

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

Form C-141
Revised August 8, 2011

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.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: El Paso Natural Gas Company, LLC, a Kinder Morgan Inc. Company	Contact: Sheila F. Castellano
Address: 2 North Nevada Avenue Colorado Springs, CO 80919	Telephone No. (719) 520-3719
Facility Name: EPNG California First Loop Line (Line No. 1103)	Facility Type: 30-inch O.D. Steel Natural Gas Pipeline

Surface Owner: Bureau of Land Management	Mineral Owner	API No.
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LOCATION OF RELEASE

Unit Letter	Section 12	Township 25 South	Range 2 West	2,050 Feet from the	North Line	360 Feet from the	West Line	Dona Ana County
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Latitude 32.149694 Longitude -107.006361

NATURE OF RELEASE

Type of Release: Hydrostatic test water from an existing natural gas pipeline	Volume of Release Approximately 380K gallons	Volume Recovered Approximately 4,400 gallons
Source of Release: pipeline rupture	Date and Hour of Occurrence: 6/11/2016 7:42a MDT	Date and Hour of Discovery: 6/11/2016 7:42a MDT
Was Immediate Notice Given? X Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD State Office, Environmental Bureau Chief, Jim Griswold (505) 476-3465 NMOCD District 2 Office (Artesia), Mike Bratcher (575) 748-1283 ext. 108 Bureau of Land Management, District Manager-William Childress, Program Manager-Douglas Haywood, Environmental Project Specialist-Joseph Navarro, Land Officer-Treaver Ashby.	
By Whom? Sheila F. Castellano, Cesar Ochoa Vidales	Date and Hour: Sheila Castellano notified NMOCD via phone on 6/11/2016, 4:40p MDT. Cesar Ochoa Vidales notified BLM via email on 6/11/2016 at 5:30p MDT. 6/21/16 – C-141 Initial Report submitted to NMOCD District 2 and Santa Fe	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

EPNG was in the process of conducting a hydrostatic pressure test of the existing 30-inch Line No. 1103 when a rupture occurred along the seam of a pipeline segment. Approximately 380,000 gallons of hydrostatic test water was released to the ground. EPNG replaced approximately 28.3 feet of 30-inch pipeline.

CTI Water Treatment Solutions (CTI) was brought to the site to recover and dispose of the residual water in the pipeline. Approximately 4,400 gallons of residual water was pumped from the pipeline and taken off-site for disposal, in accordance with applicable regulations.

A sample of the pipeline wastewater was collected on 6/11/2016 and taken to Trace Analysis, El Paso, TX Office, for analysis. The sample was analyzed for the following tests: Flashpoint, pH, VPC's (method 8260), TCLP Metals, PCB's, TCLP BTEX, TPH Method 8015.
See **Attachment A**, Water Analysis Summary Report.

Five soil samples were taken on 6/13/2016. One background sample was taken from a location on the right of way, approximately 100-feet east from the end of the rupture flow. Four soil samples were taken from locations within the affected flow area. All soils samples were taken to Trace Analysis, El Paso Office, on 6/13/2016. The samples were analyzed for the following tests: VOC's (method 8260), PCB's, LCLP BTEX, TPH Method 8015, NORMS.

Describe Area Affected and Cleanup Action Taken.*

In an email to EPNG Land Agent, Deborah White, dated 6/14/2016, BLM Las Cruces District Office (LCDO) stated, "Over the next several days, the BLM-LCDO will be making a review of the unanticipated test water release and monitoring EPNG's investigation and potential cleanup activities. In the interim, EPNG must avoid any remediation/cleanup associated with the hydrostatic test water release".

(See **Attachment B**, BLM Correspondence_email and map)

Based on an inspection summary prepared by the BLM, the area impacted by the release of hydrostatic test water was approximately 4.5 acres. The release traveled eastward along the pipeline corridor for approximately 0.95 miles.

At the request of Bradford Billings, a second soil sample was taken from the affected soil at the rupture site location. The analytical report of the soil sample was sent to Mr. Billings for review on 8/24/16 (See **Attachment C**, analysis report, includes original analysis report for five sample locations).

Mr. Billings responded to my email on 8/26/16 stating that "OCD is requiring no further action on this situation." He went on to state that the "BLM has approved the backfill of the exposed pipeline/trench at the [rupture] location. OCD is in agreement". See **Attachment D**, OCD email correspondence).

