AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pLWJ1028852512

1RP - 2637

PLAINS MARKETING L.P.

7/29/2016

Leking, Geoffrey R, EMNRD

From: Ben J. Arguijo [bjarguijo@basinenv.com]
Sent: Wednesday, August 17, 2011 11:42 AM
To: Leking, Geoffrey R, EMNRD
Cc: 'Jason Henry'
Subject: FW: WO 425095 / Chevron Grayburg 6" Sec 6
Attachments: Rpt_WO_425095_ver_1_001.pdf; Soil Chemistry Chevron Grayburg 6-Inch Section 6.pdf

Mr. Leking,

Per our telephone conversation a few minutes ago, attached please find the most recent laboratory analytical results and a cumulative data table for the Chevron Grayburg 6" Section 6 release site. If you have any questions, please do not hesitate to contact me.

Respectfully,
Ben J. Arguijo

HOBBS OCD

AUG 17 2011

RECEIVED

Ben J. Arguijo
Project Manager
Basin Environmental
3100 Plains Hwy.
P.O. Box 301
Lovington, NM 88260
p:(575)396-2378 m:(575)441-2124
f:(575)396-1429
bjarguijo@basinenv.com

From: andrea Elam [mailto:andrea.lam@xenco.com]
Sent: Wednesday, August 17, 2011 11:19 AM
To: bjarguijo@basinenv.com; jhenry@paalp.com
Subject: Re: WO 425095 / Chevron Grayburg 6" Sec 6

--
Thank you,
Andrea Elam

Xenco Laboratories
Odessa, Texas
432-563-1800

2637

Analytical Report 425095

HOBBS OCD

AUG 17 2011

RECEIVED

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Chevron Grayburg 6" Sec 6

PPN AFE 14153

17-AUG-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

17-AUG-11

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

Reference: XENCO Report No: **425095**
Chevron Grayburg 6" Sec 6
Project Address: Lea County, NM

Jason Henry:

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 425095. 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. 425095 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

Sample Cross Reference 425095

PLAINS ALL AMERICAN EH&S, Midland, TX

Chevron Grayburg 6" Sec 6

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile	S	08-04-11 06:50		425095-001

CASE NARRATIVE

XENCO Laboratories

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Chevron Grayburg 6" Sec 6

Project ID:	*PPN AFE 14153*	*Report Date:*	*17-AUG-11*
Work Order Number:	*425095*	*Date Received:*	*08/04/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-866400 TPH by SW8015 Mod
SW8015MOD_NM

Batch 866400, 1-Chlorooctane, o-Terphenyl recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 425095-001.

RPD recovered outside QC limits between the sample and sample duplicate for the C12-C28 range and C6-C12 range.

Batch: LBA-867483 BTEX by EPA 8021
SW8021BM

Batch 867483, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 425095-001.
The Laboratory Control Sample for Toluene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 425095

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Chevron Grayburg 6" Sec 6

Project Id: PPN AFE 14153
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Aug-04-11 01:39 pm
Report Date: 17-AUG-11
Project Manager: Brent Barron II

Analysis Requested								
	Lab Id:	425095-001						
	Field Id:	Stockpile						
	Depth:							
	Matrix:	SOIL						
	Sampled:	Aug-04-11 06:50						
BTEX by EPA 8021	*Extracted:*	Aug-16-11 15:45						
	Analyzed:	Aug-16-11 18:41						
	Units/RL:	mg/kg	RL					
Benzene		ND	0.00103					
Toluene		ND	0.00206					
Ethylbenzene		0.00135	0.00103					
m_p-Xylenes		0.00468	0.00206					
o-Xylene		0.00303	0.00103					
Xylenes, Total		0.00771	0.00103					
Total BTEX		0.00906	0.00103					
Inorganic Anions In Soil by E300	*Extracted:*							
	Analyzed:	Aug-04-11 16:21						
	Units/RL:	mg/kg	RL					
Chloride		87.3	10.4					
Percent Moisture	*Extracted:*							
	Analyzed:	Aug-04-11 15:55						
	Units/RL:	%	RL					
Percent Moisture		3.67	1.00					
TPH by SW8015 Mod	*Extracted:*	Aug-04-11 14:15						
	Analyzed:	Aug-04-11 18:49						
	Units/RL:	mg/kg	RL					
C6-C12 Gasoline Range Hydrocarbons		ND	15.5					
C12-C28 Diesel Range Hydrocarbons		329	15.5					
C28-C35 Oil Range Hydrocarbons		18.6	15.5					
Total TPH		348	15.5					

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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 affect the recovery of the spike concentration. This condition could also affect 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 quantiation limit and above the detection limit.

