95.25	94.96	2.30
9/4/08	94.89	95.19	90.66	90.96	NM	90.47	93.49	96.38	94.50	93.32	2.31
1/13/09	98.13	97.35	95.16	97.08	94.60	95.03	94.62	99.50	96.11	96.40	1.73
3/31/2009	100.94	101.09	96.72	98.12	95.58	95.29	96.51	104.45	96.98	98.41	3.09
6/23/2009	97.57	96.99	92.92	94.13	93.38	94.56	94.73	98.09	95.06	95.27	1.85
9/30/09	95.89	95.45	92.54	94.91	NM	94.43	93.35	95.56	94.73	94.61	1.15
12/15/09	100.42	100.53	96.16	98.51	NM	95.26	96.07	103.01	97.10	98.38	2.72
3/31/10	101.67	101.87	97.14	98.42	95.5	95.21	97.56	104.41	96.94	98.75	3.18
6/29/10	95.92	96.69	91.76	91.22	92.45	93.08	94.61	97.84	94.8	94.26	2.29
Average										95.19	2.28

Average Water Elevation in Ashfill (12/05 to 10/07)	93.74
Standard Deviation	2.29

Average Water Elevation in Ashfill (3/08 to 6/10)	96.13
Standard Deviation	1.93

TABLE 3
SUMMARY OF GROUNDWATER ANALYSES
SWIFT CREEK PROJECT

		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury	Sulfate
NCAC	**2L Std.**	0.01	0.7	0.002	0.01	0.015	0.02	0.02	0.001	250
NCDWM	**SWSL**	0.01	0.1	0.001	0.01	0.01	0.01	0.01	0.0002	
MW-1S	6/7/04	0.028	0.190	<0.001	<0.01	**0.068**	<0.01	<0.01	<0.0002	**490**
	12/1/05	0.020	0.170	<0.001	<0.01	**0.042**	<0.01	<0.01	<0.0002	**608**
	6/10/06	0.012	0.472	<0.001	<0.01	**0.052**	<0.01	<0.01	0.00064	**740**
	4/5/07	<0.01	0.458	<0.001	<0.01	<0.010	<0.01	<0.01	0.00047	**420**
	11/15/07	<0.01	0.529	<0.001	<0.01	**0.031**	<0.01	<0.01	0.00089	**520**
	6/18/08	<0.01	0.619	<0.001	<0.01	0.011	<0.01	<0.01	0.00051	**470**
	1/14/09	<0.01	0.416	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	210
	6/24/09	<0.01	0.412	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	220
	12/16/09	<0.01	0.256	0.001	<0.01	<0.010	**0.022**	<0.01	<0.0002	160
	6/30/10	**0.012**	0.691	0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	**280**
MW-1D	6/7/04	<0.01	0.540	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	13
	12/1/05	<0.01	0.360	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	7.7
	6/10/06	<0.01	0.341	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	20
	4/5/07	<0.01	0.343	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	12
	10/22/07	<0.01	0.365	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	11
	6/18/08	<0.01	0.334	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	14
	1/14/08	<0.01	0.356	NR	NR	<0.010	NR	NR	<0.0002	14
	6/24/09	<0.01	0.403	NR	NR	<0.010	NR	NR	<0.0002	20
MW-2S	6/22/04	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	32
	12/1/05	<0.01	0.180	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	10.1
	6/10/06	<0.01	0.198	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<5
	4/5/07	<0.01	0.232	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	4.4
	10/22/07	<0.01	0.256	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	3.6
	6/18/08	<0.01	0.103	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	4.4
	1/14/09	<0.01	0.164	NR	NR	<0.010	NR	NR	<0.0002	<5
	6/24/09	<0.01	0.173	NR	NR	<0.010	NR	NR	<0.0002	<5
	12/16/09	<0.01	0.218	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	<5
	6/30/10	<0.01	0.229	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	<5
MW-2D	6/22/04	<0.01	0.170	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	5.6
	12/1/05	<0.01	0.300	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	3.1
	6/10/06	<0.01	0.290	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	11
	4/5/07	<0.01	0.254	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	2.9
	10/22/07	<0.01	0.273	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	4.8
	6/18/08	<0.01	0.265	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	22
	1/14/09	<0.01	0.253	NR	NR	<0.010	NR	NR	<0.0002	16
	6/24/09	<0.01	0.289	NR	NR	<0.010	NR	NR	<0.0002	6.3

TABLE 3
SUMMARY OF GROUNDWATER ANALYSES
SWIFT CREEK PROJECT

		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury	Sulfate
NCAC	**2L Std.**	0.01	0.7	0.002	0.01	0.015	0.02	0.02	0.001	250
NCDWM	**SWSL**	0.01	0.1	0.001	0.01	0.01	0.01	0.01	0.0002	
MW-5S	12/1/05	<0.01	0.450	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	6.1
	6/10/06	<0.01	0.121	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	7
	4/5/07	<0.01	0.218	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	4.7
	10/22/07	<0.01	0.278	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	4.9
	6/18/08	<0.01	0.046	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	8.7
	1/14/09	<0.01	0.051	NR	NR	<0.010	NR	NR	<0.0002	10
	6/24/09	<0.01	0.058	NR	NR	<0.010	NR	NR	<0.0002	13
	12/16/09	<0.01	0.056	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	17
	6/30/10	<0.01	0.057	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	12
MW-5D	12/1/05	<0.01	0.170	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	8.1
	6/10/06	<0.01	0.236	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	6
	4/5/07	<0.01	0.227	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	5.8
	10/22/07	<0.01	0.258	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	6.6
	6/18/08	<0.01	0.254	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	10
	1/14/09	<0.01	0.255	NR	NR	<0.010	NR	NR	<0.0002	10
	6/24/09	<0.01	0.261	NR	NR	<0.010	NR	NR	<0.0002	17
MW-3	12/1/05	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	**334**
	6/10/06	<0.01	0.192	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	**580**
	4/5/07	<0.01	0.342	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	**570**
	11/15/07	<0.01	0.133	<0.001	<0.01	**0.036**	<0.01	<0.01	<0.0002	**380**
	6/18/08	<0.01	0.145	<0.001	<0.01	**0.022**	<0.01	<0.01	<0.0002	**370**
	1/14/09	<0.01	0.144	<0.001	<0.01	0.013	<0.01	<0.01	<0.0002	**550**
	6/24/09	<0.01	0.202	<0.001	<0.01	**0.081**	<0.01	<0.01	<0.0002	**570**
	12/16/09	**0.012**	0.192	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	**710**
	6/30/10	**0.011**	0.094	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	**840**
MW-4	12/1/05	<0.01	0.460	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	5.7
	6/10/06	<0.01	0.171	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<5
	4/5/07	<0.01	<0.100	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	8.6
	10/22/07	<0.01	0.147	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	5.9
	6/18/08	<0.01	0.198	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	5.4
	1/14/09	<0.01	0.083	NR	NR	<0.010	NR	NR	<0.0002	6.4
	6/24/09	<0.01	0.349	NR	NR	<0.010	NR	NR	<0.0002	7.7
	12/16/09	<0.01	0.121	<0.001	<0.01	<0.010	<0.01	<0.01	<0.0002	7.5
	6/30/10	<0.01	0.181	<0.001	0.018	<0.010	<0.01	<0.01	0.0006	15

