Form C-141 Revised October 10, 2003

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

.

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

Release Notification and Corrective Action

						OPERA	TOR		🗌 Initia	al Report	X Final Report		
Name of Co		Plains Pipel				Contact Daniel Bryant							
		119, Midlan				Telephone No. 432-557-5865							
Facility Nar	ne TNM	[Keohane P	ump His	storical	I	Facility Type Pump							
Surface Ow	ner Danny	Berry		Mineral C	wner l	BLM			Lease N	lo.			
				LOCA	TIO	N OF REI	LEASE						
Unit Letter "O"	Section 27	Township T20S	Range R34E	Feet from the	North	/South Line	Feet from the	East/We	est Line	County Lea			
	I of	itudo 21	0° 22' 14	7 [°] North		Longitude	1020 2	 20' 41 7'	Woat				
Latitude 32°, 32', 15.7' North Longitude 103°, 32', 41.7' West. NATURE OF RELEASE													
Tome of Dala	Carla	0:1			UKE			— T,	Values)			
Type of Rele						Volume of Unknown	Kelease		volume f	Recovered			
Source of Re	lease Pum	p				Date and H Unknown	Iour of Occurrenc			Hour of Dis			
Was Immedia	ate Notice (Given?				If YES, To	Whom?		0//24/200	<u> </u>			
			Yes 🗌	No 🔲 Not Req	uired								
By Whom?							Iour 08/07/2008						
Was a Water	course Read		Yes	No No		If YES, Vo	olume Impacting t	the Water	course.				
If a Watercou	irse was Im	pacted, Descri	ibe Fully.*	:									
Describe Cau	ise of Proble	em and Reme	dial Action	n Taken.* Lando	wner n	otified Plains	Pipeline of a histo	orical rele	ase locate	ed on his pro	operty		
Describe Are	a Affected	and Cleanup A	Action Tal	en. Impacted soi	l was e	xcavated and	ransported to an 1	NMOCD	approved	land farm.	Excavation backfill		
material was	purchased f	from the lando	wner. Ple	ease refer to the R	emedia	tion Summary	and Site Closure	Request	dated Oct	ober 2008 f	or additional details.		
				is true and comp		he best of my	knowledge and u	nderstand	I that purs				
				nd/or file certain r									
public health	or the envir	ronment. The	acceptance	e of a C-141 repo	ort by th	e NMOCD m	arked as "Final R	eport" do	es not reli	ieve the ope	rator of liability ater, human health		
or the enviror	nment. In a	ddition. NMO	CD accent	tance of a C-141	renort d	loes not reliev	e the operator of i	responsibilities	ility for c	ompliance v	with any other		
federal, state,	or local lav	ws and/or regu	lations.				F			· · · · · · · · · · · · · · · · · · ·			
							OIL CON	SERVA	TION	DIVISIO	<u>DN</u>		
Signature:	sill	jet_					7	Ľ	John				
Printed Name	e: Daniel Br	yant			Approved by	District Supervis	RONME	NTAL	ENGINEE	R			
Title: Remed	liation Coor	dinator			1	Approval Dat			piration				
E-mail Addre	ess: dmbrya	int@paalp.com	n			Conditions of	Approval:				RP-1926		
Date:	October 20), 2008	Phone	: 432-557-5865									

RECEIVEL

HOBBSULL

DEC 0 4 2008

Basin Environmental Service Technologies, LLC

2800 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
cstanley@basinenv.com
Office: (505) 396-2378
Fax: (505) 396-1429

ŵ Effective Solutions

REMEDIATION SUMMARY

AND

SITE CLOSURE REQUEST

PLAINS MARKETING, L.P. (231735) TNM Keohane Pump Historical Lea County, New Mexico Plains SRS – TNM Keohane Pump Historical UNIT O (SW/SE), Section 27, Township 20 South, Range 34 East Latitude 32° 21' 15.7" North, Longitude 103° 32' 41.7" West NMOCD Reference # 1RP-1926

RECEIVEL

Prepared For:

Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002

HABBS (MID

Prepared By: Basin Environmental Service Technologies, LLC

October 2008

Curt D. Stanley

Project Manager

DEC 04 2008

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- Appendix A Laboratory Reports
- Appendix B Photographs
- Appendix C Release Notification and Corrective Action (Form C-141)

INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Marketing, L.P. (Plains), has prepared this Remediation Summary and Site Closure Request for the release site known as TNM-Keohane Pump Historical. The legal description of the release site is Unit Letter "O" (SW ¼ SE ¼), Section 27, Township 20 South, Range 34 East, in Lea County, New Mexico. The subsurface of the property affected by the release is owned by the United States Bureau of Land Management (BLM), the surface of the property is owned by Mr. Danny Berry. The release site GPS coordinates are 32° 32' 15.7" North and 103° 32' 41.7" West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map. The Release Notification and Corrective Action (Form C-141) is included as Appendix C.

On July 24, 2008, Plains reported a historical release of an unknown volume of crude oil at the former Plains Keohane Pump Station. The historical release was discovered by the landowner and reported to Plains. The Pump Station was removed from the site prior to the discovery of the release. The resulting surface stain attributed to the release measured approximately 40 feet by 75 feet. The release was the attributed to routine operation of the pump station.

NMOCD SITE CLASSIFICATION

According to data obtained from the New Mexico Office of the State Engineer (NMOSE), no water wells are recorded in Section 27 of the above referenced township. The NMOSE database indicates groundwater was encountered at depths exceeding 100 feet below ground surface (bgs) in a water well within the township. This depth to groundwater results in a score of zero (0) being assigned to the site based on the New Mexico Oil Conservation Division (NMOCD) depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

There is no surface water body located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

The NMOCD guidelines indicate the Keohane Pump Historical release site has a ranking score of zero (0). Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX 50 mg/Kg (ppm)
- TPH 5,000 mg/Kg (ppm)

SUMMARY OF RECENT FIELD ACTIVITIES

On July 7 through July 9, 2008, approximately 836 cubic yards (cy) of hydrocarbon impacted soil was excavated at the release site, stockpiled and subsequently transported to the Lazy Ace

Land Farm. The final dimensions of the excavation were approximately 40 feet in width (North to South), 75 feet in length (East to West) and four (4) feet below ground surface (bgs) in depth in the center of the excavation.

On August 7, 2008, a confirmation soil sample was collected from the excavation floor (Floor @ 4'). The soil sample was analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) using method EPA 8021b and total petroleum hydrocarbons (TPH) using method SW8015 modified. A summary of the analytical results is included as Table 1, Concentrations of BTEX and TPH in Soil. Laboratory results are included in Appendix A and soil sample locations are depicted on Figure 2, Site and Sample Location Map.

The analytical results indicated benzene and BTEX concentrations were below the laboratory method detection limit (MDL) of 0.0011 mg/Kg and 0.0021 mg/Kg, respectively. The analytical results indicated TPH concentrations were 82.1 mg/Kg for the soil sample.

Based on the analytical results, the excavation was backfilled with soil purchased from the landowner. The site was contoured to the area topography and was seeded in September 2008 with vegetation acceptable to the surface landowner. Photographs are provided as Appendix B.

SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples collected from the excavation, Basin recommends Plains provide the NMOCD Hobbs District Office and the BLM-Carlsbad District Office a copy of this Remediation Summary and Site Closure Request and request the NMOCD and BLM grant site closure to the TNM-Keohane Historical release.

LIMITATIONS

Basin Environmental Service Technologies, LLC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC 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. Basin Environmental Service Technologies, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC 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 Marketing, L.P. The information contained in this report, including all exhibits and attachments, may not be used by any other

party without the express consent of Basin Environmental Service Technologies, LLC and/or Plains Marketing, L.P.

