





1

atta

April 12, 2013

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

RE:

Plains Marketing, L.P., Monument 18 Release Site NMOCD Reference # 1R-0124 Unit Letter D of Section 7, Township 20 South, Range 37 East Lea County, New Mexico

Dear Mr. Hansen:

Plains Marketing, L.P. is pleased to submit the attached *Remediation Summary and Proposed Soil Closure Strategy* report, dated March 2013, for the Monument 18 site. This site is located in Section 7 of Township 20 South, and Range 37 East, Lea County, New Mexico. This document details the proposed soil remediation activities to be performed at the site.

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

Sincerely,

Henry

Jason Henry Remediation Coordinator Plains Marketing, L.P.

CC: Geoff Leking, NMOCD, Hobbs Office

REMEDIATION SUMMARY AND PROPOSED

SOIL CLOSURE STATEGY

MONUMENT 18

NW ¼ NW ¼ SECTION 07, TOWNSHIP 20 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS SRS# NUMBER: TNM MONUMENT-18 NMOCD REFERENCE 1R-0124

Prepared For:

PLAINS MARKETING, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON, TEXAS 77002

Prepared By:

NOVA Safety and Environmental 2057 Commerce Street Midland, Texas 79703

March 2013

Camille Bryant

Senior Project Manager

safety and environmental

Brittan K. Byerly, P.

President

2057 Commerce Drive Midland, Texas 79703 432 520-7720 432 520-7701 fax

TABLE OF CONTENTS

1.0	INTRODUCTION	.1
2.0	SITE BACKGROUND	.1
3.0	LEAK ZONE INVESTIGATION	.1
4.0	PROPOSED ACTIONS	.2
5.0	REPORTING	.3
6.0	LIMITATIONS	.3
7.0	DISTRUBUTION	.4

FIGURES

FIGURE 1:	Site Location Map
FIGURE 2:	Site Map
FIGURE 3:	Inferred Groundwater Gradient Map
FIGURE 4:	Groundwater Concentration and Inferred PSH Extent Map

TABLES

TABLE 1: Concentrations of BTEX and TPH in Soil

APPENDICES

APPENDIX A: Laboratory Reports APPENDIX B: Notification of Release and Corrective Action (Form C-141)

1.0 INTRODUCTION

NOVA Safety and Environmental (NOVA), on behalf of Plains Marketing, L.P., (Plains), has prepared this Remediation Summary and Proposed Soil Closure Strategy for the site known as TNM Monument 18. The purpose of this Remediation Summary and Proposed Soil Closure Strategy is to summarize known soil data and propose a plan for the remediation of hydrocarbon impacted soil at the site. The legal description of the release site is Unit Letter "D" (NW ¼ NW ¼) Section 07, Township 20 South, Range 37 East, in Lea County, New Mexico. A Site Location Map and Site Map are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action (Form C-141) is provided as Appendix B.

2.0 SITE BACKGROUND

No information with respect to the release date, volume of crude oil released and recovered, excavation dimensions or pipeline repair is available as this release occurred while the pipeline was operated by Texas New Mexico Pipe Line Company (TNM). The site is now the responsibility of Plains, which acquired the assets of Link Energy in April of 2004. Based on New Mexico Oil Conservation Division ranking criteria the site has a ranking score of >19 points based on depth to groundwater less than fifty (50) feet.

The initial site investigation, which consisted of the installation of seven (7) groundwater monitor wells (MW-1 through MW-7), was conducted by previous consultants. Monitor wells MW-8, MW-9, and MW-10 were installed in November of 2004 to further delineate the groundwater plume and to gain information on vadose hydrocarbon concentrations to the east and west of the suspected release point.

On September 13, 2005, monitor well MW-2 was plugged and abandoned with New Mexico Oil Conservation Division (NMOCD) approval granted on June 22, 2005. A total of nine (9) groundwater monitor wells (MW-1, and MW-3 through MW-10) are currently located on the site. A site map illustrating site details is provided as Figure 2.

3.0 LEAK ZONE INVESTIGATION

No known information exists regarding the magnitude of the release, emergency response activities, pipeline repair, or initial remedial actions at the site, with the exception of the existence of seven monitor wells. There is no known soil data associated with the installation of monitor wells MW-1 through MW-7.

On November 4 and 5, 2004, three (3) monitor wells (MW-8, MW-9, and MW-10) were installed in the side gradient directions of the hydrocarbon impacted groundwater zone to more fully delineate the extent of groundwater impact at the site.

Monitor well MW-8 is located to the east of the inferred release point in a cross gradient direction. Soil samples collected at fifteen (15), twenty-five (25), and thirty (30) feet below ground surface (bgs) were submitted to the laboratory for analysis. Laboratory

analytical results indicated benzene concentrations were less than the laboratory MDL for all the submitted soil samples. BTEX concentrations ranged from less than the laboratory MDL for soil samples MW-8 @ 15' and MW-8 @ 30' to 0.417 mg/Kg for soil sample MW-8 @ 25'. TPH concentrations ranged from 256.64 mg/Kg for soil sample MW-8 @ 30' to 1,632.5 mg/Kg for soil sample MW-8 @ 25'. Please reference Table 1 for Concentrations of BTEX and TPH in Soil. Laboratory analytical reports are provided as Appendix A.

Monitor well MW-9 is located to the south of the inferred release point in a cross/down gradient direction. Soil samples collected at ten (10), twenty (20), and thirty (30) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the laboratory MDL for all the submitted soil samples.

Monitor well MW-10 is located to the southwest of the inferred release point in a cross gradient direction. Soil samples collected at fifteen (15) and thirty (30) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the laboratory MDL for all the submitted soil samples.

4.0 PROPOSED ACTIONS

Based upon the distribution of dissolved phase hydrocarbons in the groundwater, the site's groundwater gradient (Figure 3), surficially disturbed area where mesquite trees have not re-established, and the limited soil data available, Plains proposes the following soil remediation activities designed to progress the Monument 18 Release Site toward an NMOCD approved soil closure:

- Excavation of the visually impacted soil will commence along the Plains pipeline. The excavation will be completed to a total depth of approximately fifteen (15) feet bgs. The excavation will extend horizontally to the north, south, east, and west of the inferred release point. The actual limits of the excavation will be determined by field screening utilizing a PID and by visual and olfactory evaluation of the excavation sidewalls. The excavation will be limited due to numerous pipelines, utilities and roads located in the area of the release site. A five (5) foot buffer zone will remain in place between Maddox Road and the excavation and around all utilities in the area. Excavated soil will be stockpiled on-site pending transportation to an NMOCD permitted disposal facility.
- Soil samples will be collected from the floor and the sidewalls of the excavation. One (1) sample will be collected for every fifty (50) linear feet of the excavation sidewalls and floor. The soil samples will be submitted to the laboratory for determination of concentrations of benzene, toluene, ethyl-benzene and xylene (BTEX), total petroleum hydrocarbons (TPH) by EPA Methods SW 8021b and 8015M, respectively. Analytical results from sidewall soil samples will determine the final extent of the excavation, which will progress until soil samples indicated

constituent concentrations below the appropriate NMOCD regulatory standard with the total depth of the excavation limited to fifteen (15) feet bgs.

• If laboratory analytical results of the soil samples collected from the floor of the excavation indicate elevated concentrations of BTEX, and /or TPH constituents remain, and with NMOCD approval, a twenty (20) millimeter (mil) polyurethane liner will be installed on the floor of the excavation. Six (6) inches of sand will be installed above and beneath the liner to protect the liner from damage. The sand and liner will be positioned to allow moisture to shed off the sides of the liner. If needed, monitor wells will be fitted with a forty (40) mil protective boot to maintain the impermeability of the liner. On completion of liner installation activities, the excavation will be backfilled with locally obtained non-impacted soil.

5.0 REPORTING

On completion of the proposed soil closure strategy activities, Plains will submit a Remediation and Soil Closure Request for NMOCD approval. Groundwater monitoring and sampling will continue at the site.