TABLE 3
SUMMARY OF GROUNDWATER ANALYSES
SWIFT CREEK PROJECT

		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury	Sulfate
NCAC	**2L Std.**	0.01	0.7	0.002	0.01	0.015	0.02	0.02	0.001	250
NCDWM	**SWSL**	0.01	0.1	0.001	0.01	0.01	0.01	0.01	0.0002	
MW-6	12/1/05	<0.01	1.300	<0.001	<0.01	0.01	<0.01	<0.01	<0.0002	174
	6/10/06	<0.01	0.816	<0.001	<0.01	0.013	<0.01	<0.01	<0.0002	**510**
	4/5/07	<0.01	0.312	<0.001	<0.01	**0.032**	<0.01	<0.01	<0.0002	220
	11/15/07	<0.01	0.120	<0.001	<0.01	**0.074**	<0.01	<0.01	0.00026	**290**
	6/18/08	<0.01	0.080	<0.001	<0.01	**0.054**	<0.01	<0.01	0.00091	**490**
	1/14/09	<0.01	0.066	NR	NR	0.014	NR	NR	<0.0002	**560**
	6/24/09	0.018	0.155	NR	NR	**0.016**	NR	NR	0.00026	**430**
	12/16/09	**0.014**	0.126	<0.001	<0.01	0.010	<0.01	<0.01	<0.0002	220
	6/30/10	**0.109**	0.313	<0.001	<0.01	**0.155**	<0.01	<0.01	0.0003	**300**
MW-7	12/1/05	0.038	<0.10	<0.001	<0.01	**0.093**	<0.01	<0.01	<0.0002	**379**
	6/10/06	0.03	0.059	<0.001	<0.01	**0.053**	<0.01	<0.01	<0.0002	**500**
	4/5/07	0.017	<0.100	<0.001	<0.01	**0.047**	<0.01	<0.01	0.0003	**460**
	11/15/07	0.029	<0.100	<0.001	<0.01	**0.124**	<0.01	<0.01	0.00072	**250**
	6/18/08	0.019	0.042	<0.001	<0.01	**0.072**	<0.01	<0.01	<0.0002	**420**
	1/14/09	0.022	0.052	<0.001	<0.01	**0.088**	<0.01	<0.01	<0.0002	**500**
	6/24/09	**0.072**	0.080	<0.001	<0.01	**0.171**	<0.01	<0.01	<0.0002	**500**
	12/16/09	**0.128**	0.123	<0.01	<0.01	**0.273**	<0.100	<0.10	0.0006	**490**
	6/30/10	**0.208**	0.172	<0.01	<0.01	**0.379**	<0.100	<0.10	0.0002	**530**
MW-8	4/5/07	0.025	<0.100	<0.001	<0.01	**0.024**	<0.01	<0.01	<0.0002	**400**
	11/15/07	0.030	<0.100	<0.001	<0.01	**0.038**	<0.01	<0.01	<0.0002	**430**
	6/18/08	0.031	0.048	<0.001	<0.01	**0.027**	<0.01	<0.01	<0.0002	**300**
	1/14/09	0.028	0.039	NR	NR	**0.032**	NR	NR	<0.0002	**350**
	6/24/09	**0.159**	0.114	NR	NR	**0.173**	NR	NR	0.0003	**460**
	12/16/09	**0.569**	0.286j	<0.016	<0.050	**0.376j**	<0.135	<0.095	0.0002	**460**
	6/30/10	**0.366**	0.232	<0.016	<0.050	**0.283**	<0.135	<0.095	0.0002	**500**

Concentrations in mg/L (ppm), "j" = estimated conce
Bold values exceed the 2L Groundwater Standard
MW-1S, MW-2S and MW-5S are screened shallow (approx. 3 to 13 feet).
MW-1D, MW-2D, and MW-5D are screened deep (approx. 23 to 33 feet).
MW-3, MW-4, MW-6 and MW-7 are shallow wells located on the SE, SW, NW and NE corners.

TABLE 4
SUMMARY OF SURFACE WATER ANALYSES
SWIFT CREEK PROJECT

		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury	Sulfate
NCAC	**2B Std.**	0.05	1.0	0.002	0.05	0.025	0.005	0.06	0.000012	250
NCDWM	**SWSL**	0.01	0.1	0.001	0.01	0.01	0.01	0.01	0.0002	
SW-1	3/4/03	<0.01	<0.10	<0.001	<0.01	<0.005	<0.01	<0.01	<0.0002	12
	6/22/04	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<2.0
	12/1/05	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	6.3
	6/10/06	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<5
	4/5/07	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	6.6
	10/22/07	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	3.8
	6/18/08	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	2.5
	1/14/09	<0.01	<0.10	NR	NR	<0.01	NR	NR	<0.0002	5.6
	6/24/09	<0.01	0.03	NR	NR	<0.01	NR	NR	<0.0002	<5
	12/16/09	<0.01	0.048	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	6.2
	6/30/10	<0.01	0.032	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<5
SW-2	3/4/03	<0.01	<0.10	<0.001	<0.01	<0.005	<0.01	<0.01	<0.0002	13
	6/22/04	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<2.0
	12/1/05	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	10.2
	6/10/06	<0.01	0.090	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	<5
	4/5/07	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	3.5
	10/22/07	DRY								
	7/8/08	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	13
	1/14/09	<0.01	<0.10	NR	NR	<0.01	NR	NR	<0.0002	6.1
	6/24/09	<0.01	0.088	NR	NR	<0.01	NR	NR	<0.0002	<5
	12/16/09	<0.01	0.025	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	7.5
	6/30/10	DRY								
SW-3	4/5/07	<0.01	<0.10	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	2.4
	10/22/07	DRY								
	6/18/08	<0.01	0.089	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	3.3
	1/14/09	<0.01	<0.10	NR	NR	<0.01	NR	NR	<0.0002	20
	6/24/09	<0.01	0.087	NR	NR	<0.01	NR	NR	<0.0002	<5
	12/16/09	<0.01	0.075	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	14
	6/30/10	<0.01	0.328	<0.001	<0.01	<0.01	<0.01	<0.01	<0.0002	47

Concentrations in mg/L (ppm)
Bold values exceed the 2B Surface Water Standard
SW-1 Swift Creek at bridge (background).
SW-2 in swamp near MW-2S and MW-2D
SW-3 in Lane Swamp north of MW-8

