

**3R - 446**

**GWMR**

**12 / 08 / 2011**



ENTERPRISE PRODUCTS PARTNERS L.P.  
ENTERPRISE PRODUCTS HOLDINGS LLC  
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

RECEIVED OCD

December 08, 2011

2011 DEC 15 A 9:00

Return Receipt Requested  
7010 1870 0001 2945 4429

Mr. Glen Von Gonten  
New Mexico Energy, Minerals & Natural Resources Department  
Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Quarterly Groundwater Monitoring Report  
K-51 Pipeline Release Site  
Off County Road 537  
NE ¼ Section 34 & NW ¼, Sec 35, T26N, R6W  
Rio Arriba County, New Mexico**

Dear Mr. Von Gonten:

Enterprise Field Services, LLC (Enterprise) is submitting two (2) copies of the enclosed *Quarterly Groundwater Monitoring Report*, dated October 19, 2011, for the release site referenced above. A release of approximately 10 barrels of condensate occurred at this location on April 13, 2010. The enclosed report provides the results of the last quarterly groundwater monitoring event, conducted during September 2011. The results of this monitoring event indicate that several monitor well locations currently exceed applicable New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards.

Based on these results, Enterprise recommends performing additional site investigations to ensure that the full extent of affected soil and groundwater at the site are delineated. Also, based on the results from the initial insitu chemical treatment of affected soil and groundwater performed at the site during May 2011, additional treatment events will be required. Quarterly groundwater monitoring events shall be continued until site closure is completed.

Enterprise wishes to proceed with the additional site delineation investigation as soon as possible. Following completion of the site delineation investigation, additional corrective actions to complete treatment of affected soils and groundwater at the site will be proposed to the Oil Conservation Division (OCD). If you have any questions, or require additional information, please do not hesitate to contact me at (713) 381-2286, or [drsmith@eprod.com](mailto:drsmith@eprod.com).

Sincerely,

David R. Smith, P.G.  
Sr. Environmental Scientist

Rodney M. Sartor, REM  
Manager, Remediation

/dep  
Enclosures

cc: Brandon Powell, New Mexico Oil Conservation Division, 1000 Rio Brazos Road, Aztec, NM 87410

ec: Chris Mitchell, Southwest Geoscience  
Kyle Summers, Southwest Geoscience

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## QUARTERLY GROUNDWATER MONITORING REPORT

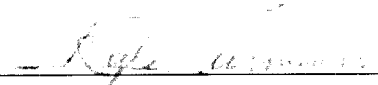
Property:

K-51 Pipeline Release  
Sections 34 and 35, T26N, R6W  
Rio Arriba County, New Mexico  
SWG Project No. 0410003  
October 19, 2011

Prepared for:

Enterprise Field Services, LLC  
1100 Louisiana Street  
Houston, Texas 77002  
Attention: Mr. David R. Smith, P.G.

PREPARED BY:

  
\_\_\_\_\_  
Kyle Summers, C.P.G.  
Senior Geologist/  
Manager, Four Corners Office

  
\_\_\_\_\_  
B. Chris Mitchell, P.G.  
Principal Geoscientist

**Southwest**  
Geoscientists, Inc.

606 S. Rio Grande Avenue  
Unit A, Downstairs West  
Aztec, NM 87410  
Ph: (505) 334-5200  
Fax: (505) 334-5204

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## TABLE OF CONTENTS

1.0 INTRODUCTION .....	1
1.1 Site Description & Background.....	1
1.2 Scope Of Work .....	2
1.3 Standard of Care & Limitations .....	2
2.0 SAMPLING PROGRAM.....	2
3.0 LABORATORY ANALYTICAL PROGRAM .....	3
4.0 GROUNDWATER FLOW DIRECTION .....	4
5.0 DATA EVALUATION.....	4
5.1 Groundwater Samples.....	4
6.0 FINDINGS.....	5
7.0 RECOMMENDATIONS.....	5

### APPENDIX A FIGURES

- Figure 1: Topographic Map
- Figure 2: Site Vicinity Map
- Figure 3: Site Plan
- Figure 4A: Groundwater Gradient Map  
(September 22, 2011)
- Figure 5: Groundwater Quality Exceedance Zone  
(September 2011)

### APPENDIX B TABLES

- Table 1: Groundwater Analytical Summary
- Table 2: Groundwater Elevations

### APPENDIX C LABORATORY ANALYTICAL DATA & CHAIN-OF-CUSTODY DOCUMENTATION

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## QUARTERLY GROUNDWATER MONITORING REPORT

K-51 Pipeline Release  
Sections 34 and 35, T26N, R6W  
Rio Arriba County, New Mexico

SWG Project No. 0410003

### 1.0 INTRODUCTION

#### 1.1 Site Description & Background

The K-51 pipeline release site is located at the boundary of Sections 34 and 35, Township 26 North, Range 6 West, in Rio Arriba County, New Mexico, referred to hereinafter as the "Site" or "subject Site". The Site consists of silty/sandy canyon bottomland with native grasses, and is crossed by a natural gas pipeline operated by Enterprise Field Services, LLC (Enterprise).

On April 13, 2010, approximately 10 barrels of natural gas condensate were released from the Enterprise natural gas gathering pipeline at the Site, due to internal corrosion. Subsequent to the completion of excavation and off-site disposal of petroleum hydrocarbon affected soils, confirmation soil samples were collected from the excavation by Souder, Miller and Associates (SMA). In addition, one (1) groundwater sample was collected from the groundwater which recharged into the excavation. The excavation was then backfilled with unaffected soils.

In June 2010, eight (8) soil borings (BH-1 through BH-8) were advanced on-site by LT Environmental (LTE). Subsequent to advancement, four (4) of the soil borings were converted to groundwater monitoring wells (MW-1 through MW-4). Based on the results of soil and groundwater sampling activities, constituent of concern (COC) concentrations were identified in soil above the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* (RALs) and in groundwater above the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (GQSs).

