

January 4, 2018



El Paso Natural Gas
Company, L.L.C.
a Kinder Morgan company

State of New Mexico
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 85705

Subject: El Paso Natural Gas Company, L.L.C., Line No. 1100 Segment 5 & 6, Release Notification #2RP-4500- Corrective Action

As described Release Notification form C-141 submitted to your department on November 24, 2017 (Appendix A), After hydrostatic test was completed on sections 3 & 4 on November 10, 2017, EPNG started pushing the hydrostatic test water to section 5, air was being vented at section 6. A frac tank was placed at this location to capture small amounts of water during this process. The operator left section 6 leaving the valve open. The frac tank located on Mile Post 355+3100 overflowed, releasing into the environment approximately 1500 to 2000 gallons of hydrostatic test water. The released was discovered until November 16, 2017. @ 10:15 a.m. and reported to NMOCD by phone on November 16, 2017 at 1:47p.m.

On November 17, 2017, a composite sample of the impacted soil was gathered and analyzed for the following parameters: PCB's, TPH, VOC's, and TCLP BTEX. The results are attached on Appendix B.

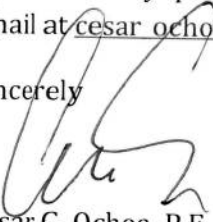
As shown on the table below, the results are below recommended action levels listed on Section IV.A.b of the "Guidelines for Remediation of Leaks, Spills and Releases (8/13/1993)". The depth to water on the closest water wells is approximately 50 ft. and there is no water source or water body within 1,000 ft. from the affected area (Appendix C).

Constituents	Total Ranking 10-19*	Soil Release Results (11/27/2017)
Benzene (ppm)	10	<0.125
BTEX (ppm)	50	<0.0744
TPH (ppm)	1000	<14.9

* Section IV.A.b -Recommended Remediation Action Level of the "Guidelines for Remediation of Leaks, Spills and Releases (8/13/1993)

If you have any questions or need additional information, please call me at (915) 587-3694, or by email at cesar_ochoa@kinermorgan.com.

Sincerely,


Cesar G. Ochoa, P.E.

EHS Engineer II

Appendix A
Initial Notification Form

NM OIL CONSERVATION

ARTESIA DISTRICT

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

NOV 24 2017

Form C-141
Revised April 3, 2017

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

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

Release Notification and Corrective Action

FAB1733430549
NAB1733430713

OPERATOR		☒ Initial Report	☐ Final Report
Name of Company El Paso Natural Gas Company, LLC a subsidiary of Kinder Morgan Inc.		Contact Cesar Ochoa	
Address 8645 Railroad Drive El Paso, Texas 79904		Telephone No. 915-587-3694	
Facility Name EPNG's Line No. 1100		Facility Type 26-inch Outside Diameter (O.D.) steel natural gas pipeline	
Surface Owner Private Land	Mineral Owner	API No.	

LOCATION OF RELEASE

Unit Letter A	Section 19	Township 23 S	Range 19 W	Feet from the	North/South Line	Feet from the	East/West Line	County Hidalgo
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Latitude **32.2960268** Longitude **-108.8314753** NAD83

NATURE OF RELEASE

Type of Release Hydrostatic test water from an existing natural gas pipeline	Volume of Release 35-48 1/2 bbls	Volume Recovered unknown
Source of Release Overflowed frac tank	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD- Carl J. Chaves	
By Whom? Cesar Ochoa	Date and Hour 11/16/2017 @ 1:47pm *2:29 per email	
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.*

After hydrostatic test was completed on sections 3 and 4 on 11/10/2017, EPNG started pushing water into section 5. EPNG was venting air through test section 6 utilizing a frac tank to receive air and small amounts of water. Operator left section 6 leaving the valve open. The frac tank located on Mile Post 355+ 3100 overflowed releasing into the environment approximately 1500 to 2000 gallons of hydrostatic test water. The release was discovered until 11/16/2017 @ 10:15 am.

Impacted soil samples were collected on 11/17/2017 and shipped to Xenco Laboratories in El Paso Texas. Samples will be analyzed for VOC's (method 8260), PCB's, TCLP BTEX, TPH (Method 8015) and NORMS.

Describe Area Affected and Cleanup Action Taken.*

Impacted soil was cast away and will be handled according to laboratory results.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Cesar Ochoa	Approved by Environmental Specialist: 	
Title: EHS Engineer II	Approval Date: 11/28/17	Expiration Date: N/A
E-mail Address: cesar_ochoa@kindermorgan.com	Conditions of Approval: see Attached	Attached ☒ 2PP-4500
Date: 11/24/2017	Phone: 915-587-3694	

* Attach Additional Sheets If Necessary

11/27/17 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **11/24/17** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number IRP 4500 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 12/24/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Ochoa Vidales, Cesar G <Cesar_Ochoa@kindermorgan.com>
Sent: Friday, November 24, 2017 3:23 PM
To: Weaver, Crystal, EMNRD; Chavez, Carl J, EMNRD
Cc: Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD; Blythe, Amy M (Amy)
Subject: RE: Hydrostatic Test Water Release Hidalgo Co. Reported at ~ 1:47 p.m. Today by Kinder Morgan (El Paso Natural Gas)
Attachments: C-141L100MP355.pdf

Dear Crystal,

Attached is El Paso Natural Gas Company's (EPNG) **Initial Report on Form C-141**, as NMOC's required Written Notification, for the unauthorized release of hydrostatic test water in Hidalgo County, New Mexico. The event occurred during a hydrostatic project on the California Main Line (Line No. 1100) while moving water from test section 3 and 4 into test section 5 reported on November 16, 2017.

Respectfully,

Cesar G. Ochoa, P.E.
Pipeline Engineer- EHS
8645 Railroad Dr. El Paso, TX. 79904
Office (915) 587-3694, Cell (915) 345-6605, Fax (915) 587-3639



El Paso
Natural Gas Company
a Kinder Morgan company

From: Weaver, Crystal, EMNRD [mailto:Crystal.Weaver@state.nm.us]
Sent: Thursday, November 16, 2017 4:39 PM
To: Ochoa Vidales, Cesar G; Chavez, Carl J, EMNRD
Cc: Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD
Subject: RE: Hydrostatic Test Water Release Hidalgo Co. Reported at ~ 1:47 p.m. Today by Kinder Morgan (El Paso Natural Gas)

[This email message was received from the Internet and came from outside of Kinder Morgan]

Cesar,

Thank you for the notification and the information. Please follow this notification with the submission of an Initial C-141 form on or before 11/25/17. Also if any of the HST water made it onto Federal or State Land Office surface then Kinder Morgan/El Paso Natural Gas Co. will need to notify the proper contacts for those agencies if applicable.

If you have any questions or concerns you may contact either myself or Mike Bratcher here at the OCD District II Artesia Office.

Thank you,

Crystal Weaver

Environmental Specialist

OCD – Artesia District II

811 S. 1st Street

Artesia, NM 88210

Office: 575-748-1283 ext. 101

Cell: 575-840-5963

Fax: 575-748-9720

From: Ochoa Vidales, Cesar G [mailto:Cesar_Ochoa@kindermorgan.com]

Sent: Thursday, November 16, 2017 2:29 PM

To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>

Cc: Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Subject: RE: Hydrostatic Test Water Release Hidalgo Co. Reported at ~ 1:47 p.m. Today by Kinder Morgan (El Paso Natural Gas)

Crystal/ Carl,

We actually believe the release occurred on 11/10 but it was discover by our personnel today at 10:15.

Cesar G. Ochoa, P.E.

Pipeline Engineer- EHS

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Subject: Hydrostatic Test Water Release Hidalgo Co. Reported at ~ 1:47 p.m. Today by Kinder Morgan (El Paso Natural Gas)

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Crystal:

Mr. Cesar Ochoa called into OCD- SF today at ~ 1:47 p.m. to report a hydrostatic test water release approaching or exceeding 25 bbls at El Paso Natural Gas Line 1100 (Mile Post 355 + 3100) or at lat. 32.2960268 -108.8314753 (see attached photos).

On Friday, test water was removed from a section of pipe to another section. A vent was left open in the frack tank containing the HST water, and it overflowed during the weekend while no one was there or noticed/discovered until 11/10 at ~ 4 p.m.

Please contact Mr. Ochoa at (915) 587-3694 or via e-mail at cesar_ochoa@kindermorgan.com.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/OCD> and see “Publications”)

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Pipeline Engineer- EHS
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Thank you.

Mr. Carl J. Chavez, CHMM (#13099)

New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us

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Appendix B

Laboratory Analytical Results



Certificate of Analysis Summary 568854

Kinder Morgan-El Paso, El Paso, TX

Project Name: KMI L1100 Hydrotest

Date Received in Lab: Fri Nov-17-17 10:14 am

Report Date: 27-NOV-17

Project Manager: Kelsey Brooks

Project Id:

Contact: Amy Blythe

Project Location: Lordsburg, NM

<i>Analysis Requested</i>		Lab Id: Field Id: Depth: Matrix: Sampled:	568854-001 S111617-001 SOIL Nov-16-17 13:25	568854-002 WW111617-002 - 008 N/A WASTE WATER Nov-16-17 13:40		
Flash Point	Flash Point	Extracted: Analyzed: Units/RL:		Nov-21-17 13:42 Deg F RL		
PCBs by EPA 8082 SUB: TX104704215-17-23		Extracted: Analyzed: Units/RL:	Nov-20-17 12:51 Nov-21-17 12:55 mg/kg RL	Nov-20-17 15:12 Nov-21-17 12:01 mg/L RL		
PCB-1016	PCB-1016		<0.0167 0.0167	<0.00100 0.00100		
PCB-1221	PCB-1221		<0.0167 0.0167	<0.00100 0.00100		
PCB-1232	PCB-1232		<0.0167 0.0167	<0.00100 0.00100		
PCB-1242	PCB-1242		<0.0167 0.0167	<0.00100 0.00100		
PCB-1248	PCB-1248		<0.0167 0.0167	<0.00100 0.00100		
PCB-1254	PCB-1254		<0.0167 0.0167	<0.00100 0.00100		
PCB-1260	PCB-1260		<0.0167 0.0167	<0.00100 0.00100		
Total PCB	Total PCB		<0.0167 0.0167	<0.00100 0.00100		
TCCLP Mercury by SW 7470A SUB: TX104704215-17-23		Extracted: Analyzed: Units/RL:		Nov-21-17 10:20 Nov-21-17 14:47 mg/L RL		
Mercury	Mercury			<0.00100 0.00100		

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

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

Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 568854

Kinder Morgan-El Paso, El Paso, TX

Project Name: KMI L1100 Hydrotest

Date Received in Lab: Fri Nov-17-17 10:14 am

Report Date: 27-NOV-17

Project Manager: Kelsey Brooks

Project Id:

Contact: Amy Blythe

Project Location: Lordsburg, NM

Analysis Requested		Lab Id:	568854-001	568854-002		
		Field Id:	S111617-001	WW111617-002 - 008		
		Depth:		N/A		
		Matrix:	SOIL	WASTE WATER		
		Sampled:	Nov-16-17 13:25	Nov-16-17 13:40		
TCLP Metals by SW 1311/6010B SUB: TX104704215-17-23		Extracted:		Nov-22-17 09:00		
		Analyzed:		Nov-22-17 15:09		
		Units/RL:		mg/L RL		
Arsenic				<0.0500 0.0500		
Barium				0.0846 0.0500		
Cadmium				<0.0250 0.0250		
Chromium				<0.0500 0.0500		
Lead				<0.0500 0.0500		
Selenium				<0.100 0.100		
Silver				<0.100 0.100		
TPH by SW 8015B SUB: TX104704215-17-23		Extracted:	Nov-21-17 16:45	Nov-21-17 16:45		
		Analyzed:	Nov-21-17 21:22	Nov-21-17 21:42		
		Units/RL:	mg/kg RL	mg/L RL		
C6-C10 Gasoline Range Hydrocarbons			<14.9 14.9	2.57 1.50		
C10-C28 Diesel Range Organics			<14.9 14.9	<1.50 1.50		
Total TPH			<14.9 14.9	2.57 1.50		

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Mike Kimmel
Client Services Manager



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Kinder Morgan-El Paso, El Paso, TX

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Contact: Amy Blythe

Project Location: Lordsburg, NM

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VOCs By SW846 8260C SUB: TX104704215-17-23		Extracted: Analyzed: Units/RL:	Nov-22-17 08:30 Nov-22-17 09:04 mg/kg RL	Nov-21-17 18:00 Nov-21-17 19:57 mg/L RL		
Benzene			<0.125 0.125	<0.0250 0.0250		
Bromobenzene			<0.125 0.125	<0.0250 0.0250		
Bromochloromethane			<0.125 0.125	<0.0250 0.0250		
Bromodichloromethane			<0.125 0.125	<0.0250 0.0250		
Bromoform			<0.125 0.125	<0.0250 0.0250		
Methyl bromide			<0.125 0.125	<0.0250 0.0250		
tert-Butylbenzene			<0.125 0.125	<0.0250 0.0250		
Sec-Butylbenzene			<0.125 0.125	<0.0250 0.0250		
n-Butylbenzene			<0.125 0.125	<0.0250 0.0250		
Carbon Tetrachloride			<0.125 0.125	<0.0250 0.0250		
Chlorobenzene			<0.125 0.125	<0.0250 0.0250		
Chloroethane			<0.250 0.250	<0.0500 0.0500		
Chloroform			<0.125 0.125	<0.0250 0.0250		
Methyl Chloride			<0.250 0.250	<0.0500 0.0500		
2-Chlorotoluene			<0.125 0.125	<0.0250 0.0250		
4-Chlorotoluene			<0.125 0.125	<0.0250 0.0250		
p-Cymene (p-Isopropyltoluene)			<0.125 0.125	<0.0250 0.0250		
1,2-Dibromo-3-Chloropropane			<0.125 0.125	<0.0250 0.0250		
Dibromochloromethane			<0.125 0.125	<0.0250 0.0250		
1,2-Dibromoethane			<0.125 0.125	<0.0250 0.0250		
Methylene bromide			<0.125 0.125	<0.0250 0.0250		
1,2-Dichlorobenzene			<0.125 0.125	<0.0250 0.0250		
1,3-Dichlorobenzene			<0.125 0.125	<0.0250 0.0250		
1,4-Dichlorobenzene			<0.125 0.125	<0.0250 0.0250		

