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Received by OCD: 1/28/2020 1:41:00 PM

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NCE2003737116
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Natural Gas Pipeline Co. of America LLC	OGRID 329155
Contact Name Glen Thompson	Contact Telephone (432) 333-5518
Contact email glen_thompson@kindermorgan.com	Incident # <i>(assigned by OCD)</i>
Contact mailing address 1550 Windway, Odessa, TX 79763	

Location of Release Source

Latitude **32.7732863** Longitude **-104.2616192**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name NGPL's Indian Basin Line	Site Type Natural gas steel transmission pipeline
Date Release Discovered 01/14/2020	API# <i>(if applicable)</i> N/A

Unit Letter	Section	Township	Range	County
I, O, & P	3	18 South	27 East	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☒ Private (Name: **COG Operating LLC and Concho Oil & Gas**)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe) Hydrotest water	Volume/Weight Released (provide units) Original estimate approximately 6,000 gallons; revised estimate approximately 18,000 gallons	Volume/Weight Recovered (provide units) 16,800 gallons

Cause of Release: **At approximately 2:30 p.m. MTN, a Kinder Morgan contractor was at Section 4 / 5 test brake on the Natural Gas Pipeline Co. of America LLC (NGPL) Indian Basin Line removing a metal rod from a 6-inch valve. The metal rod was used as a barrier for pipeline pigs during the hydrotest project. While attempting to remove the metal rod, the metal rod became lodged in the valve. The line had been air blown to remove the water but when the valve was opened to dislodge the metal rod hydrotest water began flowing from the valve for approximately 20 minutes until the rod could be dislodged and the valve shut.**

Incident ID	NCE2003737116
District RP	
Facility ID	
Application ID	


Initial Response

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. No visible sheen was observed on any standing water. The release point was on a ridge line that sloped downhill to the south. The hydrotest water release travelled downhill to the south for approximately 650 ft. into an ephemeral draw (dry arroyo) where it collected in a low spot at approximately 850 ft. from the release point and then continued for another 150 ft. into what on-site personnel described as an old borrow pit. On-site personnel placed hay bales at the end of the hydrotest water release (1000 ft.) to prevent further progression and utilized vacuum trucks to pump released hydrotest water from the low areas where the water had pooled. The released hydrotest water was placed in on-site frac tanks. Five surface samples were collected along the release path to determine if any impact occurred above regulatory limits (see attached Figure – NGPL Indian Basin Hydrotest Water Spill). A water sample was also collected of the released hydrotest water where it had pooled approximately 850 ft. from the release point. The sample results are included in the attached Xenco Lab Report# 649140. All lab results were below lab detection limits for TPH and BTEX in all the samples. Based on these sample results, NGPL has concluded their investigation, determining that no further action is warranted and is requesting closure from the NMOCD for this release.

State of New Mexico
Oil Conservation Division

Incident ID	NCE2003737116
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Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: G.D. Thompson Title: Engineer – EHS Sr.
Signature:  Date: 01/28/2020
email: glen_thompson@kindermorgan.com Telephone: (432) 333-5518

OCD Only

Received by: Cristina Eads Date: 02/06/2020

Figure

NGPL Indian Basin

Hydrotest Water Spill

Legend

- Extents of Spill
- NGPL Indian Basin Line
- Spill/Sample Locations

Location of Spill (TB 4-5)

TEST BREAK 4/5

150' from TB 4-5 (Soil Sample)

400' from TB 4-5 (Soil Sample)

650' from TB 4-5 (Soil Sample)

850' from TB 4-5 (Water Sample)

850' from TB 4-5 (Soil Sample)

1000' from TB 4-5 (Soil Sample)

Google Earth

© 2019 Google

600 ft



Lab Report

Analytical Report 649140

for Kinder Morgan NGPL

Project Manager: Michael Bowles

NGPL Indian Basin Line Hydrstatic Test

414290

20-JAN-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



20-JAN-20

Project Manager: **Michael Bowles**
Kinder Morgan NGPL
569 Brookewood Village, Suite 749
Birmingham, AL 35209