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Orders : 425095,

Project ID: PPN AFE 14153

Lab Batch #: 866400 **Sample:** 425095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/04/11 18:49

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	21.7	99.5	22	70-135	*
o-Terphenyl	11.4	49.8	23	70-135	*

Lab Batch #: 867483 **Sample:** 425095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/11 18:41

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 866400 **Sample:** 609367-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/04/11 15:04

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.0	99.9	94	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 867483 **Sample:** 609987-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/11 18:19

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 866400 **Sample:** 609367-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/04/11 14:07

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	53.8	50.0	108	70-135	

* Surrogate outside of Laboratory QC limits

** 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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Orders : 425095, **Project ID:** PPN AFE 14153

Lab Batch #: 867483 **Sample:** 609987-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/11 16:47

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 866400 **Sample:** 609367-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/04/11 14:36

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	101	125	70-135	
o-Terphenyl	55.8	50.3	111	70-135	

Lab Batch #: 867483 **Sample:** 609987-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/11 17:10

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 867483 **Sample:** 425382-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/11 22:07

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 867483 **Sample:** 425382-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/11 22:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

** 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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Orders : 425095,

Project ID: PPN AFE 14153

Lab Batch #: 866400 **Sample:** 425046-001 D / MD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/04/11 22:57

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.5	109	70-135	
o-Terphenyl	57.1	49.8	115	70-135	

* Surrogate outside of Laboratory QC limits

** 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.

XENCO Laboratories

BS / BSD Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Order #: 425095 **Project ID:** PPN AFE 14153

Analyst: ASA **Date Prepared:** 08/16/2011 **Date Analyzed:** 08/16/2011

Lab Batch ID: 867483 **Sample:** 609987-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 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
Benzene	<0.00100	0.100	0.109	109	0.100	0.111	111	2	70-130	35	
Toluene	<0.00200	0.100	0.0949	95	0.100	0.0983	98	4	70-130	35	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.106	106	4	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.208	104	0.200	0.213	107	2	70-135	35	
o-Xylene	<0.00100	0.100	0.0964	96	0.100	0.0996	100	3	71-133	35	

Analyst: BRB **Date Prepared:** 08/04/2011 **Date Analyzed:** 08/04/2011

Lab Batch ID: 866421 **Sample:** 866421-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions In Soil by E300 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
Chloride	<1.00	20.0	21.8	109	20.0	22.0	110	1	75-125	20	

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Order #: 425095 **Project ID:** PPN AFE 14153

Analyst: BEV **Date Prepared:** 08/04/2011 **Date Analyzed:** 08/04/2011

Lab Batch ID: 866400 **Sample:** 609367-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	<15.0	1000	937	94	1010	974	96	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	919	92	1010	934	92	2	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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Order #: 425095
Lab Batch #: 866421
Project ID: PPN AFE 14153
Date Analyzed: 08/04/2011
Date Prepared: 08/04/2011
Analyst: BRB
QC- Sample ID: 425048-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	417	201	625	103	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Chevron Grayburg 6" Sec 6

Work Order # : 425095 **Project ID:** PPN AFE 14153

Lab Batch ID: 867483 **QC- Sample ID:** 425382-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/16/2011 **Date Prepared:** 08/16/2011 **Analyst:** ASA

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021 **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
Benzene	<0.000997	0.0997	0.0871	87	0.101	0.0875	87	0	70-130	35	
Toluene	<0.00199	0.0997	0.0641	64	0.101	0.0692	69	8	70-130	35	X
Ethylbenzene	<0.000997	0.0997	0.0544	55	0.101	0.0654	65	18	71-129	35	X
m_p-Xylenes	<0.00199	0.199	0.0995	50	0.201	0.125	62	23	70-135	35	X
o-Xylene	<0.000997	0.0997	0.0447	45	0.101	0.0544	54	20	71-133	35	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative 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

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Chevron Grayburg 6" Sec 6

Work Order #: 425095

Lab Batch #: 866421 **Project ID:** PPN AFE 14153

Date Analyzed: 08/04/2011 16:21 **Date Prepared:** 08/04/2011 **Analyst:** BRB

QC- Sample ID: 425048-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions In Soil by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	417	418	0	20	

Lab Batch #: 866401

Date Analyzed: 08/04/2011 10:47 **Date Prepared:** 08/04/2011 **Analyst:** BRB

QC- Sample ID: 425037-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	<1.00	<1.00	0	20	

Lab Batch #: 866400

Date Analyzed: 08/04/2011 22:57 **Date Prepared:** 08/04/2011 **Analyst:** BEV

QC- Sample ID: 425046-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

TPH by SW8015 Mod	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	54.3	23.5	79	35	F
C12-C28 Diesel Range Hydrocarbons	1590	505	104	35	F
C28-C35 Oil Range Hydrocarbons	31.9	30.3	5	35	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Ben Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dakotah Ward e-mail: bjarguijo@basinenv.com

Project Name: Chevron Grayburg 6" Sec 6
Project #: PPN AFE 14153
Project Loc: Lea County, NM
PO #: PAA-J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 425095

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 80158	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	Chlorides		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	Stockpile			8/4/2011	0650		1	X								Soil	X											X			X

Special Instructions: Run TPH, Hold for BTEX

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotah Ward	8/4/11	1:39	L. Hernandez	8/4/11	1:39

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

407 CG
Temperature Upon Receipt: 3.6 °C

Final 1.001

XENCO Laboratories

XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains
Date/Time: 8/4/11 1:39
Lab ID #: 425095
Initials: AH

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	(Yes)	No	(N/A) AH	
17. VOC sample have zero head space?	Yes	No	(N/A)	

18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 3.6 °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

Contact: _____ Contacted by: _____ Date/Time: _____

Regarding: _____

Corrective Action Taken: #16 pub CL to Xenco Houston

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis