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TALON LPE

Closure Report
Energy Transfer Partners: CAL AB Launcher
|2RP-2778|

August 15, 2016

Prepared By:

TALON/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

Prepared For:

Energy Transfer Partners

2RP - 2778

Mr. Mike Bratcher
NMOCD District II
811 S. 1st Street
Artesia, NM 88210

Subject: **Remedial Activities and Closure Report**
Energy Transfer Partners
CAL AB Launcher

Dear Mr. Bratcher

Energy Transfer Partners (Energy Transfer) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remediation activities and closure request are submitted herein.

Site Information

The Regency Cal AB Launcher release is located approximately thirty-four (34) miles south of Carlsbad, New Mexico. The legal location for this site is Unit Letter A, Section 8, Township 26 South, and Range 29 East in Eddy County New Mexico. More specifically the latitude and longitude for the release are 32.062333 North and -104.001110 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of the Dev-Pima complex with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is made up of Holocene to upper Pleistocene alluvium. Drainage courses in this area are normally dry.

Ground Water and Site Ranking

According to the New Mexico Office of the State Engineer the ground water in this area is approximately 75-feet below ground surface (BGS). The referenced ground water data is presented in Appendix II. Given the proximity to surface water in this area the ranking for this site is a **20** based on the following:

Depth to ground water	50'-100'
Wellhead Protection Area	>1000'
Distance to surface water body	200-1000'

Based upon the site ranking of **20**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 100 mg/kg for TPH and 1,000 mg/kg for total chlorides.

Incident Description

On January 10, 2015 a vacuum truck driver attempted to load condensate into the Regency pipeline. The driver attached the hose to the wrong valve and sprayed condensate in an approximate 200-foot radius. Subsequent precipitation events in the area caused the fluid to flow down gradient across a Kinder Morgan Right-of-Way (ROW) and into a draw in the direction of the Pecos River.

Upon notification of proper Regency personnel, Talon was contacted to conduct an emergency response and to contain the release. Oil sorbent booms were placed in the draw at the end of the flow path in the draw, at an additional location further down the draw and around the sumps on location to insure containment should a large precipitation event occur. The heavily impacted material on the upper launcher location (including the soil on Kinder Morgan's ROW) was scraped up and stockpiled. The stockpiled soil was covered in plastic and berms were constructed around the stockpile to insure nothing would run-off. A vacuum truck was then dispatched to recover the free standing fluid in the sumps.

Once the impacted area was contained and it was determined that the river was not impacted, Talon personnel conducted soil sampling at the launcher location as well as soil and rain water sampling within the draw (which has since evaporated) where it had pooled.

Initial Remedial Actions

Per BLM request the soil samples were analyzed for TPH, BTEX, Chlorides, and RCRA 8 Metals Total analysis. The analysis of RCRA Metals indicated concentrations that were of concern to the BLM. At the direction of the BLM additional background sampling was performed utilizing previous analytical methods to demonstrate that the concentration of metals was widespread, pre-existing, and not exclusively associated with the Regency release (laboratory reports for both events can be found in Appendix VI. The laboratory analysis of the background samples was provided to the BLM. Following several discussions on a course of action to take with regard to the indicated heavy metal contamination, the BLM in a letter dated January 15, 2016 agreed that the background level of heavy metals were "comparative" to the concentration of metals found in the flow path.

In the letter dated January 15, 2016 the BLM provided a decision stating that "...The heavy metals are still an environmental concern and a separate investigation into their origin will be conducted..." Concluding additionally that "...Regency release cleanup can proceed..." with the following stipulations:

1. That Regency comply with all State and Federal requirements regarding cleanup and waste disposal activities.

2. That Regency provide a disposal plan to the BLM detailing testing and disposal options.
3. That Regency will gain the approval of the Work Plan from the NMOCD and that approval be forwarded to Ms. Terry Gregston of the BLM prior to beginning work on the final stages of the cleanup.

Initially, with permission of the BLM, the hydrocarbon and chloride contamination in the draw was excavated to a depth of 1-foot bgs. All of the excavated material was stockpiled on a poly liner on the upper launcher spill location. Following this excavation, confirmation samples were taken within the flow path and at four background locations (sample locations are shown on the site map in Appendix I). These soil samples were analyzed for TPH, BTEX, Chlorides and the RCRA 8 Metals using the TCLP analytical method. The TCLP was used to help characterize the metals in the contaminated soil to aid in determining the proper disposal method for the material. The sample locations are labeled C-1 through C-6 and the background locations are labeled BC-1 through BC-4. Additionally, a composite of the spoils pile was also taken for waste disposal characterization.

Laboratory Results

See Appendix VI for complete report of laboratory results.

1/29/2015 through 2/23/2015

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	94.4	247	2870	13300
S-2	0	59.4	474	1960	9110
S-3	0	ND	5200	ND	588
S-4	0	ND	10.7	ND	ND
S-5	0	ND	828	20.1	1670
S-6	0	ND	1720	ND	80.1
S-7	0	ND	4670	ND	55.3
S-1 D	0	0.00898	1870	62.9	1660
S-2 D	0	0.00455	353	527	11500
S-3 D	0	0.0713	62.2	1140	13600
S-4 D	0	ND	45	ND	18.6
S-5 D	0	0.03	371	809	13500
S-6 D	0	0.00619	937	98.5	3450

(ND) Analyte Not Detected
(D) Draw

10/29/2015

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	86.6	149	389	9720
S-2	0	0.327	74.4	252	4680
S-3	0	ND	ND	ND	ND
S-4	0	ND	ND	ND	ND
S-5	0	0.536	114	389	7040
S-6	0	ND	1520	ND	ND
S-7	0	ND	4370	ND	ND
S-1 D	0	0.0518	23.1	85.8	691
S-2 D	0	0.729	69.2	306	7850
S-3 D	0	0.0825	823	118	2850
S-4 D	0	ND	499	ND	ND
S-5 D	0	ND	1160	ND	ND
S-6 D	0	ND	1210	ND	ND

11/18/15 Confirmation Sampling (Draw)

Sample ID	Depth (feet)	BTEX	Chlorides	Total TPH	Hg	As	Ba	Cd	Cr	Pb	Se	Ag
C-1	1	ND	3.74	ND	ND	ND	0.364	ND	ND	ND	ND	ND
C-2	1	ND	10.4	ND	ND	ND	0.242	ND	ND	ND	ND	ND
C-3	1	ND	15.1	ND	ND	ND	0.308	ND	ND	ND	ND	ND
C-5	1	ND	3.25	ND	ND	ND	0.366	ND	ND	ND	ND	ND
C-6	1	ND	ND	ND	ND	ND	0.632	ND	ND	ND	ND	ND
BC-1	1	ND	2.66	ND	ND	ND	0.269	ND	ND	ND	ND	ND
BC-2	1	ND	ND	ND	ND	ND	0.279	ND	ND	ND	ND	ND
BC-3	1	ND	2.58	ND	ND	ND	0.214	ND	ND	ND	ND	ND
BC-4	1	ND	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND

Confirmation Sampling (Location)

Sample ID	Depth (feet)	BTEX	Chlorides	Total TPH	Hg	As	Ba	Cd	Cr	Pb	Se	Ag
C-1	1	0.0073	259	1250	ND	0.254	ND	ND	ND	ND	ND	ND
C-1	1.5	--	--	17.9	--	--	--	--	--	--	--	--
C-2	1	ND	106	33.8	ND	ND	0.3	ND	ND	ND	ND	ND
C-3	1	ND	24.5	ND	ND	ND	0.402	ND	ND	ND	ND	ND
C-4	1	ND	3.12	ND	ND	ND	0.705	ND	ND	ND	ND	ND
C-5	1	ND	303	ND	ND	ND	0.318	ND	ND	ND	ND	ND
C-6	1	ND	748	ND	ND	ND	0.186	ND	ND	ND	ND	ND
C-7	1	ND	1050	ND	ND	ND	0.136	ND	ND	ND	ND	ND
C-7	1.5	--	629	--	--	--	--	--	--	--	--	--

(ND) Analyte Not Detected
(--) Analyte Not Tested

Waste Disposal

As shown by the TCLP analysis of the stock piled soil excavated from the draw, the soil removed from this site was not characterized as hazardous waste. The laboratory results from the stockpile sample along with a form C-138 was sent to Lea Land, LLC for review and approval of waste acceptance. Upon approval of the C-138 all excavated material was hauled to Lea Land, LLC (an NMOCD approved solid waste disposal facility) for disposal. A copy of the approved C-138 and disposal manifests can be found in Appendix IV.

Generated Soil Stockpile

Sample ID	Depth (feet)	BTEX	Chlorides	Total TPH	Hg	As	Ba	Cd	Cr	Pb	Se	Ag
SP-1	Composite	ND	24	ND	ND	ND	0.399	ND	ND	ND	ND	ND

(ND) Analyte Not Detected

Remedial Actions Taken

- The impacted area within the draw was excavated to a depth of 1-foot BGS. Confirmation soil samples were taken at the bottom of the excavation to insure that all impacts above NMOCD RRAL'S was successfully removed.

- Upon receipt of permission from BLM and NMOCD, the draw was backfilled with top soil, contoured to match the surrounding terrain, and seeded with BLM #1 seed mixture. Erosional control berms were also constructed per BLM stipulations.

- The impacted area on location was excavated to a depth of 1-foot BGS. Confirmation soil samples were taken at the bottom of the excavation at sample locations C-1 through C-7.

- The laboratory results from the confirmation soil sampling carried out on the location showed that the areas in the vicinity of sample locations C-1 and C-7 were above NMOCD RRAL'S for TPH and Chlorides respectively. These areas further were excavated to a depth of 1.5-feet BGS and resampled.

- Following the second round of confirmation sampling on the location, laboratory results indicated that all soil above NMOCD RRAL's had been successfully removed.

- Upon receipt of permission from BLM and NMOCD the location was backfilled with caliche and berms were constructed to prevent any future releases from entering the draw.

Closure

On behalf of Energy Transfer Partners we respectfully request that no further actions be required and that closure with regard to this release be granted.

If we can provide additional information or be of further assistance, please contact our office at (575)-746-8768.

Respectfully submitted,

TALON/LPE

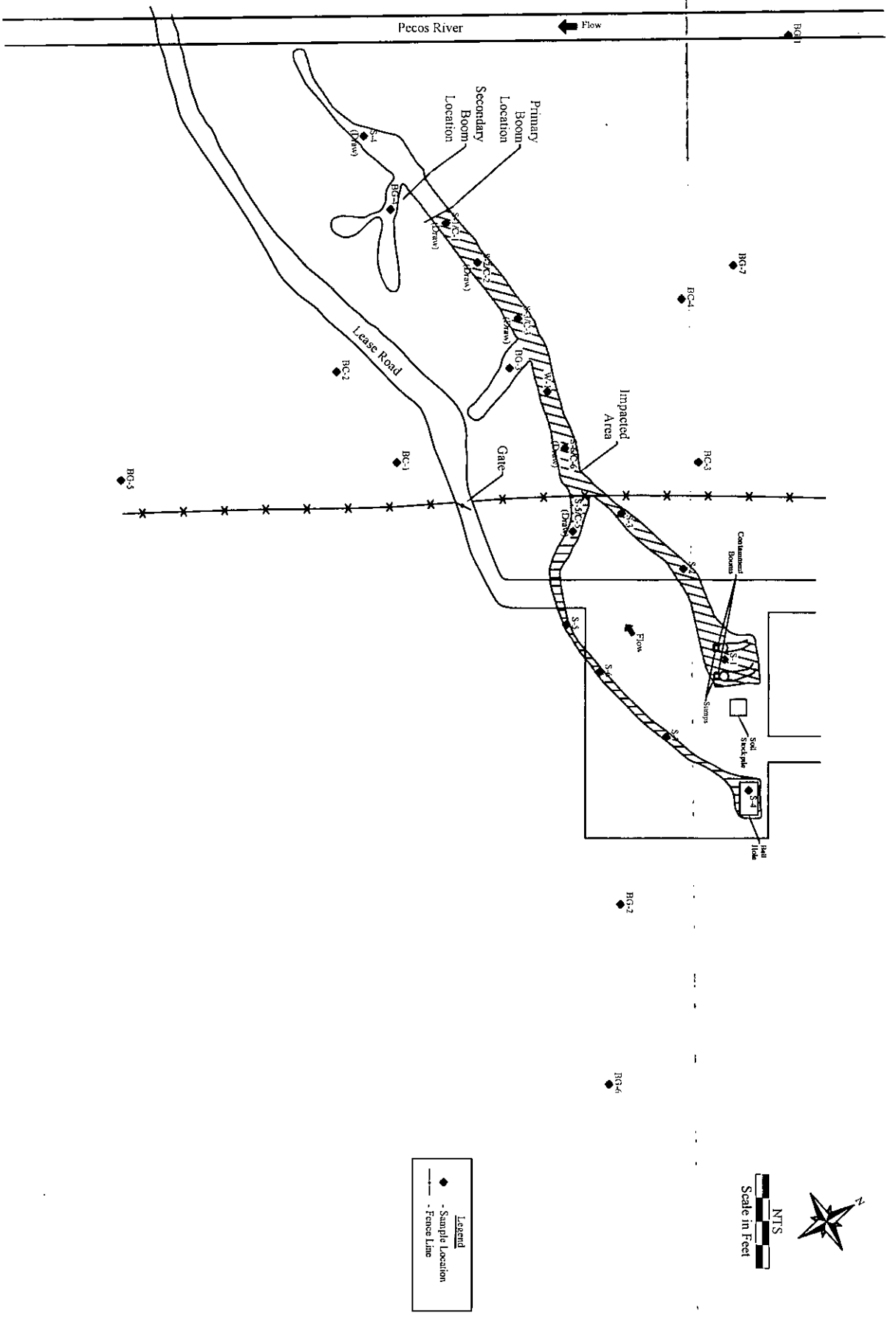
Sheldon Hitchcock
Project Manager

David J. Adkins
District Manager

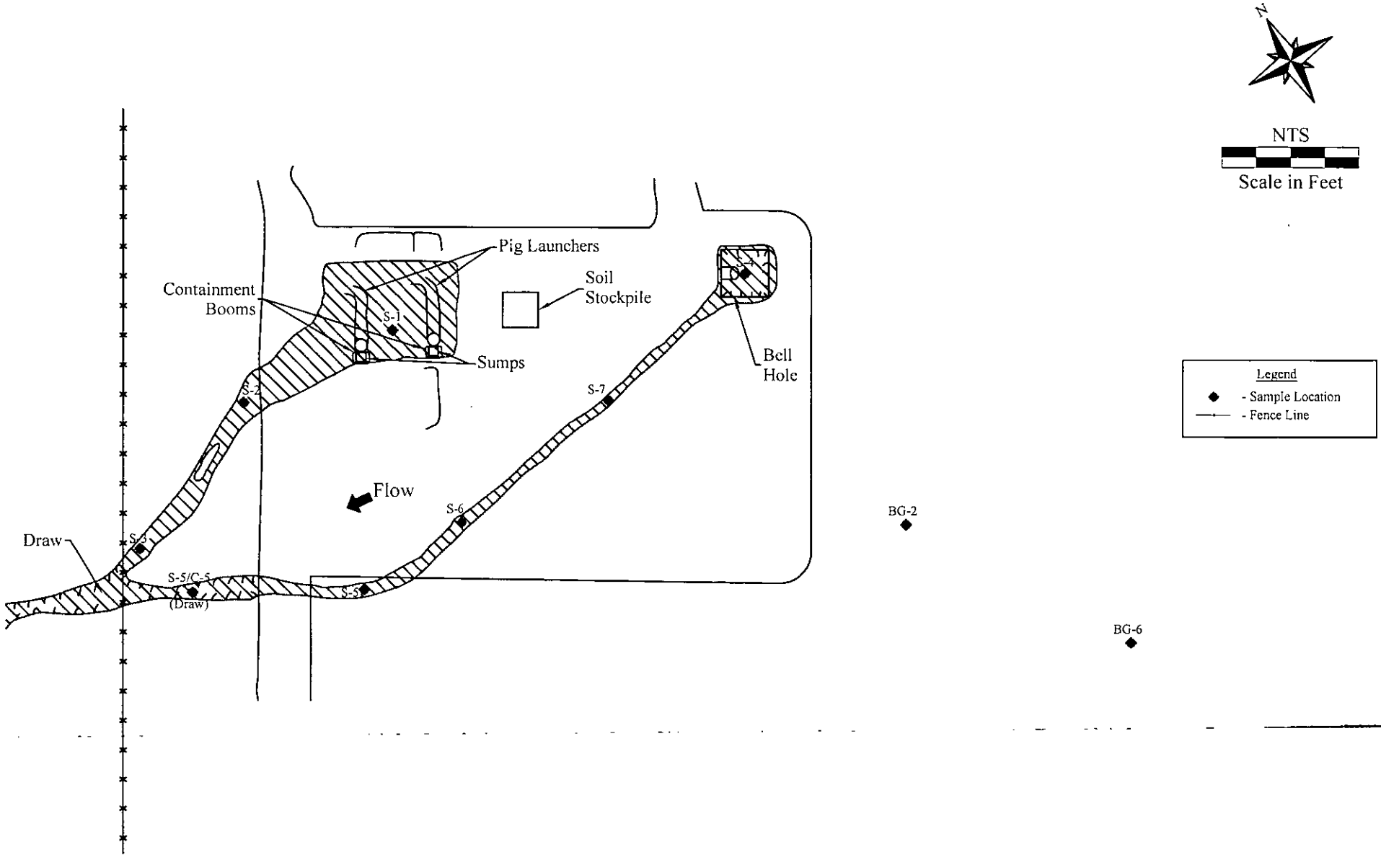
Attachments

Appendix I	Site Plan
Appendix II	Groundwater Data
Appendix III	Initial & Final C-141
Appendix IV	Approved C-138 & Disposal Manifests
Appendix V	Seed Label
Appendix VI	Laboratory Reports

APPENDIX I-SITE PLAN



TALON LPE	Date: 11/30/2015 Scale: NTS Drawn By: TJS	Cal A B Launcher Spill Southern Union Gas Eddy County, New Mexico Figure 3 - Site Plan



TALON LPE

Date:	07/21/2015
Scale:	NTS
Drawn By:	TJS

Cal A B Launcher Spill

Southern Union Gas
Eddy County, New Mexico
Figure 2 - Site Plan


Energy Transfer
Cal AB Launcher
Legend
Arch Area
Boom Location
Sample Location
BG-7
S-4 (draw)
Second Boom Location
First Boom Location
S-1 (draw)/C-1
BG-4
S-2 (draw)/C-2
BC-4
S-3 (draw)/C-3
BC-3
BG-3
S-3
W-1
S-2
S-6 (draw)/C-6
S-1
S-5 (draw)/C-5
S-7
S-4
S-6
S-5
BC-2
BC-1
BG-2
BG-5
Google earth
© 2015 Google
N
BG-6
400 ft

APPENDIX II-GROUNDWATER DATA

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	Code	County	Q 64	Q 16	Q 4	Sec	Twws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03507 POD1	C		ED	1	3	3	05	26S	29E	593064	3548313	1445	140	78	62
C 03508 POD1	C		ED	1	3	3	05	26S	29E	593063	3548361	1464	140	75	65
C 02894	C		ED	2	2	3	12	26S	28E	590458	3547061*	4026	240		
C 02160 S8			ED	2	3	3	12	26S	28E	590056	3546653*	4508	200	120	80
C 01668			ED		3	3	12	26S	28E	589957	3546554*	4630	250	100	150

Average Depth to Water: **93 feet**

Minimum Depth: **75 feet**

Maximum Depth: **120 feet**

Record Count: 5

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 594416 **Northing (Y):** 3547801 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

APPENDIX III-INITIAL C-141& FINAL C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 30 2015
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

fAB1503426369
nAB1503426578

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Regency Gas 29875	Contact Rachel Johnson
Address P.O. Box 1226 Jal, NM 88252	Telephone No. 325-514-2636
Facility Name: Cal AB Launcher	Facility Type Pipeline launcher and receiver

Surface Owner NMBLM	Mineral Owner NMBLM	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
"A"	8	26S	29E					Eddy County

Latitude 32.002158 **Longitude** -103.973977

NATURE OF RELEASE

Type of Release: Condensate	Volume of Release: Unknown	Volume Recovered: 0
Source of Release:	Date and Hour of Occurrence: 1/10/15	Date and Hour of Discovery: 1/10/15
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken. * On January 10, 2015 a vacuum truck driver attempted to load condensate into the Regency pipeline. Driver attached the hose to the wrong valve and sprayed condensate within a approx.. 200ft radius. Driver made notifications to the appropriate Regency personnel. The affected area was not remediated in a timely manner; therefore creating a flow path crossing the Kinder Morgan ROW and finally reaching the ravine connecting to the Pecos River. Upon the notifications to Rachel Johnson, Regency Environmental Specialist for the area, Talon and a crew were dispatched. The affected soil has been sampled, area has been assessed, sumps and containments emptied, buoys placed in the ravine, and stockpile set on plastic and covered with plastic. Regency piping area has been berned and buoyed to avoid further runoff at this time.

Describe Area Affected and Cleanup Action Taken.* Runoff from the piping ran into the ravine and is 1000ft from reaching the Pecos River. Buoys have been placed in the ravine to prevent further damage.