TABLE 5
MONITORING WELL AND PIEZOMETER SUMMARY
SWIFT CREEK PROJECT

Piezometer	Top of Casing Elev.	Ground Surface Elev.	Casing Stick Up	Screen Interval	Total Depth (TOC)	Measured Total Depth 8/2007	Ash/Soil Contact	Ash/Soil Contact Elv.	Alluvial/ Marine contact Elv.	Comments
P-1	108.19	105.6	2.6	20-30	32.6		14.4	91.2		Missing
P-2	109.53	106.7	2.8	20-30	32.8	33.90	16.1	90.6		
P-3	106.18	104.4	1.8	18-28	30.0		12.5	91.9		
P-4	106.57	104.0	2.6	20-30	32.6		14.0	90.0		
P-5	108.39	105.9	2.5	20-30	32.5	32.57	13	92.9		
P-6	109.79	107.5	2.3	20-30	32.3	32.35	13.5	94.0		
P-7	107.77	105.9	1.9	30-40	41.9	42.30	14.3	91.6	82.9	
P-8	106.53	103.9	2.6	30-40	42.6	42.15	13.3	90.7	82.9	
P-9	103.32	100.9	2.4	20-30	32.4	32.87	Soil		87.0	
P-10	108.17	106.1	2.1	20-30	32.1		Soil		89.1	Removed
P-11	101.88	99.2	2.7	13-23	25.7		Soil		82.0	Removed
P-12	107.04	104.0	3.0	6-16	19.0	19.44	13.8	90.2		
P-13	108.99	105.9	3.1	6-16	19.1	19.16	13.3	92.7		
P-14	105.38	101.9	3.5	4-14	17.5	17.95	11.5	90.4		
P-15	103.76	101.0	2.8	4-14	16.8	16.85	11.1	89.9		
P-16	105.28	102.1	3.2	4-14	17.2		11.5	90.6		
P-17	105.31	101.8	3.5	4-14	17.5	17.93	11.5	90.3		
P-18	111.21	107.5	3.7	5-15	18.7	18.30	13.5	94.0		
P-19	111.86	108.3	3.6	7-17	20.6	20.00	15.2	93.1		
P-20	107.00	104.2	2.8	7-17	19.8	19.94	15.0	89.2		
P-21	104.99	99.5	5.5	4.5-11.5	16.5	16.60	9.5	90.0		
P-22	103.60	101.8	1.8	17-27	28.8		Soil		87.0	
P-23	109.75	107.1	2.7	9-19	21.8		12.0	95.0	90.0	
P-24	103.17	101.1	2.1	3-13	15.3		Soil		90.0	
B-1	107.66	105.7	2.0	14-19	21.0	19.40	13.5	92.2	88.9	1" casing
Monitoring Wells										
MW-1S	99.54	96.8	2.7	3-13	15.7				84.0	
MW-1D	99.90	97.1	2.8	23-33	35.7				84.0	
MW-2S	94.87	92.1	2.8	6-16	18.7				78.5	
MW-2D	95.22	92.2	3.0	26-36	39.1				78.5	
MW-3	102.15	99.2	3.0	7-17	20.0				82.2	
MW-4	106.06	104.1	2.0	8-18	20.0				89.1	
MW-5S	102.68	99.7	3.0	6-16	17.0				88.2	
MW-5D	102.67	99.8	2.9	25-35	37.9				88.2	
MW-6	98.41	95.0	3.4	6-16	19.4				79.0	
MW-7	98.63	95.1	3.5	6-16	19.5				79.0	
MW-8	95.42	92.4	3.0	6-16	19.0				76.4	

FIGURES

REUSE TECHNOLOGY, INC.

SWIFT CREEK PROJECT

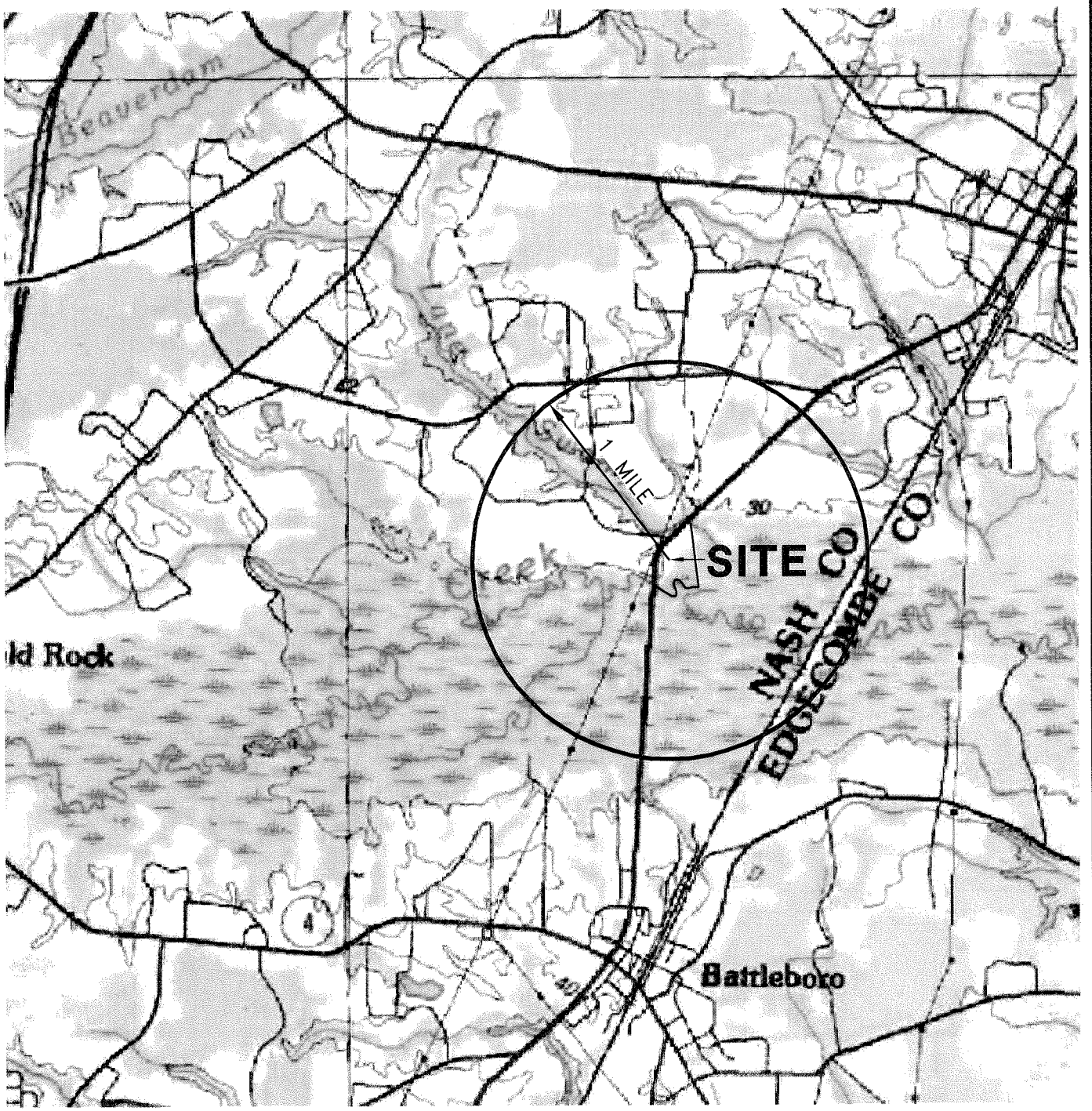

FIGURE 1
SITE LOCATON MAP

Sherrill Environmental, Inc.
3326 Rugby Rd.
Durham N.C. 27707
Phone (919) 493-6555
Fax (919) 493-6554
sherrill@nc.rr.com

