1R - 420

REPORTS

DATE:

May 2012

SOIL CLOSURE REQUEST

TEXACO SKELLY F

SW ¼ NW ¼ SECTION 21, TOWNSHIP 20 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: 2002-11229
NMOCD Reference Number 1R-0420

Prepared for:

PLAINS MARKETING, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002

NOVA
safety and environmental

Prepared by:

NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703

May 2012

Ronald K. Rounsaville
Senior Project Manager

Brittan K. Byerly, P.G.
President

PLAINS
PIPELINE, L.P.

June 8. 2012

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Plains Pipeline, L.P. Texaco Skelly F Site
NMOCD Reference # 1R-0420
Unit Letter E of Section 21, Township 20 South, Range 37 East
Lea County, New Mexico

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached *Soil Closure Request*, dated May 2012, for the Texaco Skelly F site. This document details the soil remediation activities performed at the site.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains Pipeline, L.P.

CC: Geoff Leking, NMOCD, Hobbs Office

Enclosure

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1.0 INTRODUCTION

On behalf of Plains Pipeline, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Soil Closure Request to the New Mexico Oil Conservation Division (NMOCD) for the site known as Texaco Skelly "F" (SRS # 2002-11229). The site is located approximately three and one-half miles south of the town of Monument, New Mexico, in the SW ¼ of the NW ¼ of Section 21, Township 20 South, Range 37 East in Lea County, New Mexico. The Texaco Skelly "F" Crude Oil Release was discovered September 15, 1998; the cause of the release was attributed to internal pipeline corrosion. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D. Approximately thirty barrels of crude oil was released from a four inch pipeline with no recovery. The release resulted in a surface stain approximately thirty feet by one hundred feet oriented parallel to the pipeline. This Soil Closure Request details the results of the NMOCD approved activities completed at the site. For reference, a Site Location Map is provided as Figure 1.

2.0 NMOCD SITE CLASSIFICATION

The depth to groundwater at the site is approximately 25 feet bgs. Based on the NMOCD soil classification system, 20 points would be assigned to the site as a result of this criterion. There are no receptor water wells located within 1,000 feet of the site. Based on the NMOCD Soil Classification System, 0 points would be assigned to the site as a result of this criterion. There are no surface-water features identified within a one-mile radius of the site. Based on the NMOCD Soil Classification System, 0 points would be assigned to the site as a result of this criterion. The NMOCD guidelines indicate that the site would have a Ranking Score of >19. The soil action levels for a site with a Ranking Score of >19 points are as follows:

- Benzene - 10 ppm
- BTEX - 50 ppm
- TPH - 100 ppm

The approved Soil Closure Work Plan proposed that if hydrocarbon impact exceeding NMOCD cleanup standards existed in the soil below 20 feet in depth, then a synthetic liner would be installed in the excavation over the area exceeding the cleanup standards. Impacted excavated soil from the surface to 20 feet bgs would be treated on-site by blending and aeration techniques to achieve target concentrations (or below) as stated in the Work Plan. Pursuant to the Work Plan, treated soil above the liner will be blended to less than 1000 mg/kg TPH, less than 10 mg/Kg benzene and less than 50 mg/Kg total BTEX. The upper one foot of each excavation area will be backfilled with non-impacted top soil exhibiting a TPH concentration less than 100 mg/Kg.

3.0 SUMMARY OF FIELD ACTIVITIES

3.1 Impacted Soil Removal

Pursuant to the Soil Closure Work Plan, approved by the NMOCD on February 19, 2008, excavation of the impacted soils in the area of the release began on September 20, 2011. An excavator was utilized to remove impacted soil from the floor and sidewalls of the excavation area. The excavated soil was stockpiled on-site, pending laboratory analysis. As excavation activities progressed, soil samples were collected from the floor and sidewalls of the excavation area. Based on visual and olfactory observations, the final dimensions of the excavation area were approximately 100 feet in length (north to south) by 70 feet in width (east to west) and averaged approximately 24 feet in depth. An estimated 6,222 cubic yards of soil was brought to surface and remediated by mixing, blending and aeration methods. Excavation activities were completed on April 16, 2012. Figure 2 is an Excavation Area Map depicting the pipelines, the excavation area and other site details.

3.2 Excavated Soil Remediation

Excavated soil was staged in a large cleared area located north and west of the excavation area. Non-impacted near-surface soil collected from within the cleared area was pushed up and used to blend with the impacted soil. Mixing and blending activities continued concurrently with excavation activities. Approximately 6,222 cubic yards of soil were brought to the surface for remediation. Following blending activities, twelve confirmation soil samples were collected, one for every 500 cubic yards of material and submitted for laboratory analysis for BTEX, EPA method 8021 and Total Petroleum Hydrocarbons, EPA method 8015.

3.3 Confirmation Soil Sampling – Excavation Areas

Confirmation soil samples collected from walls and floor of the excavation areas were submitted for laboratory analysis for TPH by Method 8015M and BTEX by Method 8021B. Laboratory submitted samples were placed in a new sterile glass container, equipped with a Teflon-lined lid furnished by the laboratory. Samples were labeled, placed on ice, and chilled to a temperature of approximately 4° C. Appropriate chain-of-custody documentation and shipping protocols were followed. The laboratory analytical reports are presented on the attached CD provided in Appendix C. Table 1 displays the analytical results of confirmation soil samples.

Main Excavation Area

On September 28, 2011, October 3 and 5, 2011, confirmation soil samples were collected from the sidewalls of the main excavation area. The analytical results of these soil samples indicated TPH and BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg and 50 mg/Kg, respectively.

On October 13, 2011, confirmation soil samples were collected from the floor of the main excavation area. The analytical results of these soil samples indicated TPH and BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg and 50 mg/Kg,

respectively, with the exception of the soil samples collected at the location identified as NE. FLR-2, 20 ft. The analytical results for soil sample NE. FLR-2, 20 ft. indicated a TPH concentration of 292.4 mg/Kg.

On October 20, 2011, upon receipt of the analytical results, the floor area surrounding soil sample NE. FLR-1, 20 ft. was excavated further to the north approximately 3 feet. Confirmation soil sample NE. FLR-2B, 20 ft. was collected from the excavation floor and submitted for laboratory analysis. The analytical results for soil sample NE. FLR-2B, 20 ft. indicated TPH concentrations were below the NMOCD regulatory standards. A Confirmation Sample Locations Map for the Main Excavation Area is provided as Figure 3. Table 1 displays the analytical results of confirmation soil samples.

During excavation activities, at Plains request, four interceptor sumps were excavated in the floor of the main excavation area, each to a depth of approximately 29 feet bgs. The trenches were located along the south and east floor areas, in the central portion of the floor and the fourth lying in between recovery wells RW-1 and RW-2 in a north-south position. Groundwater was observed at approximately twenty-seven feet bgs. Each of the sumps measured approximately 25 feet in length by approximately 5 feet wide in order to capture Phase Separated Hydrocarbons (PSH) observed on top of the groundwater. As the excavation activities progressed within the Main Excavation area, the entire floor was excavated to groundwater to delineate the presence of PSH. The main excavation area consisted of friable silty sand approximately 10-11 feet thick overlying a fractured caliche bed approximately 11-30 feet thick. The impacted soil from the floor area was added to the excavated soil stockpile for blending and mixing. Figure 3 illustrates the extent and depth of the extended floor excavation.

3.4 Confirmation Soil Sampling – Blended Soil Piles

From September 20, 2011 through March 28, 2012, the estimated 6,222 cubic yards of impacted soil from the main excavation area was staged in cleared areas to the north and west of the excavation area. Non-impacted soil collected from the staging area was used to mix with the impacted soil.

On October 5 and 13, 2011, four composite soil samples were collected from the western blended soil stockpile, SP-2A through SP-2D, and submitted to the laboratory for analysis. The analytical results indicated the TPH concentration of the soil stockpile SP-2 ranged from 247.5 mg/Kg to 339.8 mg/Kg. Benzene concentrations were less than 0.020 mg/Kg and total BTEX concentrations were below 50 mg/Kg. On October 20, 2011, following additional soil blending activities, six composite soil samples were collected from the northern soil stockpile, SP-1A through SP-1F, and submitted to the laboratory for analysis. The analytical results indicated three of the six soil stockpile samples (SP-1A, SP-1B and SP-1D) from stockpile SP-1 exceeded the NMOCD approved limit of 1,000 mg/Kg with TPH concentrations ranging from 1,081.9 mg/Kg to 1,302.2 mg/Kg. Benzene concentrations were less than 0.020 mg/Kg and total BTEX concentrations were below 50 mg/Kg. On March 23, 2012, following additional soil blending and mixing activities, three re-blended soil stockpile samples (SP-1A2, SP-1B2 and SP-1D2) were collected and submitted to the laboratory for analysis. The analytical results indicated the

TPH concentrations of the three re-blended stockpile samples were below the approved 1,000 mg/Kg limit with TPH concentrations ranging from 478.4 mg/Kg to 775.5 mg/Kg.

3.5 Synthetic Liner Placement

Upon receipt of laboratory analytical results indicating all of the identified areas of hydrocarbon impact were below the approved criteria set forth in the Soil Closure Work Plan for treated soils, preparation for the installation of the synthetic liner installation began as proposed in the Soil Closure Work Plan dated April 2008. The floor of the excavation was backfilled up to a depth of approximately 20 feet bgs. Following the backfilling activities, a six-inch layer of non-impacted sand, acquired locally, was placed in the excavation. The sand protects the synthetic liner from rips and tears and aids in the proper installation of the liner.

On April 3, 2012, a synthetic liner was installed within the main excavation area at a depth of approximately 20 feet bgs by a vendor trained in the proper installation of impermeable liners. Photographic documentation of the liner installation is provided as Appendix B. Following the synthetic liner installation, an additional six-inch layer of non-impacted sand was placed on top of the liner to further protect the liner during backfilling operations.

3.6 Backfilling and Surface Restoration

Based on analytical results of laboratory analyzed confirmation soil samples obtained from the excavation areas and remediated soil piles, the backfilling of the excavations with remediated soil commenced on April 9, 2012. The blended soil stockpile was placed in the excavations in twelve-inch lifts and compacted. A water truck was used to supply moisture to the soil to facilitate proper compaction.

On April 16, 2012, backfilling activities were completed and the disturbed area was contoured to fit the surrounding topography.

4.0 PSH RECOVERY EFFORTS

During the excavation of the main floor area, PSH and impacted groundwater within the sumps was evacuated using a vacuum truck. From October 6, 2011 through March 29, 2012, approximately 2,282 barrels of impacted groundwater and oil were recovered from the various sumps along the main floor excavation area. On February 9 and March 23, 2012, two- 30 foot deep recovery sumps were constructed within two separate trenches. The first recovery sump (Sump #1) was installed in a trench located north of monitor well MW-7 and the second recovery sump (Sump#2) was installed within the sump trench located between recovery wells RW-1 and RW-2 to enhance PSH recovery. Following the fluid evacuation activities and the installation of the two recovery sumps, PSH thicknesses in two monitor wells and two recovery wells in the near vicinity of the excavation area have diminished to thicknesses ranging from 0.03 ft. to 0.43 ft.

5.0 SOIL CLOSURE REQUEST

Plains has completed the activities proposed in the NMOCD approved Soil Closure Work Plan dated April 2008 and requests NMOCD approval for Soil Closure.

A complete (including groundwater) Site Closure Request will be submitted to the NMOCD upon completion of eight consecutive quarterly groundwater sampling events demonstrating that BTEX concentrations are below the NMOCD regulatory guidelines.

6.0 LIMITATIONS

NOVA has prepared this Soil Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report including all exhibits and attachments may not be used by any other party without the express written consent of NOVA and/or Plains.