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

Signature: Rachel Johnson	OIL CONSERVATION DIVISION
Printed Name: Rachel Johnson	Approved by Environmental Specialist:
Title: Environmental Specialist	Approval Date: 2/2/15 Expiration Date:
E-mail Address: rachel.johnson@regencygas.com	Conditions of Approval: Attached ☐
Date: 1/30/15 Phone: 325-514-2636 (cell)	Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/2/15

* Attach Additional Sheets If Necessary

2RP-2778

APPENDIX IV-

APPROVED C-138 & DISPOSAL MANIFESTS

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Energy Transfer Partners: 600 N. Marienfeld Str. Ste 700 Midland, TX 79701

2. **Originating Site:**
Cal AB Launcher

3. **Location of Material (Street Address, City, State or ULSTR):**
A-S8-T26S-R29E

4. **Source and Description of Waste:**
Excavated soil generated during the remediation of a condensate release.

Estimated Volume 910 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Johnnie Bradford, representative or authorized agent for Energy Transfer Partners do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load*

☐ RCRA Non-Exempt: *Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by* characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Johnnie Bradford, representative for Energy Transfer Partners, LP do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Talon/LPE (0308669)

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lea Land, LLC WM-1-035

Address of Facility: MM 64, HW4 62/180 East, Carlsbad, NM 88220

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Saralyn Hall TITLE: Mktg. Manager DATE: 1/21/16

SIGNATURE: Saralyn Hall TELEPHONE NO.: 405-519-1187

Surface Waste Management Facility Authorized Agent

Energy Transfer Weights Statement - Total Received

Receive Date	*Manifest Number*	*Lease Name*	*Weight (lbs.)*	*Weight (Tons)*
3/15/2016	113779	Cal A B Launcher	36,460	18.23
3/15/2016	113780	Cal A B Launcher	40,720	20.36
3/15/2016	113781	Cal A B Launcher	36,980	18.49
3/15/2016	113782	Cal A B Launcher	37,280	18.64
3/15/2016	113783	Cal A B Launcher	38,120	19.06
3/15/2016	113784	Cal A B Launcher	39,460	19.73
3/15/2016	113785	Cal A B Launcher	39,180	19.59
3/15/2016	113786	Cal A B Launcher	37,760	18.88
3/15/2016	113809	Cal A B Launcher	39,880	19.94
3/15/2016	113810	Cal A B Launcher	42,040	21.02
3/15/2016	113811	Cal A B Launcher	38,720	19.36
3/15/2016	113812	Cal A B Launcher	41,720	20.86
3/15/2016	113813	Cal A B Launcher	42,360	21.18
3/15/2016	113814	Cal A B Launcher	37,920	18.96
3/15/2016	113815	Cal A B Launcher	39,260	19.63
3/15/2016	113816	Cal A B Launcher	35,920	17.96
3/16/2016	113850	Cal A B Launcher	86,060	43.03
3/16/2016	113851	Cal A B Launcher	87,520	43.76
3/16/2016	113852	Cal A B Launcher	78,400	39.20
3/16/2016	113853	Cal A B Launcher	74,860	37.43
3/16/2016	113854	Cal A B Launcher	72,980	36.49
3/16/2016	113855	Cal A B Launcher	82,520	41.26
3/16/2016	113856	Cal A B Launcher	73,780	36.89
3/16/2016	113857	Cal A B Launcher	40,920	20.46
3/17/2016	113899	Cal A B Launcher	158,620	79.31
3/17/2016	113900	Cal A B Launcher	39,040	19.52
3/17/2016	113901	Cal A B Launcher	41,960	20.98
3/17/2016	113902	Cal A B Launcher	40,240	20.12
3/17/2016	113903	Cal A B Launcher	40,340	20.17
3/17/2016	113904	Cal A B Launcher	40,340	20.17
3/17/2016	113905	Cal A B Launcher	43,680	21.84
3/17/2016	113906	Cal A B Launcher	38,820	19.41
		Cal A B Launcher	1,663,860 *lbs.*	831.93 *Tons*

Lea Land Landfill New Mexico
Mile Market # 64 US Highway 62/180
*30 miles East of Carlsbad, NM * (505) 887-4048*

Energy Transfer - Caliche

Receive Date	*Lease Name*	*Weight (Tons)*
3/15/2015	Cal A B Launcher	330.42
3/16/2015	Cal A B Launcher	330.54
3/17/2015	Cal A B Launcher	399.05
		1,060.01
		Tons

Lea Land Landfill New Mexico
Mile Market # 64 US Highway 62/180
*30 miles East of Carlsbad, NM * (505) 887-4048*

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Manny

NON-HAZARDOUS WASTE MANIFEST NO 113779 | 1. PAGE __ OF __ | 2. TRAILER NO. # 3327

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non-Hazardous Waste	1	CM			
b.					
c.					
d. WT: 36,460 34,680					

12. COMMENTS OR SPECIAL INSTRUCTIONS: J.M.
~~CALEB~~ LAUNCHER job: 701583144.01
CALAB

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME José M García	PRINTED/TYPED NAME
SIGNATURE DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:10

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 H.B

NON-HAZARDOUS WASTE MANIFEST NO 113780 | 1. PAGE__OF__ | 2. TRAILER NO. # 04

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 40720					

12. COMMENTS OR SPECIAL INSTRUCTIONS: J.M.
~~CALEB~~ LAUNCHER job: 701583144.0
CAI AB

13. WASTE PROFILE NO.

TREATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Cristo T	PRINTED/TYPED NAME
SIGNATURE Cristo T DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL	DATE	TIME
Daniel Gonzales		3/15/2016	11:15

GENERATOR: COPIES 1 & 6 DISPOSAL SIT

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113781 | 1. PAGE__OF__ | 2. TRAILER NO. #321

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non-Hazardous Waste	1	CM			
b.					
c.					
d. WT: 36,980					

12. COMMENTS OR SPECIAL INSTRUCTIONS: ~~CALEB LAUNCHER~~ job: 701583144.01 CAI A-B

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately descri shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according international and national government regulations, including applicable state regulations, and are the same materials previously approved b

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Alvaro Ramos	PRINTED/TYPED NAME
SIGNATURE DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:25

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPOR

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113782 | 1. PAGE__OF__ | 2. TRAILER NO. 322

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 37,280					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
~~CALEB~~ LAUNCHER job: 701583144.0 |
Cal A B

13. WASTE PROFILE NO.

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receip
PRINTED/TYPED NAME [signature]	PRINTED/TYPED NAME
SIGNATURE [signature] DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
[signature]		3/15/2016	11:30

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORT

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113783 | 1. PAGE __ OF __ | 2. TRAILER NO. 316

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 38,120					

12. COMMENTS OR SPECIAL INSTRUCTIONS: ~~CALEB~~ LAUNCHER job: 701583144.01 CAI AB

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGEN
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Luis Limon	PRINTED/TYPED NAME
SIGNATURE Luis Limon DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:30

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPI

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Gemini

NON HAZARDOUS WASTE MANIFEST NO 113784 | 1. PAGE __ OF __ | 2. TRAILER NO. 319

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WI: 39,460					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
~~CALEB~~ LAUNCHER job: 701583144.01
CAL A B

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

TRANSPORTER

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Moises Gonzalez	PRINTED/TYPED NAME
SIGNATURE Moises Gonzalez DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:35

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113785 | 1. PAGE __ OF __ | 2. TRAILER NO. #313

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,180					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
~~CALEB~~ LAUNCHER job: 701583144.01 CALAB	

TREATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME JASON D	PRINTED/TYPED NAME
SIGNATURE [signature] DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:35

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Talon

NON-HAZARDOUS WASTE MANIFEST NO 113786 | 1. PAGE __ OF __ | 2. TRAILER NO. 180901

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 37,760					

12. COMMENTS OR SPECIAL INSTRUCTIONS: ~~CALEB~~ LAUNCHER job: 701583144.01 Cal AB

13. WASTE PROFILE NO.

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Bill Riggs	PRINTED/TYPED NAME
SIGNATURE Bill Riggs DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/15/2016	11:45

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Manny

NON-HAZARDOUS WASTE MANIFEST NO 113809 | 1. PAGE __ OF __ | 2. TRAILER NO. #27

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,880					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALEB LAUNCHER job: 701583144.02
CALAB

13. WASTE PROFILE NO.

GENERATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the conten shipping name and are classified, packed, marked, and labeled, and are in all respects international and national government regulations, including applicable state regulati

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME José M Garcia	PRINTED/TYPED NAME
SIGNATURE DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CEL	DATE	TIME
Santos Gonzalez		3/15/2016	300

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: C TRAN

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

H B

NON-HAZARDOUS WASTE MANIFEST NO 113810 | 1. PAGE ___ OF ___ | 2. TRAILER NO. # 04

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non-Hazardous Waste	1	CM			
b.					
c.					
d. WT: 4240					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
~~CALEB~~ LAUNCHER job: 701583144.02 CA1AB	

TOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME CRISTO T	PRINTED/TYPED NAME
SIGNATURE Cristo T DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Sandra Dooley		3/15/2016	

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113811 | 1. PAGE __ OF __ | 2. TRAILER NO. 321

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 38720					

12. COMMENTS OR SPECIAL INSTRUCTIONS: ~~CALEB~~ LAUNCHER job: 701583144.02 CA1 AB

13. WASTE PROFILE NO.

TOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME ~~Alvaro Ramos~~	PRINTED/TYPED NAME
SIGNATURE ~~Alvaro Ramos~~ DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Landon Langley		3/15/2016	3:15

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113812 | 1. PAGE __ OF __ | 2. TRAILER NO. 322

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 41720					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALEB LAUNCHER job: 701583144.02
CALAB

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HO
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE.	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt
PRINTED/TYPED NAME [signature]	PRINTED/TYPED NAME
SIGNATURE [signature] DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
[signature]		3/15/2016	3:30

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORT

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113813 | 1. PAGE __ OF __ | 2. TRAILER NO. 319

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 42,340					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
~~CALEB~~ LAUNCHER job: 701583144.02
CAL AB

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by prop shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LL

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Moises Gonzalez	PRINTED/TYPED NAME:
SIGNATURE: Moises Gonzalez DATE: 3/15/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Daniel Gonzalez		3/15/2016	3:45

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113814 | 1. PAGE __ OF __ | 2. TRAILER NO. 313

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste.	1	CM			
b.					
c.					
d. WT: 37,920					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALEB LAUNCHER job: 701583144.02
CAT A B

13. WASTE PROFILE NO.

TREATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents f this consignment are fully and accurately desc shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway accordi international and national government regulations, including applicable state regulations, and are the same materials previously approved

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME ADAM D	PRINTED/TYPED NAME
SIGNATURE Adam D DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Dustin Dooley		3/15/2016	3:50

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTE

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Talon

NON-HAZARDOUS WASTE MANIFEST NO 113815 | 1. PAGE __ OF __ | 2. TRAILER NO# 180901

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,710					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
~~CALEB~~ LAUNCHER job: 701583144.02 CALAB	

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Bill Riggs	PRINTED/TYPED NAME:
SIGNATURE: Bill Riggs DATE: 3/15/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/15/2016	3:50

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113816 | 1. PAGE __ OF __ | 2. TRAILER NO. 316

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/15/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 35,920					

12. COMMENTS OR SPECIAL INSTRUCTIONS: ~~CALEB~~ LAUNCHER job: 701583144.02 CA/AB

13. WASTE PROFILE NO.

TOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Luis Limon	PRINTED/TYPED NAME
SIGNATURE Luis Limon DATE 3/15/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzales		3/15/2016	3:55

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113850 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 319

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd # 400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 41,560 44,500					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALE A B LAUNCHER job # 701583144.02 T@ 8L0L0

13. WASTE PROFILE NO.

TRANSPORTER

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Moises Gonzalez	PRINTED/TYPED NAME
SIGNATURE Moises Gonzalez DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:15

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

H.B

NON-HAZARDOUS WASTE MANIFEST NO 113851 | 1. PAGE __ OF __ | 2. TRAILER NO. #4

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 4,560 45,960					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CALE A.B LAUNCHER job # 701583144.02 T@ 87,520	

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Cristo T	PRINTED/TYPED NAME
SIGNATURE DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:25

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113852 | 1. PAGE __ OF __ | 2. TRAILER NO. #321

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,920 38,480					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CALE A B LAUNCHER job # 701583144.02 T@ 78,400	

GENERATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EME
Kin Slaughter	575-887-4048	

GENERATOR

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Alvaro Ramos S	PRINTED/TYPED NAME
SIGNATURE Alvaro Ramos DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:35

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORT : COPI

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini #316

NON-HAZARDOUS WASTE MANIFEST NO 113853 | 1. PAGE __ OF __ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterr	3/16/2016
PHONE NO.	CITY	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio TX 78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste		CM			
b.					
c.					
d. WT: 37,000 37,860					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALB A B LAUNCHER job #:701583144.02 T@ 74,860

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EME
Kin Slaughter	575-887-4048	

15. *GENERATOR'S CERTIFICATION:* I Hereby declare that the conten shipping name and are classified, packed, marked, and labeled, and are in all respects international and national government regulations, including applicable state regulati

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED TYPED NAME: Luis Limon	PRINTED/TYPED NAME:
SIGNATURE: Luis Limon DATE: 3/16/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE			TIME
Santos Gonzales			11:40

GENERATOR: COPIES 1 & 6 DISPOSA

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113854 | 1. PAGE __ OF __ | 2. TRAILER NO. #322

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,220 33,760					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CALL A B LAUNCHER job # 701583144.02 T@ 5298

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately descri roper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway accordin t international and national government regulations, including applicable state regulations, and are the same materials previously approved b LLC

PRINTED/TYPED NAME	SIGNATURE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME [illegible]	PRINTED/TYPED NAME
SIGNATURE [illegible] DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:45

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

HB

NON-HAZARDOUS WASTE MANIFEST NO 113855 | 1. PAGE __ OF __ | 2. TRAILER NO. #001

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 43160 39,360					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CALE A B LAUNCHER job # 701583144.02 T@ 82520	

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME J. Estrada	PRINTED/TYPED NAME
SIGNATURE J. Estrada DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11.45

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113856 | 1. PAGE __ OF __ | 2. TRAILER NO. 313

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
dWT: 36,420 37,110					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CALE A B LAUNCHER job # 701583144.02 T@ 73780	

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME ADAM J	PRINTED/TYPED NAME
SIGNATURE DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:55

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Talon

NON-HAZARDOUS WASTE MANIFEST NO 113857 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 180901

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/16/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 40,920					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CALEA B LAUNCHER job # 701583144.02	

GENERATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kip Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7428	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Byl Riggs	PRINTED/TYPED NAME
SIGNATURE Bill Riggs DATE 3/16/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/16/2016	11:55

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 TALON LPE

NON-HAZARDOUS WASTE MANIFEST NO 113899 | 1. PAGE __ OF __ | 2. TRAILER NO. 1142

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 31,320 27300					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02 Total 58620	

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME: BILLY STILES	PRINTED/TYPED NAME:
SIGNATURE: Billy Stiles DATE: 3/17/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Antos	—	3/17/2016	1120

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

HB

NON-HAZARDOUS WASTE MANIFEST NO 113900 | 1. PAGE __ OF __ | 2. TRAILER NO. 001

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39040					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

TOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17 TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Estrada	PRINTED/TYPED NAME:
SIGNATURE: Estrada DATE: 3/17/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/17/2016	1130

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

HB 04

NON-HAZARDOUS WASTE MANIFEST NO 113901 | 1. PAGE __ OF __ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 41960					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: J. Cristo T	PRINTED/TYPED NAME
SIGNATURE: J. Cristo T DATE 3/17/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/17/2016	1135

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

MANNY

NON-HAZARDOUS WASTE MANIFEST NO 113902 | 1. PAGE __ OF __ | 2. TRAILER NO 427

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 40240					

12. COMMENTS OR SPECIAL INSTRUCTIONS: CAL A.B LAUNCHER job # 701583144.02

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME José M Garcia	PRINTED/TYPED NAME
SIGNATURE DATE 3/17/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/17/2016	1140

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

07

NON-HAZARDOUS WASTE MANIFEST NO 113903 | 1. PAGE __ OF __ | 2. TRAILER NO. ST07

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 46340					

12. COMMENTS OR SPECIAL INSTRUCTIONS: CAL A B LAUNCHER job # 701583144.02

13. WA

TO

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accur shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highw international and national government regulations, including applicable state regulations, and are the same materials previously

PRINTED/TYPED NAME	SIGNATURE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Rogelio Silva	PRINTED/TYPED NAME:
SIGNATURE: Rogelio Silva DATE: 3/17/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/17/2016	1140

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSP

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113904 | 1. PAGE __ OF __ | 2. TRAILER NO. 313

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c					
d. WT: 40340					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

GENERATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME [signature]	PRINTED/TYPED NAME
SIGNATURE [signature] DATE 3/17/2016	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
[signature]	✓	3/17/2016	1145

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 113905 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 322

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 43680					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

TREATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Emilio Alvarez	PRINTED/TYPED NAME
SIGNATURE Emilio Alvarez DATE 3/17/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/17/2016	1150

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Resume

NON-HAZARDOUS WASTE MANIFEST NO 113906 | 1. PAGE __ OF __ | 2. TRAILER NO. 317

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/17/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 38,820					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CAL A B LAUNCHER job # 701583144.02

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512).673-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME Robert D. Ragland	PRINTED/TYPED NAME
SIGNATURE Robert D. Ragland DATE 3/17/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
[illegible]	—	3/17/2016	1200

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

Energy Transfer Weights Statement - Total Received

Receive Date	*Manifest Number*	*Lease Name*	*Weight (lbs.)*	*Weight (Tons)*
3/21/2016	113973	Cal A B Launcher	39,740	19.87
3/22/2016	114005	Cal A B Launcher	27,780	13.89
3/22/2016	114006	Cal A B Launcher	35,180	17.59
3/22/2016	114012	Cal A B Launcher	35,520	17.76
3/22/2016	114015	Cal A B Launcher	35,760	17.88
3/23/2016	114040	Cal A B Launcher	76,400	38.20
3/23/2016	114041	Cal A B Launcher	52,360	26.18
		Cal A B Launcher	302,740 *lbs.*	151.37 *Tons*

Lea Land Landfill New Mexico
Mile Market # 64 US Highway 62/180
*30 miles East of Carlsbad, NM * (505) 887-4048*

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Talon

NON-HAZARDOUS WASTE MANIFEST NO 113973 | 1. PAGE __ OF __ | 2. TRAILER NO. 180901

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400			3/21/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39740					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144:02	

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Bill Ross	PRINTED/TYPED NAME:
SIGNATURE: Bill Ross DATE: 3/21/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/21/2016	120

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPI

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Talon

NON-HAZARDOUS WASTE MANIFEST NO 114005 | 1. PAGE __ OF __ | 2. TRAILER NO. 1142

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/22/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
dWT: 27780					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

TOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Billy Stites	PRINTED/TYPED NAME:
SIGNATURE:	SIGNATURE:
DATE: 3/22/2016	DATE:

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Dantan Gutierrez		3/22/2016	145

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Gemini

NON-HAZARDOUS WASTE MANIFEST NO 114006 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 313

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/22/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d.W.T: 35,180					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A.B LAUNCHER job # 701583144.02	

TRANSPORTER

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME: Adam D	PRINTED/TYPED NAME:
SIGNATURE: Adam D DATE: 3/22/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Daniel Hiveros		3/22/2016	235

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST NO 114012 | 1. PAGE __ OF __ | 2. TRAILER NO. 322

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. #400	3/22/2016
PHONE NO.	CITY / STATE / ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio / TX / 78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 35520					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
CAL A-B LAUNCHER job # 701583144.02

13. WASTE PRO

TRANSPORTER

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO	24-HOUR EM R
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME: Enrique Rodriguez	PRINTED/TYPED NAME:
SIGNATURE: Enrique Rodriguez DATE: 3/22/2016	SIGNATURE: DATE:

DISPOSAL FACILITY

FACILITY	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
	—	3/22/2016	235

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTE

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Talon

NON-HAZARDOUS WASTE MANIFEST NO 114015 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 18091

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/22/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 35760					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02	

TREATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 673-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Bill Biggs	PRINTED/TYPED NAME
SIGNATURE Bill Biggs DATE 3/22/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
		3/22/2016	300

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Talon

NON-HAZARDOUS WASTE MANIFEST NO 114040 | 1. PAGE__OF__ | 2. TRAILER NO. 18D9d

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/23/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 37,900 38,500					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02 T@ 76,400	

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7429	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Bill Russ	PRINTED/TYPED NAME
SIGNATURE Bill Russ DATE 3/23/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos L Gonzalez		3/23/2016	10:55

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTER ES 4 & 5

COPY

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 TALON

NON-HAZARDOUS WASTE MANIFEST NO 114041 | 1. PAGE __ OF __ | 2. TRAILER NO. 1142

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Energy Transfer Co.	800 E. Sonterra Blvd. # 400			3/23/2016
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(210) 403-7300	San Antonio	TX	78258	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 27,580 24,780					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
CAL A B LAUNCHER job # 701583144.02 T@ 52,360	

TREATOR

14. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TALON LPE	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: ROBBIE DeROSIER	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (512) 873-7428	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Billy Stites	PRINTED/TYPED NAME
SIGNATURE Billy Stites DATE 3/23/2016	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		3/23/2016	11:15

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS 4 & 5

COPY 1

APPENDIX V-SEED LABEL

Curtis and Curtis, Inc.
4500 North Prince
Clovis, NM 88101
Phone: (575) 762-4759
www.curtisseed.com

3/17/16 RM

Talon / LPE, LTD
4 Acre BLM #1, Drilled Rate
2 - 2 Acre Bags @ 18.93 Bulk Pounds Each
Job "SUG Cal AB Launcher 701583.144.02 Eddy Cty"

Lot#: M-13521

Item	Origin	Purity	Germ	Dormant	Total Germination	Test Date	Total PLS Pounds
Blue Grama VNS	New Mexico	17.61%	88.00%	2.00%	90.00%	03/16	6.00
Sand Dropseed VNS	New Mexico	11.01%	23.00%	73.00%	96.00%	11/15	4.00
Sideoats Grama El Reno	Texas	53.91%	98.00%	0.00%	98.00%	09/15	20.00

Other Crop: 0.21%
Weed Seed: 0.28%
Inert Matter: 16.98%

There Are 2 Bags For This Mix
This Bag Weighs 18.93 Bulk Pounds
Use This Bag For 2 Acres

Total Bulk Pounds: 38

Curtis and Curtis, Inc.
4500 North Prince
Clovis, NM 88101
Phone: (575) 762-4759
www.curtisseed.com

3/17/16 RM

Talon / LPE, LTD
4 Acre BLM #1, Drilled Rate
2 - 2 Acre Bags @ 18.93 Bulk Pounds Each
Job "SUG Cal AB Launcher 701583.144.02 Eddy Cty"

Lot#: M-13521

Item	Origin	Purity	Germ	Dormant	Total Germination	Test Date	Total PLS Pounds
Blue Grama VNS	New Mexico	17.61%	88.00%	2.00%	90.00%	03/16	6.00
Sand Dropseed VNS	New Mexico	11.01%	23.00%	73.00%	96.00%	11/15	4.00
Sideoats Grama El Reno	Texas	53.91%	98.00%	0.00%	98.00%	09/15	20.00

Other Crop: 0.21%
Weed Seed: 0.28%
Inert Matter: 16.98%

There Are 2 Bags For This Mix
This Bag Weighs 18.93 Bulk Pounds
Use This Bag For 2 Acres

Total Bulk Pounds: 38

APPENDIX VI-LABORATORY RESULTS

Analytical Report 501565

for

Talon/LPE Co.