ACE JOB #: 01-060
SCALE: 1"=4,000'
DATE: 2-17-10
SHEET #: 1 OF 8

Appian
APPIAN CONSULTING ENGINEERS, P.A.
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS
COMPREHENSIVE ENVIRONMENTAL SERVICES
P.O. Box 7966 / Rocky Mount, N.C. 27804
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www.appianengineers.com

GENESIS 1:1

F:\Appian Projects - Shared Folders\01060-swiftcreek\01060-02-10.dwg <FIG-2> 02/18/2010 - 12:27:03 PM

REUSE TECHNOLOGY, INC.

SWIFT CREEK PROJECT

SCALE: 1" = 200'

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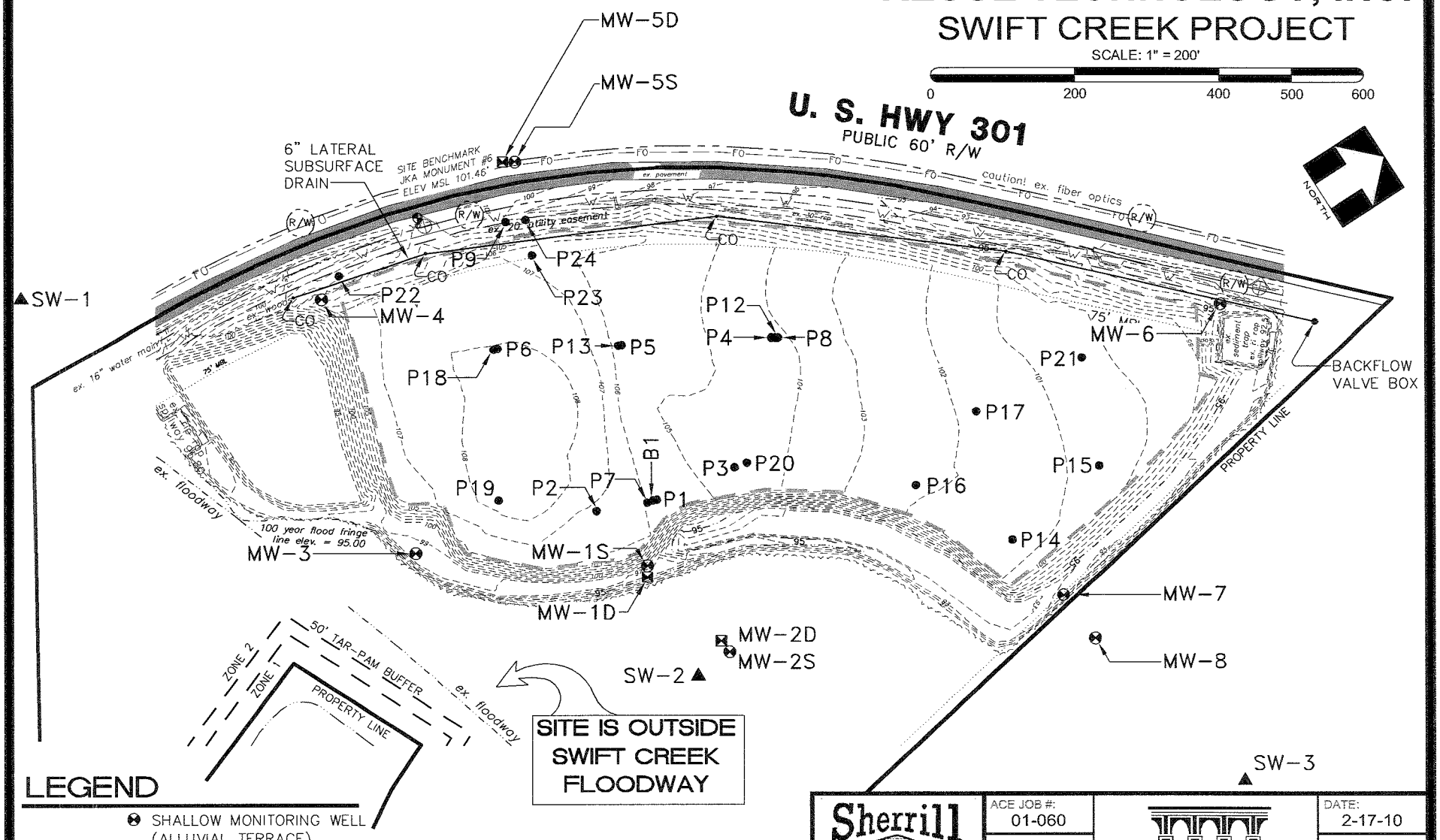

LEGEND

- SHALLOW MONITORING WELL (ALLUVIAL TERRACE)
- DEEP MONITORING WELL (MARINE SEDIMENTS)
- PIEZOMETER
- SURFACE WATER LOCATION
- LIMITS OF ASH FILL PER PAUL ODEN WITH REUSE TECHNOLOGIES FEB. 21, 2003

FIGURE 2
SITE MAP

Sherrill Environmental, Inc.
3326 Rugby Rd.
Durham N.C. 27707
Phone (919) 493-6555
Fax (919) 493-6554
sherrill@nc.rr.com

ACE JOB #: 01-060
SCALE: 1"=200'
DATE: 2-17-10
SHEET #: 2 OF 8

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GENESIS 1:1

F:\Appian Projects - Shared Folders\01060-swiftcreek\01060-09-10.dwg <FIG-3 (6-30-10)> 09/03/2010 - 11:55:32 AM

REUSE TECHNOLOGY, INC.