At this time, EPNG would like to request closure of OCD's review of EPNG's hydrostatic water rupture event located in Dona Ana County, NM.

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: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Sheila F. Castellano		Approved by Environmental Specialist:	
Title: Kinder Morgan Contractor Consultant		Approval Date:	Expiration Date:
E-mail Address: sheila_castellano@kindermorgan.com		Conditions of Approval:	Attached ☐
Date: 8/29/2016 Phone: (719)520-3719			

* Attach Additional Sheets If Necessary

ATTACHMENT A

Summary Report

Cesar Ochoa
El Paso Natural Gas Co.-El Paso
8645 Railroad Dr.
El Paso, TX 79904

Report Date: June 20, 2016

Work Order: 16061422



Project Name: 1103 Spike Test Water
Project Number: 2016060204

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
421688	Spike Test Water	water	2016-06-11	10:00	2016-06-13

Sample - Field Code	TPH DRO DRO (mg/L)
421688 - Spike Test Water	<5.00

Sample: 421688 - Spike Test Water

Param	Flag	Result	Units	RL
Flashpoint		greater than 150	F	
Total PCB		<0.000500	mg/L	0.0005
Aroclor 1016 (PCB-1016)		<0.000500	mg/L	0.0005
Aroclor 1221 (PCB-1221)		<0.000500	mg/L	0.0005
Aroclor 1232 (PCB-1232)		<0.000500	mg/L	0.0005
Aroclor 1242 (PCB-1242)		<0.000500	mg/L	0.0005
Aroclor 1248 (PCB-1248)		<0.000500	mg/L	0.0005
Aroclor 1254 (PCB-1254)		<0.000500	mg/L	0.0005
Aroclor 1260 (PCB-1260)		<0.000500	mg/L	0.0005
Aroclor 1268 (PCB-1268)		<0.000500	mg/L	0.0005
pH		7.60	s.u.	2
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		0.220	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005
TCLP Lead		<0.100	mg/L	0.1

continued ...

sample 421688 continued ...

Param	Flag	Result	Units	RL
TCLP Selenium		<0.200	mg/L	0.2
Benzene	1	<0.0500	mg/L	0.001
Bromochloromethane	2	<50.0	µg/L	1
Dichlorodifluoromethane		<50.0	µg/L	1
Chloromethane (methyl chloride)		<50.0	µg/L	1
Vinyl Chloride		<50.0	µg/L	1
Bromomethane (methyl bromide)		<250	µg/L	5
Chloroethane		<50.0	µg/L	1
Trichlorofluoromethane	Qc	<50.0	µg/L	1
Acetone	Qc	<500	µg/L	10
Iodomethane (methyl iodide)		<250	µg/L	5
Carbon Disulfide		<50.0	µg/L	1
Acrylonitrile		<50.0	µg/L	1
2-Butanone (MEK)		<250	µg/L	5
4-Methyl-2-pentanone (MIBK)		<250	µg/L	5
2-Hexanone		<250	µg/L	5
trans 1,4-Dichloro-2-butene	Qc	<500	µg/L	10
1,1-Dichloroethene		<50.0	µg/L	1
Methylene chloride		<250	µg/L	5
MTBE		<50.0	µg/L	1
trans-1,2-Dichloroethene		<50.0	µg/L	1
1,1-Dichloroethane		<50.0	µg/L	1
cis-1,2-Dichloroethene		<50.0	µg/L	1
2,2-Dichloropropane	Qc	<50.0	µg/L	1
1,2-Dichloroethane (EDC)		<50.0	µg/L	1
Chloroform		<50.0	µg/L	1
1,1,1-Trichloroethane		<50.0	µg/L	1
1,1-Dichloropropene		<50.0	µg/L	1
Benzene		<50.0	µg/L	1
Carbon Tetrachloride	Qc	<50.0	µg/L	1
1,2-Dichloropropane		<50.0	µg/L	1
Trichloroethene (TCE)		<50.0	µg/L	1
Dibromomethane (methylene bromide)		<50.0	µg/L	1
Bromodichloromethane		<50.0	µg/L	1
2-Chloroethyl vinyl ether		<250	µg/L	5
cis-1,3-Dichloropropene		<50.0	µg/L	1
trans-1,3-Dichloropropene		<50.0	µg/L	1
Toluene		<50.0	µg/L	1
1,1,2-Trichloroethane		<50.0	µg/L	1
1,3-Dichloropropane		<50.0	µg/L	1
Dibromochloromethane		<50.0	µg/L	1
1,2-Dibromoethane (EDB)		<50.0	µg/L	1
Tetrachloroethene (PCE)		<50.0	µg/L	1
Chlorobenzene		<50.0	µg/L	1
1,1,1,2-Tetrachloroethane		<50.0	µg/L	1

continued ...

¹Sample dilution due to turbidity.²Sample dilution due to high turbidity.

sample 421688 continued ...

Param	Flag	Result	Units	RL
Ethylbenzene		<50.0	µg/L	1
m,p-Xylene		<50.0	µg/L	1
Bromoform		<50.0	µg/L	1
Styrene		<50.0	µg/L	1
o-Xylene		<50.0	µg/L	1
1,1,2,2-Tetrachloroethane		<50.0	µg/L	1
2-Chlorotoluene		<50.0	µg/L	1
1,2,3-Trichloropropane		<50.0	µg/L	1
Isopropylbenzene		<50.0	µg/L	1
Bromobenzene		<50.0	µg/L	1
n-Propylbenzene		<50.0	µg/L	1
1,3,5-Trimethylbenzene		<50.0	µg/L	1
tert-Butylbenzene		<50.0	µg/L	1
1,2,4-Trimethylbenzene		<50.0	µg/L	1
1,4-Dichlorobenzene (para)		<50.0	µg/L	1
sec-Butylbenzene		<50.0	µg/L	1
1,3-Dichlorobenzene (meta)		<50.0	µg/L	1
p-Isopropyltoluene		<50.0	µg/L	1
4-Chlorotoluene		<50.0	µg/L	1
1,2-Dichlorobenzene (ortho)		<50.0	µg/L	1
n-Butylbenzene		<50.0	µg/L	1
1,2-Dibromo-3-chloropropane	Qc	<250	µg/L	5
1,2,3-Trichlorobenzene	Qc,Qr	<250	µg/L	5
1,2,4-Trichlorobenzene	Qc	<250	µg/L	5
Naphthalene	Qc,Qr	<250	µg/L	5
Hexachlorobutadiene		<250	µg/L	5

ATTACHMENT B

From: [White, Deborah A \(Deb\) \(Contractor\)](#)
To: [Christensen, Lynn A](#); [King, Allen E](#); [Ross, Randall W \(Randy\)](#); [Soto, Javier](#); [Verquer, Gary L \(Gary L. Verquer\)](#); [Blythe, Amy M \(Amy\)](#); [Castellano, Sheila Fennell \(Contractor\)](#); [Ochoa Vidales, Cesar G](#)
Cc: [Heidke, William G \(Geoff\)](#)
Subject: FW: EPNG Hydostatic Test Failure Notificaiton
Date: Tuesday, June 14, 2016 4:43:08 PM
Attachments: [image001.png](#)
Importance: High

All,

This afternoon I received this follow-up from BLM regarding the L1103 Rupture and their site visit yesterday.

BLM's primary concerns are the impact to any cultural or biological resources, and the spread of noxious weeds during clean-up activities.

Therefore, please note the highlighted passages in the email and follow as pertinent to the situation.

Deb
Deborah White, SR/WA-NAC
Independent Property Rights Specialist
Deborah_White@kindermorgan.com
Cell: (918) 891-0384

From: Ashby, Treaver [<mailto:tashby@blm.gov>]
Sent: Tuesday, June 14, 2016 4:18 PM
To: White, Deborah A (Deb) (Contractor)
Cc: WChildre@blm.gov; DHaywood@blm.gov; JNavarro@blm.gov; Dominick Chavez; David Jevons; Anthony Hom; Jennifer Montoya; David Wallace
Subject: Re: EPNG Hydostatic Test Failure Notificaiton

Deborah,

On, Monday, June 13, 2016, upon receiving notice from Mr. Cesar G. Ochoa, P.E., Kinder Morgan, that a rupture had occurred during the hydrostatic pressure test (testing approved by the BLM on June 9, 2016), the BLM-LCDO made an on-site inspection at the reported rupture location on EPNG's pipeline L1103, which was authorized by a grant issued by the BLM and identified in the BLM's case files as ROW Serial No. NMNM 0 000161. From this inspection, the attached map was developed to estimate the area impacted by the rupture event.

Apparently, when the EPNG pipeline ruptured during the hydrostatic pressure test conducted on Saturday, June 11, 2016, the pressurized test water sprayed north from the subject pipeline and then ran in an easterly direction down the pipeline rights-of-way and the adjacent roadway. Based on the inspection, the area covered by the release of the hydrostatic test water (shown as the green shaded area on the attached map) was roughly 4.5 acres (inside and outside the EPNG's rights-of-way).

Over the next several days, the BLM-LCDO will be making a review of the unanticipated test water release and monitoring EPNG's investigation and potential cleanup activities. In the interim, EPNG must avoid any remediation/cleanup associated with the hydrostatic test water release. Any activities outside the limits of the EPNG's rights-of-way are prohibited.

However, if EPNG is required to take immediate action as directed by the New Mexico Oil Conservation Division (NMOCD), New Mexico Environmental Department (NMED), and/or other state and federal regulatory agencies, please advise the BLM-LCDO as soon as practicable and take the necessary actions as appropriate.

Finally, please provide the BLM-LCDO with a copy of any incident and/or investigation reports (or, any other environmental reports associated with the hydrostatic pressure test rupture) that were prepared for the NMOCD, NMED, FERC, etc.

Thank you,

Treaver

Treaver C. Ashby
Realty Specialist
Bureau of Land Management
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005
(575) 525-4304 (office)
(575) 525-4412 (fax)

On Tue, Jun 14, 2016 at 2:35 PM, White, Deborah A (Deb) (Contractor)
<Deborah_White@kindermorgan.com> wrote:

Gentlemen,

I understand that BLM personnel visited the site of EPNG's ruptured pipeline in Dona Ana County NM yesterday morning; this email is a quick follow-up to determine if there are any comments/conditions for moving forward.

Thank you,
Deborah

Deborah White, SR/WA-NAC
Independent Property Rights Specialist
Deborah_White@kindermorgan.com
Cell: (918) 891-0384

From: Ochoa Vidales, Cesar G
Sent: Saturday, June 11, 2016 6:33 PM
To: 'WChildre@blm.gov'; 'DHaywood@blm.gov'; 'JNavarro@blm.gov'; 'TAshby@blm.gov'

Cc: Greer, John; Thompson, Glen D; Verquer, Gary L (Gary L. Verquer); Castellano, Sheila Fennell (Contractor); White, Deborah A (Deb) (Contractor)
Subject: EPNG Hydrostatic Test Failure Notificaiton

Mr. Childress,

El Paso Natural Gas Company, LLC (EPNG), a Kinder Morgan (KMI)-owned company, was conducting a hydrostatic test on an existing natural gas pipeline –Line 1103. On Saturday, June 11, 2016 at approximately 7:42 a.m. Mountain Standard Time a line rupture occurred at Latitude 32.149694 and Longitude -107.006361 (Mile Post 246+692). Approximately 380,000 gallons of hydrotest water and pipeline liquids were released and ran along the pipeline Right-of-Way to Latitude 32.14608 and Longitude -106.99065 (Mile Post 245+935). Oil sheen has been identified by our personnel on the released liquids. The liquids have been contained within KMI ROW. Contractor will collect as much liquids as possible. No natural gas loss occurred. Line 1103 is a steel 30-inch diameter natural gas pipeline that runs from Texas into New Mexico and all the way to the Arizona/ California border. The nearest cross roads to the rupture are Afton Road and Hwy. 28. The nearest town is La Mesa, NM.

Directions to the discharge area from La Mesa, New Mexico are:

From intersection of W. San Miguel Street and Lou Henson Highway travel southeast on NM-28-S toward Josephine Street. Turn right onto Harlackner Road and drive 1.6 miles. Turn left onto West Side Road/Westside Canal Road. Turn right at the first cross street onto W. Afton Road and drive for 9.1 miles to the Afton Compressor Station property. Travel approximately 9 additional miles west along the Right-of-Way road to the rupture location.