Project Manager: Melissa Decker

Cal AB Launcher

701583.144.01

27-FEB-15

Collected By: Client

XENCO Laboratories

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

XENCO Laboratories

27-FEB-15

Project Manager: **Melissa Decker**
Talon/LPE Co.
2901 S State Highway 349
Midland, TX 79706

Reference: XENCO Report No(s): **501565**
Cal AB Launcher
Project Address: Malaga,NM

Melissa Decker:

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(s) 501565. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 501565 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,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 501565

Talon/LPE Co., Midland, TX

Cal AB Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BG-1	S	01-30-15 10:00	- 0 ft	501565-001
W-1 Draw	W	01-29-15 23:00		501565-002
W-1 Draw Voa	W	01-29-15 23:03		501565-003
S-1-0'	S	01-29-15 23:09	- 0 ft	501565-004
S-2-0'	S	01-29-15 23:12	- 0 ft	501565-005
S-3-0'	S	01-29-15 23:16	- 0 ft	501565-006
S-4-0'	S	01-30-15 09:30	- 0 ft	501565-007
S-5-0'	S	01-30-15 09:32	- 0 ft	501565-008
S-6-0' Draw	S	01-30-15 09:34	- 0 ft	501565-009
S-1-0' Draw	S	01-29-15 23:25	- 0 ft	501565-010
S-2-0' Draw	S	01-29-15 23:30	- 0 ft	501565-011
S-3-0' Draw	S	01-29-15 23:35	- 0 ft	501565-012
S-4-0' Draw	S	01-30-15 09:40	- 0 ft	501565-013
S-5-0' Draw	S	01-30-15 09:45	- 0 ft	501565-014
Sump	S	01-29-15 23:40		501565-015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: 27-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	501565-001		501565-002		501565-003		501565-004		501565-005		501565-006	
	Field Id:	BG-1		W-1 Draw		W-1 Draw Voa		S-1-0'		S-2-0'		S-3-0'	
	Depth:	0 ft						0 ft		0 ft		0 ft	
	Matrix:	SOIL		WATER		WATER		SOIL		SOIL		SOIL	
	Sampled:	Jan-30-15 10:00		Jan-29-15 23:00		Jan-29-15 23:03		Jan-29-15 23:09		Jan-29-15 23:12		Jan-29-15 23:16	
BTEX by EPA 8021B	*Extracted:*					Jan-30-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00	
	Analyzed:					Jan-30-15 21:34		Feb-03-15 09:31		Feb-03-15 09:47		Feb-03-15 04:04	
	Units/RL:					mg/L	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene						0.309	0.00100	1.49	0.249	ND	0.249	ND	0.000998
Toluene						0.395	0.00200	22.5	0.498	10.0	0.498	ND	0.00200
Ethylbenzene						0.0447	0.00100	9.47	0.249	6.19	0.249	ND	0.000998
m,p-Xylenes						0.340	0.00200	42.6	0.498	32.3	0.498	ND	0.00200
o-Xylene						0.129	0.00100	18.3	0.249	10.9	0.249	ND	0.000998
Total Xylenes						0.469	0.00100	60.9	0.249	43.2	0.249	ND	0.000998
Total BTEX						1.22	0.00100	94.4	0.249	59.4	0.249	ND	0.000998
Inorganic Anions by EPA 300/300.1 SUB: E871002	*Extracted:*	Feb-07-15 12:00		Jan-31-15 13:36				Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00	
	Analyzed:	Feb-08-15 04:52		Jan-31-15 13:36				Feb-08-15 05:07		Feb-08-15 05:22		Feb-08-15 14:42	
	Units/RL:	mg/kg	RL	mg/L	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		121	13.3	21000	1000			247	24.1	474	44.4	5200	498
Mercury by EPA 7470A SUB: T104704295-TX	*Extracted:*					Feb-04-15 10:00							
	Analyzed:					Feb-04-15 12:45							
	Units/RL:					mg/L	RL						
Mercury						ND	0.000500						
Mercury by SW 7471A SUB: T104704295-TX	*Extracted:*							Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00	
	Analyzed:							Feb-04-15 14:14		Feb-04-15 14:16		Feb-04-15 14:18	
	Units/RL:							mg/kg	RL	mg/kg	RL	mg/kg	RL
Mercury								0.0385	0.00356	0.0255	0.00318	0.0939	0.00371

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: 27-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	501565-001		501565-002	501565-003		501565-004		501565-005		501565-006	
	Field Id:	BG-1		W-1 Draw	W-1 Draw Voa		S-1-0'		S-2-0'		S-3-0'	
	Depth:	0 ft					0 ft		0 ft		0 ft	
	Matrix:	SOIL		WATER	WATER		SOIL		SOIL		SOIL	
	Sampled:	Jan-30-15 10:00		Jan-29-15 23:00	Jan-29-15 23:03		Jan-29-15 23:09		Jan-29-15 23:12		Jan-29-15 23:16	
Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*	Feb-03-15 09:30			Feb-03-15 06:15		Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30	
	Analyzed:	Feb-03-15 13:20			Feb-03-15 12:37		Feb-03-15 13:22		Feb-03-15 13:32		Feb-03-15 13:34	
	Units/RL:	mg/kg	RL		mg/L	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Arsenic		2.38	0.574		ND	0.100	4.60	0.580	1.55	0.538	4.10	0.612
Barium		148	0.574		1.38	0.100	248	0.580	137	0.538	552	0.612
Cadmium		ND	0.287		ND	0.0500	0.389	0.290	ND	0.269	0.428	0.306
Chromium		5.97	0.287		0.0730	0.0500	4.61	0.290	3.10	0.269	8.17	0.306
Lead		7.06	0.688		ND	0.120	13.3	0.697	5.91	0.646	9.35	0.735
Selenium		ND	0.574		ND	0.100	ND	0.580	ND	0.538	ND	0.612
Silver		ND	0.229		ND	0.0400	ND	0.232	ND	0.215	ND	0.245
Percent Moisture	*Extracted:*											
	Analyzed:	Feb-02-15 17:15					Feb-02-15 17:15		Feb-02-15 17:15		Feb-02-15 17:15	
	Units/RL:	%	RL				%	RL	%	RL	%	RL
Percent Moisture		24.9	1.00				17.2	1.00	9.85	1.00	19.9	1.00
TPH By SW8015 Mod	*Extracted:*				** ** ** **		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00	
	Analyzed:				Feb-02-15 10:05		Feb-03-15 09:26		Feb-03-15 09:48		Feb-02-15 23:16	
	Units/RL:				mg/L	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons					270	15.0	2870	74.9	1960	74.9	ND	14.9
C12-C28 Diesel Range Hydrocarbons					3140	15.0	13300	74.9	9110	74.9	558	14.9
C28-C35 Oil Range Hydrocarbons					16.0	15.0	1630	74.9	1110	74.9	70.1	14.9
Total TPH					3430	15.0	17800	74.9	12200	74.9	628	14.9

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: 27-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested		501565-007		501565-008		501565-009		501565-010		501565-011		501565-012	
	Field Id:	S-4-0'		S-5-0'		S-6-0' Draw		S-1-0' Draw		S-2-0' Draw		S-3-0' Draw	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-30-15 09:30		Jan-30-15 09:32		Jan-30-15 09:34		Jan-29-15 23:25		Jan-29-15 23:30		Jan-29-15 23:35	
BTEX by EPA 8021B	*Extracted:*	Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00	
	Analyzed:	Feb-03-15 04:20		Feb-03-15 12:09		Feb-03-15 04:53		Feb-03-15 05:09		Feb-03-15 05:26		Feb-03-15 05:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000992	ND	0.00100	0.00111	0.000994	0.00148	0.000996	0.00169	0.000996	0.00189	0.000996
Toluene		ND	0.00198	ND	0.00200	0.00285	0.00199	0.00330	0.00199	0.00286	0.00199	0.00424	0.00199
Ethylbenzene		ND	0.000992	ND	0.00100	ND	0.000994	ND	0.000996	ND	0.000996	0.00379	0.000996
m,p-Xylenes		ND	0.00198	ND	0.00200	0.00223	0.00199	0.00212	0.00199	ND	0.00199	0.0288	0.00199
o-Xylene		ND	0.000992	ND	0.00100	ND	0.000994	0.00208	0.000996	ND	0.000996	0.0326	0.000996
Total Xylenes		ND	0.000992	ND	0.00100	0.00223	0.000994	0.00420	0.000996	ND	0.000996	0.0614	0.000996
Total BTEX		ND	0.000992	ND	0.00100	0.00619	0.000994	0.00898	0.000996	0.00455	0.000996	0.0713	0.000996
Inorganic Anions by EPA 300/300.1 SUB: E871002	*Extracted:*	Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00	
	Analyzed:	Feb-08-15 06:24		Feb-08-15 07:10		Feb-08-15 14:57		Feb-08-15 15:12		Feb-08-15 15:28		Feb-08-15 15:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		10.7	2.39	828	55.7	937	75.3	232	25.9	353	27.4	62.2	11.3
Mercury by SW 7471A SUB: T104704295-TX	*Extracted:*	Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00	
	Analyzed:	Feb-04-15 14:20		Feb-04-15 14:22		Feb-04-15 14:24		Feb-04-15 14:26		Feb-04-15 14:28		Feb-04-15 14:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Mercury		0.0396	0.00327	0.0179	0.00371	0.0323	0.00561	0.00632	0.00383	0.00860	0.00418	0.00878	0.00351

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: 27-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	501565-007		501565-008		501565-009		501565-010		501565-011		501565-012	
	Field Id:	S-4-0'		S-5-0'		S-6-0' Draw		S-1-0' Draw		S-2-0' Draw		S-3-0' Draw	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-30-15 09:30		Jan-30-15 09:32		Jan-30-15 09:34		Jan-29-15 23:25		Jan-29-15 23:30		Jan-29-15 23:35	
Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*	Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30	
	Analyzed:	Feb-03-15 13:37		Feb-03-15 13:39		Feb-03-15 13:42		Feb-03-15 13:44		Feb-03-15 13:46		Feb-03-15 13:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Arsenic		3.22	0.565	3.16	0.645	5.31	0.812	2.43	0.549	4.81	0.641	2.28	0.536
Barium		224	0.565	176	0.645	173	0.812	166	0.549	114	0.641	142	0.536
Cadmium		0.407	0.282	0.323	0.323	0.430	0.406	ND	0.274	0.359	0.320	ND	0.268
Chromium		5.86	0.282	5.18	0.323	8.65	0.406	3.76	0.274	4.47	0.320	2.73	0.268
Lead		11.4	0.678	9.31	0.775	8.75	0.974	4.49	0.659	6.51	0.769	3.14	0.643
Selenium		ND	0.565	ND	0.645	ND	0.812	ND	0.549	ND	0.641	ND	0.536
Silver		0.265	0.226	0.684	0.258	ND	0.325	ND	0.220	ND	0.256	ND	0.214
Percent Moisture	*Extracted:*												
	Analyzed:	Feb-02-15 17:15		Feb-02-15 17:15		Feb-02-15 17:15		Feb-02-15 17:15		Feb-02-15 17:15		Feb-02-15 17:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		16.5	1.00	28.3	1.00	46.9	1.00	22.8	1.00	27.1	1.00	11.2	1.00
TPH By SW8015 Mod	*Extracted:*	Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00	
	Analyzed:	Feb-02-15 23:38		Feb-03-15 00:46		Feb-03-15 01:09		Feb-03-15 01:32		Feb-03-15 10:11		Feb-03-15 10:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.0	20.1	15.0	98.5	15.0	62.9	15.0	527	75.0	1140	74.9
C12-C28 Diesel Range Hydrocarbons		ND	15.0	1670	15.0	3160	15.0	1660	15.0	11500	75.0	13600	74.9
C28-C35 Oil Range Hydrocarbons		ND	15.0	123	15.0	195	15.0	149	15.0	933	75.0	981	74.9
Total TPH		ND	15.0	1810	15.0	3450	15.0	1870	15.0	13000	75.0	15700	74.9

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: *27-FEB-15*
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	501565-013		501565-014		501565-015					
	Field Id:	S-4-0' Draw		S-5-0' Draw		Sump					
	Depth:	0 ft		0 ft							
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jan-30-15 09:40		Jan-30-15 09:45		Jan-29-15 23:40					
BTEX by EPA 8021B	***Extracted:***	Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00					
	Analyzed:	Feb-03-15 05:59		Feb-03-15 06:15		Feb-03-15 08:10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.000992	0.00155	0.000994	6.63	1.25				
Toluene		ND	0.00198	0.00592	0.00199	125	2.50				
Ethylbenzene		ND	0.000992	ND	0.000994	43.6	1.25				
m,p-Xylenes		ND	0.00198	0.0144	0.00199	205	2.50				
o-Xylene		ND	0.000992	0.00634	0.000994	77.7	1.25				
Total Xylenes		ND	0.000992	0.0207	0.000994	283	1.25				
Total BTEX		ND	0.000992	0.0282	0.000994	458	1.25				
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Feb-07-15 12:00		Feb-07-15 12:00		Feb-07-15 12:00					
	Analyzed:	Feb-08-15 15:59		Feb-08-15 16:14		Feb-08-15 17:00					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		45.0	2.62	371	35.5	3710	998				
Mercury by SW 7471A SUB: T104704295-TX	***Extracted:***	Feb-04-15 10:00		Feb-04-15 10:00		Feb-04-15 10:00					
	Analyzed:	Feb-04-15 14:37		Feb-04-15 14:39		Feb-04-15 14:41					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Mercury		0.00525	0.00398	0.0213	0.00541	0.0166	0.00313				

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 501565

Talon/LPE Co., Midland, TX

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Melissa Decker
Project Location: Malaga,NM

Date Received in Lab: Fri Jan-30-15 03:12 pm
Report Date: *27-FEB-15*
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	501565-013		501565-014		501565-015			
	Field Id:	S-4-0' Draw		S-5-0' Draw		Sump			
	Depth:	0 ft		0 ft					
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Jan-30-15 09:40		Jan-30-15 09:45		Jan-29-15 23:40			
Metals per ICP by SW846 6010B SUB: T104704295-TX	***Extracted:***	Feb-03-15 09:30		Feb-03-15 09:30		Feb-03-15 09:30			
	Analyzed:	Feb-03-15 13:52		Feb-03-15 13:54		Feb-03-15 14:03			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Arsenic		2.77	0.637	3.58	0.785	ND	0.249		
Barium		120	0.637	185	0.785	1.49	0.249		
Cadmium		0.440	0.319	0.424	0.393	ND	0.124		
Chromium		8.09	0.319	5.70	0.393	0.323	0.124		
Lead		7.44	0.765	7.60	0.942	ND	0.299		
Selenium		ND	0.637	ND	0.785	ND	0.249		
Silver		ND	0.255	0.424	0.314	ND	0.0995		
Percent Moisture	***Extracted:***								
	Analyzed:	Feb-02-15 17:15		Feb-02-15 17:15					
	Units/RL:	%	RL	%	RL				
Percent Moisture		23.8	1.00	43.7	1.00				
TPH By SW8015 Mod	***Extracted:***	Feb-02-15 16:00		Feb-02-15 16:00		Feb-02-15 16:00			
	Analyzed:	Feb-03-15 02:39		Feb-03-15 10:56		Feb-03-15 03:25			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	15.0	809	74.9	14300	1500		
C12-C28 Diesel Range Hydrocarbons		18.6	15.0	13500	74.9	113000	1500		
C28-C35 Oil Range Hydrocarbons		ND	15.0	1250	74.9	10600	1500		
Total TPH		18.6	15.0	15600	74.9	138000	1500		

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565,

Project ID: 701583.144.01

Lab Batch #: 960786 **Sample:** 501565-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 21:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0354	0.0300	118	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 960788 **Sample:** 501565-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 02/02/15 10:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.5	9.99	125	70-135	
o-Terphenyl	3.84	4.99	77	70-135	

Lab Batch #: 960901 **Sample:** 501565-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/02/15 23:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	99.6	97	70-135	
o-Terphenyl	50.1	49.8	101	70-135	

Lab Batch #: 960901 **Sample:** 501565-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/02/15 23:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.0	99.9	93	70-135	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 960901 **Sample:** 501565-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 00:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-135	
o-Terphenyl	51.9	49.9	104	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.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565,

Project ID: 701583.144.01

Lab Batch #: 960901 **Sample:** 501565-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 01:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.7	104	70-135	
o-Terphenyl	51.1	49.9	102	70-135	

Lab Batch #: 960901 **Sample:** 501565-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 01:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-135	
o-Terphenyl	54.9	49.9	110	70-135	

Lab Batch #: 960901 **Sample:** 501565-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 02:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.8	100	70-135	
o-Terphenyl	51.4	49.9	103	70-135	

Lab Batch #: 960901 **Sample:** 501565-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 03:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	1190	1000	119	70-135	
o-Terphenyl	561	500	112	70-135	

Lab Batch #: 960905 **Sample:** 501565-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 04:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	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.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565, **Project ID:** 701583.144.01

Lab Batch #: 960905 **Sample:** 501565-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 04:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 960905 **Sample:** 501565-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 04:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 960905 **Sample:** 501565-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 05:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 960905 **Sample:** 501565-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 05:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 960905 **Sample:** 501565-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 05:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0354	0.0300	118	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.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565, **Project ID:** 701583.144.01

Lab Batch #: 960905 **Sample:** 501565-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 05:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 960905 **Sample:** 501565-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 06:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 960905 **Sample:** 501565-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 08:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 960901 **Sample:** 501565-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 09:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.8	126	70-135	
o-Terphenyl	63.2	49.9	127	70-135	

Lab Batch #: 960905 **Sample:** 501565-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 09:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565, **Project ID:** 701583.144.01

Lab Batch #: 960905 **Sample:** 501565-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 09:47

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 960901 **Sample:** 501565-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 09:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.8	115	70-135	
o-Terphenyl	47.2	49.9	95	70-135	

Lab Batch #: 960901 **Sample:** 501565-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 10:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	39.1	50.0	78	70-135	

Lab Batch #: 960901 **Sample:** 501565-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 10:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.9	105	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 960901 **Sample:** 501565-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 10:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.9	104	70-135	
o-Terphenyl	46.2	50.0	92	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.

Version: 1.%

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565,

Project ID: 701583.144.01

Lab Batch #: 960905 **Sample:** 501565-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 12:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

Lab Batch #: 960786 **Sample:** 667865-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 17:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 960788 **Sample:** 667869-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 19:49

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	5.83	5.00	117	70-135	

Lab Batch #: 960901 **Sample:** 667906-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/02/15 18:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

Lab Batch #: 960905 **Sample:** 667913-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/03/15 02:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	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.

Version: 1.%

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565, **Project ID:** 701583.144.01

Lab Batch #: 960786 **Sample:** 667865-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 18:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0348	0.0300	116	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 960788 **Sample:** 667869-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 20:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	5.25	5.00	105	70-135	

Lab Batch #: 960901 **Sample:** 667906-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/02/15 18:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	56.8	50.0	114	70-135	

Lab Batch #: 960905 **Sample:** 667913-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/03/15 02:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 960786 **Sample:** 667865-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 18:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	

* 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.

Version: 1.%

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565,

Project ID: 701583.144.01

Lab Batch #: 960788 **Sample:** 667869-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 20:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	10.0	109	70-135	
o-Terphenyl	5.94	5.00	119	70-135	

Lab Batch #: 960901 **Sample:** 667906-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/02/15 19:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	59.5	50.0	119	70-135	

Lab Batch #: 960905 **Sample:** 667913-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/03/15 02:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 960786 **Sample:** 501447-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 18:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0313	0.0300	104	80-120	

Lab Batch #: 960901 **Sample:** 501574-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/02/15 20:11

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.9	126	70-135	
o-Terphenyl	63.1	50.0	126	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 501565, **Project ID:** 701583.144.01

Lab Batch #: 960905 **Sample:** 501565-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 03:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	80-120	

Lab Batch #: 960786 **Sample:** 501447-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 01/30/15 18:49

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0315	0.0300	105	80-120	

Lab Batch #: 960901 **Sample:** 501574-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/02/15 20:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.8	101	70-135	
o-Terphenyl	45.9	49.9	92	70-135	

Lab Batch #: 960905 **Sample:** 501565-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/03/15 03:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	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.

Blank Spike Recovery

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Lab Batch #: 961346 **Sample:** 688214-1-BKS **Matrix:** Solid

Date Analyzed: 02/08/2015 **Date Prepared:** 02/07/2015 **Analyst:** BHRE

Reporting Units: mg/kg **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	20.0	20.6	103	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Analyst: ARM **Date Prepared:** 01/30/2015 **Date Analyzed:** 01/30/2015

Lab Batch ID: 960786 **Sample:** 667865-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0987	99	0.100	0.102	102	3	70-125	25	
Toluene	<0.00200	0.100	0.0958	96	0.100	0.0992	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0955	96	0.100	0.0987	99	3	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.199	100	4	70-131	25	
o-Xylene	<0.00100	0.100	0.0986	99	0.100	0.102	102	3	71-133	25	

Analyst: ARM **Date Prepared:** 02/02/2015 **Date Analyzed:** 02/03/2015

Lab Batch ID: 960905 **Sample:** 667913-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.101	101	0.100	0.100	100	1	70-130	35	
Toluene	<0.00200	0.100	0.0975	98	0.100	0.0981	98	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0974	97	0.100	0.0988	99	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.196	98	0.200	0.199	100	2	70-135	35	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.103	103	1	71-133	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

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Analyst: JUM **Date Prepared:** 01/31/2015 **Date Analyzed:** 01/31/2015

Lab Batch ID: 960882 **Sample:** 667820-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	25.0	22.4	90	25.0	23.9	96	6	90-110	20	

Analyst: BHRE **Date Prepared:** 02/07/2015 **Date Analyzed:** 02/08/2015

Lab Batch ID: 961352 **Sample:** 688218-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	20.0	20.1	101	20.0	20.3	102	1	90-110	20	

Analyst: DAT **Date Prepared:** 02/04/2015 **Date Analyzed:** 02/04/2015

Lab Batch ID: 961042 **Sample:** 667974-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by EPA 7470A 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
Mercury	<0.000100	0.00500	0.00497	99	0.00500	0.00495	99	0	85-115	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

Version: 1.%

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Analyst: DAT **Date Prepared:** 02/04/2015 **Date Analyzed:** 02/04/2015

Lab Batch ID: 961045 **Sample:** 667976-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW 7471A 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
Mercury	<0.00333	0.167	0.162	97	0.167	0.162	97	0	85-115	20	

Analyst: DAT **Date Prepared:** 02/03/2015 **Date Analyzed:** 02/03/2015

Lab Batch ID: 960903 **Sample:** 667901-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	<0.0100	1.00	1.07	107	1.00	1.07	107	0	85-115	20	
Barium	<0.0100	1.00	1.07	107	1.00	1.08	108	1	85-115	20	
Cadmium	<0.00500	1.00	1.07	107	1.00	1.08	108	1	85-115	20	
Chromium	<0.00500	1.00	1.04	104	1.00	1.04	104	0	85-115	20	
Lead	<0.0120	1.00	1.06	106	1.00	1.07	107	1	85-115	20	
Selenium	<0.0100	1.00	1.07	107	1.00	1.07	107	0	85-115	20	
Silver	<0.00400	1.00	1.02	102	1.00	1.03	103	1	85-115	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

Version: 1.%

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BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Analyst: DAT **Date Prepared:** 02/03/2015 **Date Analyzed:** 02/03/2015

Lab Batch ID: 960914 **Sample:** 667904-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	<0.500	100	107	107	100	108	108	1	85-115	20	
Barium	<0.500	100	106	106	100	106	106	0	85-115	20	
Cadmium	<0.250	100	106	106	100	106	106	0	85-115	20	
Chromium	<0.250	100	104	104	100	104	104	0	85-115	20	
Lead	<0.600	100	104	104	100	105	105	1	85-115	20	
Selenium	<0.500	100	107	107	100	107	107	0	85-115	20	
Silver	<0.200	100	102	102	100	101	101	1	85-115	20	

Analyst: ARM **Date Prepared:** 01/30/2015 **Date Analyzed:** 01/30/2015

Lab Batch ID: 960788 **Sample:** 667869-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

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	<1.50	100	80.5	81	100	85.7	86	6	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<1.50	100	83.0	83	100	91.1	91	9	70-135	25	

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

Version: 1.%

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565 **Project ID:** 701583.144.01

Analyst: ARM **Date Prepared:** 02/02/2015 **Date Analyzed:** 02/02/2015

Lab Batch ID: 960901 **Sample:** 667906-1-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	906	91	1000	932	93	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	1070	107	4	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

Version: 1.%

Form 3 - MS Recoveries

Project Name: Cal AB Launcher

Work Order #: 501565

Lab Batch #: 960882

Project ID: 701583.144.01

Date Analyzed: 01/31/2015

Date Prepared: 01/31/2015

Analyst: JUM

QC- Sample ID: 501462-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	134000	50000	186000	104	80-120	

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

Version: 1.%

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 501565 **Project ID:** 701583.144.01

Lab Batch ID: 960786 **QC- Sample ID:** 501447-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 01/30/2015 **Date Prepared:** 01/30/2015 **Analyst:** ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00100	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Toluene	<0.00200	0.100	0.0971	97	0.100	0.0990	99	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0961	96	0.100	0.0983	98	2	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.194	97	0.200	0.198	99	2	70-131	25	
o-Xylene	<0.00100	0.100	0.0991	99	0.100	0.101	101	2	71-133	25	

Lab Batch ID: 960905 **QC- Sample ID:** 501565-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/03/2015 **Date Prepared:** 02/02/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00100	0.100	0.0899	90	0.0998	0.0923	92	3	70-130	35	
Toluene	<0.00200	0.100	0.0849	85	0.0998	0.0874	88	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0785	79	0.0998	0.0825	83	5	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.156	78	0.200	0.163	82	4	70-135	35	
o-Xylene	<0.00100	0.100	0.0781	78	0.0998	0.0816	82	4	71-133	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 501565 **Project ID:** 701583.144.01

Lab Batch ID: 961346 **QC- Sample ID:** 501565-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/08/2015 **Date Prepared:** 02/07/2015 **Analyst:** BHRE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	474	444	932	103	444	932	103	0	80-120	20	

Lab Batch ID: 961352 **QC- Sample ID:** 501530-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/08/2015 **Date Prepared:** 02/07/2015 **Analyst:** BHRE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	128	117	251	105	117	253	107	1	80-120	20	

Lab Batch ID: 961352 **QC- Sample ID:** 501565-014 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/08/2015 **Date Prepared:** 02/07/2015 **Analyst:** BHRE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	371	355	734	102	355	735	103	0	80-120	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 501565 **Project ID:** 701583.144.01

Lab Batch ID: 961042 **QC- Sample ID:** 501409-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 02/04/2015 **Date Prepared:** 02/04/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by EPA 7470A 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
Mercury	<0.000100	0.00500	0.00414	83	0.00500	0.00421	84	2	75-125	20	

Lab Batch ID: 961045 **QC- Sample ID:** 501462-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/04/2015 **Date Prepared:** 02/04/2015 **Analyst:** DAT

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW 7471A 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
Mercury	0.208	0.304	0.446	78	0.303	0.431	74	3	75-125	20	X

Lab Batch ID: 960903 **QC- Sample ID:** 501409-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 02/03/2015 **Date Prepared:** 02/03/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	<0.0100	1.00	1.04	104	1.00	1.04	104	0	75-125	20	
Barium	0.0927	1.00	1.05	96	1.00	1.04	95	1	75-125	20	
Cadmium	<0.00500	1.00	0.925	93	1.00	0.921	92	0	75-125	20	
Chromium	<0.00500	1.00	0.969	97	1.00	0.973	97	0	75-125	20	
Lead	<0.0120	1.00	0.908	91	1.00	0.906	91	0	75-125	20	
Selenium	<0.0100	1.00	1.08	108	1.00	1.08	108	0	75-125	20	
Silver	<0.00400	1.00	0.986	99	1.00	0.985	99	0	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 501565 **Project ID:** 701583.144.01

Lab Batch ID: 960914 **QC- Sample ID:** 501625-001 S **Batch #:** 1 **Matrix:** Solid

Date Analyzed: 02/03/2015 **Date Prepared:** 02/03/2015 **Analyst:** DAT

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	4.26	114	112	95	112	109	94	3	75-125	20	
Barium	67.3	114	186	104	112	182	102	2	75-125	20	
Cadmium	0.369	114	91.9	80	112	89.8	80	2	75-125	20	
Chromium	8.25	114	101	81	112	99.0	81	2	75-125	20	
Lead	8.08	114	97.3	78	112	95.1	78	2	75-125	20	
Selenium	<0.571	114	103	90	112	101	90	2	75-125	20	
Silver	<0.228	114	95.5	84	112	94.8	85	1	75-125	20	

Lab Batch ID: 960901 **QC- Sample ID:** 501574-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/02/2015 **Date Prepared:** 02/02/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	<16.0	1070	1050	98	1070	912	85	14	70-135	35	
C12-C28 Diesel Range Hydrocarbons	41.5	1070	1230	111	1070	906	81	30	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Cal AB Launcher

Work Order #: 501565

Lab Batch #: 960867 **Project ID:** 701583.144.01

Date Analyzed: 02/02/2015 17:15 **Date Prepared:** 02/02/2015 **Analyst:** WRU

QC- Sample ID: 501565-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	24.9	28.8	15	20	

Lab Batch #: 960867

Date Analyzed: 02/02/2015 17:15 **Date Prepared:** 02/02/2015 **Analyst:** WRU

QC- Sample ID: 501608-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	10.9	11.2	3	20	

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

Version: 1.%

CHAIN OF CUSTODY

XENCO LABORATORIES

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Dallas, Texas (214-902-0300) | Norcross, Georgia (770-449-8800) | Tampa, Florida (813-620-2000)

Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job # 501565

Client / Reporting Information

Company Name / Branch: Talon/LPE

Company Address: 2901 Hwy 349 Midland

Email: slhitchcock@talonlpe.com

Project Contact: Melissa Decker

Sampler's Name: Melissa Decker

Project Information Cal AB Launder

Project Name/Number: 701583.144.01

Project Location: Malaga, NM

Invoice To: Phone No: mdecker@talonlpe.com

PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	None	Chlorides	TPH DRO/GRO	BTEX	RCRA 8 Metals	Field Comments
1	BG-1	0'	1/30	1000	S	1								X	X	X	X	X	
2	W-1 Draw		1/29	2300	W	1								X	X				
3	W-1 Draw VOA		1/29	2303	W	1	X							X		X	X	X	
4	S-1-0'	0'	1/29	2309	S	1								X	X	X	X	X	
5	S-2-0'	0'	1/29	2312	S	1								X	X	X	X	X	
6	S-3-0'	0'	1/29	2316	S	1								X	X	X	X	X	
7	S-4-0'	0'	1/30	0930	S	1								X	X	X	X	X	
8	S-5-0'	0'	1/30	0932	S	1								X	X	X	X	X	
9	S-6-0'	0'	1/30	0934	S	1								X	X	X	X	X	
10	S-1-0' Draw	0'	1/29	2325	S	1								X	X	X	X	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] Next Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [ ] 5 Day TAT
- [ ] 7 Day TAT
- [ ] Contract TAT

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
Melissa Decker	1/30 1512		2	1/30/15 1512	
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 3 | Thermo. Corr. Factor

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

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Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job # 501565

Client / Reporting Information

Company Name: Talon/LPE

Company Address: 2901 Hwy 349 Midland

Email: Slhitchcoke@talonlpe.com & mdecker@talonlpe.com

Project Contact: Melissa Decker

Samplers's Name: Melissa Decker

Project Information

Project Name/Number: CAL AB Launcher 701583.144.01

Project Location: Malaga, NM

Invoice To:

PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	None	DRO/GRO	TPH	BTEX	RCRA Metals	Chlorides	Field Comments
1	S-2-0' DRAW	0'	1/29	2330	S	1								X	X	X	X	X	X	
2	S-3-0' DRAW	0'	1/29	2335	S	1								X	X	X	X	X	X	
3	S-4-0' DRAW	0'	1/30	0940	S	1								X	X	X	X	X	X	
4	S-5-0' DRAW	0'	1/30	0945	S	1								X	X	X	X	X	X	
5	SUMP	0'	1/29	2340	S	1								X	X	X	X	X	O	
6																				
7																				
8																				
9																				
10																				

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] Next Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [ ] 5 Day TAT
- [ ] 7 Day TAT
- [ ] Contract TAT

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler	Date/Time	Received By	Relinquished By	Date/Time	Received By
1	Melissa Decker	1/30 1512				
2					1/30 15	1512
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: Y / N — Cooler Temp. — Thermo. Corr. Factor
6						

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon/LPE Co.

Date/ Time Received: 01/30/2015 03:12:00 PM

Work Order #: 501565

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 01/30/2015

Checklist reviewed by: Kelsey Brooks Date: 01/30/2015

Analytical Report 502904

for

Talon LPE

Project Manager: Sheldon Hitckcock

Cal AB Launcher

701583.144.01

26-FEB-15

Collected By: Client

XENCO Laboratories

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

XENCO Laboratories

26-FEB-15

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **502904**
Cal AB Launcher
Project Address: A-8-265-29E

Sheldon Hitckcock:

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(s) 502904. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 502904 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,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 502904

Talon LPE, Artesia, NM

Cal AB Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-6 0'	S	02-23-15 10:07	- 0 ft	502904-001
S-7 0'	S	02-23-15 10:09	- 0 ft	502904-002
BG-2 0'	S	02-23-15 10:20	- 0 ft	502904-003
BG-3 0'	S	02-23-15 10:34	- 0 ft	502904-004
BG-4 0'	S	02-23-15 10:42	- 0 ft	502904-005

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 502904

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Sheldon Hitchcock
Project Location: A-8-265-29E

Date Received in Lab: Tue Feb-24-15 12:56 pm
Report Date: 26-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	502904-001		502904-002		502904-003		502904-004		502904-005	
	Field Id:	S-6 0'		S-7 0'		BG-2 0'		BG-3 0'		BG-4 0'	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-23-15 10:07		Feb-23-15 10:09		Feb-23-15 10:20		Feb-23-15 10:34		Feb-23-15 10:42	
BTEX by EPA 8021B	*Extracted:*	Feb-24-15 15:00		Feb-24-15 15:00							
	Analyzed:	Feb-25-15 02:23		Feb-25-15 02:39							
	Units/RL:	mg/kg	RL	mg/kg	RL						
Benzene		ND	0.000996	ND	0.000994						
Toluene		ND	0.00199	ND	0.00199						
Ethylbenzene		ND	0.000996	ND	0.000994						
m,p-Xylenes		ND	0.00199	ND	0.00199						
o-Xylene		ND	0.000996	ND	0.000994						
Total Xylenes		ND	0.000996	ND	0.000994						
Total BTEX		ND	0.000996	ND	0.000994						
Inorganic Anions by EPA 300/300.1	*Extracted:*	Feb-25-15 17:00		Feb-25-15 17:00		Feb-25-15 17:00		Feb-25-15 17:00		Feb-25-15 17:00	
	Analyzed:	Feb-26-15 08:52		Feb-26-15 13:04		Feb-26-15 13:50		Feb-26-15 14:12		Feb-26-15 14:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1720	223	4670	471	345	113	141	114	209	24.8
Mercury by SW 7471A SUB: T104704295-TX	*Extracted:*					Feb-26-15 09:00		Feb-26-15 09:00		Feb-26-15 09:00	
	Analyzed:					Feb-26-15 11:02		Feb-26-15 11:09		Feb-26-15 11:11	
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL
Mercury						ND	0.00300	0.00583	0.00329	0.00592	0.00375

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 502904

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Sheldon Hitchcock
Project Location: A-8-265-29E

Date Received in Lab: Tue Feb-24-15 12:56 pm
Report Date: 26-FEB-15
Project Manager: Kelsey Brooks

Analysis Requested										
	Lab Id:	502904-001		502904-002		502904-003		502904-004		502904-005	
	Field Id:	S-6 0'		S-7 0'		BG-2 0'		BG-3 0'		BG-4 0'	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-23-15 10:07		Feb-23-15 10:09		Feb-23-15 10:20		Feb-23-15 10:34		Feb-23-15 10:42	
Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*					Feb-26-15 07:30		Feb-26-15 07:30		Feb-26-15 07:30	
	Analyzed:					Feb-26-15 11:01		Feb-26-15 11:04		Feb-26-15 11:06	
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL
Arsenic						3.78	0.559	2.71	0.560	3.06	0.597
Barium						71.6	0.559	85.7	0.560	172	0.597
Cadmium						ND	0.280	0.308	0.280	0.585	0.299
Chromium						2.77	0.280	5.53	0.280	11.9	0.299
Lead						4.04	0.671	5.37	0.672	8.48	0.716
Selenium						ND	0.559	ND	0.560	ND	0.597
Silver						ND	0.224	ND	0.224	ND	0.239
Percent Moisture	*Extracted:*										
	Analyzed:	Feb-24-15 17:30		Feb-24-15 17:30		Feb-24-15 17:30		Feb-24-15 17:30		Feb-24-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.2	1.00	15.0	1.00	11.5	1.00	12.4	1.00	19.5	1.00
TPH By SW8015 Mod	*Extracted:*	Feb-25-15 15:00		Feb-25-15 15:00							
	Analyzed:	Feb-25-15 19:06		Feb-25-15 20:14							
	Units/RL:	mg/kg	RL	mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	15.0	ND	14.9						
C12-C28 Diesel Range Hydrocarbons		80.1	15.0	55.3	14.9						
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	14.9						
Total TPH		80.1	15.0	55.3	14.9						

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 502904, **Project ID:** 701583.144.01

Lab Batch #: 962598 **Sample:** 502904-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 02:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 962598 **Sample:** 502904-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 02:39

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

Lab Batch #: 962630 **Sample:** 502904-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 19:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	54.5	49.9	109	70-135	

Lab Batch #: 962630 **Sample:** 502904-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 20:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	99.6	92	70-135	
o-Terphenyl	46.2	49.8	93	70-135	

Lab Batch #: 962598 **Sample:** 689008-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 04:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 502904, **Project ID:** 701583.144.01

Lab Batch #: 962630 **Sample:** 689030-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 17:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 962598 **Sample:** 689008-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 01:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 962630 **Sample:** 689030-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 17:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

Lab Batch #: 962598 **Sample:** 689008-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 01:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 962630 **Sample:** 689030-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02/25/15 18:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	56.6	50.0	113	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 502904, **Project ID:** 701583.144.01

Lab Batch #: 962598 **Sample:** 502904-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 01:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 962630 **Sample:** 502904-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 19:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.7	116	70-135	
o-Terphenyl	49.5	49.9	99	70-135	

Lab Batch #: 962598 **Sample:** 502904-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 01:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 962630 **Sample:** 502904-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02/25/15 19:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.9	112	70-135	
o-Terphenyl	50.8	50.0	102	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.

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 502904 **Project ID:** 701583.144.01

Analyst: ARM **Date Prepared:** 02/24/2015 **Date Analyzed:** 02/25/2015

Lab Batch ID: 962598 **Sample:** 689008-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.101	101	0.100	0.102	102	1	70-130	35	
Toluene	<0.00200	0.100	0.0997	100	0.100	0.101	101	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.104	104	0.100	0.105	105	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.204	102	0.200	0.206	103	1	70-135	35	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.103	103	0	71-133	35	

Analyst: JUM **Date Prepared:** 02/25/2015 **Date Analyzed:** 02/26/2015

Lab Batch ID: 962690 **Sample:** 689021-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	50.0	52.5	105	50.0	48.8	98	7	90-110	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

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 502904 **Project ID:** 701583.144.01

Analyst: DAT **Date Prepared:** 02/26/2015 **Date Analyzed:** 02/26/2015

Lab Batch ID: 962673 **Sample:** 689033-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW 7471A 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
Mercury	<0.00333	0.167	0.165	99	0.167	0.167	100	1	85-115	20	

Analyst: DAT **Date Prepared:** 02/26/2015 **Date Analyzed:** 02/26/2015

Lab Batch ID: 962664 **Sample:** 689027-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	<0.500	100	101	101	100	102	102	1	85-115	20	
Barium	<0.500	100	101	101	100	102	102	1	85-115	20	
Cadmium	<0.250	100	101	101	100	101	101	0	85-115	20	
Chromium	<0.250	100	101	101	100	101	101	0	85-115	20	
Lead	<0.600	100	102	102	100	102	102	0	85-115	20	
Selenium	<0.500	100	103	103	100	102	102	1	85-115	20	
Silver	<0.200	100	99.8	100	100	99.6	100	0	85-115	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

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BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 502904 **Project ID:** 701583.144.01

Analyst: ARM **Date Prepared:** 02/25/2015 **Date Analyzed:** 02/25/2015

Lab Batch ID: 962630 **Sample:** 689030-1-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	843	84	1000	886	89	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	1200	120	15	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

Form 3 - MS Recoveries

Project Name: Cal AB Launcher

Work Order #: 502904

Lab Batch #: 962690

Project ID: 701583.144.01

Date Analyzed: 02/26/2015

Date Prepared: 02/25/2015

Analyst: JUM

QC- Sample ID: 502781-001 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	359	540	937	107	80-120	

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

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Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 502904 **Project ID:** 701583.144.01

Lab Batch ID: 962598 **QC- Sample ID:** 502904-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/25/2015 **Date Prepared:** 02/24/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000996	0.0996	0.0977	98	0.0998	0.0961	96	2	70-130	35	
Toluene	<0.00199	0.0996	0.0951	95	0.0998	0.0918	92	4	70-130	35	
Ethylbenzene	<0.000996	0.0996	0.0964	97	0.0998	0.0935	94	3	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.188	94	0.200	0.183	92	3	70-135	35	
o-Xylene	<0.000996	0.0996	0.0930	93	0.0998	0.0913	91	2	71-133	35	

Lab Batch ID: 962673 **QC- Sample ID:** 502904-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/26/2015 **Date Prepared:** 02/26/2015 **Analyst:** DAT

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW 7471A 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
Mercury	0.00294	0.144	0.123	83	0.143	0.125	85	2	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 502904 **Project ID:** 701583.144.01

Lab Batch ID: 962664 **QC- Sample ID:** 502905-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/26/2015 **Date Prepared:** 02/26/2015 **Analyst:** DAT

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Arsenic	3.81	124	120	94	122	116	92	3	75-125	20	
Barium	117	124	253	110	122	249	108	2	75-125	20	
Cadmium	0.436	124	105	84	122	102	83	3	75-125	20	
Chromium	9.34	124	126	94	122	122	92	3	75-125	20	
Lead	6.15	124	111	85	122	109	84	2	75-125	20	
Selenium	<0.622	124	111	90	122	112	92	1	75-125	20	
Silver	<0.249	124	119	96	122	119	98	0	75-125	20	

Lab Batch ID: 962630 **QC- Sample ID:** 502904-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/25/2015 **Date Prepared:** 02/25/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	<15.0	997	936	94	999	823	82	13	70-135	35	
C12-C28 Diesel Range Hydrocarbons	80.1	997	1090	101	999	1070	99	2	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Cal AB Launcher

Work Order #: 502904

Lab Batch #: 962556 **Project ID:** 701583.144.01

Date Analyzed: 02/24/2015 17:30 **Date Prepared:** 02/24/2015 **Analyst:** JUM

QC- Sample ID: 502839-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	21.5	20.1	7	20	

Lab Batch #: 962556

Date Analyzed: 02/24/2015 17:30 **Date Prepared:** 02/24/2015 **Analyst:** JUM

QC- Sample ID: 502839-011 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.11	4.47	13	20	

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

CHAIN OF CUSTODY

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Page ___ Of ___

Stafford, Texas (281-240-4200)
Dallas, Texas (214-902-0300)
Service Center - San Antonio, Texas (210-509-3334)
www.xenco.com
Odessa, Texas (432-563-1800)
Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Xenco Quote #:
Xenco Job #: 502904

Client / Reporting Information

Company Name / Branch:	Talon/LPE
Company Address:	408 W. Texas Ave. Artesia, NM
Email:	Slhitchcock@talonlpc.com
Phone No:	
Project Contact:	Sheldon Hitchcock
Samplers's Name:	Sheldon Hitchcock

Project Information Cal AB Laucher

Project Name/Number:	701583.144.01
Project Location:	A-8-26S-29E
Invoice To:	Sheldon Hitchcock
PO Number:	

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil
WW= Waste Water

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	8 RCRA	TPH DRO/GRO	BTEX	Chlorides	Field Comments
1	S-60'	0'	2/23/15	10:07	S	1								/		/	/	/	
2	S-70'	0'	|	10:09	S	1								/		/	/	/	
3	BG-20'	0'	|	10:20	S	1								/	/			/	
4	BG-30'	0'	|	10:39	S	1								/	/			/	
5	BG-40'	0'	|	10:42	S	1								/	/			/	
6																			
7																			
8																			
9																			
10																			

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [x] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Sheldon Hitchcock	2/23/15 1:21p	1 [signature]	2	2/24/15 12:47	[signature]
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X · Cooler Temp.: -1.7 · Thermo. Corr. Factor: -1
5		5			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 02/24/2015 12:56:21 PM

Work Order #: 502904

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	No
#6 *Custody Seals Signed and dated?	No
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 02/24/2015

Checklist reviewed by: Date:

Analytical Report 508466

for

Talon LPE

Project Manager: Sheldon Hitchcock

Cal AB Launcher

701583.144.01

29-MAY-15

Collected By: Client

XENCO Laboratories

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

XENCO Laboratories

29-MAY-15

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **508466**
Cal AB Launcher
Project Address: A-8-265-29E

Sheldon Hitckcock:

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(s) 508466. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 508466 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,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 508466

Talon LPE, Artesia, NM

Cal AB Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BG-5 0'	S	05-22-15 11:07	- 0 ft	508466-001
BG-5 1'	S	05-22-15 11:10	- 1 ft	508466-002
BG-6 0'	S	05-22-15 11:22	- 0 ft	508466-003
BG-6 1'	S	05-22-15 11:27	- 1 ft	508466-004
BG-7 0'	S	05-22-15 11:40	- 0 ft	508466-005
BG-7 0.5' Refusal	S	05-22-15 11:45	- .5 ft	508466-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 508466

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id: 701583.144.01
Contact: Sheldon Hitchcock
Project Location: A-8-265-29E

Date Received in Lab: Wed May-27-15 11:30 am
Report Date: 29-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	508466-001		508466-002		508466-003		508466-004		508466-005		508466-006	
	Field Id:	BG-5 0'		BG-5 1'		BG-6 0'		BG-6 1'		BG-7 0'		BG-7 0.5' Refusal	
	Depth:	0 ft		1 ft		0 ft		1 ft		0 ft		.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-22-15 11:07		May-22-15 11:10		May-22-15 11:22		May-22-15 11:27		May-22-15 11:40		May-22-15 11:45	
Mercury by SW 7471A SUB: E871002	*Extracted:*	May-28-15 13:00		May-28-15 13:00		May-28-15 13:00		May-28-15 13:00		May-28-15 13:00		May-28-15 13:00	
	Analyzed:	May-28-15 16:21		May-28-15 16:27		May-28-15 16:29		May-28-15 16:31		May-28-15 16:36		May-28-15 16:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Mercury		ND	0.0200	ND	0.0185	ND	0.0179	ND	0.0196	0.0236	0.0179	ND	0.0182
RCRA Metals by SW846-6010B SUB: E871002	*Extracted:*	May-28-15 13:30		May-28-15 13:30		May-28-15 13:30		May-28-15 13:30		May-28-15 13:30		May-28-15 13:30	
	Analyzed:	May-29-15 10:10		May-29-15 10:18		May-29-15 10:25		May-29-15 10:31		May-29-15 10:38		May-29-15 10:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Arsenic		2.81	2.00	4.11	2.00	ND	2.00	ND	1.96	1.91	1.72	1.82	1.72
Barium		156	1.00	355	1.00	31.1	1.00	23.5	0.980	69.2	0.862	105	0.862
Cadmium		ND	1.00	ND	1.00	ND	1.00	ND	0.980	ND	0.862	ND	0.862
Chromium		5.83	1.00	5.58	1.00	3.13	1.00	1.71	0.980	6.19	0.862	6.71	0.862
Lead		8.50	2.00	6.35	2.00	4.54	2.00	2.66	1.96	7.73	1.72	8.15	1.72
Selenium		ND	3.00	ND	3.00	ND	3.00	ND	2.94	ND	2.59	ND	2.59
Silver		ND	3.00	ND	3.00	ND	3.00	ND	2.94	ND	2.59	ND	2.59

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 508466 **Project ID:** 701583.144.01

Analyst: BfRE **Date Prepared:** 05/28/2015 **Date Analyzed:** 05/28/2015

Lab Batch ID: 969103 **Sample:** 693124-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

Mercury by SW 7471A 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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Mercury	<0.0200	0.200	0.204	102	0.200	0.202	101	1	80-120	20	

Analyst: DEP **Date Prepared:** 05/28/2015 **Date Analyzed:** 05/29/2015

Lab Batch ID: 969107 **Sample:** 693125-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

RCRA Metals by SW846-6010B 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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Arsenic	<2.00	100	104	104	100	98.0	98	6	75-125	20	
Barium	<1.00	100	99.9	100	100	96.3	96	4	75-125	20	
Cadmium	<1.00	100	101	101	100	96.3	96	5	75-125	20	
Chromium	<1.00	100	104	104	100	100	100	4	75-125	20	
Lead	<2.00	100	106	106	100	102	102	4	75-125	20	
Selenium	<3.00	100	105	105	100	97.9	98	7	75-125	20	
Silver	<3.00	50.0	49.5	99	50.0	48.1	96	3	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

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 508466 **Project ID:** 701583.144.01

Lab Batch ID: 969103 **QC- Sample ID:** 508466-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/28/2015 **Date Prepared:** 05/28/2015 **Analyst:** BHRE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by SW 7471A 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
Mercury	<0.0200	0.200	0.214	107	0.192	0.205	107	4	75-125	20	

Lab Batch ID: 969107 **QC- Sample ID:** 508347-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/29/2015 **Date Prepared:** 05/28/2015 **Analyst:** DEP

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

RCRA Metals by SW846-6010B 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
Arsenic	5.76	120	117	93	120	119	94	2	75-125	20	
Barium	46.8	120	163	97	120	166	99	2	75-125	20	
Cadmium	<1.20	120	112	93	120	113	94	1	75-125	20	
Chromium	11.0	120	136	104	120	138	106	1	75-125	20	
Lead	96.6	120	171	62	120	169	60	1	75-125	20	X
Selenium	<3.59	120	112	93	120	113	94	1	75-125	20	
Silver	<3.59	59.9	51.9	87	59.9	52.2	87	1	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 05/27/2015 11:30:00 AM

Work Order #: 508466

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/27/2015

Checklist reviewed by: Kelsey Brooks Date: 05/27/2015

Analytical Report 518518

for

Talon LPE

Project Manager: Sheldon Hitckcock

Cal A B Launcher

03-NOV-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

03-NOV-15

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **518518**
Cal A B Launcher
Project Address:

Sheldon Hitckcock:

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(s) 518518. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 518518 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 518518

Talon LPE, Artesia, NM

Cal A B Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 0'	S	10-29-15 15:00	- 0 ft	518518-001
S-2 0'	S	10-29-15 15:05	- 0 ft	518518-002
S- 3 0'	S	10-29-15 15:10	- 0 ft	518518-003
S-4 0'	S	10-29-15 15:15	- 0 ft	518518-004
S-5 0'	S	10-29-15 15:20	- 0 ft	518518-005
S-6 0'	S	10-29-15 15:25	- 0 ft	518518-006
S- 7 0'	S	10-29-15 15:30	- 0 ft	518518-007
S-1 0' Draw	S	10-29-15 16:20	- 0 ft	518518-008
S-2 0' Draw	S	10-29-15 16:15	- 0 ft	518518-009
S-3 0' Draw	S	10-29-15 16:10	- 0 ft	518518-010
S-4 0' Draw	S	10-29-15 16:25	- 0 ft	518518-011
S-5 0' Draw	S	10-29-15 16:05	- 0 ft	518518-012
S-6 0' Draw	S	10-29-15 16:00	- 0 ft	518518-013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-980399 BTEX by EPA 8021B

Lab Sample ID 518518-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 518518-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013.

The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 518518

Talon LPE, Artesia, NM

Project Name: Cal A B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location:

Date Received in Lab: Sat Oct-31-15 12:50 pm
Report Date: 03-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	518518-001		518518-002		518518-003		518518-004		518518-005		518518-006	
	Field Id:	S-1 0'		S-2 0'		S-3 0'		S-4 0'		S-5 0'		S-6 0'	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-15 15:00		Oct-29-15 15:05		Oct-29-15 15:10		Oct-29-15 15:15		Oct-29-15 15:20		Oct-29-15 15:25	
BTEX by EPA 8021B	*Extracted:*	Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00	
	Analyzed:	Nov-02-15 12:36		Nov-02-15 12:53		Nov-03-15 10:46		Nov-02-15 14:31		Nov-02-15 14:48		Nov-03-15 11:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.250	0.00100	0.00100	ND	0.00101	ND	0.00100	ND	0.00100	ND	0.00100
Toluene		2.91	0.500	0.0222	0.00201	ND	0.00202	ND	0.00201	0.0450	0.00200	ND	0.00200
Ethylbenzene		24.1	0.250	0.0130	0.00100	ND	0.00101	ND	0.00100	0.0487	0.00100	ND	0.00100
m,p-Xylenes		29.7	0.500	0.152	0.00201	ND	0.00202	ND	0.00201	0.280	0.00200	ND	0.00200
o-Xylene		29.9	0.250	0.139	0.00100	ND	0.00101	ND	0.00100	0.162	0.00100	ND	0.00100
Total Xylenes		59.6	0.250	0.291	0.00100	ND	0.00101	ND	0.00100	0.442	0.00100	ND	0.00100
Total BTEX		86.6	0.250	0.327	0.00100	ND	0.00101	ND	0.00100	0.536	0.00100	ND	0.00100
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-02-15 13:06		Nov-02-15 13:51		Nov-02-15 14:14		Nov-02-15 14:37		Nov-02-15 14:59		Nov-02-15 17:56	
	Analyzed:	Nov-02-15 13:06		Nov-02-15 13:51		Nov-02-15 22:51		Nov-02-15 14:37		Nov-02-15 14:59		Nov-02-15 17:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		149	100	74.4	40.0	ND	2.00	ND	2.00	114	100	1520	200
TPH by SW 8015B	*Extracted:*	Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00	
	Analyzed:	Nov-03-15 11:23		Nov-02-15 14:40		Nov-02-15 15:08		Nov-02-15 15:36		Nov-03-15 11:51		Nov-02-15 16:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		389	74.9	252	15.0	ND	14.9	ND	15.0	389	74.9	ND	15.0
C10-C28 Diesel Range Hydrocarbons		9720	74.9	4680	15.0	ND	14.9	ND	15.0	7040	74.9	ND	15.0
C28-C35 Oil Range Hydrocarbons		1260	74.9	327	15.0	ND	14.9	ND	15.0	838	74.9	ND	15.0
Total TPH		11400	74.9	5260	15.0	ND	14.9	ND	15.0	8270	74.9	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 518518

Talon LPE, Artesia, NM

Project Name: Cal A B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location:

Date Received in Lab: Sat Oct-31-15 12:50 pm
Report Date: 03-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	518518-007		518518-008		518518-009		518518-010		518518-011		518518-012	
	Field Id:	S- 7 0'		S-1 0' Draw		S-2 0' Draw		S-3 0' Draw		S-4 0' Draw		S-5 0' Draw	
	Depth:	0 ft		0 ft		0 ft		0 ft		0 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-15 15:30		Oct-29-15 16:20		Oct-29-15 16:15		Oct-29-15 16:10		Oct-29-15 16:25		Oct-29-15 16:05	
BTEX by EPA 8021B	*Extracted:*	Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00		Nov-02-15 10:00	
	Analyzed:	Nov-03-15 11:19		Nov-03-15 15:18		Nov-03-15 12:23		Nov-03-15 12:06		Nov-03-15 15:01		Nov-03-15 12:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000992	ND	0.00101	ND	0.00100	ND	0.00101	ND	0.00166	0.00166	0.000998
Toluene		ND	0.00198	ND	0.00202	0.0382	0.00200	ND	0.00202	ND	0.00332	ND	0.00200
Ethylbenzene		ND	0.000992	ND	0.00101	ND	0.00100	ND	0.00101	ND	0.00166	ND	0.000998
m,p-Xylenes		ND	0.00198	0.0278	0.00202	0.400	0.00200	0.0474	0.00202	ND	0.00332	ND	0.00200
o-Xylene		ND	0.000992	0.0240	0.00101	0.291	0.00100	0.0351	0.00101	ND	0.00166	ND	0.000998
Total Xylenes		ND	0.000992	0.0518	0.00101	0.691	0.00100	0.0825	0.00101	ND	0.00166	ND	0.000998
Total BTEX		ND	0.000992	0.0518	0.00101	0.729	0.00100	0.0825	0.00101	ND	0.00166	0.00166	0.000998
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-02-15 18.19		Nov-02-15 18:41		Nov-02-15 19:04		Nov-02-15 19:27		Nov-02-15 19:49		Nov-02-15 20:35	
	Analyzed:	Nov-02-15 18:19		Nov-02-15 18:41		Nov-02-15 19:04		Nov-02-15 19:27		Nov-02-15 19:49		Nov-02-15 20:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4370	400	23.1	10.0	69.2	40.0	823	100	499	100	1160	100
TPH by SW 8015B	*Extracted:*	Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00		Nov-02-15 09:00	
	Analyzed:	Nov-02-15 16:56		Nov-02-15 18:05		Nov-03-15 12:18		Nov-02-15 18:58		Nov-02-15 19:50		Nov-02-15 20:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	14.9	85.8	15.0	306	300	118	14.9	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	14.9	691	15.0	7850	300	2850	14.9	ND	15.0	ND	15.0
C28-C35 Oil Range Hydrocarbons		ND	14.9	153	15.0	1170	300	279	14.9	ND	15.0	ND	15.0
Total TPH		ND	14.9	930	15.0	9330	300	3250	14.9	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 518518

Talon LPE, Artesia, NM

Project Name: Cal A B Launcher

Project Id:

Contact: Sheldon Hitchcock

Project Location:

Date Received in Lab: Sat Oct-31-15 12:50 pm

Report Date: 03-NOV-15

Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	518518-013					
	Field Id:	S-6 0' Draw					
	Depth:	0 ft					
	Matrix:	SOIL					
	Sampled:	Oct-29-15 16:00					
BTEX by EPA 8021B	*Extracted:*	Nov-02-15 10:00					
	Analyzed:	Nov-02-15 18:39					
	Units/RL:	mg/kg RL					
Benzene		ND 0.000992					
Toluene		ND 0.00198					
Ethylbenzene		ND 0.000992					
m,p-Xylenes		ND 0.00198					
o-Xylene		ND 0.000992					
Total Xylenes		ND 0.000992					
Total BTEX		ND 0.000992					
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-02-15 20:57					
	Analyzed:	Nov-02-15 20:57					
	Units/RL:	mg/kg RL					
Chloride		1210 100					
TPH by SW 8015B	*Extracted:*	Nov-02-15 09:00					
	Analyzed:	Nov-02-15 21:15					
	Units/RL:	mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons		ND 15.0					
C10-C28 Diesel Range Hydrocarbons		ND 15.0					
C28-C35 Oil Range Hydrocarbons		ND 15.0					
Total TPH		ND 15.0					

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 518518-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 12:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

Lab Batch #: 980399 **Sample:** 518518-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 12:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 980399 **Sample:** 518518-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 14:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 980504 **Sample:** 518518-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 14:40

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.2	99.9	93	70-135	
o-Terphenyl	42.9	50.0	86	70-135	

Lab Batch #: 980399 **Sample:** 518518-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 14:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980504 **Sample:** 518518-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 15:08

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.4	99.6	78	70-135	
o-Terphenyl	36.4	49.8	73	70-135	

Lab Batch #: 980504 **Sample:** 518518-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 15:36

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.2	99.9	86	70-135	
o-Terphenyl	40.8	50.0	82	70-135	

Lab Batch #: 980504 **Sample:** 518518-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 16:30

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.7	99.9	88	70-135	
o-Terphenyl	41.1	50.0	82	70-135	

Lab Batch #: 980504 **Sample:** 518518-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 16:56

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.1	99.6	84	70-135	
o-Terphenyl	39.6	49.8	80	70-135	

Lab Batch #: 980504 **Sample:** 518518-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 18:05

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	100	90	70-135	
o-Terphenyl	64.4	50.0	129	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 518518-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 18:39

BTEX by EPA 8021B 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	0.0319	0.0300	106	80-120	

Lab Batch #: 980504 **Sample:** 518518-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 18:58

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.9	99.6	99	70-135	
o-Terphenyl	47.4	49.8	95	70-135	

Lab Batch #: 980504 **Sample:** 518518-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 19:50

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	99.9	91	70-135	
o-Terphenyl	42.5	50.0	85	70-135	

Lab Batch #: 980504 **Sample:** 518518-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 20:48

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.3	99.7	85	70-135	
o-Terphenyl	39.5	49.9	79	70-135	

Lab Batch #: 980504 **Sample:** 518518-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 21:15

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.2	99.9	88	70-135	
o-Terphenyl	41.2	50.0	82	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 518518-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 10:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0348	0.0300	116	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 980399 **Sample:** 518518-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 11:02

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 980399 **Sample:** 518518-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 11:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 980504 **Sample:** 518518-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 11:23

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-135	
o-Terphenyl	41.4	50.0	83	70-135	

Lab Batch #: 980504 **Sample:** 518518-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 11:51

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.8	112	70-135	
o-Terphenyl	35.7	49.9	72	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 518518-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 12:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

Lab Batch #: 980504 **Sample:** 518518-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 12:18

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.9	99.9	86	70-135	
o-Terphenyl	47.2	50.0	94	70-135	

Lab Batch #: 980399 **Sample:** 518518-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 12:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 980399 **Sample:** 518518-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 12:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 980399 **Sample:** 518518-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 15:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 518518-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 15:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 980504 **Sample:** 700368-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/15 13:20

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 980399 **Sample:** 700313-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/15 16:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0344	0.0300	115	80-120	

Lab Batch #: 980399 **Sample:** 700313-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/15 09:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 980504 **Sample:** 700368-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/15 12:26

SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	47.4	50.0	95	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980399 **Sample:** 700313-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/02/15 09:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 980504 **Sample:** 700368-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/15 10:55

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 980399 **Sample:** 518518-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 13:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 980504 **Sample:** 518518-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 21:41

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	44.7	49.9	90	70-135	

Lab Batch #: 980399 **Sample:** 518518-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/02/15 13:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A B Launcher

Work Orders : 518518,

Project ID:

Lab Batch #: 980504 **Sample:** 518518-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/15 12:50

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-135	
o-Terphenyl	44.9	50.0	90	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.

BS / BSD Recoveries

Project Name: Cal A B Launcher

Work Order #: 518518 **Project ID:**

Analyst: SYG **Date Prepared:** 11/02/2015 **Date Analyzed:** 11/02/2015

Lab Batch ID: 980399 **Sample:** 700313-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000994	0.0994	0.0799	80	0.0998	0.0801	80	0	70-130	35	
Toluene	<0.00199	0.0994	0.0802	81	0.0998	0.0845	85	5	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0860	87	0.0998	0.0896	90	4	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.175	88	0.200	0.181	91	3	70-135	35	
o-Xylene	<0.000994	0.0994	0.0862	87	0.0998	0.0896	90	4	71-133	35	

Analyst: MNR **Date Prepared:** 11/02/2015 **Date Analyzed:** 11/02/2015

Lab Batch ID: 980471 **Sample:** 700319-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	50.0	48.8	98	50.0	48.8	98	0	90-110	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

BS / BSD Recoveries

Project Name: Cal A B Launcher

Work Order #: 518518 **Project ID:**

Analyst: PJB **Date Prepared:** 11/02/2015 **Date Analyzed:** 11/02/2015

Lab Batch ID: 980504 **Sample:** 700368-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	833	83	1000	945	95	13	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1130	113	1000	1210	121	7	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

Form 3 - MS Recoveries

Project Name: Cal A B Launcher

Work Order #: 518518

Lab Batch #: 980471 **Project ID:**

Date Analyzed: 11/02/2015 **Date Prepared:** 11/02/2015 **Analyst:** MNR

QC- Sample ID: 518518-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	149	2500	2600	98	80-120	

Lab Batch #: 980471

Date Analyzed: 11/02/2015 **Date Prepared:** 11/02/2015 **Analyst:** MNR

QC- Sample ID: 518518-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	499	2500	3020	101	80-120	

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

Form 3 - MS / MSD Recoveries

Project Name: Cal A B Launcher

Work Order # : 518518 **Project ID:**

Lab Batch ID: 980399 **QC- Sample ID:** 518518-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/02/2015 **Date Prepared:** 11/02/2015 **Analyst:** SYG

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00101	0.101	<0.00101	0	0.101	<0.00101	0	NC	70-130	35	X
Toluene	<0.00202	0.101	<0.00202	0	0.101	<0.00201	0	NC	70-130	35	X
Ethylbenzene	<0.00101	0.101	<0.00101	0	0.101	<0.00101	0	NC	71-129	35	X
m,p-Xylenes	<0.00202	0.202	<0.00202	0	0.201	<0.00201	0	NC	70-135	35	X
o-Xylene	<0.00101	0.101	<0.00101	0	0.101	<0.00101	0	NC	71-133	35	X

Lab Batch ID: 980504 **QC- Sample ID:** 518518-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/02/2015 **Date Prepared:** 11/02/2015 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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
C6-C10 Gasoline Range Hydrocarbons	<15.0	997	890	89	999	991	99	11	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	997	1170	117	999	1280	128	9	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☑ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330928 Page 1 of 2

Lab Only: 518518

Company-City Talon/LPE Artesia, NM 88210	**Phone** 575-746-8768
Project Name-Location Cal AB Launcher ☑ Previously done at XENCO	**Project ID**
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM	**Proj. Manager (PM)** Sheldon Hitchcock
E-mail Results to ☑ PM and s.hitchcock@talonlpe.com	**Fax No:**
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O. Bill to: Rachel Johnson ETP	
Quote/Pricing:	**P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name S. Hitchcock **Signature** Sheldon Hitchcock

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth (ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	TPH 8015M	BTEX 8021B	Total Chlorides	TATASAP 5h 12h (24h) 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:	
1	S-1 0'	10/29/15	3:00	0'	S		1	1	4oz	Glass	Cool										✓	✓	✓						1
2	S-2 0'		3:05	0'	S		1	1													✓	✓	✓						2
3	S-3 0'		3:10	0'	S		1	1													✓	✓	✓						3
4	S-4 0'		3:15	0'	S		1	1													✓	✓	✓						4
5	S-5 0'		3:20	0'	S		1	1													✓	✓	✓						5
6	S-6 0'		3:25	0'	S		1	1													✓	✓	✓						6
7	S-7 0'		3:30	0'	S		1	1													✓	✓	✓						7
8	S-1 0' Draw		4:20	0'	S		1	1													✓	✓	✓						8
9	S-2 0' Draw		4:15	0'	S		1	1													✓	✓	✓						9
10	S-3 0' Draw		4:10	0	S		1	1													✓	✓	✓						10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Sheldon Hitchcock		2) KBattle	10/30/15
2	3)		4)	10/31/15 1250
3	5)		6)	

Total Containers per COC: Cooler Temp: 1.5 °C 3°

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA),See Label (L), Other (O) _____
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☑ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330930 Page 2 of 2

Company-City Talon/LPE Artesia, NM	**Phone** 575-746-8768
Project Name-Location Cal AB Laundry ☑ Previously done at XENCO	**Project ID**
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM	**Proj. Manager (PM)** Sheldon Hitchcock
E-mail Results to ☐PM and shitchcock@talonlpe.com	**Fax No:**
Invoice to ☐Accounting ☐Inc. Invoice with Final Report ☐Invoice must have a P.O. Bill to: Rachel Johnson ETP	
Quote/Pricing:	**P.O. No:** ☐ Call for P.O.
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP** QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:	
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)	
Sampler Name S. Hitchcock	**Signature**

Lab Only: 518518

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	TPH 8015M	BTEX 8021B	Total chlorides	TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:
1	S-4' Draw	10/29/15	4:25	0'	S		1	1	4oz	C	Cool										1	1	1					1
2	S-5' Draw	10/29/15	4:05	0'	S		1	1	4oz	C	Cool										1	1	1					2
3	S-6' Draw	10/29/15	4:00	0'	S		1	1	4oz	C	Cool										1	1	1					3
4																												4
5																												5
6																												6
7																												7
8																												8
9																												9
10																												10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1)		2)	
3)		4)	10/30/15 1250
5)		6)	

Total Containers per COC: Cooler Temp: 1.5 C 3.0

Otherwise agreed on writing. Reports are the intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 10/31/2015 12:50:00 PM

Work Order #: 518518

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Sample instructions complete on Chain of Custody?	Yes	
#9 Any missing/extra samples?	No	
#10 Chain of Custody signed when relinquished/ received?	Yes	
#11 Chain of Custody agrees with sample label(s)?	Yes	
#12 Container label(s) legible and intact?	Yes	
#13 Sample matrix/ properties agree with Chain of Custody?	Yes	
#14 Samples in proper container/ bottle?	Yes	
#15 Samples properly preserved?	Yes	
#16 Sample container(s) intact?	Yes	
#17 Sufficient sample amount for indicated test(s)?	Yes	
#18 All samples received within hold time?	Yes	
#19 Subcontract of sample(s)?	No	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Minerva Rios Date: 10/31/2015

Checklist reviewed by: Kelsey Brooks Date: 11/03/2015

Analytical Report 519768

for

Talon LPE

Project Manager: Sheldon Hitckcock

Cal A/B Launcher

27-NOV-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

27-NOV-15

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **519768**
Cal A/B Launcher
Project Address: NM

Sheldon Hitckcock:

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(s) 519768. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 519768 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,

Julian Martinez
Project Manager

Sample Cross Reference 519768

Talon LPE, Artesia, NM

Cal A/B Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
C-1	S	11-18-15 12:56		519768-001
C-2	S	11-18-15 12:58		519768-002
C-3	S	11-18-15 13:00		519768-003
C-5	S	11-18-15 13:06		519768-004
C-6	S	11-18-15 13:03		519768-005
BC-1	S	11-18-15 13:16		519768-006
BC-2	S	11-18-15 13:18		519768-007
BC-3	S	11-18-15 13:24		519768-008
BC-4	S	11-18-15 13:26		519768-009

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 519768

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitckcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 27-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	519768-001		519768-002		519768-003		519768-004		519768-005		519768-006	
	Field Id:	C-1		C-2		C-3		C-5		C-6		BC-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-15 12:56		Nov-18-15 12:58		Nov-18-15 13:00		Nov-18-15 13:06		Nov-18-15 13:03		Nov-18-15 13:16	
TCLP Mercury by SW 7470A SUB: T104704295-TX	*Extracted:*	Nov-25-15 07:45		Nov-25-15 07:45		Nov-25-15 07:45		Nov-25-15 07:45		Nov-25-15 07:45		Nov-25-15 07:45	
	Analyzed:	Nov-25-15 11:16		Nov-25-15 11:22		Nov-25-15 11:24		Nov-25-15 11:26		Nov-25-15 11:32		Nov-25-15 11:34	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Mercury		ND	0.000100	ND	0.000100	ND	0.000100	ND	0.000100	ND	0.000100	ND	0.000100
TCLP Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*	Nov-25-15 05:45		Nov-25-15 05:45		Nov-25-15 05:45		Nov-25-15 05:45		Nov-25-15 05:45		Nov-25-15 05:45	
	Analyzed:	Nov-25-15 10:53		Nov-25-15 11:11		Nov-25-15 11:23		Nov-25-15 11:27		Nov-25-15 11:30		Nov-25-15 11:33	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Arsenic		ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250
Barium		0.364	0.0250	0.242	0.0250	0.308	0.0250	0.366	0.0250	0.0623	0.0250	0.269	0.0250
Cadmium		ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125
Chromium		ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125	ND	0.0125
Lead		ND	0.0300	ND	0.0300	ND	0.0300	ND	0.0300	ND	0.0300	ND	0.0300
Selenium		ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250
Silver		ND	0.0100	ND	0.0100	ND	0.0100	ND	0.0100	ND	0.0100	ND	0.0100

Julian Martinez
Project Manager

Certificate of Analysis Summary 519768

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 27-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested		519768-001		519768-002		519768-003		519768-004		519768-005		519768-006	
	Lab Id:												
	Field Id:	C-1		C-2		C-3		C-5		C-6		BC-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-15 12:56		Nov-18-15 12:58		Nov-18-15 13:00		Nov-18-15 13:06		Nov-18-15 13:03		Nov-18-15 13:16	
BTEX by EPA 8021B	*Extracted:*	Nov-23-15 15:00		Nov-23-15 15:00		Nov-23-15 15:00		Nov-23-15 15:00		Nov-23-15 15:00		Nov-23-15 15:00	
	Analyzed:	Nov-23-15 17:46		Nov-23-15 18:03		Nov-24-15 08:59		Nov-24-15 10:54		Nov-23-15 18:52		Nov-23-15 19:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00101	ND	0.00100	ND	0.000990	ND	0.00167	ND	0.00101	ND	0.000996
Toluene		ND	0.00202	ND	0.00200	ND	0.00198	ND	0.00333	ND	0.00201	ND	0.00199
Ethylbenzene		ND	0.00101	ND	0.00100	ND	0.000990	ND	0.00167	ND	0.00101	ND	0.000996
m,p-Xylenes		ND	0.00202	ND	0.00200	ND	0.00198	ND	0.00333	ND	0.00201	ND	0.00199
o-Xylene		ND	0.00101	ND	0.00100	ND	0.000990	ND	0.00167	ND	0.00101	ND	0.000996
Total Xylenes		ND	0.00101	ND	0.00100	ND	0.000990	ND	0.00167	ND	0.00101	ND	0.000996
Total BTEX		ND	0.00101	ND	0.00100	ND	0.000990	ND	0.00167	ND	0.00101	ND	0.000996
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-20-15 12:00		Nov-20-15 12:00		Nov-20-15 12:00		Nov-20-15 12:00		Nov-20-15 12.00		Nov-20-15 12:00	
	Analyzed:	Nov-23-15 13:50		Nov-23-15 14:13		Nov-23-15 14:58		Nov-23-15 17:38		Nov-23-15 15:44		Nov-23-15 18:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3.74	2.00	10.4	10.0	15.1	10.0	3.25	2.00	ND	2.00	2.66	2.00
TPH by SW 8015B	*Extracted:*	Nov-20-15 10:00		Nov-20-15 10:00		Nov-20-15 10:00		Nov-20-15 10:00		Nov-20-15 10:00		Nov-20-15 10:00	
	Analyzed:	Nov-23-15 13:07		Nov-23-15 13:43		Nov-23-15 14:21		Nov-23-15 14:53		Nov-23-15 18:12		Nov-23-15 18:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0
Total TPH		ND	15.0	ND	15.0	ND	14.9	ND	15.0	ND	15.0	ND	15.0

Julian Martinez
Project Manager

Certificate of Analysis Summary 519768

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 27-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	519768-007		519768-008		519768-009				
	Field Id:	BC-2		BC-3		BC-4				
	Depth:									
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Nov-18-15 13:18		Nov-18-15 13:24		Nov-18-15 13:26				
TCLP Mercury by SW 7470A SUB: T104704295-TX	*Extracted:*	Nov-25-15 07:45		Nov-25-15 07:45		Nov-25-15 07:45				
	Analyzed:	Nov-25-15 11:36		Nov-25-15 11:39		Nov-25-15 11:41				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Mercury		ND	0.000100	ND	0.000100	ND	0.000100			
TCLP Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*	Nov-25-15 05:45		Nov-25-15 05:45		Nov-25-15 05:45				
	Analyzed:	Nov-25-15 11:36		Nov-25-15 11:40		Nov-25-15 11:43				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Arsenic		ND	0.0250	ND	0.0250	ND	0.0250			
Barium		0.279	0.0250	0.214	0.0250	1.36	0.0250			
Cadmium		ND	0.0125	ND	0.0125	ND	0.0125			
Chromium		ND	0.0125	ND	0.0125	ND	0.0125			
Lead		ND	0.0300	ND	0.0300	ND	0.0300			
Selenium		ND	0.0250	ND	0.0250	ND	0.0250			
Silver		ND	0.0100	ND	0.0100	ND	0.0100			

Julian Martinez
Project Manager

Certificate of Analysis Summary 519768

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 27-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested												
	Lab Id:	519768-007		519768-008		519768-009						
	Field Id:	BC-2		BC-3		BC-4						
	Depth:											
	Matrix:	SOIL		SOIL		SOIL						
	Sampled:	Nov-18-15 13:18		Nov-18-15 13:24		Nov-18-15 13:26						
BTEX by EPA 8021B	*Extracted:*	Nov-23-15 15:00		Nov-23-15 15:00		Nov-23-15 15:00						
	Analyzed:	Nov-23-15 19:25		Nov-23-15 19:42		Nov-23-15 19:57						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Benzene		ND	0.00100	ND	0.00101	ND	0.000994					
Toluene		ND	0.00201	ND	0.00201	ND	0.00199					
Ethylbenzene		ND	0.00100	ND	0.00101	ND	0.000994					
m,p-Xylenes		ND	0.00201	ND	0.00201	ND	0.00199					
o-Xylene		ND	0.00100	ND	0.00101	ND	0.000994					
Total Xylenes		ND	0.00100	ND	0.00101	ND	0.000994					
Total BTEX		ND	0.00100	ND	0.00101	ND	0.000994					
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-20-15 12:00		Nov-20-15 12:00		Nov-20-15 12:00						
	Analyzed:	Nov-23-15 18:23		Nov-25-15 12:32		Nov-21-15 09:55						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Chloride		ND	2.00	2.58	2.00	ND	2.00					
TPH by SW 8015B	*Extracted:*	Nov-20-15 10:00		Nov-20-15 10:00		Nov-20-15 10:00						
	Analyzed:	Nov-23-15 19:22		Nov-23-15 19:55		Nov-23-15 20:35						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL					
C6-C10 Gasoline Range Hydrocarbons		ND	14.9	ND	14.9	ND	14.9					
C10-C28 Diesel Range Hydrocarbons		ND	14.9	ND	14.9	ND	14.9					
C28-C35 Oil Range Hydrocarbons		ND	14.9	ND	14.9	ND	14.9					
Total TPH		ND	14.9	ND	14.9	ND	14.9					

Julian Martinez
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768,

Project ID:

Lab Batch #: 982033 **Sample:** 519768-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 13:07

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.8	102	70-135	
o-Terphenyl	45.4	49.9	91	70-135	

Lab Batch #: 982033 **Sample:** 519768-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 13:43

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.9	100	70-135	
o-Terphenyl	44.2	50.0	88	70-135	

Lab Batch #: 982033 **Sample:** 519768-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 14:21

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	99.5	98	70-135	
o-Terphenyl	41.9	49.8	84	70-135	

Lab Batch #: 982033 **Sample:** 519768-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 14:53

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

Lab Batch #: 982003 **Sample:** 519768-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 17:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0357	0.0300	119	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768,

Project ID:

Lab Batch #: 982003 **Sample:** 519768-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 18:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

Lab Batch #: 982033 **Sample:** 519768-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 18:12

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	99.8	96	70-135	
o-Terphenyl	45.0	49.9	90	70-135	

Lab Batch #: 982033 **Sample:** 519768-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 18:48

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	99.8	99	70-135	
o-Terphenyl	46.4	49.9	93	70-135	

Lab Batch #: 982003 **Sample:** 519768-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 18:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 982003 **Sample:** 519768-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:09

BTEX by EPA 8021B 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	0.0342	0.0300	114	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768,

Project ID:

Lab Batch #: 982033 **Sample:** 519768-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:22

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.6	99.5	98	70-135	
o-Terphenyl	46.2	49.8	93	70-135	

Lab Batch #: 982003 **Sample:** 519768-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 982003 **Sample:** 519768-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0354	0.0300	118	80-120	

Lab Batch #: 982033 **Sample:** 519768-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:55

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.6	121	70-135	
o-Terphenyl	57.4	49.8	115	70-135	

Lab Batch #: 982003 **Sample:** 519768-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 19:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768,

Project ID:

Lab Batch #: 982033 **Sample:** 519768-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:35

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	99.5	99	70-135	
o-Terphenyl	46.2	49.8	93	70-135	

Lab Batch #: 982003 **Sample:** 519768-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/24/15 08:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 982003 **Sample:** 519768-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/24/15 10:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 982033 **Sample:** 701239-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 11:33

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 982003 **Sample:** 701277-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 17:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768, **Project ID:**

Lab Batch #: 982033 **Sample:** 701239-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 12:08

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 982003 **Sample:** 701277-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 16:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 982033 **Sample:** 701239-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 12:47

TPH by SW 8015B 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	44.4	50.0	89	70-135	

Lab Batch #: 982003 **Sample:** 701277-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 16:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 982033 **Sample:** 519769-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/21/15 09:15

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	37.9	49.9	76	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519768,

Project ID:

Lab Batch #: 982003 **Sample:** 519768-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 982033 **Sample:** 519769-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/21/15 09:54

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	99.9	97	70-135	
o-Terphenyl	35.1	50.0	70	70-135	

Lab Batch #: 982003 **Sample:** 519768-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:47

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0345	0.0300	115	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.