SWIFT CREEK PROJECT

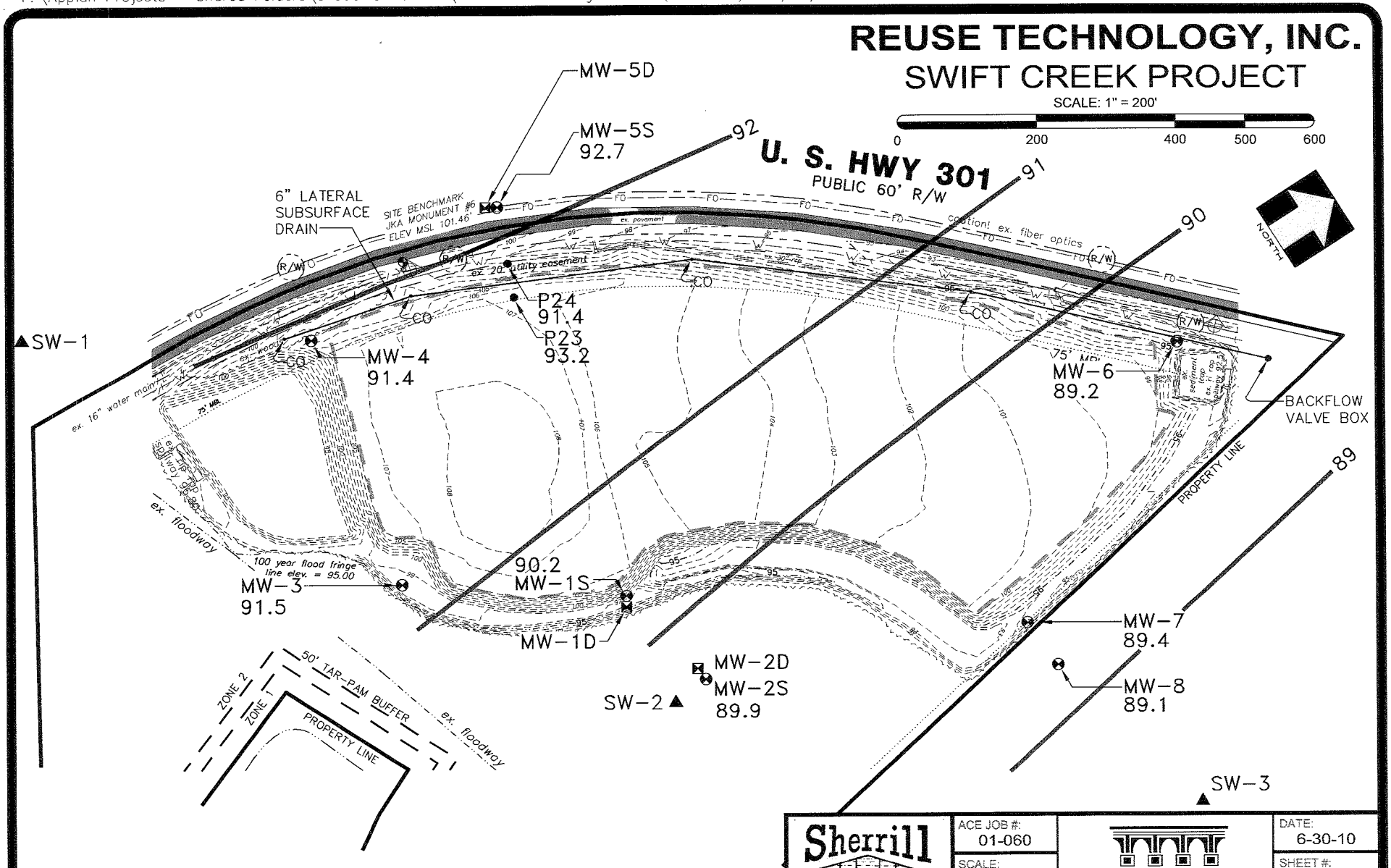

FIGURE 3

MAP OF GROUNDWATER TABLE

6/30/10

Sherrill Environmental, Inc.
3326 Rugby Rd.
Durham N.C. 27707
Phone (919) 493-6555
Fax (919) 493-6554
sherrill@nc.rr.com

ACE JOB #:	01-060
SCALE:	1"=200'
DATE:	6-30-10
SHEET #:	3 OF 4

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REUSE TECHNOLOGY, INC.

SWIFT CREEK PROJECT

SCALE: 1" = 200'