6.0 LIMITATIONS

NOVA has prepared this Remediation Summary and Proposed Soil Closure Strategy 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 Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505
- Copy 2: Geoffrey R. 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 Denver City, TX 79323 jhenry@paalp.com
- Copy 4: Jeff Dann Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, TX 77002 jpdann@paalp.com
- Copy 5:

NOVA Safety and Environmental 2057 Commerce Street Midland, TX 79703 cstanley@novatraining.cc

Figures

•

•

v .









Table

TABLE 1 CONCENTRATIONS OF BTEX AND TPH IN SOIL

MONUMENT #18 PLAINS MARKETING, L.P. LEA COUNTY, NM NMOCD Reference # 1R-0124 PLAINS SRS NUMBER: TNM MONUMENT 18-KNOWN

	-		Met	thods: EPA SW	846-8021B, 503	30		Methods:		
SAMPLE	SAMPLE	SAMPLE	DENZENE		ETHYL-	m,p,o-	EPA SW 846-8015M GRO/DRO/ TOTAL TPH			
LOCATION	DATE	(feet)	(ma/Ka)	(ma/Ka)	BENZENE	XYLENE	GRO	DRO	TOTAL	
		()	(((mg/Kg)	(mg/Kg)			ТРН	
							(mg/Kg)	(mg/Kg)	(mg/Kg)	
· MW-8	11/5/04	15'	<0.0500	<0.0500	<0.0500	<0.0500	722	13.4	735.4	
MW-8	11/5/04	25'	<0.0500	<0.0500	<0.0500	0.417	1,560	72.5	1,632.5	
MW-8	11/5/04	30'	<0.0100	<0.0100	<0.0100	<0.0100	255	1.64	256.64	
MW-9	11/04/04	10'	<0.0100	<0.0100	<0.0100	<0.0100	<1	<50	<50	
MW-9	11/04/04	20'	<0.0100	<0.0100	<0.0100	<0.0100	<1	<50	<50	
MW-9	11/04/04	30'	<0.0100	<0.0100	<0.0100	<0.0100	<1	<50	<50	
MW-10	11/04/04	15'	<0.0100	<0.0100	<0.0100	<0.0100	<1	<50	<50	
MW-10	11/04/04	30'	< 0.0100	<0.0100	<0.0100	<0.0100	<1	<50	<50	

Appendix A Laboratory Reports

Analytical and Quality Control Report

Craig Eschberger Nova Safety & Environmental 5023 Commerce Midland, TX 79703 Report Date: November 16, 2004

Work Order: 4110905

Project Location:Monument-Lea Co.,NMProject Name:TNM Monument 18Project Number:TNM Monument 18

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
47981	MW-9 5'	soil	2004-11-04	11:00	2004-11-09
47982	MW-9 10'	soil	2004-11-04	11:05	2004-11-09
47983	MW-9 15'	soil	2004-11-04	11:15	2004-11-09
47984	MW-9 20'	soil	2004-11-04	11:20	2004-11-09
47985	MW-9 25'	soil	2004-11-04	11:25	2004-11-09
47986	MW-9 30'	soil	2004-11-04	11:35	2004-11-09
47987	MW-10 10'	soil	2004-11-04	13:30	2004-11-09
47988	MW-10 15'	soil	2004-11-04	13:35	2004-11-09
47989	MW-10 25'	soil	2004-11-04	13:45	2004-11-09
47990	MW-10 30'	soil	2004-11-04	13:50	2004-11-09
47991	MW-10 35'	soil	2004-11-04	13:55	2004-11-09
47992	MW-8 15'	soil	2004-11-05	07:30	2004-11-09
47993	MW-8 25'	soil	2004-11-05	07:40	2004-11-09
47994	MW-8 30'	soil	2004-11-05	07:55	2004-11-09

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 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael aber

Dr. Blair Leftwich, Director

Report Date: November 16, 2004	Work Order: 4110905	Page Number: 2 of 17
TNM Monument 18	TNM Monument 18	Monument-Lea Co.,NM

Analytical Report

Sample: 47982 - MW-9 10'

Analysis: BTEX		Analytical Method: S 8021B				hod: S 5035		
QC Batch:	13926		Date Analyzed	1: :	2004-11-09		Analyzed	By: MT
Prep Batch:	12304		Date Prepared	:	2004-11-09		Prepared	By: MT
			RL				۰,	
Parameter Flag			Result		Units	Dil	Dilution	
Benzene			< 0.0100		mg/Kg		10	0.00100
Toluene			< 0.0100		mg/Kg		10	0.00100
Ethylbenzen	9		< 0.0100		mg/Kg	-	10	0.00100
Xylene			<0.0100		mg/Kg	10		0.00100
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		0.816	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.736	mg/Kg	10	0.100	74	63.1 - 105	

Sample: 47982 - MW-9 10'

Analysis: QC Batch: Prep Batch:	TPH DRO 14045 12412			Analytical M Date Analyze Date Prepare	lethod: N ed: 2 ed: 2	1od. 8015 004-11-14 004-11-09	B .		Prep Method: Analyzed By: Prepared By:	N/A BP DS
				RL						
Parameter Flag		Result	Units		Dilution		RL			
DRO	•			<50.0		mg/Kg		- 1		50.0
							Spike	Percent	Reco	overy
Surrogate	F	ag	Result	Units	Dilutio	n '	Amount	Recovery	/ Lin	nits
n-Triacontan	e		123	mg/Kg	1		150	82	69.8 -	106.1

Sample: 47982 - MW-9 10'

Analysis: QC Batch: Prep Batch:	TPH GRO 13931 12304	•		Analytica Date Ana Date Prep	l Method: lyzed: ared:	S 8015B 2004-11-09 2004-11-09		Prep Meth Analyzed Prepared I	od: S 5035 By: MT By: MT
				RL				•	
Parameter		Flag		Result		Units	Di	lution	RL
GRO				<1.00		mg/Kg		10	0.100
Surrogate			Flag	Result	Units	Dilution	Spike	Percent	Recovery Limits
Trifluorotolu	ene (TFT)		Tag	1.07	ma/K a	10	0.100	107	0 - 160
4-Bromofluorobenzene (4-BFB)			0.973	mg/Kg	10	0.100	97	0 - 174	

Sample: 47984 - MW-9 20'

Report Date: November 16, 2004 TNM Monument 18				Work Ord TNM M	ler: 4110905 onument 18		Page Number: 3 of 17 Monument-Lea Co.,NM		
Analysis: QC Batch: Prep Batch:	BTEX 13926 12304		Analytical M Date Analyz Date Prepar	Method: zed: ed:	S 8021B 2004-11-09 2004-11-09		Prep Me Analyze Prepare	ethod: S 5035 d By: MT d By: MT	
			RL						
Parameter		Flag	Result		Units		Dilution	RL	
Benzene	•		< 0.0100		mg/Kg		10	0.00100	
Toluene			< 0.0100		mg/Kg		10	0.00100	
Ethylbenzene			< 0.0100		mg/Kg		10	. 0.00100	
Xylene			<0.0100		mg/Kg		10	0.00100	
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits	
Trifluorotolu	ene (TFT)		0.814	mg/Kg	10	0 100	81	60.1 - 104	
4-Bromofluo	robenzene (4-BF	B)	0.757	mg/Kg	10	0.100	76	63.1 - 105	
Analysis: QC Batch: Prep Batch: Parameter	TPH DRO 14045 12412	llag	Analytica Date Ana Date Prep RL Besult	al Method alyzed: pared:	: Mod. 8015E 2004-11-14 2004-11-09	3	Prep Anal Prepa	Method: N/A yzed By: BP ured By: DS	
Parameter	F	lag	Kesult		Units		Dilution		
Surrogate n-Triacontan	Flag	Result 140	Units mg/Kg	D	ilution	Spike Amount 150	Percent Recovery 93	Recovery Limits 69.8 - 106.1	
Sample: 479	84 - MW-9 20'								
Analysis: QC Batch: Prep Batch:	TPH GRO 13931 12304		Analytica Date Ana Date Prep	l Method: lyzed: ared:	S 8015B 2004-11-09 2004-11-09		Prep Me Analyze Prepare	ethod: S 5035 ed By: MT d By: MT	
			RL						
Parameter	F	lag	Result		Units		Dilution	· RL	
GRO			<1.00		mg/Kg		. 10	0.100	
Surrogate	ene (TET)	Flag	Result	Units	Dilutior	Spike Amount	Percent Recovery	Recovery Limits	
4-Bromofluo	robenzene (1_DE	B)	1.09	mg/Ng	5 IV 7 10	0.100	109	0 - 100	
	TOUCHZONE (4-DF	וט	1.00	mg/ ng	5 10	0.100	100	0-1/4	

