

3R – 440

GWMR

11 / 14 / 2014



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

ENTERPRISE PRODUCTS OPERATING LLC

November 14, 2014

Return Receipt Requested  
7012 1010 0003 3760 7727

Mr. Jim Griswold, Environmental Bureau Chief  
New Mexico Energy, Minerals & Natural Resources  
Department - Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**RE:    *Enterprise Products – Remediation Project Updates***

Attn: Glenn von Gonten

Dear Mr. Griswold,

On October 29, 2014, Greg Miller (Enterprise-Houston office), Tom Long and Runell Seale (Enterprise-Farmington office) and I met with Glenn von Gonten (OCD-Santa Fe office), Brandon Powell and Cory Smith (OCD-Aztec district office) at the OCD District Office in Aztec, New Mexico. During that meeting, we discussed, among other topics, some of the reports and updates that Enterprise Products Operating LLC (Enterprise) agreed to provide as outlined in an October 10, 2014 letter (the "Letter") from William C. Scott of Modrall Sperling to Keith Herrmann of OCD. Specifically, we discussed the following, and reached the agreements outlined below:

1. In reference to the *Section A - General Proposals for Future Communications* discussed on page 6 of the Letter, Enterprise indicated that it proposed to conduct face-to-face meetings with the OCD-Santa Fe office on a quarterly basis to update the OCD on active groundwater remediation sites, and to help facilitate the prioritization, planning and implementation of our remediation field activities. These meetings have been occurring on as-needed basis. OCD staff at the October 29 meeting indicated that they would prefer to have quarterly meetings at this time.. Additionally, Enterprise intends to continue submitting the Excel project tracking spreadsheet to the OCD on a monthly basis. This spreadsheet tracks all Enterprise groundwater remediation sites in New Mexico, including sites where OCD closure approval has been requested. The spreadsheet provides pertinent information on each release site, including a summary of site conditions and recent activities. A recent copy of the spreadsheet is attached to this letter for your review. Unless the OCD wants information provided in another format, the current spreadsheet appears to satisfy the information requirements of Section A.
2. In *Section B of the Letter – Status of Development of Standard Remediation Protocol* (Protocol), Enterprise had agreed to provide a revised draft Protocol by November 30. At the October 29 meeting, Enterprise provided copies of a revised draft Protocol, entitled ***General Release Notification, Response and Remediation Plan (for Release Sites Under NMOCD Jurisdiction)***. That revised draft Protocol was discussed section by section with the OCD staff. Based on comments and recommendations provided by Messrs. Von Gonten, Powell, and Smith, Enterprise is further revising that draft Protocol and will submit a final Protocol to the OCD by January 1, 2015 (as requested by Mr. von Gonten during the Meeting).

3. In reference to *Section C of the Letter – Status and Next Steps Concerning Existing Remediation Projects*, for the **Lateral K-31** remediation site, Enterprise offered to provide an update regarding the September 2014 groundwater monitoring and sampling (GWM&S) event to be submitted by November 15, 2014. Please note that this was a typo and that the second semi-annual GWM&S event is scheduled to be conducted during the week of November 10, 2014. As such, a copy of a letter report/update from APEX Companies, LLC, including a copy of the analytical data for (only) the first quarter 2014 GWM&S event, is attached. Please note that during the October 29 meeting, Mr. von Gonten reiterated previous OCD requests (during meetings on January 27, 2014 with Greg Miller and David Smith, on March 3, 2014 with David Smith, Runell Seale and Don Anderson (Enterprise-Denver office), and on August 4, 2014 with David Smith and Tom Long) for Enterprise to provide only annual reports for GWM&S events. In light of that direction, Enterprise will not be providing quarterly monitoring reports as a general practice. As noted in the draft Protocol, and as requested by the OCD, GWM&S events will normally be conducted on a semi-annual basis, with reporting on an annual basis. More frequent monitoring GWM&S events may be conducted at some release sites during initial site characterizations, or if other conditions warrant more frequent sampling.
4. In reference to *Section C of the Letter – Status and Next Steps Concerning Existing Remediation Projects*, for the **Lateral C-64** remediation, Enterprise offered to provide an update regarding the *Site Assessment Work Plan* (the "Plan") by November 15, 2014. Since the date of the October 10 letter, Enterprise has secured approval from the landowner to proceed. The work outlined in the Plan will be completed by the end of 2014.

We look forward to the continued development and implementation of our remedial action program, and appreciate the OCD's assistance. Should 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



Gregory E. Miller, P.G.  
Supervisor, Environmental

/dep

cc: Brandon Powell, NMOCD, Aztec, NM  
Keith Herrmann, NMOCD, Santa Fe, NM  
William C. Scott, Monrall Sperling, Albuquerque, NM

ec: Liz Scaggs, APEX Environmental, Dallas, TX  
Kyle Summers, APEX Environmental, Aztec, NM



November 13, 2014

**Enterprise Field Services, LLC**

P.O. Box 4324

Houston, Texas 77210-4324

Attn: **Mr. David Smith**

Re: Semi-Annual Groundwater Monitoring (March 2014)  
Lateral K-31 Release  
SE¼ SW¼ Section 16, T25N, R6W  
Rio Arriba County, New Mexico  
Project No. 7030414G014

Dear Mr. Smith:

Apex TITAN, Inc. (Apex) appreciates the opportunity to submit this letter reporting the March 2014 semi-annual groundwater monitoring results for the above-referenced facility (hereinafter, the Site). This information will also be presented, in more detail, in an annual groundwater monitoring report (AGMR) following receipt of the November 2014 sampling results (sampling performed by Apex). The AGMR will include data from the March 2014 and November 2014 sampling events.

***Semi-Annual Groundwater Sampling***

Animas Environmental Services, LLC collected one (1) groundwater sample from each of the nine (9) monitoring wells during March 2014 as part of the semi-annual groundwater monitoring program to evaluate the magnitude and extent of constituents of concern (COCs) identified in association with the on-site groundwater from a December 2011 release from the lateral K-31 pipeline. A Site Map is included as Figure 1 (Attachment A).

***Laboratory Analytical Program***

The groundwater samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing EPA SW-846 Method 8021.

A summary of the analysis, sample type, and EPA-approved methods for the sampling event is presented below:

Analysis	Sample Type	No. of Samples	EPA Method
BTEX	Groundwater	9	SW-846 8021

***Data Evaluation***

The Site is subject to regulatory oversight by the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) which utilizes the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* to determine baseline groundwater assessment.

Apex compared BTEX concentrations or laboratory reporting limits (RLs) associated with the groundwater samples collected from the Site monitoring wells to the WQCC *Groundwater Quality Standards*. The



results of the groundwater sample analyses are summarized in Table 1 of Attachment B. Laboratory data sheets and chain-of-custody documentation are provided as Attachment C.