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519768 **Project ID:**

Analyst: SYG **Date Prepared:** 11/23/2015 **Date Analyzed:** 11/23/2015

Lab Batch ID: 982003 **Sample:** 701277-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0909	91	0.100	0.0930	93	2	70-130	35	
Toluene	<0.00200	0.100	0.0907	91	0.100	0.0949	95	5	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0951	95	0.100	0.0994	99	4	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.201	0.208	103	5	70-135	35	
o-Xylene	<0.00100	0.100	0.0931	93	0.100	0.0981	98	5	71-133	35	

Analyst: MNR **Date Prepared:** 11/20/2015 **Date Analyzed:** 11/21/2015

Lab Batch ID: 981896 **Sample:** 701200-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	50.0	50.4	101	50.0	49.9	100	1	90-110	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

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519768 **Project ID:**

Analyst: DAT **Date Prepared:** 11/25/2015 **Date Analyzed:** 11/25/2015

Lab Batch ID: 982154 **Sample:** 701344-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000100	0.00500	0.00508	102	0.00500	0.00513	103	1	85-115	20	

Analyst: DAT **Date Prepared:** 11/25/2015 **Date Analyzed:** 11/25/2015

Lab Batch ID: 982158 **Sample:** 701333-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals per ICP by SW846 6010B 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
Arsenic	<0.0250	2.50	2.46	98	2.50	2.47	99	0	85-115	20	
Barium	<0.0250	2.50	2.31	92	2.50	2.33	93	1	85-115	20	
Cadmium	<0.0125	2.50	2.32	93	2.50	2.32	93	0	85-115	20	
Chromium	<0.0125	2.50	2.28	91	2.50	2.34	94	3	85-115	20	
Lead	<0.0300	2.50	2.23	89	2.50	2.23	89	0	85-115	20	
Selenium	<0.0250	2.50	2.56	102	2.50	2.58	103	1	85-115	20	
Silver	<0.0100	2.50	2.25	90	2.50	2.29	92	2	85-115	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

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519768 **Project ID:**

Analyst: PJB **Date Prepared:** 11/20/2015 **Date Analyzed:** 11/20/2015

Lab Batch ID: 982033 **Sample:** 701239-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	977	98	1000	1000	100	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1120	112	1000	1120	112	0	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

Form 3 - MS Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519768

Lab Batch #: 981896 **Project ID:**

Date Analyzed: 11/21/2015 **Date Prepared:** 11/20/2015 **Analyst:** MNR

QC- Sample ID: 519702-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	138	1000	1140	100	80-120	

Lab Batch #: 981896

Date Analyzed: 11/23/2015 **Date Prepared:** 11/20/2015 **Analyst:** MNR

QC- Sample ID: 519768-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	10.4	250	263	101	80-120	

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

Form 3 - MS / MSD Recoveries

Project Name: Cal A/B Launcher

Work Order # : 519768 **Project ID:**

Lab Batch ID: 982003 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/23/2015 **Date Prepared:** 11/23/2015 **Analyst:** SYG

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00101	0.101	0.0810	80	0.101	0.0892	88	10	70-130	35	
Toluene	<0.00202	0.101	0.0815	81	0.101	0.0873	86	7	70-130	35	
Ethylbenzene	<0.00101	0.101	0.0815	81	0.101	0.0906	90	11	71-129	35	
m,p-Xylenes	<0.00202	0.202	0.166	82	0.202	0.187	93	12	70-135	35	
o-Xylene	<0.00101	0.101	0.0815	81	0.101	0.0907	90	11	71-133	35	

Lab Batch ID: 982154 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/25/2015 **Date Prepared:** 11/25/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000100	0.00500	0.00507	101	0.00500	0.00507	101	0	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Cal A/B Launcher

Work Order # : 519768 **Project ID:**

Lab Batch ID: 982158 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/25/2015 **Date Prepared:** 11/25/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals per ICP by SW846 6010B 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
Arsenic	<0.0250	2.50	2.43	97	2.50	2.42	97	0	75-125	20	
Barium	0.364	2.50	2.54	87	2.50	2.56	88	1	75-125	20	
Cadmium	<0.0125	2.50	2.10	84	2.50	2.11	84	0	75-125	20	
Chromium	<0.0125	2.50	2.29	92	2.50	2.29	92	0	75-125	20	
Lead	<0.0300	2.50	2.07	83	2.50	2.07	83	0	75-125	20	
Selenium	<0.0250	2.50	2.55	102	2.50	2.54	102	0	75-125	20	
Silver	<0.0100	2.50	2.31	92	2.50	2.33	93	1	75-125	20	

Lab Batch ID: 982033 **QC- Sample ID:** 519769-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/21/2015 **Date Prepared:** 11/20/2015 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	995	100	999	929	93	7	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	1050	105	999	986	99	6	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200** ☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334** ☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330844 Page 1 of 2

Lab Only: 519768

Company-City Talon LP Artesia, NM 88210	**Phone** 575-689-5148
Project Name-Location CAL A/B Launcher ☐ Previously done at XENCO	**Project ID**
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM	**Proj. Manager (PM)** Johnnie Bradford
E-mail Results to ☒PM and Johnnie. SHitchcock@talonlpc.com / JBradford@Greggytransfer.com	**Fax No:**
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O. Bill to: Rachel Johnson - ETP	
Quote/Pricing:	**P.O. No:** ☐ Call for P.O.

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Johnnie Bradford **Signature** Johnnie Bradford

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals) VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	TPH 8015M	BETX 8021B	Chlorides	TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:	
1	C-1	11/18/14	12:56	0'	S		✓	1	4oz	C	C								✓		✓	✓	✓					1
2	C-2		12:58																									2
3	C-3		13:00																									3
4	C-5		13:06																									4
5	C-6		13:03																									5
6	BC-1		13:16																									6
7	BC-2		13:18																									7
8	BC-3		13:24																									8
9	BC-4		13:26	↓	↓		↓	↓	↓	↓	↓								↓		↓	↓	↓					9
10																												10

Relinquished by: (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Johnnie Bradford	11/19/2015 08:05	2) Sylvia Davis	11/19/15 8:05
3)		4)	
5)		6)	

Total Containers per COC: 9 Cooler Temp: 6 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA),See Label (L), Other (O) _____
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

Committed to Excellence in Service and Quality *www.xenco.com*

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 11/19/2015 08:05:00 AM

Work Order #: 519768

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	6	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Sample instructions complete on Chain of Custody?	Yes	
#9 Any missing/extra samples?	No	
#10 Chain of Custody signed when relinquished/ received?	Yes	
#11 Chain of Custody agrees with sample label(s)?	Yes	
#12 Container label(s) legible and intact?	Yes	
#13 Sample matrix/ properties agree with Chain of Custody?	Yes	
#14 Samples in proper container/ bottle?	Yes	
#15 Samples properly preserved?	Yes	
#16 Sample container(s) intact?	Yes	
#17 Sufficient sample amount for indicated test(s)?	Yes	
#18 All samples received within hold time?	Yes	
#19 Subcontract of sample(s)?	No	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Carley Owens — Carley Owens — Date: 11/19/2015

Checklist reviewed by: Kelsey Brooks — Kelsey Brooks — Date: 11/19/2015

Analytical Report 519769

for

Talon LPE

Project Manager: Sheldon Hitchcock

Cal A/B Launcher

25-NOV-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
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)

25-NOV-15

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **519769**
Cal A/B Launcher
Project Address: NM

Sheldon Hitckcock:

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(s) 519769. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 519769 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,

Julian Martinez
Project Manager

Sample Cross Reference 519769

Talon LPE, Artesia, NM

Cal A/B Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1	S	11-18-15 13:37	- 0 ft	519769-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 519769

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 25-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested								
	Lab Id:	519769-001						
	Field Id:	SP-1						
	Depth:	-0 ft						
	Matrix:	SOIL						
	Sampled:	Nov-18-15 13:37						
TCLP Mercury by SW 7470A SUB: T104704295-TX	*Extracted:*	Nov-25-15 07:45						
	Analyzed:	Nov-25-15 11:43						
	Units/RL:	mg/L	RL					
Mercury		ND	0.000100					
TCLP Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*	Nov-25-15 05:45						
	Analyzed:	Nov-25-15 11:46						
	Units/RL:	mg/L	RL					
Arsenic		ND	0.0250					
Barium		0.399	0.0250					
Cadmium		ND	0.0125					
Chromium		ND	0.0125					
Lead		ND	0.0300					
Selenium		ND	0.0250					
Silver		ND	0.0100					

Julian Martinez
Project Manager

Certificate of Analysis Summary 519769

Talon LPE, Artesia, NM

Project Name: Cal A/B Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Nov-19-15 08:05 am
Report Date: 25-NOV-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	519769-001					
	Field Id:	SP-1					
	Depth:	0 ft					
	Matrix:	SOIL					
	Sampled:	Nov-18-15 13:37					
BTEX by EPA 8021B	*Extracted:*	Nov-23-15 15:00					
	Analyzed:	Nov-23-15 20:14					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.000994				
Toluene		ND	0.00199				
Ethylbenzene		ND	0.000994				
m,p-Xylenes		ND	0.00199				
o-Xylene		ND	0.000994				
Total Xylenes		ND	0.000994				
Total BTEX		ND	0.000994				
Inorganic Anions by EPA 300/300.1	*Extracted:*	Nov-20-15 12:00					
	Analyzed:	Nov-23-15 13:28					
	Units/RL:	mg/kg	RL				
Chloride		24.0	20.0				
TPH by SW 8015B	*Extracted:*	Nov-20-15 10:00					
	Analyzed:	Nov-23-15 22:52					
	Units/RL:	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0				
C10-C28 Diesel Range Hydrocarbons		ND	15.0				
C28-C35 Oil Range Hydrocarbons		ND	15.0				
Total TPH		ND	15.0				

Julian Martinez
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519769, 519769 **Project ID:**

Lab Batch #: 982003 **Sample:** 519769-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:14

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 982033 **Sample:** 519769-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 22:52

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.2	99.8	91	70-135	
o-Terphenyl	42.4	49.9	85	70-135	

Lab Batch #: 982033 **Sample:** 701239-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 11:33

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 982003 **Sample:** 701277-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 17:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

Lab Batch #: 982033 **Sample:** 701239-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 12:08

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	46.6	50.0	93	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519769, 519769 **Project ID:**

Lab Batch #: 982003 **Sample:** 701277-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 16:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 982033 **Sample:** 701239-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/15 12:47

TPH by SW 8015B 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	44.4	50.0	89	70-135	

Lab Batch #: 982003 **Sample:** 701277-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/23/15 16:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 982033 **Sample:** 519769-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/21/15 09:15

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	37.9	49.9	76	70-135	

Lab Batch #: 982003 **Sample:** 519768-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	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.

Form 2 - Surrogate Recoveries

Project Name: Cal A/B Launcher

Work Orders : 519769, 519769 **Project ID:**

Lab Batch #: 982033 **Sample:** 519769-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/21/15 09:54

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	99.9	97	70-135	
o-Terphenyl	35.1	50.0	70	70-135	

Lab Batch #: 982003 **Sample:** 519768-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/23/15 20:47

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0345	0.0300	115	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.

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519769, 519769 **Project ID:**

Analyst: SYG **Date Prepared:** 11/23/2015 **Date Analyzed:** 11/23/2015

Lab Batch ID: 982003 **Sample:** 701277-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0909	91	0.100	0.0930	93	2	70-130	35	
Toluene	<0.00200	0.100	0.0907	91	0.100	0.0949	95	5	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0951	95	0.100	0.0994	99	4	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.201	0.208	103	5	70-135	35	
o-Xylene	<0.00100	0.100	0.0931	93	0.100	0.0981	98	5	71-133	35	

Analyst: MNR **Date Prepared:** 11/20/2015 **Date Analyzed:** 11/21/2015

Lab Batch ID: 981896 **Sample:** 701200-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	50.0	50.4	101	50.0	49.9	100	1	90-110	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

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519769, 519769 **Project ID:**

Analyst: DAT **Date Prepared:** 11/25/2015 **Date Analyzed:** 11/25/2015

Lab Batch ID: 982154 **Sample:** 701344-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000100	0.00500	0.00508	102	0.00500	0.00513	103	1	85-115	20	

Analyst: DAT **Date Prepared:** 11/25/2015 **Date Analyzed:** 11/25/2015

Lab Batch ID: 982158 **Sample:** 701333-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals per ICP by SW846 6010B 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
Arsenic	<0.0250	2.50	2.46	98	2.50	2.47	99	0	85-115	20	
Barium	<0.0250	2.50	2.31	92	2.50	2.33	93	1	85-115	20	
Cadmium	<0.0125	2.50	2.32	93	2.50	2.32	93	0	85-115	20	
Chromium	<0.0125	2.50	2.28	91	2.50	2.34	94	3	85-115	20	
Lead	<0.0300	2.50	2.23	89	2.50	2.23	89	0	85-115	20	
Selenium	<0.0250	2.50	2.56	102	2.50	2.58	103	1	85-115	20	
Silver	<0.0100	2.50	2.25	90	2.50	2.29	92	2	85-115	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

BS / BSD Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519769, 519769 **Project ID:**

Analyst: PJB **Date Prepared:** 11/20/2015 **Date Analyzed:** 11/20/2015

Lab Batch ID: 982033 **Sample:** 701239-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	977	98	1000	1000	100	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1120	112	1000	1120	112	0	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

Form 3 - MS Recoveries

Project Name: Cal A/B Launcher

Work Order #: 519769

Lab Batch #: 981896 **Project ID:**

Date Analyzed: 11/21/2015 **Date Prepared:** 11/20/2015 **Analyst:** MNR

QC- Sample ID: 519702-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	138	1000	1140	100	80-120	

Lab Batch #: 981896

Date Analyzed: 11/23/2015 **Date Prepared:** 11/20/2015 **Analyst:** MNR

QC- Sample ID: 519768-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	10.4	250	263	101	80-120	

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

Form 3 - MS / MSD Recoveries

Project Name: Cal A/B Launcher

Work Order # : 519769 **Project ID:**

Lab Batch ID: 982003 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/23/2015 **Date Prepared:** 11/23/2015 **Analyst:** SYG

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00101	0.101	0.0810	80	0.101	0.0892	88	10	70-130	35	
Toluene	<0.00202	0.101	0.0815	81	0.101	0.0873	86	7	70-130	35	
Ethylbenzene	<0.00101	0.101	0.0815	81	0.101	0.0906	90	11	71-129	35	
m,p-Xylenes	<0.00202	0.202	0.166	82	0.202	0.187	93	12	70-135	35	
o-Xylene	<0.00101	0.101	0.0815	81	0.101	0.0907	90	11	71-133	35	

Lab Batch ID: 982154 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/25/2015 **Date Prepared:** 11/25/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000100	0.00500	0.00507	101	0.00500	0.00507	101	0	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Cal A/B Launcher

Work Order # : 519769 **Project ID:**

Lab Batch ID: 982158 **QC- Sample ID:** 519768-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/25/2015 **Date Prepared:** 11/25/2015 **Analyst:** DAT

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals per ICP by SW846 6010B 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
Arsenic	<0.0250	2.50	2.43	97	2.50	2.42	97	0	75-125	20	
Barium	0.364	2.50	2.54	87	2.50	2.56	88	1	75-125	20	
Cadmium	<0.0125	2.50	2.10	84	2.50	2.11	84	0	75-125	20	
Chromium	<0.0125	2.50	2.29	92	2.50	2.29	92	0	75-125	20	
Lead	<0.0300	2.50	2.07	83	2.50	2.07	83	0	75-125	20	
Selenium	<0.0250	2.50	2.55	102	2.50	2.54	102	0	75-125	20	
Silver	<0.0100	2.50	2.31	92	2.50	2.33	93	1	75-125	20	

Lab Batch ID: 982033 **QC- Sample ID:** 519769-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/21/2015 **Date Prepared:** 11/20/2015 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	995	100	999	929	93	7	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	1050	105	999	986	99	6	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 281-240-4200
☐ 5332, Blackberry Drive, San Antonio, TX 78238 210-509-3334
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 214-902-0300
☐ 12600 West I-20 East, Odessa, TX 79765 432-563-1800

Serial #: 330846 Page 2 of 2

Company-City: Talon LP Artesia, NM 88210 Phone: 575-689-5148

Lab Only: 519766 519769

Project Name-Location: CAL A1B Launcher ☐ Previously done at XENCO Project ID:

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other NM
Proj. Manager (PM): Johnnie Bradford

E-mail Results to ☒ PM and Fax No: EnergyTR AASTER .com
SHitchcock @ talonLPC.com / Johnnie.Bradford@

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to: Rachel Johnson - ETP

Quote/Pricing: P.O. No: ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Johnnie Bradford Signature: Johnnie Bradford

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - (TCLP) (Metals) VOCs . SVOCs Pest. Herb. PCBs)	EDB / DBCP	TPH - 8015M	BETX - 8021 B	Chlorides	TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Remarks	
1	SP-1	11/18/2014	13:37	0'	S	✓		1	32	C	C								✓		✓	✓	✓						1
2																													2
3																													3
4																													4
5																													5
6																													6
7																													7
8																													8
9																													9
10																													10

Remarks columns: Addn: Date Rcv. by: From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Johnnie Bradford	11/19/2015 8:05	2) [signature]	11/19/15 8:05
2	3)		4)	
3	5)		6)	

Total Containers per COC: 1 Cooler Temp: 6 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA), See Label (L), Other (O)
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other ________ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

Committed to Excellence in Service and Quality www.xenco.com

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 11/19/2015 08:05:00 AM

Work Order #: 519769

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Carley Owens — Carley Owens — Date: 11/19/2015

Checklist reviewed by: Kelsey Brooks — Kelsey Brooks — Date: 11/19/2015

Analytical Report 527665

for

Talon LPE

Project Manager: Sheldon Hitchcock

Cal AB Launcher

06-APR-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

06-APR-16

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **527665**
Cal AB Launcher
Project Address: NM

Sheldon Hitckcock:

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(s) 527665. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 527665 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 527665

Talon LPE, Artesia, NM

Cal AB Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
C-1 1'	S	03-30-16 13:04	- 1 ft	527665-001
C-2 1'	S	03-30-16 13:06	- 1 ft	527665-002
C-3 1'	S	03-30-16 13:08	- 1 ft	527665-003
C-4 1'	S	03-30-16 13:12	- 1 ft	527665-004
C-5 1'	S	03-30-16 13:15	- 1 ft	527665-005
C-6 1'	S	03-30-16 13:18	- 1 ft	527665-006
C-7 1'	S	03-30-16 13:23	- 1 ft	527665-007

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-991555 BTEX by EPA 8021B

Lab Sample ID 527665-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 527665-001, -002, -003, -004, -005, -006, -007.

