P1031

RCO 2455

[redacted] ☐ Paper Report ☑ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Golder Associates NC, Inc. on behalf of Red Rock Disposal, LLC

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Rachel P. Kirkman, P.G. Phone: 336-852-4903

E-mail: rkirkman@golder.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Red Rock C&D Landfill	7130 New Landfill Lane Holly Springs, NC 27540	92-28	.0500	March 20-21, 2007

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify)
☐ Other(specify)

Received MAY 2007 Solid Waste Section

Notification attached?

☐ No. No groundwater or surface water standards or explosive methane gas limits were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Rachel P. Kirkman, P.G.	Senior Project Geologist	(336) 852-4903
Facility Representative Name (Print)	Title	(Area Code) Telephone Number

Rachel P. Kirkman 5-23-07
Signature Date

Affix NC Licensed Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1811 GEOLOGIST RACHEL P. KIRKMAN 5-23-07

Revised 10/2006

Golder Associates NC, Inc.

4900 Koger Boulevard, Suite 140
Greensboro, NC 27407
Telephone (336) 852-4903
Fax (336) 852-4904

May 25, 2007 Project No. 073-9603507.100

Department of Environment and Natural Resources
Division of Waste Management
Solid Waste Section
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605
919-733-4996

Attention: Mr. Donald Herndon
Environmental Specialist

Re: Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Holly Springs, Wake County, North Carolina
Water Quality Monitoring Report, First Semi-annual 2007 Sampling Event

Dear Mr. Herndon:

On behalf of Red Rock Disposal, LLC (Red Rock), a subsidiary of Waste Industries USA, Inc. (Waste Industries), Golder Associates NC, Inc. (Golder) is submitting the enclosed *Water Quality Monitoring Report*, which documents the results of the March 20-21, 2007, compliance monitoring event at the above-referenced facility.

Red Rock Disposal, LLC is voluntarily monitoring groundwater at this facility for parameters listed in Title 15A NCAC 13B.0544 of the North Carolina Solid Waste Management Rules (NCSWMR) in order to collect background data under the recently implemented Construction and Demolition Landfill Rules.

As presented, five inorganic constituents (barium, cobalt, iron, manganese, and zinc) were detected above the Solid Waste Section reporting limits (SWSLs) in one or more downgradient monitoring wells during the March 2007 monitoring event. There were no organic constituents detected in any of the monitoring wells. Additionally, no inorganic or organic constituents were detected above the SWSL in surface water samples. The concentration of barium in MW-3; iron in MW-4 and MW-5; and manganese in MW-10, MW-2T, MW-4, MW-5, and MW-6T exceeded their respective North Carolina Groundwater Quality Standards (2L Standards) during the March 2007 monitoring event. The barium concentration in MW-3 and MW-6T also exceeded the facility background concentration. However, both of these detections appear to be consistent with historical detections of barium at the facility and are believed to be representative of naturally occurring conditions. Insufficient background data were available to perform statistical analysis of cobalt, iron, manganese, and zinc. Based on the concentrations detected in the background well, the concentrations of iron and manganese are assumed to be representative of naturally occurring conditions.

Based on these results, Red Rock Disposal, LLC will continue monitoring this facility in accordance with the requirements of the Detection Monitoring Program for Construction & Demolition Landfills as outlined in Title 15A NCAC 13B.0544. The next event is scheduled for September 2007. The need for additional background data for statistical purposes will be evaluated prior to the next compliance event. If you have any questions, please contact the undersigned at 336-852-4903.

Sincerely,
GOLDER ASSOCIATES NC, INC.

Benjamin S. Draper
Geologist

Rachel P. Kirkman, P.G.
Senior Project Geologist

Enclosure

C: John Demary, Landfill Manager, Red Rock Disposal, LLC, 7130 New Landfill Drive, Holly Springs, NC 27540, jdemary@waste-ind.com, 919-557-9583
Shawn P. Carroll, Landfill Division Environmental Operative, Waste Industries USA, Inc., 3301 Benson Drive, Suite 503, Raleigh, NC 27609, scarroll@waste-ind.com, 910-520-1002

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WATER QUALITY MONITORING REPORT
FIRST SEMI-ANNUAL 2007 SAMPLING EVENT

RED ROCK DISPOSAL, LLC CONSTRUCTION AND DEMOLITION LANDFILL, PERMIT NO. 92-28
WAKE COUNTY, NORTH CAROLINA

MAY 2007

PREPARED FOR:

RED ROCK DISPOSAL, LLC
7130 NEW LANDFILL DRIVE
HOLLY SPRINGS, NC 27540

PREPARED BY:

GOLDER ASSOCIATES NC, INC.
4900 KOGER BOULEVARD, SUITE 140
GREENSBORO, NC 27407
PROJECT NO. 073-9603507.100

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Drawing 1 Groundwater Contour Map, March 20, 2007

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1.0 INTRODUCTION

This report summarizes the monitoring results from March 20-21, 2007, groundwater, surface water sampling and analysis event at the Red Rock Disposal, LLC Construction & Demolition (C&D) Landfill (Red Rock Landfill) in Wake County, North Carolina in accordance with Title 15A of the North Carolina Administrative Code (NCAC) Subchapter 13B.0544. The Red Rock Landfill, an active C&D landfill, is owned and operated by Red Rock Disposal, LLC a subsidiary of Waste Industries, Inc., under Permit No. 92-28 issued by the North Carolina (NC) Department of Environment and Natural Resources (DENR).

1.1 Site Description and Background

The location of the facility is shown on the inlay on Drawing 1. Red Rock Landfill is located in southwestern Wake County, approximately 5 miles southwest of Holly Springs, North Carolina. Access to the site is from New Landfill Drive, located off of Rex Road to the north of the site.

There are three streams that traverse the site, which drain into the Shearon Harris Reservoir, located to the southwest of the site. One stream is the Jim Branch that flows southwesterly along the southeastern portion of the property boundary. A second stream is an unnamed intermittent tributary of the Jim Branch, which flows southeasterly across a portion of the northern property boundary. A third stream is another unnamed tributary of the Jim Branch that flows southerly across a portion of the southern property boundary. The locations of these surface water features are shown on Drawing 1.

Based on the topography as shown on Drawing 1, topographic surface elevations at the facility range from elevations of approximately 250 feet above mean sea level (AMSL) near the southeastern portion of the site near the Jim Branch to 330 feet AMSL near the northeastern property boundary along Rex Road. The site is surrounded predominantly by wooded or agricultural properties, along with a nearby rock quarry. North Carolina designated game lands border portions of the site to the west. A Progress Energy power line easement cuts through the southern portion of the site.

1.2 Compliance Monitoring History

Groundwater monitoring at the facility was initiated in October 2001 after approval of G.N. Richardson & Associate's Water Quality Monitoring Plan (WQMP) for Phase I, by the NCDENR, which included MW-1, MW-2, MW-3, MW-4, MW-5, and MW-10. The WQMP for Phase I was updated in October 2003 to include additional monitoring wells MW-11, MW-12, MW-13, and MW-14 to monitor Phase 2, which were installed in August 2003. To date, these wells have only been used for additional groundwater elevation data. Background sampling for these wells will be initiated prior to waste disposal in Phase 2 in accordance with the facility permit. Monitoring wells MW-1 was decommissioned as part of the expansion; however, MW-9 will remain for water levels until excavations begin in that area.

Currently the facility's monitoring network is comprised of six (6) monitoring wells (MW-2T, MW-3, MW-4, MW-5, MW-6T, and MW-10), which monitor the uppermost aquifer beneath the

facility. MW-10 is the facility's upgradient background monitoring well. Monitoring wells MW-2T and MW-6T are replacement wells for MW-2 and MW-6, which were decommissioned.

In addition to the groundwater monitoring points, the facility's monitoring network includes three surface water sampling points, SW-1, SW-2, and SW-3. Surface water monitoring point SW-1 was relocated northwest of MW-9 and upstream of the facility at a springhead, after site construction created wetlands in its former location. Point SW-2 is located along an unnamed tributary of Jim Branch, which is downstream of the waste area. Point SW-3 is located along Jim Branch downstream of the facility. These points are sampled in conjunction with the groundwater monitoring wells in accordance with the facility's permit and WQMP.

1.3 Hydrogeologic Setting

Geologically, the facility is located within the Deep River basin and Durham sub-basin of the Triassic Basin in the Piedmont Physiographic Province of North Carolina (NCGS, 1985). Generally, the Triassic Basin consists of Lower Mesozoic sedimentary and igneous rocks that filled rift basins. The Durham sub-basin contains conglomerates, fanglomerates, sandstones and mudstones. More specifically, all three Deep River sub-basins contain a middle clay-shale and mudstone interval 50 to about 400 meters thick, which is evident by the red shale present at the site, in addition to the presence of conglomerates and sandstones. The Deep River basin is bounded on the east by the Jonesboro fault system and is intruded by through-going north- and northwest-striking diabase dikes (Olsen, et al., 1991).

The uppermost groundwater beneath the facility is present in a shallow, unconfined aquifer comprised of saprolite, partially weathered rock, and conglomerate bedrock. Groundwater occurs at depths varying widely from approximately 3 feet below grade to 21 feet below grade across the site. Groundwater elevations average approximately 3-10 feet below grade along the perimeter downgradient boundary, and approximately 8 feet below grade to the north along the upgradient northern perimeter boundary. Depth-to-water measurements obtained during the March 2007 monitoring event and summarized in Table 1 were used to prepare a groundwater surface contour map presented on Drawing 1.

Surface water and groundwater at the site generally flows to the south and southeast toward Jim Branch, located along the southeastern portion of the site. The Jim Branch flows toward the southwest into the Shearon Harris Reservoir, located approximately ¾ mile from the site. Groundwater beneath the site flows in three distinguishable and vertically interconnected hydrogeologic units; saprolite, partially weathered rock (PWR), and bedrock (GNR, 2003). The groundwater contour map and interpreted flow directions are consistent with previously submitted interpretations for this facility.

Based on the March 20-21, 2007, groundwater contour map, the hydraulic gradient in the shallow aquifer underlying the site as measured along the conceptual flow path shown on the contour map was calculated to be approximately 0.028. Groundwater velocities were calculated using a hydraulic conductivity of $7.45E^{-04}$, which is the average of the hydraulic conductivities for each of the hydrogeologic units present at the facility (GNR, 2003). The estimated effective porosity of the shallow aquifer is 0.10 (GNR, 2003).

Using the above values, the estimated rate of groundwater flow for the uppermost aquifer beneath the facility was calculated using the following modified Darcy equation:

$$V_{gw} = Ki/n_e$$

where V_{gw} = average linear velocity (feet/year), K = hydraulic conductivity (feet/year), i = horizontal hydraulic gradient, and n_e = effective porosity.

The average estimated linear groundwater flow velocity under the waste management unit is approximately 220 feet/year, which is consistent with previous estimates (Table 2). The range of groundwater flow is expected to vary depending on the hydrogeologic unit in which it occurs. The linear velocity equation above makes the simplified assumptions of a homogeneous and isotropic aquifer. Therefore, this equation can grossly overestimate groundwater velocity when applied to heterogeneous and/or anisotropic conditions, such as in the saprolite wells used for gradient estimates at this site. The saprolite may have areas that exhibit relict foliation and these structures can result in locally anisotropic groundwater flow directions.

2.0 FIELD PROGRAM, MONITORING RESULTS, AND DISCUSSION

Field activities conducted as part of the March 2007 sampling event are discussed in the following sections.

2.1 Visual Inspection Program

In order to ensure that a potential release is detected at the earliest possible time, the visual inspection program is used at the Red Rock C&D Landfill by the sampling crews. This program includes physical indicators such as potential water table mounding beneath the waste management unit, physical examination of any stresses in biological communities, visible signs of leachate migration (i.e., leachate seeps), unexplained changes in soil characteristics, and any other change to the environment due to the waste management unit. During the March 2007 compliance monitoring event, no physical indicators of a potential release were observed in the vicinity of the waste management areas by the sampling crew.

2.2 Well Network and Groundwater Elevation Measurements

The current network of groundwater monitoring wells at the facility consists of wells MW-2T, MW-3, MW-4, MW-5, MW-6T, and MW-10. Monitoring well construction information for all site monitoring wells is summarized on Table 3 and the well locations are shown on Drawing 1. The well locations were selected to yield groundwater samples representative of the conditions in the uppermost aquifer underlying the facility, and to monitor for potential releases from the landfill unit. One upstream (SW-1) and two downstream (SW-2 and SW-3) surface water monitoring points are also monitored.

Monitoring well MW-10 is the facility's background well, and is located hydraulically upgradient to sidegradient of the waste disposal area. Monitoring wells MW-2T, MW-3, MW-4, MW-5, and MW-

6T are located downgradient of the waste disposal area and represent the facility's downgradient compliance wells. The well locations yield groundwater samples representative of the conditions in the uppermost aquifer underlying the facility and monitor for potential releases from the landfill unit.

Depth-to-water measurements were recorded to the nearest 0.01 foot prior to initiating groundwater purging and sampling activities. The respective groundwater level elevations for this event are presented in Table 1. The historical water level data are also shown on this table.

As presented, recent groundwater elevation data for the current monitoring well network indicate that the hydraulic head level in the uppermost aquifer beneath the facility is fairly consistent, with temporal variation from the long-term average limited to approximately 5-10 feet (plus or minus). However, several historical groundwater elevation readings appear to be anomalous and are not considered representative of site hydrogeologic conditions. The range in fluctuation (excluding anomalous data) appears to be greatest in MW-10, which is the upgradient well, located in a groundwater recharge area. The range in fluctuation in compliance wells MW-2T, MW-3, MW-4, MW-5, and MW-6T, which are located near groundwater discharge areas, is much less, presumably due to the stabilizing affect of the hydraulic discharge boundary.

2.3 March 2007 Groundwater Monitoring Event

Personnel from Golder visited the facility on March 20-21, 2007, to purge and sample monitoring wells MW-2T, MW-3, MW-4, MW-5, MW-6T, and MW-10 (upgradient) and to sample surface water monitoring points SW-1 (upstream), SW-2 and SW-3 (downstream). Depth-to-water measurements were obtained from the network monitoring wells to the nearest 0.01 foot using an electronic water level indicator prior to purging the wells.

Monitoring wells were purged and sampled using disposable bailers. Measurements of temperature, pH, specific conductivity, temperature, and turbidity were recorded prior to the purge, after each purge volume, and at the time of sampling.

During the purge, the laboratory-supplied sample containers were prepared. Each sample container was labeled with the sample identification number, sampling personnel, date and time of sample collection, project name and number, and requested chemical analyses.

The required groundwater samples were collected directly from the disposable bailers in the labeled, laboratory-supplied, pre-preserved sample containers after purging was completed. After collection, the samples were placed in a cooler on ice, under chain-of-custody control. Copies of the groundwater sampling logs are presented in Appendix I. Included in each log is a description of the sampling equipment, sampling method, field observations, and water-quality measurements.

The surface water samples were collected from the stream flow, by lowering a decontaminated polyethylene dipper into the stream flow with the opening facing into the current. The collected water was then poured from the dipper into the sample containers, taking care to prevent the over flow of the sample containers and to minimize sample-induced turbidity. Measurements of temperature, pH, specific conductivity, temperature, turbidity, dissolved oxygen, and oxygen reduction potential were measured directly from the stream and recorded during the collection of the

surface water samples. After collection, the samples were placed in a cooler on ice, under chain-of-custody control. Copies of the sampling logs are presented in Appendix I. Included in each log is a description of the sampling equipment, sampling method, field observations, and water-quality measurements.

2.4 Laboratory Analysis Program

The March 21, 2007, groundwater and surface water samples were picked up at the site by Environmental Conservation Laboratories, Inc. (ENCO) of Cary, North Carolina under chain-of-custody control for analysis. As presented, groundwater samples at the facility were analyzed for NC Appendix I constituents plus several indicator parameters as specified in the new NCDENR SWS C&D rules effective January 1, 2007. The surface water samples at the facility were analyzed for the NC Appendix I list of constituents. The samples were received at the laboratory on March 21, 2007, in good condition and properly preserved.

2.5 March 2007 Sampling Results

Analytical results for the March 2007 groundwater and surface water samples are summarized in Tables 4 and 5 along with available historical data. The laboratory certificates-of-analysis, chain-of-custody form and laboratory data reviews for the sampling event are included in Appendix II.

As presented, five inorganic constituents (barium, cobalt, iron, manganese, and zinc) were detected above the Solid Waste Section Limits (SWSLs) in one or more downgradient monitoring wells during the March 2007 monitoring event. Barium was detected in MW-3 and MW-6T; cobalt and zinc were detected in MW-5; iron was detected in MW-4 and MW-5; and manganese was detected in MW-2T, MW-4, MW-5, and MW-6T. No inorganic constituents were detected above the SWSLs in surface water samples. Additionally, there were no organic constituents detected in any monitoring well or surface water samples.

3.0 LABORATORY AND FIELD QA/QC

A field blank was collected by Golder personnel as part of the March 2007 groundwater sampling event. In addition to the field blank, a laboratory-prepared trip blank accompanied the volatile sample containers for the March 2007 sampling event to and from the laboratory. ENCO analyzed the field blank for Appendix I constituents and the trip blank for Appendix I volatile organic compounds. Reviews of the laboratory data were performed by Golder personnel (included in Appendix II). Lead, selenium, zinc, and sulfate were detected in one or more blanks at estimated concentrations. Based on our data review the following detections should be considered blank-qualified and were not included in the statistical analyses: lead in MW-3, MW-5, SW-1, SW-2, and SW-3; selenium in MW-4 and SW-2; zinc in MW-2T, MW-4, and SW-2; and sulfate in MW-3.

4.0 DATA EVALUATION

The results of the data evaluations are presented in the following sections.

4.1 Statistical Evaluations

As presented, barium, cobalt, zinc, iron, and manganese were detected above the SWSLs in one or more downgradient monitoring wells during this sampling event. Statistical analyses are not yet required by the facility's approved WQMP; however, voluntarily pursuant to the requirements of 15A NCAC 13B.0544, the barium concentrations detected in downgradient monitoring wells MW-3, MW-5 and MW-6T were statistically evaluated to determine if the reported concentrations exceeded the facility background concentration. The statistical worksheets are presented as Appendix III. As presented, the reported barium concentrations in MW-3 and MW-6T were determined to be above the facility background concentration. However, these detections appear to be consistent with previous detections of barium in these wells and are believed to be representative of background conditions. Due to an insufficient amount of background data, statistical analysis of cobalt, iron, manganese, and zinc could not be performed. Future data will help determine trends for these constituents.

No organic constituents were detected in groundwater or surface water at the facility during the March 2007 monitoring event. No inorganic or organic constituents were detected in surface water samples above the SWSLs at the facility during the March 2007 monitoring event.

4.2 North Carolina Groundwater Quality Standard Comparisons

As presented in Table 4, concentrations of barium in MW-3; iron in MW-4 and MW-5; and manganese in MW-2T, MW-4, MW-5, MW-6T and MW-10 exceeded their respective 2L Standards. The concentrations of these constituents in downgradient monitoring wells appear to be representative of background (i.e., naturally occurring) conditions.

5.0 CONCLUSIONS

Based on the results summarized herein, Red Rock Disposal, LLC, appears to be in compliance with respect to water quality monitoring requirements and will continue monitoring the uppermost aquifer beneath this facility in accordance with the requirements of the Detection Monitoring Program for Construction & Demolition Landfills as outlined in Title 15A NCAC 13B.0544. The next groundwater monitoring event is scheduled for September 2007.

6.0 REFERENCES

HGL (The Hutchinson Group, Ltd.), Murrysville, PA, various monitoring well, piezometer construction records and boring logs, July-October 2000.

GNR (G.N. Richardson & Associates, Inc.), Raleigh, NC, *Groundwater and Surface Water Monitoring Reports*, November 2001 through October 2006, and *Water Quality Monitoring Plans*, May 2001 and October 2003.

NCGS (North Carolina Geologic Survey), 1985. Geologic Map of North Carolina.

Olsen et al. (Olsen, Paul E., Froelich, Albert J., Daniels, David L., Smoot, Joseph P., Gore, Pamela J.W.), Rift Basins of Early Mesozoic Age, in Horton, J.W., Jr., and Zullo, V.A., eds., The Geology of the Carolinas: The University of Tennessee Press, 1991, pp. 142-170.

USGS (Heath, Ralph C.), Basic Ground-Water Hydrology, Water Supply Paper 2220, for U.S. Department of Interior and U.S.G.S., 1983.

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TABLES

TABLE 1

Summary of Historical Groundwater Elevation Data
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

	Monitoring Well															
	MW-1	**MW-2**	**MW-2T***	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-6T***	**MW-7**	**MW-8**	**MW-9**	**MW-10***	**MW-11**	**MW-12**	**MW-13**	**MW-14**
TOC Elevation (ft AMSL)	280.60	262.13	281.19	261.80	254.10	254.47	277.47	289.21	302.36	286.62	300.69	301.16	310.77	314.83	331.34	301.20
Date	**Static Water Elevation (ft AMSL)**															
11/30/2000	269.62	253.80	NI	248.38	241.87	251.28	272.53	NI	288.67	258.15	290.89	283.86	NI	NI	NI	NI
1/10/2001	269.50	254.51	NI	248.23	249.18	251.48	272.52	NI	287.84	258.07	290.45	283.53	NI	NI	NI	NI
2/13/2001	269.82	255.45	NI	248.66	251.48	251.87	272.94	NI	289.39	264.94	289.63	283.28	NI	NI	NI	NI
4/9/2001	270.77	257.46	NI	249.95	251.24	251.49	274.29	NI	298.81	257.76	297.33	285.13	NI	NI	NI	NI
4/26/2001	270.54	256.00	NI	249.57	250.10	251.76	273.62	NI	294.38	257.67	295.36	284.56	NI	NI	NI	NI
6/11/2002	253.11	--	255.03	248.33	246.57	247.22	--	269.74	--	--	--	286.80	NI	NI	NI	NI
11/1/2002	254.23	--	254.99	248.35	251.61	251.85	--	270.41	--	--	--	285.63	NI	NI	NI	NI
3/6/2003	256.00	--	256.87	252.85	251.91	251.98	--	271.68	--	--	--	290.06	NI	NI	NI	NI
9/9/2003	271.60	--	256.21	250.19	251.36	251.19	--	275.07	--	--	295.47	287.74	280.77	299.71	319.69	291.03
9/23/2003	273.60	--	237.32	249.92	250.86	250.82	--	275.24	--	--	--	--	--	--	--	--
3/11/2004	275.58	--	257.22	252.61	251.73	251.81	--	277.64	--	--	--	290.45	--	--	--	--
9/23/2004	--	--	257.62	250.98	251.57	251.44	--	275.73	--	--	--	290.13	--	--	--	--
3/10/2005	--	--	257.31	252.19	251.88	251.99	--	275.37	--	--	--	290.88	--	--	--	--
9/22/2005	--	--	255.82	248.26	247.45	246.83	--	--	--	--	--	289.94	--	--	--	--
3/6/2006	--	--	256.17	250.29	250.61	250.59	--	274.96	--	--	--	291.63	--	--	--	--
9/19/2006	--	--	257.19	248.77	248.53	250.47	--	277.26	--	--	--	290.83	--	--	--	--
3/20/2007	--	--	266.28	251.80	251.30	251.05	--	275.79	--	--	297.48	293.25	289.81	300.53	324.84	290.12
MEAN	*271.38*	*255.44*	*257.34*	*249.96*	*250.46*	*250.89*	*273.18*	*274.44*	*291.82*	*259.32*	*293.80*	*287.98*	*285.29*	*300.12*	*322.27*	*290.58*
MAXIMUM	*275.58*	*257.46*	*266.28*	*252.85*	*251.91*	*251.99*	*274.29*	*277.64*	*298.81*	*264.94*	*297.48*	*293.25*	*289.81*	*300.53*	*324.84*	*291.03*
MINIMUM	*269.50*	*253.80*	*254.99*	*248.23*	*246.57*	*246.83*	*272.52*	*269.74*	*287.84*	*257.67*	*289.63*	*283.28*	*280.77*	*299.71*	*319.69*	*290.12*

Notes:

1. ft AMSL = feet above mean sea level.
2. -- = not measured or no data
3. TOC = top of casing
4. NI = not installed
5. MW = monitoring well
6. TOC and Water Elevation Data for dates prior to March 2007 from historical G.N. Richardson & Associates, Inc. *Ground and Surface Water Monitoring Reports* .
7. *MW-2T and MW-6T are replacement well installations for MW-2 and MW-6, respectively.
8. **TOC Elevation for MW-10 is listed as both 296.35 feet AMSL in the Hutchinson Group, Ltd. data and 301.16 feet AMSL in the Richardson data from the same sampling periods. The latest TOC elevation is used for this table.
9. It appears that MW-2T and MW-6T were replacement wells and MW-10 was resurveyed by G.N. Richardson & Associates, Inc. The TOC data from the most recent reports are used in this table.
10. Water level data for MW-1 from 6/11/2002, 11/1/2002, and 3/6/2003; for MW-2T from 9/23/2003; and for MW-4 from 11/3/2000 appear to be anomalous and were not included in the mean, maximum, and minimum groundwater calculations.

TABLE 2

Summary of Estimated Horizontal Flow Velocities
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

March 2007							
Gradient Calculation Segment	**Flow Direction**	**Gradient Segment Length (feet)**	**Gradient Segment Elevations (feet)**	**Horizontal Gradient (i, feet)**	**Effective Porosity (n_e)**	**Hydraulic Conductivity (K, cm/sec)**	**Velocity (V_{gw}, feet/year)**
i_1	SE	930	320 280	0.0430	0.1	0.000745	331.50
i_2	S	916	270 250	0.0218	0.1	0.000745	168.28
i_3	SE	1455	280 250	0.0206	0.1	0.000745	158.92

Notes:

1. Horizontal velocities based on the modified Darcy equation $V_{gw} = Ki/n_e$.
2. Values for K and n_e were based on mean values for MW-1, MW-3, MW-5 and MW-10 and hydrogeologic data collected by G.N. Richardson & Associates, Inc. Values for n_e also based on typical effective porosities for similar hydrogeologic conditions as discussed in the 1983 U.S. Dept of Interior and U.S.G.S. publication *Basic Ground-Water Hydrology, Water-Supply Paper 2220,* by Ralph C. Heath

TABLE 3

Summary of Well Construction Information

Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28

Wake County, North Carolina

Well Identification	Construction Date	Ground Surface Elevation (ft AMSL)	Measuring Point Elevation (ft AMSL)	Well Depth** (feet)	Well Diameter (inches)	Screened Interval (ft bgs)	Screened Interval (ft AMSL)	Depth to Bedrock (feet bgs)	Depth to Bedrock (feet AMSL)	Well Status
MW-1	10/5-6/2000	277.33	280.60	30	2	5-15	272.33-262.33	7.00	270.33	Decommissioned
MW-2	10/3/2000	260.46	262.13	25	2	5-15	255.46-245.46	8.00	252.46	Decommissioned
MW-2T*	--	--	281.19	82	2	--	--	--	--	Active
MW-3	10/19/2000	257.5	261.80	31.5	2	17-27	240.5-230.5	5.00	252.50	Active
MW-4	10/11/2000	251.76	254.10	17	2	5-15	246.76-236.76	6.00	245.76	Active
MW-5	10/12/2000	252.04	254.47	15.5	2	4-14	248.04-238.04	11.00	241.04	Active
MW-6	10/18/2000	274.72	277.47	23	2	10-20	264.72-254.72	5.00	269.72	Decommissioned
MW-6T*	--	--	289.21	54	2	--	--	--	--	Active
MW-7	10/17/2000	300.14	302.36	20.5	2	8-18	292.14-282.14	10.30	289.84	Water Levels Only
MW-8	10/18/2000	283.58	286.62	33.5	2	23-33	260.58-250.58	33.50	250.08	Water Levels Only
MW-9	10/16/2000	298.44	300.69	37	2	22-32	276.44-266.44	13.40	285.04	Water Levels Only
MW-10*	10/18/2000	294.02	296.35	34	2	11-31	283.02-263.02	17.00	277.02	Active
MW-11	8/12/2003	308.17	310.77	50	2	40-50	268.17-258.17	12.00	296.17	Water Levels Only
MW-12	8/11/2003	312.04	314.83	28.5	2	17-27	295.04-285.04	8.00	304.04	Water Levels Only
MW-13	8/11/2003	328.36	331.34	17	2	7-17	321.36-311.36	7.00	321.36	Water Levels Only
MW-14	8/12/2003	298.24	301.20	32	2	22-32	276.24-266.24	8.00	290.24	Water Levels Only

Notes:

1. ft AMSL= feet above mean sea level
2. ft BGS= feet below ground surface
3. NA= not drilled to auger refusal
4. -- = no data available
5. Unless otherwise noted, well construction information taken from G.N. Richardson & Associates, Inc. & The Hutchinson Group, Ltd. hydrogeologic data, including previous *Groundwater Monitoring Reports* and May 2001 and Oct 2003 *Water Quality Monitoring Plans.*
6. *MW-2T & MW-6T are replacement wells for MW-2 and MW-6 and have been included as part of the monitoring well network since the April 2001 sampling event.
7. *MW-10 appears to have been resurveyed. The most recent TOC data is used in the construction of this table.
8. **Well depths for MW-2T, MW-3, MW-4, MW-5, MW-6T and MW-10 were based on Golder's March 2007 field measurements.