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Mike Kimmel
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VOCs By SW846 8260C SUB: TX104704215-17-23		Extracted: Analyzed: Units/RL:	Nov-22-17 08:30 Nov-22-17 09:04 mg/kg RL	Nov-21-17 18:00 Nov-21-17 19:57 mg/L RL		
Dichlorodifluoromethane			<0.125 0.125	<0.0250 0.0250		
1,2-Dichloroethane			<0.125 0.125	<0.0250 0.0250		
1,1-Dichloroethane			<0.125 0.125	<0.0250 0.0250		
trans-1,2-dichloroethylene			<0.125 0.125	<0.0250 0.0250		
cis-1,2-Dichloroethylene			<0.125 0.125	<0.0250 0.0250		
1,1-Dichloroethene			<0.125 0.125	<0.0250 0.0250		
2,2-Dichloropropane			<0.125 0.125	<0.0250 0.0250		
1,3-Dichloropropane			<0.125 0.125	<0.0250 0.0250		
1,2-Dichloropropane			<0.125 0.125	<0.0250 0.0250		
trans-1,3-dichloropropene			<0.125 0.125	<0.0250 0.0250		
1,1-Dichloropropene			<0.125 0.125	<0.0250 0.0250		
cis-1,3-Dichloropropene			<0.125 0.125	<0.0250 0.0250		
Ethylbenzene			<0.125 0.125	<0.0250 0.0250		
Hexachlorobutadiene			<0.125 0.125	<0.0250 0.0250		
Isopropylbenzene			<0.125 0.125	<0.0250 0.0250		
Methylene Chloride			<0.499 0.499	<0.0250 0.0250		
MTBE			<0.125 0.125	<0.0250 0.0250		
Naphthalene			<0.250 0.250	<0.0500 0.0500		
n-Propylbenzene			<0.125 0.125	<0.0250 0.0250		
Styrene			<0.125 0.125	<0.0250 0.0250		
1,1,1,2-Tetrachloroethane			<0.125 0.125	<0.0250 0.0250		
1,1,2,2-Tetrachloroethane			<0.125 0.125	<0.0250 0.0250		
Tetrachloroethylene			<0.125 0.125	<0.0250 0.0250		
Toluene			<0.125 0.125	<0.0250 0.0250		

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

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Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 568854
Kinder Morgan-El Paso, El Paso, TX
Project Name: KMI L1100 Hydrotest

Project Id: Amy Blythe
Contact: Lordsburg, NM
Date Received in Lab: Fri Nov-17-17 10:14 am
Report Date: 27-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested		Lab Id:	568854-001	568854-002		
		Field Id:	S111617-001	WW111617-002 - 008		
		Depth:		N/A		
		Matrix:	SOIL	WASTE WATER		
		Sampled:	Nov-16-17 13:25	Nov-16-17 13:40		
VOCs By SW846 8260C SUB: TX104704215-17-23	Extracted:	Nov-22-17 08:30	Nov-22-17 09:04	Nov-21-17 18:00		
	Analyzed:	Nov-22-17 09:04		Nov-21-17 19:57		
	Units/RL:	mg/kg	RL	mg/L	RL	
	1,2,3-Trichlorobenzene	<0.125	0.125	<0.0250	0.0250	
	1,2,4-Trichlorobenzene	<0.125	0.125	<0.0250	0.0250	
	1,1,2-Trichloroethane	<0.125	0.125	<0.0250	0.0250	
	1,1,1-Trichloroethane	<0.125	0.125	<0.0250	0.0250	
	Trichloroethylene	<0.125	0.125	<0.0250	0.0250	
	Trichlorofluoromethane	<0.125	0.125	<0.0250	0.0250	
	1,2,3-Trichloropropane	<0.125	0.125	<0.0250	0.0250	
pH by SM4500-H	1,2,4-Trimethylbenzene	<0.125	0.125	<0.0250	0.0250	
	1,3,5-Trimethylbenzene	<0.125	0.125	<0.0250	0.0250	
	Vinyl Chloride	<0.0499	0.0499	<0.0100	0.0100	
	o-Xylene	<0.125	0.125	<0.0250	0.0250	
	m,p-Xylenes	<0.250	0.250	<0.0500	0.0500	
	Total Xylenes	<0.125	0.125	<0.0250	0.0250	
	Extracted:					
	Analyzed:			Nov-17-17 16:04		
	Units/RL:			Deg C	RL	
	Temperature			20.9 K		
pH by SM4500-H	Extracted:					
	Analyzed:			Nov-17-17 16:04		
	Units/RL:			SU	RL	
pH				7.60 K		

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

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Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 568854
Kinder Morgan-El Paso, El Paso, TX
Project Name: KMI L1100 Hydrotest

Project Id:

Contact: Amy Blythe

Project Location: Lordsburg, NM

Date Received in Lab: Fri Nov-17-17 10:14 am

Report Date: 27-NOV-17

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>		<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>
		568854-001	S111617-001	N/A	SOIL	Nov-16-17 13:25	Nov-26-17 12:00	Nov-26-17 14:33	mg/L RL
		568854-002	WW111617-002 - 008	N/A	WASTE WATER	Nov-16-17 13:40	Nov-26-17 12:00	Nov-26-17 14:54	mg/L RL
TCLP BTEX by SW 8260B SUB: TX104704215-17-23									
Benzene		0.00620	0.00500				<0.00500	0.00500	
Toluene		0.0744	0.00500				<0.00500	0.00500	
Ethylbenzene		0.0137	0.00500				<0.00500	0.00500	
m,p-Xylenes		0.0291	0.0100				<0.0100	0.0100	
o-Xylene		0.0152	0.00500				<0.00500	0.00500	

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Mike Kimmel
Client Services Manager

Analytical Report 568854

**for
Kinder Morgan-El Paso**

Project Manager: Amy Blythe

KMI L1100 Hydrotest

27-NOV-17

Collected By: Client



200 East Sunset Rd, Suite E, El Paso, TX 79922

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



27-NOV-17

Project Manager: **Amy Blythe**
Kinder Morgan-El Paso
8645 Railroad Dr.
El Paso, TX 79904

Reference: XENCO Report No(s): **568854**
KMI L1100 Hydrotest
Project Address: Lordsburg, NM

Amy Blythe :

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) 568854. 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. 568854 will be filed for 45 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,

A handwritten signature in dark ink, appearing to read 'Mike Kimmel', is written over a horizontal line.

Mike Kimmel

Client Services Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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Sample Cross Reference 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S111617-001	S	11-16-17 13:25	N/A	568854-001
WW111617-002 - 008	W	11-16-17 13:40	N/A	568854-002



CASE NARRATIVE

Client Name: Kinder Morgan-El Paso

Project Name: KMI L1100 Hydrotest

Project ID:

Work Order Number(s): 568854

Report Date: 27-NOV-17

Date Received: 11/17/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3034073 VOCs by SW-846 8260C

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Sample was ran 1X all internal standard was outside acceptance criteria limit.



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: S111617-001

Matrix: Soil

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-001

Date Collected: 11.16.17 13.25

Analytical Method: PCBs by EPA 8082

Prep Method: SW3545

Tech: DRU

% Moisture:

Analyst: JVI

Date Prep: 11.20.17 12.51

Basis: Wet Weight

Seq Number: 3033887

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
PCB-1016	12674-11-2	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1221	11104-28-2	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1232	11141-16-5	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1242	53469-21-9	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1248	12672-29-6	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1254	11097-69-1	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
PCB-1260	11096-82-5	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5
Total PCB	1336-36-3	<0.0167	0.0167	mg/kg	11.21.17 12.55	U	5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Decachlorobiphenyl	2051-24-3	102	%	39-125	11.21.17 12.55	
Tetrachloro-m-xylene	877-09-8	77	%	37-124	11.21.17 12.55	

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 11.21.17 16.45

Basis: Wet Weight

Seq Number: 3034020

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<14.9	14.9	mg/kg	11.21.17 21.22	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<14.9	14.9	mg/kg	11.21.17 21.22	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.21.17 21.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	11.21.17 21.22	
o-Terphenyl	84-15-1	99	%	70-135	11.21.17 21.22	



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: S111617-001

Matrix: Soil

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-001

Date Collected: 11.16.17 13.25

Analytical Method: VOCs By SW846 8260C

Prep Method: SW5030C

Tech: JTR

% Moisture:

Analyst: MCH

Date Prep: 11.22.17 08.30

Basis: Wet Weight

Seq Number: 3034073

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Bromobenzene	108-86-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Bromochloromethane	74-97-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Bromodichloromethane	75-27-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Bromoform	75-25-2	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Methyl bromide	74-83-9	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
tert-Butylbenzene	98-06-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Sec-Butylbenzene	135-98-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
n-Butylbenzene	104-51-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Carbon Tetrachloride	56-23-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Chlorobenzene	108-90-7	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Chloroethane	75-00-3	<0.250	0.250	mg/kg	11.22.17 06.08	U	1
Chloroform	67-66-3	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Methyl Chloride	74-87-3	<0.250	0.250	mg/kg	11.22.17 06.08	U	1
2-Chlorotoluene	95-49-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
4-Chlorotoluene	106-43-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
p-Cymene (p-Isopropyltoluene)	99-87-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2-Dibromo-3-Chloropropane	96-12-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Dibromochloromethane	124-48-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2-Dibromoethane	106-93-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Methylene bromide	74-95-3	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2-Dichlorobenzene	95-50-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,3-Dichlorobenzene	541-73-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,4-Dichlorobenzene	106-46-7	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Dichlorodifluoromethane	75-71-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2-Dichloroethane	107-06-2	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1-Dichloroethane	75-34-3	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
trans-1,2-dichloroethylene	156-60-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
cis-1,2-Dichloroethylene	156-59-2	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1-Dichloroethene	75-35-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
2,2-Dichloropropane	594-20-7	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,3-Dichloropropane	142-28-9	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2-Dichloropropane	78-87-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
trans-1,3-dichloropropene	10061-02-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1-Dichloropropene	563-58-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
cis-1,3-Dichloropropene	10061-01-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Ethylbenzene	100-41-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Hexachlorobutadiene	87-68-3	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Isopropylbenzene	98-82-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: S111617-001

Matrix: Soil

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-001

Date Collected: 11.16.17 13.25

Analytical Method: VOCs By SW846 8260C

Prep Method: SW5030C

Tech: JTR

% Moisture:

Analyst: MCH

Date Prep: 11.22.17 08.30

Basis: Wet Weight

Seq Number: 3034073

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Methylene Chloride	75-09-2	<0.499	0.499	mg/kg	11.22.17 06.08	U	1
MTBE	1634-04-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Naphthalene	91-20-3	<0.250	0.250	mg/kg	11.22.17 06.08	U	1
n-Propylbenzene	103-65-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Styrene	100-42-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1,1,2-Tetrachloroethane	630-20-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1,2,2-Tetrachloroethane	79-34-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Tetrachloroethylene	127-18-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Toluene	108-88-3	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2,3-Trichlorobenzene	87-61-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2,4-Trichlorobenzene	120-82-1	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1,2-Trichloroethane	79-00-5	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,1,1-Trichloroethane	71-55-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Trichloroethylene	79-01-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Trichlorofluoromethane	75-69-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2,3-Trichloropropane	96-18-4	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,2,4-Trimethylbenzene	95-63-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
1,3,5-Trimethylbenzene	108-67-8	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
Vinyl Chloride	75-01-4	<0.0499	0.0499	mg/kg	11.22.17 06.08	U	1
o-Xylene	95-47-6	<0.125	0.125	mg/kg	11.22.17 06.08	U	1
m,p-Xylenes	179601-23-1	<0.250	0.250	mg/kg	11.22.17 06.08	U	1
Total Xylenes	1330-20-7	<0.125	0.125	mg/kg	11.22.17 06.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	53-142	11.22.17 09.04	
1,2-Dichloroethane-D4	17060-07-0	109	%	56-150	11.22.17 09.04	
Toluene-D8	2037-26-5	101	%	70-130	11.22.17 09.04	
4-Bromofluorobenzene	460-00-4	100	%	68-152	11.22.17 09.04	



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: **S111617-001**

Matrix: Soil

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-001

Date Collected: 11.16.17 13.25

Analytical Method: TCLP BTEX by SW 8260B

Prep Method: SW5030B

Tech: JTR

% Moisture:

Analyst: JTR

Date Prep: 11.26.17 12.00

Seq Number: 3034196

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00620	0.00500	mg/L	11.26.17 14.33		5
Toluene	108-88-3	0.0744	0.00500	mg/L	11.26.17 14.33		5
Ethylbenzene	100-41-4	0.0137	0.00500	mg/L	11.26.17 14.33		5
m,p-Xylenes	179601-23-1	0.0291	0.0100	mg/L	11.26.17 14.33		5
o-Xylene	95-47-6	0.0152	0.00500	mg/L	11.26.17 14.33		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Dibromofluoromethane	1868-53-7	98	%	75-131	11.26.17 14.33		
1,2-Dichloroethane-D4	17060-07-0	89	%	63-144	11.26.17 14.33		
Toluene-D8	2037-26-5	94	%	80-117	11.26.17 14.33		



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: **WW111617-002 - 008**

Matrix: Waste Water

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-002

Date Collected: 11.16.17 13.40

Analytical Method: pH by SM4500-H

Tech: MLC

% Moisture:

Analyst: MLC

Seq Number: 3033865

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
pH	12408-02-5	7.60		SU	11.17.17 16.04	K	1
Temperature	TEMP	20.9		Deg C	11.17.17 16.04	K	1

Analytical Method: TCLP Mercury by SW 7470A

Prep Method: SW7470P

Tech: AHI

% Moisture:

Analyst: ELW

Date Prep: 11.21.17 10.20

Seq Number: 3033940

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00100	0.00100	mg/L	11.21.17 14.47	U	5

Analytical Method: TCLP Metals by SW 1311/6010B

Prep Method: SW3010A

Tech: MLI

% Moisture:

Analyst: DEP

Date Prep: 11.22.17 09.00

Seq Number: 3034100

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.0500	0.0500	mg/L	11.22.17 15.09	U	1
Barium	7440-39-3	0.0846	0.0500	mg/L	11.22.17 15.09		1
Cadmium	7440-43-9	<0.0250	0.0250	mg/L	11.22.17 15.09	U	1
Chromium	7440-47-3	<0.0500	0.0500	mg/L	11.22.17 15.09	U	1
Lead	7439-92-1	<0.0500	0.0500	mg/L	11.22.17 15.09	U	1
Selenium	7782-49-2	<0.100	0.100	mg/L	11.22.17 15.09	U	1
Silver	7440-22-4	<0.100	0.100	mg/L	11.22.17 15.09	U	1



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: **WW111617-002 - 008**

Matrix: Waste Water

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-002

Date Collected: 11.16.17 13.40

Analytical Method: Flash Point (CC) SW-846 1010

Tech: YAV

% Moisture:

Analyst: YAV

Seq Number: 3033958

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Flash Point		>180		Deg F	11.21.17 13.42	U	1

Analytical Method: PCBs by EPA 8082

Prep Method: SW3510C

Tech: DRU

% Moisture:

Analyst: JVI

Date Prep: 11.20.17 15.12

Seq Number: 3034062

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
PCB-1016	12674-11-2	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1221	11104-28-2	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1232	11141-16-5	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1242	53469-21-9	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1248	12672-29-6	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1254	11097-69-1	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
PCB-1260	11096-82-5	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10
Total PCB	1336-36-3	<0.00100	0.00100	mg/L	11.21.17 12.01	U	10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tetrachloro-m-xylene	877-09-8	104	%	50-125	11.21.17 12.01	
Decachlorobiphenyl	2051-24-3	83	%	45-162	11.21.17 12.01	



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: **WW111617-002 - 008**

Matrix: Waste Water

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-002

Date Collected: 11.16.17 13.40

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 11.21.17 16.45

Seq Number: 3034022

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	2.57	1.50	mg/L	11.21.17 21.42		1
C10-C28 Diesel Range Organics	C10C28DRO	<1.50	1.50	mg/L	11.21.17 21.42	U	1
Total TPH	PHC635	2.57	1.50	mg/L	11.21.17 21.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	11.21.17 21.42	
o-Terphenyl	84-15-1	96	%	70-135	11.21.17 21.42	

Analytical Method: TCLP BTEX by SW 8260B

Prep Method: SW5030B

Tech: JTR

% Moisture:

Analyst: JTR

Date Prep: 11.26.17 12.00

Seq Number: 3034205

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/L	11.26.17 14.54	U	5
Toluene	108-88-3	<0.00500	0.00500	mg/L	11.26.17 14.54	U	5
Ethylbenzene	100-41-4	<0.00500	0.00500	mg/L	11.26.17 14.54	U	5
m,p-Xylenes	179601-23-1	<0.0100	0.0100	mg/L	11.26.17 14.54	U	5
o-Xylene	95-47-6	<0.00500	0.00500	mg/L	11.26.17 14.54	U	5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	75-131	11.26.17 14.54	
1,2-Dichloroethane-D4	17060-07-0	93	%	63-144	11.26.17 14.54	
Toluene-D8	2037-26-5	95	%	80-117	11.26.17 14.54	



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotest

Sample Id: **WW111617-002 - 008**

Matrix: Waste Water

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-002

Date Collected: 11.16.17 13.40

Analytical Method: VOCs By SW846 8260C

Prep Method: SW5030C

Tech: SAD

% Moisture:

Analyst: SAD

Date Prep: 11.21.17 18.00

Seq Number: 3034006

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Bromobenzene	108-86-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Bromochloromethane	74-97-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Bromodichloromethane	75-27-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Bromoform	75-25-2	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Methyl bromide	74-83-9	<0.0250	0.0250	mg/L	11.21.17 19.57		5
n-Butylbenzene	104-51-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Sec-Butylbenzene	135-98-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
tert-Butylbenzene	98-06-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Carbon Tetrachloride	56-23-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Chlorobenzene	108-90-7	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Chloroethane	75-00-3	<0.0500	0.0500	mg/L	11.21.17 19.57		5
Chloroform	67-66-3	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Methyl Chloride	74-87-3	<0.0500	0.0500	mg/L	11.21.17 19.57		5
2-Chlorotoluene	95-49-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
4-Chlorotoluene	106-43-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
p-Cymene (p-Isopropyltoluene)	99-87-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Dibromochloromethane	124-48-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2-Dibromo-3-Chloropropane	96-12-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2-Dibromoethane	106-93-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Methylene bromide	74-95-3	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2-Dichlorobenzene	95-50-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,3-Dichlorobenzene	541-73-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,4-Dichlorobenzene	106-46-7	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Dichlorodifluoromethane	75-71-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1-Dichloroethane	75-34-3	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2-Dichloroethane	107-06-2	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1-Dichloroethene	75-35-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
cis-1,2-Dichloroethylene	156-59-2	<0.0250	0.0250	mg/L	11.21.17 19.57		5
trans-1,2-dichloroethylene	156-60-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2-Dichloropropane	78-87-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,3-Dichloropropane	142-28-9	<0.0250	0.0250	mg/L	11.21.17 19.57		5
2,2-Dichloropropane	594-20-7	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1-Dichloropropene	563-58-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
cis-1,3-Dichloropropene	10061-01-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
trans-1,3-dichloropropene	10061-02-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Ethylbenzene	100-41-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Hexachlorobutadiene	87-68-3	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Isopropylbenzene	98-82-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5



Certificate of Analytical Results 568854

Kinder Morgan-El Paso, El Paso, TX

KMI L1100 Hydrotect

Sample Id: **WW111617-002 - 008**

Matrix: Waste Water

Date Received: 11.17.17 10.14

Lab Sample Id: 568854-002

Date Collected: 11.16.17 13.40

Analytical Method: VOCs By SW846 8260C

Prep Method: SW5030C

Tech: SAD

% Moisture:

Analyst: SAD

Date Prep: 11.21.17 18.00

Seq Number: 3034006

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Methylene Chloride	75-09-2	<0.0250	0.0250	mg/L	11.21.17 19.57		5
MTBE	1634-04-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Naphthalene	91-20-3	<0.0500	0.0500	mg/L	11.21.17 19.57		5
n-Propylbenzene	103-65-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Styrene	100-42-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1,1,2-Tetrachloroethane	630-20-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1,2,2-Tetrachloroethane	79-34-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Tetrachloroethylene	127-18-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Toluene	108-88-3	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2,3-Trichlorobenzene	87-61-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2,4-Trichlorobenzene	120-82-1	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1,1-Trichloroethane	71-55-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,1,2-Trichloroethane	79-00-5	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Trichloroethylene	79-01-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
Trichlorofluoromethane	75-69-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2,3-Trichloropropane	96-18-4	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,2,4-Trimethylbenzene	95-63-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
1,3,5-Trimethylbenzene	108-67-8	<0.0250	0.0250	mg/L	11.21.17 19.57		5
o-Xylene	95-47-6	<0.0250	0.0250	mg/L	11.21.17 19.57		5
m,p-Xylenes	179601-23-1	<0.0500	0.0500	mg/L	11.21.17 19.57		5
Vinyl Chloride	75-01-4	<0.0100	0.0100	mg/L	11.21.17 19.57		5
Total Xylenes	1330-20-7	<0.0250	0.0250	mg/L	11.21.17 19.57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	75-131	11.21.17 19.57	
1,2-Dichloroethane-D4	17060-07-0	95	%	63-144	11.21.17 19.57	
Toluene-D8	2037-26-5	105	%	80-117	11.21.17 19.57	
4-Bromofluorobenzene	460-00-4	99	%	74-124	11.21.17 19.57	



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 **SQL** 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

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QC Summary 568854

Kinder Morgan-El Paso

KMI L1100 Hydrotest

Analytical Method: pH by SM4500-H

Seq Number: 3033865

Parent Sample Id: 568898-001

Matrix: Water

MD Sample Id: 568898-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
pH	7.36	7.37	0	20	SU	11.17.17 16:04	
Temperature	20.3	20.3	0	20	Deg C	11.17.17 16:04	

Analytical Method: TCLP Mercury by SW 7470A

Seq Number: 3033940

MB Sample Id: 7634754-1-BLK

Matrix: Water

LCS Sample Id: 7634754-1-BKS

Prep Method: SW7470P

Date Prep: 11.21.17

LCSD Sample Id: 7634754-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Mercury	<0.000200	0.00200	0.00211	106	0.00205	103	80-120	3	20	mg/L	11.21.17 13:52	

Analytical Method: TCLP Mercury by SW 7470A

Seq Number: 3033940

Parent Sample Id: 568663-001

Matrix: Liquid

MS Sample Id: 568663-001 S

Prep Method: SW7470P

Date Prep: 11.21.17

MSD Sample Id: 568663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Mercury	<0.000200	0.00200	0.00185	93	0.00176	88	75-125	5	20	mg/L	11.21.17 14:04	

Analytical Method: TCLP Mercury by SW 7470A

Seq Number: 3033940

Parent Sample Id: 568882-001

Matrix: Water

MS Sample Id: 568882-001 S

Prep Method: SW7470P

Date Prep: 11.21.17

MSD Sample Id: 568882-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Mercury	<0.000200	0.00200	0.00186	93	0.00186	93	75-125	0	20	mg/L	11.21.17 13:58	

Analytical Method: TCLP Metals by SW 1311/6010B

Seq Number: 3034100

MB Sample Id: 7634841-1-BLK

Matrix: Water

LCS Sample Id: 7634841-1-BKS

Prep Method: SW3010A

Date Prep: 11.22.17

LCSD Sample Id: 7634841-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Arsenic	<0.0100	1.00	0.958	96	0.966	97	75-125	1	20	mg/L	11.22.17 14:23	
Barium	<0.0100	1.00	0.970	97	0.970	97	75-125	0	20	mg/L	11.22.17 14:23	
Cadmium	<0.00500	1.00	1.00	100	0.997	100	75-125	0	20	mg/L	11.22.17 14:23	
Chromium	<0.0100	1.00	1.02	102	1.02	102	75-125	0	20	mg/L	11.22.17 14:23	
Lead	<0.0100	1.00	0.995	100	0.993	99	75-125	0	20	mg/L	11.22.17 14:23	
Selenium	<0.0200	1.00	0.974	97	0.986	99	75-125	1	20	mg/L	11.22.17 14:23	
Silver	<0.0200	0.500	0.508	102	0.508	102	75-125	0	20	mg/L	11.22.17 14:23	



QC Summary 568854

Kinder Morgan-El Paso

KMI L1100 Hydrotest

Analytical Method: TCLP Metals by SW 1311/6010B

Seq Number: 3034100

Parent Sample Id: 568531-001

Matrix: Soil

MS Sample Id: 568531-001 S

Prep Method: SW3010A

Date Prep: 11.22.17

MSD Sample Id: 568531-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Arsenic	<0.0500	5.00	4.92	98	4.92	98	75-125	0	20	mg/L	11.22.17 14:35	
Barium	0.464	5.00	5.22	95	5.21	95	75-125	0	20	mg/L	11.22.17 14:35	
Cadmium	<0.0250	5.00	5.09	102	5.05	101	75-125	1	20	mg/L	11.22.17 14:35	
Chromium	<0.0500	5.00	5.07	101	5.00	100	75-125	1	20	mg/L	11.22.17 14:35	
Lead	<0.0500	5.00	4.90	98	4.88	98	75-125	0	20	mg/L	11.22.17 14:35	
Selenium	<0.100	5.00	5.15	103	5.17	103	75-125	0	20	mg/L	11.22.17 14:35	
Silver	<0.100	2.50	2.55	102	2.54	102	75-125	0	20	mg/L	11.22.17 14:35	

Analytical Method: Flash Point (CC) SW-846 1010

Seq Number: 3033958

Parent Sample Id: 568854-002

Matrix: Waste Water

MD Sample Id: 568854-002 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Flash Point	>180	>180	0	25	Deg F	11.21.17 14:10	U

Analytical Method: PCBs by EPA 8082

Seq Number: 3033887

MB Sample Id: 7634675-1-BLK

Matrix: Solid

LCS Sample Id: 7634675-1-BKS

Prep Method: SW3545

Date Prep: 11.20.17

LCSD Sample Id: 7634675-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
PCB-1016	<0.00333	0.167	0.147	88	0.144	86	56-121	2	20	mg/kg	11.20.17 14:55	
PCB-1260	<0.00333	0.167	0.173	104	0.157	94	41-126	10	20	mg/kg	11.20.17 14:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Decachlorobiphenyl	107		113		104		39-125	%	11.20.17 14:55
Tetrachloro-m-xylene	82		87		85		37-124	%	11.20.17 14:55

Analytical Method: PCBs by EPA 8082

Seq Number: 3034062

MB Sample Id: 7634679-1-BLK

Matrix: Water

LCS Sample Id: 7634679-1-BKS

Prep Method: SW3510C

Date Prep: 11.20.17

LCSD Sample Id: 7634679-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
PCB-1016	<0.000100	0.00500	0.00429	86	0.00430	86	54-125	0	20	mg/L	11.21.17 10:15	
PCB-1260	<0.000100	0.00500	0.00425	85	0.00440	88	41-126	3	20	mg/L	11.21.17 10:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Decachlorobiphenyl	86		88		92		45-162	%	11.21.17 10:15
Tetrachloro-m-xylene	82		88		88		50-125	%	11.21.17 10:15



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: PCBs by EPA 8082

Seq Number: 3033887

Parent Sample Id: 568533-001

Matrix: Soil

MS Sample Id: 568533-001 S

Prep Method: SW3545

Date Prep: 11.20.17

MSD Sample Id: 568533-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
PCB-1016	<0.0334	0.167	0.137	82	0.142	85	56-121	4	20	mg/kg	11.21.17 12:23	
PCB-1260	<0.0334	0.167	0.142	85	0.140	84	41-126	1	20	mg/kg	11.21.17 12:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Decachlorobiphenyl	103		102		39-125	%	11.21.17 12:23
Tetrachloro-m-xylene	77		74		37-124	%	11.21.17 12:23

Analytical Method: TPH by SW 8015B

Seq Number: 3034022

MB Sample Id: 7634831-1-BLK

Matrix: Water

LCS Sample Id: 7634831-1-BKS

Prep Method: SW8015P

Date Prep: 11.21.17

LCSD Sample Id: 7634831-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<1.50	100	79.9	80	76.2	76	70-135	5	25	mg/L	11.21.17 12:58	
C10-C28 Diesel Range Organics	<1.50	100	104	104	98.1	98	70-135	6	25	mg/L	11.21.17 12:58	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	71		78		79		70-135	%	11.21.17 12:58
o-Terphenyl	70		76		75		70-135	%	11.21.17 12:58

Analytical Method: TPH by SW 8015B

Seq Number: 3034020

MB Sample Id: 7634830-1-BLK

Matrix: Solid

LCS Sample Id: 7634830-1-BKS

Prep Method: SW8015P

Date Prep: 11.21.17

LCSD Sample Id: 7634830-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	921	92	918	92	70-135	0	35	mg/kg	11.21.17 22:45	
C10-C28 Diesel Range Organics	<15.0	1000	1290	129	1250	125	70-135	3	35	mg/kg	11.21.17 22:45	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		98		102		70-135	%	11.21.17 22:45
o-Terphenyl	113		99		111		70-135	%	11.21.17 22:45



QC Summary 568854

Kinder Morgan-El Paso

KMI L1100 Hydrotest

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3034196

MB Sample Id: 7634957-1-BLK

Matrix: Water

LCS Sample Id: 7634957-1-BKS

Prep Method: SW5030B

Date Prep: 11.26.17

LCSD Sample Id: 7634957-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00500	0.500	0.471	94	0.457	91	66-142	3	20	mg/L	11.26.17 11:02	
Toluene	<0.00500	0.500	0.500	100	0.488	98	59-139	2	20	mg/L	11.26.17 11:02	
Ethylbenzene	<0.00500	0.500	0.480	96	0.469	94	75-125	2	20	mg/L	11.26.17 11:02	
m,p-Xylenes	<0.0100	1.00	0.874	87	0.854	85	75-125	2	20	mg/L	11.26.17 11:02	
o-Xylene	<0.00500	0.500	0.492	98	0.490	98	75-125	0	20	mg/L	11.26.17 11:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	99		100		98		75-131	%	11.26.17 11:02
1,2-Dichloroethane-D4	91		111		110		63-144	%	11.26.17 11:02
Toluene-D8	95		101		103		80-117	%	11.26.17 11:02

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3034205

MB Sample Id: 7634961-1-BLK

Matrix: Water

LCS Sample Id: 7634961-1-BKS

Prep Method: SW5030B

Date Prep: 11.26.17

LCSD Sample Id: 7634961-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.102	102	0.100	100	66-142	2	20	mg/L	11.26.17 09:59	
Toluene	<0.00100	0.100	0.110	110	0.107	107	59-139	3	20	mg/L	11.26.17 09:59	
Ethylbenzene	<0.00100	0.100	0.106	106	0.105	105	75-125	1	20	mg/L	11.26.17 09:59	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.191	96	75-125	3	20	mg/L	11.26.17 09:59	
o-Xylene	<0.00100	0.100	0.107	107	0.106	106	75-125	1	20	mg/L	11.26.17 09:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	95		100		98		75-131	%	11.26.17 09:59
1,2-Dichloroethane-D4	79		114		111		63-144	%	11.26.17 09:59
Toluene-D8	93		103		102		80-117	%	11.26.17 09:59

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3034196

Parent Sample Id: 568291-001

Matrix: Soil

MS Sample Id: 568291-001 S

Prep Method: SW5030B

Date Prep: 11.26.17

MSD Sample Id: 568291-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00500	0.500	0.490	98	0.477	95	66-142	3	20	mg/L	11.26.17 15:15	
Toluene	0.0246	0.500	0.502	95	0.487	92	59-139	3	20	mg/L	11.26.17 15:15	
Ethylbenzene	<0.00500	0.500	0.502	100	0.490	98	75-125	2	20	mg/L	11.26.17 15:15	
m,p-Xylenes	0.0108	1.00	1.07	106	1.04	103	75-125	3	20	mg/L	11.26.17 15:15	
o-Xylene	0.00525	0.500	0.512	101	0.504	100	75-125	2	20	mg/L	11.26.17 15:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	97		98		75-131	%	11.26.17 15:15
1,2-Dichloroethane-D4	109		112		63-144	%	11.26.17 15:15
Toluene-D8	99		98		80-117	%	11.26.17 15:15



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3034205

Parent Sample Id: 568708-001

Matrix: Water

MS Sample Id: 568708-001 S

Prep Method: SW5030B

Date Prep: 11.26.17

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0965	97	66-142	mg/L	11.26.17 15:59	
Toluene	<0.00100	0.100	0.0952	95	59-139	mg/L	11.26.17 15:59	
Ethylbenzene	<0.00100	0.100	0.0988	99	75-125	mg/L	11.26.17 15:59	
m,p-Xylenes	<0.00200	0.200	0.207	104	75-125	mg/L	11.26.17 15:59	
o-Xylene	<0.00100	0.100	0.104	104	75-125	mg/L	11.26.17 15:59	
Surrogate			MS %Rec	MS Flag	Limits	Units	Analysis Date	
Dibromofluoromethane			99		75-131	%	11.26.17 15:59	
1,2-Dichloroethane-D4			110		63-144	%	11.26.17 15:59	
Toluene-D8			97		80-117	%	11.26.17 15:59	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034006

MB Sample Id: 7634826-1-BLK

Matrix: Water

LCS Sample Id: 7634826-1-BKS

Prep Method: SW5030B

Date Prep: 11.21.17

LCSD Sample Id: 7634826-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00500	0.0500	0.0511	102	0.0515	103	66-142	1	25	mg/L	11.21.17 12:01	
Bromobenzene	<0.00500	0.0500	0.0521	104	0.0536	107	75-125	3	25	mg/L	11.21.17 12:01	
Bromochloromethane	<0.00500	0.0500	0.0553	111	0.0529	106	60-140	4	25	mg/L	11.21.17 12:01	
Bromodichloromethane	<0.00500	0.0500	0.0552	110	0.0577	115	75-125	4	25	mg/L	11.21.17 12:01	
Bromoform	<0.00500	0.0500	0.0473	95	0.0461	92	75-125	3	25	mg/L	11.21.17 12:01	
Methyl bromide	<0.00500	0.0500	0.0445	89	0.0391	78	60-140	13	25	mg/L	11.21.17 12:01	
n-Butylbenzene	<0.00500	0.0500	0.0550	110	0.0543	109	75-125	1	25	mg/L	11.21.17 12:01	
Sec-Butylbenzene	<0.00500	0.0500	0.0572	114	0.0565	113	75-125	1	25	mg/L	11.21.17 12:01	
tert-Butylbenzene	<0.00500	0.0500	0.0563	113	0.0566	113	75-125	1	25	mg/L	11.21.17 12:01	
Carbon Tetrachloride	<0.00500	0.0500	0.0526	105	0.0525	105	62-125	0	25	mg/L	11.21.17 12:01	
Chlorobenzene	<0.00500	0.0500	0.0531	106	0.0541	108	60-133	2	25	mg/L	11.21.17 12:01	
Chloroethane	<0.0100	0.0500	0.0476	95	0.0433	87	60-140	9	25	mg/L	11.21.17 12:01	
Chloroform	<0.00500	0.0500	0.0536	107	0.0526	105	70-130	2	25	mg/L	11.21.17 12:01	
Methyl Chloride	<0.0100	0.0500	0.0433	87	0.0415	83	60-140	4	25	mg/L	11.21.17 12:01	
2-Chlorotoluene	<0.00500	0.0500	0.0547	109	0.0550	110	73-125	1	25	mg/L	11.21.17 12:01	
4-Chlorotoluene	<0.00500	0.0500	0.0522	104	0.0521	104	74-125	0	25	mg/L	11.21.17 12:01	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0549	110	0.0552	110	75-125	1	25	mg/L	11.21.17 12:01	
Dibromochloromethane	<0.00500	0.0500	0.0552	110	0.0558	112	73-125	1	25	mg/L	11.21.17 12:01	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0510	102	0.0544	109	59-125	6	25	mg/L	11.21.17 12:01	
1,2-Dibromoethane	<0.00500	0.0500	0.0558	112	0.0543	109	73-125	3	25	mg/L	11.21.17 12:01	
Methylene bromide	<0.00500	0.0500	0.0505	101	0.0521	104	69-127	3	25	mg/L	11.21.17 12:01	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0546	109	0.0546	109	75-125	0	25	mg/L	11.21.17 12:01	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0554	111	0.0547	109	75-125	1	25	mg/L	11.21.17 12:01	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0542	108	0.0524	105	75-125	3	25	mg/L	11.21.17 12:01	
Dichlorodifluoromethane	<0.00500	0.0500	0.0446	89	0.0425	85	70-130	5	25	mg/L	11.21.17 12:01	
1,1-Dichloroethane	<0.00500	0.0500	0.0540	108	0.0531	106	72-125	2	25	mg/L	11.21.17 12:01	
1,2-Dichloroethane	<0.00500	0.0500	0.0479	96	0.0516	103	68-127	7	25	mg/L	11.21.17 12:01	
1,1-Dichloroethene	<0.00500	0.0500	0.0502	100	0.0486	97	59-172	3	25	mg/L	11.21.17 12:01	
cis-1,2-Dichloroethylene	<0.00500	0.0500	0.0535	107	0.0521	104	75-125	3	25	mg/L	11.21.17 12:01	
trans-1,2-dichloroethylene	<0.00500	0.0500	0.0515	103	0.0492	98	75-125	5	25	mg/L	11.21.17 12:01	
1,2-Dichloropropane	<0.00500	0.0500	0.0542	108	0.0568	114	74-125	5	25	mg/L	11.21.17 12:01	
1,3-Dichloropropane	<0.00500	0.0500	0.0531	106	0.0538	108	75-125	1	25	mg/L	11.21.17 12:01	
2,2-Dichloropropane	<0.00500	0.0500	0.0552	110	0.0526	105	75-125	5	25	mg/L	11.21.17 12:01	
1,1-Dichloropropene	<0.00500	0.0500	0.0504	101	0.0495	99	75-125	2	25	mg/L	11.21.17 12:01	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0542	108	0.0552	110	74-125	2	25	mg/L	11.21.17 12:01	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0551	110	0.0541	108	66-125	2	25	mg/L	11.21.17 12:01	
Ethylbenzene	<0.00500	0.0500	0.0532	106	0.0528	106	75-125	1	25	mg/L	11.21.17 12:01	
Hexachlorobutadiene	<0.00500	0.0500	0.0568	114	0.0527	105	75-125	7	25	mg/L	11.21.17 12:01	
Isopropylbenzene	<0.00500	0.0500	0.0561	112	0.0555	111	75-125	1	25	mg/L	11.21.17 12:01	
Methylene Chloride	<0.00500	0.0500	0.0458	92	0.0438	88	75-125	4	25	mg/L	11.21.17 12:01	
MTBE	<0.00500	0.0500	0.0541	108	0.0552	110	65-135	2	25	mg/L	11.21.17 12:01	
Naphthalene	<0.0100	0.0500	0.0536	107	0.0570	114	70-130	6	25	mg/L	11.21.17 12:01	
n-Propylbenzene	<0.00500	0.0500	0.0544	109	0.0549	110	75-125	1	25	mg/L	11.21.17 12:01	
Styrene	<0.00500	0.0500	0.0549	110	0.0538	108	75-125	2	25	mg/L	11.21.17 12:01	
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0557	111	0.0550	110	72-125	1	25	mg/L	11.21.17 12:01	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0570	114	0.0595	119	74-125	4	25	mg/L	11.21.17 12:01	
Tetrachloroethylene	<0.00500	0.0500	0.0520	104	0.0503	101	71-125	3	25	mg/L	11.21.17 12:01	
Toluene	<0.00500	0.0500	0.0526	105	0.0518	104	59-139	2	25	mg/L	11.21.17 12:01	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0540	108	0.0566	113	75-137	5	25	mg/L	11.21.17 12:01	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0548	110	0.0545	109	75-135	1	25	mg/L	11.21.17 12:01	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0563	113	0.0530	106	75-125	6	25	mg/L	11.21.17 12:01	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0547	109	0.0547	109	75-127	0	25	mg/L	11.21.17 12:01	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034006

MB Sample Id: 7634826-1-BLK

Matrix: Water

LCS Sample Id: 7634826-1-BKS

Prep Method: SW5030B

Date Prep: 11.21.17

LCSD Sample Id: 7634826-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethylene	<0.00500	0.0500	0.0505	101	0.0515	103	62-137	2	25	mg/L	11.21.17 12:01	
Trichlorofluoromethane	<0.00500	0.0500	0.0463	93	0.0530	106	60-140	13	25	mg/L	11.21.17 12:01	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0517	103	0.0549	110	75-125	6	25	mg/L	11.21.17 12:01	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0554	111	0.0547	109	75-125	1	25	mg/L	11.21.17 12:01	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0553	111	0.0555	111	70-125	0	25	mg/L	11.21.17 12:01	
o-Xylene	<0.00500	0.0500	0.0559	112	0.0546	109	75-125	2	25	mg/L	11.21.17 12:01	
m,p-Xylenes	<0.0100	0.100	0.106	106	0.103	103	75-125	3	25	mg/L	11.21.17 12:01	
Vinyl Chloride	<0.00200	0.0500	0.0498	100	0.0420	84	60-140	17	25	mg/L	11.21.17 12:01	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	93		101		97		75-131			%	11.21.17 12:01	
1,2-Dichloroethane-D4	101		95		99		63-144			%	11.21.17 12:01	
Toluene-D8	106		99		100		80-117			%	11.21.17 12:01	
4-Bromofluorobenzene	100		97		98		74-124			%	11.21.17 12:01	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034073

MB Sample Id: 7634866-1-BLK

Matrix: Solid

LCS Sample Id: 7634866-1-BKS

Prep Method: SW5030C

Date Prep: 11.21.17

LCSD Sample Id: 7634866-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00500	0.0500	0.0471	94	0.0475	95	66-142	1	25	mg/kg	11.21.17 22:42	
Bromobenzene	<0.00500	0.0500	0.0521	104	0.0495	99	75-125	5	25	mg/kg	11.21.17 22:42	
Bromochloromethane	<0.00500	0.0500	0.0510	102	0.0489	98	60-140	4	25	mg/kg	11.21.17 22:42	
Bromodichloromethane	<0.00500	0.0500	0.0529	106	0.0545	109	75-125	3	25	mg/kg	11.21.17 22:42	
Bromoform	<0.00500	0.0500	0.0490	98	0.0471	94	75-125	4	25	mg/kg	11.21.17 22:42	
Methyl bromide	<0.00500	0.0500	0.0473	95	0.0494	99	60-140	4	25	mg/kg	11.21.17 22:42	
tert-Butylbenzene	<0.00500	0.0500	0.0502	100	0.0510	102	75-125	2	25	mg/kg	11.21.17 22:42	
Sec-Butylbenzene	<0.00500	0.0500	0.0493	99	0.0494	99	75-125	0	25	mg/kg	11.21.17 22:42	
n-Butylbenzene	<0.00500	0.0500	0.0485	97	0.0471	94	75-125	3	25	mg/kg	11.21.17 22:42	
Carbon Tetrachloride	<0.00500	0.0500	0.0501	100	0.0514	103	62-125	3	25	mg/kg	11.21.17 22:42	
Chlorobenzene	<0.00500	0.0500	0.0493	99	0.0486	97	60-133	1	25	mg/kg	11.21.17 22:42	
Chloroethane	<0.0100	0.0500	0.0456	91	0.0479	96	60-140	5	25	mg/kg	11.21.17 22:42	
Chloroform	<0.00500	0.0500	0.0493	99	0.0501	100	74-125	2	25	mg/kg	11.21.17 22:42	
Methyl Chloride	<0.0100	0.0500	0.0439	88	0.0469	94	60-140	7	25	mg/kg	11.21.17 22:42	
2-Chlorotoluene	<0.00500	0.0500	0.0506	101	0.0495	99	73-125	2	25	mg/kg	11.21.17 22:42	
4-Chlorotoluene	<0.00500	0.0500	0.0507	101	0.0494	99	74-125	3	25	mg/kg	11.21.17 22:42	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0496	99	0.0484	97	75-125	2	25	mg/kg	11.21.17 22:42	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0513	103	0.0526	105	59-125	3	25	mg/kg	11.21.17 22:42	
Dibromochloromethane	<0.00500	0.0500	0.0538	108	0.0522	104	73-125	3	25	mg/kg	11.21.17 22:42	
1,2-Dibromoethane	<0.00500	0.0500	0.0525	105	0.0525	105	73-125	0	25	mg/kg	11.21.17 22:42	
Methylene bromide	<0.00500	0.0500	0.0514	103	0.0517	103	69-127	1	25	mg/kg	11.21.17 22:42	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0487	97	0.0482	96	75-125	1	25	mg/kg	11.21.17 22:42	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0485	97	0.0470	94	75-125	3	25	mg/kg	11.21.17 22:42	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0480	96	0.0463	93	75-125	4	25	mg/kg	11.21.17 22:42	
Dichlorodifluoromethane	<0.00500	0.0500	0.0440	88	0.0467	93	65-135	6	25	mg/kg	11.21.17 22:42	
1,2-Dichloroethane	<0.00500	0.0500	0.0496	99	0.0523	105	68-127	5	25	mg/kg	11.21.17 22:42	
1,1-Dichloroethane	<0.00500	0.0500	0.0484	97	0.0491	98	72-125	1	25	mg/kg	11.21.17 22:42	
trans-1,2-dichloroethylene	<0.00500	0.0500	0.0457	91	0.0467	93	75-125	2	25	mg/kg	11.21.17 22:42	
cis-1,2-Dichloroethylene	<0.00500	0.0500	0.0472	94	0.0478	96	75-125	1	25	mg/kg	11.21.17 22:42	
1,1-Dichloroethene	<0.00500	0.0500	0.0461	92	0.0471	94	59-172	2	25	mg/kg	11.21.17 22:42	
2,2-Dichloropropane	<0.00500	0.0500	0.0509	102	0.0470	94	75-125	8	25	mg/kg	11.21.17 22:42	
1,3-Dichloropropane	<0.00500	0.0500	0.0517	103	0.0523	105	75-125	1	25	mg/kg	11.21.17 22:42	
1,2-Dichloropropane	<0.00500	0.0500	0.0489	98	0.0484	97	74-125	1	25	mg/kg	11.21.17 22:42	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0530	106	0.0507	101	66-125	4	25	mg/kg	11.21.17 22:42	
1,1-Dichloropropene	<0.00500	0.0500	0.0466	93	0.0471	94	75-125	1	25	mg/kg	11.21.17 22:42	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0517	103	0.0495	99	74-125	4	25	mg/kg	11.21.17 22:42	
Ethylbenzene	<0.00500	0.0500	0.0488	98	0.0492	98	75-125	1	25	mg/kg	11.21.17 22:42	
Hexachlorobutadiene	<0.00500	0.0500	0.0407	81	0.0430	86	75-125	5	25	mg/kg	11.21.17 22:42	
Isopropylbenzene	<0.00500	0.0500	0.0504	101	0.0507	101	75-125	1	25	mg/kg	11.21.17 22:42	
Methylene Chloride	<0.0200	0.0500	0.0473	95	0.0477	95	75-125	1	25	mg/kg	11.21.17 22:42	
MTBE	<0.00500	0.0500	0.0523	105	0.0524	105	60-140	0	25	mg/kg	11.21.17 22:42	
Naphthalene	<0.0100	0.0500	0.0460	92	0.0494	99	70-130	7	25	mg/kg	11.21.17 22:42	
n-Propylbenzene	<0.00500	0.0500	0.0504	101	0.0488	98	75-125	3	25	mg/kg	11.21.17 22:42	
Styrene	<0.00500	0.0500	0.0523	105	0.0517	103	75-125	1	25	mg/kg	11.21.17 22:42	
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0523	105	0.0526	105	72-125	1	25	mg/kg	11.21.17 22:42	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0524	105	0.0502	100	74-125	4	25	mg/kg	11.21.17 22:42	
Tetrachloroethylene	<0.00500	0.0500	0.0475	95	0.0459	92	71-125	3	25	mg/kg	11.21.17 22:42	
Toluene	<0.00500	0.0500	0.0477	95	0.0471	94	59-139	1	25	mg/kg	11.21.17 22:42	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0404	81	0.0434	87	75-137	7	25	mg/kg	11.21.17 22:42	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0414	83	0.0419	84	75-135	1	25	mg/kg	11.21.17 22:42	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0500	100	0.0504	101	75-127	1	25	mg/kg	11.21.17 22:42	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0507	101	0.0507	101	75-125	0	25	mg/kg	11.21.17 22:42	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034073

MB Sample Id: 7634866-1-BLK

Matrix: Solid

LCS Sample Id: 7634866-1-BKS

Prep Method: SW5030C

Date Prep: 11.21.17

LCSD Sample Id: 7634866-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethylene	<0.00500	0.0500	0.0478	96	0.0472	94	62-137	1	25	mg/kg	11.21.17 22:42	
Trichlorofluoromethane	<0.00500	0.0500	0.0469	94	0.0488	98	67-125	4	25	mg/kg	11.21.17 22:42	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0546	109	0.0523	105	75-125	4	25	mg/kg	11.21.17 22:42	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0496	99	0.0493	99	75-125	1	25	mg/kg	11.21.17 22:42	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0487	97	0.0490	98	70-130	1	25	mg/kg	11.21.17 22:42	
Vinyl Chloride	<0.00200	0.0500	0.0445	89	0.0463	93	60-140	4	25	mg/kg	11.21.17 22:42	
o-Xylene	<0.00500	0.0500	0.0505	101	0.0509	102	75-125	1	25	mg/kg	11.21.17 22:42	
m,p-Xylenes	<0.0100	0.100	0.0979	98	0.0962	96	75-125	2	25	mg/kg	11.21.17 22:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	98		100		101		53-142	%	11.21.17 22:42
1,2-Dichloroethane-D4	99		98		95		56-150	%	11.21.17 22:42
Toluene-D8	98		98		99		70-130	%	11.21.17 22:42
4-Bromofluorobenzene	98		104		100		68-152	%	11.21.17 22:42



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034073

Parent Sample Id: 568854-001

Matrix: Soil

MS Sample Id: 568854-001 S

Prep Method: SW5030C

Date Prep: 11.21.17

MSD Sample Id: 568854-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.125	1.25	1.16	93	1.18	94	66-142	2	25	mg/kg	11.22.17 06:28	
Bromobenzene	<0.125	1.25	1.23	98	1.23	98	75-125	0	25	mg/kg	11.22.17 06:28	
Bromochloromethane	<0.125	1.25	1.16	93	1.25	100	60-140	7	25	mg/kg	11.22.17 06:28	
Bromodichloromethane	<0.125	1.25	1.20	96	1.26	101	75-125	5	25	mg/kg	11.22.17 06:28	
Bromoform	<0.125	1.25	0.973	78	1.04	83	75-125	7	25	mg/kg	11.22.17 06:28	
Methyl bromide	<0.125	1.25	0.783	63	0.863	69	60-140	10	25	mg/kg	11.22.17 06:28	
tert-Butylbenzene	<0.125	1.25	1.27	102	1.26	101	75-125	1	25	mg/kg	11.22.17 06:28	
Sec-Butylbenzene	<0.125	1.25	1.25	100	1.24	99	75-125	1	25	mg/kg	11.22.17 06:28	
n-Butylbenzene	<0.125	1.25	1.20	96	1.19	95	75-125	1	25	mg/kg	11.22.17 06:28	
Carbon Tetrachloride	<0.125	1.25	1.11	89	1.21	97	62-125	9	25	mg/kg	11.22.17 06:28	
Chlorobenzene	<0.125	1.25	1.17	94	1.19	95	60-133	2	25	mg/kg	11.22.17 06:28	
Chloroethane	<0.250	1.25	0.943	75	0.926	74	60-140	2	25	mg/kg	11.22.17 06:28	
Chloroform	<0.125	1.25	1.18	94	1.22	98	74-125	3	25	mg/kg	11.22.17 06:28	
Methyl Chloride	<0.250	1.25	1.11	89	1.17	94	60-140	5	25	mg/kg	11.22.17 06:28	
2-Chlorotoluene	<0.125	1.25	1.23	98	1.23	98	73-125	0	25	mg/kg	11.22.17 06:28	
4-Chlorotoluene	<0.125	1.25	1.21	97	1.22	98	74-125	1	25	mg/kg	11.22.17 06:28	
p-Cymene (p-Isopropyltoluene)	<0.125	1.25	1.24	99	1.24	99	75-125	0	25	mg/kg	11.22.17 06:28	
1,2-Dibromo-3-Chloropropane	<0.125	1.25	1.16	93	1.24	99	59-125	7	25	mg/kg	11.22.17 06:28	
Dibromochloromethane	<0.125	1.25	1.16	93	1.18	94	73-125	2	25	mg/kg	11.22.17 06:28	
1,2-Dibromoethane	<0.125	1.25	1.25	100	1.27	102	73-125	2	25	mg/kg	11.22.17 06:28	
Methylene bromide	<0.125	1.25	1.19	95	1.23	98	69-127	3	25	mg/kg	11.22.17 06:28	
1,2-Dichlorobenzene	<0.125	1.25	1.16	93	1.18	94	75-125	2	25	mg/kg	11.22.17 06:28	
1,3-Dichlorobenzene	<0.125	1.25	1.18	94	1.16	93	75-125	2	25	mg/kg	11.22.17 06:28	
1,4-Dichlorobenzene	<0.125	1.25	1.15	92	1.13	90	75-125	2	25	mg/kg	11.22.17 06:28	
Dichlorodifluoromethane	<0.125	1.25	1.08	86	1.09	87	65-135	1	25	mg/kg	11.22.17 06:28	
1,2-Dichloroethane	<0.125	1.25	1.23	98	1.24	99	68-127	1	25	mg/kg	11.22.17 06:28	
1,1-Dichloroethane	<0.125	1.25	1.14	91	1.21	97	72-125	6	25	mg/kg	11.22.17 06:28	
trans-1,2-dichloroethylene	<0.125	1.25	1.12	90	1.15	92	75-125	3	25	mg/kg	11.22.17 06:28	
cis-1,2-Dichloroethylene	<0.125	1.25	1.12	90	1.18	94	75-125	5	25	mg/kg	11.22.17 06:28	
1,1-Dichloroethene	<0.125	1.25	1.10	88	1.14	91	59-172	4	25	mg/kg	11.22.17 06:28	
2,2-Dichloropropane	<0.125	1.25	1.00	80	1.15	92	75-125	14	25	mg/kg	11.22.17 06:28	
1,3-Dichloropropane	<0.125	1.25	1.22	98	1.28	102	75-125	5	25	mg/kg	11.22.17 06:28	
1,2-Dichloropropane	<0.125	1.25	1.16	93	1.18	94	74-125	2	25	mg/kg	11.22.17 06:28	
trans-1,3-dichloropropene	<0.125	1.25	1.18	94	1.24	99	66-125	5	25	mg/kg	11.22.17 06:28	
1,1-Dichloropropene	<0.125	1.25	1.11	89	1.17	94	75-125	5	25	mg/kg	11.22.17 06:28	
cis-1,3-Dichloropropene	<0.125	1.25	1.17	94	1.23	98	74-125	5	25	mg/kg	11.22.17 06:28	
Ethylbenzene	<0.125	1.25	1.19	95	1.21	97	75-125	2	25	mg/kg	11.22.17 06:28	
Hexachlorobutadiene	<0.125	1.25	1.10	88	1.12	90	75-125	2	25	mg/kg	11.22.17 06:28	
Isopropylbenzene	<0.125	1.25	1.21	97	1.24	99	75-125	2	25	mg/kg	11.22.17 06:28	
Methylene Chloride	<0.499	1.25	1.16	93	1.21	97	75-125	4	25	mg/kg	11.22.17 06:28	
MTBE	<0.125	1.25	1.24	99	1.32	106	60-140	6	25	mg/kg	11.22.17 06:28	
Naphthalene	<0.250	1.25	1.15	92	1.25	100	70-130	8	25	mg/kg	11.22.17 06:28	
n-Propylbenzene	<0.125	1.25	1.23	98	1.22	98	75-125	1	25	mg/kg	11.22.17 06:28	
Styrene	<0.125	1.25	1.22	98	1.24	99	75-125	2	25	mg/kg	11.22.17 06:28	
1,1,1,2-Tetrachloroethane	<0.125	1.25	1.22	98	1.24	99	72-125	2	25	mg/kg	11.22.17 06:28	
1,1,2,2-Tetrachloroethane	<0.125	1.25	1.20	96	1.24	99	74-125	3	25	mg/kg	11.22.17 06:28	
Tetrachloroethylene	<0.125	1.25	1.12	90	1.14	91	71-125	2	25	mg/kg	11.22.17 06:28	
Toluene	<0.125	1.25	1.16	93	1.18	94	59-139	2	25	mg/kg	11.22.17 06:28	
1,2,3-Trichlorobenzene	<0.125	1.25	1.04	83	1.10	88	75-137	6	25	mg/kg	11.22.17 06:28	
1,2,4-Trichlorobenzene	<0.125	1.25	1.03	82	1.06	85	75-135	3	25	mg/kg	11.22.17 06:28	
1,1,2-Trichloroethane	<0.125	1.25	1.22	98	1.24	99	75-127	2	25	mg/kg	11.22.17 06:28	
1,1,1-Trichloroethane	<0.125	1.25	1.17	94	1.22	98	75-125	4	25	mg/kg	11.22.17 06:28	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034073

Parent Sample Id: 568854-001

Matrix: Soil

MS Sample Id: 568854-001 S

Prep Method: SW5030C

Date Prep: 11.21.17

MSD Sample Id: 568854-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethylene	<0.125	1.25	1.15	92	1.18	94	62-137	3	25	mg/kg	11.22.17 06:28	
Trichlorofluoromethane	<0.125	1.25	0.951	76	0.941	75	67-125	1	25	mg/kg	11.22.17 06:28	
1,2,3-Trichloropropane	<0.125	1.25	1.24	99	1.29	103	75-125	4	25	mg/kg	11.22.17 06:28	
1,2,4-Trimethylbenzene	<0.125	1.25	1.24	99	1.23	98	75-125	1	25	mg/kg	11.22.17 06:28	
1,3,5-Trimethylbenzene	<0.125	1.25	1.25	100	1.24	99	70-130	1	25	mg/kg	11.22.17 06:28	
Vinyl Chloride	<0.0499	1.25	1.04	83	1.10	88	60-140	6	25	mg/kg	11.22.17 06:28	
o-Xylene	<0.125	1.25	1.21	97	1.26	101	75-125	4	25	mg/kg	11.22.17 06:28	
m,p-Xylenes	<0.250	2.50	2.37	95	2.40	96	75-125	1	25	mg/kg	11.22.17 06:28	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane			95		99		53-142			%	11.22.17 06:28	
1,2-Dichloroethane-D4			95		101		56-150			%	11.22.17 06:28	
Toluene-D8			100		98		70-130			%	11.22.17 06:28	
4-Bromofluorobenzene			103		101		68-152			%	11.22.17 06:28	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034006

Parent Sample Id: 568337-006

Matrix: Ground Water

MS Sample Id: 568337-006 S

Prep Method: SW5030B

Date Prep: 11.21.17

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00500	0.0500	0.0529	106	66-142	mg/L	11.21.17 14:21	
Bromobenzene	<0.00500	0.0500	0.0532	106	75-125	mg/L	11.21.17 14:21	
Bromochloromethane	<0.00500	0.0500	0.0545	109	60-140	mg/L	11.21.17 14:21	
Bromodichloromethane	<0.00500	0.0500	0.0561	112	75-125	mg/L	11.21.17 14:21	
Bromoform	<0.00500	0.0500	0.0461	92	75-125	mg/L	11.21.17 14:21	
Methyl bromide	<0.00500	0.0500	0.0464	93	60-140	mg/L	11.21.17 14:21	
n-Butylbenzene	<0.00500	0.0500	0.0553	111	75-125	mg/L	11.21.17 14:21	
Sec-Butylbenzene	<0.00500	0.0500	0.0565	113	75-125	mg/L	11.21.17 14:21	
tert-Butylbenzene	<0.00500	0.0500	0.0569	114	75-125	mg/L	11.21.17 14:21	
Carbon Tetrachloride	<0.00500	0.0500	0.0556	111	62-125	mg/L	11.21.17 14:21	
Chlorobenzene	<0.00500	0.0500	0.0511	102	60-133	mg/L	11.21.17 14:21	
Chloroethane	<0.0100	0.0500	0.0483	97	60-140	mg/L	11.21.17 14:21	
Chloroform	<0.00500	0.0500	0.0528	106	70-130	mg/L	11.21.17 14:21	
Methyl Chloride	<0.0100	0.0500	0.0534	107	60-140	mg/L	11.21.17 14:21	
2-Chlorotoluene	<0.00500	0.0500	0.0556	111	73-125	mg/L	11.21.17 14:21	
4-Chlorotoluene	<0.00500	0.0500	0.0517	103	74-125	mg/L	11.21.17 14:21	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0518	104	75-125	mg/L	11.21.17 14:21	
Dibromochloromethane	<0.00500	0.0500	0.0524	105	73-125	mg/L	11.21.17 14:21	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0559	112	59-125	mg/L	11.21.17 14:21	
1,2-Dibromoethane	<0.00500	0.0500	0.0534	107	73-125	mg/L	11.21.17 14:21	
Methylene bromide	<0.00500	0.0500	0.0509	102	69-127	mg/L	11.21.17 14:21	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0541	108	75-125	mg/L	11.21.17 14:21	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0542	108	75-125	mg/L	11.21.17 14:21	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0526	105	75-125	mg/L	11.21.17 14:21	
Dichlorodifluoromethane	<0.00500	0.0500	0.0661	132	70-130	mg/L	11.21.17 14:21	
1,1-Dichloroethane	<0.00500	0.0500	0.0566	113	72-125	mg/L	11.21.17 14:21	
1,2-Dichloroethane	<0.00500	0.0500	0.0506	101	68-127	mg/L	11.21.17 14:21	
1,1-Dichloroethene	<0.00500	0.0500	0.0573	115	59-172	mg/L	11.21.17 14:21	
cis-1,2-Dichloroethylene	<0.00500	0.0500	0.0530	106	75-125	mg/L	11.21.17 14:21	
trans-1,2-dichloroethylene	<0.00500	0.0500	0.0541	108	75-125	mg/L	11.21.17 14:21	
1,2-Dichloropropane	<0.00500	0.0500	0.0562	112	74-125	mg/L	11.21.17 14:21	
1,3-Dichloropropane	<0.00500	0.0500	0.0520	104	75-125	mg/L	11.21.17 14:21	
2,2-Dichloropropane	<0.00500	0.0500	0.0551	110	75-125	mg/L	11.21.17 14:21	
1,1-Dichloropropene	<0.00500	0.0500	0.0520	104	75-125	mg/L	11.21.17 14:21	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0547	109	74-125	mg/L	11.21.17 14:21	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0546	109	66-125	mg/L	11.21.17 14:21	
Ethylbenzene	<0.00500	0.0500	0.0533	107	75-125	mg/L	11.21.17 14:21	
Hexachlorobutadiene	<0.00500	0.0500	0.0556	111	75-125	mg/L	11.21.17 14:21	
Isopropylbenzene	<0.00500	0.0500	0.0520	104	75-125	mg/L	11.21.17 14:21	
Methylene Chloride	<0.00500	0.0500	0.0466	93	75-125	mg/L	11.21.17 14:21	
MTBE	<0.00500	0.0500	0.0574	115	65-135	mg/L	11.21.17 14:21	
Naphthalene	<0.0100	0.0500	0.0660	132	70-130	mg/L	11.21.17 14:21	
n-Propylbenzene	<0.00500	0.0500	0.0553	111	75-125	mg/L	11.21.17 14:21	
Styrene	<0.00500	0.0500	0.0480	96	75-125	mg/L	11.21.17 14:21	
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0497	99	72-125	mg/L	11.21.17 14:21	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0573	115	74-125	mg/L	11.21.17 14:21	X
Tetrachloroethylene	<0.00500	0.0500	0.0534	107	71-125	mg/L	11.21.17 14:21	
Toluene	<0.00500	0.0500	0.0509	102	59-139	mg/L	11.21.17 14:21	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0576	115	75-137	mg/L	11.21.17 14:21	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0552	110	75-135	mg/L	11.21.17 14:21	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0555	111	75-125	mg/L	11.21.17 14:21	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0519	104	75-127	mg/L	11.21.17 14:21	



QC Summary 568854

Kinder Morgan-El Paso KMI L1100 Hydrotest

Analytical Method: VOCs By SW846 8260C

Seq Number: 3034006

Parent Sample Id: 568337-006

Matrix: Ground Water

MS Sample Id: 568337-006 S

Prep Method: SW5030B

Date Prep: 11.21.17

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Trichloroethylene	<0.00500	0.0500	0.0521	104	62-137	mg/L	11.21.17 14:21	
Trichlorofluoromethane	<0.00500	0.0500	0.0393	79	60-140	mg/L	11.21.17 14:21	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0539	108	75-125	mg/L	11.21.17 14:21	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0530	106	75-125	mg/L	11.21.17 14:21	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0573	115	70-125	mg/L	11.21.17 14:21	
o-Xylene	<0.00500	0.0500	0.0567	113	75-125	mg/L	11.21.17 14:21	
m,p-Xylenes	<0.0100	0.100	0.105	105	75-125	mg/L	11.21.17 14:21	
Vinyl Chloride	<0.00200	0.0500	0.0506	101	60-140	mg/L	11.21.17 14:21	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		75-131	%	11.21.17 14:21
1,2-Dichloroethane-D4	103		63-144	%	11.21.17 14:21
Toluene-D8	100		80-117	%	11.21.17 14:21
4-Bromofluorobenzene	104		74-124	%	11.21.17 14:21