7.0 DISTRIBUTION

Copy 1:
Ed Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Copy 2:
Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division District 1
1625 French Drive
Hobbs, NM 88240

Copy 3:
Jason Henry
Plains Marketing, L.P.
2530 State Highway 214
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jhenry@paalp.com

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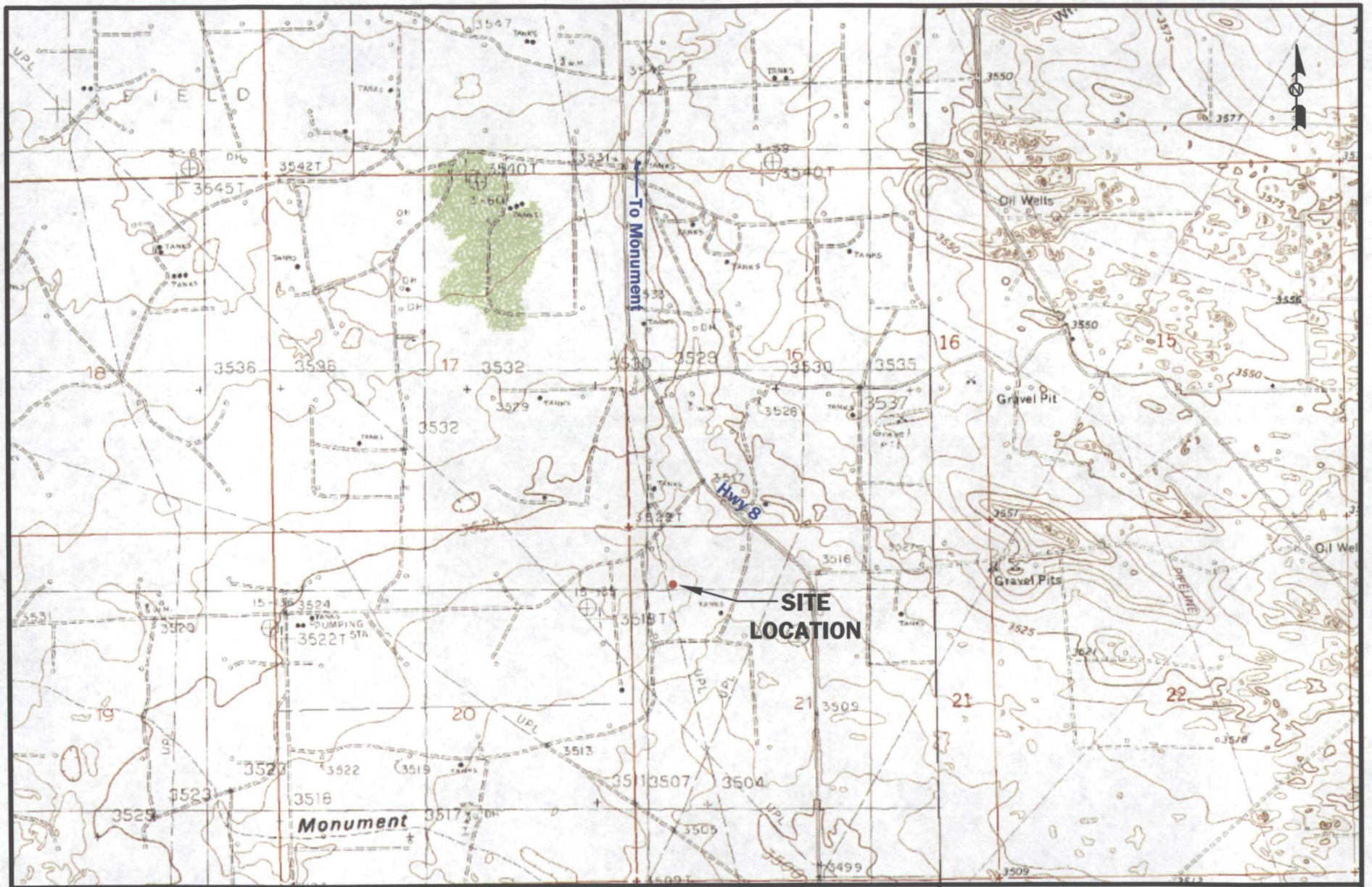
333 Clay Street, Suite 1600
Houston, Texas 77002
jpdann@paalp.com

Copy 5:
NOVA Safety and Environmental.
2057 Commerce Drive
Midland, Texas 79703
rrounsaville@novatraining.cc

FIGURES



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

NMOCD Reference #1R-420

Figure 1
Site Location Map
Texaco Skelly
Plains Marketing, L.P.
Lea County, NM

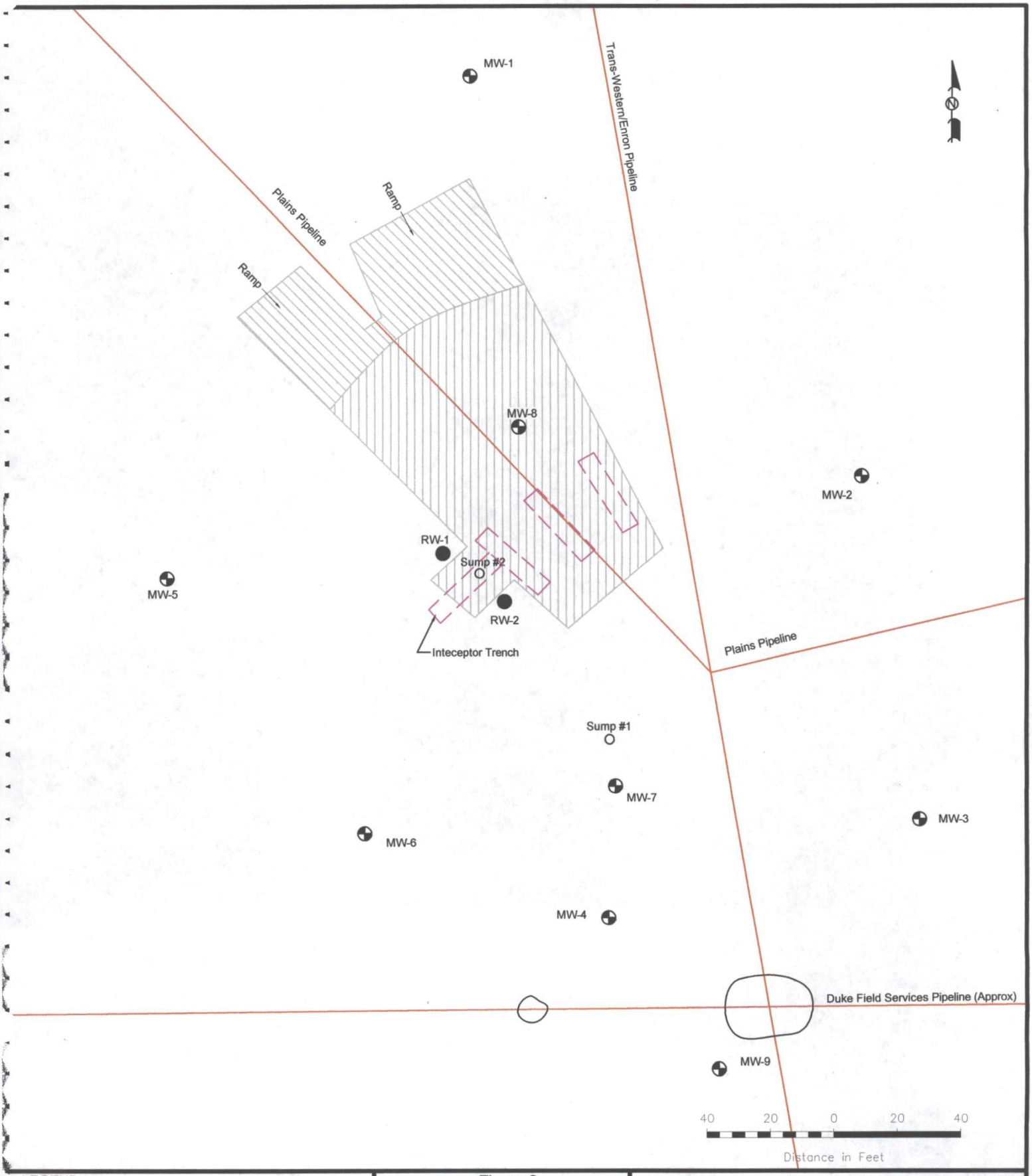
NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

March 3, 2011	Scale: 1" = 2000'	CAD By: TA	Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 33' 47.00" W 103° 15' 48.47"



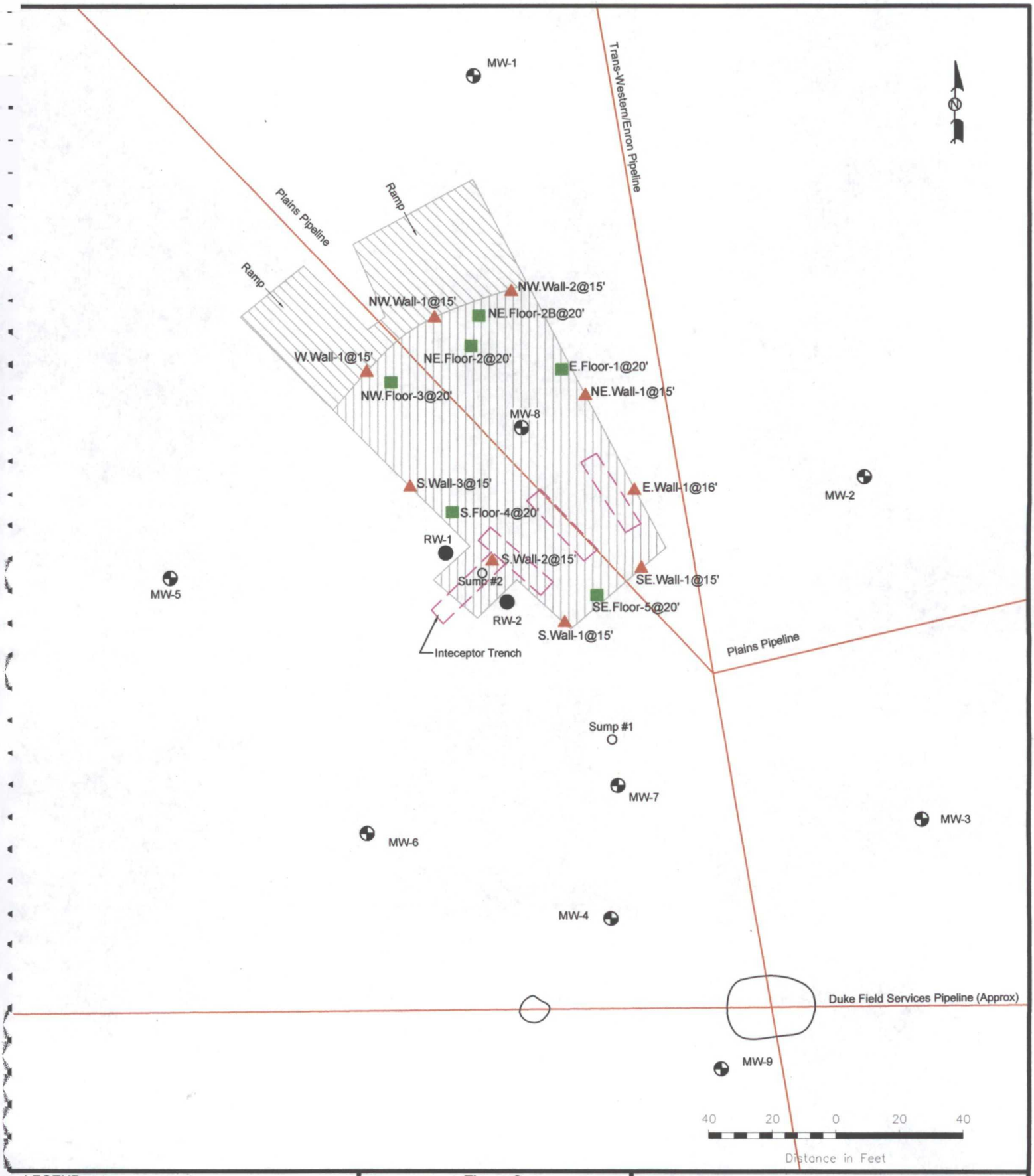
LEGEND:

- Monitor Well Location
- Excavated Area

Figure 2
Excavation Area Map
NMOCD Reference # IR-0420
Plains Marketing, L.P.
Texaco Skelly "F" Site
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

April 4, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR
Lat. N 31° 33' 47.0" Long. W 103° 15' 48.47"		SW1/4 NW1/4 Sec 21 T20S R37E	



LEGEND:

- Monitor Well Location
- Floor Soil Sample Location
- Wall Soil Sample Location
- Excavated Area

Figure 3

Site Details Schematic & Confirmation Soil Sample Locations Map
NMOCD Reference # IR-0420
Plains Marketing, L.P.
Texaco Skelly "F" Site
Lea County, NM

NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

May 4, 2012	Scale: 1" = 40'	CAD By: TA	Checked By: RKR
Lat. N 31° 33' 47.0" Long. W 103° 15' 48.47"		SW1/4 NW1/4 Sec 21 T20S R37E	

TABLES

Table 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.

TEXACO SKELLY 'F'
Lea County, New Mexico
Plains SRS# 2002-11229
NMOCD Reference Number 1R-0420

All concentrations are in mg/kg

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	SOIL STATUS	Methods: EPA SW 846-8015M			Methods: EPA SW 846-8020				
				C_6-C_{12}	C_{12} - C_{35}	Total TPH C_6-C_{35}	Benzene	Toluene	Ethylbenzene	Total Xylenes	
NMOCD REGULATORY STANDARD					-	100	10	-	-	-	-
MAIN EXCAVATION AREA											
09/28/11	NE Wall-1, 15'	15'	In-Situ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
09/28/11	SE Wall-1, 15'	15'	In-Situ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
09/28/11	S. Wall-1, 15'	15'	In-Situ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
09/28/11	S. Wall-2, 15'	15'	In-Situ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
09/28/11	S. Wall-3, 15'	15'	In-Situ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/03/11	E. Wall-1, 16'	16'	In-Situ	3.70	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/05/11	W Wall-1, 15'	15'	In-Situ	7.01	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/05/11	N West Wall-1, 15'	15'	In-Situ	4.30	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/05/11	N West Wall-2, 15'	15'	In-Situ	3.21	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	E FLR-1,	20'	In-Situ	4.43	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	NE FLR-2	20'	Excavated	**15.4**	**277**	**292.4**	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	NW FLR-3	20'	In-Situ	33.10	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	S FLR-4	20'	In-Situ	2.74	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	SE FLR-5	20'	In-Situ	2.82	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	
10/20/11	NE FLR-2B	20'	In-Situ	3.28	<50.0	<50.0	--	--	--	--	
BLENDED SOIL STOCKPILES											
10/05/11	South Soil Stockpile SP-2	--	Blended	23.8	316	339.8	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	South Soil Stockpile SP-2, B	--	Blended	22.5	225	247.5	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	South Soil Stockpile SP-2, C	--	Blended	15.6	271	286.6	<0.0200	<0.0200	<0.0200	<0.0200	
10/13/11	South Soil Stockpile SP-2, D	--	Blended	12.2	289	301.2	<0.0200	<0.0200	<0.0200	<0.0200	
10/20/11	North Soil Stockpile SP-1, A	--	Blended	45.1	**1,170**	**1,215.1**	<0.0200	<0.0200	<0.0200	0.0259	
10/20/11	North Soil Stockpile SP-1, B	--	Blended	41.9	**1,040**	**1,081.9**	<0.0200	<0.0200	<0.0200	<0.020	
10/20/11	North Soil Stockpile SP-1, C	--	Blended	56.6	756	812.6	<0.0200	<0.0200	<0.0200	<0.020	
10/20/11	North Soil Stockpile SP-1, D	--	Blended	52.2	**1,250**	**1,302.2**	<0.0200	<0.0200	<0.0200	<0.020	
10/20/11	North Soil Stockpile SP-1, E	--	Blended	69.4	<50.0	69.4	<0.0200	<0.0200	<0.0200	0.0695	
10/20/11	North Soil Stockpile SP-1, F	--	Blended	63.3	662	725.3	<0.0200	<0.0200	<0.0200	<0.020	
03/23/12	N. Soil Stockpile SP-1, A2	--	Reblended	33.5	742	775.5	NA	NA	NA	NA	
03/23/12	N. Soil Stockpile SP-1, B2	--	Reblended	21.4	457	478.4	NA	NA	NA	NA	
03/23/12	N. Soil Stockpile SP-1, D2	--	Reblended	35.2	497	532.2	NA	NA	NA	NA	
04/11/12	North Soil Stockpile SP-1, G	--	Blended	15.6	375	390.6	NA	NA	NA	NA	
04/11/12	North Soil Stockpile SP-1, H	--	Blended	17.6	375	392.6	NA	NA	NA	NA	

NA - BTEX Analysis not conducted on these samples.