TABLE 4

Summary of Groundwater Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upgradient MW-1	Upgradient MW-10	Downgradient MW-2	Downgradient MW-2T*	Downgradient MW-3	Downgradient MW-4	Downgradient MW-5	Downgradient MW-6	Downgradient MW-6T*	Downgradient MW-9	Blanks
Antimony	ug/L	10/31/01	30	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	6	--	ND	--	1.09 J	ND	ND	0.60 J	--	ND	--	ND
Arsenic	ug/L	10/31/01	10	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=50 ug/L	ug/L	06/11/02	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	11/01/02	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/11/04	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/04	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/10/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/22/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/06	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/19/06	10	--	ND	--	ND	ND	ND	ND	--	17	--	ND
	ug/L	03/21/07	10	--	ND	--	ND	ND	4.8 J	ND	--	ND	--	ND
Barium	ug/L	10/31/01	500	909	--	1410	--	1650	922	ND	ND	--	ND	ND
NC 2L=2000 ug/L	ug/L	06/11/02	500	ND	ND	--	646	1547	ND	ND	--	837	--	ND
	ug/L	11/01/02	500	ND	ND	--	ND	1733	ND	ND	--	787	--	ND
	ug/L	03/06/03	500	ND	ND	--	535	1939	ND	ND	--	936	ND	ND
	ug/L	09/23/03	500	1046	ND	--	ND	2090	ND	ND	--	1066	--	ND
	ug/L	03/11/04	500	752	707	--	ND	1881	ND	ND	--	966	--	ND
	ug/L	09/23/04	500	--	ND	--	ND	1830	ND	ND	--	977	--	ND
	ug/L	03/10/05	500	--	872	--	ND	2129	ND	ND	--	1164	--	ND
	ug/L	09/22/05	500	--	ND	--	ND	1871	ND	ND	--	1018	--	ND
	ug/L	03/06/06	500	--	590	--	ND	1838	ND	ND	--	1458	--	ND
	ug/L	09/19/06	500	--	ND	--	ND	2090	ND	ND	--	1787	--	ND
	ug/L	03/21/07	100	--	901	--	61.8 J	2080	24.7 J	226	--	1700	--	0.30 J
Beryllium	ug/L	10/31/01	2	ND	--	ND	--	ND	4	ND	ND	--	ND	ND
	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	1	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
Cadmium	ug/L	10/31/01	1	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=1.75 ug/L	ug/L	06/11/02	1	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	11/01/02	1	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/03	1	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/03	1	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/11/04	1	ND	ND	--	7	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/04	1	--	ND	--	1	ND	ND	ND	--	ND	--	ND
	ug/L	03/10/05	1	--	ND	--	3	ND	ND	ND	--	ND	--	ND
	ug/L	09/22/05	1	--	ND	--	7	ND	ND	ND	--	2	--	ND
	ug/L	03/06/06	1	--	ND	--	1	ND	ND	ND	--	ND	--	ND
	ug/L	09/19/06	1	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/21/07	1	--	ND	--	0.80 J	ND	ND	ND	--	ND	--	ND
Chromium	ug/L	10/31/01	10	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=50 ug/L	ug/L	06/11/02	10	ND	ND	--	58	ND	29	ND	--	ND	--	ND
	ug/L	11/01/02	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/11/04	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/04	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/10/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/22/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/06	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/19/06	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/21/07	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
Cobalt (Total)	ug/L	10/31/01	10	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	10	--	ND	--	ND	ND	3.1 J	30.7	--	ND	--	ND

TABLE 4

Summary of Groundwater Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upgradient MW-1	Upgradient MW-10	Downgradient MW-2	Downgradient MW-2T*	Downgradient MW-3	Downgradient MW-4	Downgradient MW-5	Downgradient MW-6	Downgradient MW-6T*	Downgradient MW-9	Blanks
Copper (Total)	ug/L	10/31/01	200	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=1000 ug/L	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	10	--	ND	--	ND	ND	ND	ND	--	ND	--	0.60 J
Lead (Total)	ug/L	10/31/01	10	ND	--	ND	--	ND	14	ND	ND	--	ND	ND
NC 2L=15 ug/L	ug/L	06/11/02	10	ND	ND	--	ND	ND	17	ND	--	ND	--	ND
	ug/L	11/01/02	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/03	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/11/04	10	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/04	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/10/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/22/05	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/06	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/19/06	10	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/21/07	10	--	ND	--	ND	2.4 B	ND	6.0 B	--	ND	--	2.7 J
Nickel (Total)	ug/L	10/31/01	50	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=100 ug/L	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	50	--	ND	--	ND	ND	ND	2.3 J	--	ND	--	ND
Selenium	ug/L	10/31/01	20	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
NC 2L=50 ug/L	ug/L	06/11/02	20	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	11/01/02	20	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/06/03	20	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/03	20	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/11/04	20	ND	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/23/04	20	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	03/10/05	20	--	ND	--	ND	ND	ND	ND	--	ND	--	ND
	ug/L	09/22/05	20	--	ND	--	ND	22	ND	ND	--	ND	--	ND
	ug/L	03/06/06	20	--	ND	--	ND	22	ND	ND	--	23	--	ND
	ug/L	09/19/06	20	--	ND	--	ND	29	ND	ND	--	47	--	ND
	ug/L	03/21/07	10	--	ND	--	ND	ND	3.2 B	ND	--	ND	--	2.5 J
Thallium	ug/L	10/31/01	10	ND	--	ND	--	ND	ND	ND	ND	--	ND	ND
	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	6	--	ND	--	ND	ND	ND	0.132 J	--	ND	--	ND
Vanadium	ug/L	10/31/01	40	ND	--	ND	--	50	ND	ND	ND	--	ND	ND
	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	25	--	ND	--	17.4 J	22.9 J	ND	ND	--	ND	--	ND
Zinc	ug/L	10/31/01	20	ND	--	22	--	ND	21	ND	ND	--	ND	ND
NC 2L=1050 ug/L	ug/L	06/11/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--	--	--	--	--	--	--	--
	ug/L	03/21/07	10	--	ND	--	3.1 B	5.9 J	4.5 B	49.8	--	ND	--	1.1 J
Iron	ug/L	03/21/07	300	--	20 J	--	26 J	ND	813	4820	--	ND	--	ND
NC 2L=300 ug/L														
Manganese	ug/L	03/21/07	50	--	166	--	141	16.8 J	743	3540	--	1370	--	ND
NC 2L=50 ug/L														
Chloride	mg/L	03/21/07	--	--	1000	--	1500	2100	15	290	--	2000	--	ND
Total Dissolved Solids	mg/L	03/21/07	--	--	860	--	1100	3400	64	590	--	3100	--	ND
Sulfate as SO4	mg/L	03/21/07	--	--	15	--	38	7.3 B	10	45	--	9.7	--	1.7 J
Total Alkalinity	mg/L	03/21/07	--	--	120	--	320	270	31	22	--	310	--	ND

TABLE 4

Summary of Groundwater Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upgradient MW-1	Upgradient MW-10	Downgradient MW-2	Downgradient MW-2T*	Downgradient MW-3	Downgradient MW-4	Downgradient MW-5	Downgradient MW-6	Downgradient MW-6T*	Downgradient MW-9	Blanks
pH (field)	S.U.	10/31/01	--	--	--	--	--	--	--	--	--	--	--	--
	S.U.	06/11/02	--	7.00	7.00	--	6.30	6.80	5.50	5.80	--	7.10	--	--
	S.U.	11/01/02	--	7.30	6.90	--	7.10	7.10	5.20	5.00	--	7.40	--	--
	S.U.	03/06/03	--	7.50	5.90	--	6.90	7.00	5.40	5.10	--	7.30	--	--
	S.U.	09/23/03	--	6.70	6.10	--	7.40	6.90	5.20	4.50	--	7.30	--	--
	S.U.	03/11/04	--	6.60	6.70	--	7.00	6.70	5.30	4.70	--	7.40	--	--
	S.U.	09/23/04	--	--	6.60	--	7.20	6.80	5.80	5.30	--	7.20	--	--
	S.U.	03/10/05	--	--	6.40	--	7.30	6.90	6.00	5.60	--	7.20	--	--
	S.U.	09/22/05	--	--	6.60	--	7.60	7.00	5.90	6.70	--	7.20	--	--
	S.U.	03/06/06	--	--	6.60	--	7.60	6.80	5.50	5.30	--	7.00	--	--
	S.U.	09/19/06	--	--	6.70	--	7.40	7.00	5.90	5.10	--	7.10	--	--
	S.U.	03/21/07	--	--	5.63	--	7.08	7.24	6.95	7.83	--	6.86	--	--
Specific Conductance	uS/cm	10/31/01	--	--	--	--	--	--	--	--	--	--	--	--
(lab prior to 9/19/06 event)	uS/cm	06/11/02	--	2300	620	--	2200	4300	270	810	--	3700	--	--
	uS/cm	11/01/02	--	2000	796	--	1820	4000	114	254	--	4000	--	--
	uS/cm	03/06/03	--	2240	253	--	1804	5170	141	458	--	3770	--	--
	uS/cm	09/23/03	--	4059	622	--	1692	3088	141	247	--	3015	--	--
	uS/cm	03/11/04	--	5078	1464	--	2250	5310	208	944	--	4050	--	--
	uS/cm	09/23/04	--	--	995	--	2410	5220	124	525	--	4050	--	--
	uS/cm	03/10/05	--	--	1382	--	1876	4073	184	938	--	3091	--	--
	uS/cm	09/22/05	--	--	997	--	1968	4040	190	2860	--	3850	--	--
	uS/cm	03/06/06	--	--	1170	--	1963	4610	140	894	--	4150	--	--
	uS/cm	09/19/06	--	--	1378	--	2170	4850	158	698	--	4700	--	--
	uS/cm	03/21/07	--	--	1870	--	2470	6480	101	1320	--	6320	--	--
Temperature	Celsius	10/31/01	--	--	--	--	--	--	--	--	--	--	--	--
(lab prior to 9/19/06 event)	Celsius	06/11/02	--	17.0	16.0	--	16.0	15.0	16.0	15.0	--	19.0	--	--
	Celsius	11/01/02	--	16.0	17.0	--	17.0	17.0	15.0	15.0	--	17.0	--	--
	Celsius	03/06/03	--	16.0	12.0	--	16.0	13.0	12.0	11.0	--	16.0	--	--
	Celsius	09/23/03	--	22.0	19.0	--	17.0	19.0	21.0	20.0	--	20.0	--	--
	Celsius	03/11/04	--	12.0	13.0	--	16.0	12.0	11.0	10.0	--	14.0	--	--
	Celsius	09/23/04	--	--	19.0	--	18.0	19.0	20.0	20.0	--	21.0	--	--
	Celsius	03/10/05	--	--	12.0	--	16.0	12.0	9.0	10.0	--	13.0	--	--
	Celsius	09/22/05	--	--	20.0	--	20.0	19.0	20.0	20.0	--	22.0	--	--
	Celsius	03/06/06	--	--	14.0	--	17.0	14.0	13.0	13.0	--	15.0	--	--
	Celsius	09/19/06	--	--	19.0	--	18.0	19.0	19.0	21.0	--	20.0	--	--
	Celsius	03/21/07	--	--	12.8	--	15.9	13.2	11.9	11.2	--	12.7	--	--
Turbidity (field)	NTU	03/21/07	--	--	124	--	135	106	154	342	--	97	--	--

Notes:

mg/L = milligrams per liter
ug/L = micrograms per liter
S.U. = Standard Units
NTU = Nephelometric Turbidity Units
ND = Not detected at the stated reporting limit
uS= microsiemens
J = Estimated value detection and reporting limit
-- = no data
Blanks = field, trip and method blanks
Shaded = Concentrations above the NC 2L Groundwater Standards have been shaded.

*MW-2T & MW-6T are replacement wells for MW-2 and MW-6 and have been included as part of the monitoring well network following the April 2001 sampling event.

MW-2T, MW-3, MW-4, MW-5, MW-6T and MW-10 have comprised the current monitoring well network since the Sept. 2004 event.

MW-10 is the facility's background well.

MW-1 was removed from the site for cell construction and was scheduled to abandoned following the March 2004 sampling event according to G.N. Richardson & Associates, Inc. WQMP Oct. 2003.

TABLE 5

Summary of Surface Water Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upstream	Downstream		Blanks
				SW-1	SW-2	SW-3	
Barium	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	500	Dry	ND	ND	ND
	ug/L	11/01/02	500	ND	ND	ND	ND
	ug/L	03/06/03	500	ND	ND	ND	ND
	ug/L	09/23/03	500	ND	ND	ND	ND
	ug/L	03/11/04	500	Dry	ND	ND	ND
	ug/L	09/23/04	500	--	ND	ND	ND
	ug/L	03/10/05	500	--	ND	ND	ND
	ug/L	09/22/05	500	--	ND	ND	ND
	ug/L	03/06/06	500	--	ND	ND	ND
	ug/L	09/19/06	500	--	ND	ND	ND
	ug/L	03/21/07	100	86.5 J	67.8 J	78.9 J	0.30 J
Chromium	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	10	Dry	234	ND	ND
	ug/L	11/01/02	10	ND	ND	ND	ND
	ug/L	03/06/03	10	ND	ND	ND	ND
	ug/L	09/23/03	10	ND	ND	ND	ND
	ug/L	03/11/04	10	Dry	ND	ND	ND
	ug/L	09/23/04	10	--	ND	ND	ND
	ug/L	03/10/05	10	--	ND	ND	ND
	ug/L	09/22/05	10	--	ND	ND	ND
	ug/L	03/06/06	10	--	ND	ND	ND
	ug/L	09/19/06	10	--	ND	ND	ND
	ug/L	03/21/07	10	ND	ND	ND	ND
Copper	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--
	ug/L	03/21/07	10	ND	ND	ND	0.60 J
Lead	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	10	Dry	14	ND	ND
	ug/L	11/01/02	10	ND	11	ND	ND
	ug/L	03/06/03	10	ND	ND	ND	ND
	ug/L	09/23/03	10	ND	15	ND	ND
	ug/L	03/11/04	10	Dry	14	ND	ND
	ug/L	09/23/04	10	--	ND	ND	ND
	ug/L	03/10/05	10	--	ND	ND	ND
	ug/L	09/22/05	10	--	ND	23	ND
	ug/L	03/06/06	10	--	ND	ND	ND
	ug/L	09/19/06	10	--	ND	ND	ND
	ug/L	03/21/07	10	5.4 B	3.4 B	2.2 B	2.7 J

TABLE 5

Summary of Surface Water Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upstream	Downstream		Blanks
				SW-1	SW-2	SW-3	
Selenium	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	20	Dry	ND	ND	ND
	ug/L	11/01/02	20	ND	ND	ND	ND
	ug/L	03/06/03	20	ND	ND	ND	ND
	ug/L	09/23/03	20	ND	ND	ND	ND
	ug/L	03/11/04	20	Dry	ND	ND	ND
	ug/L	09/23/04	20	--	ND	ND	ND
	ug/L	03/10/05	20	--	ND	ND	ND
	ug/L	09/22/05	20	--	ND	ND	ND
	ug/L	03/06/06	20	--	ND	ND	ND
	ug/L	09/19/06	20	--	ND	ND	ND
	ug/L	03/21/07	10	ND	2.9 B	ND	2.5 J
Vanadium	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--
	ug/L	03/21/07	25	ND	1.1 J	1.8 J	ND
Zinc	ug/L	10/31/01	--	--	--	--	--
	ug/L	06/11/02	--	--	--	--	--
	ug/L	11/01/02	--	--	--	--	--
	ug/L	03/06/03	--	--	--	--	--
	ug/L	09/23/03	--	--	--	--	--
	ug/L	03/11/04	--	--	--	--	--
	ug/L	09/23/04	--	--	--	--	--
	ug/L	03/10/05	--	--	--	--	--
	ug/L	09/22/05	--	--	--	--	--
	ug/L	03/06/06	--	--	--	--	--
	ug/L	09/19/06	--	--	--	--	--
	ug/L	03/21/07	10	6.7 J	4.9 B	8.4 J	1.1 J
pH (field)	S.U.	10/31/01	--	--	--	--	--
	S.U.	06/11/02	--	Dry	7.70	6.50	--
	S.U.	11/01/02	--	5.20	6.10	7.00	--
	S.U.	03/06/03	--	5.00	6.00	5.80	--
	S.U.	09/23/03	--	5.10	5.20	5.10	--
	S.U.	03/11/04	--	Dry	6.30	6.40	--
	S.U.	09/23/04	--	--	6.70	6.80	--
	S.U.	03/10/05	--	--	6.60	7.20	--
	S.U.	09/22/05	--	--	7.60	7.20	--
	S.U.	03/06/06	--	--	7.60	4.80	--
	S.U.	09/19/06	--	--	7.00	6.90	--
	S.U.	03/21/07	--	7.74	8.63	6.68	--

TABLE 5

Summary of Surface Water Monitoring Results
Detected Constituents
Red Rock Disposal, LLC C&D Landfill, Permit No. 92-28
Wake County, North Carolina

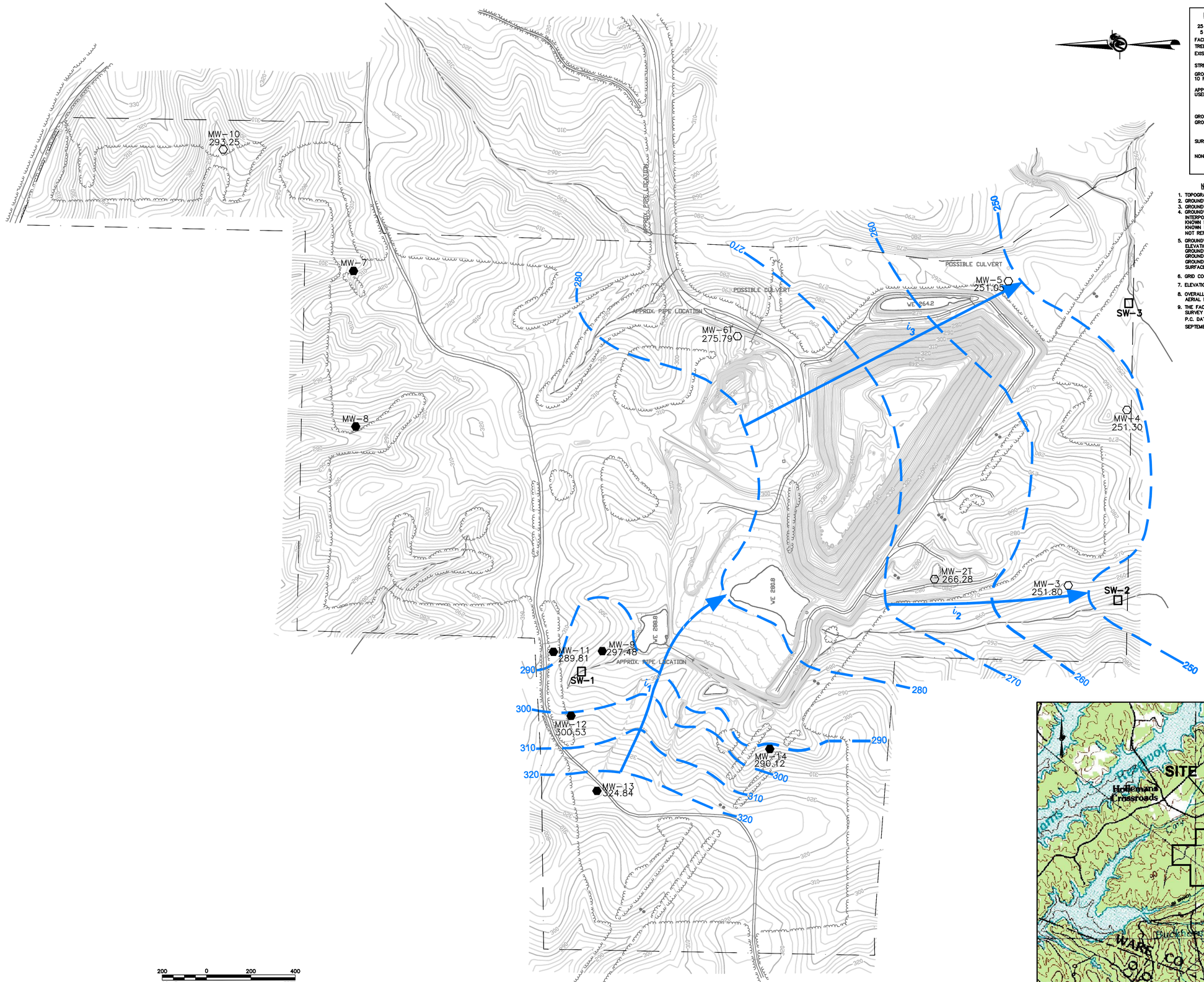
Detected Monitoring Constituent/Parameter	Reporting Units	Sample Date	Reporting Limit	Upstream	Downstream		Blanks
				SW-1	SW-2	SW-3	
Specific Conductance	uS/cm	10/31/01	--	--	--	--	--
(lab prior to 9/19/06 event)	uS/cm	06/11/02	--	Dry	140	120	--
	uS/cm	11/01/02	--	59	105	155	--
	uS/cm	03/06/03	--	35	82	90	--
	uS/cm	09/23/03	--	55	116	128	--
	uS/cm	03/11/04	--	Dry	16	114	--
	uS/cm	09/23/04	--	--	138	112	--
	uS/cm	03/10/05	--	--	108	222	--
	uS/cm	09/22/05	--	--	166	300	--
	uS/cm	03/06/06	--	--	162	295	--
	uS/cm	09/19/06	--	--	160	170	--
	uS/cm	03/21/07	--	85	153	285	--
Temperature	Celsius	10/31/01	--	--	--	--	--
(lab prior to 9/19/06 event)	Celsius	06/11/02	--	Dry	20.0	21.0	--
	Celsius	11/01/02	--	13.0	11.0	11	--
	Celsius	03/06/03	--	14.0	13.0	13.0	--
	Celsius	09/23/03	--	22.0	22.0	21.0	--
	Celsius	03/11/04	--	Dry	8.0	8.0	--
	Celsius	09/23/04	--	--	20.0	18.0	--
	Celsius	03/10/05	--	--	7.0	6.0	--
	Celsius	09/22/05	--	--	24.0	23.0	--
	Celsius	03/06/06	--	--	13.0	11.0	--
	Celsius	09/19/06	--	--	23.0	21.0	--
	Celsius	03/21/07	--	13.4	11.7	12.4	--
Turbidity (field)	NTU	03/21/07	--	133	146	183	--
Oxidation Reduction Potential (field)	millivolts	03/21/07	--	155	67	114	--
Dissolved Oxygen (field)	mg/L	03/21/07	--	9.5	10.3	9.9	--

Notes:

mg/L = milligrams per liter
ug/L = micrograms per liter
S.U. = Standard Units
NTU = Nephelometric Turbidity Units
ND = Not detected at the stated reporting limit
mS= microsiemens
mV = Millivolts
J= Estimated value between detection and reporting limit
-- = no data
Blanks = field, trip and method blanks

*The previous SW-1 location was in a wetland area that had been removed from the site for landfill expansion following the March 2004 sampling event. During the March 2007 sampling event, SW-1 was relocated as shown on Dwg. 1.

DRAWING

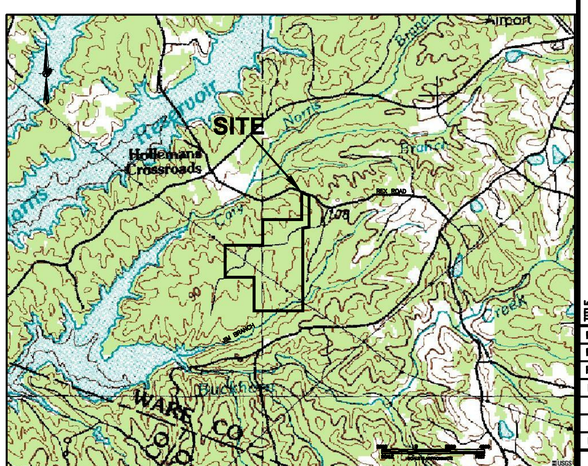


LEGEND

25 FT. CONTOUR INTERVAL	
5 FT. CONTOUR INTERVAL	
FACILITY BOUNDARY	
TREELINE	
EXISTING ROAD	
STREAM	
GROUNDWATER SURFACE 10 FT CONTOURS	250
APPROXIMATE GROUNDWATER FLOW SEGMENT USED TO CALCULATE GRADIENT	v_1
GROUNDWATER MONITORING WELL WITH GROUNDWATER ELEVATION	MW-2T 266.28
SURFACE WATER MONITORING POINT	SW-2
NON – COMPLIANCE WELL	MW-12 300.53

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL= 10 FEET
3. GROUNDWATER ELEVATIONS MEASURED ON MARCH 20, 2007.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.
6. GRID COORDINATES REFERENCE NC STATE PLANE SYSTEM (NAD 1983)
7. ELEVATION REFERENCE U.S.G.S VERTICAL DATUM (MSL).
8. OVERALL SITE TOPOGRAPHY PREPARED BY GEODATA CORP., BASED ON AERIAL PHOTOGRAPHY DATED DECEMBER 22, 2005.
9. THE FACILITY BOUNDARY SHOWN REFERENCES DRAWING TITLED, "BOUNDARY SURVEY FOR WASTE INDUSTRIES." PREPARED BY SURVEY SOULUTIONS, P.C. DATED 12/27/00, SCALE 1" = 400'. (G.N. RICHARDSON & ASSOCIATES, INC SEPTEMBER 2006)



SITE LOCATION MAP
LOCATION IS APPROXIMATE

Golder Associates
GOLDER ASSOCIATES INC, INC

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
1	4/25/07		GROUNDWATER CONTOURS	LKB		

PROJECT
RED ROCK DISPOSAL, LLC
CONSTRUCTION/ DEMOLITION
LANDFILL, PERMIT NO. 92-28
WAKE COUNTY, NC

TITLE
GROUNDWATER CONTOUR MAP
MARCH 20, 2007

PROJECT No. 073-9603.207		
FILE No.		
REV.	SCALE	1"=200'
DESIGN	LKB	4/16/07
CADD	LKB	4/16/07
CHECK		
REVIEW		

DWG-1

APPENDIX I

GROUNDWATER AND SURFACE WATER SAMPLING LOGS

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-2T
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 14.91 **feet**
Depth to Bottom: 81.94 **feet**
Water Column Thickness: 67.03 **feet**
Purge Volume: 11 **gallons**
3x Purge Volume: 33 **gallons**
Well Location: Next to Sediment Basin
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
13:47	6.47	2.26	213	-	19.0	-	0
14:15	7.62	2.31	312	-	18.1	-	11
14:58	7.62	2.63	>1000	-	17.6	-	22
Bailed Dry @ 22 Gallons							
Sampled @ 11:00 on 3/21/2007							
11:00	7.08	2.47	135	-	15.9	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy

Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/25/07

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-3
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 10.00 **feet**
Depth to Bottom: 31.43 **feet**
Water Column Thickness: 21.43 **feet**
Purge Volume: 3.51 **gallons**
3x Purge Volume: 10.54 **gallons**
Well Location: Down trail off access road near MW-2T in woods
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
15:25	7.51	5.97	320	-	14.1	-	0.0
15:31	7.31	5.87	248	-	15.3	-	3.6
15:47	7.19	5.76	>1000	-	15.9	-	7.2
Bailed Dry @ 7.2 Gallons							
Sampled @ 11:15 on 3/21/2007							
11:15	7.24	6.48	106	-	13.2	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy

Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/23/07

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-4
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 2.80 **feet**
Depth to Bottom: 17.33 **feet**
Water Column Thickness: 14.53 **feet**
Purge Volume: 2.40 **gallons**
3x Purge Volume: 7.15 **gallons**
Well Location: Off access road down next to creek.
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
13:02	7.43	0.216	205	-	13.2	-	0.0
13:05	6.23	0.148	342	-	12.2	-	2.4
13:10	5.65	0.161	>1000	-	12.9	-	4.8
Dry @ 6.0 Gallons							
Sampled @ 10:10 on 3/21/2007							
10:10	6.95	0.101	154	-	11.90	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy

Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/25/07

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-5
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 3.42 **feet**
Depth to Bottom: 15.41 **feet**
Water Column Thickness: 11.99 **feet**
Purge Volume: 1.97 **gallons**
3x Purge Volume: 5.90 **gallons**
Well Location: Off access road in pine patch near wetlands.
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
12:20	7.47	2.48	171	-	11.1	-	0.0
12:23	6.71	2.52	588	-	11.1	-	2.0
12:26	6.52	2.81	>1000	-	12.1	-	4.0
12:30	6.87	3.38	>1000	-	12.8	-	6.0
Sampled @ 9:30 on 3/21/2007							
9:30	7.83	1.320	342	-	11.2	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy
Slightly turbid.
Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/25/07

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-6T
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 13.42 **feet**
Depth to Bottom: 54.12 **feet**
Water Column Thickness: 40.70 **feet**
Purge Volume: 6.67 **gallons**
3x Purge Volume: 20.10 **gallons**
Well Location: Next to the scalehouse.
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
11:25	7.52	5.38	186	-	14.2	-	0.0
11:38	7.51	5.85	161	-	16.9	-	6.7
11:45	7.84	5.90	155	-	17.1	-	13.4
11:59	7.19	5.83	152	-	17.4	-	20.1
Sampled @ 9:10 on 3/21/2007							
9:10	6.86	6.32	97	-	12.7	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy

Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/25/07

DATE: 3/20-21/2007

Golder Associates

GROUNDWATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Well ID: MW-10
Sampler(s): B.Draper/J.DeVore
Well Diameter: 2 **inches**
Initial Depth to Water: 7.91 **feet**
Depth to Bottom: 34.39 **feet**
Water Column Thickness: 26.48 **feet**
Purge Volume: 4.43 **gallons**
3x Purge Volume: 13.00 **gallons**
Well Location: Down access road in woods (Background Well)
Equipment: Disposable Bailer, Horiba U-22 Water Quality Meter, 150' Slope WL Indicator

Time	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	Dis O2 (mg/L)	Temp. (oC)	ORP (millivolts)	Vol. (gallons)
10:26	6.14	2.87	0.0	-	14.7	-	0.0
10:39	6.16	3.21	>1000	-	14.5	-	4.5
10:50	7.14	1.80	>1000	-	15.0	-	9.0
10:57	7.32	1.97	>1000	-	15.2	-	13.1
Sampled @ 8:58 on 3/21/2007							
8:58	5.63	1.87	124	-	12.8	-	-

Comments (weather conditions, color, type of sample, purge-water management, etc.):
Temperature 50° and Breezy

Parameters taken after sample.

Signature: [signature] **Date:** 3/21/2007
QA/QC Sign Off: [signature] **Date:** 4/25/07

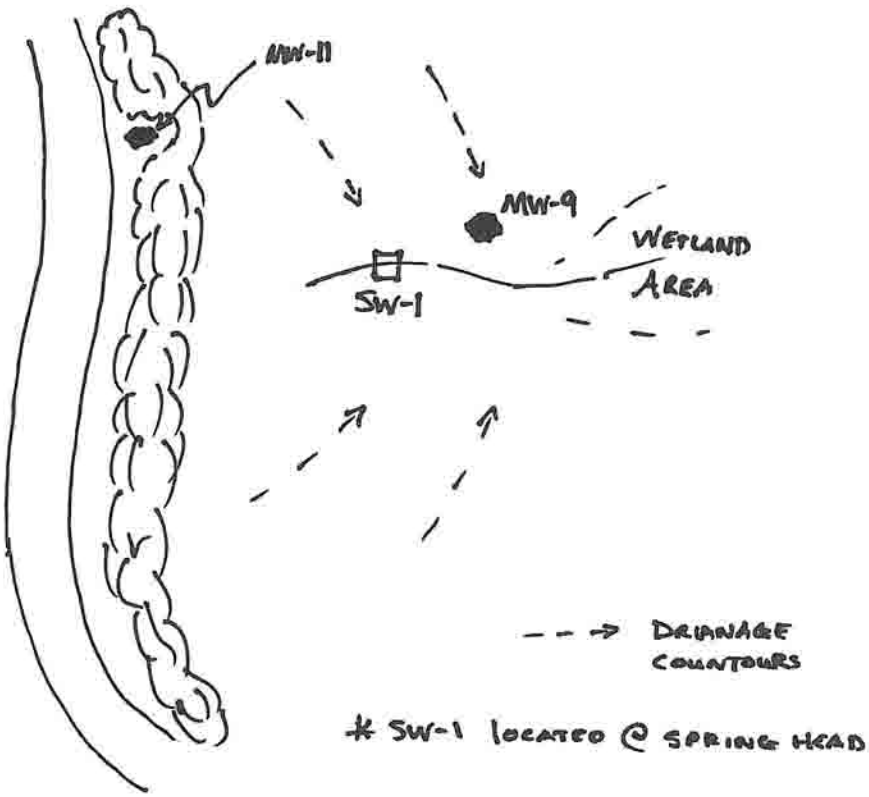
DATE: 03/21/07

SURFACE WATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Sample ID: SW-1
Sampler(s): B. Draper/J. DeVore
Sampling Location: Spring head in draw next to MW-9.
Equipment: Horiba U-22 Water Quality Meter

Time	12:15
pH s.u.	7.74
Cond. mS/cm	85
Turb. ntu	133
Dis. O2 mg/L	9.5
Temp. oC	13.4
ORP mv	155

Surface Water Location Sketch



Comments (sample methodology, weather conditions, color, silt, etc.):
Temperature 50° Cloudy

Signature: [signature] Date: 3/21/2007
QA/QC Sign Off: [signature] Date: 4/25/07

DATE: 03/21/07

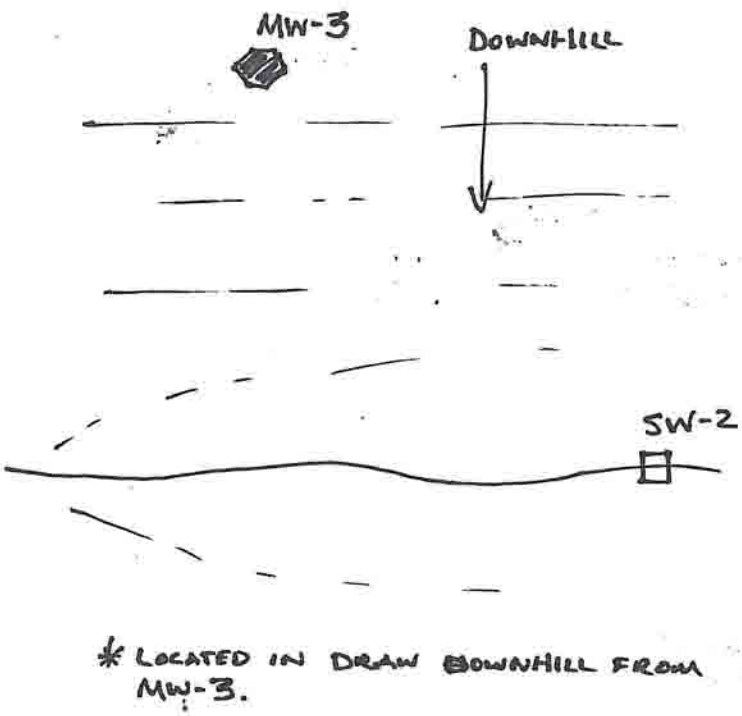
Golder Associates

SURFACE WATER SAMPLING LOG

Project Name: Red Rock - WI USA
Project No./Phase No.: 073-9603507.100
Sample ID: SW-2
Sampler(s): B. Draper/J. DeVore
Sampling Location: In draw at spring head downhill from MW-3.
Equipment: Horiba U-22 Water Quality Meter

Time	11:45
pH s.u.	8.63
Cond. mS/cm	153
Turb. ntu	146
Dis. O2 mg/L	10.3
Temp. oC	11.7
ORP mv	67

Surface Water Location Sketch



Comments (sample methodology, weather conditions, color, silt, etc.):
Temperature 50° Cloudy

Signature: [signature] Date: 3/21/2007
QA/QC Sign Off: [signature] Date: 4/25/07

DATE: 03/21/07

Golder Associates

SURFACE WATER SAMPLING LOG

Project Name: Red Rock - WI USA **Project No./Phase No.:** 073-9603507.100

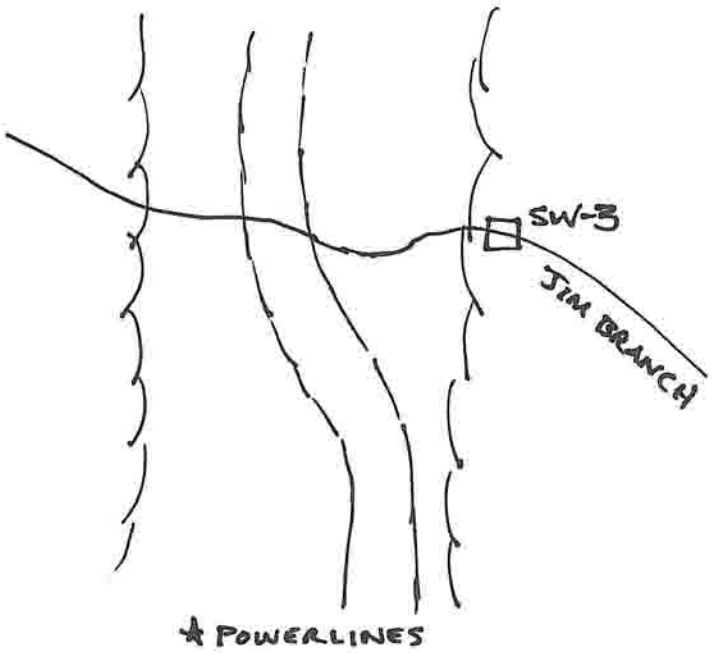
Sample ID: SW-3 **Sampler(s):** B. Draper/J. DeVore

Sampling Location: Off access road in creek near were it crosses the power lines.

Equipment: Horiba U-22 Water Quality Meter

Time	10:30
pH s.u.	6.68
Cond. mS/cm	285
Turb. ntu	183
Dis. O2 mg/L	9.9
Temp. oC	12.4
ORP mv	114

Surface Water Location Sketch



Comments (sample methodology, weather conditions, color, silt, etc.):
Temperature 50° Cloudy

Signature: Date: 3/21/2007

QA/QC Sign Off: Date: 4/25/07

APPENDIX II

MARCH 2007 CERTIFICATES-OF-ANALYSIS, CHAIN-OF-CUSTODY FORMS AND LABORATORY DATA REVIEWS

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

Friday, April 27, 2007

Waste Industries - Red Rock Disposal (WA023)

Attn: Rachel Kirkman

7130 New Landfill Drive

Holly Springs, NC 27540

RE: Project Number: 073-96033507.100, Project Name/Desc: Red Rock
ENCO Workorder: C703136

Dear Rachel Kirkman,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, March 21, 2007.

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.

This data has been produced in accordance with NELAC standards (June, 2003). 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. 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,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 51.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 9228-MW2T **Lab ID:** C703136-01

Sampled: 03/21/07 11:00 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 16:54
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 17:06
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:13
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 15:11
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 01:09

Client ID: 9228-MW3 **Lab ID:** C703136-02

Sampled: 03/21/07 11:15 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 17:04
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 17:13
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:15
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 15:13
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 01:35

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Client ID: 9228-MW4 **Lab ID:** C703136-03

Sampled: 03/21/07 10:10 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 17:17
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 17:20
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:26
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 15:16
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 02:01

Client ID: 9228-MW5MSMSD **Lab ID:** C703136-04

Sampled: 03/21/07 09:30 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 18:06
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 16:43
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:05
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 14:50
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 02:27

Client ID: 9228-MW6T **Lab ID:** C703136-05

Sampled: 03/21/07 09:10 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 17:27
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 17:27
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:46
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 15:18
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 02:53

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Client ID: 9228-MW10 **Lab ID:** C703136-06

Sampled: 03/21/07 08:40 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 160.1	03/28/07	03/27/07 07:45	3/28/2007 15:00
EPA 310.1	04/04/07	03/28/07 12:50	3/28/2007 14:00
EPA 325.3	04/18/07	03/27/07 14:00	3/27/2007 14:00
EPA 375.4	04/18/07	03/27/07 17:58	3/28/2007 17:31
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 17:34
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:49
EPA 7470A	04/18/07	03/27/07 12:53	3/28/2007 15:21
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 03:19

Client ID: 9228-SW1 **Lab ID:** C703136-07

Sampled: 03/21/07 12:15 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 18:02
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:54
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 03:45

Client ID: 9228-SW2 **Lab ID:** C703136-08

Sampled: 03/21/07 11:45 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 18:09
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 11:56
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 04:11

Client ID: 9228-SW3 **Lab ID:** C703136-09

Sampled: 03/21/07 10:30 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 18:16
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 12:04
EPA 8260B	04/04/07	03/22/07 07:02	3/23/2007 04:37

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Client ID: Field Blank **Lab ID:** C703136-10

Sampled: 03/21/07 12:50 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	09/17/07	03/22/07 08:36	3/27/2007 18:23
EPA 6020	09/17/07	03/22/07 08:40	3/22/2007 12:14
EPA 8260B	04/04/07	03/22/07 07:02	3/22/2007 22:55

Client ID: Trip Blank **Lab ID:** C703136-11

Sampled: 03/21/07 00:00 **Received:** 03/21/07 13:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	04/04/07	03/22/07 07:02	3/22/2007 22:29

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 9228-MW2T **Lab ID:** C703136-01

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Antimony	1.09	J	1	0.58	2.00	6	ug/L	EPA 6020
Barium	61.8	J	1	0.20	10.0	100	ug/L	EPA 6010B
Cadmium	0.80	J	1	0.50	1.00	1	ug/L	EPA 6010B
Chloride	1500		1	1.0	1.0	NE	mg/L	EPA 325.3
Iron	26	J	1	20	50	300	ug/L	EPA 6010B
Manganese	141		1	1.4	10.0	50	ug/L	EPA 6010B
Sulfate as SO4	38		1	0.60	5.0	NE	mg/L	EPA 375.4
Total Alkalinity	320		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	1100		1	10	10	NE	mg/L	EPA 160.1
Vanadium	17.4	J	1	1.0	10.0	25	ug/L	EPA 6010B
Zinc	3.1	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-MW3 **Lab ID:** C703136-02

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	2080		1	0.20	10.0	100	ug/L	EPA 6010B
Chloride	2100		1	1.0	1.0	NE	mg/L	EPA 325.3
Lead	2.4	J	1	2.0	10.0	10	ug/L	EPA 6010B
Manganese	16.8	J	1	1.4	10.0	50	ug/L	EPA 6010B
Sulfate as SO4	7.3		1	0.60	5.0	NE	mg/L	EPA 375.4
Total Alkalinity	270		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	3400		1	10	10	NE	mg/L	EPA 160.1
Vanadium	22.9	J	1	1.0	10.0	25	ug/L	EPA 6010B
Zinc	5.9	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-MW4 **Lab ID:** C703136-03

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Arsenic	4.8	J	1	2.0	10.0	10	ug/L	EPA 6010B
Barium	24.7	J	1	0.20	10.0	100	ug/L	EPA 6010B
Chloride	15		1	1.0	1.0	NE	mg/L	EPA 325.3
Cobalt	3.1	J	1	2.0	10.0	10	ug/L	EPA 6010B
Iron	813		1	20	50	300	ug/L	EPA 6010B
Manganese	743		1	1.4	10.0	50	ug/L	EPA 6010B
Selenium	3.2	J	1	2.0	10.0	10	ug/L	EPA 6010B
Sulfate as SO4	10		1	0.60	5.0	NE	mg/L	EPA 375.4
Total Alkalinity	31		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	64		1	10	10	NE	mg/L	EPA 160.1
Zinc	4.5	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-MW5MSMSD **Lab ID:** C703136-04

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Antimony	0.60	J	1	0.58	2.00	6	ug/L	EPA 6020
Barium	226		1	0.20	10.0	100	ug/L	EPA 6010B
Chloride	290	D	10	10	10	NE	mg/L	EPA 325.3
Cobalt	30.7		1	2.0	10.0	10	ug/L	EPA 6010B
Iron	4820		1	20	50	300	ug/L	EPA 6010B
Lead	6.0	J	1	2.0	10.0	10	ug/L	EPA 6010B
Manganese	3540		1	1.4	10.0	50	ug/L	EPA 6010B
Nickel	2.3	J	1	2.0	10.0	50	ug/L	EPA 6010B

Sulfate as SO4	45	D	4	2.4	20	NE	mg/L	EPA 375.4
Thallium	0.132	J	1	0.044	0.050	5.5	ug/L	EPA 6020
Total Alkalinity	22		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	590		1	10	10	NE	mg/L	EPA 160.1
Zinc	49.8		1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-MW6T **Lab ID: C703136-05**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	1700		1	0.20	10.0	100	ug/L	EPA 6010B
Chloride	2000		1	1.0	1.0	NE	mg/L	EPA 325.3
Manganese	1370		1	1.4	10.0	50	ug/L	EPA 6010B
Sulfate as SO4	9.7		1	0.60	5.0	NE	mg/L	EPA 375.4
Total Alkalinity	310		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	3100		1	10	10	NE	mg/L	EPA 160.1

Client ID: 9228-MW10 **Lab ID: C703136-06**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	901		1	0.20	10.0	100	ug/L	EPA 6010B
Chloride	1000		1	1.0	1.0	NE	mg/L	EPA 325.3
Iron	20	J	1	20	50	300	ug/L	EPA 6010B
Manganese	166		1	1.4	10.0	50	ug/L	EPA 6010B
Sulfate as SO4	15		1	0.60	5.0	NE	mg/L	EPA 375.4
Total Alkalinity	120		1	2.0	2.0	NE	mg/L	EPA 310.1
Total Dissolved Solids	860		1	10	10	NE	mg/L	EPA 160.1

Client ID: 9228-SW1 **Lab ID: C703136-07**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	86.5	J	1	0.20	10.0	100	ug/L	EPA 6010B
Lead	5.4	J	1	2.0	10.0	10	ug/L	EPA 6010B
Zinc	6.7	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-SW2 **Lab ID: C703136-08**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	67.8	J	1	0.20	10.0	100	ug/L	EPA 6010B
Lead	3.4	J	1	2.0	10.0	10	ug/L	EPA 6010B
Selenium	2.9	J	1	2.0	10.0	10	ug/L	EPA 6010B
Vanadium	1.1	J	1	1.0	10.0	25	ug/L	EPA 6010B
Zinc	4.9	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: 9228-SW3 **Lab ID: C703136-09**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	78.9	J	1	0.20	10.0	100	ug/L	EPA 6010B
Lead	2.2	J	1	2.0	10.0	10	ug/L	EPA 6010B
Vanadium	1.8	J	1	1.0	10.0	25	ug/L	EPA 6010B
Zinc	8.4	J	1	1.0	10.0	10	ug/L	EPA 6010B

Client ID: Field Blank **Lab ID: C703136-10**

Analyte	Results/Qual		DF	MDL	MRL	NC SWSL	Units	Method
Barium	0.30	J	1	0.20	10.0	100	ug/L	EPA 6010B
Copper	0.60	J	1	0.60	10.0	10	ug/L	EPA 6010B
Lead	2.7	J	1	2.0	10.0	10	ug/L	EPA 6010B
Zinc	1.1	J	1	1.0	10.0	10	ug/L	EPA 6010B

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ANALYTICAL REPORT

Sample ID:	9228-MW2T	Project:	Red Rock
Lab #:	C703136-01	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW2T	Project:	Red Rock
Lab #:	C703136-01	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	44	50.0	87 %	67-125
Dibromofluoromethane	1868-53-7	46	50.0	91 %	69-111
Toluene-d8	2037-26-5	46	50.0	92 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW2T
Lab #: C703136-01

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	**1.09** J	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**61.8** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	**0.80** J	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	**26** J	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**141**	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	**17.4** J	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**3.1** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID: 9228-MW2T
Lab #: C703136-01

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**1500**	1	1.0	1.0	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**38**	1	0.60	5.0	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**320**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**1100**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-MW3	Project:	Red Rock
Lab #:	C703136-02	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW3	Project:	Red Rock
Lab #:	C703136-02	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	41	50.0	81 %	67-125
Dibromofluoromethane	1868-53-7	45	50.0	90 %	69-111
Toluene-d8	2037-26-5	45	50.0	90 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW3
Lab #: C703136-02

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**2080**	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	20 U	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**2.4** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**16.8** J	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	**22.9** J	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**5.9** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID: 9228-MW3
Lab #: C703136-02

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**2100**	1	1.0	1.0	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**7.3**	1	0.60	5.0	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**270**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**3400**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-MW4	Project:	Red Rock
Lab #:	C703136-03	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW4	Project:	Red Rock
Lab #:	C703136-03	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	41	50.0	82 %	67-125
Dibromofluoromethane	1868-53-7	44	50.0	88 %	69-111
Toluene-d8	2037-26-5	45	50.0	90 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW4
Lab #: C703136-03

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	**4.8** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**24.7** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	**3.1** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	**813**	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**743**	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	**3.2** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**4.5** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID: 9228-MW4
Lab #: C703136-03

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**15**	1	1.0	1.0	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**10**	1	0.60	5.0	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**31**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**64**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-MW5MSMSD	Project:	Red Rock
Lab #:	C703136-04	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW5MSMSD	Project:	Red Rock
Lab #:	C703136-04	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	43	50.0	86 %	67-125
Dibromofluoromethane	1868-53-7	45	50.0	90 %	69-111
Toluene-d8	2037-26-5	45	50.0	90 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW5MSMSD
Lab #: C703136-04

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	**0.60** J	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**226**	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	**30.7**	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	**4820**	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**6.0** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**3540**	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	**2.3** J	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	**0.132** J	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**49.8**	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID:	9228-MW5MSMSD	Project:	Red Rock
Lab #:	C703136-04	Work Order #:	C703136
		Matrix:	Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**290** D	10	10	10	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**45** D	4	2.4	20	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**22**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**590**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-MW6T	Project:	Red Rock
Lab #:	C703136-05	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW6T	Project:	Red Rock
Lab #:	C703136-05	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	43	50.0	86 %	67-125
Dibromofluoromethane	1868-53-7	46	50.0	92 %	69-111
Toluene-d8	2037-26-5	43	50.0	87 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW6T
Lab #: C703136-05

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**1700**	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	20 U	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**1370**	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	1.0 U	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID: 9228-MW6T
Lab #: C703136-05

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**2000**	1	1.0	1.0	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**9.7**	1	0.60	5.0	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**310**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**3100**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-MW10	Project:	Red Rock
Lab #:	C703136-06	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-MW10	Project:	Red Rock
Lab #:	C703136-06	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	44	50.0	87 %	67-125
Dibromofluoromethane	1868-53-7	44	50.0	89 %	69-111
Toluene-d8	2037-26-5	44	50.0	88 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-MW10
Lab #: C703136-06

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**901**	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Iron	7439-89-6	**20** J	1	20	50	300	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Manganese	7439-96-5	**166**	1	1.4	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Mercury	7439-97-6	0.11 U	1	0.11	0.20	0.2	ug/L	EPA 7470A	EPA 7470A	7C27019
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	1.0 U	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID: 9228-MW10
Lab #: C703136-06

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Chloride	16887-00-6	**1000**	1	1.0	1.0	NE	mg/L	EPA 325.3	NO PREP	7C27021
Sulfate as SO4	14808-79-8	**15**	1	0.60	5.0	NE	mg/L	EPA 375.4	NO PREP	7C27032
Total Alkalinity	NA	**120**	1	2.0	2.0	NE	mg/L	EPA 310.1	NO PREP	7C28011
Total Dissolved Solids	NA	**860**	1	10	10	NE	mg/L	EPA 160.1	NO PREP	7C27002

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ANALYTICAL REPORT

Sample ID:	9228-SW1	Project:	Red Rock
Lab #:	C703136-07	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-SW1	Project:	Red Rock
Lab #:	C703136-07	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	42	50.0	84 %	67-125
Dibromofluoromethane	1868-53-7	46	50.0	92 %	69-111
Toluene-d8	2037-26-5	44	50.0	88 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-SW1
Lab #: C703136-07

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**86.5** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**5.4** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**6.7** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID:	9228-SW2	Project:	Red Rock
Lab #:	C703136-08	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-SW2	Project:	Red Rock
Lab #:	C703136-08	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	42	50.0	83 %	67-125
Dibromofluoromethane	1868-53-7	44	50.0	87 %	69-111
Toluene-d8	2037-26-5	44	50.0	88 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-SW2
Lab #: C703136-08

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**67.8** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**3.4** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	**2.9** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	**1.1** J	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**4.9** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID:	9228-SW3	Project:	Red Rock
Lab #:	C703136-09	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	9228-SW3	Project:	Red Rock
Lab #:	C703136-09	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/23/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	42	50.0	84 %	67-125
Dibromofluoromethane	1868-53-7	44	50.0	88 %	69-111
Toluene-d8	2037-26-5	44	50.0	89 %	85-120

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ANALYTICAL REPORT

Sample ID: 9228-SW3
Lab #: C703136-09

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**78.9** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	0.60 U	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**2.2** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	**1.8** J	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**8.4** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID:	Field Blank	Project:	Red Rock
Lab #:	C703136-10	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/22/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	Field Blank	Project:	Red Rock
Lab #:	C703136-10	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	03/22/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	41	50.0	81 %	67-125
Dibromofluoromethane	1868-53-7	45	50.0	89 %	69-111
Toluene-d8	2037-26-5	44	50.0	88 %	85-120

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ANALYTICAL REPORT

Sample ID: Field Blank
Lab #: C703136-10

Project: Red Rock
Work Order #: C703136
Matrix: Ground Water

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	DF	MDL	MRL	NC SWSL	Units	Analysis Method	Prep Method	Analytical Batch
Antimony	7440-36-0	0.58 U	1	0.58	2.00	6	ug/L	EPA 6020	EPA 3005A	7C22015
Arsenic	7440-38-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Barium	7440-39-3	**0.30** J	1	0.20	10.0	100	ug/L	EPA 6010B	EPA 3005A	7C22014
Beryllium	7440-41-7	0.70 U	1	0.70	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Cadmium	7440-43-9	0.50 U	1	0.50	1.00	1	ug/L	EPA 6010B	EPA 3005A	7C22014
Chromium	7440-47-3	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Cobalt	7440-48-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Copper	7440-50-8	**0.60** J	1	0.60	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Lead	7439-92-1	**2.7** J	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Nickel	7440-02-0	2.0 U	1	2.0	10.0	50	ug/L	EPA 6010B	EPA 3005A	7C22014
Selenium	7782-49-2	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Silver	7440-22-4	2.0 U	1	2.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014
Thallium	7440-28-0	0.044 U	1	0.044	0.050	5.5	ug/L	EPA 6020	EPA 3005A	7C22015
Vanadium	7440-62-2	1.0 U	1	1.0	10.0	25	ug/L	EPA 6010B	EPA 3005A	7C22014
Zinc	7440-66-6	**1.1** J	1	1.0	10.0	10	ug/L	EPA 6010B	EPA 3005A	7C22014

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ANALYTICAL REPORT

Sample ID:	Trip Blank	Project:	Red Rock
Lab #:	C703136-11	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	03/22/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.16 U	0.16	1.0	5	ug/L
1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	0.24 U	0.24	1.0	5	ug/L
1,1-Dichloroethane	75-34-3	0.090 U	0.090	1.0	5	ug/L
1,1-Dichloroethene	75-35-4	0.14 U	0.14	1.0	5	ug/L
1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	1.0	1	ug/L
1,2-Dibromo-3-chloropropane	96-12-8	0.19 U	0.19	1.0	1	ug/L
1,2-Dibromoethane	106-93-4	0.19 U	0.19	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	0.17 U	0.17	1.0	5	ug/L
1,2-Dichloroethane	107-06-2	0.36 U	0.36	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	0.18 U	0.18	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	1.0	1	ug/L
2-Butanone	78-93-3	0.56 U	0.56	5.0	100	ug/L
2-Hexanone	591-78-6	0.24 U	0.24	5.0	50	ug/L
4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	5.0	100	ug/L
Acetone	67-64-1	0.90 U	0.90	5.0	100	ug/L
Acrylonitrile	107-13-1	2.0 U	2.0	5.0	200	ug/L
Benzene	71-43-2	0.12 U	0.12	1.0	1	ug/L
Bromochloromethane	74-97-5	0.19 U	0.19	1.0	3	ug/L
Bromodichloromethane	75-27-4	0.19 U	0.19	0.40	1	ug/L
Bromoform	75-25-2	0.36 U	0.36	1.0	3	ug/L
Bromomethane	74-83-9	0.21 U	0.21	1.0	10	ug/L
Carbon disulfide	75-15-0	0.12 U	0.12	5.0	100	ug/L
Carbon tetrachloride	56-23-5	0.38 U	0.38	1.0	1	ug/L
Chlorobenzene	108-90-7	0.16 U	0.16	1.0	3	ug/L
Chloroethane	75-00-3	0.40 U	0.40	1.0	10	ug/L
Chloroform	67-66-3	0.16 U	0.16	1.0	5	ug/L
Chloromethane	74-87-3	0.18 U	0.18	1.0	1	ug/L
cis-1,2-Dichloroethene	156-59-2	0.14 U	0.14	1.0	5	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	0.20	1	ug/L
Dibromochloromethane	124-48-1	0.18 U	0.18	1.0	1	ug/L
Dibromomethane	74-95-3	0.14 U	0.14	1.0	10	ug/L
Ethylbenzene	100-41-4	0.17 U	0.17	1.0	1	ug/L
Iodomethane	74-88-4	0.23 U	0.23	2.0	10	ug/L
Methylene chloride	75-09-2	0.088 U	0.088	1.0	1	ug/L
Styrene	100-42-5	0.12 U	0.12	1.0	1	ug/L

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ANALYTICAL REPORT

Sample ID:	Trip Blank	Project:	Red Rock
Lab #:	C703136-11	Work Order #:	C703136
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	03/22/07 By: spf	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	CA00487		
QC Batch:	7C22002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	NC SWSL	Units
Tetrachloroethene	127-18-4	0.25 U	0.25	1.0	1	ug/L
Toluene	108-88-3	0.15 U	0.15	1.0	1	ug/L
trans-1,2-Dichloroethene	156-60-5	0.10 U	0.10	1.0	5	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	0.20	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.60 U	0.60	1.0	100	ug/L
Trichloroethene	79-01-6	0.23 U	0.23	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	0.16 U	0.16	1.0	1	ug/L
Vinyl acetate	108-05-4	0.19 U	0.19	2.0	50	ug/L
Vinyl chloride	75-01-4	0.15 U	0.15	1.0	1	ug/L
Xylenes (Total)	1330-20-7	0.21 U	0.21	1.0	4	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	42	50.0	84 %	67-125
Dibromofluoromethane	1868-53-7	44	50.0	88 %	69-111
Toluene-d8	2037-26-5	44	50.0	88 %	85-120

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes

Volatile Organic Compounds by GCMS - Quality Control

Batch 7C22002 - EPA 5030B_MS

Blank (7C22002-BLK1) Prepared: 03/22/2007 07:02 Analyzed: 03/22/2007 22:03

Acetone	0.90 U	5.0	ug/L
Acrylonitrile	2.0 U	5.0	ug/L
Benzene	0.12 U	1.0	ug/L
2-Butanone	0.56 U	5.0	ug/L
2-Hexanone	0.24 U	5.0	ug/L
Iodomethane	0.23 U	2.0	ug/L
Tetrachloroethene	0.25 U	1.0	ug/L
4-Methyl-2-pentanone	0.36 U	5.0	ug/L
Bromochloromethane	0.19 U	1.0	ug/L
Trichloroethene	0.23 U	1.0	ug/L
Bromodichloromethane	0.19 U	0.40	ug/L
Bromoform	0.36 U	1.0	ug/L
Bromomethane	0.21 U	1.0	ug/L
Carbon disulfide	0.12 U	5.0	ug/L
Carbon tetrachloride	0.38 U	1.0	ug/L
Chlorobenzene	0.16 U	1.0	ug/L
Chloroethane	0.40 U	1.0	ug/L
Chloroform	0.16 U	1.0	ug/L
Chloromethane	0.18 U	1.0	ug/L
Dibromochloromethane	0.18 U	1.0	ug/L
1,2-Dibromo-3-chloropropane	0.19 U	1.0	ug/L
1,2-Dibromoethane	0.19 U	1.0	ug/L
Dibromomethane	0.14 U	1.0	ug/L
1,2-Dichlorobenzene	0.17 U	1.0	ug/L
1,4-Dichlorobenzene	0.15 U	1.0	ug/L
trans-1,4-Dichloro-2-butene	0.60 U	1.0	ug/L
1,1-Dichloroethane	0.090 U	1.0	ug/L
1,2-Dichloroethane	0.36 U	1.0	ug/L
1,1-Dichloroethene	0.14 U	1.0	ug/L
cis-1,2-Dichloroethene	0.14 U	1.0	ug/L
trans-1,2-Dichloroethene	0.10 U	1.0	ug/L
1,2-Dichloropropane	0.18 U	1.0	ug/L
cis-1,3-Dichloropropene	0.16 U	0.20	ug/L
trans-1,3-Dichloropropene	0.18 U	0.20	ug/L
Ethylbenzene	0.17 U	1.0	ug/L
Methylene chloride	0.088 U	1.0	ug/L
Styrene	0.12 U	1.0	ug/L
1,1,1,2-Tetrachloroethane	0.16 U	1.0	ug/L
1,1,2,2-Tetrachloroethane	0.27 U	1.0	ug/L
Toluene	0.15 U	1.0	ug/L
1,1,1-Trichloroethane	0.24 U	1.0	ug/L
1,1,2-Trichloroethane	0.24 U	1.0	ug/L
Trichlorofluoromethane	0.16 U	1.0	ug/L
1,2,3-Trichloropropane	0.32 U	1.0	ug/L
Vinyl acetate	0.19 U	2.0	ug/L

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Volatile Organic Compounds by GCMS - Quality Control										
Batch 7C22002 - EPA 5030B_MS										
Blank (7C22002-BLK1) Continued				Prepared: 03/22/2007 07:02 Analyzed: 03/22/2007 22:03						
Vinyl chloride	0.15 U	1.0	ug/L							
Xylenes (Total)	0.21 U	1.0	ug/L							
Surrogate: Toluene-d8	*44*		*ug/L*	*50.0*		*87*	*85-120*			
Surrogate: 4-Bromofluorobenzene	*40*		*ug/L*	*50.0*		*81*	*67-125*			
Surrogate: Dibromofluoromethane	*45*		*ug/L*	*50.0*		*90*	*69-111*			
LCS (7C22002-BS1)				Prepared: 03/22/2007 07:02 Analyzed: 03/22/2007 23:22						
Benzene	18	1.0	ug/L	20.0		92	76-116			
Trichloroethene	18	1.0	ug/L	20.0		90	81-118			
Chlorobenzene	17	1.0	ug/L	20.0		83	75-115			
1,1-Dichloroethene	20	1.0	ug/L	20.0		100	57-141			
Toluene	19	1.0	ug/L	20.0		95	77-120			
Matrix Spike (7C22002-MS1)		**Source: C703136-04**		Prepared: 03/22/2007 07:02 Analyzed: 03/22/2007 23:49						
Benzene	19	1.0	ug/L	20.0	0.12 U	97	76-116			
Trichloroethene	19	1.0	ug/L	20.0	0.23 U	96	81-118			
Chlorobenzene	17	1.0	ug/L	20.0	0.16 U	84	75-115			
1,1-Dichloroethene	21	1.0	ug/L	20.0	0.14 U	104	57-141			
Toluene	19	1.0	ug/L	20.0	0.15 U	93	77-120			
Matrix Spike Dup (7C22002-MSD1)		**Source: C703136-04**		Prepared: 03/22/2007 07:02 Analyzed: 03/23/2007 00:17						
Benzene	18	1.0	ug/L	20.0	0.12 U	92	76-116	5	14	
Trichloroethene	18	1.0	ug/L	20.0	0.23 U	91	81-118	6	11	
Chlorobenzene	17	1.0	ug/L	20.0	0.16 U	83	75-115	1	12	
1,1-Dichloroethene	20	1.0	ug/L	20.0	0.14 U	101	57-141	3	12	
Toluene	18	1.0	ug/L	20.0	0.15 U	90	77-120	4	17	
Metals by EPA 6000/7000 Series Methods - Quality Control										
Batch 7C22014 - EPA 3005A										
Blank (7C22014-BLK1)				Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:34						
Arsenic	2.0 U	10.0	ug/L							
Barium	0.20 U	10.0	ug/L							
Beryllium	0.70 U	1.00	ug/L							
Cadmium	0.50 U	1.00	ug/L							
Chromium	2.0 U	10.0	ug/L							
Cobalt	2.0 U	10.0	ug/L							
Copper	0.60 U	10.0	ug/L							
Iron	20 U	50	ug/L							
Lead	2.0 U	10.0	ug/L							
Manganese	1.4 U	10.0	ug/L							
Nickel	2.0 U	10.0	ug/L							
Selenium	2.5 J	10.0	ug/L							
Silver	2.0 U	10.0	ug/L							
Vanadium	1.0 U	10.0	ug/L							
Zinc	1.0 U	10.0	ug/L							
LCS (7C22014-BS1)				Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:20						
Arsenic	1030	10.0	ug/L	1000		103	82-117			

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Metals by EPA 6000/7000 Series Methods - Quality Control										
Batch 7C22014 - EPA 3005A										
LCS (7C22014-BS1) Continued				Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:20						
Barium	1170	10.0	ug/L	1000		117	72-125			
Beryllium	520	1.00	ug/L	500		104	75-121			
Cadmium	528	1.00	ug/L	500		106	72-120			
Chromium	1000	10.0	ug/L	1000		100	78-119			
Cobalt	1000	10.0	ug/L	1000		100	76-117			
Copper	500	10.0	ug/L	500		100	80-117			
Iron	10200	50	ug/L	10000		102	84-133			
Lead	967	10.0	ug/L	1000		97	72-121			
Manganese	493	10.0	ug/L	500		99	76-123			
Nickel	1050	10.0	ug/L	1000		105	78-116			
Selenium	1030	10.0	ug/L	1000		103	82-127			
Silver	102	10.0	ug/L	100		102	80-128			
Vanadium	490	10.0	ug/L	500		98	78-117			
Zinc	1020	10.0	ug/L	1000		102	80-120			
Matrix Spike (7C22014-MS1)		**Source: C703136-04**		Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:50						
Arsenic	1030	10.0	ug/L	1000	2.0 U	103	64-126			
Barium	1380	10.0	ug/L	1000	226	115	74-119			
Beryllium	519	1.00	ug/L	500	0.70 U	104	70-131			
Cadmium	523	1.00	ug/L	500	0.50 U	105	68-121			
Chromium	986	10.0	ug/L	1000	2.0 U	99	73-120			
Cobalt	1020	10.0	ug/L	1000	30.7	99	76-120			
Copper	510	10.0	ug/L	500	0.60 U	102	75-123			
Iron	15000	50	ug/L	10000	4820	102	48-144			
Lead	970	10.0	ug/L	1000	6.0	96	68-126			
Manganese	3840	10.0	ug/L	500	3540	59	55-146			
Nickel	1040	10.0	ug/L	1000	2.3	104	64-126			
Selenium	1030	10.0	ug/L	1000	2.0 U	103	65-129			
Silver	101	10.0	ug/L	100	2.0 U	101	69-121			
Vanadium	475	10.0	ug/L	500	1.0 U	95	71-130			
Zinc	1060	10.0	ug/L	1000	49.8	101	63-131			
Matrix Spike Dup (7C22014-MSD1)		**Source: C703136-04**		Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:57						
Arsenic	1030	10.0	ug/L	1000	2.0 U	103	64-126	0.5	12	
Barium	1390	10.0	ug/L	1000	226	116	74-119	0.7	11	
Beryllium	522	1.00	ug/L	500	0.70 U	104	70-131	0.6	21	
Cadmium	524	1.00	ug/L	500	0.50 U	105	68-121	0.2	12	
Chromium	992	10.0	ug/L	1000	2.0 U	99	73-120	0.6	10	
Cobalt	1030	10.0	ug/L	1000	30.7	100	76-120	0.6	17	
Copper	515	10.0	ug/L	500	0.60 U	103	75-123	0.9	16	
Iron	15400	50	ug/L	10000	4820	106	48-144	2	23	
Lead	964	10.0	ug/L	1000	6.0	96	68-126	0.5	19	
Manganese	3840	10.0	ug/L	500	3540	60	55-146	0.08	19	
Nickel	1050	10.0	ug/L	1000	2.3	104	64-126	0.4	12	
Selenium	1030	10.0	ug/L	1000	2.0 U	103	65-129	0.4	10	
Silver	104	10.0	ug/L	100	2.0 U	104	69-121	3	12	
Vanadium	477	10.0	ug/L	500	1.0 U	95	71-130	0.4	16	

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Metals by EPA 6000/7000 Series Methods - Quality Control										
Batch 7C22014 - EPA 3005A										
Matrix Spike Dup (7C22014-MSD1) Continued		**Source: C703136-04**		Prepared: 03/22/2007 08:36 Analyzed: 03/27/2007 16:57						
Zinc	1060	10.0	ug/L	1000	49.8	101	63-131	0.09	24	
Batch 7C22015 - EPA 3005A										
Blank (7C22015-BLK1)				Prepared: 03/22/2007 08:40 Analyzed: 03/22/2007 10:54						
Antimony	1.00 U	5.00	ug/L							
Thallium	0.400 U	2.00	ug/L							
LCS (7C22015-BS1)				Prepared: 03/22/2007 08:40 Analyzed: 03/22/2007 11:03						
Antimony	55.0	5.00	ug/L	50.0		110	80-120			
Thallium	52.9	2.00	ug/L	50.0		106	80-120			
Matrix Spike (7C22015-MS1)		**Source: C703136-04**		Prepared: 03/22/2007 08:40 Analyzed: 03/22/2007 11:08						
Antimony	52.8	5.00	ug/L	50.0	0.60	104	70-130			
Thallium	53.9	2.00	ug/L	50.0	0.132	108	70-130			
Matrix Spike Dup (7C22015-MSD1)		**Source: C703136-04**		Prepared: 03/22/2007 08:40 Analyzed: 03/22/2007 11:10						
Antimony	52.9	5.00	ug/L	50.0	0.60	105	70-130	0.2	20	
Thallium	55.2	2.00	ug/L	50.0	0.132	110	70-130	2	20	
Batch 7C27019 - EPA 7470A										
Blank (7C27019-BLK1)				Prepared: 03/27/2007 12:53 Analyzed: 03/28/2007 14:44						
Mercury	0.11 U	0.20	ug/L							
LCS (7C27019-BS1)				Prepared: 03/27/2007 12:53 Analyzed: 03/28/2007 14:47						
Mercury	4.76	0.20	ug/L				87-123			
Matrix Spike (7C27019-MS1)		**Source: C703136-04**		Prepared: 03/27/2007 12:53 Analyzed: 03/28/2007 14:52						
Mercury	5.31	0.20	ug/L		0.11 U		63-132			
Matrix Spike Dup (7C27019-MSD1)		**Source: C703136-04**		Prepared: 03/27/2007 12:53 Analyzed: 03/28/2007 14:54						
Mercury	5.13	0.20	ug/L		0.11 U		63-132	3	10	
Post Spike (7C27019-PS1)		**Source: C703136-04**		Prepared: 03/27/2007 12:53 Analyzed: 03/28/2007 15:04						
Mercury	5.23	0.20	ug/L		0.11 U		85-115			
Classical Chemistry Parameters - Quality Control										
Batch 7C27002 - NO PREP										
Blank (7C27002-BLK1)				Prepared: 03/27/2007 07:45 Analyzed: 03/28/2007 15:00						
Total Dissolved Solids	10 U	10	mg/L							
LCS (7C27002-BS1)				Prepared: 03/27/2007 07:45 Analyzed: 03/28/2007 15:00						
Total Dissolved Solids	310	10	mg/L	300		102	90-110			
Duplicate (7C27002-DUP1)		**Source: C703069-01**		Prepared: 03/27/2007 07:45 Analyzed: 03/28/2007 15:00						
Total Dissolved Solids	3400	10	mg/L		3300			2	10	
Batch 7C27021 - NO PREP										
Blank (7C27021-BLK1)				Prepared & Analyzed: 03/27/2007						
Chloride	1.0 U	1.0	mg/L							
LCS (7C27021-BS1)				Prepared & Analyzed: 03/27/2007						
Chloride	47	1.0	mg/L	50.0		94	86-122			
Matrix Spike (7C27021-MS1)		**Source: C703136-04**		Prepared & Analyzed: 03/27/2007						
Chloride	790	10	mg/L	500	290	100	83-139			