Reference: XENCO Report No(s): **649140**
NGPL Indian Basin Line Hydrstatic Test
Project Address: Artesia, New Mexico

Michael Bowles:

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) 649140. 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. 649140 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 black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

Holly Taylor
Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 649140****Kinder Morgan NGPL, Birmingham, AL**

NGPL Indian Basin Line Hydrstatic Test

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
150' from TB 4-5	S	01-14-20 15:00	1 - 4 In	649140-001
400' from TB 4-5	S	01-14-20 15:05	1 - 4 In	649140-002
650' from TB 4-5	S	01-14-20 15:10	1 - 4 In	649140-003
850' from TB 4-5	S	01-14-20 15:15	1 - 4 In	649140-004
1000' from TB 4-5	S	01-15-20 10:35	1 - 4 In	649140-005
Test break 4-5:Release-water	W	01-14-20 15:30		649140-006



CASE NARRATIVE

Client Name: Kinder Morgan NGPL

Project Name: NGPL Indian Basin Line Hydrstatic Test

Project ID: 414290
Work Order Number(s): 649140

Report Date: 20-JAN-20
Date Received: 01/15/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3113425 BTEX by EPA 8021B

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



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: **150' from TB 4-5** Matrix: Soil Date Received: 01.15.20 11.45
 Lab Sample Id: 649140-001 Date Collected: 01.14.20 15.00 Sample Depth: 1 - 4 In
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.15.20 18.00 Basis: Wet Weight
 Seq Number: 3113407

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.15.20 21.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.15.20 21.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.15.20 21.36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.15.20 21.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-135	01.15.20 21.36		
o-Terphenyl	84-15-1	88	%	70-135	01.15.20 21.36		

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.15.20 13.00 Basis: Wet Weight
 Seq Number: 3113425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.15.20 16.42	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.15.20 16.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.15.20 16.42		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.15.20 16.42		



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: **400' from TB 4-5** Matrix: Soil Date Received: 01.15.20 11.45
 Lab Sample Id: 649140-002 Date Collected: 01.14.20 15.05 Sample Depth: 1 - 4 In
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.15.20 18.00 Basis: Wet Weight
 Seq Number: 3113407

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.15.20 21.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.15.20 21.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.15.20 21.56	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.15.20 21.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	01.15.20 21.56	
o-Terphenyl	84-15-1	92	%	70-135	01.15.20 21.56	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.15.20 13.00 Basis: Wet Weight
 Seq Number: 3113425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.15.20 16.59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.15.20 16.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.15.20 16.59	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.15.20 16.59	



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: **650' from TB 4-5**

Matrix: Soil

Date Received: 01.15.20 11.45

Lab Sample Id: 649140-003

Date Collected: 01.14.20 15.10

Sample Depth: 1 - 4 In

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 01.15.20 18.00

Basis: Wet Weight

Seq Number: 3113407

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.15.20 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.15.20 22.16	
o-Terphenyl	84-15-1	92	%	70-135	01.15.20 22.16	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.15.20 13.00

Basis: Wet Weight

Seq Number: 3113425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.15.20 17.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.15.20 17.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.15.20 17.17	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.15.20 17.17	



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: 850' from TB 4-5

Matrix: Soil

Date Received: 01.15.20 11.45

Lab Sample Id: 649140-004

Date Collected: 01.14.20 15.15

Sample Depth: 1 - 4 In

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 01.15.20 18.00

Basis: Wet Weight

Seq Number: 3113407

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.15.20 22.16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.15.20 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.15.20 22.16	
o-Terphenyl	84-15-1	92	%	70-135	01.15.20 22.16	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.15.20 13.00

Basis: Wet Weight

Seq Number: 3113425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.15.20 17.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.15.20 17.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.15.20 17.34	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.15.20 17.34	



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: **1000' from TB 4-5** Matrix: Soil Date Received: 01.15.20 11.45
 Lab Sample Id: 649140-005 Date Collected: 01.15.20 10.35 Sample Depth: 1 - 4 In
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.15.20 18.00 Basis: Wet Weight
 Seq Number: 3113407