APPENDICES

APPENDIX A
Notification of Release and Corrective Action
(Form C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	Texaco Skelly F	Facility Type:	4". Steel Pipeline

Surface Owner: Millard Deck Estate	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	21	20S	37E					Lea

Latitude 32 degrees 33' 48.02" **Longitude** 103 degrees 15' 48.08"

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 30	Volume Recovered 0
Source of Release: 4" Steel Pipeline	Date and Hour of Occurrence 09/15/1998	Date and Hour of Discovery 09/15/1998 02:00 PM
Was Immediate Notice Given? Yes ☒ No ☐ Not Required	If YES, To Whom? Donna Williams	
By Whom? Frank Hernandez	Date and Hour 02/02/01 02:30 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Internal corrosion of 4" steel pipeline. Forty feet of the line was replaced.

Describe Area Affected and Cleanup Action Taken.* Forty feet of the line was replaced. The aerial extent of surface impact was approximately 30' x 100'.

NOTE: This information was obtained from historical EOTT files, Plains acquired EOTT/Link on April 1, 2004 and Plains assumes this information to be correct.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 3/21/2005 Phone: (505)441-0965		

* Attach Additional Sheets If Necessary

APPENDIX B
Laboratory Analytical Reports
(On the attached CD)

NOVA
safety and environmental

Photographic Documentation

Client: Plains Marketing, L.P.
Location: Lea County, New Mexico

Project Name: Texaco Skelly 'F'
Photographer: Ron Rounsaville

Photograph No. 1

Direction: East

Description: View of the Main Excavation Area.

Photograph No. 2

Direction: West

Description: View of the ramp entrances along the western portion of the Main Excavation Area.

NOVA
safety and environmental

Photographic Documentation

Client: Plains Marketing, L.P.
Location: Lea County, New Mexico

Project Name: Texaco Skelly 'F'
Photographer: Ron Rounsaville

Photograph No. 3

Direction: East

Description: View of the oil stained eastern wall of the Main Excavation Area.

Photograph No. 4

Direction: Southeast

Description: View of the three floor sump excavation in the floor of the Main Excavation Area.

NOVA
safety and environmental

Photographic Documentation

Client: Plains Marketing, L.P.
Location: Lea County, New Mexico

Project Name: Texaco Skelly 'F'
Photographer: Ron Rounsaville

Photograph No. 5

Direction: West

Description: View to the west of the floor sump excavation along the southern wall of the excavation area.

Photograph No. 6

Direction: East

Description: View to the east of the excavation floor liner installation.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 25, 2011

Work Order: 11102109

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
280395	NE FLR-2B	soil	2011-10-20	13:45	2011-10-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-21 and assigned to work order 11102109. Samples for work order 11102109 were received intact at a temperature of 4.7 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	72853	2011-10-24 at 10:25	85816	2011-10-24 at 10:25
TPH GRO	S 8015 D	72814	2011-10-21 at 14:00	85774	2011-10-21 at 16:15

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11102109 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85816	Date Analyzed:	2011-10-24	Analyzed By:	kg
Prep Batch:	72853	Sample Preparation:	2011-10-24	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qs,U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	67.5 - 147.1

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85774	Date Analyzed:	2011-10-21	Analyzed By:	AG
Prep Batch:	72814	Sample Preparation:	2011-10-21	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,Qs	1	**3.28**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.96	mg/Kg	1	2.00	98	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85774

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	1.01	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.77	mg/Kg	1	2.00	88	52.4 - 130

Method Blank (1) QC Batch: 85816

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			117	mg/Kg	1	100	117	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.5	mg/Kg	1	20.0	<0.753	88	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.2	mg/Kg	1	20.0	<0.753	91	60.9 - 95.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.95	mg/Kg	1	2.00	98	98	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.90	1.85	mg/Kg	1	2.00	95	92	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	241	mg/Kg	1	250	<14.5	96	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	242	mg/Kg	1	250	<14.5	97	64.5 - 146.9	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	111	mg/Kg	1	100	116	111	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 280395

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	1	29.3	mg/Kg	1	20.0	3.28	130	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr	1	21.6	mg/Kg	1	20.0	3.28	108	61.8 - 114	30	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.96	mg/Kg	1	2	98	98	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.12	2.05	mg/Kg	1	2	106	102	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 280401

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	Qs	1	1100	mg/Kg	1	250	662	175	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	1020	mg/Kg	1	250	662	143	38.8 - 153.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	146	143	mg/Kg	1	100	146	143	54.6 - 149.8

Calibration Standards

Standard (CCV-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.14	114	80 - 120	2011-10-21

Standard (CCV-2)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.17	117	80 - 120	2011-10-21

Standard (CCV-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	239	96	80 - 120	2011-10-24

Standard (CCV-2)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	243	97	80 - 120	2011-10-24

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 111021089

Page 1 of 1

TraceAnalysis, Inc.

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BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) PLAINS
Project #: SRS # 2002-11229
Project Name: TEXACO Skelly F
Project Location (including state): Monument, NM
Sampler Signature: Rahl Rankle

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
280395	NE FLR-2B	1	4oz		X							X		10/20	1345

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC				Turn Around Time if different from standard	Hold
			X																					

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Rahl Rankle		10/21/11	1126		TA	10/21/11	11:26	INST ____ OBS 4.7 °C COR 4.7 °C
								INST ____ OBS ____ °C COR ____ °C
								INST ____ OBS ____ °C COR ____ °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 25, 2011

Work Order: 11102109

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
280395	NE FLR-2B	soil	2011-10-20	13:45	2011-10-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-21 and assigned to work order 11102109. Samples for work order 11102109 were received intact at a temperature of 4.7 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	72853	2011-10-24 at 10:25	85816	2011-10-24 at 10:25
TPH GRO	S 8015 D	72814	2011-10-21 at 14:00	85774	2011-10-21 at 16:15

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11102109 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85816	Date Analyzed:	2011-10-24	Analyzed By:	kg
Prep Batch:	72853	Sample Preparation:	2011-10-24	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qs,U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	67.5 - 147.1

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85774	Date Analyzed:	2011-10-21	Analyzed By:	AG
Prep Batch:	72814	Sample Preparation:	2011-10-21	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,Qs	1	**3.28**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.96	mg/Kg	1	2.00	98	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85774

QC Batch:	85774	Date Analyzed:	2011-10-21	Analyzed By:	AG
Prep Batch:	72814	QC Preparation:	2011-10-21	Prepared By:	AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	1.01	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.77	mg/Kg	1	2.00	88	52.4 - 130

Method Blank (1) QC Batch: 85816

QC Batch:	85816	Date Analyzed:	2011-10-24	Analyzed By:	kg
Prep Batch:	72853	QC Preparation:	2011-10-24	Prepared By:	kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			117	mg/Kg	1	100	117	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.5	mg/Kg	1	20.0	<0.753	88	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.2	mg/Kg	1	20.0	<0.753	91	60.9 - 95.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.95	mg/Kg	1	2.00	98	98	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.90	1.85	mg/Kg	1	2.00	95	92	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	241	mg/Kg	1	250	<14.5	96	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	242	mg/Kg	1	250	<14.5	97	64.5 - 146.9	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	111	mg/Kg	1	100	116	111	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 280395

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	1	29.3	mg/Kg	1	20.0	3.28	130	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr	1	21.6	mg/Kg	1	20.0	3.28	108	61.8 - 114	30	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.96	mg/Kg	1	2	98	98	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.12	2.05	mg/Kg	1	2	106	102	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 280401

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	Qs	1	1100	mg/Kg	1	250	662	175	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	1020	mg/Kg	1	250	662	143	38.8 - 153.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	146	143	mg/Kg	1	100	146	143	54.6 - 149.8

Calibration Standards

Standard (CCV-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.14	114	80 - 120	2011-10-21

Standard (CCV-2)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.17	117	80 - 120	2011-10-21

Standard (CCV-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	239	96	80 - 120	2011-10-24

Standard (CCV-2)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	243	97	80 - 120	2011-10-24

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 111021089

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
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1 (800) 378-1296

5002 Basin Street, Suite A1
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Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) PLAINS
Project #: SRS # 2002-11229
Project Name: TEXACO Skelly F
Project Location (including state): Monument, NM
Sampler Signature: Rachel Rankin

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
280395	NE FLR-2B	1	4oz		X							X		10/20	1345

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time if different from standard	Hold
			X																	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Rachel Rankin		10/21/11	1126		TA	10/21/11	11:26	INST ___ OBS 4.7 °C COR 4.7 °C
								INST ___ OBS ___ °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C

LAB USE ONLY
Intact (Y) N
Headspace Y / N / NA
Log-in-Review

REMARKS: All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 25, 2011

Work Order: 11102109

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
280395	NE FLR-2B	soil	2011-10-20	13:45	2011-10-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-21 and assigned to work order 11102109. Samples for work order 11102109 were received intact at a temperature of 4.7 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	72853	2011-10-24 at 10:25	85816	2011-10-24 at 10:25
TPH GRO	S 8015 D	72814	2011-10-21 at 14:00	85774	2011-10-21 at 16:15

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11102109 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85816	Date Analyzed:	2011-10-24	Analyzed By:	kg
Prep Batch:	72853	Sample Preparation:	2011-10-24	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qs,U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	67.5 - 147.1

Sample: 280395 - NE FLR-2B

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85774	Date Analyzed:	2011-10-21	Analyzed By:	AG
Prep Batch:	72814	Sample Preparation:	2011-10-21	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,Qs	1	**3.28**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.96	mg/Kg	1	2.00	98	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85774

QC Batch:	85774	Date Analyzed:	2011-10-21	Analyzed By:	AG
Prep Batch:	72814	QC Preparation:	2011-10-21	Prepared By:	AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	1.01	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.77	mg/Kg	1	2.00	88	52.4 - 130

Method Blank (1) QC Batch: 85816

QC Batch:	85816	Date Analyzed:	2011-10-24	Analyzed By:	kg
Prep Batch:	72853	QC Preparation:	2011-10-24	Prepared By:	kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			117	mg/Kg	1	100	117	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.5	mg/Kg	1	20.0	<0.753	88	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.2	mg/Kg	1	20.0	<0.753	91	60.9 - 95.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.95	mg/Kg	1	2.00	98	98	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.90	1.85	mg/Kg	1	2.00	95	92	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	241	mg/Kg	1	250	<14.5	96	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	242	mg/Kg	1	250	<14.5	97	64.5 - 146.9	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	111	mg/Kg	1	100	116	111	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 280395

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG
Prep Batch: 72814 | QC Preparation: 2011-10-21 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	1	29.3	mg/Kg	1	20.0	3.28	130	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr	1	21.6	mg/Kg	1	20.0	3.28	108	61.8 - 114	30	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.96	mg/Kg	1	2	98	98	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.12	2.05	mg/Kg	1	2	106	102	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 280401

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg
Prep Batch: 72853 | QC Preparation: 2011-10-24 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	Qs	1	1100	mg/Kg	1	250	662	175	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	1020	mg/Kg	1	250	662	143	38.8 - 153.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	146	143	mg/Kg	1	100	146	143	54.6 - 149.8

Calibration Standards

Standard (CCV-1)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.14	114	80 - 120	2011-10-21

Standard (CCV-2)

QC Batch: 85774 | Date Analyzed: 2011-10-21 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.17	117	80 - 120	2011-10-21

Standard (CCV-1)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	239	96	80 - 120	2011-10-24

Standard (CCV-2)

QC Batch: 85816 | Date Analyzed: 2011-10-24 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	243	97	80 - 120	2011-10-24

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 111021 09

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA — **Phone #:**

Address: (Street, City, Zip) — **Fax #:**

Contact Person: Ron Rounsaville — **E-mail:**

Invoice to: (If different from above) PLAINS

Project #: SRS # 2002-11229 — **Project Name:** TEXACO SKELLY F

Project Location (including state): Monument, NM — **Sampler Signature:** Rachel Rounsaville

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
280395	NE FLR-2B	1	4oz		X							X		10/20	1345

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time if different from standard	Hold
			X																	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Rachel Rounsaville		10/21/11	1126	[signature]	TA	10/21/11	11:26	INST ____ OBS 4.7 °C COR 4.7 °C
				[signature]				INST ____ OBS ____ °C COR ____ °C
								INST ____ OBS ____ °C COR ____ °C

LAB USE ONLY

Intact (Y) N
Headspace Y / N / NA
Log-In-Review

REMARKS:

All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

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5002 Basin Street, Suite A1 | Midland, Texas 79703 | | 432•689•6301 | FAX 432•689•6313
6015 Harris Parkway, Suite 110 | Ft. Worth, Texas 76132 | | 817•201•5260

E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 19, 2011

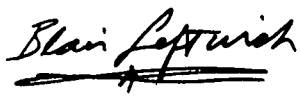
Work Order: 11101319

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
279902	E FLR-1	soil	2011-10-13	12:35	2011-10-13
279903	NE FLR-2	soil	2011-10-13	12:48	2011-10-13
279904	NW FLR-3	soil	2011-10-13	12:51	2011-10-13
279905	S FLR-4	soil	2011-10-13	12:44	2011-10-13
279906	SE FLR-5	soil	2011-10-13	12:39	2011-10-13

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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- QC Batch 85579 - CCV (2) . . . 20
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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-13 and assigned to work order 11101319. Samples for work order 11101319 were received intact at a temperature of 5.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72644	2011-10-13 at 17:00	85574	2011-10-17 at 12:34
BTEX	S 8021B	72644	2011-10-13 at 17:00	85576	2011-10-15 at 06:37
TPH DRO - NEW	S 8015 D	72738	2011-10-18 at 09:23	85689	2011-10-18 at 09:23
TPH GRO	S 8015 D	72644	2011-10-13 at 17:00	85575	2011-10-14 at 13:00
TPH GRO	S 8015 D	72644	2011-10-13 at 17:00	85579	2011-10-15 at 07:03

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11101319 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 279902 - E FLR-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85574	Date Analyzed:	2011-10-17	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70.6 - 179

Sample: 279902 - E FLR-1

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85689	Date Analyzed:	2011-10-18	Analyzed By:	kg
Prep Batch:	72738	Sample Preparation:	2011-10-18	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			96.9	mg/Kg	1	100	97	67.5 - 147.1

Sample: 279902 - E FLR-1

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85575	Date Analyzed:	2011-10-14	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**4.43**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	22.4 - 149

Sample: 279903 - NE FLR-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85574	Date Analyzed:	2011-10-17	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.14	mg/Kg	1	2.00	107	70.6 - 179

Sample: 279903 - NE FLR-2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85689	Date Analyzed:	2011-10-18	Analyzed By:	kg
Prep Batch:	72738	Sample Preparation:	2011-10-18	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**277**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			102	mg/Kg	1	100	102	67.5 - 147.1

Sample: 279903 - NE FLR-2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85575	Date Analyzed:	2011-10-14	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**15.4**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	22.4 - 149

Sample: 279904 - NW FLR-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85574	Date Analyzed:	2011-10-17	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.15	mg/Kg	1	2.00	108	70.6 - 179

Sample: 279904 - NW FLR-3

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85689	Date Analyzed:	2011-10-18	Analyzed By:	kg
Prep Batch:	72738	Sample Preparation:	2011-10-18	Prepared By:	kg

continued ...

sample 279904 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			84.7	mg/Kg	1	100	85	67.5 - 147.1

Sample: 279904 - NW FLR-3

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85575	Date Analyzed:	2011-10-14	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**33.1**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	22.4 - 149

Sample: 279905 - S FLR-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85576	Date Analyzed:	2011-10-15	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.96	mg/Kg	1	2.00	98	70.6 - 179

Sample: 279905 - S FLR-4

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85689	Date Analyzed:	2011-10-18	Analyzed By:	kg
Prep Batch:	72738	Sample Preparation:	2011-10-18	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			94.7	mg/Kg	1	100	95	67.5 - 147.1

Sample: 279905 - S FLR-4

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85579	Date Analyzed:	2011-10-15	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,Qs	1	**2.74**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	22.4 - 149

Sample: 279906 - SE FLR-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85576	Date Analyzed:	2011-10-15	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.94	mg/Kg	1	2.00	97	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	70.6 - 179

Sample: 279906 - SE FLR-5

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85689	Date Analyzed:	2011-10-18	Analyzed By:	kg
Prep Batch:	72738	Sample Preparation:	2011-10-18	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			97.5	mg/Kg	1	100	98	67.5 - 147.1

Sample: 279906 - SE FLR-5

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85579	Date Analyzed:	2011-10-15	Analyzed By:	AG
Prep Batch:	72644	Sample Preparation:	2011-10-13	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,Qs	1	**2.82**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85574

QC Batch: 85574 | Date Analyzed: 2011-10-17 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.99	mg/Kg	1	2.00	100	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	48.4 - 123.1

Method Blank (1) QC Batch: 85575

QC Batch: 85575 | Date Analyzed: 2011-10-14 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	1.07	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.59	mg/Kg	1	2.00	80	52.4 - 130

Method Blank (1) QC Batch: 85576

QC Batch: 85576 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.98	mg/Kg	1	2.00	99	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.70	mg/Kg	1	2.00	85	48.4 - 123.1

Method Blank (1) QC Batch: 85579

QC Batch: 85579 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.915	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.56	mg/Kg	1	2.00	78	52.4 - 130

Method Blank (1) QC Batch: 85689

QC Batch: 85689 | Date Analyzed: 2011-10-18 | Analyzed By: kg
Prep Batch: 72738 | QC Preparation: 2011-10-18 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			95.8	mg/Kg	1	100	96	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85574 | Date Analyzed: 2011-10-17 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.97	mg/Kg	1	2.00	<0.0118	98	77.4 - 121.7
Toluene		1	1.96	mg/Kg	1	2.00	<0.00600	98	88.6 - 121.6
Ethylbenzene		1	1.96	mg/Kg	1	2.00	<0.00850	98	74.3 - 117.9
Xylene		1	5.92	mg/Kg	1	6.00	<0.00613	99	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.98	mg/Kg	1	2.00	<0.0118	99	77.4 - 121.7	0	20
Toluene		1	1.99	mg/Kg	1	2.00	<0.00600	100	88.6 - 121.6	2	20
Ethylbenzene		1	1.96	mg/Kg	1	2.00	<0.00850	98	74.3 - 117.9	0	20
Xylene		1	5.90	mg/Kg	1	6.00	<0.00613	98	73.4 - 118.8	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.98	2.02	mg/Kg	1	2.00	99	101	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	2.10	2.06	mg/Kg	1	2.00	105	103	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85575 | Date Analyzed: 2011-10-14 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.1	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.6	mg/Kg	1	20.0	<0.753	88	60.9 - 95.4	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.91	1.90	mg/Kg	1	2.00	96	95	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.76	1.74	mg/Kg	1	2.00	88	87	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85576 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.80	mg/Kg	1	2.00	<0.0118	90	77.4 - 121.7
Toluene		1	1.82	mg/Kg	1	2.00	<0.00600	91	88.6 - 121.6
Ethylbenzene		1	1.77	mg/Kg	1	2.00	<0.00850	88	74.3 - 117.9
Xylene		1	5.38	mg/Kg	1	6.00	<0.00613	90	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.84	mg/Kg	1	2.00	<0.0118	92	77.4 - 121.7	2	20
Toluene		1	1.85	mg/Kg	1	2.00	<0.00600	92	88.6 - 121.6	2	20
Ethylbenzene		1	1.82	mg/Kg	1	2.00	<0.00850	91	74.3 - 117.9	3	20
Xylene		1	5.47	mg/Kg	1	6.00	<0.00613	91	73.4 - 118.8	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.86	1.88	mg/Kg	1	2.00	93	94	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.89	1.89	mg/Kg	1	2.00	94	94	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85579 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	16.6	mg/Kg	1	20.0	<0.753	83	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.0	mg/Kg	1	20.0	<0.753	85	60.9 - 95.4	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.86	mg/Kg	1	2.00	94	93	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.68	1.69	mg/Kg	1	2.00	84	84	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85689 | Date Analyzed: 2011-10-18 | Analyzed By: kg
Prep Batch: 72738 | QC Preparation: 2011-10-18 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	237	mg/Kg	1	250	<14.5	95	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	231	mg/Kg	1	250	<14.5	92	64.5 - 146.9	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	106	105	mg/Kg	1	100	106	105	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 279902

QC Batch: 85574 | Date Analyzed: 2011-10-17 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.12	mg/Kg	1	2.00	<0.0118	106	69.4 - 123.6
Toluene		1	2.16	mg/Kg	1	2.00	<0.00600	108	75.4 - 134.3
Ethylbenzene		1	2.24	mg/Kg	1	2.00	<0.00850	112	58.8 - 133.7
Xylene		1	6.84	mg/Kg	1	6.00	<0.00613	114	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.12	mg/Kg	1	2.00	<0.0118	106	69.4 - 123.6	0	20
Toluene		1	2.16	mg/Kg	1	2.00	<0.00600	108	75.4 - 134.3	0	20
Ethylbenzene		1	2.26	mg/Kg	1	2.00	<0.00850	113	58.8 - 133.7	1	20
Xylene		1	6.79	mg/Kg	1	6.00	<0.00613	113	57 - 134.2	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.00	mg/Kg	1	2	104	100	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.14	2.13	mg/Kg	1	2	107	106	71 - 167

Matrix Spike (MS-1) Spiked Sample: 279722

QC Batch: 85575 | Date Analyzed: 2011-10-14 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	1	31.3	mg/Kg	1	20.0	2.85	142	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qs	1	26.3	mg/Kg	1	20.0	2.85	117	61.8 - 114	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.90	1.86	mg/Kg	1	2	95	93	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.03	2.04	mg/Kg	1	2	102	102	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 279909

QC Batch: 85576 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.14	mg/Kg	1	2.00	<0.0118	107	69.4 - 123.6
Toluene		1	2.18	mg/Kg	1	2.00	<0.00600	109	75.4 - 134.3
Ethylbenzene		1	2.29	mg/Kg	1	2.00	<0.00850	114	58.8 - 133.7
Xylene		1	6.97	mg/Kg	1	6.00	<0.00613	116	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	69.4 - 123.6	6	20
Toluene		1	2.13	mg/Kg	1	2.00	<0.00600	106	75.4 - 134.3	2	20
Ethylbenzene		1	2.25	mg/Kg	1	2.00	<0.00850	112	58.8 - 133.7	2	20
Xylene		1	6.81	mg/Kg	1	6.00	<0.00613	114	57 - 134.2	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.86	1.90	mg/Kg	1	2	93	95	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.07	2.08	mg/Kg	1	2	104	104	71 - 167

Matrix Spike (MS-1) Spiked Sample: 279813

QC Batch: 85579 | Date Analyzed: 2011-10-15 | Analyzed By: AG
Prep Batch: 72644 | QC Preparation: 2011-10-13 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	1	25.8	mg/Kg	1	20.0	2.71	115	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr	1	19.4	mg/Kg	1	20.0	2.71	83	61.8 - 114	28	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.90	1.87	mg/Kg	1	2	95	94	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.97	1.92	mg/Kg	1	2	98	96	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 279909

QC Batch: 85689 | Date Analyzed: 2011-10-18 | Analyzed By: kg
Prep Batch: 72738 | QC Preparation: 2011-10-18 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	488	mg/Kg	1	250	289	80	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	504	mg/Kg	1	250	289	86	38.8 - 153.3	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	110	112	mg/Kg	1	100	110	112	54.6 - 149.8

Calibration Standards

Standard (CCV-2)

QC Batch: 85574 | Date Analyzed: 2011-10-17 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0999	100	80 - 120	2011-10-17
Toluene		1	mg/Kg	0.100	0.100	100	80 - 120	2011-10-17
Ethylbenzene		1	mg/Kg	0.100	0.0971	97	80 - 120	2011-10-17
Xylene		1	mg/Kg	0.300	0.294	98	80 - 120	2011-10-17

Standard (CCV-3)

QC Batch: 85574 | Date Analyzed: 2011-10-17 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.110	110	80 - 120	2011-10-17
Toluene		1	mg/Kg	0.100	0.108	108	80 - 120	2011-10-17
Ethylbenzene		1	mg/Kg	0.100	0.106	106	80 - 120	2011-10-17
Xylene		1	mg/Kg	0.300	0.316	105	80 - 120	2011-10-17

Standard (CCV-2)

QC Batch: 85575 | Date Analyzed: 2011-10-14 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.01	101	80 - 120	2011-10-14

Standard (CCV-3)

QC Batch: 85575 | Date Analyzed: 2011-10-14 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.01	101	80 - 120	2011-10-14

Standard (CCV-2)

QC Batch: 85576 Date Analyzed: 2011-10-15 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0970	97	80 - 120	2011-10-15
Toluene		1	mg/Kg	0.100	0.0981	98	80 - 120	2011-10-15
Ethylbenzene		1	mg/Kg	0.100	0.0968	97	80 - 120	2011-10-15
Xylene		1	mg/Kg	0.300	0.292	97	80 - 120	2011-10-15

Standard (CCV-3)

QC Batch: 85576 Date Analyzed: 2011-10-15 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0969	97	80 - 120	2011-10-15
Toluene		1	mg/Kg	0.100	0.0980	98	80 - 120	2011-10-15
Ethylbenzene		1	mg/Kg	0.100	0.0945	94	80 - 120	2011-10-15
Xylene		1	mg/Kg	0.300	0.286	95	80 - 120	2011-10-15

Standard (CCV-2)

QC Batch: 85579 Date Analyzed: 2011-10-15 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.998	100	80 - 120	2011-10-15

Standard (CCV-3)

QC Batch: 85579 Date Analyzed: 2011-10-15 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-10-15

Standard (CCV-2)

QC Batch: 85689 Date Analyzed: 2011-10-18 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	227	91	80 - 120	2011-10-18

Standard (CCV-3)

QC Batch: 85689 Date Analyzed: 2011-10-18 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	233	93	80 - 120	2011-10-18

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11101319

Page 1 of 1

TraceAnalysis, Inc.