0 200 400 500 600

NOTE:
CONCENTRATIONS IN mg/L (ppm)
NS = NOT SAMPLED

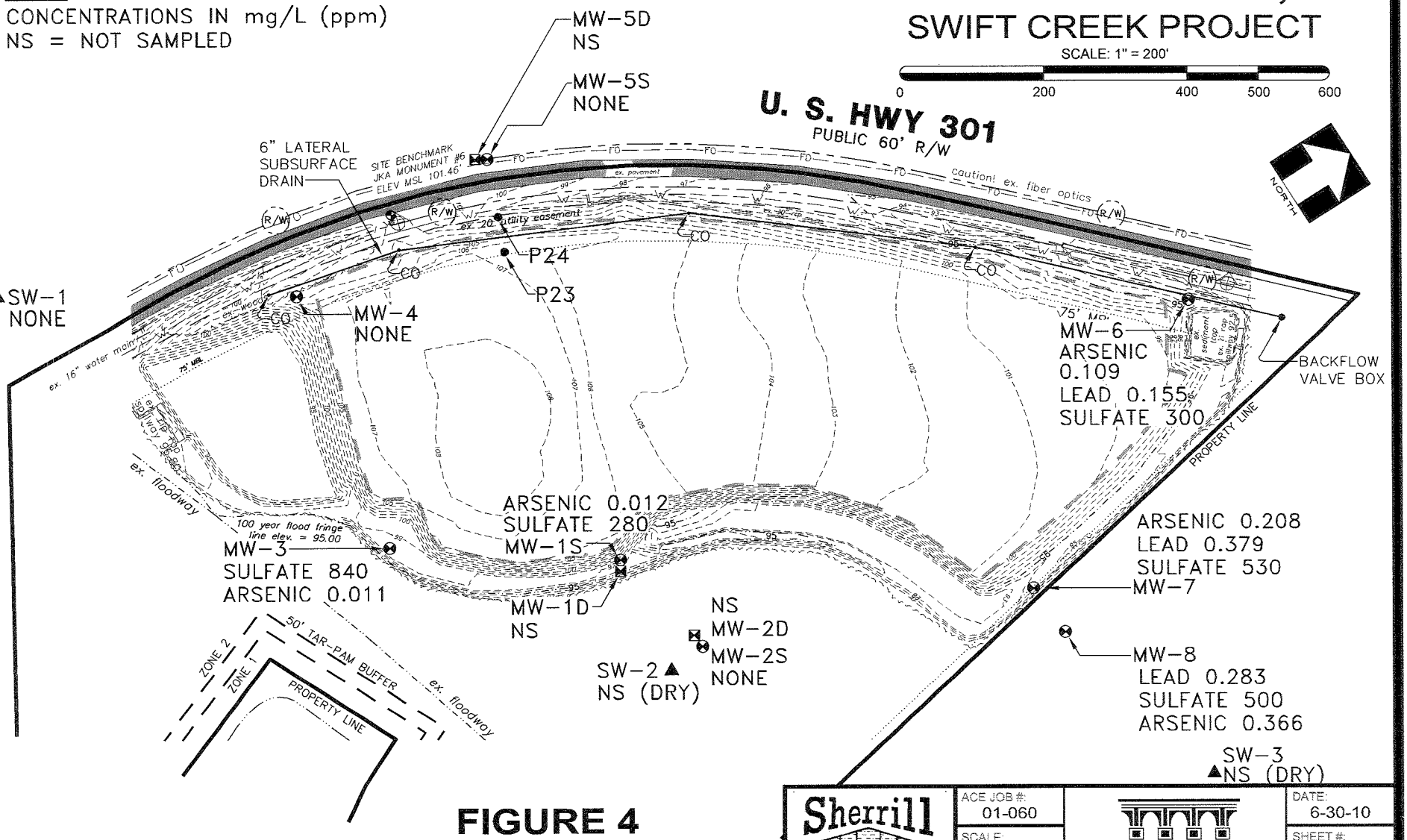

FIGURE 4
CONSTITUENTS EXCEEDING 2L GROUNDWATER STANDARDS 6/30/10

Sherrill Environmental, Inc.
3326 Rugby Rd.
Durham N.C. 27707
Phone (919) 493-6555
Fax (919) 493-6554
sherrill@nc.rr.com

ACE JOB #:	DATE:
01-060	6-30-10
SCALE: 1"=200'	SHEET #: 4 OF 4

Appian
APPIAN CONSULTING ENGINEERS, P.A.
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS
COMPREHENSIVE ENVIRONMENTAL SERVICES
P.O. Box 7966 / Rocky Mount, N.C. 27804
Phone: (252) 972-7703 / Fax: (252) 972-7638
www.appianengineers.com

APPENDIX

Environmental Conservation Laboratories, Inc.
102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515
www.encolabs.com

Friday, July 9, 2010

Sherrill Environmental, Inc. (SH004)

Attn: Jack Sherrill

3326 Rugby Road

Durham, NC 27707

RE: Laboratory Results for
Project Number: [none], Project Name/Desc: Swift Creek
ENCO Workorder: C006676

Dear Jack Sherrill,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, July 1, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Stephanie Franz

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 36.

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MW-1S	Lab ID: C006676-01	Sampled: 06/30/10 09:45	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 19:33
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 11:21
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:20

Client ID: MW-2S	Lab ID: C006676-02	Sampled: 06/30/10 09:50	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 20:35
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 11:39
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:22

Client ID: MW-3	Lab ID: C006676-03	Sampled: 06/30/10 09:35	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 20:56
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 11:42
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:26

Client ID: MW-4	Lab ID: C006676-04	Sampled: 06/30/10 09:15	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 21:17
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 11:53
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:29

Client ID: MW-5S	Lab ID: C006676-05	Sampled: 06/30/10 10:25	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 21:37
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 11:55
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:32

Client ID: MW-6	Lab ID: C006676-06	Sampled: 06/30/10 10:05	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:35

Client ID: MW-6	Lab ID: C006676-06RE1	Sampled: 06/30/10 10:05	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 22:19
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 13:23

Client ID: MW-7	Lab ID: C006676-07	Sampled: 06/30/10 09:55	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 22:39
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:38

Client ID: MW-7	Lab ID: C006676-07RE1	Sampled: 06/30/10 09:55	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 13:25

Client ID: MW-8	Lab ID: C006676-08	Sampled: 06/30/10 10:00	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:47

Client ID: MW-8	Lab ID: C006676-08RE1	Sampled: 06/30/10 10:00	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 23:21
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 13:27

Client ID: SW-1	Lab ID: C006676-09	Sampled: 06/30/10 09:25	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/7/2010 23:41
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 12:11
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 15:50

Client ID: SW-3	Lab ID: C006676-10	Sampled: 06/30/10 10:15	Received: 07/01/10 09:20
Parameter	**Hold Date/Time(s)**	**Prep Date/Time(s)**	**Analysis Date/Time(s)**
EPA 300.0	07/28/10	07/07/10 08:31	7/8/2010 00:43
EPA 6010C	12/27/10	07/01/10 14:31	7/6/2010 12:14
EPA 7470A	07/28/10	07/02/10 11:15	7/2/2010 14:56

SAMPLE DETECTION SUMMARY

Client ID: MW-1S **Lab ID: C006676-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	12.6		2.80	10.0	ug/L	EPA 6010C	
Barium - Total	691		1.00	10.0	ug/L	EPA 6010C	
Cadmium - Total	1.39		0.360	1.00	ug/L	EPA 6010C	
Sulfate as SO4	280	D	0.48	20	mg/L	EPA 300.0	

Client ID: MW-2S **Lab ID: C006676-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Barium - Total	229		1.00	10.0	ug/L	EPA 6010C	

Client ID: MW-3 **Lab ID: C006676-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	11.1		2.80	10.0	ug/L	EPA 6010C	
Barium - Total	94.0		1.00	10.0	ug/L	EPA 6010C	
Sulfate as SO4	840	D	1.2	50	mg/L	EPA 300.0	

Client ID: MW-4 **Lab ID: C006676-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Barium - Total	181		1.00	10.0	ug/L	EPA 6010C	
Chromium - Total	18.3		1.00	10.0	ug/L	EPA 6010C	
Mercury - Total	0.610		0.170	0.200	ug/L	EPA 7470A	
Sulfate as SO4	15		0.12	5.0	mg/L	EPA 300.0	

Client ID: MW-5S **Lab ID: C006676-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Barium - Total	57.4		1.00	10.0	ug/L	EPA 6010C	
Sulfate as SO4	12		0.12	5.0	mg/L	EPA 300.0	

Client ID: MW-6 **Lab ID: C006676-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Mercury - Total	0.324		0.170	0.200	ug/L	EPA 7470A	

Client ID: MW-6 **Lab ID: C006676-06RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	109	D	28.0	100	ug/L	EPA 6010C	R-05
Barium - Total	313	D	10.0	100	ug/L	EPA 6010C	R-05
Lead - Total	155	D	19.0	100	ug/L	EPA 6010C	R-05
Sulfate as SO4	300	D	0.60	25	mg/L	EPA 300.0	

Client ID: MW-7 **Lab ID: C006676-07**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Mercury - Total	0.263		0.170	0.200	ug/L	EPA 7470A	
Sulfate as SO4	530	D	1.2	50	mg/L	EPA 300.0	

Client ID: MW-7 **Lab ID: C006676-07RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	208	D	28.0	100	ug/L	EPA 6010C	R-05
Barium - Total	172	D	10.0	100	ug/L	EPA 6010C	R-05
Lead - Total	379	D	19.0	100	ug/L	EPA 6010C	R-05

Client ID: MW-8			Lab ID: C006676-08				
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**	**Notes**
Mercury - Total	0.295		0.170	0.200	ug/L	EPA 7470A	