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.15.20 22.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.15.20 22.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.15.20 22.36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.15.20 22.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	01.15.20 22.36	
o-Terphenyl	84-15-1	105	%	70-135	01.15.20 22.36	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.15.20 13.00 Basis: Wet Weight
 Seq Number: 3113425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.15.20 17.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.15.20 17.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.15.20 17.51	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.15.20 17.51	



Certificate of Analytical Results 649140

Kinder Morgan NGPL, Birmingham, AL

NGPL Indian Basin Line Hydrstatic Test

Sample Id: **Test break 4-5:Release-water**

Matrix: Water

Date Received: 01.15.20 11.45

Lab Sample Id: 649140-006

Date Collected: 01.14.20 15.30

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: LRI

% Moisture:

Analyst: ARM

Date Prep: 01.18.20 08.00

Seq Number: 3113762

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<2.36	2.36	mg/L	01.18.20 10.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<2.36	2.36	mg/L	01.18.20 10.47	U	1
Total TPH	PHC635	<2.36	2.36	mg/L	01.18.20 10.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	83	%	70-135	01.18.20 10.47		
o-Terphenyl	84-15-1	85	%	70-135	01.18.20 10.47		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 01.17.20 09.30

Seq Number: 3113742

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/L	01.17.20 19.53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
Total BTEX		<0.00200	0.00200	mg/L	01.17.20 19.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.17.20 19.53		
4-Bromofluorobenzene	460-00-4	77	%	70-130	01.17.20 19.53		



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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Kinder Morgan NGPL

NGPL Indian Basin Line Hydrstatic Test

Analytical Method: TPH by SW8015 Mod

Seq Number: 3113407

MB Sample Id: 7694481-1-BLK

Matrix: Solid

LCS Sample Id: 7694481-1-BKS

Prep Method: SW8015P

Date Prep: 01.15.20

LCSD Sample Id: 7694481-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	712	71	727	73	70-135	2	35	mg/kg	01.15.20 21:16	
Diesel Range Organics (DRO)	<50.0	1000	765	77	750	75	70-135	2	35	mg/kg	01.15.20 21:16	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag		
1-Chlorooctane	128		125		127		70-135	%	01.15.20 21:16			
o-Terphenyl	128		123		124		70-135	%	01.15.20 21:16			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3113762

MB Sample Id: 7694678-1-BLK

Matrix: Water

LCS Sample Id: 7694678-1-BKS

Prep Method: SW8015P

Date Prep: 01.18.20

LCSD Sample Id: 7694678-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<0.914	92.5	82.2	89	99.5	108	70-135	19	20	mg/L	01.18.20 10:10	
Diesel Range Organics (DRO)	<0.844	92.5	83.0	90	83.5	90	70-135	1	20	mg/L	01.18.20 10:10	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag		
1-Chlorooctane	87		98		115		70-135	%	01.18.20 10:10			
o-Terphenyl	91		87		89		70-135	%	01.18.20 10:10			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3113407

Matrix: Solid

MB Sample Id: 7694481-1-BLK

Prep Method: SW8015P

Date Prep: 01.15.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.15.20 20:56	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3113407

Parent Sample Id: 649140-001

Matrix: Soil

MS Sample Id: 649140-001 S

Prep Method: SW8015P

Date Prep: 01.15.20

MSD Sample Id: 649140-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	927	93	1090	109	70-135	16	35	mg/kg	01.15.20 21:36	
Diesel Range Organics (DRO)	<49.9	998	1010	101	1170	117	70-135	15	35	mg/kg	01.15.20 21:36	
Surrogate			MS %Rec	MS Flag		MSD %Rec	MSD Flag	Limits		Units	Analysis Date	
1-Chlorooctane			128			124		70-135		%	01.15.20 21:36	
o-Terphenyl			104			119		70-135		%	01.15.20 21:36	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* |(C-E) / (C+E)|
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



Kinder Morgan NGPL
NGPL Indian Basin Line Hydrstatic Test

Analytical Method: TPH by SW8015 Mod

Seq Number: 3113762

Parent Sample Id: 649140-006

Matrix: Water

MS Sample Id: 649140-006 S

Prep Method: SW8015P

Date Prep: 01.18.20

MSD Sample Id: 649140-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<0.932	94.4	91.7	97	85.2	90	70-135	7	20	mg/L	01.18.20 11:06	
Diesel Range Organics (DRO)	<0.861	94.4	79.3	84	79.9	85	70-135	1	20	mg/L	01.18.20 11:06	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		86		70-135	%	01.18.20 11:06
o-Terphenyl	78		72		70-135	%	01.18.20 11:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3113425

MB Sample Id: 7694449-1-BLK

Matrix: Solid

LCS Sample Id: 7694449-1-BKS

Prep Method: SW5030B

Date Prep: 01.15.20

LCSD Sample Id: 7694449-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.105	105	0.105	105	70-130	0	35	mg/kg	01.15.20 15:15	
Toluene	<0.00200	0.100	0.105	105	0.104	104	70-130	1	35	mg/kg	01.15.20 15:15	
Ethylbenzene	<0.00200	0.100	0.103	103	0.102	102	71-129	1	35	mg/kg	01.15.20 15:15	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.209	105	70-135	1	35	mg/kg	01.15.20 15:15	
o-Xylene	<0.00200	0.100	0.104	104	0.102	102	71-133	2	35	mg/kg	01.15.20 15:15	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		102		70-130	%	01.15.20 15:15
4-Bromofluorobenzene	104		104		101		70-130	%	01.15.20 15:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3113742

MB Sample Id: 7694711-1-BLK

Matrix: Water

LCS Sample Id: 7694711-1-BKS

Prep Method: SW5030B

Date Prep: 01.17.20

LCSD Sample Id: 7694711-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000408	0.100	0.107	107	0.103	103	70-130	4	25	mg/L	01.17.20 17:13	
Toluene	<0.000367	0.100	0.0975	98	0.0973	97	70-130	0	25	mg/L	01.17.20 17:13	
Ethylbenzene	<0.000657	0.100	0.0930	93	0.0933	93	70-130	0	25	mg/L	01.17.20 17:13	
m,p-Xylenes	<0.000630	0.200	0.181	91	0.182	91	70-130	1	25	mg/L	01.17.20 17:13	
o-Xylene	<0.000642	0.100	0.0914	91	0.0918	92	70-130	0	25	mg/L	01.17.20 17:13	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		108		109		70-130	%	01.17.20 17:13
4-Bromofluorobenzene	72		91		93		70-130	%	01.17.20 17:13

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Kinder Morgan NGPL
NGPL Indian Basin Line Hydrstatic Test

Analytical Method: BTEX by EPA 8021B

Seq Number: 3113425

Parent Sample Id: 649140-001

Matrix: Soil

MS Sample Id: 649140-001 S

Prep Method: SW5030B

Date Prep: 01.15.20

MSD Sample Id: 649140-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0976	98	0.0887	89	70-130	10	35	mg/kg	01.15.20 15:50	
Toluene	<0.00200	0.0998	0.0713	71	0.0756	76	70-130	6	35	mg/kg	01.15.20 15:50	
Ethylbenzene	<0.00200	0.0998	0.0769	77	0.0718	72	71-129	7	35	mg/kg	01.15.20 15:50	
m,p-Xylenes	<0.00399	0.200	0.150	75	0.142	71	70-135	5	35	mg/kg	01.15.20 15:50	
o-Xylene	<0.00200	0.0998	0.0933	93	0.0820	82	71-133	13	35	mg/kg	01.15.20 15:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		70-130	%	01.15.20 15:50
4-Bromofluorobenzene	101		98		70-130	%	01.15.20 15:50