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

The groundwater samples collected from monitoring wells MW-1, MW-5, MW-6, and MW-8 exhibited benzene concentrations ranging from 17 micrograms per liter (µg/L) (MW-1) to 77 µg/L (MW-6), which exceeded the WQCC *Groundwater Quality Standard* of 10 µg/L.

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-7, and MW-9 exhibited benzene concentrations ranging from below the laboratory RLs to 3.0 µg/L (MW-3), which are below the WQCC *Groundwater Quality Standard* of 10 µg/L.

The groundwater sample collected from the Site monitoring wells exhibited toluene concentrations ranging from below the laboratory RLs to 15 µg/L (MW-1), which are below the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from the Site monitoring wells exhibited ethylbenzene concentrations ranging from below laboratory RLs to 2 µg/L (MW-5), which are below the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from Site monitoring wells exhibited xylenes concentrations ranging from below laboratory RLs to 6 µg/L (MW-1), which are below the WQCC *Groundwater Quality Standard* of 620 µg/L.

### **Findings and Recommendations**

BTEX concentrations have decreased at each monitoring well location when compared to the December 2013 sampling event. Detailed findings and recommendations will be provided as part of the Annual Groundwater Monitoring Report following the receipt of the November 2014 sampling results.

### **Standard of Care, Limitations, and Reliance**

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

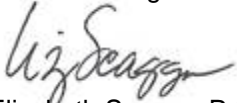
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

We appreciate the opportunity to provide this letter report and look forward to working with you on this project. If you should have any questions or comments regarding this proposal, please contact the undersigned.

Sincerely,  
**Apex TITAN, Inc.**

A handwritten signature in blue ink, appearing to read "Kyle Summers".

Kyle Summers, CPG  
Branch Manager/Senior Geologist

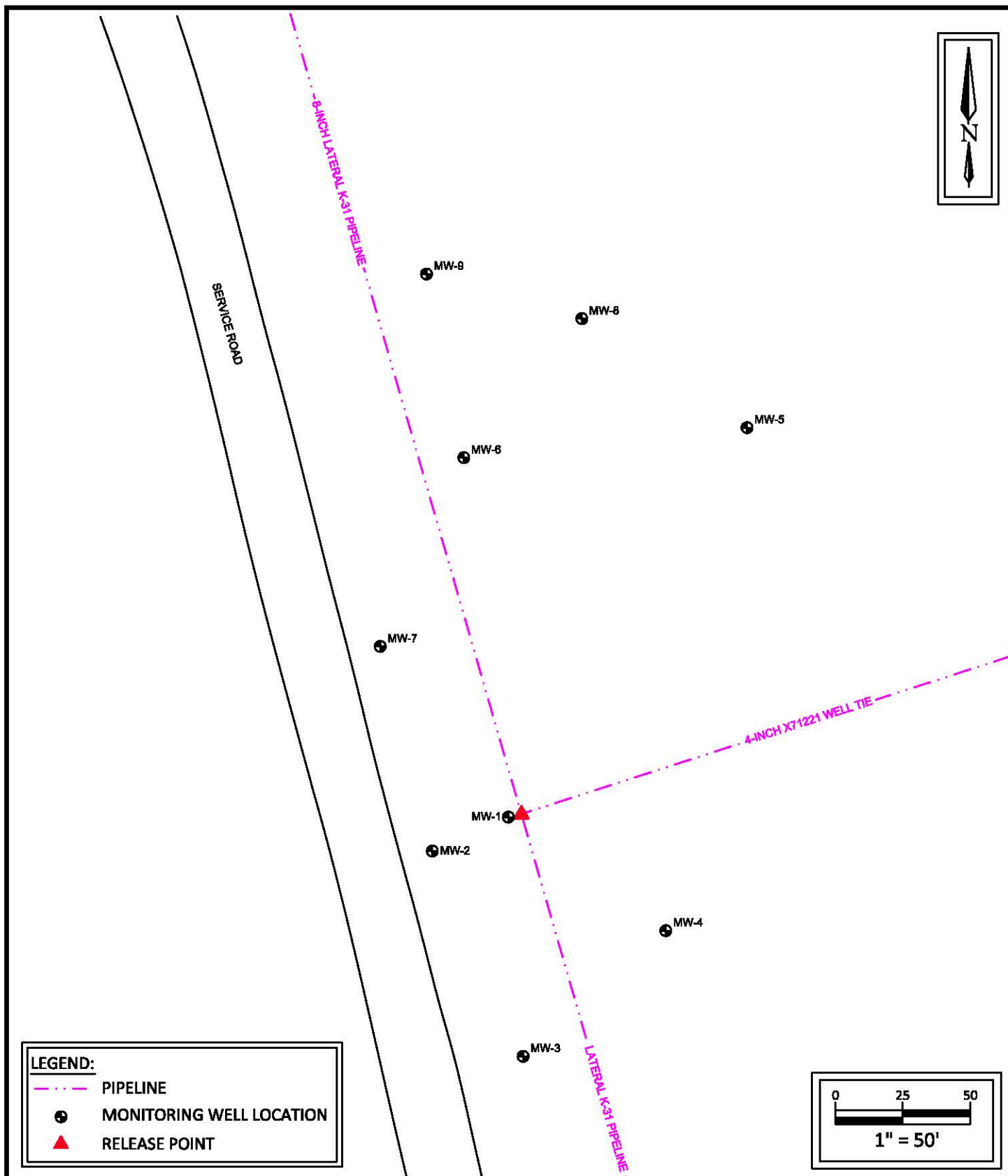
A handwritten signature in blue ink, appearing to read "Elizabeth Scaggs".

Elizabeth Scaggs, P.G.  
Senior Program Manager

Attachment A

Figure 1

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**Lateral K-31 (12/02/11)**  
**Pipeline Release**  
 SW $\frac{1}{4}$  S16 T25N R6W  
 Rural Rio Arriba County, NM  
 36.39373N, 107.47519W

Project No. 7030414G014



**Apex TITAN, Inc.**  
 808 S. Rio Grande, Suite A  
 Aztec, New Mexico 87410  
 Phone: (505) 334-5200  
[www.apexcos.com](http://www.apexcos.com)  
 A Subsidiary of Apex Companies, LLC

**FIGURE 1**

**Site Map with Monitoring Well  
 Locations Map**



Attachment B

Table 1

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**TABLE 1**  
**Lateral K-31 December 2011 Pipeline Release**  
**GROUNDWATER ANALYTICAL SUMMARY**

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620
MW-1	9.5.12	18	2.9	3.3	25
MW-1	12.20.12	11	<2.0	<2.0	5.8
MW-1	3.21.13	29	14	<2.0	6.8
MW-1	9.4.13	24	3.0	<2.0	10
MW-1	12.9.13	42	20.0	10	45
MW-1	3.19.14	17	15	<1	6
MW-2	9.5.12	9.5	9.2	<2.0	30
MW-2	12.20.12	17	<2.0	<2.0	41
MW-2	3.21.13	18	<2.0	<2.0	18
MW-2	9.4.13	8.0	<2.0	<2.0	4.2
MW-2	12.9.13	24	13	11	49
MW-2	3.19.14	<1	<1	<1	<3
MW-3	9.5.12	<2.0	<2.0	<2.0	<4.0
MW-3	12.20.12	<2.0	<2.0	<2.0	<4.0
MW-3	3.21.13	<2.0	<2.0	<2.0	<4.0
MW-3	9.4.13	5.4	<2.0	<2.0	<4.0
MW-3	12.9.13	10	15	9.7	37
MW-3	3.19.14	3	4	<1	<3
MW-4	9.5.12	<2.0	<2.0	<2.0	<4.0
MW-4	12.20.12	19	<2.0	<2.0	<4.0
MW-4	3.21.13	4.8	<2.0	<2.0	<4.0
MW-4	9.4.13	<2.0	<2.0	<2.0	<4.0
MW-4	12.9.13	42	17	14	54
MW-4	3.19.14	<1	<1	<1	<3
MW-5	9.5.12	10	<2.0	<2.0	<4.0
MW-5	12.20.12	10	<2.0	<2.0	<4.0
MW-5	9.4.13	9.0	<2.0	<2.0	<4.0
MW-5	3.28.12	9.3	<2.0	<2.0	<4.0
MW-5	12.9.13	48	9.3	9.7	36
MW-5	3.19.14	27	<1	2	<3
MW-6	9.5.12	37	8.3	<2.0	14
MW-6	12.20.12	82	5.8	<2.0	<4.0
MW-6	3.21.13	130	5.1	<2.0	<4.0
MW-6	9.4.13	40	22	<2.0	13
MW-6	12.9.13	210	20	12	51
MW-6	3.19.14	77	8	1	4

**TABLE 1**  
**Lateral K-31 December 2011 Pipeline Release**  
**GROUNDWATER ANALYTICAL SUMMARY**

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620
MW-7	9.5.12	3.6	<2.0	<2.0	<4.0
MW-7	12.20.12	5.9	<2.0	<2.0	<4.0
MW-7	3.21.13	<2.0	<2.0	<2.0	<4.0
MW-7	9.4.13	6.2	<2.0	<2.0	<4.0
MW-7	12.9.13	30	17	14	56
MW-7	3.19.14	<1	<1	<1	<3
MW-8	9.5.12	20	<2.0	<2.0	<4.0
MW-8	12.20.12	25	<2.0	<2.0	<4.0
MW-8	3.21.13	26	<2.0	<2.0	<4.0
MW-8	9.4.13	34	<2.0	<2.0	<4.0
MW-8	12.9.13	200	14	11	46
MW-8	3.19.14	57	<1	<1	<3
MW-9	9.5.12	<2.0	<2.0	<2.0	<4.0
MW-9	12.20.12	<2.0	<2.0	<2.0	<4.0
MW-9	3.21.13	<2.0	<2.0	<2.0	<4.0
MW-9	9.4.13	<2.0	<2.0	<2.0	<4.0
MW-9	12.9.13	4.0	7.1	6.0	24
MW-9	3.19.14	<1	<1	<1	<3

NA = Not Analyzed

NE = Not Established

NAPL = Non-aqueous phase liquid

<1.0 = the numeral (in this case "1.0") identifies the laboratory reporting limit

## Attachment C

# Laboratory Data Sheets and Chain of Custody Documentation

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27-Mar-2014

Heather Woods  
Animas Environmental Services  
624 E. Comanche  
Farmington, NM 87401

Tel: (505) 436-2064  
Fax: (505) 324-2022

Re: Lateral K-31 Pipeline Release

Work Order: **14030896**

Dear Heather,

ALS Environmental received 10 samples on 21-Mar-2014 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 22.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink that reads "Bethany McDaniel".

Electronically approved by: Dayna.Fisher

Bethany McDaniel  
Project Manager



Certificate No: T104704231-13-12

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



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**Client:** Animas Environmental Services  
**Project:** Lateral K-31 Pipeline Release  
**Work Order:** 14030896

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
14030896-01	MW-9	Water		3/19/2014 11:40	3/21/2014 09:15	<input type="checkbox"/>
14030896-02	MW-2	Water		3/19/2014 13:16	3/21/2014 09:15	<input type="checkbox"/>
14030896-03	MW-3	Water		3/19/2014 18:56	3/21/2014 09:15	<input type="checkbox"/>
14030896-04	MW-7	Water		3/19/2014 14:33	3/21/2014 09:15	<input type="checkbox"/>
14030896-05	MW-1	Water		3/19/2014 15:47	3/21/2014 09:15	<input type="checkbox"/>
14030896-06	MW-4	Water		3/19/2014 16:13	3/21/2014 09:15	<input type="checkbox"/>
14030896-07	MW-5	Water		3/19/2014 16:42	3/21/2014 09:15	<input type="checkbox"/>
14030896-08	MW-8	Water		3/19/2014 17:17	3/21/2014 09:15	<input type="checkbox"/>
14030896-09	MW-6	Water		3/19/2014 17:50	3/21/2014 09:15	<input type="checkbox"/>
14030896-10	Trip Blank	Trip Blank		3/19/2014	3/21/2014 09:15	<input type="checkbox"/>

## ALS Environmental

*Date: 27-Mar-14*

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**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

## Case Narrative

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## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Sample ID:** MW-9

**Collection Date:** 3/19/2014 11:40 AM

**Work Order:** 14030896

**Lab ID:** 14030896-01

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 05:17 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 05:17 PM
Benzene	ND		1	ug/L	1	3/25/2014 05:17 PM
Toluene	ND		1	ug/L	1	3/25/2014 05:17 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 05:17 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 05:17 PM
Surr: 4-Bromofluorobenzene	96.6		75-129	%REC	1	3/25/2014 05:17 PM
Surr: Trifluorotoluene	84.9		75-130	%REC	1	3/25/2014 05:17 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

**Sample ID:** MW-2

**Lab ID:** 14030896-02

**Collection Date:** 3/19/2014 01:16 PM

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/26/2014 01:44 PM
o-Xylene	ND		1	ug/L	1	3/26/2014 01:44 PM
Benzene	ND		1	ug/L	1	3/26/2014 01:44 PM
Toluene	ND		1	ug/L	1	3/26/2014 01:44 PM
Ethylbenzene	ND		1	ug/L	1	3/26/2014 01:44 PM
Xylenes, Total	ND		3	ug/L	1	3/26/2014 01:44 PM
Surr: 4-Bromofluorobenzene	102		75-129	%REC	1	3/26/2014 01:44 PM
Surr: Trifluorotoluene	87.8		75-130	%REC	1	3/26/2014 01:44 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

**Sample ID:** MW-3

**Lab ID:** 14030896-03

**Collection Date:** 3/19/2014 06:56 PM

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/26/2014 02:05 PM
o-Xylene	ND		1	ug/L	1	3/26/2014 02:05 PM
<b>Benzene</b>	<b>3</b>		<b>1</b>	<b>ug/L</b>	1	3/26/2014 02:05 PM
<b>Toluene</b>	<b>4</b>		<b>1</b>	<b>ug/L</b>	1	3/26/2014 02:05 PM
Ethylbenzene	ND		1	ug/L	1	3/26/2014 02:05 PM
Xylenes, Total	ND		3	ug/L	1	3/26/2014 02:05 PM
Surr: 4-Bromofluorobenzene	100		75-129	%REC	1	3/26/2014 02:05 PM
Surr: Trifluorotoluene	84.4		75-130	%REC	1	3/26/2014 02:05 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.



## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Sample ID:** MW-7

**Collection Date:** 3/19/2014 02:33 PM

**Work Order:** 14030896

**Lab ID:** 14030896-04

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 05:34 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 05:34 PM
Benzene	ND		1	ug/L	1	3/25/2014 05:34 PM
Toluene	ND		1	ug/L	1	3/25/2014 05:34 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 05:34 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 05:34 PM
Surr: 4-Bromofluorobenzene	94.8		75-129	%REC	1	3/25/2014 05:34 PM
Surr: Trifluorotoluene	83.3		75-130	%REC	1	3/25/2014 05:34 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

Client: Animas Environmental Services

Project: Lateral K-31 Pipeline Release

Work Order: 14030896

Sample ID: MW-1

Lab ID: 14030896-05

Collection Date: 3/19/2014 03:47 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	5		2	ug/L	1	3/25/2014 05:51 PM
o-Xylene	1		1	ug/L	1	3/25/2014 05:51 PM
Benzene	17		1	ug/L	1	3/25/2014 05:51 PM
Toluene	15		1	ug/L	1	3/25/2014 05:51 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 05:51 PM
Xylenes, Total	6		3	ug/L	1	3/25/2014 05:51 PM
Surr: 4-Bromofluorobenzene	94.0		75-129	%REC	1	3/25/2014 05:51 PM
Surr: Trifluorotoluene	82.0		75-130	%REC	1	3/25/2014 05:51 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Sample ID:** MW-4

**Collection Date:** 3/19/2014 04:13 PM

**Work Order:** 14030896

**Lab ID:** 14030896-06

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 06:09 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 06:09 PM
Benzene	ND		1	ug/L	1	3/25/2014 06:09 PM
Toluene	ND		1	ug/L	1	3/25/2014 06:09 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 06:09 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 06:09 PM
Surr: 4-Bromofluorobenzene	91.7		75-129	%REC	1	3/25/2014 06:09 PM
Surr: Trifluorotoluene	81.5		75-130	%REC	1	3/25/2014 06:09 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

**Sample ID:** MW-5

**Lab ID:** 14030896-07

**Collection Date:** 3/19/2014 04:42 PM

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 06:43 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 06:43 PM
<b>Benzene</b>	<b>27</b>		<b>1</b>	<b>ug/L</b>	1	3/25/2014 06:43 PM
Toluene	ND		1	ug/L	1	3/25/2014 06:43 PM
<b>Ethylbenzene</b>	<b>2</b>		<b>1</b>	<b>ug/L</b>	1	3/25/2014 06:43 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 06:43 PM
Surr: 4-Bromofluorobenzene	97.8		75-129	%REC	1	3/25/2014 06:43 PM
Surr: Trifluorotoluene	84.5		75-130	%REC	1	3/25/2014 06:43 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

**Sample ID:** MW-8

**Lab ID:** 14030896-08

**Collection Date:** 3/19/2014 05:17 PM

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 07:01 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 07:01 PM
<b>Benzene</b>	<b>57</b>		<b>1</b>	<b>ug/L</b>	<b>1</b>	3/25/2014 07:01 PM
Toluene	ND		1	ug/L	1	3/25/2014 07:01 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 07:01 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 07:01 PM
Surr: 4-Bromofluorobenzene	96.8		75-129	%REC	1	3/25/2014 07:01 PM
Surr: Trifluorotoluene	84.0		75-130	%REC	1	3/25/2014 07:01 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.



## ALS Environmental

Date: 27-Mar-14

Client: Animas Environmental Services

Project: Lateral K-31 Pipeline Release

Work Order: 14030896

Sample ID: MW-6

Lab ID: 14030896-09

Collection Date: 3/19/2014 05:50 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	4		2	ug/L	1	3/26/2014 02:22 PM
o-Xylene	ND		1	ug/L	1	3/26/2014 02:22 PM
Benzene	77		1	ug/L	1	3/26/2014 02:22 PM
Toluene	8		1	ug/L	1	3/26/2014 02:22 PM
Ethylbenzene	1		1	ug/L	1	3/26/2014 02:22 PM
Xylenes, Total	4		3	ug/L	1	3/26/2014 02:22 PM
Surr: 4-Bromofluorobenzene	99.6		75-129	%REC	1	3/26/2014 02:22 PM
Surr: Trifluorotoluene	84.9		75-130	%REC	1	3/26/2014 02:22 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services

**Project:** Lateral K-31 Pipeline Release

**Work Order:** 14030896

**Sample ID:** Trip Blank

**Lab ID:** 14030896-10

**Collection Date:** 3/19/2014

**Matrix:** TRIP BLANK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>BTEX BY SW8021B</b>			<b>SW8021B</b>			Analyst: <b>DNR</b>
m,p-Xylene	ND		2	ug/L	1	3/25/2014 07:18 PM
o-Xylene	ND		1	ug/L	1	3/25/2014 07:18 PM
Benzene	ND		1	ug/L	1	3/25/2014 07:18 PM
Toluene	ND		1	ug/L	1	3/25/2014 07:18 PM
Ethylbenzene	ND		1	ug/L	1	3/25/2014 07:18 PM
Xylenes, Total	ND		3	ug/L	1	3/25/2014 07:18 PM
Surr: 4-Bromofluorobenzene	90.2		75-129	%REC	1	3/25/2014 07:18 PM
Surr: Trifluorotoluene	79.9		75-130	%REC	1	3/25/2014 07:18 PM

**Note:** See Qualifiers Page for a list of qualifiers and their explanation.

**Work Order:** 14030896  
**Client:** Animas Environmental Services  
**Project:** Lateral K-31 Pipeline Release

## DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
<b><u>Batch ID: R163437</u></b> <b><u>Test Name: BTEX by SW8021B</u></b>						
14030896-01A	MW-9	Water	3/19/2014 11:40:00 AM			3/25/2014 05:17 PM
14030896-04A	MW-7		3/19/2014 2:33:00 PM			3/25/2014 05:34 PM
14030896-05A	MW-1		3/19/2014 3:47:00 PM			3/25/2014 05:51 PM
14030896-06A	MW-4		3/19/2014 4:13:00 PM			3/25/2014 06:09 PM
14030896-07A	MW-5		3/19/2014 4:42:00 PM			3/25/2014 06:43 PM
14030896-08A	MW-8		3/19/2014 5:17:00 PM			3/25/2014 07:01 PM
14030896-10A	Trip Blank	Trip Blank	3/19/2014			3/25/2014 07:18 PM
<b><u>Batch ID: R163483</u></b> <b><u>Test Name: BTEX by SW8021B</u></b>						
14030896-02A	MW-2	Water	3/19/2014 1:16:00 PM			3/26/2014 01:44 PM
14030896-03A	MW-3		3/19/2014 6:56:00 PM			3/26/2014 02:05 PM
14030896-09A	MW-6		3/19/2014 5:50:00 PM			3/26/2014 02:22 PM

# ALS Environmental

Date: 27-Mar-14

**Client:** Animas Environmental Services  
**Work Order:** 14030896  
**Project:** Lateral K-31 Pipeline Release

## QC BATCH REPORT

Batch ID: **R163437** Instrument ID **BTEX1** Method: **SW8021B**

<b>MBLK</b>	Sample ID: <b>BBLKW1-140325-R163437</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 12:14 PM</b>			
Client ID:	Run ID: <b>BTEX1_140325B</b>				SeqNo: <b>3577722</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 4-Bromofluorobenzene</i>	27.93	1.0	30	0	93.1	75-129	0			
<i>Surr: Trifluorotoluene</i>	25.39	1.0	30	0	84.6	75-130	0			

<b>LCS</b>	Sample ID: <b>BLCSS1-140325-R163437</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 11:39 AM</b>			
Client ID:	Run ID: <b>BTEX1_140325B</b>				SeqNo: <b>3577721</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	37.14	2.0	40	0	92.9	75-125				
o-Xylene	18.72	1.0	20	0	93.6	75-125				
Benzene	18.21	1.0	20	0	91	75-126				
Toluene	18.13	1.0	20	0	90.6	75-125				
Ethylbenzene	18.36	1.0	20	0	91.8	75-125				
Xylenes, Total	55.86	3.0	60	0	93.1	75-125				
<i>Surr: 4-Bromofluorobenzene</i>	26.82	1.0	30	0	89.4	75-129	0			
<i>Surr: Trifluorotoluene</i>	24.37	1.0	30	0	81.2	75-130	0			

<b>MS</b>	Sample ID: <b>14030921-01AMS</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 03:16 PM</b>			
Client ID:	Run ID: <b>BTEX1_140325B</b>				SeqNo: <b>3577726</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	38.95	2.0	40	0	97.4	75-125				
o-Xylene	20.09	1.0	20	0	100	75-125				
Benzene	19.28	1.0	20	0	96.4	75-126				
Toluene	19.05	1.0	20	0	95.2	75-125				
Ethylbenzene	19.2	1.0	20	0	96	75-125				
Xylenes, Total	59.04	3.0	60	0	98.4	75-125				
<i>Surr: 4-Bromofluorobenzene</i>	27.47	1.0	30	0	91.6	75-129	0			
<i>Surr: Trifluorotoluene</i>	23.99	1.0	30	0	80	75-130	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Animas Environmental Services  
**Work Order:** 14030896  
**Project:** Lateral K-31 Pipeline Release

## QC BATCH REPORT

Batch ID: **R163437** Instrument ID **BTEX1** Method: **SW8021B**

MSD		Sample ID: <b>14030921-01AMSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 03:33 PM</b>		
Client ID:		Run ID: <b>BTEX1_140325B</b>				SeqNo: <b>3577727</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	39.86	2.0	40	0	99.7	75-125	38.95	2.33	20	
o-Xylene	20.35	1.0	20	0	102	75-125	20.09	1.28	20	
Benzene	19.57	1.0	20	0	97.8	75-126	19.28	1.5	20	
Toluene	19.49	1.0	20	0	97.4	75-125	19.05	2.29	20	
Ethylbenzene	19.72	1.0	20	0	98.6	76-125	19.2	2.64	20	
Xylenes, Total	60.22	3.0	60	0	100	75-125	59.04	1.97	20	
Surr: 4-Bromofluorobenzene	28.43	1.0	30	0	94.8	75-129	27.47	3.44	20	
Surr: Trifluorotoluene	24.98	1.0	30	0	83.3	75-130	23.99	4.02	20	

The following samples were analyzed in this batch:

14030896-01A	14030896-04A	14030896-05A	14030896-06A
14030896-07A	14030896-08A	14030896-10A	

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.



**Client:** Animas Environmental Services  
**Work Order:** 14030896  
**Project:** Lateral K-31 Pipeline Release

## QC BATCH REPORT

Batch ID: **R163483** Instrument ID **BTEX1** Method: **SW8021B**

<b>MBLK</b>	Sample ID: <b>BBLKW1-140326-R163483</b>			Units: <b>µg/L</b>			Analysis Date: <b>3/26/2014 11:21 AM</b>			
Client ID:	Run ID: <b>BTEX1_140326B</b>			SeqNo: <b>3578533</b>			Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 4-Bromofluorobenzene</i>	29.35	1.0	30	0	97.8	75-129	0			
<i>Surr: Trifluorotoluene</i>	25.21	1.0	30	0	84	75-130	0			

<b>LCS</b>	Sample ID: <b>BLCSS1-140326-R163483</b>			Units: <b>µg/L</b>			Analysis Date: <b>3/26/2014 10:46 AM</b>			
Client ID:	Run ID: <b>BTEX1_140326B</b>			SeqNo: <b>3578532</b>			Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	37.04	2.0	40	0	92.6	75-125				
o-Xylene	18.95	1.0	20	0	94.8	75-125				
Benzene	18.29	1.0	20	0	91.4	75-126				
Toluene	18.17	1.0	20	0	90.9	75-125				
Ethylbenzene	18.07	1.0	20	0	90.3	75-125				
Xylenes, Total	55.99	3.0	60	0	93.3	75-125				
<i>Surr: 4-Bromofluorobenzene</i>	27.2	1.0	30	0	90.7	75-129	0			
<i>Surr: Trifluorotoluene</i>	24.2	1.0	30	0	80.7	75-130	0			

<b>MS</b>	Sample ID: <b>14030965-02AMS</b>			Units: <b>µg/L</b>			Analysis Date: <b>3/26/2014 12:52 PM</b>			
Client ID:	Run ID: <b>BTEX1_140326B</b>			SeqNo: <b>3578543</b>			Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	37.13	2.0	40	0	92.8	75-125				
o-Xylene	18.56	1.0	20	0	92.8	75-125				
Benzene	18.4	1.0	20	0	92	75-126				
Toluene	18.21	1.0	20	0	91	75-125				
Ethylbenzene	18.53	1.0	20	0	92.6	75-125				
Xylenes, Total	55.69	3.0	60	0	92.8	75-125				
<i>Surr: 4-Bromofluorobenzene</i>	29.1	1.0	30	0	97	75-129	0			
<i>Surr: Trifluorotoluene</i>	24.57	1.0	30	0	81.9	75-130	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Animas Environmental Services  
**Work Order:** 14030896  
**Project:** Lateral K-31 Pipeline Release

## QC BATCH REPORT

Batch ID: **R163483** Instrument ID **BTEX1** Method: **SW8021B**

MSD		Sample ID: <b>14030965-02AMSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/26/2014 01:09 PM</b>		
Client ID:		Run ID: <b>BTEX1_140326B</b>				SeqNo: <b>3578544</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	36.37	2.0	40	0	90.9	75-125	37.13	2.06	20	
o-Xylene	18.15	1.0	20	0	90.8	75-125	18.56	2.22	20	
Benzene	18.35	1.0	20	0	91.7	75-126	18.4	0.294	20	
Toluene	18.02	1.0	20	0	90.1	75-125	18.21	1.07	20	
Ethylbenzene	18.24	1.0	20	0	91.2	76-125	18.53	1.58	20	
Xylenes, Total	54.53	3.0	60	0	90.9	75-125	55.69	2.11	20	
Surr: 4-Bromofluorobenzene	28.95	1.0	30	0	96.5	75-129	29.1	0.523	20	
Surr: Trifluorotoluene	24.81	1.0	30	0	82.7	75-130	24.57	0.993	20	

The following samples were analyzed in this batch:

14030896-02A	14030896-03A	14030896-09A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Animas Environmental Services  
**Project:** Lateral K-31 Pipeline Release  
**WorkOrder:** 14030896

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<b><u>Acronym</u></b>	<b><u>Description</u></b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
ug/L	Micrograms per Liter

# ALS Environmental

## Sample Receipt Checklist

Client Name: **ANIMAS ENVIRONMENTAL SER**

Date/Time Received: **21-Mar-14 09:15**

Work Order: **14030896**

Received by: **DRC**

Checklist completed by *Parash M. Ciga* 24-Mar-14  
eSignature Date

Reviewed by: *Bethany McDaniel* 24-Mar-14  
eSignature Date

Matrices: **Water**

Carrier name: **FedEx**

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"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <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 type="checkbox"/>	No <input checked="" 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"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>1.2c/1.2c c/U</u> <u>IR1</u>		
Cooler(s)/Kit(s):	<u>5691</u>		
Date/Time sample(s) sent to storage:	<u>3/24/14 12:30</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		
Login Notes:	<u>Sample MW-8 - 1 x vial received broken</u>		

Client Contacted:

Date Contacted:

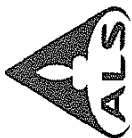
Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



Cincinnati, OH  
+1 513 733 5336  
Everett, WA  
+1 425 356 2600

Fort Collins, CO  
+1 970 490 1511  
Holland, MI  
+1 616 399 6070

## Chain of Custody Form

Page 1 of 1

COC ID: 102388

# 14030896

ANIMAS ENVIRONMENTAL SERVICES: Animas Environmental Services

Project: Lateral K-31 Pipeline Release

## Environmental



ALS Project Manager:

Customer Information				Project Information													
Purchase Order	AFE# Needed	Project Name	Lateral K-31	A	B	C	D	E	F	G	H	I	J	Hold			
Work Order		Project Number		B													
Company Name	Animas Environmental Services	Bill To Company	Enterprise Products	C													
Send Report To	Heather Woods	Invoice Attn	Farah Ullah	D													
Address	624 E. Comanche	Address	1100 Louisiana	E													
City/State/Zip	Farmington, NM 87401	City/State/Zip	Hosuton, TX 77002	F													
Phone	(505) 564-2281	Phone	(713) 381-4357	G													
Fax	(505) 324-2022	Fax		H													
e-Mail/Address	hwoods@animasenvironmental.com	e-Mail Address		I													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-9	3-19-2014	1140	H2O	HCL	3	X										
2	MW-2	3-19-2014	1316	H2O	HCL	3	X										
3	MW-3	3/19/2014	1856	H2O	HCL	3	X										
4	MW-7	3/19/2014	1433	H2O	HCL	3	X										
5	MW-1	3/19/2014	1547	H2O	HCL	3	X										
6	MW-4	3/19/2014	1613	H2O	HCL	3	X										
7	MW-5	3/19/2014	1642	H2O	HCL	3	X										
8	MW-8	3/19/2014	1717	H2O	HCL	3	X										
9	MW-6	3/19/2014	1750	H2O	HCL	3	X										
10	Trip Blank						X										

Sample(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
Signature: <i>LAVINIA ANNE</i>	Date: 3/19/2014	Signature: <i>Heather Woods</i>	Date: 3/19/2014	<input checked="" type="checkbox"/> Std. 10 WK Days	<input type="checkbox"/> 5 WK Days	<input type="checkbox"/> 2 WK Days	<input type="checkbox"/> 24 Hour
Relinquished by: <i>Heather Woods</i>	Date: 3/20/14	Relinquished by: <i>Heather Woods</i>	Date: 3/20/14	Notes:			
Logged by (Laboratory):	Date:	Relinquished by (Laboratory):	Date:	QC Package: (Check One Box Below)			
				<input checked="" type="checkbox"/> Level II Std OC			
				<input type="checkbox"/> Level III Std OC/Raw Data			
				<input type="checkbox"/> Level IV SW646/CLP			
				<input type="checkbox"/> Other / EDD			

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>3</sub> 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.  
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.  
3. The Chain of Custody is a legal document. All information must be completed accurately.

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**CUSTODY SEAL**

Date: 3/20/14 Time: 1000  
Name: Heather Woods  
Company: Almas Environmental

Seal Broken By:

Date:

3/24/14**ALS Environmental**

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CU:

Date: 3/20/14  
Name: Heather  
Company: Almas

**STUDY SEAL**

Time: 1000  
Woods  
Environmental

Seal Broken By:

Date:

3/24/14TRK#  
0215

8042 5199 0290

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## Enterprise - New Mexico Remedial Action Summary - October 2014

Remediation Site	Release Date	Release Source	Material Released	Est. Volume	Initial C-141 Date	Groundwater Impact?	PSH GW Impact	Depth to GW	Watercourse Reached?	OCDD Ranking Score	Landowner	Oversight Agency	OCDD RP Number	GW Discharge Number	GPS Coordinates	Legal Description	County	Remediation Status (1)	Site Priority	Site-Specific Assessment/ RAP?	Final C-141 Date	Closure Request Date	Comments
Bisti Receiver Tanks (adjacent to Chaco Plant)(7/23/07 Release)	7/23/2007	Tanks (overflow)	NGC	60 bbls	11/5/2008 (following site investigation)	Yes	Yes	20'	No	20	Navajo (leased)	NNEPA CERCLA Group	n/a	GW-0717 (for adjacent Chaco Plant)	36.480216, -108.120412	S21, T26N, R12W	San Juan	1,3	Medium	Yes			Navajo (CERCLA) approval of proposed investigation workplan needed. PSH present below former tank containment area. 1,000 cubic yards of affected soils excavated, and former 2007 response excavation, backfilled during Aug. 2014 under NNEPA oversight. Remedial and Corrective Action Report dated 1/06/12 (need to verify transmittal). Additional assessment of 1000 bbl vent tank storage area needed. will be performed and reported by December 31, 2014. 1,000 cubic yards
Blanco Storage Vent Tank (12/07/11 Release)	12/7/2011	Tank (overflow)	NGC	5 bbls	12/15/2011	No	No	<50'	No	30	Enterprise Blanco Storage Facility	OCDD	3R-151* (references historical El Paso crude oil release pump,	GW-049-2* (need to verify, there are two	36.730218, -107.965227	S14, T29N, R11W	San Juan	1,3	Medium	Yes			
Cohn 29-10-25 #1 (11/08/13 Release)	11/8/2013	PL - Lateral 2B-28	NGC		10/6/2014	requested by Autec	Yes (temp borings)	10'	No	30	Private (Mack S. Cohn)	Private (Mack S. Cohn)	OCDD	3RP-1018	n/a	36.703146, -107.829618	S25, T29N, 10W	San Juan	1		Yes		8 temporary wells installed at release site, GW impacts confirmed, addl investigation to be performed.
Federal 2E #1 (NAPI Field 409A) (3/15/12 Release)	3/15/2012	Pipeline	NGC	n/a	3/27/2012	Yes	No	20'	No	20	Navajo/NAPI	OCDD (also NNEPA, NAPI)	n/a	n/a	36.60687, -108.08013	S2, T27N, R12W	San Juan	1,3	High	Yes			7/02/12 SWP submitted; 1/03/13 - new Site Investigation Workplan submitted; 4/10-4/13/13 Site investigation conducted. Additional
Hobbs Station (12/23/13 Release)	12/23/2013	Pump	Crude	3,500 bbls	12/30/2013	No	No	45'	No	20	Enterprise	OCDD	pending	GW-361	32.650447, -103.14108	S22, T19S, R38E	Lea	4	High	Yes			Remedial actions are being performed for onsite soil impacts. Onsite treatment in accordance with initial RAP submitted to Hobbs OGD office on 12/23/13. RAP is being revised to include results of affected soils
Gallegos No. 2 / Trunk 6 A (5/28/12 Release)	5/28/2012	Pipeline	NGC	gas	6/12/2012	Yes	No	2.5'	Unknown	40	Navajo	NNEPA	3RP-443	n/a	36.45979, -108.02202	S29, T26N, R11W	San Juan	3	Medium	Yes			120 cu yds soil removed during PL response repair during June 2012. 8/26/13 CAP recommending excavation sent to Steve Austin, NNEPA, Wells installed and sampled 4/24/13. 6/22/12 - Site investigation
K-51 Lateral (3/19/10 Release)	4/13/2010	Pipeline	NGC	10 bbls	4/26/2010	Yes	No	15'	Unknown	40	Private (Schmitz Ranch), BLM	OCDD	3R-446 (formerly 3R-206 - historical El Paso release at drip tank)	n/a	36.446511, -107.446122	S34/35, T26N, R6W	Rio Arriba	1,3	Medium	Yes			Site was expected to closure by MMA. However, constituent concentrations in one affected monitor well (MW-19/adjacent to Tapacito Creek) have increased. An additional downgradient
Largo Compressor Station	1/24/08* (initial release date at former	Tanks (overflow) and	NGC	505 bbls	4/29/2008 (gw)	Yes	Yes	25'	Unknown	50	Enterprise / Private (H.C. Berry)	OCDD	3R-1001-1 (Note: 3R-1001 was assigned for the 1/04/08 condensate	GW-211	36.486928, -107.557622	S15, T26N, R 7W	Rio Arriba	1,4	High	Yes			Ongoing facility remedial actions for historic soil and groundwater impacts. Additional delineation required on western groundwater plume boundary due to recent increases.
Lateral C-11 (7/22/13 Release)	7/22/2013	Pipeline	Unknown	Unknown	Unknown	Probable (soil samples exceed reqs., backfilled)	n/a	40'	No	40	Navajo Allotment	OCDD	n/a	n/a	36.58841, -107.763470	S10, T27N, R9W	San Juan	1	Unknown	Yes			12/02/13 - Continued Site Assessment Workplan submitted to NM OGD; this is allotted land, approvals for monitor well installations is pending.
Lateral C-11 (12/18/12 Release)	12/18/2012	Pipeline	NGC	Unknown	12/21/2012	Yes	Yes	40'	No	40	Navajo Allotment	OCDD	n/a	n/a	36.5886, -107.7677	S10, T27N, R9W	San Juan	1	Unknown	Yes			9/10/13 - Groundwater sampling conducted 9/5/13, 0.2 ft free product observed in MW-1. 7/31/13 - Site Assessment Workplan submitted to Steve Austin, NNEPA.
Lateral C-64 (7/24/13 Release)	7/24/2013	Pipeline (line drip)	NG, NGC	n/a	8/5/2013	Probable	No	20' (est)	No	40	Private	OCDD	n/a	n/a	36.563695, -107.414268	S24, T27N, R6W	Rio Arriba	1	Unknown	Yes			Five other pipelines in same location; estimated depth to gw is <20 feet bgs. Additional assessment required, pending landowner approval.
Lateral K-12 / Tank Y-3 (3/19/12 Release)	3/19/2012	Lateral drip tank	Crude oil	1 bbl	Unknown	Yes (perched zone)	Yes	30'	No	40	BLM	OCDD	n/a	n/a	36.55412, -107.54935	S23, T27N, R7W	Rio Arriba	1,3	Medium	Yes			6/19/13 - additional soil borings (5B-8 & 5B-9) installed. Additional assessment is required and is being scheduled. Tanks have been replaced in new lined containment area.
Lateral K-31 (12/02/11 Release)	12/2/2011	Pipeline	NGC	n/a	n/a	Yes	No	14'	No	20	State of NM	OCDD	3R-440	n/a	36.39373, -107.47519	S16, T25N, R6W	Rio Arriba	1,5	Medium	Yes			Site was expected to attenuate naturally (max. 40ppb benzene). However, an additional release at this location (on 7/26/14) appears to be causing increases in groundwater constituent concentrations.
Lateral K-7 (8/30/12 Release)	8/30/2012	Pipeline	NGC	n/a (gas)	9/7/2012	Yes	No	24'	No	30	BLM	OCDD	n/a	n/a	36.46422, -107.56505	S27, T26N, R7W	Rio Arriba	2,5	Medium	Yes			Temporary borings installed in Oct 2013 confirmed groundwater impacts (24 to 28' bgs). Additional groundwater investigation proposed in 8/26/13 workplan submitted to OCDD. BLM approval needed.
Lateral K-7 (7/15/13 Release)	7/15/2013	Pipeline	G, NGC	2 bbls	Unknown	Yes	n/a	38'	No	30	Private (Largo Ranch)	OCDD	n/a	n/a	36.47945, -107.56501	S15, T26N, R18W	Rio Arriba	2,5	Low	Yes			Five wells installed during October 2013 in accordance with proposed 9/25/13 investigation workplan. GW impact confirmed with lab results, low ppb range (35 ug/L), site may close under MMA. One area
Lindrih Compressor Station	12/27/07 (Note: initial release at	Tanks	NGC	50 bbls	1/4/2008	Yes	Yes	35'	No	40	Jicarilla	OCDD	3R-215 (Note: this was assigned during 1995 for closure of facility	GW-209	36.310019, -107.396639	S18, T24, R5W	Rio Arriba	1,4	High	Yes			Evaluate treatment options for groundwater, initial MDPE not effective. Interim recovery of PSH ongoing. Also, additional delineation required to delineate western groundwater plume boundary. Delineation well(s)
South Carlsbad Station (Nov. 2009 Historical Release Discovery)	Historical	Tanks	NGC	n/a	n/a	Possible (investigation planned)	n/a	30'	No	40	Enterprise	OCDD	n/a	n/a	32.313710, -104.136661	S12, T23S, R27E	Eddy	1,4	High	Yes			Impacted soils at former condensate tank storage area remediation onsite. Recent investigation in process area indicates affected soils are present to water table depth, a further groundwater investigation is
Trunk 6C (Kutz Wash) - (9/21/11 and 10/29/13 Releases); formerly "Lateral 6C"	9/21/2011; 10/29/2013	Pipeline	NGC	7bbls (Sept 2011); no estimate for Oct 2013	9/29/2011, 11/11/13	Yes	No	15'	No	30	BLM	OCDD	3R-438	n/a	36.63197, -107.97408	S26, T28N, R11W	San Juan	1	High	Yes	9/29/2011		4 new wells installed November 2013; slug testing conducted in Dec 2013. NAPI found at site 3/20/13. Second release may be causing increased in GW constituent concentrations. Remedial actions are being evaluated. pilot test results and proposed remediation work plan