Sample: 47986 - MW-9 30'

Analysis:	BTEX		Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	13926	•	Date Analyzed:	2004-11-09	Analyzed By:	MT
Prep Batch:	12304		Date Prepared:	2004-11-09	Prepared By:	MT

Report Date: November 16, 2004 TNM Monument 18			Work Order TNM Mon	: 4110905 ument 18	Page Number: 4 of 17 Monument-Lea Co.,NM			
			RL	5				
Parameter Flag Benzene			Result		Units	Di	lution	RL
Benzene			< 0.0100		mg/Kg		10	
Toluene			< 0.0100		mg/Kg		10	0.00100
Ethylbenzene			< 0.0100		mg/Kg		10	0.00100
Xylene			< 0.0100		mg/Kg		10	0.00100
				. •		Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT))		0.749	mg/Kg	10	0.100	75	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.698	mg/Kg	10	0.100	70	63.1 - 105	

Sample: 47986 - MW-9 30'

Analysis: OC Batch:	TPH DRO 14045		Analytical Metho	d: Mod. 8	015B	I	Prep Method:	N/A BP
Prep Batch:	12412		Date Prepared:	2004-1	1-09	1	Prepared By:	DS
			RL					
Parameter	F	lag	Result	U	nits	Dilution		RL
DRO		`		mg/Kg		1		50.0
		•			Spike	Percent	Reco	very
Surrogate	Flag	Result	Units I	Dilution	Amount	Recovery	Lin	nits
n-Triacontan	e	152	mg/Kg	1	150	101	69.8 -	106.1

Sample: 47986 - MW-9 30'

Analysis: QC Batch: Prep Batch:	TPH GROAnalytical Method:S 8015Bbh:13931Date Analyzed:2004-11-09bch:12304Date Prepared:2004-11-09		Prep Method: Analyzed By: Prepared By:					
			RL					
Parameter	Fla	g	Result		Units	D	ilution	RL
GRO			<1.00	· · · · ·	mg/Kg	•	10	0.100
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.00	mg/Kg	10	0.100	100	0 - 160
4-Bromofluorobenzene (4-BFB)			0.919	mg/Kg	10	0.100	92	0 - 174

Sample: 47988 - MW-10 15'

Analysis: QC Batch: Prep Batch:	BTEX 13926 12304		Analytical Method: Date Analyzed: Date Prepared:	S 8021B 2004-11-09 2004-11-09	Prep Metho Analyzed I Prepared B	od: S 5035 By: MT y: MT
			RL	• •		
Parameter		Flag	Result	Units	Dilution	RL
Benzene			<0.0100	mg/Kg	10	0.00100
Toluene		•	<0.0100	mg/Kg	10	0.00100

continued ...

Report Date: TNM Monut	November ment 18	16, 2004		· .	Work Ord TNM Mo	er: 4110905 onument 18		Page Number: 5 of 17 Monument-Lea Co.,NM			
sample 4798	8 continued										
D (-		RL		TT		N 11 . (DI		
Parameter		Flag		Result			<u> </u>	Dilution			
Xylene	e 			<0.0100		mg/Kg mg/Kg		10	0.00100		
Surrogate			Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits		
Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB)			0.764	mg/Kg	10	0.100	76	60.1 - 104			
4-Bromonuo	robenzene (4	I-BFB)		0.700	mg/Kg	10	0.100	70	63.1 - 105		
	•								:		
Sample: 479	988 - MW-1() 15'									
Analysis [.]	TPH DRO			Analytics	al Method	• Mod 8015F	2	Pren	Method N/A		
OC Batch:	14045	•		Date Ana	lvzed	2004-11-14	,	Analy	zed By: BP		
Prep Batch:	12412			Date Prep	pared:	2004-11-09		Prepa	red By: DS		
			•	יח					-		
Parameter		Flag		Result		Units		Dilution	RI		
DRO		1.118		<50.0		mg/Kg		1	50.0		
Surrogate	FI	an	Result	Unite	ni	lution	Spike	Percent	Recovery		
n-Triacontan	e	ag	129	mg/Kg		1	150	<u></u>	<u>69 8 - 106 1</u>		
Sample: 479	988 - MW-1(0 15'						·			
Analysis	TPH GRO			Analytical	l Method [.]	S 8015B		Pren Me	thad: \$ 5035		
OC Batch:	13931			Date Anal	vzed:	2004-11-09		Analyze	d By: MT		
Prep Batch:	12304			Date Prep	ared:	2004-11-09		Preparec	By: MT		
				RL				. •	· ·		
Parameter		Flag	·	Result		Units		Dilution	RL		
GRO				<1.00		mg/Kg		10	0.100		
							Spike	Percent	Recovery		
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Limits		
Trifluorotolu	ene (TFT)			1.01	mg/Kg	10	0.100	101	0 - 160		
4-Bromofluo	robenzene (4	I-BFB)		0.917	mg/Kg	. 10	0.100	92	0 - 174		
Sample: 479	990 - MW-10) 30'									
Analysis:	BTEX			Analytical N	Method:	S 8021B		Prep Me	thod: S 5035		
QC Batch:	13926			Date Analyz	zed:	2004-11-09		Analyze	d By: MT		
Prep Batch:	12304			Date Prepar	ed:	2004-11-09		Prepareo	d By: MT		
				RL							
Parameter		Flag		Result		Units]	Dilution	RL		
Benzene	••••••••	_		< 0.0100		mg/Kg		10	0.00100		
Toluene				< 0.0100		mg/Kg		10	0.00100		
							continı	ied			

Report Date: November 16, 2004	Work Order: 4110905	Page Number: 6 of 17
TNM Monument 18	TNM Monument 18	Monument-Lea Co.,NM

sample 47990 continued ...

		RL	<u>ر</u>					
Parameter	Flag	Result	t	Units	Di	lution	RL	
Ethylbenzene		< 0.0100)	mg/Kg		10	0.00100	
Xylene		< 0.0100)	mg/Kg	10		0.00100	
					Spike	Percent	Recovery	
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)		0.774	mg/Kg	10	0.100	77 ·	60.1 - 104	
4-Bromofluorobenzene (4-BF)	B)	0.733	mg/Kg	10	0.100	73	63.1 - 105	

Sample: 47990 - MW-10 30'

Analysis: QC Batch: Prep Batch:	nalysis: TPH DRO C Batch: 14045 ep Batch: 12412			al Method: Mod alyzed: 2004 pared: 2004	. 8015B -11-14 -11-09		Prep Method: Analyzed By: Prepared By:	
		·	RL	· .				
Parameter		Flag	Result		Units	Dilution		RL
DRO			<50.0	n	ng/Kg	1		50.0
Secure and a	Else	Decult	T		Spike.	Percent	Reco	very
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Lin	nits
n-Triacontan	e	123	mg/Kg	1	150	82	69.8 -	106.1

Sample: 47990 - MW-10 30'

Analysis: QC Batch: Prep Batch:	TPH GRO 13931 12304	Analytical Method:S 8015BDate Analyzed:2004-11-09Date Prepared:2004-11-09		Prep Meth Analyzed Prepared I	od: S 5035 By: MT By: MT			
Parameter	Flag		RL Result		Units	Di	lution	RL
GRO			<1.00		mg/Kg		10	0.100
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu 4-Bromofluo	ene (TFT) robenzene (4-BFB)		1.04 0.987	mg/Kg mg/Kg	10 10	0.100 0.100	104 99	0 - 160 0 - 174

Sample: 47992 - MW-8 15'