Setting the Standard since 1990

Stamford, TX (281) 240-4200
Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
Lubbock, TX (806) 794-1296

CHAIN OF CUSTODY

Page 1 of 1

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143

Service Center - Amarillo, TX (806) 678-4514
Service Center - Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote # 568854

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes			
Company Name / Branch: Kinder Morgan				Project Name/Number: KMI L100 Hydrotest											
Company Address: 2 N Nevada Ave. Colorado Springs, CO 80903				Project Location: Lordsburg, NM											
Email: amy_blythe@kinder-morgan.com Phone No: 719.526.4813				Invoice To: KMI - Amy Blythe											
Project Contact: Amy Blythe				PO Number:											
Sampler's Name: Charles Griffin															
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	Number of preserved bottles				Field Comments				
							HCl	Ascorbic Acid	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	
1	S111617-001	TS	11/16/17	1:35p	SW	5									TPH M8015
2	WW111617-002		11/16/17	1:40p	WW	1									TCRP BTEX
3	WW111617-003		11/16/17	1:45p	WW	1									PCB's
4	WW111617-004		11/16/17	1:50p	WW	1									TCRP Metals
5	WW111617-005		11/16/17	1:55p	WW	1									VOC's M820
6	WW111617-006		11/16/17	1:59p	WW	1									PH
7	WW111617-007		11/16/17	2:10p	WW	3									Flashpoint
8	WW111617-008		11/16/17	2:25p	WW	3									TCRP BTEX, TPH, M8015, PCB's
9															
10															

Turnaround Time (Business days)				Data Deliverable Information				Notes			
☐ Same Day TAT	☐ 5 Day TAT	☐ Level II Std QC	☐ Level IV (Full Data Pkg / raw data)								
☐ Next Day EMERGENCY	☐ 7 Day TAT	☐ Level III Std QC + Forms	☐ TRRP Level IV								
☐ 2 Day EMERGENCY	☐ Contract TAT	☐ Level 3 (CLP Forms)	☐ UST / RG -411								
☒ 3 Day EMERGENCY		☐ Level II Report with TRRP checklist									

TAT Starts Day received by Lab, if received by 5:00 pm

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished By Sampler:		Relinquished By:		Relinquished By:		Relinquished By:	
Date Time	Signature	Date Time	Signature	Date Time	Signature	Date Time	Signature
11/17/17	[Signature]	11/17/17	[Signature]	11/17/17	[Signature]	11/17/17	[Signature]
3		3		4		4	
5		5		5		5	

On Job		Cooler Temp		Thermo. Corr. Factor	
Date Time	Signature	Date Time	Signature	Date Time	Signature
11/17/17	[Signature]	11/17/17	[Signature]	11/17/17	[Signature]

FED-EX / UPS: Tracking #

Site and water samples from Site #7 Area Tank overflow spill + 032-296153/-108, 831438

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of sample and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples retained by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



Inter-Office Shipment

Page 1 of 1

IOS Number **1052084**

Date/Time: 11/17/17 15:31

Lab# From: **El Paso**

Lab# To: **Houston**

Created by: James Ratcliff

Delivery Priority: Fedex

Air Bill No.: 409248456539

Please send report to Kelsey Brooks

Address: 200 East Sunset Rd, Suite E, El Paso, TX 79922
Phone:

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
568854-001	S	S111617-001	11/16/17 13:25	SW8260C	VOCs By SW846 8260C	11/21/17	11/30/17	KEB	BDCME BRBZ BRCLME I	
568854-001	S	S111617-001	11/16/17 13:25	SW8082	PCBs by EPA 8082	11/21/17	11/30/17	KEB	PCB1016 PCB1221 PCB12	
568854-001	S	S111617-001	11/16/17 13:25	SW8015B_NM	TPH by SW 8015B	11/21/17	11/30/17	KEB	PHCC10C28 PHCC6C10 T	
568854-001	W	S111617-001	11/16/17 13:25	SW8260BTX_TCLP	TCLP BTEX by SW 8260B	11/21/17	11/30/17	KEB	BZ BZME EBZ XYLMP X	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW7470A_TCLP	TCLP Mercury by SW 7470A	11/21/17	12/14/17	KEB	HG	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW6010BTCLP	TCLP Metals by SW 1311/6010B	11/21/17	05/15/18	KEB	AG AS BA CD CR PB SE	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW8260BTX_TCLP	TCLP BTEX by SW 8260B	11/21/17	11/30/17	KEB	BZ BZME EBZ XYLMP X	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW8082	PCBs by EPA 8082	11/21/17	11/23/17	KEB	PCB1016 PCB1221 PCB12	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW1010	Flash Point (CC) SW-846 1010	11/21/17	12/16/17	KEB	FLASHPT	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW8015B_NM	TPH by SW 8015B	11/21/17	11/23/17	KEB	PHCC10C28 PHCC6C10 T	
568854-002	W	WW111617-002 - 008	11/16/17 13:40	SW8260C	VOCs By SW846 8260C	11/21/17	11/30/17	KEB	BDCME BRBZ BRCLME I	

Inter Office Shipment or Sample Comments:

Relinquished By

Melissa Corell

Date Relinquished: 11/22/2017

Received By:

Rene Vandenberghe

Date Received: 11/18/2017 09:30

Cooler Temperature: 1.6



Inter-Office Shipment

Page 1 of 1

IOS Number **1052085**

Date/Time: 11/17/17 15:32

Lab# From: **El Paso**

Lab# To: **Midland**

Created by: James Ratcliff

Delivery Priority: Fedex

Air Bill No.:

Please send report to: Kelsey Brooks

Address: 200 East Sunset Rd, Suite E, El Paso, TX 79922

Phone:

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
568854-001	S	S111617-001	11/16/17 13:25	E901.1	NORM analysis by E901.1 MOD	11/21/17	05/15/18	KEB	Y	

Inter Office Shipment or Sample Comments:

Relinquished By

James Ratcliff

Received By:

Connie Hernandez

Date Relinquished: 11/17/2017

Date Received: 11/21/2017 11:46

Cooler Temperature: 5.6



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1052084

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: James Ratcliff

Date Sent: 11/17/2017 03:31 PM

Received By: Rene Vandenberghe

Date Received: 11/18/2017 09:30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

R. C. Vandenberghe

Rene Vandenberghe

Date: 11/18/2017



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 1052085

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: James Ratcliff

Date Sent: 11/17/2017 03:32 PM

Received By: Connie Hernandez

Date Received: 11/21/2017 11:46 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	5.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Connie Hernandez

Date: 11/21/2017



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: Kinder Morgan-El Paso

Date/ Time Received: 11/17/2017 10:14:00 AM

Work Order #: 568854

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR3

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.1	
#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?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Houston, Midland
#18 Water VOC samples have zero headspace?	N/A	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: JR

PH Device/Lot#: pH Paper / Lot 195894

Checklist completed by:


James Ratcliff

Date: 11/17/2017

Checklist reviewed by:


Mike Kimmel

Date: 11/19/2017



Kinder Morgan- El paso

ATTN: Amy Blythe
8645 Railroad Dr.
El Paso, TX 79904
915-587-3694

Sample Type: Soil
Sample Condition: Intact/ Ambient deg C
Lab ID#: 568854-001
Project Name: KMI L1100 Hydrotest
Project #: KMI L1100- Hydrotest
Project Location: Lordsburg, NM

Sample Date: 11/16/17
Sample Time: 13:25
Receiving Date: 11/17/17
Analysis Date: 11/21/17
Analysis Time: 13:25
Field Code: S111617-001

Analysis Description	Analysis Results pCi/G	Analysis Error +/- 2s	Analysis Results Bq/G	Analysis Error +/- 2s	Analysis Test Method	Analysis Technician
Ra-226	<2.24	N/A	<0.08	N/A	EPA 901.1M	JUM
Ra-228	<0.88	N/A	<0.03	N/A	EPA 901.1M	JUM
Pb-210	<2.85	N/A	<0.11	N/A	EPA 901.1M	JUM
Th-228	<5.59	N/A	<0.21	N/A	EPA 901.1M	JUM
Bi-214	<0.41	N/A	<0.02	N/A	EPA 901.1M	JUM
Ra-224	10	1.51	0.37	0.06	EPA 901.1M	JUM
Pb-212	1.43	0.22	0.05	0.01	EPA 901.1M	JUM
Total Activity	11.43	N/A	0.42	N/A	EPA 901.1M	JUM
Notes:						

Quality Assurance Review

Xenco Laboratories assumes no liability for the use or interpretation of any analytical results other than the cost of the performed analysis itself. Reproduction of this report in less than full requires the written consent of the client.