The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 527665

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Mar-31-16 09:42 am
Report Date: 06-APR-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	527665-001		527665-002		527665-003		527665-004		527665-005		527665-006	
	Field Id:	C-1 1'		C-2 1'		C-3 1'		C-4 1'		C-5 1'		C-6 1'	
	Depth:	-1 ft		-1 ft		-1 ft		-1 ft		-1 ft		-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-30-16 13:04		Mar-30-16 13:06		Mar-30-16 13:08		Mar-30-16 13:12		Mar-30-16 13:15		Mar-30-16 13:18	
TCLP Mercury by SW 7470A SUB: E871002	*Extracted:*	Apr-05-16 12:10		Apr-05-16 12:10		Apr-05-16 12:10		Apr-05-16 12:10		Apr-05-16 12:10		Apr-05-16 12:10	
	Analyzed:	Apr-05-16 15:48		Apr-05-16 15:52		Apr-05-16 15:53		Apr-05-16 15:55		Apr-05-16 15:59		Apr-05-16 16:00	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Mercury		ND	0.000200	ND	0.000200	ND	0.000200	ND	0.000200	ND	0.000200	ND	0.000200
TCLP Metals by SW846 6010B SUB: E871002	*Extracted:*	Apr-05-16 11:30		Apr-05-16 11:30		Apr-05-16 11:30		Apr-05-16 11:30		Apr-05-16 11:30		Apr-05-16 11:30	
	Analyzed:	Apr-05-16 17:05		Apr-05-16 17:19		Apr-05-16 17:24		Apr-05-16 17:29		Apr-05-16 17:42		Apr-05-16 17:47	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Arsenic		ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500
Barium		0.254	0.0500	0.365	0.0500	0.402	0.0500	0.705	0.0500	0.318	0.0500	0.186	0.0500
Cadmium		ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250	ND	0.0250
Chromium		ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500
Lead		ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500	ND	0.0500
Selenium		ND	0.100	ND	0.100	ND	0.100	ND	0.100	ND	0.100	ND	0.100
Silver		ND	0.100	ND	0.100	ND	0.100	ND	0.100	ND	0.100	ND	0.100

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 527665

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id:
Contact: Sheldon Hitckcock
Project Location: NM

Date Received in Lab: Thu Mar-31-16 09:42 am
Report Date: 06-APR-16
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	527665-001		527665-002		527665-003		527665-004		527665-005		527665-006	
	Field Id:	C-1 1'		C-2 1'		C-3 1'		C-4 1'		C-5 1'		C-6 1'	
	Depth:	1 ft		1 ft		1 ft		1 ft		1 ft		1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-30-16 13:04		Mar-30-16 13:06		Mar-30-16 13:08		Mar-30-16 13:12		Mar-30-16 13:15		Mar-30-16 13:18	
BTEX by EPA 8021B	*Extracted:*	Mar-31-16 12:00		Mar-31-16 12:00		Mar-31-16 12:00		Mar-31-16 12:00		Mar-31-16 12:00		Mar-31-16 12:00	
	Analyzed:	Mar-31-16 14:06		Mar-31-16 14:23		Mar-31-16 14:39		Mar-31-16 14:56		Mar-31-16 15:12		Mar-31-16 15:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00150	ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149	ND	0.00150
Toluene		ND	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199	ND	0.00200
Ethylbenzene		0.00329	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199	ND	0.00200
m,p-Xylenes		0.00410	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199	ND	0.00200
o-Xylene		ND	0.00299	ND	0.00299	ND	0.00298	ND	0.00299	ND	0.00298	ND	0.00299
Total Xylenes		0.00410	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00199	ND	0.00200
Total BTEX		0.00739	0.00150	ND	0.00150	ND	0.00149	ND	0.00150	ND	0.00149	ND	0.00150
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-03-16 17:50		Apr-03-16 17:50		Apr-03-16 17:50		Apr-03-16 17:50		Apr-03-16 17:50		Apr-03-16 17:50	
	Analyzed:	Apr-04-16 07:55		Apr-04-16 08:15		Apr-04-16 08:36		Apr-04-16 08:56		Apr-04-16 09:16		Apr-04-16 10:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		259	100	106	40.0	24.5	20.0	3.12	2.00	303	100	748	100
TPH By SW8015B Mod	*Extracted:*	Mar-31-16 14:00		Mar-31-16 14:00		Mar-31-16 14:00		Mar-31-16 14:00		Mar-31-16 14:00		Mar-31-16 14:00	
	Analyzed:	Mar-31-16 17:32		Mar-31-16 18:41		Mar-31-16 19:03		Mar-31-16 19:25		Mar-31-16 19:47		Mar-31-16 20:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		27.2	15.0	ND	14.9	ND	15.0	ND	14.9	ND	15.0	ND	15.0
C10-C28 Diesel Range Hydrocarbons		1220	15.0	33.8	14.9	ND	15.0	ND	14.9	ND	15.0	ND	15.0
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	14.9	ND	15.0	ND	14.9	ND	15.0	ND	15.0
Total TPH		1250	15.0	33.8	14.9	ND	15.0	ND	14.9	ND	15.0	ND	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 527665

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Mar-31-16 09:42 am
Report Date: 06-APR-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	527665-007					
	Field Id:	C-7 1'					
	Depth:	-1 ft					
	Matrix:	SOIL					
	Sampled:	Mar-30-16 13:23					
TCLP Mercury by SW 7470A SUB: E871002	*Extracted:*	Apr-05-16 12:10					
	Analyzed:	Apr-05-16 16:02					
	Units/RL:	mg/L RL					
Mercury		ND 0.000200					
TCLP Metals by SW846 6010B SUB: E871002	*Extracted:*	Apr-05-16 11:30					
	Analyzed:	Apr-05-16 17:52					
	Units/RL:	mg/L RL					
Arsenic		ND 0.0500					
Barium		0.136 0.0500					
Cadmium		ND 0.0250					
Chromium		ND 0.0500					
Lead		ND 0.0500					
Selenium		ND 0.100					
Silver		ND 0.100					

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 527665

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Thu Mar-31-16 09:42 am
Report Date: 06-APR-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	527665-007					
	Field Id:	C-7 1'					
	Depth:	1 ft					
	Matrix:	SOIL					
	Sampled:	Mar-30-16 13:23					
BTEX by EPA 8021B	*Extracted:*	Mar-31-16 12:00					
	Analyzed:	Mar-31-16 15:45					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00149				
Toluene		ND	0.00198				
Ethylbenzene		ND	0.00198				
m,p-Xylenes		ND	0.00198				
o-Xylene		ND	0.00298				
Total Xylenes		ND	0.00198				
Total BTEX		ND	0.00149				
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-03-16 17:50					
	Analyzed:	Apr-04-16 11:02					
	Units/RL:	mg/kg	RL				
Chloride		1050	100				
TPH By SW8015B Mod	*Extracted:*	Mar-31-16 14:00					
	Analyzed:	Mar-31-16 20:32					
	Units/RL:	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.0				
C10-C28 Diesel Range Hydrocarbons		ND	15.0				
C28-C35 Oil Range Hydrocarbons		ND	15.0				
Total TPH		ND	15.0				

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 527665,

Project ID:

Lab Batch #: 991555 **Sample:** 527665-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 14:06

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 991555 **Sample:** 527665-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 14:23

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 991555 **Sample:** 527665-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 14:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 991555 **Sample:** 527665-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 14:56

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 991555 **Sample:** 527665-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 15:12

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 527665,

Project ID:

Lab Batch #: 991555 **Sample:** 527665-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 15:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 991555 **Sample:** 527665-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 15:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 991537 **Sample:** 527665-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 17:32

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.8	110	70-135	
o-Terphenyl	52.7	49.9	106	70-135	

Lab Batch #: 991537 **Sample:** 527665-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 18:41

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	99.6	99	70-135	
o-Terphenyl	46.6	49.8	94	70-135	

Lab Batch #: 991537 **Sample:** 527665-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 19:03

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.7	102	70-135	
o-Terphenyl	49.2	49.9	99	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 527665,

Project ID:

Lab Batch #: 991537 **Sample:** 527665-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 19:25

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.6	102	70-135	
o-Terphenyl	48.9	49.8	98	70-135	

Lab Batch #: 991537 **Sample:** 527665-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 19:47

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.8	106	70-135	
o-Terphenyl	52.0	49.9	104	70-135	

Lab Batch #: 991537 **Sample:** 527665-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 20:09

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	50.8	49.9	102	70-135	

Lab Batch #: 991537 **Sample:** 527665-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 20:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R *	Flags
1-Chlorooctane	101	99.7	101	70-135	
o-Terphenyl	48.4	49.9	97	70-135	

Lab Batch #: 991555 **Sample:** 707193-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 13:50

SURROGATE RECOVERY STUDY

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-Bromofluorobenzene	0.0266	0.0300	89	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 527665,

Project ID:

Lab Batch #: 991537 **Sample:** 707182-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 16:22

TPH By SW8015B Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	53.4	50.0	107	70-135	

Lab Batch #: 991555 **Sample:** 707193-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 12:27

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 991537 **Sample:** 707182-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 16:46

TPH By SW8015B Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	51.2	50.0	102	70-135	

Lab Batch #: 991555 **Sample:** 707193-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 12:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 991537 **Sample:** 707182-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/31/16 17:10

TPH By SW8015B Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	50.2	50.0	100	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 527665,

Project ID:

Lab Batch #: 991555 **Sample:** 527665-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 13:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 991537 **Sample:** 527665-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 17:54

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.9	125	70-135	
o-Terphenyl	51.9	50.0	104	70-135	

Lab Batch #: 991555 **Sample:** 527665-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 13:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 991537 **Sample:** 527665-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/31/16 18:17

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.9	128	70-135	
o-Terphenyl	54.4	50.0	109	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.

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 527665 **Project ID:**

Analyst: PJB **Date Prepared:** 03/31/2016 **Date Analyzed:** 03/31/2016

Lab Batch ID: 991555 **Sample:** 707193-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00150	0.100	0.0932	93	0.100	0.0890	89	5	70-130	35	
Toluene	<0.00200	0.100	0.0944	94	0.100	0.0916	92	3	70-130	35	
Ethylbenzene	<0.00200	0.100	0.105	105	0.100	0.101	101	4	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.204	102	0.200	0.197	99	3	70-135	35	
o-Xylene	<0.00300	0.100	0.0976	98	0.100	0.0946	95	3	71-133	35	

Analyst: MNR **Date Prepared:** 04/03/2016 **Date Analyzed:** 04/04/2016

Lab Batch ID: 991677 **Sample:** 707259-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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	<2.00	50.0	53.3	107	50.0	50.6	101	5	90-110	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

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 527665 **Project ID:**

Analyst: BHRE **Date Prepared:** 04/05/2016 **Date Analyzed:** 04/05/2016

Lab Batch ID: 991786 **Sample:** 707323-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000200	0.00200	0.00190	95	0.00200	0.00222	111	16	80-120	20	

Analyst: BHRE **Date Prepared:** 04/05/2016 **Date Analyzed:** 04/05/2016

Lab Batch ID: 991790 **Sample:** 707325-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals by SW846 6010B 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
Arsenic	<0.0100	1.00	0.971	97	1.00	0.978	98	1	80-120	20	
Barium	<0.0100	1.00	0.935	94	1.00	0.940	94	1	80-120	20	
Cadmium	<0.00500	1.00	0.946	95	1.00	0.950	95	0	80-120	20	
Chromium	<0.0100	1.00	1.04	104	1.00	1.05	105	1	80-120	20	
Lead	<0.0100	1.00	0.996	100	1.00	0.998	100	0	80-120	20	
Selenium	<0.0200	1.00	0.972	97	1.00	0.977	98	1	80-120	20	
Silver	<0.0200	0.500	0.580	116	0.500	0.583	117	1	80-120	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

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 527665 **Project ID:**

Analyst: ARM **Date Prepared:** 03/31/2016 **Date Analyzed:** 03/31/2016

Lab Batch ID: 991537 **Sample:** 707182-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	844	84	1000	828	83	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	934	93	1000	866	87	8	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

Form 3 - MS Recoveries

Project Name: Cal AB Launcher

Work Order #: 527665

Lab Batch #: 991677 **Project ID:**

Date Analyzed: 04/04/2016 **Date Prepared:** 04/03/2016 **Analyst:** MNR

QC- Sample ID: 527809-001 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	734	2500	3380	106	80-120	

Lab Batch #: 991677

Date Analyzed: 04/04/2016 **Date Prepared:** 04/04/2016 **Analyst:** MNR

QC- Sample ID: 527822-001 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	1010	2500	3670	106	80-120	

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

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 527665 **Project ID:**

Lab Batch ID: 991555 **QC- Sample ID:** 527665-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/31/2016 **Date Prepared:** 03/31/2016 **Analyst:** PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00150	0.0998	0.0596	60	0.0992	0.0579	58	3	70-130	35	X
Toluene	<0.00200	0.0998	0.0603	60	0.0992	0.0559	56	8	70-130	35	X
Ethylbenzene	0.00329	0.0998	0.0647	62	0.0992	0.0587	56	10	71-129	35	X
m,p-Xylenes	0.00410	0.200	0.125	60	0.198	0.112	54	11	70-135	35	X
o-Xylene	<0.00299	0.0998	0.0628	63	0.0992	0.0544	55	14	71-133	35	X

Lab Batch ID: 991786 **QC- Sample ID:** 527665-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/05/2016 **Date Prepared:** 04/05/2016 **Analyst:** BHRE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A 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
Mercury	<0.000200	0.00200	0.00188	94	0.00200	0.00175	88	7	75-125	20	

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

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 527665 **Project ID:**

Lab Batch ID: 991790 **QC- Sample ID:** 527665-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/05/2016 **Date Prepared:** 04/05/2016 **Analyst:** BHRE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals by SW846 6010B 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
Arsenic	<0.0500	5.00	5.20	104	5.00	5.24	105	1	80-120	20	
Barium	0.254	5.00	5.05	96	5.00	5.08	97	1	80-120	20	
Cadmium	<0.0250	5.00	4.95	99	5.00	4.98	100	1	80-120	20	
Chromium	<0.0500	5.00	5.34	107	5.00	5.38	108	1	80-120	20	
Lead	<0.0500	5.00	4.96	99	5.00	5.01	100	1	80-120	20	
Selenium	<0.100	5.00	5.21	104	5.00	5.31	106	2	80-120	20	
Silver	<0.100	2.50	2.98	119	2.50	2.97	119	0	80-120	20	

Lab Batch ID: 991537 **QC- Sample ID:** 527665-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/31/2016 **Date Prepared:** 03/31/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod 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
C6-C10 Gasoline Range Hydrocarbons	27.2	999	889	86	999	1010	98	13	70-135	35	
C10-C28 Diesel Range Hydrocarbons	1220	999	2270	105	999	2340	112	3	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Final 1.000

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200** ☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334** ☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330849 Page of

Company-City Talon/LPE Artesia, NM	**Phone** 575-677-5198
Project Name-Location Cal AB Launcher	☐ Previously done at XENCO **Project ID**
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other	**Proj. Manager (PM)** Sheldon Hitchcock
E-mail Results to ☐ PM and	**Fax No:**
shitchcock@talonlpe.com	
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.	
Bill to: Rachel Johnson - ETP	
Quote/Pricing:	**P.O. No:** ☐ Call for P.O.

Lab Only: 52605

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Sheldon Hitchcock **Signature** Sheldon Hitchcock

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	C-1 1'	3/30/16	13:04	1	S		X	1	4	C	C
2	C-2 1'		13:04	1	S		X	1	4	C	C
3	C-3 1'		13:08	1	S		X	1	4	C	C
4	C-4 1'		13:12	1	S		X	1	4	C	C
5	C-5 1'		13:15	1	S		X	1	4	C	C
6	C-6 1'		13:18	1	S		X	1	4	C	C
7	C-7 1'		13:23	1	S		X	1	4	C	C
8											
9											
10											

VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs
VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:
PAHs SIM 8310 8270
TX-1005 DRO GRO MA EPH MA VPH
SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL
OC Pesticides PCBs Herbicides OP Pesticides
Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2
SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)
EDB / DBCP
TPH 8015M
BTEX 8021B
Total Chlorides
TCLP RCRA 8 Metals
TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)

Remarks
Sample Clean-ups are pre-approved as needed
Addn: Date Rcv. by: From:

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Sheldon Hitchcock SH	3/30/16 13:33	2) Jasmine Bradford	03/30/2016 13:25
3) Jasmine Bradford	3/31/2016 09:42	4) [illegible]	3/31/16 9:42
5)		6)	

Total Containers per COC:
Otherwise agreed on writing. Reports are C/F:0
until paid. Samples will be held 30 days a
hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Temp: 2.9° IR ID:R-8
Corrected Temp:

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA),See Label (L), Other (O) _____
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

Committed to Excellence in Service and Quality *www.xenco.com*

Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 03/31/2016 09:42:00 AM

Work Order #: 527665

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seal present on shipping container/ cooler?	Yes
#5 *Custody Seals intact on shipping container/ cooler?	Yes
#6 Custody Seals intact on sample bottles?	Yes
#7 *Custody Seals Signed and dated?	Yes
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	No
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Minerva Rios Date: 03/31/2016

Checklist reviewed by: Kelsey Brooks Date: 03/31/2016

Analytical Report 528951

for

Talon LPE

Project Manager: Sheldon Hitckcock

Cal AB Launcher

29-APR-16

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534-15-1)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

29-APR-16

Project Manager: **Sheldon Hitckcock**
Talon LPE
408 W. Texas St.
Artesia, NM 88210

Reference: XENCO Report No(s): **528951**
Cal AB Launcher
Project Address: NM

Sheldon Hitckcock:

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(s) 528951. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 528951 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 528951

Talon LPE, Artesia, NM

Cal AB Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
C-1 1.5'	S	04-22-16 11:00	- 1.5 ft	528951-001
C-7 1.5'	S	04-22-16 10:15	- 1.5 ft	528951-002

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 528951

Talon LPE, Artesia, NM

Project Name: Cal AB Launcher

Project Id:
Contact: Sheldon Hitchcock
Project Location: NM

Date Received in Lab: Fri Apr-22-16 03:58 pm
Report Date: 29-APR-16
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	528951-001	528951-002				
	Field Id:	C-1 1.5'	C-7 1.5'				
	Depth:	1.5 ft	1.5 ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Apr-22-16 11:00	Apr-22-16 10:15				
Inorganic Anions by EPA 300/300.1	*Extracted:*		Apr-28-16 18:00				
	Analyzed:		Apr-29-16 13:21				
	Units/RL:		mg/kg RL				
Chloride			629 40.0				
TPH By SW8015B Mod	*Extracted:*	Apr-23-16 11:00					
	Analyzed:	Apr-25-16 09:17					
	Units/RL:	mg/kg RL					
C6-C10 Gasoline Range Hydrocarbons		ND 15.0					
C10-C28 Diesel Range Hydrocarbons		17.9 15.0					
C28-C35 Oil Range Hydrocarbons		ND 15.0					
Total TPH		17.9 15.0					

Kelsey Brooks
Project Manager

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 quantitation 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.

** Surrogate recovered outside laboratory control limit.

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

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 528951,

Project ID:

Lab Batch #: 993066 **Sample:** 528951-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/25/16 09:17

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.0	99.9	85	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

Lab Batch #: 993066 **Sample:** 708099-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/16 01:46

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 993066 **Sample:** 708099-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/16 02:11

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	53.5	50.0	107	70-135	

Lab Batch #: 993066 **Sample:** 708099-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/24/16 02:38

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	46.9	50.0	94	70-135	

Lab Batch #: 993066 **Sample:** 528736-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/16 03:34

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.2	99.9	95	70-135	
o-Terphenyl	41.3	50.0	83	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.

Form 2 - Surrogate Recoveries

Project Name: Cal AB Launcher

Work Orders : 528951,

Project ID:

Lab Batch #: 993066 **Sample:** 528736-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/24/16 04:02

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.7	100	70-135	
o-Terphenyl	*44.5*	*49.9*	*89*	*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.

BS / BSD Recoveries

Project Name: Cal AB Launcher

Work Order #: 528951 **Project ID:**

Analyst: MNR **Date Prepared:** 04/28/2016 **Date Analyzed:** 04/29/2016

Lab Batch ID: 993436 **Sample:** 708288-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

Inorganic Anions by EPA 300/300.1	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	<2.00	50.0	48.7	97	50.0	48.5	97	0	90-110	20	

Analyst: ARM **Date Prepared:** 04/23/2016 **Date Analyzed:** 04/24/2016

Lab Batch ID: 993066 **Sample:** 708099-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015B Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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-C10 Gasoline Range Hydrocarbons	<15.0	1000	916	92	1000	803	80	13	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	967	97	1000	843	84	14	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

Form 3 - MS Recoveries

Project Name: Cal AB Launcher

Work Order #: 528951

Lab Batch #: 993436 **Project ID:**

Date Analyzed: 04/29/2016 **Date Prepared:** 04/28/2016 **Analyst:** MNR

QC- Sample ID: 528951-002 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	629	1000	1610	98	80-120	

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

Form 3 - MS / MSD Recoveries

Project Name: Cal AB Launcher

Work Order # : 528951 **Project ID:**

Lab Batch ID: 993066 **QC- Sample ID:** 528736-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/24/2016 **Date Prepared:** 04/23/2016 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod 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
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	770	77	997	795	80	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	21.6	999	819	80	997	875	86	7	70-135	35	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Cal AB Launcher

Work Order #: 528951

Lab Batch #: 993436 **Project ID:**

Date Analyzed: 04/29/2016 13:47 **Date Prepared:** 04/28/2016 **Analyst:** MNR

QC- Sample ID: 528951-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	629	621	1	20	

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

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 281-240-4200
☐ 5332, Blackberry Drive, San Antonio, TX 78238 210-509-3334
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 214-902-0300
☒ 12600 West I-20 East, Odessa, TX 79765 432-563-1800

Serial #: 330850 Page 1 of 1

Lab Only: 528951

Company-City: Talon/LPE Artesia, NM Phone: 575-684-6198
Project Name-Location: Cal AB Laguna ☐ Previously done at XENCO Project ID:
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other
Proj. Manager (PM): Sheldon Hitchcock
E-mail Results to ☑ PM and Fax No:
shitchcock@talonlpe.com
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to: Rachel Johnson - ETP
Quote/Pricing: P.O. No: ☐ Call for P.O.
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)
Sampler Name: S. Hitchcock Signature: [signature]

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d (Standard) TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

#	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	TPH 8015M	Chlorides
1	C-1 1.5'	4/22/16	11:00	1.5	S		X	1	4	C	C	/	
2	C-7 1.5'	4/22/16	10:15	1.5	S		X	1	4	C	C		/
3													
4													
5													
6													
7													
8													
9													
10													

Other analysis columns (unmarked): VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs; VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:; PAHs SIM 8310 8270; TX-1005 DRO GRO MA EPH MA VPH; SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL; OC Pesticides PCBs Herbicides OP Pesticides; Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2; SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs); EDB / DBCP; TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d; Addn: PAH above mg/L W, mg/Kg S Highest Hit; Hold Samples (Surcharges will apply and are pre-approved); Sample Clean-ups are pre-approved as needed

Remarks: Addn: Date Rcv. by: From: Final 1.000

#	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Sheldon Hitchcock [signature]	4/22/16 12:00	2) Rachel Johnson	4-22-16
2	3) Rachel Johnson [signature]	4/22/16 3:45	4) [signature]	4-22-16 3:45
3	5)		6)	

Total Containers per COC: Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA), See Label (L), Other (O)
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)
Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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C/F: 0 Corrected Temp: 4.1°C 4.1

Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Talon LPE

Date/ Time Received: 04/22/2016 03:58:28 PM

Work Order #: 528951

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.1
#2 *Shipping container in good condition?	N/A
#3 *Samples received on ice?	Yes
#4 *Custody Seal present on shipping container/ cooler?	N/A
#5 *Custody Seals intact on shipping container/ cooler?	N/A
#6 Custody Seals intact on sample bottles?	N/A
#7 *Custody Seals Signed and dated?	N/A
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	No
#21 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Mary Alexis Negron Date: 04/22/2016
Mary Negron

Checklist reviewed by: Kelsey Brooks Date: 04/22/2016
Kelsey Brooks