Analysis:	BTEX	Analytical Method:	S 8021B	·	Prep Method:	S 5035
QC Batch:	13926	Date Analyzed:	2004-11-09		Analyzed By:	MT
Prep Batch:	12304	Date Prepared:	2004-11-09		Prepared By:	MT
				continued		

Report Date: November 16, 200 TNM Monument 18			Work Orde TNM Mo	er: 4110905 nument 18		Page Number: 7 of 17 Monument-Lea Co.,NM			
sample 47992 continued									
Parameter FI	ag	RL Result		Units		Dilution	RL		
•		DI							
Parameter Fl	9 0	KL Result		Units		Dilution	RI		
Benzene	ц <u>в</u> Г	<0.0500				50	0.00100		
Toluene		< 0.0500		mg/Kg		50	0.00100		
Ethylbenzene		< 0.0500		mg/Kg		50	0.00100		
Xylene		< 0.0500		mg/Kg		50	0.00100		
					Cu il.	Danaant			
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits		
Trifluorotoluene (TFT)	2	0 864	mø/Kø	50	0.0200	86	<u>60.1 - 104</u>		
4-Bromofluorobenzene (4-BFB)	3	0.825	mg/Kg	50	0.0200	82	63.1 - 105		
	,		<u> </u>						
					*				
Sample: 47992 - MW-8 15'									
Analysis: TPH DRO		Analytica	I Method:	Mod. 8015B	6	Prep	Method: N/A		
OC Batch: 14045		Date Ana	lvzed:	2004-11-14		Analy	zed By: BP		
Prep Batch: 12412		Date Prep	ared:	2004-11-09		Prepa	red By: DS		
		DT							
Parameter Fla	σ	Result		Units		Dilution	RL.		
DRO	Þ	722		mg/Kg		1	50.0		
· · · ·				88	<u> </u>				
e.					Spike	Percent	Recovery		
Surrogate Flag	Result	Units	Dil	ution	Amount	Recovery	Limits		
n-Triacontane ⁴	208	mg/Kg		1	150	139	69.8 - 106.1		
Sample: 47992 - MW-8 15'		×							
Analysis: TPH GRO		Analytical	Method:	S 8015B		Prep Me	thod: S 5035		
QC Batch: 13931		Date Anal	yzed:	2004-11-09		Analyze	d By: MT		
Prep Batch: 12304		Date Prepa	ared:	2004-11-09		Preparec	l By: MT		
		RL							
Parameter Flag	5	Result		Units		Dilution	RL		
GRO		13.4		mg/Kg		50	0.100		
					Snike	Percent	Recovery		
Surrogate	Flag	Result	Units	Dilution	Amoun	t Recoverv	Limits		
Trifluorotoluene (TFT)	0	1.03	mg/Kg	50	0.100	21	0 - 160		

mg/Kg

50

0.100

24

0 - 174

1.22

Sample: 47993 - MW-8 25'

4-Bromofluorobenzene (4-BFB)

⁴Surrogate recovery out of range due to peak interference. QC shows process is within control.

¹Sample diluted due to hydrocarbons beyond xylene. ²Spike changed due to required dilution. ³Spike changed due to required dilution.

Report Date: TNM Monur	November 16 nent 18	5, 2004			Work Ord TNM M	ler: 4110905 onument 18		Page Monume	Number: 8 of 17 ent-Lea Co.,NM
Analysis: QC Batch: Prep Batch:	BTEX 13932 12309			Analytical M Date Analyz Date Prepar	Aethod: zed: ed:	S 8021B 2004-11-09 2004-11-09	·	Prep Me Analyze Prepare	ethod: S 5035 ed By: MT d By: MT
_				RL					
Parameter		Flag		Result		Units		Dilution	RL
Benzene		5		< 0.0500		mg/Kg		50	0.00100
Totuene				< 0.0500		mg/Kg		50	0.00100
Xvlene				< 0.0300		mg/Kg		50 50	0.00100
						&&	· · · · · · · · · · · · · · · · · · ·		
C			Elsa	Develt	T In its	Dilution	Spike	Percent	Recovery
Triffuorotohu			- riag	C 752	Units	Dilution 50		75	<u> 60.1.104</u>
4-Bromofluo	robenzene (4-l	BFB)	7	1 13	mg/Kg	50	0.0200	113	63.1 - 104
Sample: 479 Analysis: QC Batch: Prep Batch:	9 3 - MW-8 2 TPH DRO 14045 12412	5'		Analytica Date Ana Date Prej	al Method Ilyzed: pared:	: Mod. 8015E 2004-11-14 2004-11-09	3	Prep Anal Prepa	Method: N/A yzed By: BP ured By: DS
				DI					
Parameter		Flag		Result		Units		Dilution	RL
DRO				1560		mg/Kg		5	50.0
Surrogate	Flag	5	Result	Units	D	ilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	e °		258	mg/Kg		5	30.0	172	69.8 - 106.1
Sample: 479	93 - MW-8 2	5'							
Analysis: QC Batch: Prep Batch:	TPH GRO 13935 12309			Analytica Date Anal Date Pren	l Method: lyzed: ared:	S 8015B 2004-11-09 2004-11-09		Prep Me Analyze Prenare	ethod: S 5035 ed By: MT
Ttop Duton.	12507			Date Trop	uiou.	2001 11 05		Tiopulo	aby. Mi
Doromotor		Floo		RL		IInita		Dilution	DI
GRO		riag		72.5		mg/Kg		. 50	0.100
				, 2.0		'0'D			
Surrogata	-		Flag	Decult	I Inita	Dibution	Spike	Percent	Recovery
Trifluorotolu	ene (TET)		riag	0.802	ma/V				0 160
4-Bromofluo	robenzene (4-1	RFR)		0.093	mg/Kg	5 JU 5 5 0	0.100	10 //1	0 - 100
- Bromondo		51 5)		2.01	mg/ Kg		0.100	TI	· · · · ·

Sample: 47994 - MW-8 30'

۰.,

⁵Sample diluted due to hydrocarbons beyond xylene.
 ⁶Spike changed due to dilution.
 ⁷Spike changed due to dilution.
 ⁸Surrogate recovery out of range due to peak interference. QC shows process is within control.

Report Date: TNM Monur	November 16 nent 18	5, 2004			Work Ord TNM M	ler: 4110905 onument 18		Page Number: 9 of 17 Monument-Lea Co.,NM		
Analysis: QC Batch: Prep Batch:	is: BTEX tch: 13932 atch: 12309		Analytical Method: Date Analyzed: Date Prepared:		S 8021B 2004-11-09 2004-11-09		Prep Me Analyze Preparec	thod: S 5035 d By: MT By: MT		
•				RL						
Parameter		Flag		Result		Units	I	Dilution	RL	
Benzene				< 0.0100		mg/Kg		10	0.00100	
Toluene		4		<0.0100		mg/Kg		10	0.00100	
Ethylbenzene	e			< 0.0100		mg/Kg		10	0.00100	
Xylene				< 0.0100		mg/Kg		10	0.00100	
							Spike	Percent	Recovery	
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotolu	ene (TFT)	OPD)		0.717	mg/Kg	10	0.100	72	60.1 - 104	
4-Bromofluo	robenzene (4-	BFB)		0.685	· mg/Kg	10	0.100	68	63.1 - 105	
Sample: 479 Analysis: QC Batch: Prep Batch:	9 94 - MW-8 3 0 TPH DRO 14045 12412	0'		Analytic Date Ana Date Pre	al Method alyzed: pared:	: Mod. 80151 2004-11-14 2004-11-09	3	Prep I Analy Prepa	Method: N/A zed By: BP red By: DS	
Parameter	•	Flag		RL Result		Units		Dilution	RL	
DRO				255		mg/Kg		1	50.0	
			_				~ *	_	_	
c				T T 1 ,		•	Spike	Percent	Recovery	
Surrogate	Flag	5	Result	Units	Di	llution	Amount	Recovery	Limits	
			149	· ing/Kg	,			<u> </u>	09.8 - 100.1	
Sample: 479	94 - MW-8 3	0'								
Analysis: QC Batch: Prep Batch:	TPH GRO 13935 12309			Analytica Date Ana Date Prep	l Method: lyzed: pared:	S 8015B 2004-11-09 2004-11-09		Prep Me Analyze Prepared	thod: S 5035 d By: MT By: MT	
				RL						
Parameter		Flag		Result		Units	•	Dilution	RL	
GRO				1.64		mg/Kg		10	0.100	
Sumocata			Flag	Damit	T T	D:1	Spike	Percent	Recovery	
Trifluorotolu	ene (TET)		гıag	A OGR			Amount	07		
4-Bromofluo	rohenzene (4-	BFB)		0.900	mg/Kg	, 10 r . 10	0.100	97	0 - 174	
						,			~ 111	

Method Blank (1) QC Batch: 13926

RL
0.001
0.001

continued ...