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Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) PLAINS
Project #: SRS # 2002-11229
Project Name: TEXACO Skelly 'F'
Project Location (including state): Monument, NM
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
279902	E. FLR-1	1	4oz		X							X		10/13	1235		X		X																						
903	NE. FLR-2	1			X							X			1248		X		X																						
904	NW. FLR-3	1			X							X			1251		X		X																						
905	S. FLR-4	1			X							X			1244		X		X																						
906	SE. FLR-5	1			X							X			1239		X		X																						

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		10/13/11	15:36		T/A	10/13/11	15:36	INST ___ OBS 5.3 °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C

LAB USE ONLY
Intact Y / N
Headspace Y / N NA
Log-in-Review

REMARKS: All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 11, 2011

Work Order: 11100605

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
279149	SP-2	soil	2011-10-05	14:55	2011-10-06

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-06 and assigned to work order 11100605. Samples for work order 11100605 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72465	2011-10-07 at 07:00	85443	2011-10-07 at 08:34
TPH DRO - NEW	S 8015 D	72468	2011-10-06 at 14:58	85361	2011-10-06 at 14:58
TPH GRO	S 8015 D	72465	2011-10-07 at 07:00	85444	2011-10-07 at 09:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11100605 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 279149 - SP-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85443	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.28	mg/Kg	1	2.00	114	70.6 - 179

Sample: 279149 - SP-2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85361	Date Analyzed:	2011-10-06	Analyzed By:	kg
Prep Batch:	72468	Sample Preparation:	2011-10-06	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1	**316**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			106	mg/Kg	1	100	106	67.5 - 147.1

Sample: 279149 - SP-2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85444	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**23.8**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85361

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.3	mg/Kg	1	100	79	52.7 - 133.8

Method Blank (1) QC Batch: 85443

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	48.4 - 123.1

Method Blank (1) QC Batch: 85444

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.937	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.84	mg/Kg	1	2.00	92	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.58	mg/Kg	1	2.00	79	52.4 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	226	mg/Kg	1	250	<14.5	90	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	224	mg/Kg	1	250	<14.5	90	64.5 - 146.9	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	86.7	88.1	mg/Kg	1	100	87	88	65.3 - 135.8

Laboratory Control Spike (LCS-1)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7
Toluene		1	2.02	mg/Kg	1	2.00	<0.00600	101	88.6 - 121.6
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9
Xylene		1	6.17	mg/Kg	1	6.00	<0.00613	103	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7	0	20
Toluene		1	2.01	mg/Kg	1	2.00	<0.00600	100	88.6 - 121.6	0	20
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9	0	20
Xylene		1	6.13	mg/Kg	1	6.00	<0.00613	102	73.4 - 118.8	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.99	mg/Kg	1	2.00	98	100	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.98	2.04	mg/Kg	1	2.00	99	102	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.5	mg/Kg	1	20.0	<0.753	92	60.9 - 95.4	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.92	1.91	mg/Kg	1	2.00	96	96	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.77	1.81	mg/Kg	1	2.00	88	90	56.2 - 132

Matrix Spike (MS-1) Spiked Sample: 279152

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	511	mg/Kg	1	250	298	85	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	472	mg/Kg	1	250	298	70	38.8 - 153.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	99.4	102	mg/Kg	1	100	99	102	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 279152

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.21	mg/Kg	1	2.00	<0.0118	110	69.4 - 123.6
Toluene		1	2.26	mg/Kg	1	2.00	<0.00600	113	75.4 - 134.3
Ethylbenzene		1	2.26	mg/Kg	1	2.00	<0.00850	113	58.8 - 133.7
Xylene		1	6.84	mg/Kg	1	6.00	<0.00613	114	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.08	mg/Kg	1	2.00	<0.0118	104	69.4 - 123.6	6	20
Toluene		1	2.14	mg/Kg	1	2.00	<0.00600	107	75.4 - 134.3	5	20
Ethylbenzene		1	2.17	mg/Kg	1	2.00	<0.00850	108	58.8 - 133.7	4	20
Xylene		1	6.54	mg/Kg	1	6.00	<0.00613	109	57 - 134.2	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.01	2.03	mg/Kg	1	2	100	102	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.16	2.20	mg/Kg	1	2	108	110	71 - 167

Matrix Spike (MS-1) Spiked Sample: 279142

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	20.9	mg/Kg	1	20.0	7.0116	69	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	20.8	mg/Kg	1	20.0	7.0116	69	61.8 - 114	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.88	mg/Kg	1	2	94	94	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.03	1.98	mg/Kg	1	2	102	99	37.3 - 162

Calibration Standards

Standard (CCV-2)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	228	91	80 - 120	2011-10-06

Standard (CCV-3)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	230	92	80 - 120	2011-10-06

Standard (CCV-2)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0989	99	80 - 120	2011-10-07
Toluene		1	mg/Kg	0.100	0.0994	99	80 - 120	2011-10-07
Ethylbenzene		1	mg/Kg	0.100	0.0969	97	80 - 120	2011-10-07
Xylene		1	mg/Kg	0.300	0.293	98	80 - 120	2011-10-07

Standard (CCV-3)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0987	99	80 - 120	2011-10-07
Toluene		1	mg/Kg	0.100	0.0980	98	80 - 120	2011-10-07
Ethylbenzene		1	mg/Kg	0.100	0.0959	96	80 - 120	2011-10-07
Xylene		1	mg/Kg	0.300	0.288	96	80 - 120	2011-10-07

Standard (CCV-2)

QC Batch: 85444 Date Analyzed: 2011-10-07 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.10	110	80 - 120	2011-10-07

Standard (CCV-3)

QC Batch: 85444 Date Analyzed: 2011-10-07 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-10-07

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11100605

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) PLAINS
Project #: SRS# 2002-11229
Project Name: TEXACO SKELLY F
Project Location (including state): Lea Co. NM
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
27949	SP-2	1	4oz		X							X		10/5	1455

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time If different from standard	Hold
X	X	X																		

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
		10/6/11	0800		Nova	10/6/11	916
	Nova	10/6/11	916		T/A	10/6/11	9:16

INST ____ °C
OBS ____ °C
COR ____ °C

INST ____ °C
OBS 4.0 °C
COR ____ °C

INST ____ °C
OBS ____ °C
COR ____ °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
all tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry

ORIGINAL COPY

LAB Order ID # 111006O5

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
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1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA — **Phone #:**

Address: (Street, City, Zip) — **Fax #:**

Contact Person: Ron Rounsaville — **E-mail:**

Invoice to: (if different from above) PLAINS

Project #: SRS# 2002-11229 — **Project Name:** Texaco Skelly F

Project Location (including state): Lea Co. NM — **Sampler Signature:**

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time if different from standard	Hold
279149	SP-2	1	4oz		X							X		10/5	1455	X			X																	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		10/6/11	0800		Nova	10/6/11	916	INST ___ OBS ___ °C COR ___ °C
	Nova	10/6/11	916		T/A	10/6/11	9:16	INST ___ OBS 4.0 °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C

LAB USE ONLY
Intact (Y) / N
Headspace Y / N / NA
Log-in-Review ___

REMARKS:
All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # ___

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 13, 2011

Work Order: 11100604

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
279142	West Wall-1, 15'	soil	2011-10-05	15:38	2011-10-06
279143	N West Wall-1, 15'	soil	2011-10-05	15:42	2011-10-06
279144	N West Wall-2, 15'	soil	2011-10-05	15:47	2011-10-06

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-06 and assigned to work order 11100604. Samples for work order 11100604 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72465	2011-10-07 at 07:00	85443	2011-10-07 at 08:34
TPH DRO - NEW	S 8015 D	72468	2011-10-06 at 14:58	85361	2011-10-06 at 14:58
TPH DRO - NEW	S 8015 D	72560	2011-10-11 at 14:16	85470	2011-10-11 at 14:16
TPH GRO	S 8015 D	72465	2011-10-07 at 07:00	85444	2011-10-07 at 09:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11100604 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 279142 - West Wall-1, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85443	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.19	mg/Kg	1	2.00	110	70.6 - 179

Sample: 279142 - West Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85361	Date Analyzed:	2011-10-06	Analyzed By:	kg
Prep Batch:	72468	Sample Preparation:	2011-10-06	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			82.5	mg/Kg	1	100	82	67.5 - 147.1

Sample: 279142 - West Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85444	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**7.01**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	22.4 - 149

Sample: 279143 - N West Wall-1, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85443	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.17	mg/Kg	1	2.00	108	70.6 - 179

Sample: 279143 - N West Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85361	Date Analyzed:	2011-10-06	Analyzed By:	kg
Prep Batch:	72468	Sample Preparation:	2011-10-06	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			82.1	mg/Kg	1	100	82	67.5 - 147.1

Sample: 279143 - N West Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85444	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
GRO		1		**4.30**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.90	mg/Kg	1	2.00	95	22.4 - 149

Sample: 279144 - N West Wall-2, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85443	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
Benzene	U	1		<0.0200	mg/Kg	1	0.0200
Toluene	U	1		<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1		<0.0200	mg/Kg	1	0.0200
Xylene	U	1		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.10	mg/Kg	1	2.00	105	70.6 - 179

Sample: 279144 - N West Wall-2, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85470	Date Analyzed:	2011-10-11	Analyzed By:	kg
Prep Batch:	72560	Sample Preparation:	2011-10-11	Prepared By:	kg

continued ...

sample 279144 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			75.9	mg/Kg	1	100	76	67.5 - 147.1

Sample: 279144 - N West Wall-2, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85444	Date Analyzed:	2011-10-07	Analyzed By:	AG
Prep Batch:	72465	Sample Preparation:	2011-10-07	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**3.21**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85361

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.3	mg/Kg	1	100	79	52.7 - 133.8

Method Blank (1) QC Batch: 85443

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	48.4 - 123.1

Method Blank (1) QC Batch: 85444

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.937	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.84	mg/Kg	1	2.00	92	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.58	mg/Kg	1	2.00	79	52.4 - 130

Method Blank (1) QC Batch: 85470

QC Batch:	85470	Date Analyzed:	2011-10-11	Analyzed By:	kg
Prep Batch:	72560	QC Preparation:	2011-10-11	Prepared By:	kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			109	mg/Kg	1	100	109	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	226	mg/Kg	1	250	<14.5	90	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	224	mg/Kg	1	250	<14.5	90	64.5 - 146.9	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	86.7	88.1	mg/Kg	1	100	87	88	65.3 - 135.8

Laboratory Control Spike (LCS-1)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7
Toluene		1	2.02	mg/Kg	1	2.00	<0.00600	101	88.6 - 121.6
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9
Xylene		1	6.17	mg/Kg	1	6.00	<0.00613	103	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7	0	20
Toluene		1	2.01	mg/Kg	1	2.00	<0.00600	100	88.6 - 121.6	0	20
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9	0	20
Xylene		1	6.13	mg/Kg	1	6.00	<0.00613	102	73.4 - 118.8	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.99	mg/Kg	1	2.00	98	100	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.98	2.04	mg/Kg	1	2.00	99	102	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.5	mg/Kg	1	20.0	<0.753	92	60.9 - 95.4	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.92	1.91	mg/Kg	1	2.00	96	96	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.77	1.81	mg/Kg	1	2.00	88	90	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85470 | Date Analyzed: 2011-10-11 | Analyzed By: kg
Prep Batch: 72560 | QC Preparation: 2011-10-11 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	214	mg/Kg	1	250	<14.5	86	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	240	mg/Kg	1	250	<14.5	96	64.5 - 146.9	11	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	109	103	mg/Kg	1	100	109	103	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 279152

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg
Prep Batch: 72468 | QC Preparation: 2011-10-06 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	511	mg/Kg	1	250	298	85	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	472	mg/Kg	1	250	298	70	38.8 - 153.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	99.4	102	mg/Kg	1	100	99	102	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 279152

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.21	mg/Kg	1	2.00	<0.0118	110	69.4 - 123.6
Toluene		1	2.26	mg/Kg	1	2.00	<0.00600	113	75.4 - 134.3
Ethylbenzene		1	2.26	mg/Kg	1	2.00	<0.00850	113	58.8 - 133.7
Xylene		1	6.84	mg/Kg	1	6.00	<0.00613	114	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.08	mg/Kg	1	2.00	<0.0118	104	69.4 - 123.6	6	20
Toluene		1	2.14	mg/Kg	1	2.00	<0.00600	107	75.4 - 134.3	5	20
Ethylbenzene		1	2.17	mg/Kg	1	2.00	<0.00850	108	58.8 - 133.7	4	20

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Xylene		1	6.54	mg/Kg	1	6.00	<0.00613	109	57 - 134.2	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.01	2.03	mg/Kg	1	2	100	102	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.16	2.20	mg/Kg	1	2	108	110	71 - 167

Matrix Spike (MS-1) Spiked Sample: 279142

QC Batch: 85444 | Date Analyzed: 2011-10-07 | Analyzed By: AG
Prep Batch: 72465 | QC Preparation: 2011-10-07 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	20.9	mg/Kg	1	20.0	7.0116	69	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	20.8	mg/Kg	1	20.0	7.0116	69	61.8 - 114	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.88	mg/Kg	1	2	94	94	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.03	1.98	mg/Kg	1	2	102	99	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 279144