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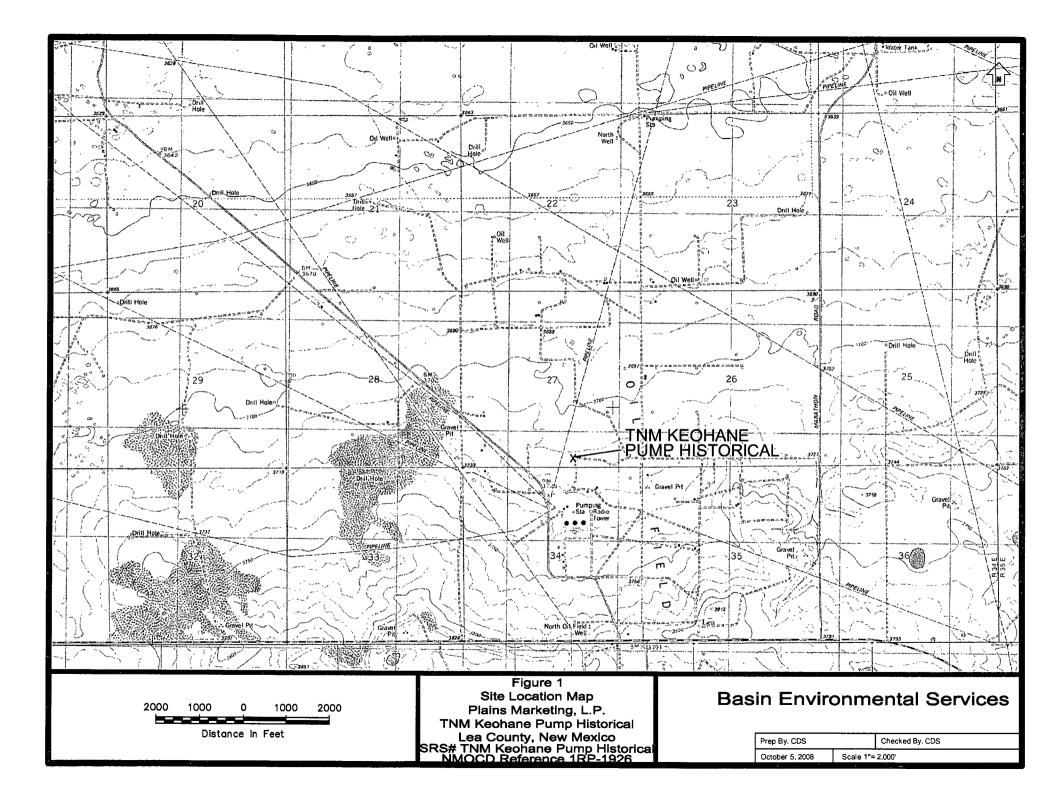
.

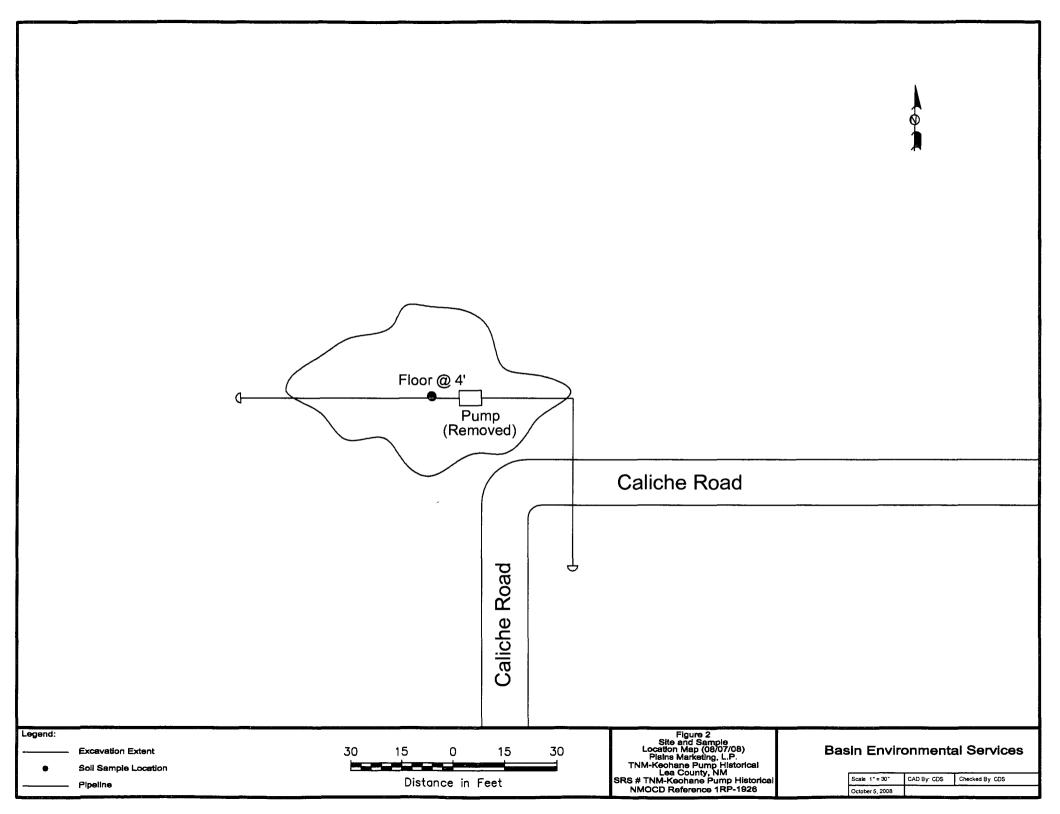
DISTRIBUTION:

- Copy 1: Larry Johnson New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 1) 1625 French Drive Hobbs, New Mexico 88240
- Copy 2: James Amos Carlsbad Field Office United Stated Bureau of Land Management 620 E. Greene Street Carlsbad, New Mexico 88220
- Copy 3: Jeff Dann Plains Marketing, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002 jpdann@paalp.com
- Copy 4: Daniel Bryant Plains Marketing, L.P. P.O. Box 3119 Midland, Texas 79702 dmbryant@paalp.com
- Copy 5: Curt Stanley Basin Environmental P.O. Box 301 Lovington, New Mexico 88260 cstanley@basinenv.com

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Figures





Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX AND TPH IN SOIL

PLAINS MARKETING, L.P. TNM-KEOHANE PUMP HISTORICAL LEA COUNTY, NEW MEXICO SRS # TNM-KEOHANE PUMP HISTORICAL NMOCD REFERENCE 1RP - 1926

SAMPLE				METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M			
SAMPLE LOCATION	DEPTH (below ground surface)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	M,P- XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	TPH GRO C ₆ - C ₁₂ (mg/Kg)	TPH DRO C ₁₂ - C ₂₈ (mg/Kg)	TPH ORO C ₂₈ - C ₃₅ (mg/Kg)	TOTAL TPH C ₆ - C ₃₅ (mg/Kg)	
Floor @ 4'	4'	08/07/08	In-Situ	< 0.0010	< 0.0021	< 0.0011	< 0.0021	<0.0011	< 0.0021	<15.9	42 9	39.2	82.1	
·	··· * **		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	State States	1 6 1	1. 1. 1. 1. 1. 1.	· ern &		1. S. S. C. P. P.	the of the	بالمراجع والمرتجع			
NMOCD REGULA	TORY STANDA	RD		10					50				5,000	

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Appendices

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Appendix A Laboratory Reports

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Analytical Report 310166

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

TNM-Keohane Pump Historical TNM-Keohane Pump Hist.

18-AUG-08





E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> South Carolina certification numbers: Norcross(Atlanta), GA 98015

> North Carolina certification numbers: Norcross(Atlanta), GA 483

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18-AUG-08



Project Manager: **Camille Reynolds PLAINS ALL AMERICAN EH&S** 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: **310166 TNM-Keohane Pump Historical** Project Address: Lea County, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 310166. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 310166 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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Sample Cross Reference 310166

PLAINS ALL AMERICAN EH&S, Midland, TX

TNM-Keohane Pump Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor @ 4'	S	Aug-07-08 13:50		310166-001



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/

Certificate of Analysis Summary 310166 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: TNM-Keohane Pump Historical

Date Received in Lab: Thu Aug-14-08 04:45 pm

Project Location: Lea County, NM

Project Id: TNM-Keohane Pump Hist.

Contact: Camille Reynolds

Report Date: 18-AUG-08 Project Manager: Brent Barron, 11

				Troject Manager.	Dient Durron, n	
	Lab Id:	310166-001				
Analysis Requested	Field Id:	Floor @ 4'				
Antheryses Acquester	Depth:					
	Matrix:	SOIL				
	Sampled:	Aug-07-08 13.50				
BTEX by EPA 8021B	Extracted:	Aug-15-08 15:30				
	Analyzed:	Aug-16-08 00.04				
L	Units/RL:	mg/kg RL				
Benzene		ND 0 0011				
Toluene		ND 0.0021				
Ethylbenzene		ND 0.0011				
m,p-Xylenes		ND 0.0021				
o-Xylene		ND 0.0011				
Total Xylenes		ND				
Total BTEX		ND				
Percent Moisture	Extracted:					
	Analyzed:	Aug-15-08 17:00				
	Units/RL:	% RL				
Percent Moisture		5.84				
TPH By SW8015 Mod	Extracted:	Aug-15-08 16:45				
1111 by 5 00015 1100	Analyzed:	Aug-16-08 21:01				
	Units/RL:	mg/kg RL				
C6-C12 Gasoline Range Hydrocarbons		ND 15.9				
C12-C28 Diesel Range Hydrocarbons		42.9 15.9				
C28-C35 Oil Range Hydrocarbons		39.2 15.9				
Total TPH		82 1		1		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

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Brent Barron Odessa Laboratory Director



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL(PQL) and above the SQL(MDL).
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- * Outside XENCO'S scope of NELAC Accreditation

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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(210) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
6017 Financial Dr., Norcross, GA 30071	(770) 449-8800	(770) 449-5477



Form 2 - Surrogate Recoveries



Project Name: TNM-Keohane Pump Historical

Vork Order #: 310166		Project II	D: TNM-Keo	hane Pump	Hist.		
Lab Batch #: 731303 Sample:	310166-001 / SMP Ba	tch: 1 Matri	ix: Soil				
Units: mg/kg	SU	RROGATE RI	ECOVERY S	STUDY			
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene	0.0343	0.0300	114	80-120			
4-Bromofluorobenzene	0.0268	0.0300	89	80-120			
		1		00 120			
•			ix: Soil				
Units: mg/kg	SU	RROGATE RI	ECOVERY S	STUDY			
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene	0.0292	0.0300	97	80-120			
4-Bromofluorobenzene	0.0318	0.0300	106	80-120			
Lab Batch #: 731303 Sample:	: 310166-001 SD / MSD Ba	tch: ¹ Matri	ix: Soil	1			
Units: mg/kg		RROGATE RI		STUDY			
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene	0.0291	0.0300	97	80-120			
4-Bromofluorobenzene	0.0322	0.0300	107	80-120			
Lab Batch #: 731303 Sample:	514022-1-BKS / BKS Ba	tch: 1 Matri	ix: Solid				
Units: mg/kg		RROGATE RI		THDY			
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1.4-Difluorobenzene	0.0284	0.0300	95	80-120			
4-Bromofluorobenzenc	0.0289	0.0300	95	80-120			
		1					
Lab Baten #: 731303 Sample: Units: mg/kg							
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene	0.0350	0.0300	117	80-120			
4-Bromofluorobenzene	0.0271	0.0300	90	80-120			

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries



Project Name: TNM-Keohane Pump Historical

Vork Order #: 310166			Project II	D: TNM-Keoł	hane Pump) Hist.				
Lab Batch #: 731303 S	Sample: 514022-1-BSD / 1			ix: Solid						
Units: mg/kg		SU	RROGATE RE	COVERY S	JTUDY					
BTEX by EPA 80)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
Analytes		<u> </u>	<u> </u> '		L	l				
1,4-Difluorobenzene		0.0290	0.0300	97	80-120	I				
4-Bromofluorobenzene		0.0271	0.0300	90	80-120	L				
Lab Batch #: 731290 S Units: mg/kg	Sample: 310166-001 / SM		tch: ¹ Matrix RROGATE RE	ix: Soil	TUNY					
	,			TOVERI S						
TPH By SW8015 Analytes	Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctanc		79.3	100	79	70-135	i				
o-Terphenyl		44.0	50.0	88	70-135	i				
Lab Batch #: 731290 S	Sample: 310167-003 S / N	AS Bat	tch: ¹ Matrix	ix: Soil	<u></u>					
Units: mg/kg		SURROGATE RECOVERY STUDY								
TPH By SW8015 Analytes	Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	!	78.4	100	78	70-135	·				
o-Terphenyl	/	47.6	50.0	78 95	70-135	í				
	/ Sample: 310167-003 SD			ix: Soil						
Units: mg/kg	!	SUI	RROGATE RE	COVERY S	TUDY					
TPH By SW8015 Analytes	Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctanc	· · · · · · · · · · · · · · · · · · ·	81.0	100	81	70-135	í — — —				
o-Terphenyl		48.3	50.0	97	70-135	i				
Lab Batch #: 731290 S	Sample: 514017-1-BKS / 1	BKS Bat	tch: ¹ Matrix	ix: Solid	<u> </u>					
Units: mg/kg		SUI	RROGATE RE	COVERY S	STUDY					
TPH By SW8015 Analytes	Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctanc		80.4	100	80	70-135	i				
o-Terphenyl		46.7	50.0	93	70-135	i				
		1 .	1 · · · ·	1 J	4 1					

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries



Project Name: TNM-Keohane Pump Historical

ork Order #: 310166		Project I	D: TNM-Kee	hane Pump	Hist.				
Lab Batch #: 731290 Sample: 514017-1-BL	K/BLK Ba	itch: 1 Mati	rix: Solid						
Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
Analytes 1-Chlorooctane	82.7	100	83	70-135					
o-Terphenyl	46.4	50.0	93	70-135					
Lab Batch #: 731290 Sample: 514017-1-BSI	D/BSD Ba	tch: 1 Mati	rix: Solid						
Units: mg/kg	SU	RROGATE R	ECOVERY S	STUDY					
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	79.5	100	80	70-135					
o-Terphenyl	46.2	50.0	92	70-135					

** Surrogates outside limits; data and surrogates confirmed by reanalysis *** Poor recoveries due to dilution Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes.





Project Name: TNM-Keohane Pump Historical

Work Order #: 310166 Analyst: ASA	Da	ite Prepar	ed: 08/15/200)8					FNM-Keoh 08/15/2008	ane Pump	Hist.
Lab Batch ID: 731303 Sample: 514022-1-	BKS	Bate	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / B	LANK S	PIKE DUPI	LICATE	RECOVE	ERY STUD	PΥ	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		լոյ		ועז	[E]	Kesun [F]					
Benzene	ND	0.1000	0.1124	112	0.1	0.0997	100	12	70-130	35	
Toluene	ND	0.1000	0.1126	113	0.1	0.0991	99	13	70-130	35	
Ethylbenzene	ND	0.1000	0.1200	120	0.1	0.1084	108	10	71-129	35	
m,p-Xylenes	ND	0.2000	0.2508	125	0.2	0.2234	112	12	70-135	· 35	
o-Xylene	ND	0.1000	0.1153	115	0.1	0.1020	102	12	71-133	35	
Analyst: IRO	Da	ite Prepar	ed: 08/15/200)8			Date A	nalyzed: ()	8/16/2008		
Lab Batch ID: 731290 Sample: 514017-1-	BKS	Batc	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	PIKE / B	LANK S	PIKE DUPI	ICATE	RECOVE	ERY STUE	PΥ	·····
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	844	84	1000	835	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	851	85	1000	839	84	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)| Blank Spike Recovery [D] = 100*(C)/[B] Blank Spike Duplicate Recovery [G] = 100*(F)/[E] All results are based on MDL and Validated for QC Purposes



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Project Name: TNM-Keohane Pump Historical



Work Order # 310166						Project II): TNM-I	Keohane P	ump Hist.		
Lab Batch ID: 731303 Date Analyzed: 08/16/2008	QC- Sample ID: Date Prepared:				tch #: alyst:	1 Matrix ASA	x: Soil				
Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	ND	0.1062	0.0828	78	0.1062	0.0873	82	5	70-130	35	
Toluene	ND	0.1062	0.0810	76	0.1062	0.0844	79	4	70-130	35	1
Ethylbenzene	ND	0.1062	0.0855	81	0.1062	0.0905	85	5	71-129	35	
m,p-Xylenes	ND	0.2124	0.1768	83	0.2124	0.1863	88	6	70-135	35	
o-Xylene	ND	0.1062	0.0781	74	0.1062	0.0832	78	5	71-133	35	
Lab Batch ID: 731290 Date Analyzed: 08/17/2008	QC- Sample ID: Date Prepared:				tch #: alyst:	1 Matrix IRO	k: Soil				
Reporting Units: mg/kg		М	ATRIX SPIKI	E / MATI	RIX SPI	KE DUPLICA'	TE REC	OVERY S	STUDY		
TPH By SW8015 Mod	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]	[0]	[D]	[E]	Acoun [1']	[G]	/0			
C6-C12 Gasoline Range Hydrocarbons	ND	1160	915	79	1160	960	83	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1160	906	78	1160	954	82	5	70-135	35	[

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit





Project Name: TNM-Keohane Pump Historical

Work Order # 310166

Lab Batch #: 731187 Date Analyzed: 08/15/2008 D QC- Sample ID: 310167-001 D	ate Prepared: 08/ Batch #:	15/2008 1	Project ID: TNM-Keohane Pumj Analyst: JLG Matrix: Soil				
Reporting Units: %	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY		
Percent Moisture	Parent Sample Result	Sample Duplicate Result	RPD	Control Limits %RPD	Flag		
Analyte	[A]	[B]					
Percent Moisture	10.1	9.53	6	20			

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes.