## Closed or Closure Requested Sites

Lateral K-17 / K-Trunk (3/19/2010 Release)	3/19/2010	Tank	NGC	n/a	4/11/12 (C-141 for confirmed GW	Yes	No	15'	No	30	BLM	OCDD	3R-439	n/a	36.552209, -107.652894	Unknown	Unknown	5	Low	Yes		9/30/2014	Site closure requested on 9/30/14. Natural attenuation of limited GW impact.
Kutz Hydrocarbon Recovery - Facility Decommissioning (at Blanco Plant)	Historical	tanks	various	n/a	n/a	no	no	>50'	no	10	Enterprise	OCDD	n/a	GW-049-1	36.735607, -107.958881	S11, T29N, R11W	San Juan	6,8	Closed	Yes		4/19/2011	This facility was acquired from El Paso during 2004, and with the exception of one used oil tank, was not utilized by Enterprise. A soil boring investigation was conducted during 2010 prior to site
Blanco Products Storage (10/31/06 Condensate Sump Release)	10/31/2006	Tank	NGC	n/a	10/31/2006	yes	no	8' (note: this is a shallow	no	30	Enterprise	OCDD	n/a	GW-049-2* (Note: GW-049 2 refers to the	36.711211, -107.965592	S14, T29N, R11W	San Juan	6	Low	Yes		3/9/2012	Closure requested on 3/09/12. Perched water zone expected to deplete following placing sump in lined containment. Monitor wells remain in place.
Chaco Plant (South Pond Closure)	Historical	various	various	n/a	historical	no	no	15'	no	20	Enterprise Chaco Gas Plant	OCDD	n/a	GW-071	36.486039, -108.124631	S16, T26N, R12W	San Juan	6	Closed	Yes		5/26/2011	South Pond closure completed and closure requested on 5/26/11
Chaco Plant (Ballard Ponds Closures)	Historical	various	various	n/a	historical	no	no	15'	no	20	Enterprise Chaco Gas Plant	OCDD	n/a	GW-071	36.483208, -108.117639	S16, T26N, R12W	San Juan	6	Closed	Yes		9/25/2012	Remedial actions for Ballard Ponds completed and closure requested 9/25/12.
Chaco Plant (Closure of historical groundwater monitoring system)	Historical	various	various	n/a	historical	no	no	15'	no	20	Enterprise Chaco Gas Plant	OCDD	n/a	GW-071	36.483935, -108.121848	S16, T26N, R12W	San Juan	6	Low	Yes		6/6/2011	Evaluation of historical groundwater information and request for closure of existing groundwater monitor wells requested 6/06/11.
CPS-1989 (3/06/08 Release)	3/6/2008	Cathodic protection well	pH drop at Cathodic Anode Bed and	n/a	3/10/2008 (receipt of analytical	high sulfate levels are present, but may	no	Initial water bearing zone at	no	20	BLM	OCDD	3R-417	n/a	36.667772, -107.838308	S13, T2N, R10W	San Juan	6	Low	Yes		3/31/2011	Monitor wells are still in place at the site. Plugging and abandonment pending OCDD approval.
Smyers LSR1 (12/26/11 Release)	12/26/2011	pipeline	Water, NGC	n/a		no	no	3'	no	40	BLM	OCDD	3R-437	n/a	36.9234, -107.96485	S2, T31N, R11W	San Juan	6	Closed	Yes		6/21/2013	Soils removed during pipeline repairs. Closure requested on 6/21/13 following groundwater evaluation.
2C-45/McKenzie No. 2 / (3/26/12 Release)	3/26/2012	pipeline	NGC	n/a	verbal on 3/31/12 and final C-141 on	yes (Note: samples from excavation, not	no	8'	yes (Lapis Canyon Wash)	40	BLM	OCDD	3R-144	n/a	36.38347, -108.4167	S24, T25N, R6W	Rio Arriba	6	Closed	Yes	1/16/2013	12/18/2012	Affected soil removed (3,000 cu yds), groundwater not affected, NFA report submitted

1) 1) Assessment Required, 2) Delineation Completed, 3) Interim Remedial Actions, 4) Active Remedial Actions, 5) Monitored Natural Attenuation (MNA), 6) Closure Requested, 7) Closure Approved, 8) Final site restoration, P&amp;A Monitor Wells Completed