I tried to contact your office by phone today, but I had no luck. The incident will be reported to the NM Oil Conservation Division as required as well. Please feel free to contact me at any time if you have any questions.

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

KINDER MORGAN



ATTACHMENT C

Soil Sample Analysis Summary Reports

(Original Soil Analysis Summary Report of affected soil taken from five locations and Soil Analysis Summary Analysis Report for follow up soil sample taken from affected soil at rupture location)

— Initial Samples from Affected Areas

Summary Report

Cesar Ochoa
Kinder Morgan-El Paso
11621 Railroad Drive
El Paso, TX 79934

Report Date: June 28, 2016

Work Order: 16061614



Project Name: L1100

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
421914	Sample 1 End	soil	2016-06-14	15:15	2016-06-15
421915	Sample 2 Near Rupture	soil	2016-06-14	15:18	2016-06-15
421916	Sample 3 Half	soil	2016-06-14	15:25	2016-06-15
421917	Sample 4 Background	soil	2016-06-14	15:32	2016-06-15
421918	Sample 5 Ginch D	soil	2016-06-14	15:40	2016-06-15

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
421914 - Sample 1 End	<0.0200 Qr	<0.0200 Qr	<0.0200 Qr	<0.0200 B		217	<4.00 Qr
421915 - Sample 2 Near Rupture	<0.0200 Qr	<0.0200 Qr	<0.0200 Qr	<0.0200 B		<50.0	<4.00 Qr
421916 - Sample 3 Half	<0.0200 Qr	<0.0200 Qr	<0.0200 Qr	<0.0200 B		<50.0	<4.00 Qr
421917 - Sample 4 Background	<0.0200 Qr	<0.0200 Qr	<0.0200 Qr, Qs	<0.0200 B		<50.0	<4.00 Qr
421918 - Sample 5 Ginch D	<0.0200 Qr	<0.0200 Qr	<0.0200 Qr	<0.0200 B		<50.0	<4.00 Qr

Sample: 421914 - Sample 1 End

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)		<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)		<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)		<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)		<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)		<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)		<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)		<0.00167	mg/Kg	0.00167
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		0.316	mg/L	0.1

continued ...

sample 421914 continued ...

Param	Flag	Result	Units	RL
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.200	mg/L	0.2
Bromochloromethane	Qr	<20.0	µg/Kg	20
Dichlorodifluoromethane	Qc, Qr	<20.0	µg/Kg	20
Chloromethane (methyl chloride)	Qc, Qr	<20.0	µg/Kg	20
Vinyl Chloride	Qc, Qr	<20.0	µg/Kg	20
Bromomethane (methyl bromide)	Qc, Qr	<100	µg/Kg	100
Chloroethane	Qc	<20.0	µg/Kg	20
Trichlorofluoromethane	Qr	<20.0	µg/Kg	20
Acetone	Qr	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)	Qr	<100	µg/Kg	100
2-Hexanone	Qr	<100	µg/Kg	100
trans-1,4-Dichloro-2-butene	Qr	<200	µg/Kg	200
1,1-Dichloroethene	Qr	<20.0	µg/Kg	20
Methylene chloride	B, Qr	<100	µg/Kg	100
MTBE	Qr	<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
1,1-Dichloroethane	Qc, Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
2,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)	Qr	<20.0	µg/Kg	20
Chloroform	Qr	<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr	<20.0	µg/Kg	20
Benzene	Qr	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether	Qr	<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr	<20.0	µg/Kg	20
Dibromochloromethane	Qr	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr	<20.0	µg/Kg	20
Chlorobenzene	Qr	<20.0	µg/Kg	20

continued ...

sample 421914 continued ...

Param	Flag	Result	Units	RL
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr	<20.0	µg/Kg	20
m,p-Xylene	Qr	<20.0	µg/Kg	20
Bromoform	Qc,Qr	<20.0	µg/Kg	20
Styrene	Qr	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20
1,1,2,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr	<20.0	µg/Kg	20
1,3,5-Trimethylbenzene	Qr	<20.0	µg/Kg	20
tert-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr	<20.0	µg/Kg	20
sec-Butylbenzene	Qr	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr	44.0	µg/Kg	20
4-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr	<20.0	µg/Kg	20
n-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qc,Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qc,Qr	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qc,Qr	<100	µg/Kg	100
Naphthalene	Qc,Qr	<100	µg/Kg	100
Hexachlorobutadiene	Qr	<100	µg/Kg	100

Sample: 421915 - Sample 2 Near Rupture

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)		<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)		<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)		<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)		<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)		<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)		<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)		<0.00167	mg/Kg	0.00167
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		0.167	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005

continued ...

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This is only a summary. Please, refer to the complete report package for quality control data.

sample 421915 continued ...

Param	Flag	Result	Units	RL
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.200	mg/L	0.2
Bromochloromethane	Qr	<20.0	µg/Kg	20
Dichlorodifluoromethane	Qc,Qr	<20.0	µg/Kg	20
Chloromethane (methyl chloride)	Qc,Qr	<20.0	µg/Kg	20
Vinyl Chloride	Qc,Qr	<20.0	µg/Kg	20
Bromomethane (methyl bromide)	Qc,Qr	<100	µg/Kg	100
Chloroethane	Qc	<20.0	µg/Kg	20
Trichlorofluoromethane	Qr	<20.0	µg/Kg	20
Acetone	Qr	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)	Qr	<100	µg/Kg	100
2-Hexanone	Qr	<100	µg/Kg	100
trans-1,4-Dichloro-2-butene	Qr	<200	µg/Kg	200
1,1-Dichloroethene	Qr	<20.0	µg/Kg	20
Methylene chloride	B,Qr	<100	µg/Kg	100
MTBE	Qr	<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
1,1-Dichloroethane	Qc,Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
2,2-Dichloropropane	Qc,Qr	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)	Qr	<20.0	µg/Kg	20
Chloroform	Qr	<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr	<20.0	µg/Kg	20
Benzene	Qr	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qc,Qr	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether	Qr	<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr	<20.0	µg/Kg	20
Dibromochloromethane	Qr	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr	<20.0	µg/Kg	20
Chlorobenzene	Qr	<20.0	µg/Kg	20
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr	<20.0	µg/Kg	20
m,p-Xylene	Qr	<20.0	µg/Kg	20

continued ...

sample 421915 continued ...

Param	Flag	Result	Units	RL
Bromoform	Qc, Qr	<20.0	µg/Kg	20
Styrene	Qr	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20
1,1,2,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr	<20.0	µg/Kg	20
1,3,5-Trimethylbenzene	Qr	<20.0	µg/Kg	20
tert-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr	<20.0	µg/Kg	20
sec-Butylbenzene	Qr	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr	<20.0	µg/Kg	20
4-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr	<20.0	µg/Kg	20
n-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qc, Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
Naphthalene	Qc, Qr	<100	µg/Kg	100
Hexachlorobutadiene	Qr	<100	µg/Kg	100

Sample: 421916 - Sample 3 Half

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)		<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)		<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)		<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)		<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)		<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)		<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)		<0.00167	mg/Kg	0.00167
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		0.220	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.200	mg/L	0.2
Bromochloromethane	Qr	<20.0	µg/Kg	20

continued ...

sample 421916 continued ...

Param	Flag	Result	Units	RL
Dichlorodifluoromethane	Qc, Qr	<20.0	µg/Kg	20
Chloromethane (methyl chloride)	Qc, Qr	<20.0	µg/Kg	20
Vinyl Chloride	Qc, Qr	<20.0	µg/Kg	20
Bromomethane (methyl bromide)	Qc, Qr	<100	µg/Kg	100
Chloroethane	Qc	<20.0	µg/Kg	20
Trichlorofluoromethane	Qr	<20.0	µg/Kg	20
Acetone	Qr	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)	Qr	<100	µg/Kg	100
2-Hexanone	Qr	<100	µg/Kg	100
trans 1,4-Dichloro-2-butene	Qr	<200	µg/Kg	200
1,1-Dichloroethene	Qr	<20.0	µg/Kg	20
Methylene chloride	B, Qr	<100	µg/Kg	100
MTBE	Qr	<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
1,1-Dichloroethane	Qc, Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
2,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)	Qr	<20.0	µg/Kg	20
Chloroform	Qr	<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr	<20.0	µg/Kg	20
Benzene	Qr	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether	Qr	<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr	<20.0	µg/Kg	20
Dibromochloromethane	Qr	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr	<20.0	µg/Kg	20
Chlorobenzene	Qr	<20.0	µg/Kg	20
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr	<20.0	µg/Kg	20
m,p-Xylene	Qr	<20.0	µg/Kg	20
Bromoform	Qc, Qr	<20.0	µg/Kg	20
Styrene	Qr	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20

continued ...

sample 421916 continued ...