Report Date: November 16, 2004	Work Order: 4110905	Page Number: 10 of 17
TNM Monument 18	TNM Monument 18	Monument-Lea Co.,NM

method blank continued

Parameter	Flag		Result	t	Units	3	RL
Ethylbenzene			< 0.0100)	. mg/K	g	0.001
Xylene	< 0.0100			mg/K	g	0.001	
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.906	mg/Kg	10	0.100	91	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.467	mg/Kg	10	0.100	47	36.6 - 112

Method Blank (1) QC Batch: 13931

Parameter	Flag		Result		Units	RL	
GRO			2.02		mg/K	g	0.1
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	9	1.22	mg/Kg	10	0.100	122	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.605	mg/Kg	10	0.100	60	50.7 - 113

Method Blank (1) QC Batch: 13932

Parameter	Flag		Result	t	Units	•	RL
Benzene			< 0.0100		mg/K	g	0.001
Toluene			< 0.0100	· ·	mg/K	g	0.001
Ethylbenzene			< 0.0100		mg/K	g	0.001
Xylene		<0.0100			mg/K	0.001	
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.882	mg/Kg	10	0.100	88	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.533	mg/Kg	10	0.100	53	36.6 - 112

Method Blank (1) QC Batch: 13935

Parameter	Flag		Result		Units	5	RL
GRO		-	2.04		mg/K	g	0.1
Surrogate	Flag	Result	Units	Dilution	Spike A mount	Percent	Recovery Limits
Trifluorotoluene (TFT)	10	1.19	mg/Kg	10	0.100	119	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.683	mg/Kg	10	0.100	68	50.7 - 113

⁹High surrogate recovery due to unknown anomaly. ICV/CCV show the method to be in control.

¹⁰High surrogate recovery due to unknown anomaly. ICV/CCV show the method to be in control.

Report Date: November 16, 2004	Work Order: 4110905	Page Number: 11 of 17
TNM Monument 18	TNM Monument 18	Monument-Lea Co.,NM
· · · · · · · · · · · · · · · · · · ·		

Method Blank (1) QC Batch: 14045

Parameter		Flag		Result		RL	
DRO				<50.0		mg/Kg	50
Surrogate	Flag	Result	Unite	Dilution	Spike A mount	Percent	Recovery Limits
n-Triacontane	I lag	120	mg/Kg	1	150	<u>80</u>	69.8 - 106.1

Method Blank (2) QC Batch: 14045

Parameter		Flag		Result		Units	RL
DRO				<50.0	1	mg/Kg	50
_					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		136	mg/Kg	1	150	91	69.8 - 106.1

Laboratory Control Spike (LCS-1) QC Batch: 13926

	LCS	LCSD			Spike	Matrix			Rec.	RPD
Param	Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
Benzene	0.962	0.978	mg/Kg	10	0.100	< 0.0333	96	2	79.8 - 114	9.4
Toluene	0.918	0.936	mg/Kg	10	0.100	< 0.0353	92	2	79.7 - 115	7.5
Ethylbenzene	0.906	0.928	mg/Kg	10	0.100	< 0.0339	91	2	78.7 - 116	8
Xylene	2.57	2.64	mg/Kg	10	0.300	<0.103	86	3	78.7 - 118	7.9

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.927	0.912	mg/Kg	10	0.100	93	91	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.791	0.785	mg/Kg	10	0.100	79	78	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 13931

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	10.2	9.88	mg/Kg	10	1.00	< 0.381	102	3	72 - 124	21
Percent reco	verv is based or	n the spike r	esult. RPD is	based on	the spike and	snike dunlica	te result.			

Surrogate	LCS Result	LCSD Result	Units .	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec.
Trifluorotoluene (TFT)	1.06	1.07	mg/Kg	10	0.100	106	107	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.931	1.00	mg/Kg	10	0.100	93	100	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 13932

Report Date: November 16, 2004 TNM Monument 18				Wo Th	rk Order: 411 M Monumer	Page Number: 12 of 17 Monument-Lea Co.,NM				
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.982	0.993	mg/Kg	10	0.100	< 0.0333	98	1	79.8 - 114	9.4
Toluene	0.936	0.944	mg/Kg	10	0.100	< 0.0353	94	1	79.7 - 115	7.5
Ethylbenzene	0.916	0.925	mg/Kg	10	0.100	< 0.0339	92	1	78.7 - 116	8
Xylene 2.60 2.63 mg/Kg				10	0.300	< 0.103	87	1	78.7 - 118	7.9
					•					

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.905	0.923	mg/Kg	10	0.100	90	92	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.805	0.827	mg/Kg	10	0.100	80	83	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 13935

	LCS	LCSD			Spike	Matrix			Rec.	RPD
Param	Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
GRO	9.92	9.89	mg/Kg	10	1.00	<0.381	99	0	72 - 124	21

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

		LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1112	1.15	1.17	mg/Kg	10	0.100	115	117	80.4 - 113
4-Bromofluorobenzene (4-BFB)		0.999	1.03	mg/Kg	10	0.100	100	103	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 14045

Param		LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	13	198	192	mg/Kg	1	250	<12.0	79	3	78.7 - 117.	5 20
Percent r	ecovery	is based or	n the spike r	esult. RPD is	based on t	the spike and	d spike duplic	ate result	•		
			LCS	LCSD			Spike	L	.CS	LCSD	Rec.
Surrogat	e		Result	Result	Units	Dil.	Amoun	it R	lec.	Rec.	Limit
n-Triaco	ntane		132	133	mg/Kg	1	150		88	89	69.8 - 106.1

Laboratory Control Spike (LCS-2) QC Batch: 14045

Param	LCS Result	LCSD Result	Unite	ы	Spike Amount	Matrix Result	Rec	RDU	Rec.	RPD Limit
DRO	241	213	mg/Kg	1	250	<12.0	<u>96</u>	12	78.7 - 117.6	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	148	138	mg/Kg	1	150	99	92	69.8 - 106.1

¹¹High surrogate recovery due to unknown anomaly. Other analyte recoveries show the method to be in control.

¹²High surrogate recovery due to unknown anomaly. Other analyte recoveries show the method to be in control.

¹³LCS is within limits and RPD is within limits.

Matrix Spike (MS-1) QC Batch: 13932 Spiked Sample: 47996

	MS	MSD			Spike	Matrix			Rec.	RPD
Param	Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
Benzene	0.773	0.745	mg/Kg	10	0.100	< 0.0333	77	4	63.5 - 98.6	12
Toluene	0.762	0.762	mg/Kg	10	0.100	< 0.0353	76	0	65.8 - 102	11.4
Ethylbenzene	0.784	0.788	mg/Kg	10	0.100	< 0.0339	78	0	66.6 - 106	10.5
Xylene	2.24	2.26	mg/Kg	10	0.300	< 0.103	75	1	67.4 - 108	10.6

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

_	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.761	0.731	mg/Kg	10	0.1	76	73	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.746	0.736	mg/Kg	10	0.1	75	74	63.1 - 105

Matrix Spike (MS-1) QC Batch: 13935 Spiked Sample: 47996

	MS	MSD			Spike	Matrix			Rec.	RPD
Param	Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
GRO	11.7	12.1	mg/Kg	10	1.00	<0.381	117	3	0 - 182	19.6

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.17	1.22	mg/Kg	10	0.1	117	122	0 - 160
4-Bromofluorobenzene (4-BFB)	0.954	1.01	mg/Kg	10	0.1	95	101	0 - 174

Matrix Spike (MS-2) QC Batch: 14045 Spiked Sample: 47998

		MS	MSD			Spike	Matrix			Rec.	RPD
Param		Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
DRO	14	242	146	mg/Kg	1	250	<12.0	97	49	67.7 - 110.5	20

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

•		MS	MSD			Spike	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	15	139	102	mg/Kg	1	150	93	68	69.8 - 106.1

Standard (CCV-1) QC Batch: 13926

			CCVs	CCVs	CCVs	Percent		
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2004-11-09	
Toluene		mg/Kg	0.100	0.0947	95	85 - 115	2004-11-09	
Ethylbenzene		mg/Kg	0.100	0.0965	96	85 - 115	2004-11-09	
Xylene	•	mg/Kg	0.300	0.279	93	85 - 115	2004-11-09	

¹⁴MSD out of control chart range. QC shows process is within control.