Client ID: MW-8			Lab ID: C006676-08RE1				
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**	**Notes**
Arsenic - Total	366	D	28.0	100	ug/L	EPA 6010C	R-05
Barium - Total	232	D	10.0	100	ug/L	EPA 6010C	R-05
Lead - Total	283	D	19.0	100	ug/L	EPA 6010C	R-05
Sulfate as SO4	500	D	1.2	50	mg/L	EPA 300.0	

Client ID: SW-1			Lab ID: C006676-09				
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**	**Notes**
Barium - Total	32.1		1.00	10.0	ug/L	EPA 6010C	

Client ID: SW-3			Lab ID: C006676-10				
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**	**Notes**
Barium - Total	328		1.00	10.0	ug/L	EPA 6010C	
Sulfate as SO4	47		0.12	5.0	mg/L	EPA 300.0	

ANALYTICAL RESULTS

Description: MW-1S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-01
Sampled: 06/30/10 09:45
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:20	NLH	

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Description: MW-1S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-01
Sampled: 06/30/10 09:45
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**12.6**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Barium [7440-39-3] ^	**691**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Cadmium [7440-43-9] ^	**1.39**		ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:21	JDH	

Description: MW-1S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-01
Sampled: 06/30/10 09:45
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**280**	D	mg/L	4	20	0G07005	EPA 300.0	07/07/10 19:33	PEV	

Description: MW-2S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-02
Sampled: 06/30/10 09:50
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:22	NLH	

www.encolabs.com

Description: MW-2S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-02
Sampled: 06/30/10 09:50
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Barium [7440-39-3] ^	**229**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:39	JDH	

Description: MW-2S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-02
Sampled: 06/30/10 09:50
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	5.0	U	mg/L	1	5.0	0G07005	EPA 300.0	07/07/10 20:35	PEV	

Description: MW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-03
Sampled: 06/30/10 09:35
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:26	NLH	

Description: MW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-03
Sampled: 06/30/10 09:35
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**11.1**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Barium [7440-39-3] ^	**94.0**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:42	JDH	

Description: MW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-03
Sampled: 06/30/10 09:35
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**840**	D	mg/L	10	50	0G07005	EPA 300.0	07/07/10 20:56	PEV	

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Description: MW-4
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-04
Sampled: 06/30/10 09:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	**0.610**		ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:29	NLH	

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Description: MW-4
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-04
Sampled: 06/30/10 09:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Barium [7440-39-3] ^	**181**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Chromium [7440-47-3] ^	**18.3**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:53	JDH	

Description: MW-4
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-04
Sampled: 06/30/10 09:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**15**		mg/L	1	5.0	0G07005	EPA 300.0	07/07/10 21:17	PEV	

Description: MW-5S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-05
Sampled: 06/30/10 10:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:32	NLH	

www.encolabs.com

Description: MW-5S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-05
Sampled: 06/30/10 10:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Barium [7440-39-3] ^	**57.4**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 11:55	JDH	

Description: MW-5S
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-05
Sampled: 06/30/10 10:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**12**		mg/L	1	5.0	0G07005	EPA 300.0	07/07/10 21:37	PEV	

Description: MW-6
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-06
Sampled: 06/30/10 10:05
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	**0.324**		ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:35	NLH	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**109**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Barium [7440-39-3] ^	**313**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Cadmium [7440-43-9] ^	10.0	UD	ug/L	10	10.0	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Chromium [7440-47-3] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Lead [7439-92-1] ^	**155**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Selenium [7782-49-2] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05
Silver [7440-22-4] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:23	JDH	R-05

Description: MW-6
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-06
Sampled: 06/30/10 10:05
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**300**	D	mg/L	5	25	0G07005	EPA 300.0	07/07/10 22:19	PEV	

Description: MW-7
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-07
Sampled: 06/30/10 09:55
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	**0.263**		ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:38	NLH	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**208**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Barium [7440-39-3] ^	**172**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Cadmium [7440-43-9] ^	10.0	UD	ug/L	10	10.0	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Chromium [7440-47-3] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Lead [7439-92-1] ^	**379**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Selenium [7782-49-2] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05
Silver [7440-22-4] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:25	JDH	R-05

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**530**	D	mg/L	10	50	0G07005	EPA 300.0	07/07/10 22:39	PEV	

Description: MW-8 | **Lab Sample ID:** C006676-08 | **Received:** 07/01/10 09:20
Matrix: Ground Water | **Sampled:** 06/30/10 10:00 | **Work Order:** C006676
Project: Swift Creek | **Sampled By:** John Sherrill

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	**0.295**		ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:47	NLH	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**366**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Barium [7440-39-3] ^	**232**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Cadmium [7440-43-9] ^	10.0	UD	ug/L	10	10.0	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Chromium [7440-47-3] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Lead [7439-92-1] ^	**283**	D	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Selenium [7782-49-2] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05
Silver [7440-22-4] ^	100	UD	ug/L	10	100	0G01034	EPA 6010C	07/06/10 13:27	JDH	R-05

Description: MW-8
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-08
Sampled: 06/30/10 10:00
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**500**	D	mg/L	10	50	0G07005	EPA 300.0	07/07/10 23:21	PEV	

Description: SW-1
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-09
Sampled: 06/30/10 09:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 15:50	NLH	

Description: SW-1
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-09
Sampled: 06/30/10 09:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Barium [7440-39-3] ^	**32.1**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:11	JDH	

Description: SW-1
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-09
Sampled: 06/30/10 09:25
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	5.0	U	mg/L	1	5.0	0G07005	EPA 300.0	07/07/10 23:41	PEV	

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Description: SW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-10
Sampled: 06/30/10 10:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.200	U	ug/L	1	0.200	0G02010	EPA 7470A	07/02/10 14:56	NLH	

Description: SW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-10
Sampled: 06/30/10 10:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Barium [7440-39-3] ^	**328**		ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Cadmium [7440-43-9] ^	1.00	U	ug/L	1	1.00	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Chromium [7440-47-3] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Lead [7439-92-1] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Selenium [7782-49-2] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	
Silver [7440-22-4] ^	10.0	U	ug/L	1	10.0	0G01034	EPA 6010C	07/06/10 12:14	JDH	

Description: SW-3
Matrix: Ground Water
Project: Swift Creek

Lab Sample ID: C006676-10
Sampled: 06/30/10 10:15
Sampled By: John Sherrill

Received: 07/01/10 09:20
Work Order: C006676

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MRL	Batch	Method	Analyzed	By	Notes
Sulfate as SO4 [14808-79-8] ^	**47**		mg/L	1	5.0	0G07005	EPA 300.0	07/08/10 00:43	PEV	

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 0G02010 - EPA 245.1

Blank (0G02010-BLK1) Prepared: 07/02/2010 11:15 Analyzed: 07/02/2010 14:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.200	U	0.200	ug/L							