Xenco Laboratories 1211 W Florida Ave, Midland TX 79701 (432)-704-5440

Appendix C

Depth to Water and Distance to Water Body

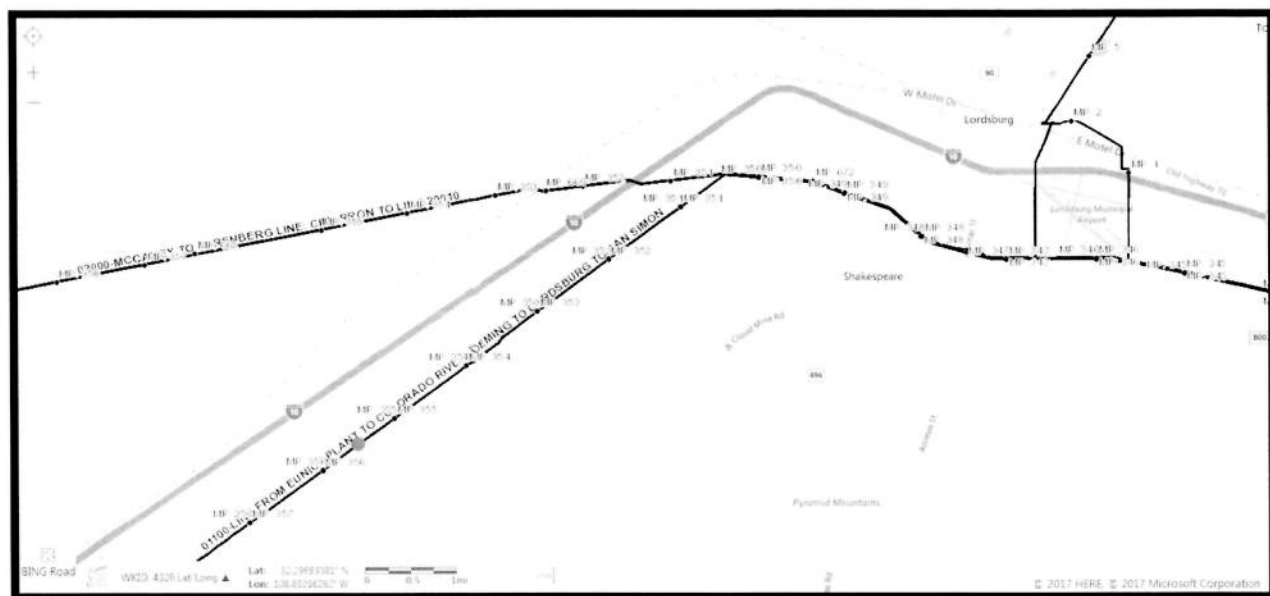


Fig. 1- Site Location

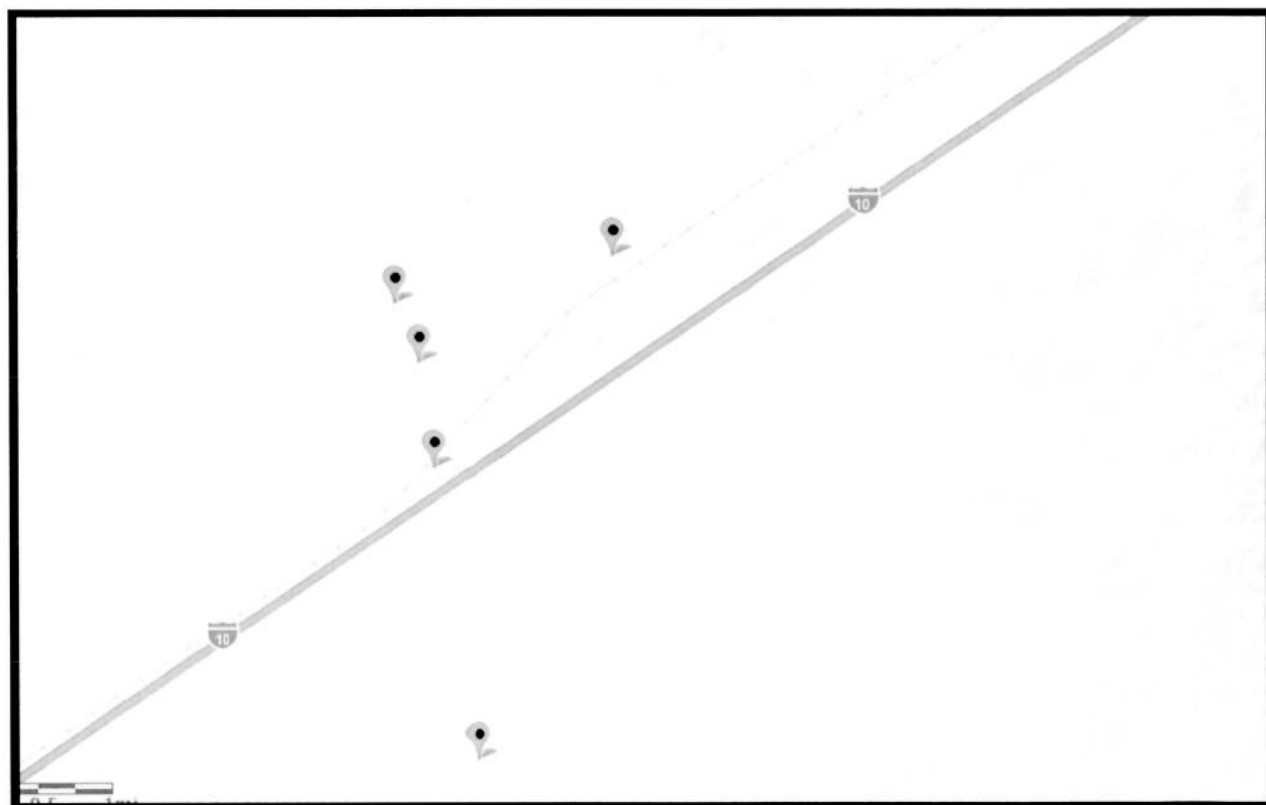


Fig. 2- Water Well Data

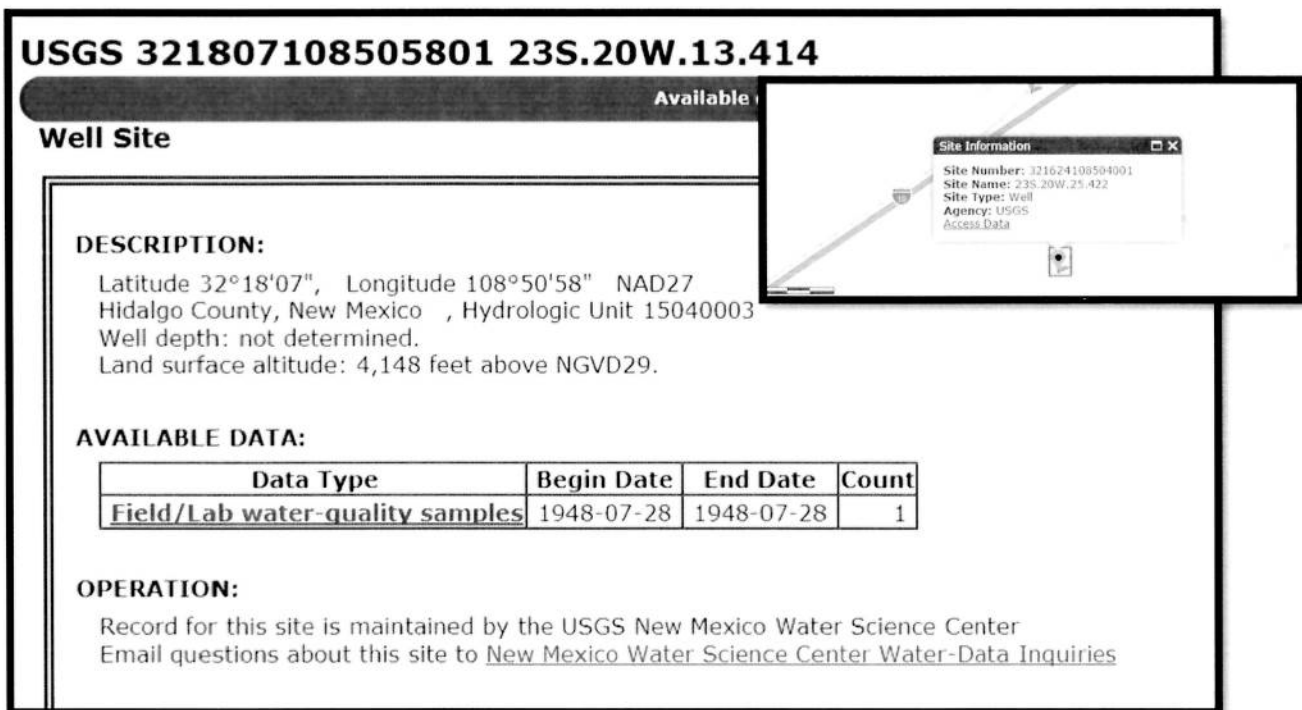


Fig. 3- Depth to Water

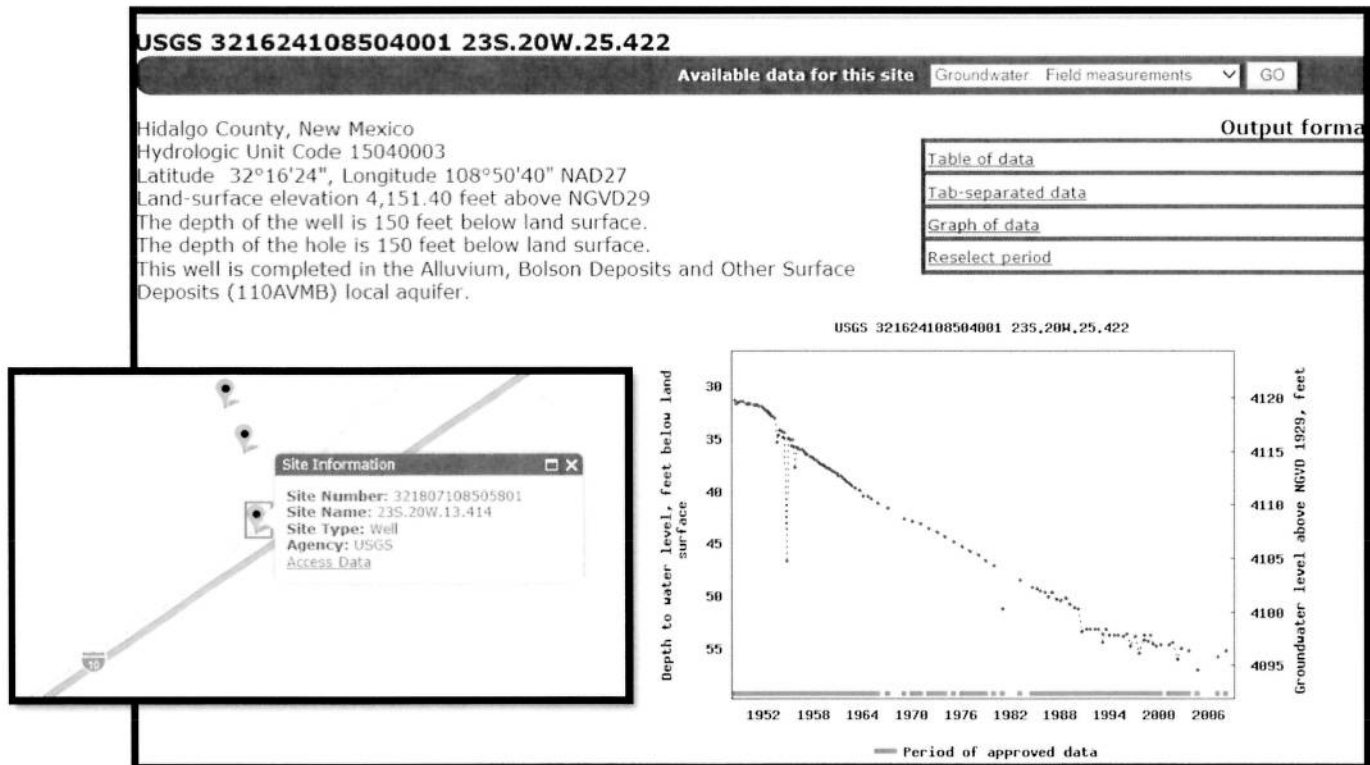


Fig. 4- Depth to Water

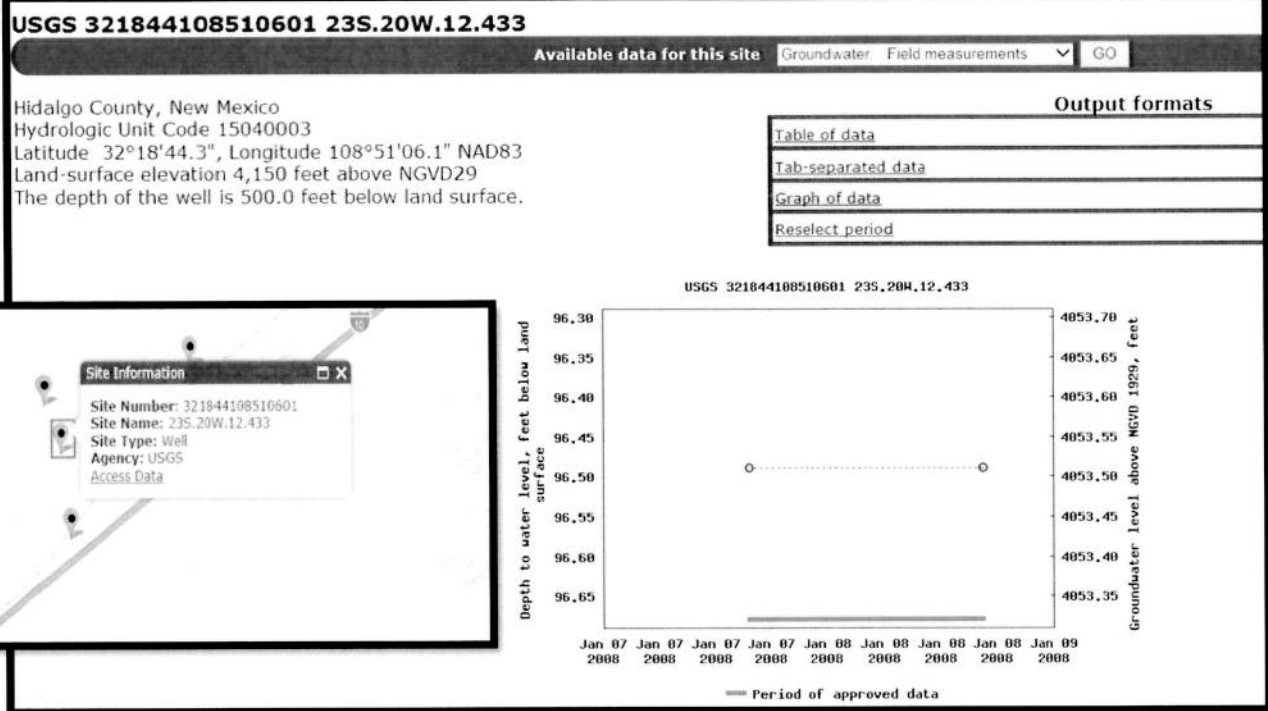


Fig. 5- Depth to Water

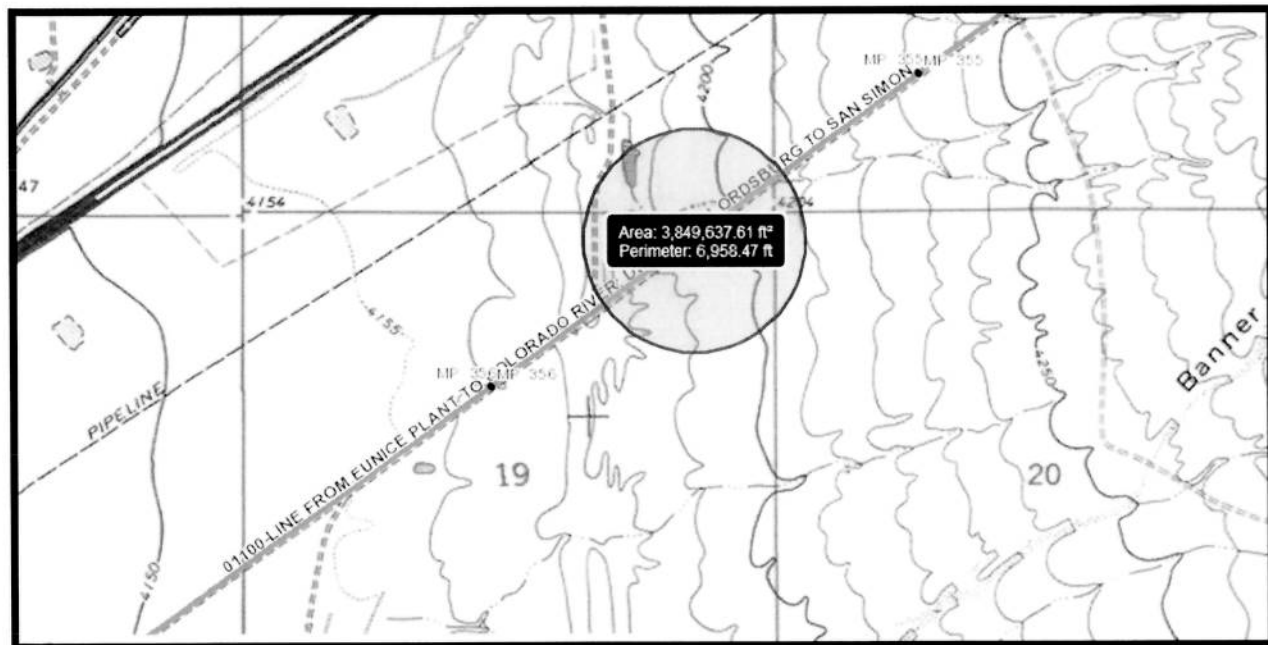


Fig. 6- Topo map. 1,000ft radius