Environmental Lab of Te A Xonco Laboratories Company	exas	CHAIN OF C 12600 West I 20 East Odessa, Texas 79765	CUSTODY RECORD AND ANALYSIS REQUEST Phone 432-563-1800 Fax 432-563 1713	
Project Manager.	Ani!		Project Name TNUN - KECHANEPSA	P
	WARELAND JAY		Project & TNH-KESHARE HIS	9 12121(Crt(
Company Address 2 E 90 P	Ains Hum		Project Loc: Fr. (D. N.M PUMP	Hisr
City/State/Zip	a. NM EE	<u>ح</u> ما <u>-</u>	POS PAA - C & BRUAN	
Telephone No 575-4	41-2244 FaxN			-1
Sampler Signature	e-ma			
X	-02 11 RI	- Carenage an	Analyze For	
(lab use only)	1 sur plead	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
ORDER#		Preservation & # of Containers		
(A) (A) (A) (A) (A) (A) (A) (A)	Brejinving Depth Ending Depth Date Sampled Time Sampled	(iliada utinad Dial & cl. Contenent Ita HAC) HAC) MoCH MeE,D, Noon	Obset (Sparety) Openetry Openetry and wave 31-40.09 Openetry and an and an and and and and and and a	
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		╄┊╏┊┊╡ ┊╞╋	┝╂╾╾╂╀╂╂╬╬╋	
Special Instructions	_ _ l		Laboratory Convents	
Removements of Arc. So C/14/08	Time Received by		Cale The Street Headshedd (1864) North Cale North Cale Cale Cale Cale Cale Cale Cale Cale	
Reinquished by Date Reinquished by Date Date	Time Received by Time Received by ELOT	()	Date Time Sample Hand Delivered (T) N by Sampler Clark Rep ? (T) N by Courier? UPS DHL Fodex Lone Star Date Time _ / (2 4 1/455	
	andrea S	am 81"	1408 16 45 Température Upon Receipt 5.5 °C	

Environmental Lab of Texas

Variance/ C	orrective	Action	Report-	Sample	Log-In
-	1-2	_			-

Client	BEGINE TW. 1 Plains
Date/ Time	814.08 16.45
Lab ID # ·	310106
Initials.	OIL

Sample Receipt Checklist

	Sample Receipt	oncernar		Client Initia
¥1	Temperature of container/ cooler?	Yes	No	5.5 .0
:2	Shipping container in good condition?	Yes	No	
# 3	Custody Seals Intact on shipping container/ cooler?	Yes	No	Not Present
4	Custody Seals intact on sample bottles/ container?	(res)	No	Not Present
ŕ5	Chain of Custody present?	(es)	No	
#6	Sample instructions complete of Chain of Custody?	(es)	No	
17	Chain of Custody signed when relinquished/ received?	(Yes)	No	
¥8	Chain of Custody agrees with sample label(s)?	(es)	No	ID written on Cont / Lid
¥9	Container label(s) legible and intact?	Yes	No	Not Applicable
#10	Sample matnx/ properties agree with Chain of Custody?	res	No	
#11	Containers supplied by ELOT?	(es)	No	
#12	Samples in proper container/ bottle?	(es)	No	See Below
#13	Samples properly preserved?	Yes	No	See Balow
#14	Sample bottles intact?	fres)	No	
#15	Preservations documented on Chain of Custody?	(es)	No	
#16	Containers documented on Chain of Custody?	(res)	No	1
#17	Sufficient sample amount for indicated test(s)?	Yes)	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Below
#19	Subcontract of sample(s)?	Yes	No	Not Applicable
#20	VOC samples have zero headspace?	Yes	No	Not Applicable

Variance Documentation

Date/ Time

Contact

Regarding

Corrective Action Taken.