During April 2011, nine (9) soil borings (SB-9, SB-10, MW-11 through MW-14, SB-15, MW-16, and MW-17) were advanced in and around the former K-51 release area to further delineate the dissolve phase COC plume. Additionally, fifteen (15) injection points were installed to allow In-Situ Chemical Oxidation (ISCO) of the COCs. ISCO activities were performed during May 2011, and groundwater was subsequently sampled during July 2011. Based on the results of post-ISCO sampling activities, COCs are present in groundwater above the New Mexico WECC GQSs.

The Site is subject to regulatory oversight by the New Mexico Energy, Minerals, and Natural Resources Department OCD. To address activities related to condensate releases, the New Mexico OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.30

Remediation. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

A topographic map is included as Figure 1, a 2005 aerial photograph of the Site vicinity is included as Figure 2, and a Site plan is included as Figure 3 of Appendix A.

## **1.2 Scope of Work**

The objective of the groundwater monitoring event was to further evaluate the concentrations of chemicals of concern (COCs) in groundwater at the Site.

A Site Vicinity Map is included as Figure 2, and a Site Plan, which indicates the approximate locations of the monitoring wells in relation to pertinent structures and general Site boundaries, is included as Figure 3 of Appendix A.

## **1.3 Standard of Care & Limitations**

The findings and recommendations contained in this report represent SWG's professional opinions based upon information derived from on-Site activities and other services performed under this scope of work and were arrived at in accordance with currently acceptable professional standards. The findings were based upon analytical results provided by an independent laboratory. Evaluations of the geologic/hydrogeologic conditions at the Site for the purpose of this investigation are made from a limited number of available data points (i.e. soil borings and ground water samples) and site wide subsurface conditions may vary from these data points. SWG makes no warranties, express or implied, as to the services performed hereunder. Additionally, SWG does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

This report is based upon a specific scope of work requested by Enterprise. The agreement between SWG and Enterprise outlines the scope of work, and only those tasks specifically authorized by that agreement or outlined in this report were performed. This report has been prepared for the intended use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and SWG.

## **2.0 SAMPLING PROGRAM**

A quarterly groundwater sampling event was conducted on September 22, 2011 by Jordon Dubuisson, a SWG environmental professional.

SWG's groundwater sampling program consisted of the following:

- Collection of one groundwater sample from each monitoring well utilizing low-flow sampling techniques.

Prior to sample collection, SWG gauged the depth to fluids in each monitoring well using an interface probe capable of detecting light non-aqueous phase liquids (LNAPL). LNAPL was not observed in any of the Site monitoring wells.

Prior to sample collection, each monitoring well was micro-purged utilizing low-flow sampling techniques. Low-flow refers to the velocity with which groundwater enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. It does not necessarily refer to the flow rate of water discharged at the surface which can be affected by flow regulators or restrictions. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system, to the extent practical, taking into account established Site sampling objectives. Flow rates on the order of 0.1 to 0.5 L/min will be maintained during sampling activities, using dedicated sampling equipment.

The utilization of low-flow minimal drawdown techniques enables the isolation of the screened interval groundwater from the overlying stagnant casing water. The pump intake is placed within the screened interval such that the groundwater recovered is drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone.

The groundwater samples were collected from each monitoring well once produced groundwater was consistent in color, clarity, pH, DO, ORP, temperature and conductivity.

Groundwater samples were collected in laboratory prepared containers, sealed with custody tape and placed on ice in a cooler secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico.

### 3.0 LABORATORY ANALYTICAL PROGRAM

The groundwater samples collected from the monitoring wells during the groundwater sampling event were analyzed for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA method SW-846#8015M, and benzene, toluene, ethylbenzene and xylenes (BTEX) utilizing EPA method SW-846 #8021B.

A summary of the analysis, sample type, sample frequency and EPA-approved methods are presented on the following table:

Analysis	Sample Type	No. of Samples	Method
<i>TPH GRO/DRO</i>	Groundwater	19	SW-846# 8015M
<i>BTEX</i>	Groundwater	19	SW-846# 8021B

Laboratory results are summarized in Table 1 included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix C.

#### 4.0 GROUNDWATER FLOW DIRECTION

The monitoring wells have been surveyed to determine top-of-casing (TOC) elevations. Prior to sample collection, SWG gauged the depth to fluids in each monitoring well. The groundwater flow direction at the Site is generally towards the northwest. The observed gradient during this monitoring event was approximately 0.007 ft/ft across the Site.

Groundwater measurements collected during the most recent gauging event in September 2011 are presented with TOC elevations in Table 2, Appendix B. A groundwater gradient map depicting the most recent gauging data is included as Figure 4 (Appendix A).

#### 5.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to crude oil/condensate related releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the EMNRD/OCD rules, specifically NMAC 19.15.30 Remediation. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

##### 5.1 Groundwater Samples

SWG compared BTEX concentrations or practical quantitation limits (PQLs) associated with the groundwater samples collected from monitoring wells during the July 2011 sampling event to the New Mexico WQCC *Groundwater Quality Standards*. The results of the groundwater sample analyses are summarized in Table 1 of Appendix B.

##### Benzene, Toluene, Ethylbenzene, and Xylenes

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-11, MW-12, MW-13, MW-16 and MW-17 during the September 2011 sampling event did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the respective WQCC *Groundwater Quality Standards*.

The groundwater samples collected from monitoring wells MW-1, MW-4 and MW-14 during the September 2011 sampling event exhibited benzene concentrations ranging from 62 µg/L to 690 µg/L, which exceed the WQCC *Groundwater Quality Standard* of 10 µg/L.

The groundwater sample collected from monitoring well MW-1 during the September 2011 sampling event exhibited a toluene concentration of 1,200 µg/L which exceeds the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from monitoring wells MW-1 and MW-4 exhibited xylene concentrations of 1,200 µg/L and 820 µg/L, respectively, which exceed the WQCC *Groundwater Quality Standard* of 620 µg/L.

## 6.0 FINDINGS

During September 2011, SWG conducted a quarterly groundwater monitoring event at the K-51 Pipeline release site. The Site is located at the boundary of Sections 34 and 35, Township 26 North, Range 6 West, in Rio Arriba County, New Mexico. The Site consists of silty/sandy canyon bottomland with native grasses, and is crossed by a natural gas pipeline operated by Enterprise.

- During the completion of the sampling event, one (1) groundwater sample was collected from each monitoring well utilizing low-flow sampling techniques.
- The groundwater samples collected from monitoring wells MW-2, MW-3, MW-11, MW-12, MW-13, MW-16 and MW-17 during the September 2011 sampling event did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the respective WQCC *Groundwater Quality Standards*.
- The groundwater samples collected from monitoring wells MW-1, MW-4 and MW-14 during the September 2011 sampling event exhibited benzene concentrations ranging from 62 µg/L to 690 µg/L, which exceed the WQCC *Groundwater Quality Standard* of 10 µg/L.
- The groundwater sample collected from monitoring well MW-1 during the September 2011 sampling event exhibited a toluene concentration of 1,200 µg/L which exceeds the WQCC *Groundwater Quality Standard* of 750 µg/L.
- The groundwater samples collected from monitoring wells MW-1 and MW-4 exhibited xylene concentrations of 1,200 µg/L and 820 µg/L, respectively, which exceed the WQCC *Groundwater Quality Standard* of 620 µg/L.

## 7.0 RECOMMENDATIONS

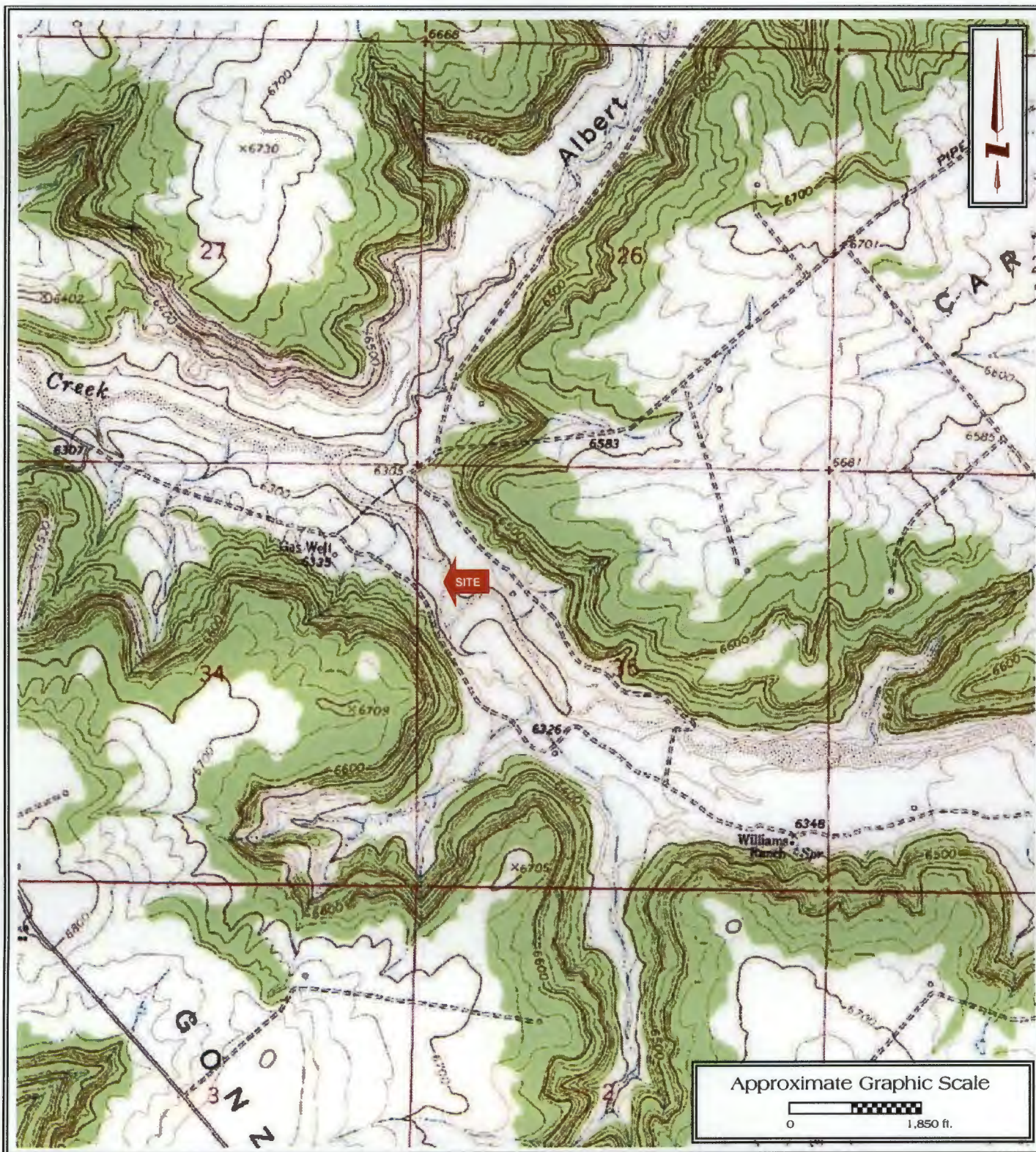
Based on the results of groundwater monitoring activities, SWG has the following recommendations:

- Report the groundwater monitoring results to the OCD;
- Perform Supplemental Site Investigation activities to further evaluate the extent of COCs in groundwater; and,
- Pursuant to the completion of supplemental site investigation activities, continue the evaluation and execution of corrective actions to reduce the concentrations of COCs in soil to below the OCD *Remediation Action Levels* and groundwater to below the New Mexico WQCC *Groundwater Quality Standards*.

APPENDIX A

Figures

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K-51 Pipeline Release

N36° 26' 47.77"; W107° 26' 46.04"

Off County Road 537

Rio Arriba, New Mexico

SWG Project No. 0410003

**Southwest**  
GEOSCIENCE

**FIGURE 1**

Topographic Map

Gonzales Mesa, NM Quadrangle

Contour Interval - 10 Feet



K-51 Pipeline Release

N36° 26' 47.77"; W107° 26' 46.04"

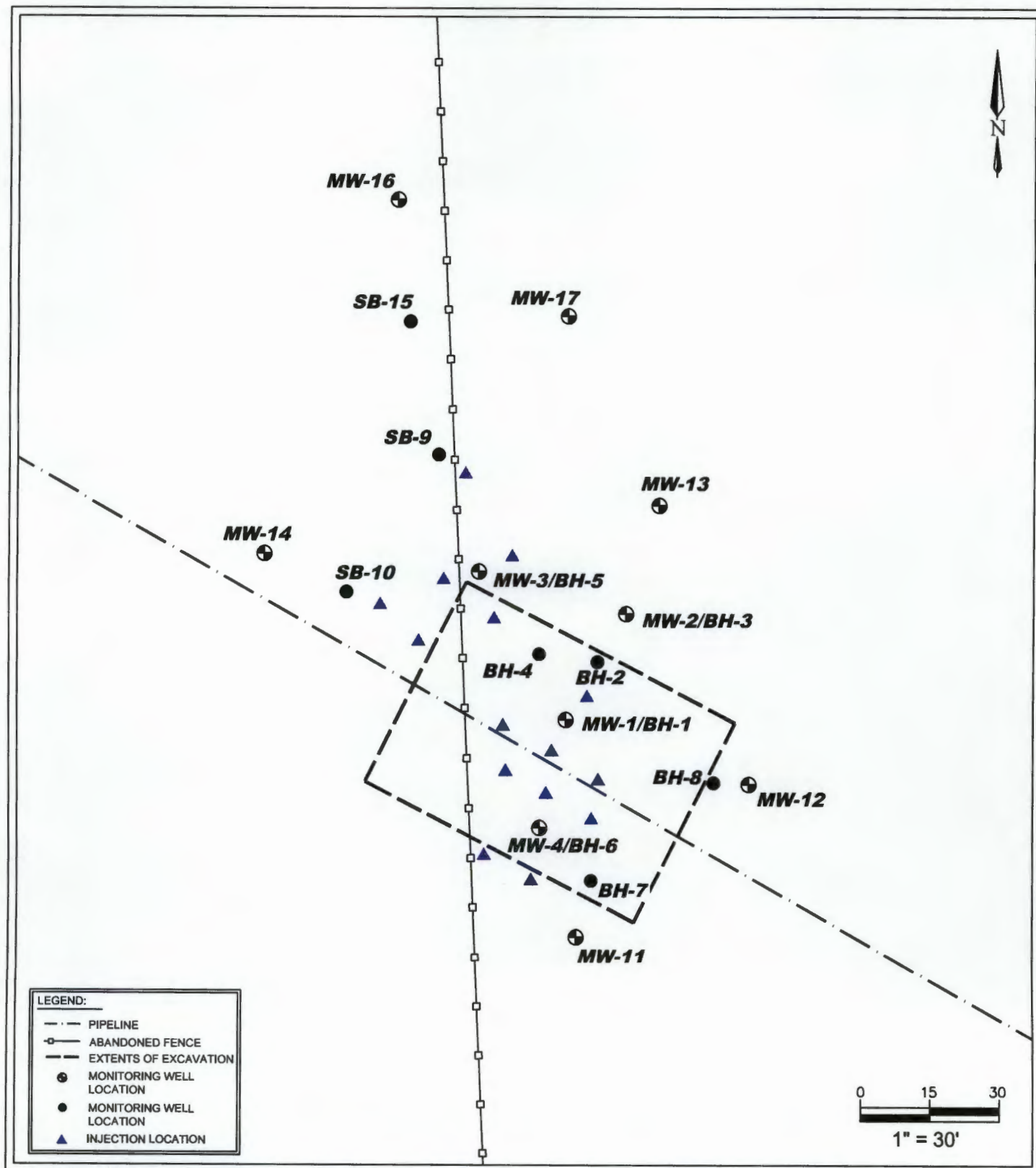
Off County Road 537

Rio Arriba, New Mexico

SWG Project No. 0410003

**Southwest**  
GEOSCIENCE

**FIGURE 2**  
Site Vicinity Map  
2005 Aerial Photograph

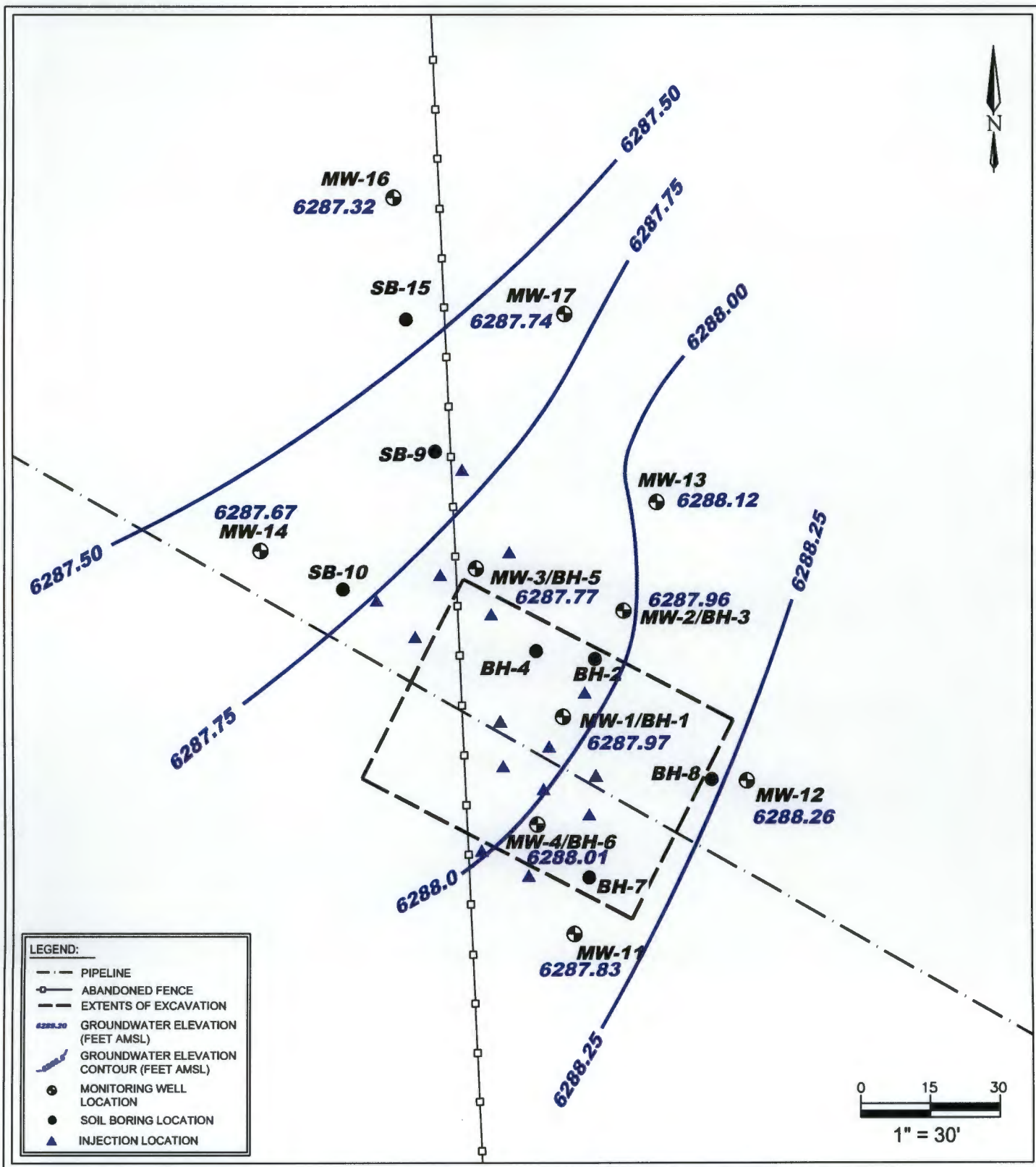


K-51 Pipeline Release  
 N35° 26' 47.77"; W107° 26' 46.04"  
 Off County Road 537  
 Rio Arriba County, New Mexico

SWG Project No. 0410003

**Southwest**  
 GEOSCIENCE

**FIGURE 3**  
**SITE MAP**

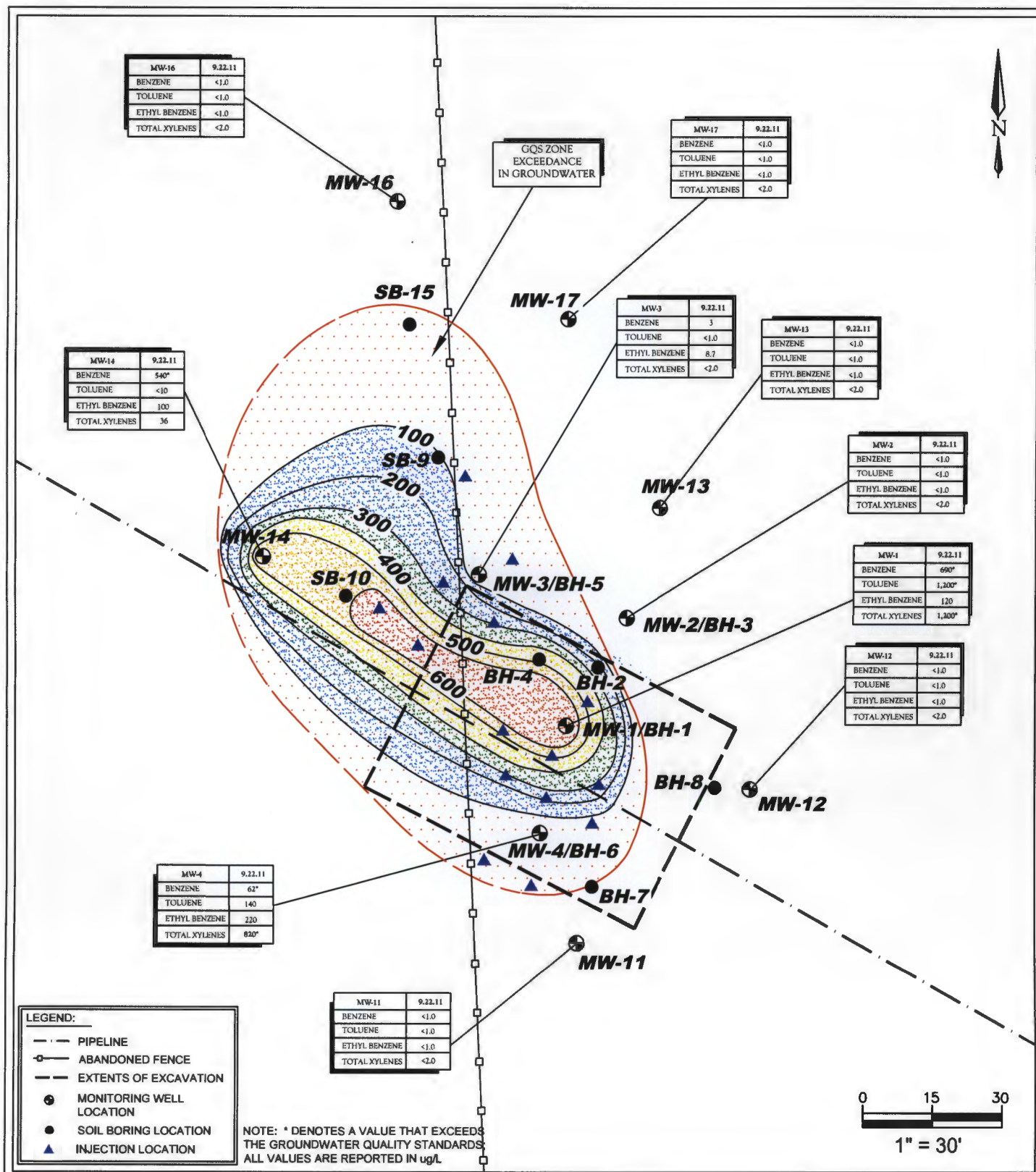


K-51 Pipeline Release  
 N35° 26' 47.77"; W107° 26' 46.04"  
 Off County Road 537  
 Rio Arriba County, New Mexico