Analytical Method: BTEX by EPA 8021B

Seq Number: 3113742

Parent Sample Id: 648861-001

Matrix: Ground Water

MS Sample Id: 648861-001 S

Prep Method: SW5030B

Date Prep: 01.17.20

MSD Sample Id: 648861-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000700	0.100	0.104	103	0.106	105	70-130	2	25	mg/L	01.17.20 17:54	
Toluene	0.00140	0.100	0.0978	96	0.101	100	70-130	3	25	mg/L	01.17.20 17:54	
Ethylbenzene	<0.000657	0.100	0.0931	93	0.0968	97	70-130	4	25	mg/L	01.17.20 17:54	
m,p-Xylenes	<0.000630	0.200	0.182	91	0.191	96	70-130	5	25	mg/L	01.17.20 17:54	
o-Xylene	<0.000642	0.100	0.0901	90	0.0956	96	70-130	6	25	mg/L	01.17.20 17:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		112		70-130	%	01.17.20 17:54
4-Bromofluorobenzene	86		96		70-130	%	01.17.20 17:54

MS/MSD Percent Recovery
 Relative Percent Difference
 LCS/LCSD Recovery
 Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Atlanta, GA (770) 449-8800

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Work Order No: 1649140

Chain of Custody



Work Order Comments				
Program:	UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> rownfields	<input type="checkbox"/> Kc <input type="checkbox"/> perfund <input type="checkbox"/>
State of Project:				
Reporting:	Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>
	PST/UST	<input type="checkbox"/>	TRRP	<input type="checkbox"/>
	Level IV	<input type="checkbox"/>		<input type="checkbox"/>
Deliverables:	EDD	<input type="checkbox"/>	Adapt	<input type="checkbox"/>
	Other:			

ANALYSIS REQUEST									
HN03: HN									
H2SO4: H2									
HCL: HL									
None: NO									
NaOH: Na									
MeOH: Me									
Zn Acetate+ NaOH: Zn									
TAT starts the day received by the lab, if received by 4:30pm									
Sample Comments									

[illegible]

1631 / 245.1 / 7470 / 7471 : Hg

A submission charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. (Interview will be without charge.)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
 Zach Markel		1/15/20 11:45 ²			
		4			
		6			

Revised Date 04/19 Rev. 2018

Inter-Office Shipment

IOS Number : **56120**

Date/Time: 01.15.2020 Created by: Elizabeth McClellan

Lab# From: **Carlsbad**

Delivery Priority:

Lab# To: **Houston**

Air Bill No.:

Please send report to: Holly Taylor

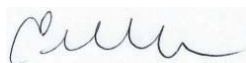
Address: 1089 N Canal Street

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
649140-006	W	Test break 4-5:Release-	01.14.2020 15:30	SW8015MOD_NM	TPH by SW8015 Mod	01.17.2020	01.28.2020	HTA	PHCC10C28 PHCC28C35	
649140-006	W	Test break 4-5:Release-	01.14.2020 15:30	SW8021B	BTEX by EPA 8021B	01.17.2020	01.28.2020	HTA	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 01.15.2020

Received By: _____

Date Received: _____

Cooler Temperature: _____

Inter-Office Shipment

IOS Number **56211**

Date/Time: 01/15/20 17:54

Created by: Elizabeth McClellan

Please send report to: Holly Taylor

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.: 777490572686

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
649140-006	W	Test break 4-5:Release-w	01/14/20 15:30	SW8015MOD_NM	TPH by SW8015 Mod	01/17/20	01/28/20	HTA	PHCC10C28 PHCC28C35 I	
649140-006	W	Test break 4-5:Release-w	01/14/20 15:30	SW8021B	BTEX by EPA 8021B	01/17/20	01/28/20	HTA	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 01/15/2020

Received By:



Brianna Teel

Date Received: 01/16/2020 11:33

Cooler Temperature: 0.7



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 56211

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sent By: Elizabeth McClellan

Date Sent: 01/15/2020 05:54 PM

Received By: Brianna Teel

Date Received: 01/16/2020 11:33 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.7
#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:

Brianna Teel

Date: 01/16/2020



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Kinder Morgan NGPL

Date/ Time Received: 01/15/2020 11:45:00 AM

Work Order #: 649140

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?	Yes	
#6 *Custody Seals Signed and dated?	Yes	
#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	TPH and BTEX water samples subbed to Midland.
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Elizabeth McClellan

Date: 01/15/2020

Checklist reviewed by:

Holly Taylor

Date: 01/17/2020