QC Batch: 85470 | Date Analyzed: 2011-10-11 | Analyzed By: kg
Prep Batch: 72560 | QC Preparation: 2011-10-11 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	166	mg/Kg	1	250	<14.5	66	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	140	mg/Kg	1	250	<14.5	56	38.8 - 153.3	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	88.5	87.6	mg/Kg	1	100	88	88	54.6 - 149.8

Calibration Standards

Standard (CCV-2)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	228	91	80 - 120	2011-10-06

Standard (CCV-3)

QC Batch: 85361 | Date Analyzed: 2011-10-06 | Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	230	92	80 - 120	2011-10-06

Standard (CCV-2)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0989	99	80 - 120	2011-10-07
Toluene		1	mg/Kg	0.100	0.0994	99	80 - 120	2011-10-07
Ethylbenzene		1	mg/Kg	0.100	0.0969	97	80 - 120	2011-10-07
Xylene		1	mg/Kg	0.300	0.293	98	80 - 120	2011-10-07

Standard (CCV-3)

QC Batch: 85443 | Date Analyzed: 2011-10-07 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0987	99	80 - 120	2011-10-07
Toluene		1	mg/Kg	0.100	0.0980	98	80 - 120	2011-10-07
Ethylbenzene		1	mg/Kg	0.100	0.0959	96	80 - 120	2011-10-07
Xylene		1	mg/Kg	0.300	0.288	96	80 - 120	2011-10-07

Standard (CCV-2)

QC Batch: 85444 Date Analyzed: 2011-10-07 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.10	110	80 - 120	2011-10-07

Standard (CCV-3)

QC Batch: 85444 Date Analyzed: 2011-10-07 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-10-07

Standard (CCV-2)

QC Batch: 85470 Date Analyzed: 2011-10-11 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	211	84	80 - 120	2011-10-11

Standard (CCV-3)

QC Batch: 85470 Date Analyzed: 2011-10-11 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	215	86	80 - 120	2011-10-11

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11100604

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: JRS# 2002-11229
Project Name: Texaco Skelly F
Project Location (including state): Lea Co. NM
Sampler Signature: Ron Rounsaville

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
279142	WEST Wall-1, 15'	1	4oz		X							X		10/5	1538
143	N. WEST wall-1, 15'	1	"		X							X			1542
144	N. WEST Wall-2, 15'	1	"		X							X			1547

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
	X		X																						
	X		X																						
	X		X																						

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
		10/6/11	0800		Nova	10/6/11	916
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
	Nova	10/6/11	916		T/A	10/6/11	9:16
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

INST ____ °C
OBS 4.0 °C
COR ____ °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
All tests-Midland

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # ____

ORIGINAL COPY

LAB Order ID # 11100604

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
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1 (800) 378-1296

5002 Basin Street, Suite A1
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Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA — **Phone #:**

Address: (Street, City, Zip) — **Fax #:**

Contact Person: Ron Rounsaville — **E-mail:**

Invoice to: (If different from above) Plains

Project #: SRS# 2002-11229 — **Project Name:** Texaco Skelly F

Project Location (including state): Lea Co. NM — **Sampler Signature:** Ron Rounsaville

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
279142	WEST wall-1, 15'	1	40z		X							X		10/5	1538		X		X																			
143	N. WEST wall-1, 15'	1	"		X							X			1542		X		X																			
144	N. WEST wall-2, 15'	1	"		X							X			1547		X		X																			

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		10/6/11	0800		Nova	10/6/11	916	INST ___ °C OBS ___ °C COR ___ °C
	Nova	10/6/11	916		T/A	10/6/11	9:16	INST ___ °C OBS 4.0 °C COR ___ °C
								INST ___ °C OBS ___ °C COR ___ °C

LAB USE ONLY

Intact (Y) N

Headspace Y / N / (NA)

Log-in-Review ___

REMARKS: All tests-Midland

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

TRACEANALYSIS, INC.

5701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 6, 2011

Work Order: 11100403

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278971	E Wall-1, 16'	soil	2011-10-03	14:42	2011-10-04

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-10-04 and assigned to work order 11100403. Samples for work order 11100403 were received intact at a temperature of 3.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72438	2011-10-04 at 11:00	85322	2011-10-04 at 21:44
TPH DRO - NEW	S 8015 D	72444	2011-10-05 at 13:28	85330	2011-10-05 at 13:28
TPH GRO	S 8015 D	72438	2011-10-04 at 11:00	85323	2011-10-04 at 22:10

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11100403 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 278971 - E Wall-1, 16'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85322	Date Analyzed:	2011-10-04	Analyzed By:	AG
Prep Batch:	72438	Sample Preparation:	2011-10-04	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200		mg/Kg	1	0.0200
Toluene	U	1	<0.0200		mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200		mg/Kg	1	0.0200
Xylene	U	1	<0.0200		mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.03	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.93	mg/Kg	1	2.00	96	70.6 - 179

Sample: 278971 - E Wall-1, 16'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85330	Date Analyzed:	2011-10-05	Analyzed By:	kg
Prep Batch:	72444	Sample Preparation:	2011-10-05	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
DRO	U	1	<50.0		mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			82.1	mg/Kg	1	100	82	67.5 - 147.1

Sample: 278971 - E Wall-1, 16'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85323	Date Analyzed:	2011-10-04	Analyzed By:	AG
Prep Batch:	72438	Sample Preparation:	2011-10-04	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**3.70**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85322

QC Batch: 85322 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.60	mg/Kg	1	2.00	80	48.4 - 123.1

Method Blank (1) QC Batch: 85323

QC Batch: 85323 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.881	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.53	mg/Kg	1	2.00	76	52.4 - 130

Method Blank (1) QC Batch: 85330

QC Batch: 85330 | Date Analyzed: 2011-10-05 | Analyzed By: kg
Prep Batch: 72444 | QC Preparation: 2011-10-05 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			82.2	mg/Kg	1	100	82	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85322 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.58	mg/Kg	1	2.00	<0.0118	79	77.4 - 121.7
Toluene		1	1.90	mg/Kg	1	2.00	<0.00600	95	88.6 - 121.6
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9
Xylene		1	6.14	mg/Kg	1	6.00	<0.00613	102	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.61	mg/Kg	1	2.00	<0.0118	80	77.4 - 121.7	2	20
Toluene		1	1.94	mg/Kg	1	2.00	<0.00600	97	88.6 - 121.6	2	20
Ethylbenzene		1	2.10	mg/Kg	1	2.00	<0.00850	105	74.3 - 117.9	3	20
Xylene		1	6.28	mg/Kg	1	6.00	<0.00613	105	73.4 - 118.8	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.94	2.01	mg/Kg	1	2.00	97	100	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.84	1.84	mg/Kg	1	2.00	92	92	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85323 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	16.6	mg/Kg	1	20.0	<0.753	83	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.2	mg/Kg	1	20.0	<0.753	86	60.9 - 95.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.88	mg/Kg	1	2.00	94	94	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.73	1.73	mg/Kg	1	2.00	86	86	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85330 | Date Analyzed: 2011-10-05 | Analyzed By: kg
Prep Batch: 72444 | QC Preparation: 2011-10-05 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	252	mg/Kg	1	250	<14.5	101	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	242	mg/Kg	1	250	<14.5	97	64.5 - 146.9	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	100	99.5	mg/Kg	1	100	100	100	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 278972

QC Batch: 85322 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.62	mg/Kg	1	2.00	<0.0118	81	69.4 - 123.6

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Toluene		1	2.16	mg/Kg	1	2.00	<0.00600	108	75.4 - 134.3
Ethylbenzene		1	2.42	mg/Kg	1	2.00	<0.00850	121	58.8 - 133.7
Xylene		1	7.29	mg/Kg	1	6.00	<0.00613	122	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.68	mg/Kg	1	2.00	<0.0118	84	69.4 - 123.6	4	20
Toluene		1	2.09	mg/Kg	1	2.00	<0.00600	104	75.4 - 134.3	3	20
Ethylbenzene		1	2.41	mg/Kg	1	2.00	<0.00850	120	58.8 - 133.7	0	20
Xylene		1	7.23	mg/Kg	1	6.00	<0.00613	120	57 - 134.2	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.99	2.02	mg/Kg	1	2	100	101	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	1.99	2.01	mg/Kg	1	2	100	100	71 - 167

Matrix Spike (MS-1) Spiked Sample: 278847

QC Batch: 85323 | Date Analyzed: 2011-10-04 | Analyzed By: AG
Prep Batch: 72438 | QC Preparation: 2011-10-04 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qm	1	25.1	mg/Kg	1	20.0	1.6123	117	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	24.2	mg/Kg	1	20.0	1.6123	113	61.8 - 114	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.85	1.86	mg/Kg	1	2	92	93	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.95	1.98	mg/Kg	1	2	98	99	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278971

QC Batch: 85330 | Date Analyzed: 2011-10-05 | Analyzed By: kg
Prep Batch: 72444 | QC Preparation: 2011-10-05 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	195	mg/Kg	1	250	<14.5	78	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	195	mg/Kg	1	250	<14.5	78	38.8 - 153.3	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	80.9	79.3	mg/Kg	1	100	81	79	54.6 - 149.8

Calibration Standards

Standard (CCV-1)

QC Batch: 85322 | Date Analyzed: 2011-10-04 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0803	80	80 - 120	2011-10-04
Toluene		1	mg/Kg	0.100	0.0963	96	80 - 120	2011-10-04
Ethylbenzene		1	mg/Kg	0.100	0.103	103	80 - 120	2011-10-04
Xylene		1	mg/Kg	0.300	0.307	102	80 - 120	2011-10-04

Standard (CCV-2)

QC Batch: 85322 | Date Analyzed: 2011-10-04 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0829	83	80 - 120	2011-10-04
Toluene		1	mg/Kg	0.100	0.101	101	80 - 120	2011-10-04
Ethylbenzene		1	mg/Kg	0.100	0.108	108	80 - 120	2011-10-04
Xylene		1	mg/Kg	0.300	0.321	107	80 - 120	2011-10-04

Standard (CCV-1)

QC Batch: 85323 | Date Analyzed: 2011-10-04 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.03	103	80 - 120	2011-10-04

Standard (CCV-2)

QC Batch: 85323 | Date Analyzed: 2011-10-04 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-10-04

Standard (CCV-2)

QC Batch: 85330 Date Analyzed: 2011-10-05 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	237	95	80 - 120	2011-10-05

Standard (CCV-3)

QC Batch: 85330 Date Analyzed: 2011-10-05 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	218	87	80 - 120	2011-10-05

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11100403

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
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BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) PLAINS
Project #: SRS# 2002-11229
Project Name: Texaco Skelly 'F'
Project Location (including state): Monument, NM
Sampler Signature: Ronald Rounsaville

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
27897	E. Wall-1, 16'	1	4oz		X							X		10/3/11	1442	X	X	X	X																					

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
Ronald Rounsaville		10/4/11	0750		Nova	10/4/11			3.3 °C	3.3 °C
	Nova	10/4/11								
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
				JA		10/4/11	9:00		3.3 °C	3.3 °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
									°C	°C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:
all tests Midland

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

ORIGINAL COPY

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 3, 2011

Work Order: 11092903

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278546	N.E. Wall-1, 15'	soil	2011-09-28	14:34	2011-09-28
278547	S.E. Wall-1, 15'	soil	2011-09-28	14:39	2011-09-28
278548	S. Wall-1, 15'	soil	2011-09-28	14:45	2011-09-28
278549	S. Wall-2, 15'	soil	2011-09-28	14:50	2011-09-28
278550	S. Wall-3, 15'	soil	2011-09-28	14:54	2011-09-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2011-09-28 and assigned to work order 11092903. Samples for work order 11092903 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72291	2011-09-29 at 08:15	85150	2011-09-29 at 09:11
TPH DRO - NEW	S 8015 D	72332	2011-09-30 at 13:48	85197	2011-09-30 at 13:48
TPH GRO	S 8015 D	72291	2011-09-29 at 08:15	85151	2011-09-29 at 09:38

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11092903 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 278546 - N.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85150	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	1	2.00	99	70.6 - 179

Sample: 278546 - N.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85197	Date Analyzed:	2011-09-30	Analyzed By:	kg
Prep Batch:	72332	Sample Preparation:	2011-09-30	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			78.1	mg/Kg	1	100	78	67.5 - 147.1

Sample: 278546 - N.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85151	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	22.4 - 149

Sample: 278547 - S.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85150	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.03	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	70.6 - 179

Sample: 278547 - S.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85197	Date Analyzed:	2011-09-30	Analyzed By:	kg
Prep Batch:	72332	Sample Preparation:	2011-09-30	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			75.6	mg/Kg	1	100	76	67.5 - 147.1

Sample: 278547 - S.E. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85151	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	22.4 - 149

Sample: 278548 - S. Wall-1, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85150	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	70.6 - 179

Sample: 278548 - S. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85197	Date Analyzed:	2011-09-30	Analyzed By:	kg
Prep Batch:	72332	Sample Preparation:	2011-09-30	Prepared By:	kg

continued ...

sample 278548 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			75.9	mg/Kg	1	100	76	67.5 - 147.1

Sample: 278548 - S. Wall-1, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85151	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	22.4 - 149

Sample: 278549 - S. Wall-2, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85150	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	70.6 - 179

Sample: 278549 - S. Wall-2, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85197	Date Analyzed:	2011-09-30	Analyzed By:	kg
Prep Batch:	72332	Sample Preparation:	2011-09-30	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Q-r		65.6	mg/Kg	1	100	66	67.5 - 147.1