SWG Project No. 0410003

Southwest  
 GEOSCIENCE

FIGURE 4  
 GROUNDWATER  
 GRADIENT MAP  
 SEPTEMBER 2011



K-51 Pipeline Release  
 N35° 26' 47.77"; W107° 26' 46.04"  
 Off County Road 537  
 Rio Arriba County, New Mexico

SWG Project No. 0410003

Southwest  
 GEOSCIENCE

FIGURE 5  
 GROUNDWATER QUALITY  
 STANDARD (GQS)  
 EXCEEDANCE ZONE IN  
 GROUNDWATER  
 MAP

SEPTEMBER 22, 2011

APPENDIX B

Tables

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TABLE 1  
K-51 PIPELINE RELEASE  
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE
SMA Data from Open Excavation							
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
SWG Groundwater Samples							
MW-1	6.21.10	8,400	1,300	560	4,200	NA	NA
	9.24.10	2,300	28	200	520	8.4	<1.0
	4.21.11	430	<20	120	60	2.1	<1.0
	6.21.11	820	370	33	140	5.1	130
	9.22.11	690	1,200	120	1,200	8.9	30
MW-2	6.21.10	200	53	14	96	NA	NA
	9.24.10	2.3	<1.0	<1.0	<2.0	<0.050	<1.0
	4.21.11	3.3	<1.0	<1.0	<2.0	0.065	<1.0
	6.21.11	2.2	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3	6.21.10	640	57	72	1,000	NA	NA
	9.24.10	150	<1.0	16	28	0.48	<1.0
	4.21.11	52	<1.0	17	10	0.25	<1.0
	6.21.11	62	14	13	160	0.67	<1.0
	9.22.11	3	<1.0	8.7	<2.0	0.066	<1.0
MW-4	6.21.10	3,600	10,000	600	6,600	NA	NA
	9.24.10	870	870	260	1,600	12	1
	4.21.11	670	<20	520	790	6.3	<1.0
	6.21.11	17	22	36	77	0.64	1.1
	9.22.11	62	140	220	820	3.8	1.2
MW-11	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-12	4.21.11	1.9	<1.0	<1.0	<2.0	<0.050	<1.0
	6.21.11	4.6	<1.0	<1.0	<2.0	0.063	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-13	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14	4.21.11	2,800	<100	280	720	8.7	<1.0
	6.21.11	470	<10	37	210	1.9	<1.0
	9.22.11	540	<10	100	36	1.7	<1.0
MW-16	4.21.11	4.4	<2.0	<2.0	<4.0	<0.10	<1.0
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	0.065	<1.0
MW-17	4.21.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
	6.21.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0

Note: Concentrations in bold and yellow exceed the applicable OCD Remediation Action Level

NA = Not Analyzed

NE = Not Established

TABLE 2  
K-51 Pipeline Release  
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1	4.21.11	ND	11.80	ND	6300.89	6289.09
MW-1	6.21.11	ND	12.16	ND	6300.89	6288.73
MW-1	9.22.11	ND	12.92	ND	6300.89	6287.97
MW-2	4.21.11	ND	10.55	ND	6299.82	6289.27
MW-2	6.21.11	ND	11.87	ND	6299.82	6287.95
MW-2	9.22.11	ND	11.86	ND	6299.82	6287.96
MW-3	4.21.11	ND	11.30	ND	6300.22	6288.92
MW-3	6.21.11	ND	11.64	ND	6300.22	6288.58
MW-3	9.22.11	ND	12.45	ND	6300.22	6287.77
MW-4	4.21.11	ND	11.90	ND	6300.91	6289.01
MW-4	6.21.11	ND	12.18	ND	6300.91	6288.73
MW-4	9.22.11	ND	12.90	ND	6300.91	6288.01
MW-11	4.21.11	ND	11.98	ND	6301.19	6289.21
MW-11	6.21.11	ND	12.40	ND	6301.19	6288.79
MW-11	9.22.11	ND	13.07	ND	6301.19	6288.12
MW-12	4.21.11	ND	8.96	ND	6299.08	6290.12
MW-12	6.21.11	ND	9.42	ND	6299.08	6289.66
MW-12	9.22.11	ND	10.82	ND	6299.08	6288.26
MW-13	4.21.11	ND	9.07	ND	6298.27	6289.20
MW-13	6.21.11	ND	9.51	ND	6298.27	6288.76
MW-13	9.22.11	ND	10.15	ND	6298.27	6288.12
MW-14	4.21.11	ND	12.54	ND	6301.20	6288.66
MW-14	6.21.11	ND	12.88	ND	6301.20	6288.32
MW-14	9.22.11	ND	13.53	ND	6301.20	6287.67
MW-16	4.21.11	ND	12.06	ND	6299.89	6287.83
MW-16	6.21.11	ND	12.26	ND	6299.89	6287.63
MW-16	9.22.11	ND	12.57	ND	6299.89	6287.32
MW-17	4.21.11	ND	9.90	ND	6298.57	6288.67
MW-17	6.21.11	ND	9.56	ND	6298.57	6289.01
MW-17	9.22.11	ND	10.83	ND	6298.57	6287.74

BTOC - below top of casing

AMSL - above mean sea level

TOC - top of casing

\* - corrected for presence of phase-separated hydrocarbon using a site-specific density correction factor of 0.63