¹⁵RPD out of range for MS/MSD. LCS/LCSD show process is within control.

TNM Monum	November 16, ient 18	. 2004		Work Order: 4110 TNM Monumen	0905 t 18	Page I Monun	Number: 14 of 17 nent-Lea Co.,NM
Standard (CC	CV-2) QC	Batch: 13926					
		,	CCVs	CCVs	CCVs	Percent	
_			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0998	100	85 - 115	2004-11-09
Fthylbenzene		mg/Kg	0.100	0.0956	96	85 - 115	2004-11-09
Xylene	,	mg/Kg	0.300	0.267	89	85 - 115	2004-11-09
Standard (CC	CV-1) QC	Batch: 13931					
	-		CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/L	1.00	1.00	100	85 - 115	2004-11-09
Standard (CC	CV-2) QC	Batch: 13931	·				
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	· · · · · · · · · · · · · · · · · · ·	mg/L	1.00	1.00	100	85 - 115	2004-11-09
Daram	Flag	Unite	True	Found	Percent	Recovery	Date
Param Benzene	Flag	Units mg/Kg	True Conc.	Found Conc.	Percent Recovery	Recovery Limits	Date Analyzed
Param Benzene Toluene	Flag	Units mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100	Found Conc. 0.0973 0.0933	Percent Recovery 97 93	Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene	Flag	Units mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.100	CCVs Found Conc. 0.0973 0.0933 0.0914	Percent Recovery 97 93 91	Percent Recovery Limits 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene	Flag	Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261	Percent Recovery 97 93 91 87	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC	Flag CV-1) QC	Units mg/Kg mg/Kg mg/Kg mg/Kg Batch: 13932	CCVs True Conc. 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261	Percent Recovery 97 93 91 87	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC	Flag CV-1) QC	Units mg/Kg mg/Kg mg/Kg mg/Kg Batch: 13932	CCVs True Conc. 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261	CCVs Percent Recovery 97 93 91 87 CCVs	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 .2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC	Flag CV-1) QC	Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found	CCVs Percent Recovery 97 93 91 87 CCVs Percent	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 .2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC	Flag CV-1) QC Flag	Units mg/Kg mg/Kg mg/Kg Batch: 13932 Units	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc.	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc.	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 .2004-11-09 Date Analyzed
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene	Flag CV-1) QC Flag	Units mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102	CCVs Percent Recovery 97 93 91 87 87 CCVs Percent Recovery 102	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 Date Analyzed 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene	Flag CV-1) QC Flag	Units mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 Date Analyzed 2004-11-09 2004-11-09
Param Benzene Foluene Ethylbenzene Xylene Standard (CC Param Benzene Foluene Ethylbenzene	Flag CV-1) QC Flag	Units mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.100	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene Ethylbenzene Xylene	Flag CV-1) QC Flag	Units mg/Kg mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952 0.273	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95 91	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene Ethylbenzene Xylene Standard (IC	Flag CV-1) QC Flag V-1) QC H	Units mg/Kg mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952 0.273	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95 91	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene Ethylbenzene Xylene Standard (IC	Flag CV-1) QC Flag V-1) QC H	Units mg/Kg mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952 0.273	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95 91 SCCVs	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene Ethylbenzene Xylene Standard (IC	Flag CV-1) QC Flag V-1) QC H	Units mg/Kg mg/Kg mg/Kg Batch: 13932 Units mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.100 0.300	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952 0.273 CCVs Found	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95 91 CCVs Percent	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09
Param Benzene Toluene Ethylbenzene Xylene Standard (CC Param Benzene Toluene Ethylbenzene Xylene Standard (IC Param	Flag CV-1) QC Flag V-1) QC H Flag	Units mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.100 0.300 CCVs True Conc. 0.100 0.100 0.100 0.300 CCVs True CCVs	CCVs Found Conc. 0.0973 0.0933 0.0914 0.261 CCVs Found Conc. 0.102 0.0957 0.0952 0.273 CCVs Found CCVs Found	CCVs Percent Recovery 97 93 91 87 CCVs Percent Recovery 102 96 95 91 SCVs Percent Recovery	Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 Percent Recovery Limits 85 - 115 85	Date Analyzed 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09 2004-11-09