Sample: 278549 - S. Wall-2, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85151	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.81	mg/Kg	1	2.00	90	22.4 - 149

Sample: 278550 - S. Wall-3, 15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85150	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene	U	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1	<0.0200	mg/Kg	1	0.0200
Xylene	U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.03	mg/Kg	1	2.00	102	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			1.96	mg/Kg	1	2.00	98	70.6 - 179

Sample: 278550 - S. Wall-3, 15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85197	Date Analyzed:	2011-09-30	Analyzed By:	kg
Prep Batch:	72332	Sample Preparation:	2011-09-30	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			75.8	mg/Kg	1	100	76	67.5 - 147.1

Sample: 278550 - S. Wall-3, 15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85151	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72291	Sample Preparation:	2011-09-29	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85150

QC Batch: 85150 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.95	mg/Kg	1	2.00	98	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.72	mg/Kg	1	2.00	86	48.4 - 123.1

Method Blank (1) QC Batch: 85151

QC Batch: 85151 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.988	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.83	mg/Kg	1	2.00	92	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.64	mg/Kg	1	2.00	82	52.4 - 130

Method Blank (1) QC Batch: 85197

QC Batch: 85197 | Date Analyzed: 2011-09-30 | Analyzed By: kg
Prep Batch: 72332 | QC Preparation: 2011-09-30 | Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			107	mg/Kg	1	100	107	52.7 - 133.8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85150 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.98	mg/Kg	1	2.00	<0.0118	99	77.4 - 121.7
Toluene		1	2.07	mg/Kg	1	2.00	<0.00600	104	88.6 - 121.6
Ethylbenzene		1	2.07	mg/Kg	1	2.00	<0.00850	104	74.3 - 117.9
Xylene		1	6.17	mg/Kg	1	6.00	<0.00613	103	73.4 - 118.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.96	mg/Kg	1	2.00	<0.0118	98	77.4 - 121.7	1	20
Toluene		1	2.00	mg/Kg	1	2.00	<0.00600	100	88.6 - 121.6	3	20
Ethylbenzene		1	2.02	mg/Kg	1	2.00	<0.00850	101	74.3 - 117.9	2	20
Xylene		1	6.02	mg/Kg	1	6.00	<0.00613	100	73.4 - 118.8	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.98	2.00	mg/Kg	1	2.00	99	100	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.91	1.88	mg/Kg	1	2.00	96	94	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85151 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.0	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.86	1.86	mg/Kg	1	2.00	93	93	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.77	1.79	mg/Kg	1	2.00	88	90	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85197 | Date Analyzed: 2011-09-30 | Analyzed By: kg
Prep Batch: 72332 | QC Preparation: 2011-09-30 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	243	mg/Kg	1	250	<14.5	97	64.5 - 146.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	248	mg/Kg	1	250	<14.5	99	64.5 - 146.9	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	108	113	mg/Kg	1	100	108	113	65.3 - 135.8

Matrix Spike (MS-1) Spiked Sample: 278520

QC Batch: 85150 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.03	mg/Kg	1	2.00	<0.0118	102	69.4 - 123.6

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Toluene		1	2.18	mg/Kg	1	2.00	<0.00600	109	75.4 - 134.3
Ethylbenzene		1	2.28	mg/Kg	1	2.00	<0.00850	114	58.8 - 133.7
Xylene		1	6.84	mg/Kg	1	6.00	<0.00613	114	57 - 134.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.19	mg/Kg	1	2.00	<0.0118	110	69.4 - 123.6	8	20
Toluene		1	2.35	mg/Kg	1	2.00	<0.00600	118	75.4 - 134.3	8	20
Ethylbenzene		1	2.47	mg/Kg	1	2.00	<0.00850	124	58.8 - 133.7	8	20
Xylene		1	7.42	mg/Kg	1	6.00	<0.00613	124	57 - 134.2	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.05	2.03	mg/Kg	1	2	102	102	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.02	2.01	mg/Kg	1	2	101	100	71 - 167

Matrix Spike (MS-1) Spiked Sample: 278550

QC Batch: 85151 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72291 | QC Preparation: 2011-09-29 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	16.5	mg/Kg	1	20.0	<0.753	82	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	19.6	mg/Kg	1	20.0	<0.753	98	61.8 - 114	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.84	1.82	mg/Kg	1	2	92	91	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.90	1.92	mg/Kg	1	2	95	96	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278703

QC Batch: 85197 | Date Analyzed: 2011-09-30 | Analyzed By: kg
Prep Batch: 72332 | QC Preparation: 2011-09-30 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	192	mg/Kg	1	250	<14.5	77	38.8 - 153.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	197	mg/Kg	1	250	<14.5	79	38.8 - 153.3	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	73.1	77.5	mg/Kg	1	100	73	78	54.6 - 149.8

Calibration Standards

Standard (CCV-2)

QC Batch: 85150 | Date Analyzed: 2011-09-29 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0976	98	80 - 120	2011-09-29
Toluene		1	mg/Kg	0.100	0.102	102	80 - 120	2011-09-29
Ethylbenzene		1	mg/Kg	0.100	0.0989	99	80 - 120	2011-09-29
Xylene		1	mg/Kg	0.300	0.294	98	80 - 120	2011-09-29

Standard (CCV-3)

QC Batch: 85150 | Date Analyzed: 2011-09-29 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0962	96	80 - 120	2011-09-29
Toluene		1	mg/Kg	0.100	0.0986	99	80 - 120	2011-09-29
Ethylbenzene		1	mg/Kg	0.100	0.0973	97	80 - 120	2011-09-29
Xylene		1	mg/Kg	0.300	0.291	97	80 - 120	2011-09-29

Standard (CCV-2)

QC Batch: 85151 | Date Analyzed: 2011-09-29 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.03	103	80 - 120	2011-09-29

Standard (CCV-3)

QC Batch: 85151 | Date Analyzed: 2011-09-29 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-09-29

Standard (CCV-2)

QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	200	80	80 - 120	2011-09-30

Standard (CCV-3)

QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	225	90	80 - 120	2011-09-30

Standard (CCV-4)

QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	226	90	80 - 120	2011-09-30

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11092903

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: SRS# 2002-11229
Project Name: TEXACO SKELLY 'F'
Project Location (including state): Monument, NM
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
278546	N.E. Wall-1, 15'	1	4oz		X							X		9/28/11	1434		X		X																						
547	S.E. Wall-1, 15'	1	"		X							X			1439		X		X																						
548	S. Wall-1, 15'	1	"		X							X			1445		X		X																						
549	S. Wall-2, 15'	1	"		X							X			1450		X		X																						
550	S. Wall-3, 15'	1	"		X							X			1454		X		X																						

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		9/28/11	1454		T/A	9/28/11	16:54	INST ____ OBS 4.0 °C COR ____ °C
								INST ____ OBS ____ °C COR ____ °C
								INST ____ OBS ____ °C COR ____ °C

LAB USE ONLY
Intact Y / N
Headspace Y / N (NA)
Log-in-Review

REMARKS:
* Midland - All tests

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: April 12, 2012

Work Order: 12041117

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
294034	N. Stockpile, SP-1, G	soil	2012-04-10	13:03	2012-04-11
294035	N. Stockpile, SP-1, H	soil	2012-04-10	13:10	2012-04-11

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2012-04-11 and assigned to work order 12041117. Samples for work order 12041117 were received intact at a temperature of 2.6 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	76505	2012-04-11 at 14:12	90159	2012-04-11 at 14:16
TPH GRO	S 8015 D	76518	2012-04-11 at 10:59	90178	2012-04-11 at 11:55

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12041117 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 294034 - N. Stockpile, SP-1, G

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90159	Date Analyzed:	2012-04-11	Analyzed By:	DA
Prep Batch:	76505	Sample Preparation:	2012-04-11	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**375**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		205	mg/Kg	1	100	205	49.3 - 157.5

Sample: 294034 - N. Stockpile, SP-1, G

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90178	Date Analyzed:	2012-04-11	Analyzed By:	tc
Prep Batch:	76518	Sample Preparation:	2012-04-11	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr	1	**15.6**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.18	mg/Kg	1	2.00	109	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	45.1 - 162.2

Sample: 294035 - N. Stockpile, SP-1, H

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90159	Date Analyzed:	2012-04-11	Analyzed By:	DA
Prep Batch:	76505	Sample Preparation:	2012-04-11	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**375**	mg/Kg	1	50.0

Surrogate		Flag		Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr			197	mg/Kg	1	100	197	49.3 - 157.5

Sample: 294035 - N. Stockpile, SP-1, H

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90178	Date Analyzed:	2012-04-11	Analyzed By:	tc
Prep Batch:	76518	Sample Preparation:	2012-04-11	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr	1	**17.6**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.16	mg/Kg	1	2.00	108	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	1	2.00	99	45.1 - 162.2

Method Blanks

Method Blank (1) QC Batch: 90159

QC Batch: 90159 | Date Analyzed: 2012-04-11 | Analyzed By: DA
Prep Batch: 76505 | QC Preparation: 2012-04-11 | Prepared By: DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			117	mg/Kg	1	100	117	52 - 140.8

Method Blank (1) QC Batch: 90178

QC Batch: 90178 | Date Analyzed: 2012-04-11 | Analyzed By: tc
Prep Batch: 76518 | QC Preparation: 2012-04-11 | Prepared By: tc

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	78.6 - 111
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	55 - 100

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 90159 | Date Analyzed: 2012-04-11 | Analyzed By: DA
Prep Batch: 76505 | QC Preparation: 2012-04-11 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	233	mg/Kg	1	250	<14.5	93	62 - 128.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	223	mg/Kg	1	250	<14.5	89	62 - 128.3	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	110	111	mg/Kg	1	100	110	111	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 90178 | Date Analyzed: 2012-04-11 | Analyzed By: tc
Prep Batch: 76518 | QC Preparation: 2012-04-11 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.0	mg/Kg	1	20.0	<1.22	85	68.3 - 105.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.3	mg/Kg	1	20.0	<1.22	86	68.3 - 105.7	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.86	1.93	mg/Kg	1	2.00	93	96	80 - 111.2
4-Bromofluorobenzene (4-BFB)	1.76	1.85	mg/Kg	1	2.00	88	92	66.4 - 106.6

Matrix Spike (MS-1) Spiked Sample: 294035

QC Batch: 90159 | Date Analyzed: 2012-04-11 | Analyzed By: DA
Prep Batch: 76505 | QC Preparation: 2012-04-11 | Prepared By: DA

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	605	mg/Kg	1	250	375	92	45.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	609	mg/Kg	1	250	375	94	45.5 - 127	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	Qsr	Qsr	187	200	mg/Kg	1	100	187	200	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 294034

QC Batch: 90178 | Date Analyzed: 2012-04-11 | Analyzed By: tc
Prep Batch: 76518 | QC Preparation: 2012-04-11 | Prepared By: tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	45.9	mg/Kg	1	20.0	15.6364	151	28.2 - 157.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr Qr	1	37.0	mg/Kg	1	20.0	15.6364	107	28.2 - 157.2	22	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.19	2.19	mg/Kg	1	2	110	110	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	2.16	2.12	mg/Kg	1	2	108	106	77.9 - 122.4

Calibration Standards

Standard (CCV-3)

QC Batch: 90159 | Date Analyzed: 2012-04-11 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	260	104	80 - 120	2012-04-11

Standard (CCV-4)

QC Batch: 90159 | Date Analyzed: 2012-04-11 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	260	104	80 - 120	2012-04-11

Standard (CCV-1)

QC Batch: 90178 | Date Analyzed: 2012-04-11 | Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.08	108	80 - 120	2012-04-11

Standard (CCV-2)

QC Batch: 90178 | Date Analyzed: 2012-04-11 | Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.15	115	80 - 120	2012-04-11

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-11-3	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 1204111-1

Page 1 of 1

TraceAnalysis, Inc.