ND - Not Detected

APPENDIX C

Laboratory Data Reports  
& Chain-of-Custody Documentation

---

## COVER LETTER

Friday, September 30, 2011

Kyle Summers  
Southwest Geoscience  
606 S. Rio Grande Unit A  
Aztec, NM 87410

TEL: (903) 821-5603  
FAX

RE: K 51 Release

Order No.: 1109898

Dear Kyle Summers:

Hall Environmental Analysis Laboratory, Inc. received 10 sample(s) on 9/23/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901  
AZ license # AZ0682

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-13

Lab Order: 1109898

Collection Date: 9/22/2011 9:45:00 AM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 2:05:54 AM
Surr: DNOP	146	81.1-147		%REC	1	9/27/2011 2:05:54 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/27/2011 6:56:26 PM
Surr: BFB	90.4	65.4-141		%REC	1	9/27/2011 6:56:26 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/27/2011 6:56:26 PM
Toluene	ND	1.0		µg/L	1	9/27/2011 6:56:26 PM
Ethylbenzene	ND	1.0		µg/L	1	9/27/2011 6:56:26 PM
Xylenes, Total	ND	2.0		µg/L	1	9/27/2011 6:56:26 PM
Surr: 4-Bromofluorobenzene	96.5	76.5-115		%REC	1	9/27/2011 6:56:26 PM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience  
Lab Order: 1109898  
Project: K 51 Release  
Lab ID: 1109898-02

Client Sample ID: MW-14  
Collection Date: 9/22/2011 10:30:00 AM  
Date Received: 9/23/2011  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 2:40:18 AM
Surr: DNOP	127	81.1-147		%REC	1	9/27/2011 2:40:18 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	1.7	0.50		mg/L	10	9/28/2011 7:33:48 PM
Surr: BFB	98.0	65.4-141		%REC	10	9/28/2011 7:33:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	540	10		µg/L	10	9/28/2011 7:33:48 PM
Toluene	ND	10		µg/L	10	9/28/2011 7:33:48 PM
Ethylbenzene	100	10		µg/L	10	9/28/2011 7:33:48 PM
Xylenes, Total	36	20		µg/L	10	9/28/2011 7:33:48 PM
Surr: 4-Bromofluorobenzene	99.9	76.5-115		%REC	10	9/28/2011 7:33:48 PM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-16

Lab Order: 1109898

Collection Date: 9/22/2011 11:00:00 AM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-03

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 3:14:25 AM
Surr: DNOP	129	81.1-147		%REC	1	9/27/2011 3:14:25 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	0.065	0.050		mg/L	1	9/27/2011 11:44:42 PM
Surr: BFB	103	65.4-141		%REC	1	9/27/2011 11:44:42 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/27/2011 11:44:42 PM
Toluene	ND	1.0		µg/L	1	9/27/2011 11:44:42 PM
Ethylbenzene	ND	1.0		µg/L	1	9/27/2011 11:44:42 PM
Xylenes, Total	ND	2.0		µg/L	1	9/27/2011 11:44:42 PM
Surr: 4-Bromofluorobenzene	100	76.5-115		%REC	1	9/27/2011 11:44:42 PM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience  
Lab Order: 1109898  
Project: K 51 Release  
Lab ID: 1109898-04

Client Sample ID: MW-17  
Collection Date: 9/22/2011 11:20:00 AM  
Date Received: 9/23/2011  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 3:48:34 AM
Surr: DNOP	129	81.1-147		%REC	1	9/27/2011 3:48:34 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/28/2011 12:13:27 AM
Surr: BFB	90.8	65.4-141		%REC	1	9/28/2011 12:13:27 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/28/2011 12:13:27 AM
Toluene	ND	1.0		µg/L	1	9/28/2011 12:13:27 AM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2011 12:13:27 AM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2011 12:13:27 AM
Surr: 4-Bromofluorobenzene	95.7	76.5-115		%REC	1	9/28/2011 12:13:27 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-2

Lab Order: 1109898

Collection Date: 9/22/2011 12:10:00 PM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 4:57:24 AM
Surr: DNOP	138	81.1-147		%REC	1	9/27/2011 4:57:24 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/28/2011 12:42:22 AM
Surr: BFB	90.8	65.4-141		%REC	1	9/28/2011 12:42:22 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/28/2011 12:42:22 AM
Toluene	ND	1.0		µg/L	1	9/28/2011 12:42:22 AM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2011 12:42:22 AM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2011 12:42:22 AM
Surr: 4-Bromofluorobenzene	96.0	76.5-115		%REC	1	9/28/2011 12:42:22 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Page 5 of 10

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-3

Lab Order: 1109898

Collection Date: 9/22/2011 12:40:00 PM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-06

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 5:31:32 AM
Surr: DNOP	141	81.1-147		%REC	1	9/27/2011 5:31:32 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	0.066	0.050		mg/L	1	9/28/2011 1:11:13 AM
Surr: BFB	104	65.4-141		%REC	1	9/28/2011 1:11:13 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	3.0	1.0		µg/L	1	9/28/2011 1:11:13 AM
Toluene	ND	1.0		µg/L	1	9/28/2011 1:11:13 AM
Ethylbenzene	8.7	1.0		µg/L	1	9/28/2011 1:11:13 AM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2011 1:11:13 AM
Surr: 4-Bromofluorobenzene	102	76.5-115		%REC	1	9/28/2011 1:11:13 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-1

Lab Order: 1109898

Collection Date: 9/22/2011 1:15:00 PM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-07

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	30	1.0		mg/L	1	9/27/2011 6:05:23 AM
Surr: DNOP	152	81.1-147	S	%REC	1	9/27/2011 6:05:23 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	8.9	1.0		mg/L	20	9/28/2011 1:40:06 AM
Surr: BFB	93.4	65.4-141		%REC	20	9/28/2011 1:40:06 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	690	20		µg/L	20	9/28/2011 1:40:06 AM
Toluene	1200	20		µg/L	20	9/28/2011 1:40:06 AM
Ethylbenzene	120	20		µg/L	20	9/28/2011 1:40:06 AM
Xylenes, Total	1200	40		µg/L	20	9/28/2011 1:40:06 AM
Surr: 4-Bromofluorobenzene	98.5	76.5-115		%REC	20	9/28/2011 1:40:06 AM