Standard (CCV-1) QC Batch: 13935 CCVs CCVs CCVs Percent Recovery Date Param Flag Units Conc. Coc. Recovery Limits Analyzed GRO mg/L 1.00 0.962 96 85-115 2004-11-09 Standard (CCV-1) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. CCVs Percent Recovery Date Param Flag Units Conc. CCVs Percent Recovery Date Standard (CCV-2) QC Batch: 14045 CCVs CCVs Percent True Found Percent Analyzed Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Analyzed Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Percent Param Flag Units Conc. Conc. Recovery Date Standard (CCV-3) QC Batch: 14045 CCVs Percent Percent	-		TNM Monume	10905 ent 18	Monument-Lea Co.,NM		
$\begin{array}{c ccccc} \hline & CCVs & CCVs & CCVs & Percent \\ \hline True & Found & Percent & Recovery & Date \\ \hline True & Found & Percent & Recovery & Date \\ \hline Recovery & Limits & Analyzed \\ \hline Recovery & Date & Analyzed \\ \hline Recovery & Date & Analyzed \\ \hline Standard (CCV-1) & QC Batch: 14045 \\ \hline CCVs & CCVs & CCVs & Percent & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline DRO & mg/Kg & 250 & 238 & 95 & 75 - 125 & 2004-11-14 \\ \hline Standard (CCV-2) & QC Batch: 14045 \\ \hline CCVs & CCVs & CCVs & Percent & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline DRO & mg/Kg & 250 & 190 & 76 & 75-125 & 2004-11-14 \\ \hline Standard (ICV-2) & QC Batch: 14045 \\ \hline CCVs & CCVs & CCVs & Percent \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Date \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline Standard (ICV-2) & QC Batch: 14045 \\ \hline CCVs & CCVs & CCVs & Percent \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Limits & Analyzed \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline Standard (ICV-4) & QC Batch: 14045 \\ \hline CCVs & CCVs & CCVs & Percent \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Limits & Analyzed \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline Standard (CCV-4) & QC Batch: 14045 \\ \hline CVs & CCVs & CCVs & Percent \\ \hline Param & Flag & Units & Conc. & Conc. & Recovery & Limits & Analyzed \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline DRO & mg/Kg & 250 & 217 & 87 & 75-125 & 2004-11-14 \\ \hline DRO & mg/Kg & 250 & 254 & 102 & 75-125 & $	Standard (CCV-1)	OC Batch: 13035			·		•
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Stanuaru (CC V-I)	QC Datch. 15955					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			CCVs	CCVs	CCVs	Percent	
ParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedGKOmg/L1.000.9629685-1152004-11-09Standard (CCV-1)QC Batch: 14045CCV'sCCV'sPercentRecoveryDateParamFlagUnitsConc.Conc.Conc.Conc.Conc.Conc.DROmg/Kg2502389575-1252004-11-14Standard (CCV-2)QC Batch: 14045CCV'sCCV'sPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502299175-1252004-11-14Standard (CCV-3)QC Batch: 14045CCV'sCCV'sPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg2501907675-1252004-11-14Standard (ICV-2)QC Batch: 14045CCV'sCCV'sPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDateParamFlagUnitsConc.Conc.RecoveryDateParamFlagUnitsConc.CCV'sPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDateParamFlagUnitsConc.Conc.RecoveryDateDate			True	Found	Percent	Recovery	Date
GRO mg/L 1.00 0.962 96 85-115 2004-11-09 Standard (CCV-1) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date DRO mg/Kg 250 238 95 75-125 2004-11-14 Standard (CCV-2) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Recovery Date Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date DRO mg/Kg 250 190 76 75 - 125 2004-11-14 <	Param Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Standard (CCV-1) QC Batch: 14045 Param Flag Units Conc. CCVs Percent Recovery Date DRO mg/Kg 250 238 95 75 - 125 2004-11-14 Standard (CCV-2) QC Batch: 14045 Percent Recovery Date Param Flag Units Conc. CCVs Percent Recovery Date Param Flag Units Conc. Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Conc. Recovery Date Standard (CCV-3) QC Batch: 14045 Analyzed DRO mg/Kg 250 190 76 75 - 125 2004-11-14 Standard (ICV-2) QC Batch: 14045 CVs CCVs CCVs Percent Recovery Date DRO mg/Kg 250 190 76 75 - 125 2004-11-14	GRO	mg/L	1.00	0.962	96	85 - 115	2004-11-09
Standard (CCV-1)QC Batch: 14045ParamFlagUnitsConc.CCVsCCVsPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502389575 - 1252004-11-14Standard (CCV-2)QC Batch: 14045CCVsCCVsCCVsPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg2502299175 - 1252004-11-14Standard (CCV-3)QC Batch: 14045CCVsCCVsCCVsPercentRecoveryDateDROmg/Kg2501907675 - 1252004-11-14Standard (CCV-3)QC Batch: 14045CCVsCCVsCCVsPercentRecoveryDateDROmg/Kg2501907675 - 1252004-11-14Standard (ICV-2)QC Batch: 14045CCVsCCVsCCVsPercentTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg2502178775 - 1252004-11-14Standard (ICV-2)QC Batch: 14045CCVsCCVsPercent <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Standard (CCV-1)	QC Batch: 14045		• •			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			CCVs	CCVs	CCVs	Percent	
Param Flag Units Conc. Recovery Limits Analyzed DRO mg/Kg 250 238 95 75 - 125 2004-11-14 Standard (CCV-2) QC Batch: 14045 CCVs CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 229 91 75 - 125 2004-11-14 Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Recovery Limits Analyzed DRO mg/Kg 250 229 91 75 - 125 2004-11-14 Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 190 76 75 - 125 2004-11-14 Standard (ICV-2) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 <td></td> <td></td> <td>True</td> <td>Found</td> <td>Percent</td> <td>Recovery</td> <td>Date</td>			True	Found	Percent	Recovery	Date
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Param Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Standard (CCV-2)QC Batch: 14045 $\begin{array}{cccccccccccccccccccccccccccccccccccc$	DRO	mg/Kg	250	238	95	75 - 125	2004-11-14
Standard (CCV-2) QC Batch: 14045 CCVs CCVs CCVs Percent Param Flag Units CCVs CCVs CCVs Percent Recovery Limits Analyzed DRO mg/Kg 250 229 91 75 - 125 2004-11-14 Standard (CCV-3) QC Batch: 14045 CCVs CCVs CCVs Percent True Found Percent Param Flag Units COVs CCVs CCVs Percent True Found Percent <		000.1.1.000					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Standard (CCV-2)	QC Batch: 14045					
ParamFlagUnitsConc.FoundPercentRecoveryLimitsAnalyzedDROmg/Kg2502299175 - 1252004-11-14Standard (CCV-3)QC Batch: 14045CCVsCCVsCCVsPercentRecoveryDateParamFlagUnitsConc.CCVsPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2501907675 - 1252004-11-14Standard (ICV-2)QC Batch: 14045CCVsCCVsPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg2502178775 - 1252004-11-14Standard (ICV-2)QC Batch: 14045CCVsCCVsCCVsPercentParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsPercentTrueFoundPercentRecoveryDateDROmg/Kg25025410275 - 1252004-11-14DateDrueFoundPercentRecoveryDateDrueFound<			CCVs	CCVs	CCVs	Percent	
Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 229 91 75 - 125 2004-11-14 Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 190 76 75 - 125 2004-11-14 Standard (ICV-2) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units C			True	Found	Percent	Recovery	Date
DRO mg/Kg 250 229 91 75 - 125 2004-11-14 Standard (CCV-3) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 190 76 75 - 125 2004-11-14 Standard (ICV-2) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Recovery Date DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent Recovery Date DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date DRO mg/Kg 250 254 102 75 - 125 2004-11-14 <td>Param Flag</td> <td>Units</td> <td>Conc.</td> <td>Conc.</td> <td>Recovery</td> <td>Limits</td> <td>Analyzed</td>	Param Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Standard (CCV-3) QC Batch: 14045ParamFlagUnitsCCVsCCVsPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2501907675 - 1252004-11-14Standard (ICV-2)QC Batch: 14045TrueFoundPercentTrueFlagUnitsConc.CCVsCCVsPercentTrueFoundParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsPercentParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsCCVsPercentParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg25025410275 - 1252004-11-14DROmg/Kg25025410275 - 1252004-11-14	DRO	mg/Kg	250	229	91	75 - 125	2004-11-14
Standard (ICV-2) QC Batch: 14045 CCVs CCVs CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs CCVs Percent Recovery Date Param Flag Units Conc. Recovery Date Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Date DRO mg/Kg 250 254 102 75 - 125 2004-11-14	Param Flag DRO	Units mg/Kg	<u>Conc.</u> 250	Conc. 190	Recovery 76	Limits 75 - 125	Analyzed 2004-11-14
Standard (ICV-2) QC Batch: 14045 CCVs CCVs CCVs Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 Param Flag Units CCVs CCVs Percent Param Flag Units Conc. CCVs Percent Param Flag Units Conc. COVs Percent Param Flag Units Conc. Conc. Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 254 102 75 - 125 2004-11-14							20011111
CCVsCCVsPercent FoundPercent PercentRecovery RecoveryDate AnalyzedParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsCCVsPercent RecoveryTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg25025410275 - 1252004-11-14	Standard (ICN A)						
CCVsCCVsCCVsPercentTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsCCVsPercentTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg25025410275 - 1252004-11-14	Standard (ICV-2)	QC Batch: 14045					
ParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg2502178775 - 1252004-11-14Standard (CCV-4)QC Batch: 14045CCVsCCVsCCVsPercentTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryDateDROmg/Kg25025410275 - 1252004-11-14	Standard (IUV-2)	QC Batch: 14045	COL				
Tarant Prag Onits Conc. Conc. Recovery Linits Analyzed DRO mg/Kg 250 217 87 75 - 125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 254 102 75 - 125 2004-11-14	Standard (IUV-2)	QC Batch: 14045	CCVs	CCVs	CCVs	Percent	Dete
BRO Ingrkg 250 211 61 15-125 2004-11-14 Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 254 102 75 - 125 2004-11-14	Siandard (ICV-2)	QC Batch: 14045	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Standard (CCV-4) QC Batch: 14045 CCVs CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 254 102 75 - 125 2004-11-14	Param Flag	QC Batch: 14045	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CCVsCCVsCCVsPercentTrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg25025410275 - 1252004-11-14	Param Flag	QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250	CCVs Found Conc. 217	CCVs Percent Recovery 87	Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14
TrueFoundPercentRecoveryDateParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg25025410275 - 1252004-11-14	Param Flag DRO Standard (CCV-4)	QC Batch: 14045 Units mg/Kg QC Batch: 14045	CCVs True Conc. 250	CCVs Found Conc. 217	CCVs Percent Recovery 87	Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14
ParamFlagUnitsConc.Conc.RecoveryLimitsAnalyzedDROmg/Kg25025410275 - 1252004-11-14	Param Flag DRO Standard (CCV-4)	QC Batch: 14045 Units mg/Kg QC Batch: 14045	CCVs True Conc. 250 CCVs	CCVs Found Conc. 217 CCVs	CCVs Percent Recovery 87 CCVs	Percent Recovery Limits 75 - 125 Percent	Date Analyzed 2004-11-14
DRO mg/Kg 250 254 102 75 - 125 2004-11-14	Param Flag DRO Standard (CCV-4)	QC Batch: 14045 Units mg/Kg QC Batch: 14045	CCVs True Conc. 250 CCVs True	CCVs Found Conc. 217 CCVs Found	CCVs Percent Recovery 87 CCVs Percent	Percent Recovery Limits 75 - 125 Percent Recovery	Date Analyzed 2004-11-14 Date
	Param Flag DRO Standard (CCV-4) Param Flag	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units	CCVs True Conc. 250 CCVs True Conc.	CCVs Found Conc. 217 CCVs Found Conc.	CCVs Percent Recovery 87 CCVs Percent Recovery	Percent Recovery Limits 75 - 125 Percent Recovery Limits	Date Analyzed 2004-11-14 Date Analyzed
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14
	Param Flag DRO Standard (CCV-4) Param Flag DRO	QC Batch: 14045 Units mg/Kg QC Batch: 14045 Units mg/Kg	CCVs True Conc. 250 CCVs True Conc. 250	CCVs Found Conc. 217 CCVs Found Conc. 254	CCVs Percent Recovery 87 CCVs Percent Recovery 102	Percent Recovery Limits 75 - 125 Percent Recovery Limits 75 - 125	Date Analyzed 2004-11-14 Date Analyzed 2004-11-14

Page 1 of Z 6701 Aberdeen Avenue, Ste. 9 155 McCutcheon Suite H CHAIN-OF-CUSTODY AND ANALYSIS REQUEST ä Lubbock, Texas 79424 El Paso, Texas 79932 Tel (915) 585-3443 TraceAnalysis, Inc. Tel (806) 794-1296 4110905 Fax (806) 794-1298 Fax (915) 585-4944 LAB Order ID # 1 (800) 378-1296 1 (888) 588-3443 Company Name: Phone #: ANALYSIS REQUEST 1/AINS (Circle or Specify Method No.) nu sois (DRO-GRO Address: (Street. City, Zip)/ Fax #: fouston Total Melals Ag As Ba Cd Cr Pb Se Hg 6010B/200 7 Contact Person: TEDAY Milton P.10 Invoice to: slandai ICLPMetals Ag As Ba Cd Cr Pb Se Hg (If different from above) Project Name: Men4ment 18 Project #: fom TUM Sampler Signature GC/MS Semi Vol 8270C/629 Project Location: Tum Around Time it different LAG. NM nonument an 710 GC/MS Vol 8260B/62 PRESERVATIVE TPH ALB 1TX1005 esticides 8081A/608 SAMPLING ICLP Semi Volatiles MATRIX # CONTAINERS Volume/Amount METHOD 80218/602 **FCLP**Pesticides PCB's 8082/608 **TCLP Volatiles** BOD. TSS pH 2004 BTEX 8021Br LAB # FIELD CODE PAH 8270C SLUDGE WATER NONE DATE NaOH H,SO. LAB USE TIME CONH MTBE SOIL ÀIR Ÿ ШO Ե õ ONLY Ţ 402 11/2 mwg-5X 1 V 47981]/¦to MW9-10' X 1 11 11:05 X 82 MW9-15' h 83 11:5 X 84 XX mw9-20 11:20 1 11 85 MW9-251 4 11:25 86 MW9-30 11:35 X 4 87 MW10-10 4 1:30 88 MW10-15 XX 1:35 51 MW10- 38 25 89 1 ١ :49 MW10 - 30 1 40 1:50 X K 1 1:55 91 mw10-35 X đ Date: Time: Received by: Date: Time: REMARKS: Relinguisbed)b FAIR Rosults La NOUX-432/520770/ LAB USE 1/02/54 4,00 Ø ONLY 11/8/04 VI 15 ŁО, 600 Date Time: Received by: Date: Time: Relinquished by Intact 11/08/04 17a Headspace CALIG ESchbruge Y/N Received at Laboratory by: Date: Rélinguished by: Date: Time: Time: Temp Check II Special Reporting Limits Are Needed Log-in Review 4.04 1011511- P524085 Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. Carner ORIGINAL COPY

Report Date: November 16, 2004 TNM Monument 18

Work Order: 4110905 TNM Monument 18

Page Number: 16 of 17 Monument-Lea Co.,NM

6701 Aberdeen Avenue, Ste. 9 155 McCutcheon, Suite H CHAIN-OF-CUSTODY AND ANALYSIS REQUEST à Lubbock, Texas 79424 El Paso, Texas 79932 TraceAnalysis, Inc. Tel (806) 794-1296 Tel (915) 585-3443 4110905 Fax (805) 794-1298 Fax (915) 585-4944 LAB Order ID # 1 (888) 588-3443 1 (800) 378-1296 Phone #: Company Name: **ANALYSIS REQUEST** (Circle or Specify Method No.) (Street, City, Zip) Fax #: Address: USTOR TPH 448-47×TOUS MCD BOIS (D. PO -6 PD) foial Meials Ag As Ba Cd Cr Pb Se Hg 60105/2007 TCLP Meials Ag As Ba Cd Cr Pb Se Hg Contact Person: clo TEDDY Milton Turn Around Time it different from standard Invoice to: (If different from above) Project #: Project Name: TNM MONUMENT 2 Sampler Signature: GC/MS Semi Vol 8270C/625 **Project Location:** Monument - Lau Co. MM GCIMS Vol 8260B/624 PRESERVATIVE Pesticides 8081A/608 CLP Semi Volatiles SAMPLING MATRIX # CONTAINERS Volume/Amount METHOD 80218/602 BTEX 802184804 **ICLP Pasticides** PCB's 8082/608 BOD TSS. pH ł LAB # FIELD CODE SLUDGE 12004 Volati WATER NONE DATE NaOH H,SO. TIME MTBE /LAB USE SOIL Ŝ CLP CLP ЫQ Per ЧA HA Ŷ ONLY ğ 402 t ¥ 7:30 X 47992 ¥ Y かんち 93 y Y 7:40 Ł 94 30 Ý ¥ 1:57 X REMARKS: Date: Relingoished by Date: Time: Received by: Time: LAB USE See PAGEI 4:00 11/08/04 ONLY 0 1do 1/8/04 1600 FAY to NOVA-Received by: hishedby Date: Time: Date: Time: Intact 1700 Headspace Y / N 128 124 4% Received at Laboratory by: Reinguished by: Date: Time: Date: Time: Temo_ Check If Special Reporting Limits Are Needed 0 Log-in Review 0 10 Its 1524085 Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 19m the breston Carrier # **ORIGINAL COPY**

Report Date: November 16, 2004 TNM Monument 18

Page Z of Z

Work Order: 4110905 TNM Monument 18

Page Number: 17 of 17 Monument-Lea Co.,NM

Appendix B Notification of Release and Correction 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	Monument # 18	Facility Type:	Pipeline	
Surface Owner: Jim B Cooper	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
D	7	205	37E					Lea

Latitude 32 degrees 35' 30.0" Longitude 103 degrees 17' 55.9"

Volume of Release: Type of Release: Volume Recovered Source of Release: Date and Hour of Occurrence Date and Hour of Discovery Unknown If YES, To Whom? Was Immediate Notice Given? Yes 🗌 No 🗌 Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. 🗌 Yes 🖾 No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Describe Area Affected and Cleanup Action Taken.* NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable. 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. OIL CONSERVATION DIVISION Signature: Approved by District Supervisor: Camille Reynolds Printed Name: Title: **Remediation Coordinator** Approval Date: **Expiration Date:** E-mail Address: Conditions of Approval: cjreynolds@paalp.com Attached

Attach Additional Sheets If Necessary

Phone:

(505)441-0965

Date: 3/21/2005

NATURE OF RELEASE