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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA

Phone #:

Address: (Street, City, Zip)

Fax #:

Contact Person: Ron Rounsaville

E-mail:

Invoice to: (If different from above) PLAINS

Project #: SRS# 2002-11229

Project Name: Texas Skelly F

Project Location (including state): Monument, NM

Sampler Signature: Rachel Rounsaville

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
294034	N. Stockpile, SP-1, G	1	4oz		X							X		4/10/12	1303
035	N. Stockpile, SP-1, H	1	"		X							X		"	1310

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	CPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time if different from standard	Hold
			X																X	
			X																X	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Rachel Rounsaville		4/11/12	1132		TA	4/11/12	11:32

INST IR-1 / OBS 26 °C / COR °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in-Review

REMARKS:

24 HR / TA

all to Midland

Dry Weight Basis Required

TRRP Report Required

Check If Special Reporting Limits Are Needed

Carrier # carry in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800·378·1296 806·794·1296 FAX 806·794·1298
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(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972·242·7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: March 28, 2012

Work Order: 12032606

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
292252	SP-1, A2	soil	2012-03-23	12:08	2012-03-26
292253	SP-1, B2	soil	2012-03-23	12:16	2012-03-26
292254	SP-1, D2	soil	2012-03-23	12:25	2012-03-26

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative 3

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- Sample 292252 (SP-1, A2) . . . 4
- Sample 292253 (SP-1, B2) . . . 4
- Sample 292254 (SP-1, D2) . . . 5

Method Blanks 7
- QC Batch 89702 - Method Blank (1) . . . 7
- QC Batch 89746 - Method Blank (1) . . . 7

Laboratory Control Spikes 8
- QC Batch 89702 - LCS (1) . . . 8
- QC Batch 89746 - LCS (1) . . . 8
- QC Batch 89702 - MS (1) . . . 9
- QC Batch 89746 - MS (1) . . . 9

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2012-03-26 and assigned to work order 12032606. Samples for work order 12032606 were received intact at a temperature of 5.8 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	76144	2012-03-26 at 15:08	89702	2012-03-26 at 15:12
TPH GRO	S 8015 D	76174	2012-03-27 at 10:36	89746	2012-03-27 at 11:20

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12032606 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 292252 - SP-1, A2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	89702	Date Analyzed:	2012-03-26	Analyzed By:	DA
Prep Batch:	76144	Sample Preparation:	2012-03-26	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
DRO		1		**742**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	222	mg/Kg	5	100	222	49.3 - 157.5

Sample: 292252 - SP-1, A2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	89746	Date Analyzed:	2012-03-27	Analyzed By:	tc
Prep Batch:	76174	Sample Preparation:	2012-03-27	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
GRO		1		**33.5**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.31	mg/Kg	1	2.00	116	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	45.1 - 162.2

Sample: 292253 - SP-1, B2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	89702	Date Analyzed:	2012-03-26	Analyzed By:	DA
Prep Batch:	76144	Sample Preparation:	2012-03-26	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**457**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr Qsr		162	mg/Kg	5	100	162	49.3 - 157.5

Sample: 292253 - SP-1, B2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	89746	Date Analyzed:	2012-03-27	Analyzed By:	tc
Prep Batch:	76174	Sample Preparation:	2012-03-27	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**21.4**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.41	mg/Kg	1	2.00	120	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.17	mg/Kg	1	2.00	108	45.1 - 162.2

Sample: 292254 - SP-1, D2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	89702	Date Analyzed:	2012-03-26	Analyzed By:	DA
Prep Batch:	76144	Sample Preparation:	2012-03-26	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**497**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr Qsr		168	mg/Kg	5	100	168	49.3 - 157.5

Sample: 292254 - SP-1, D2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	89746	Date Analyzed:	2012-03-27	Analyzed By:	tc
Prep Batch:	76174	Sample Preparation:	2012-03-27	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**35.2**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.91	mg/Kg	1	2.00	96	45.1 - 162.2

Method Blanks

Method Blank (1) QC Batch: 89702

QC Batch: 89702 | Date Analyzed: 2012-03-26 | Analyzed By: DA
Prep Batch: 76144 | QC Preparation: 2012-03-26 | Prepared By: DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	22.7	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			99.8	mg/Kg	1	100	100	52 - 140.8

Method Blank (1) QC Batch: 89746

QC Batch: 89746 | Date Analyzed: 2012-03-27 | Analyzed By: tc
Prep Batch: 76174 | QC Preparation: 2012-03-27 | Prepared By: tc

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	1.59	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	78.6 - 111
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	55 - 100

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 89702 | Date Analyzed: 2012-03-26 | Analyzed By: DA
Prep Batch: 76144 | QC Preparation: 2012-03-26 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	252	mg/Kg	1	250	<14.5	101	62 - 128.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	238	mg/Kg	1	250	<14.5	95	62 - 128.3	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	102	108	mg/Kg	1	100	102	108	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 89746 | Date Analyzed: 2012-03-27 | Analyzed By: tc
Prep Batch: 76174 | QC Preparation: 2012-03-27 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	19.0	mg/Kg	1	20.0	<1.22	95	68.3 - 105.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	19.2	mg/Kg	1	20.0	<1.22	96	68.3 - 105.7	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.99	1.95	mg/Kg	1	2.00	100	98	80 - 111.2
4-Bromofluorobenzene (4-BFB)	1.88	1.84	mg/Kg	1	2.00	94	92	66.4 - 106.6

Matrix Spike (MS-1) Spiked Sample: 292254

QC Batch: 89702 | Date Analyzed: 2012-03-26 | Analyzed By: DA
Prep Batch: 76144 | QC Preparation: 2012-03-26 | Prepared By: DA

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	612	mg/Kg	5	250	497	46	45.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	666	mg/Kg	5	250	497	68	45.5 - 127	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	Qsr	Qsr	157	186	mg/Kg	5	100	157	186	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 292254

QC Batch: 89746 | Date Analyzed: 2012-03-27 | Analyzed By: tc
Prep Batch: 76174 | QC Preparation: 2012-03-27 | Prepared By: tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	54.6	mg/Kg	1	20.0	35.1928	97	28.2 - 157.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	55.5	mg/Kg	1	20.0	35.1928	102	28.2 - 157.2	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.09	2.11	mg/Kg	1	2	104	106	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	1.98	2.03	mg/Kg	1	2	99	102	77.9 - 122.4

Calibration Standards

Standard (CCV-2)

QC Batch: 89702 | Date Analyzed: 2012-03-26 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	264	106	80 - 120	2012-03-26

Standard (CCV-3)

QC Batch: 89702 | Date Analyzed: 2012-03-26 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	257	103	80 - 120	2012-03-26

Standard (CCV-1)

QC Batch: 89746 | Date Analyzed: 2012-03-27 | Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.17	117	80 - 120	2012-03-27

Standard (CCV-2)

QC Batch: 89746 | Date Analyzed: 2012-03-27 | Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.15	115	80 - 120	2012-03-27

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-11-3	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12032606

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA — **Phone #:**

Address: (Street, City, Zip) — **Fax #:**

Contact Person: Ron Rounsaville — **E-mail:**

Invoice to: (If different from above) Plains

Project #: SRS# 2002-11229 — **Project Name:** TEXACO SKELLY F

Project Location (including state): Lea Co. NM — **Sampler Signature:** Ron Rounsaville

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
292252	SP-1, A2	1	4oz		X							X		3/23/12	1208
253	SP-1, B2	1	"		X							X		3/23/12	1216
254	SP-1, D2	1	"		X							X		3/23/12	1225

MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
		X	X																					
		X	X																					
		X	X																					

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		3/26/12	0900		TA	3/26/12	9:00	INST IR-1
								OBS 58 °C
								COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C
								OBS °C
								COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C
								OBS °C
								COR °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS: all to Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carrillo

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Hansen, Edward J., EMNRD

From: Jason Henry <JHenry@paalp.com>
Sent: Tuesday, August 21, 2012 2:06 PM
To: Hansen, Edward J., EMNRD
Subject: RE: Additional Information Required (1R-420) - Plains Texaco Skelly F Release Site
Attachments: TexacoSkellySeeding_07132012.pdf; Texaco_Skelley_Report (Backfill).pdf

Ed,

In compliance with the directives below, the following documents are attached:

- Re-seeding documentation (photographs) from the 07-13-2012 re-seeding event which was conducted by Basin Environmental personnel. The seed mix that was used (BLM #2) was approved by the landowner.
- Analytical Report for the 5-point composite soil sample collected on 08-10-2012 from the backfilled area.

Regarding the closure of the product recovery sumps, Plains proposes to conduct the following P&A activities when the sumps are no longer needed:

- First, attempt to remove the casing at each sump location and then backfill each sump location with native material from on-site.
- If the sump casings cannot be successfully removed intact, then cut each sump casing to below ground level and fill each casing with hydrated bentonite. Finally, pour a cement cap over each sump casing and cover the cement caps with native material from on-site.

Please let me know if you have any questions or need more information.

Thank you,
Jason Henry
575-441-1099

From: Hansen, Edward J., EMNRD [mailto:edwardj.hansen@state.nm.us]
Sent: Thursday, June 21, 2012 5:16 PM
To: Jason Henry
Cc: Leking, Geoffrey R, EMNRD; Jeffrey P Dann
Subject: Additional Information Required (1R-420) - Plains Texaco Skelly F Release Site

RE: Soil Closure Request for the Plains Marketing's
Texaco Skelly F Release Site (1R-420)
Unit F, Section 21, T20S, R37E, NMPM, Lea County, New Mexico
Additional Information Required

Dear Mr. Henry:

The New Mexico Oil Conservation Division (OCD) has received Plains Marketing's (Plains) report and soil closure request regarding the above-referenced site (dated May 2012). The report indicates that

additional information is required. Therefore, the OCD cannot approved the soil closure request at this time:

Plains must address the re-vegetation of the site as part of the request.

Plains must address the closure of the current sumps at the site as part of the request.

Plains must address the upper three feet of the backfill regarding the TPH concentration as proposed in the April 2008, Soil Closure Proposal as part of the request.

Please provide the above information to the OCD within 60 days.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: August 20, 2012

Work Order: 12081302

Project Location: Monument, NM
Project Name: Texaco Skelley
Project Number: NM-2011
SRS #: 2002-11229

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
306548	CV-1A, 18 in.	soil	2012-08-10	12:50	2012-08-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Texaco Skelley were received by TraceAnalysis, Inc. on 2012-08-10 and assigned to work order 12081302. Samples for work order 12081302 were received intact at a temperature of 5.4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	79640	2012-08-15 at 08:00	93943	2012-08-16 at 10:26
TPH GRO	S 8015 D	79710	2012-08-17 at 16:27	94026	2012-08-17 at 16:27

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12081302 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 306548 - CV-1A, 18 in.

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	93943	Date Analyzed:	2012-08-16	Analyzed By:	CW
Prep Batch:	79640	Sample Preparation:	2012-08-15	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs,U	2	<50.0	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		137	mg/Kg	1	100	137	70 - 130

Sample: 306548 - CV-1A, 18 in.

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94026	Date Analyzed:	2012-08-17	Analyzed By:	MT
Prep Batch:	79710	Sample Preparation:	2012-08-17	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qc	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.48	mg/Kg	1	2.00	74	70 - 130
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	70 - 130

Method Blanks

Method Blank (1) QC Batch: 93943

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW
Prep Batch: 79640 | QC Preparation: 2012-08-15 | Prepared By: CW

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		2	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			118	mg/Kg	1	100	118	70 - 130

Method Blank (1) QC Batch: 94026

QC Batch: 94026 | Date Analyzed: 2012-08-17 | Analyzed By: MT
Prep Batch: 79710 | QC Preparation: 2012-08-17 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<0.359	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW
Prep Batch: 79640 | QC Preparation: 2012-08-15 | Prepared By: CW

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	278	mg/Kg	1	250	<14.5	111	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		2	299	mg/Kg	1	250	<14.5	120	70 - 130	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	119	126	mg/Kg	1	100	119	126	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94026 | Date Analyzed: 2012-08-17 | Analyzed By: MT
Prep Batch: 79710 | QC Preparation: 2012-08-17 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.359	87	68.9 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.359	87	68.9 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.03	2.00	mg/Kg	1	2.00	102	100	70 - 130
4-Bromofluorobenzene (4-BFB)	1.94	1.91	mg/Kg	1	2.00	97	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306548

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW
Prep Batch: 79640 | QC Preparation: 2012-08-15 | Prepared By: CW

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	295	mg/Kg	1	250	<14.5	118	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr.Qs	Qr.Qs 2	718	mg/Kg	1	250	<14.5	287	70 - 130	84	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	126	153	mg/Kg	1	100	126	153	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306506

QC Batch: 94026 | Date Analyzed: 2012-08-17 | Analyzed By: MT
Prep Batch: 79710 | QC Preparation: 2012-08-17 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	23.4	mg/Kg	1	20.0	4.92	92	68.9 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	21.7	mg/Kg	1	20.0	4.92	84	68.9 - 120	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.69	1.66	mg/Kg	1	2	84	83	70 - 130
4-Bromofluorobenzene (4-BFB)	2.23	2.13	mg/Kg	1	2	112	106	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	297	119	80 - 120	2012-08-16

Standard (CCV-2)

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	248	99	80 - 120	2012-08-16

Standard (CCV-3)

QC Batch: 93943 | Date Analyzed: 2012-08-16 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	270	108	80 - 120	2012-08-16

Standard (CCV-1)

QC Batch: 94026 | Date Analyzed: 2012-08-17 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.872	87	80 - 120	2012-08-17

Standard (CCV-2)

QC Batch: 94026 | Date Analyzed: 2012-08-17 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.884	88	80 - 120	2012-08-17

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 12081302

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Lounsaville
E-mail:
Invoice to: (If different from above) PLAINS ATTN: JASON Henry
Project #: SRS# 2002-11229
Project Name: Texaco Skelly F
Project Location (including state): Monument, NM
Sampler Signature: Ron Lounsaville

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
306548	CV-1A, 18"	1	4oz		X							X		8/10/12	1250				X																				

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
		8/10/12	1548		TA	8/10/12	1548

INST IR-1
OBS 5.4 °C
COR 5.4 °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS: Midland all

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Carrier # Carrizo

Curtis & Curtis Seed
4500 N. Prince
Clovis, NM 88101
Phone: 575-762-4759

Basin Environmental
2 Acre BLM #2 Drilled Rate
2-1 Acre Bags @ 18.22 Bulk Pounds Each
Job: [redacted]

Lot# M-x900

Item	Origin	Purity	Germ	Dormant	Germ & Dormant	Test Date	Total PLS Pounds
Sand Dropseed Not Stated	Texas	12.20%	07.00%	83.00%	90.00%	07/10	04.00
Sand Bluestem Goldstriker	Nebraska	17.16%	96.00%	00.00%	96.00%	03/10	06.00
Little Bluestem Pastura	Texas	31.32%	57.00%	23.00%	80.00%	07/10	10.00
Coreopsis Plains	Oregon	14.26%	77.00%	00.00%	77.00%	09/10	04.00

Other Crop: 00.61%
Weed Seed: 00.17%
Inert Matter: 21.27%

There Are 2 Bags For This Mix
This Bag Weighs 18.22 Bulk Pounds
Use this bag for 1 acre

Total Bulk Pounds: 36.42