LCS (0G02010-BS1) Prepared: 07/02/2010 11:15 Analyzed: 07/02/2010 14:53

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.51		0.200	ug/L	5.00		110	85-115			

Matrix Spike (0G02010-MS1) Prepared: 07/02/2010 11:15 Analyzed: 07/02/2010 14:58

Source: C006676-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.33		0.200	ug/L	5.00	0.200 U	107	85-115			

Matrix Spike Dup (0G02010-MSD1) Prepared: 07/02/2010 11:15 Analyzed: 07/02/2010 15:02

Source: C006676-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.26		0.200	ug/L	5.00	0.200 U	105	85-115	1	15	

Post Spike (0G02010-PS1) Prepared: 07/02/2010 11:15 Analyzed: 07/02/2010 15:11

Source: C006676-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.03		0.200	ug/L	5.00	-0.0606	102	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0G01034 - EPA 3005A

Blank (0G01034-BLK1) Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	10.0	U	10.0	ug/L							
Barium	10.0	U	10.0	ug/L							
Cadmium	1.00	U	1.00	ug/L							
Chromium	10.0	U	10.0	ug/L							
Lead	10.0	U	10.0	ug/L							
Selenium	10.0	U	10.0	ug/L							
Silver	10.0	U	10.0	ug/L							

LCS (0G01034-BS1) Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	543		10.0	ug/L	500		109	80-120			
Barium	527		10.0	ug/L	500		105	80-120			
Cadmium	265		1.00	ug/L	250		106	80-120			
Chromium	524		10.0	ug/L	500		105	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0G01034 - EPA 3005A

LCS (0G01034-BS1) Continued Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Lead	544		10.0	ug/L	500		109	80-120			
Selenium	546		10.0	ug/L	500		109	80-120			
Silver	262		10.0	ug/L	250		105	80-120			

Matrix Spike (0G01034-MS1) Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:24

Source: C006676-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	459		10.0	ug/L	500	12.6	89	75-125			
Barium	1120		10.0	ug/L	500	691	86	75-125			
Cadmium	214		1.00	ug/L	250	1.39	85	75-125			
Chromium	427		10.0	ug/L	500	10.0 U	85	75-125			
Lead	391		10.0	ug/L	500	10.0 U	78	75-125			
Selenium	438		10.0	ug/L	500	10.0 U	88	75-125			
Silver	242		10.0	ug/L	250	10.0 U	97	75-125			

Matrix Spike Dup (0G01034-MSD1) Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:27

Source: C006676-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	451		10.0	ug/L	500	12.6	88	75-125	2	20	
Barium	1130		10.0	ug/L	500	691	87	75-125	0.3	20	
Cadmium	214		1.00	ug/L	250	1.39	85	75-125	0.02	20	
Chromium	427		10.0	ug/L	500	10.0 U	85	75-125	0.02	20	
Lead	386		10.0	ug/L	500	10.0 U	77	75-125	1	20	
Selenium	435		10.0	ug/L	500	10.0 U	87	75-125	0.9	20	
Silver	238		10.0	ug/L	250	10.0 U	95	75-125	1	20	

Post Spike (0G01034-PS1) Prepared: 07/01/2010 14:31 Analyzed: 07/06/2010 11:30

Source: C006676-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1.89		0.0100	mg/L	2.00	0.0126	94	80-120			
Barium	2.39		0.0100	mg/L	2.00	0.691	85	80-120			
Cadmium	0.822		0.00100	mg/L	1.00	0.00139	82	80-120			
Chromium	1.65		0.0100	mg/L	2.00	0.000264	83	80-120			
Lead	1.64		0.0100	mg/L	2.00	-0.00911	83	80-120			
Selenium	1.87		0.0100	mg/L	2.00	-0.0110	94	80-120			
Silver	0.942		0.0100	mg/L	1.00	-0.00297	94	80-120			

Classical Chemistry Parameters - Quality Control

Batch 0G07005 - NO PREP

Blank (0G07005-BLK1) Prepared: 07/07/2010 08:31 Analyzed: 07/07/2010 17:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	5.0	U	5.0	mg/L							

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0G07005 - NO PREP

LCS (0G07005-BS1) Prepared: 07/07/2010 08:31 Analyzed: 07/07/2010 18:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	46		5.0	mg/L	50.0		92	90-110			

Matrix Spike (0G07005-MS1) Prepared: 07/07/2010 08:31 Analyzed: 07/07/2010 18:31

Source: C007649-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	73		5.0	mg/L	10.0	71	22	80-120			QM-07

Matrix Spike Dup (0G07005-MSD1) Prepared: 07/07/2010 08:31 Analyzed: 07/07/2010 18:52

Source: C007649-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	75		5.0	mg/L	10.0	71	38	80-120	2	15	QM-07

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr, Orlando, FL 32824, (407) 826-5314 Fax (407) 850-6945
4810 Executive Park Court, Suite 211, Jacksonville, FL 32216 6069, (904) 296-3007 Fax (904) 296-6210
102-A Woodwinds Industrial Ct, Cary, NC 27511, (919) 467-3090 Fax (919) 467-3515

Page 1 of 1

Client Name: Sherrill Environmental, Inc. (SH004)	Project Number: [none]
Address: 3326 Rugby Road	Project Name/Desc: Swift Creek
City/ST/Zip: Durham, NC 27707	PO # / Billing Info
Tel: (919) 493-6555 Fax: (919) 493-6554	Reporting Contact: Jack Sherrill
Sampler(s) Name, Affiliation (Print): John Sherrill	Billing Contact: Accounts Payable
Sampler(s) Signature: John Sherrill	Facility # (if required)

Requested Analyses: Ag,As,Ba,Cd,Cr,Pb,Se | Hg | Sulfate 300

Preservation (See Codes) (Combine as necessary)

Requested Turnaround Times

Note: Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C006676

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Ag,As,Ba,Cd,Cr,Pb,Se	Hg	Sulfate 300	Sample Comments
	MW-1S	6/30/10	945		GW	2	X	X	X	
	MW-2S		950		GW	2	X	X	X	
	MW-3		935		GW	2	X	X	X	
	MW-4		915		GW	2	X	X	X	SW-3 collected
	MW-5S		1025		GW	2	X	X	X	at Lane Swamp
	MW-6		1005		GW	2	X	X	X	bridge Hwy 301
	MW-7		955		GW	2	X	X	X	
	MW-8		1000		GW	2	X	X	X	
	SW-1		925		GW	2	X	X	X	
	~~SW-2~~ DRY				GW	~~2~~	~~X~~	~~X~~	~~X~~	
	SW-3	↓	1015		GW	2	X	X	X	

← Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: John Sherrill	Date/Time: 7/1/10	Received By	Date/Time: 7-1-10 9:20
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler Pg & Temps on Receipt: 1.7°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix: GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: Use H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note: All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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