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Classical Chemistry Parameters - Quality Control										
Batch 7C27021 - NO PREP										
Matrix Spike Dup (7C27021-MSD1)		**Source: C703136-04**		Prepared & Analyzed: 03/27/2007						
Chloride	770	10	mg/L	500	290	96	83-139	2	12	
Batch 7C27032 - NO PREP										
Blank (7C27032-BLK1)				Prepared: 03/27/2007 17:58 Analyzed: 03/28/2007 16:26						
Sulfate as SO4	1.7 J	5.0	mg/L							
LCS (7C27032-BS1)				Prepared: 03/27/2007 17:58 Analyzed: 03/28/2007 16:31						
Sulfate as SO4	22	5.0	mg/L	20.0		109	80-120			
Matrix Spike (7C27032-MS1)		**Source: C703136-02**		Prepared: 03/27/2007 17:58 Analyzed: 03/28/2007 17:08						
Sulfate as SO4	25	5.0	mg/L	20.0	7.3	90	80-120			
Matrix Spike Dup (7C27032-MSD1)		**Source: C703136-02**		Prepared: 03/27/2007 17:58 Analyzed: 03/28/2007 17:13						
Sulfate as SO4	26	5.0	mg/L	20.0	7.3	95	80-120	4	10	
Batch 7C28011 - NO PREP										
Blank (7C28011-BLK1)				Prepared: 03/28/2007 12:50 Analyzed: 03/28/2007 14:00						
Total Alkalinity	2.0 U	2.0	mg/L							
LCS (7C28011-BS1)				Prepared: 03/28/2007 12:50 Analyzed: 03/28/2007 14:00						
Total Alkalinity	120	2.0	mg/L	125		99	80-120			
Matrix Spike (7C28011-MS1)		**Source: C703136-04**		Prepared: 03/28/2007 12:50 Analyzed: 03/28/2007 14:00						
Total Alkalinity	150	2.0	mg/L	125	22	99	80-120			
Matrix Spike Dup (7C28011-MSD1)		**Source: C703136-04**		Prepared: 03/28/2007 12:50 Analyzed: 03/28/2007 14:00						
Total Alkalinity	150	2.0	mg/L	125	22	99	80-120	0.3	25	

NOTES AND DEFINITIONS

D	Data reported from a dilution
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
U	Analyte included in the analysis, but not detected

LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8260B Appendix 1	Water	NC	591
Alkalinity 310.1	Water	NC	591
Antimony Total EPA 6020	Water	NC	591
Arsenic Total EPA 6010B	Water	NC	591
Barium Total EPA 6010B	Water	NC	591
Beryllium Total EPA 6010B	Water	NC	591
Cadmium Total EPA 6010B	Water	NC	591
Chloride 325.3	Water	NC	591
Chromium Total EPA 6010B	Water	NC	591
Cobalt Total EPA 6010B	Water	NC	591
Copper Total EPA 6010B	Water	NC	591
Iron Total EPA 6010B	Water	NC	591
Lead Total EPA 6010B	Water	NC	591
Manganese Total EPA 6010B	Water	NC	591
Mercury Total EPA 7470A	Water	NC	591
Nickel Total EPA 6010B	Water	NC	591
Selenium Total EPA 6010B	Water	NC	591
Silver Total EPA 6010B	Water	NC	591
TDS 160.1	Water	NC	591
Thallium Total EPA 6020	Water	NC	591
Vanadium Total EPA 6010B	Water	NC	591
Zinc Total EPA 6010B	Water	NC	591

WORK ORDER

Printed: 3/29/2007 7:52:15AM

C703136

ENCO Cary

Sample Receipt Conditions

Client:	**Waste Industries - Red Rock Disposal (WA023)**	**Lab Project Mgr:**	**Chuck Smith**
Project:	**Red Rock**	**Project Number:**	**073-96033507.100**
PO #:			

Report To:
Waste Industries - Red Rock Disposal (WA023)
Rachel Kirkman
7130 New Landfill Drive
Holly Springs, NC 27540
Phone: (919) 557-9583
Fax: (919) 557-9583

Invoice To:
Waste Industries - Red Rock Disposal (WA023)
Rachel Kirkman
7130 New Landfill Drive
Holly Springs, NC 27540
Phone :(919) 557-9583
Fax: (919) 557-9583

Received By:	Briana DeBottis	Date Received:	21-Mar-07 13:10
Logged In By:	Briana DeBottis	Date Logged In:	21-Mar-07 14:58

Work Order Comments:

Default Cooler received at 3.5°C

Containers Intact	Y	Containers Properly Preserved	Y	Proper Containers Received	Y	All Samples in PreLog Received	N	COC/Labels Agree	Y
Custody Seals Intact	Y	Volatile Containers Preserved	Y	Volatile Containers Headspace Free	Y	Aqueous Samples Checked for Residual Cl	N	Received On Ice	Y

Reviewed By

Date

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

1015 Passport Way
Cary, NC 27513
(919) 677-1669 Fax (919) 677-9846

Client Name: Waste Insdustries - Red Rock Disposal (WA023)	Project Number: 073-96033507.100
Address: 7130 New Landfill Drive	Project Name/Desc: Red Rock
City/ST/Zip: Holly Springs, NC 27540	PO # / Billing Info
Tel: (919) 557-9583 Fax: (919) 557-9583	Reporting Contact: Rachel Kirkman
Sampler(s) Name, Affiliation (Print): B. Drapee / J. DeVore	Billing Contact: Rachel Kirkman
Sampler(s) Signature:	Facility # (if required)

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C703136

Requested Analyses

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B Appendix 1	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Hg,Mn,Ni,Pb,Sb,Se,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.1,Sulfate 375.4	Chloride 325.2	TDS 160.1					Sample Comments
	9828-MW2T	3/21/07	11:00	G	Water	6	X	X		X	X	X					NC Appendix I, Hg, Mn, Fe, Chloride, Sulfate, Alkalinity, TDS
	9828-MW3		11:15	G	Water	6	X	X		X	X	X					
	9828-MW4		10:10	G	Water	6	X	X		X	X	X					
	9828-MW5MSMSD		9:30	G	Water	9	X	X		X	X	X					
	9828-MW6T		9:10	G	Water	6	X	X		X	X	X					
	9828-MW10		8:40	G	Water	6	X	X		X	X	X					
	9828-SW1		12:15	G	Water	4	X		X								NC Appendix I
	9828-SW2		11:45	G	Water	4	X		X								
	9828-SW3		10:30	G	Water	4	X		X								
	Field Blank		12:50	G	Water	4	X		X								
	Trip Blank	—	—	—	Water	3	X										NC Appendix I VOC only.
	Extra				Water	6	X	X		X	X	X					

<-- Total # of Containers

Sample Kit Prepared By: CARY	Date/Time: 3/14/07	Relinquished By:	Date/Time: 3/21/07 / 13:16	Received By: James Nunn	Date/Time: 3/21/07 13:16
Comments: Chain Covers 2 coolers		Relinquished By:	Date/Time:	Received By:	Date/Time:
		Relinquished By:	Date/Time:	Received By:	Date/Time:
		Cooler #'s & Temps on Receipt		Condition Upon Receipt: ___ Acceptable ___ Unacceptable	

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

Preservation: I-Ice 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

GOLDER ASSOCIATES NC, INC.
QUALITY ASSURANCE & QUALITY CONTROL
LABORATORY DATA REVIEW

Project Name: Red Rock Disposal, LLC C&D Landfill – Waste Industries USA

Project Reference Number: 073-9603507.100

Sampling Event Date: March 21, 2007

Review Date: April 10, 2007 *Initials:* JD

Review Date: April 25, 2007 *Initials:* BD

Report #: C703136

Person(s) performing the review are to initial each item on this form as acknowledgement of data acceptance, or as acknowledgement of a review issue. In the case of the latter, a brief explanation should follow the applicable item.

Golder Associates Inc. has reviewed the laboratory certificates of analysis, chain-of-custody form, and laboratory provided sample group quality assurance and quality control data for the above referenced sample group to identify potential bias or inaccuracy, in general accordance with the following United States Environmental Protection Agency documents:

- Region III Modifications to Functional Guidelines for Organic Data Review Multi-Media, Multi-Concentration, September 1994;
- Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, April 1993; and
- Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, July 1998.

COMPLIANCE ANALYTE LIST(S) (check all that apply)

X NC Closed Facility/C & D List (plus mercury)

___ NC Appendix I

___ NC Appendix I + Detects

___ NC Appendix II

___ NC Subtitle D Leachate List

Other: _____

1.0 CHAIN OF CUSTODY (COC) REVIEW

JD BD COC was properly signed by all parties.

JD BD Correct project name and number are on the form.

- ***Incorrect project number listed on the "chain-of-custody", the project number should be 073-9603507.100.***

JD BD Sample receipt condition at laboratory was acceptable.

JD BD Each sample and blank submitted for analysis appears in the report.

Notes: _____

2.0 SAMPLE HOLDING TIMES

JD BD Holding times for extraction and/or analysis were met for each analytical Method (see below for reference).

Notes: _____

Review Criteria		
Method	**Analytes**	**Holding Time**
SW-846 Method 8260 and 8011	VOCs	14 days
SW-846 Methods 8270, 8080, 8081, 8082, and 8151	SVOCs, PCBs, pesticides and herbicides	7 days for extraction, 40 days from extraction for analysis
SW-846 Methods 6000 and 7000 Series	Metals except mercury	6 months (no temperature requirements)
SW-846 Method 7470	Mercury	28 days
SW-846 Method 376.1	Sulfide	7 days
SW-846 Method 9010	Cyanide	14 days
EPA Method 300	Nitrate/Sulfate	48 hours/28 days
EPA Method 405.1	BOD	48 hours
EPA Method 410.4	COD	28 days
EPA Method 365.4	Phosphorous	28 days
EPA Method 160.1	TDS	7 days
EPA Method 325.3	Chloride	28 days

3.0 LABORATORY QUALITY CONTROL REVIEW

JD BD Laboratory analyzed at least one internal blank for each method, where applicable.

JD BD Laboratory blank is interference-free.

Method Blank (7C22014-BLK1):
- ***Selenium @ 2.5 µg/L (J)***

Method Blank (7C27032-BLK1):
- ***Sulfate @ 1.7 µg/L (J)***

JD BD Surrogate recoveries are provided for each analytical method, where applicable.

JD BD Surrogate recoveries for each method are within the acceptable limits (i.e., at least 50% of the surrogates were within range).

JD BD MS/MSD/LCS data results are provided for each analytical method.

JD BD MS/MSD/LCS recoveries for each method are within the acceptable limits (i.e., at least 1 of the 3 were within range).

- ***The LCS/MS/MSD/PS data for 7C27019 did not list a % recovery.***

Notes: _____

4.0 ANALYTE LISTS/METHODS

JD BD The proper number of constituents are present for each analyte list as identified above (including detects where applicable).

JD BD Proper EPA SW-846 analytical methods were used for analysis.

Notes: _____

5.0 DATA REPORTING

JD BD All analytical reporting associated with the event was performed by the contracted lab.

JD BD Trip, field and/or equipment, and laboratory blank results have all been reported. All detects for blanks are listed below by constituent. All laboratory method blanks, if any, have been 'flagged' with a 'B' where detected in other samples as appropriate and a laboratory narrative was provided. If the sample was flagged by the laboratory and is not within 5X of the concentration in the blank (or 10X for commonly detected laboratory contaminants-acetone, methylene chloride and phthalates), list below with explanation if flags should be removed. If flags need to be added for samples, also list below.

Method Blanks:

- ***Selenium @ 2.5 µg/L (J)***
- ***Sulfate @ 1.7 µg/L (J)***

****Note the detection of Sulfate in MW-3 needs a B-Flag. Selenium in MW-4 and SW-2 need B-Flags.***

Field Blanks:

- ***Barium @ 0.3 µg/L (J)***
- ***Copper @ 0.6 µg/L (J)***
- ***Lead @ 2.7µg/L (J)***
- ***Zinc @ 1.1 µg/L (J)***

****Note the detections of Lead in MW-3, MW-5, SW-1, SW-2, and SW-3. Zinc in MW-2T, MW-4, and SW-2 need B-Flags.***

JD BD It is clear from the laboratory report that samples have or have not been diluted during analysis, and if the samples have been diluted, the result is reported as a multiple of the dilution (e.g., a sample diluted 10x resulting in an analytical detection of 1.0 should be reported as 10). Those that have been diluted are listed below with the dilution factor.

MW-5:

- ***Chloride diluted @ 10:1 dilution factor***
- ***Sulfate diluted @ 4:1 dilution factor***

JD BD The report provides the reporting limit for each constituent.

JD BD The results were reported at or below their proper reporting limits (e.g., NC Solid Waste Section approved RLs). Those that are not reported correctly are listed below (by constituent) with the proper reporting limit listed beside them. State if the reporting limit error is due to dilutions.

JD BD No inorganic and organic constituents were reported above their respective NC 2L Drinking Water Standards in wells, surface points, or field/equipment/trip blanks.

- ***The following inorganic constituents were detected:***

MW-2T:

- ***Manganese: 141 µg/L (2L=50 ug/L)***

MW-3:

- ***Barium: 2,080 µg/L (2L=2000 µg/L)***

MW-4:

- ***Iron: 813 µg/L (2L=300 µg/L)***
- ***Manganese: 743 µg/L (2L=50 µg/L)***

MW-5:

- ***Iron: 4,820 µg/L (2L=300 µg/L)***
- ***Manganese: 3,540 µg/L (2L=50 µg/L)***

MW-6T:

- ***Manganese: 1,370 µg/L (2L=1,370 µg/L)***

MW-10:

- ***Manganese: 166 µg/L (2L=50 µg/L)***

WJ BD No inorganic and organic constituents were detected in a well or surface water point at concentrations outside of their historical range (more than 5X previous concentrations or first-time detections).

- ***The following inorganic constituents were sampled and detected for the first time:***

MW-2T:
Antimony, Vanadium, Iron, Zinc, Manganese

MW-3:
Manganese

MW-4:
Iron, Manganese

MW-5:
Antimony, Iron, Manganese

MW-6T:
Manganese

SW-1:
Barium, Zinc

SW-2:
Barium, Vanadium, Zinc

SW-3:
Barium, Vanadium, Zinc

- ***The following inorganic constituents were detected for the first time:***

MW-3:
Lead, Zinc

MW-4:
Arsenic, Cobalt, Selenium

MW-5:
Barium, Cobalt, Lead, Nickel, Thallium, Zinc

SW-1:
Lead, Selenium

- ***The following inorganic constituent was detected at the highest historical detection:***

MW-10:
Barium

JD BD Other report issues/Communications with laboratory/etc.:

Notes: ***The majority of new detections are the result of new SWS Reporting Limits and revised parameter list***

APPENDIX III

STATISTICAL EVALUATION WORKSHEETS

Project Name: Red Rock C&D LF - WI USA
Project No: 073-9603507
Date: 4/25/07

Analyte: Barium

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	10/31/2001	MW-1	909		500
2	6/11/2002	MW-1	ND, QL = 500		500
3	11/1/2002	MW-1	ND, QL = 500		500
4	3/6/2003	MW-1	ND, QL = 500		500
5	9/23/2003	MW-1	1046		500
6	3/11/2004	MW-1	752		500
7	6/11/2002	MW-10	ND, QL = 500		500
8	11/1/2002	MW-10	ND, QL = 500		500
9	3/6/2003	MW-10	ND, QL = 500		500
10	9/23/2003	MW-10	ND, QL = 500		500
11	3/11/2004	MW-10	707		500
12	9/23/2004	MW-10	ND, QL = 500		500
13	3/10/2005	MW-10	872		500
14	9/22/2005	MW-10	ND, QL = 500		500
15	3/6/2006	MW-10	590		500
16	9/19/2006	MW-10	ND, QL = 500		500
17	3/21/2007	MW-10	901		100

Number of Data	17
Number of Truncated Data	10
Percentage of Truncated Data	59%

Nonparametric Prediction Interval: **1046**