## Qualifiers:

\* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience

Client Sample ID: MW-12

Lab Order: 1109898

Collection Date: 9/22/2011 1:50:00 PM

Project: K 51 Release

Date Received: 9/23/2011

Lab ID: 1109898-08

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 6:39:32 AM
Surr: DNOP	125	81.1-147		%REC	1	9/27/2011 6:39:32 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/28/2011 2:08:53 AM
Surr: BFB	89.5	65.4-141		%REC	1	9/28/2011 2:08:53 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/28/2011 2:08:53 AM
Toluene	ND	1.0		µg/L	1	9/28/2011 2:08:53 AM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2011 2:08:53 AM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2011 2:08:53 AM
Surr: 4-Bromofluorobenzene	94.1	76.5-115		%REC	1	9/28/2011 2:08:53 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

**CLIENT:** Southwest Geoscience  
**Lab Order:** 1109898  
**Project:** K 51 Release  
**Lab ID:** 1109898-09

**Client Sample ID:** MW-4  
**Collection Date:** 9/22/2011 2:15:00 PM  
**Date Received:** 9/23/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	9/27/2011 7:13:42 AM
Surr: DNOP	127	81.1-147		%REC	1	9/27/2011 7:13:42 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	3.8	1.0		mg/L	20	9/28/2011 2:37:42 AM
Surr: BFB	99.6	65.4-141		%REC	20	9/28/2011 2:37:42 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	62	20		µg/L	20	9/28/2011 2:37:42 AM
Toluene	140	20		µg/L	20	9/28/2011 2:37:42 AM
Ethylbenzene	220	20		µg/L	20	9/28/2011 2:37:42 AM
Xylenes, Total	820	40		µg/L	20	9/28/2011 2:37:42 AM
Surr: 4-Bromofluorobenzene	102	76.5-115		%REC	20	9/28/2011 2:37:42 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Sep-11

Analytical Report

CLIENT: Southwest Geoscience  
Lab Order: 1109898  
Project: K 51 Release  
Lab ID: 1109898-10

Client Sample ID: MW-11  
Collection Date: 9/22/2011 2:40:00 PM  
Date Received: 9/23/2011  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2011 7:47:51 AM
Surr: DNOP	128	81.1-147		%REC	1	9/27/2011 7:47:51 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/28/2011 3:06:27 AM
Surr: BFB	91.3	65.4-141		%REC	1	9/28/2011 3:06:27 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	9/28/2011 3:06:27 AM
Toluene	ND	1.0		µg/L	1	9/28/2011 3:06:27 AM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2011 3:06:27 AM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2011 3:06:27 AM
Surr: 4-Bromofluorobenzene	97.4	76.5-115		%REC	1	9/28/2011 3:06:27 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
NC Non-Chlorinated  
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

Client: Southwest Geoscience  
Project: K 51 Release

Work Order: 1109898

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 8015B: Diesel Range</b>											
Sample ID: MB-28571		MBLK				Batch ID: 28571	Analysis Date: 9/26/2011 8:21:25 PM				
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Sample ID: LCS-28571		LCS				Batch ID: 28571	Analysis Date: 9/26/2011 8:56:20 PM				
Diesel Range Organics (DRO)	4.613	mg/L	1.0	5	0	92.3	74	157			
Sample ID: LCSD-28571		LCSD				Batch ID: 28571	Analysis Date: 9/26/2011 9:30:28 PM				
Diesel Range Organics (DRO)	5.361	mg/L	1.0	5	0	107	74	157	15.0	23	

**Method: EPA Method 8016B: Gasoline Range**

Sample ID: b 1		MBLK				Batch ID: R48017	Analysis Date: 9/27/2011 10:43:15 AM				
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: b 10		MBLK				Batch ID: R48048	Analysis Date: 9/28/2011 2:01:37 PM				
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		LCS				Batch ID: R48017	Analysis Date: 9/27/2011 12:39:18 PM				
Gasoline Range Organics (GRO)	0.5532	mg/L	0.050	0.5	0	111	92.1	117			
Sample ID: 2.5UG GRO LCS		LCS				Batch ID: R48048	Analysis Date: 9/28/2011 1:32:50 PM				
Gasoline Range Organics (GRO)	0.5608	mg/L	0.050	0.5	0	112	92.1	117			

**Method: EPA Method 8021B: Volatiles**

Sample ID: b 1		MBLK				Batch ID: R48017	Analysis Date: 9/27/2011 10:43:15 AM				
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: b 10		MBLK				Batch ID: R48048	Analysis Date: 9/28/2011 2:01:37 PM				
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		LCS				Batch ID: R48017	Analysis Date: 9/27/2011 1:08:11 PM				
Benzene	20.37	µg/L	1.0	20	0.4978	99.4	80	120			
Toluene	20.64	µg/L	1.0	20	0	103	80	120			
Ethylbenzene	20.66	µg/L	1.0	20	0	103	80	120			
Xylenes, Total	62.09	µg/L	2.0	60	0	103	80	120			
Sample ID: 100NG BTEX LCS		LCS				Batch ID: R48048	Analysis Date: 9/28/2011 12:06:20 PM				
Benzene	19.79	µg/L	1.0	20	0.3166	97.4	80	120			
Toluene	19.61	µg/L	1.0	20	0.3746	96.2	80	120			
Ethylbenzene	19.93	µg/L	1.0	20	0.2626	98.3	80	120			
Xylenes, Total	59.56	µg/L	2.0	60	0	99.3	80	120			

**Qualifiers:**

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name SOUTHWEST GEOSCIENCE

Date Received:

9/23/2011

Work Order Number 1109898

Received by: AMG

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>

Number of preserved bottles checked for pH:

<2 >12 unless noted below.

Container/Temp Blank temperature?

2.2°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

**Southwest**  
GEOSCIENCE  
Environmental & Hydrogeologic Consultants

**SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914**