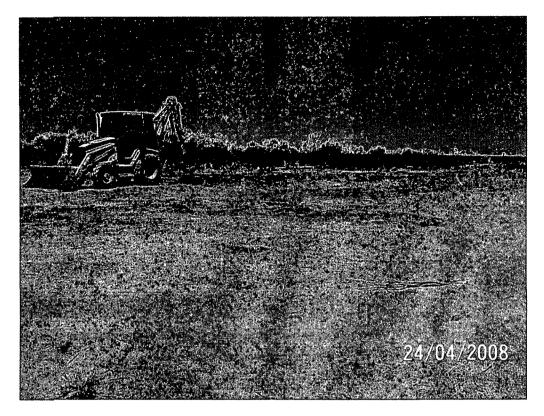
Check all that Apply:

See attached e-mail/ fax

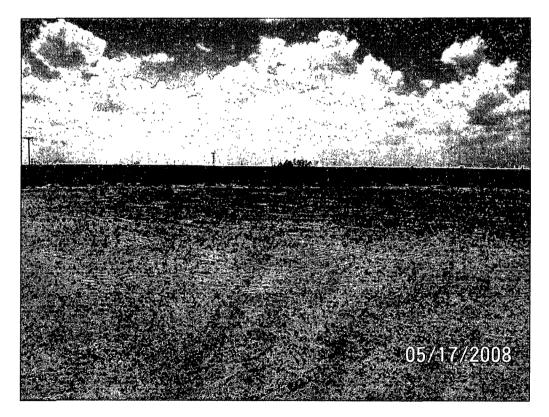
Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

Appendix B Photographs



TNM Keohane Pump Historical – Release Area Prior to Excavation Activities



TNM Keohane Pump Historical – Excavation Activities Completed and Site Contoured

Appendix C Release Notification and Corrective Action (Form C-141)

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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

1220 5. 50. 1181		ITC, 14141 87505		Sa	nta Fe	e, NM 875	05				
			Rele	ease Notific	atior	and Co	orrective A	ction	<i>E</i>		
						OPER	TOR	(x Initi	al Report 🔪 🗌	Final Repo
Name of Co							nille Reynolds		<u> </u>		
						No. 505-441-09	65				
Facility Nar	ne TNM K	Loehane Pun	np Histor	ical		Facility Typ	e Pump				
Surface Ow	ner Danny	Berry		Mineral O	wner E	BLM			Lease N	No.	
				· · · · · · · · · · · · · · · · · · ·				API#	30-02	5-08465-	00-00
Tinit I attau	LOCATION OF RELEASE					County					
Unit Letter O	Section 27	Township 20S	Range 34E	reet nom uie	noiub	Soun Line	Feet from the	L'asv w	rest Luie	Lea	
	1	Latitud	e <u>32° 3</u> 2	2' 15.7"		Longitude	_ <u>103° 32' 41.7</u>	" "		·····	
				NAT	URE	OF REL	EASE				
Type of Rele						Volume of	Release unknow			Recovered	
Source of Re							lour of Occurrence	æ		Hour of Discover	у
Wee Issue !!	A. Notes	<u></u> 0				Unknown If YES, To	W/h am 2		07/24/200	08 @ 9:00	
Was Immedia	ate Notice (Yes 🗌] No 🔲 Not Rea	quired	Larry John					
By Whom? (Camille Bry				-	-	lour 08/07/2008	@ 8:00			<u> </u>
Was a Water		hed?	Yes 🛛] No		If YES, Vo	lume Impacting t	the Wate	rcourse.		
If a Wataraa	The surge Imp	pacted, Descr	ibo Fully ?	*		<u> </u>				· · · · · · · · · · · · · · · · · · ·	
Describe Are	a Affected a	and Cleanup A	Action Tal	ken:* Remediation	in prog	ress.			OB	1 ? 2008 35 0 C	;D
	•				******						
regulations al public health should their o	l operators : or the envir operations have a second	are required to onment. The ave failed to a ddition, NMO	o report an acceptance idequately CD accept	e is true and compl nd/or file certain re cc of a C-141 report investigate and re otance of a C-141 r	lease no t by the mediate	otifications and NMOCD m	ad perform correct arked as "Final R on that pose a thrue the operator of n	tive action eport" do eat to gro responsit	ons for rele oes not reli ound water bility for co	eases which may e ieve the operator o r, surface water, he ompliance with an	endanger of liability uman health
Signature amille Bugart						OIL CONSERVATION DIVISION					
Printed Name	: Camille B	ryant		0-	1	Approved by	District Supervise ENVIR	or:	VTAL EI	Sinfer	
Title: Remedi	ation Coord	linator				Approval Dat	• • •			Date: 10-15	58
E-mail Addre	ss: cjbryant	@paalp.com				Conditions of			`	Attached	
Date: 08/07/2				Phone:505-441-09	965	SUBM	IT FINAL	C.14	ŀι	IRD-	1926
ttach Addit	ional Shee	ts If Necessa	iry		1			\sim (<u> </u>		
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