Param	Flag	Result	Units	RL
1,1,2,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr	<20.0	µg/Kg	20
1,3,5-Trimethylbenzene	Qr	<20.0	µg/Kg	20
tert-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr	<20.0	µg/Kg	20
sec-Butylbenzene	Qr	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr	<20.0	µg/Kg	20
4-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr	<20.0	µg/Kg	20
n-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qc, Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
Naphthalene	Qc, Qr	<100	µg/Kg	100
Hexachlorobutadiene	Qr	<100	µg/Kg	100

Sample: 421917 - Sample 4 Background

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)		<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)		<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)		<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)		<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)		<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)		<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)		<0.00167	mg/Kg	0.00167
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		0.226	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.200	mg/L	0.2
Bromochloromethane	Qr	<20.0	µg/Kg	20
Dichlorodifluoromethane	Qc, Qr	<20.0	µg/Kg	20
Chloromethane (methyl chloride)	Qc, Qr	<20.0	µg/Kg	20
Vinyl Chloride	Qc, Qr	<20.0	µg/Kg	20

continued ...

sample 421917 continued ...

Param	Flag	Result	Units	RL
Bromomethane (methyl bromide)	Qc,Qr,Qs	<100	µg/Kg	100
Chloroethane	Qc,Qs	<20.0	µg/Kg	20
Trichlorofluoromethane	Qr,Qs	<20.0	µg/Kg	20
Acetone	Qr	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)	Qr	<100	µg/Kg	100
2-Hexanone	Qr	<100	µg/Kg	100
trans 1,4-Dichloro-2-butene	Qr	<200	µg/Kg	200
1,1-Dichloroethene	Qr	<20.0	µg/Kg	20
Methylene chloride	B,Qr	<100	µg/Kg	100
MTBE	Qr	<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
1,1-Dichloroethane	Qc,Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
2,2-Dichloropropane	Qc,Qr,Qs	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)	Qr	<20.0	µg/Kg	20
Chloroform	Qr	<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr	<20.0	µg/Kg	20
Benzene	Qr	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qc,Qr	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr,Qs	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether	Qr	<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr,Qs	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr,Qs	<20.0	µg/Kg	20
Dibromochloromethane	Qr,Qs	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr,Qs	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr,Qs	<20.0	µg/Kg	20
Chlorobenzene	Qr,Qs	<20.0	µg/Kg	20
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr,Qs	<20.0	µg/Kg	20
m,p-Xylene	Qr,Qs	<20.0	µg/Kg	20
Bromoform	Qc,Qr,Qs	<20.0	µg/Kg	20
Styrene	Qr,Qs	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20
1,1,2,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20

continued ...

sample 421917 continued ...

Param	Flag	Result	Units	RL
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,3,5-Trimethylbenzene	Qr, Qs	<20.0	µg/Kg	20
tert-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr, Qs	<20.0	µg/Kg	20
sec-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr, Qs	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr, Qs	<20.0	µg/Kg	20
4-Chlorotoluene	Qr, Qs	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr, Qs	<20.0	µg/Kg	20
n-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qc, Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qc, Qr, Qs	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qc, Qr, Qs	<100	µg/Kg	100
Naphthalene	Qc, Qr, Qs	<100	µg/Kg	100
Hexachlorobutadiene	Qr, Qs	<100	µg/Kg	100

Sample: 421918 - Sample 5 Ginch D

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)		<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)		<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)		<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)		<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)		<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)		<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)		<0.00167	mg/Kg	0.00167
TCLP Silver		<0.0500	mg/L	0.05
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		<0.100	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Mercury		<0.00500	mg/L	0.005
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.200	mg/L	0.2
Bromochloromethane	Qr	<20.0	µg/Kg	20
Dichlorodifluoromethane	Qc, Qr	<20.0	µg/Kg	20
Chloromethane (methyl chloride)	Qc, Qr	<20.0	µg/Kg	20
Vinyl Chloride	Qc, Qr	<20.0	µg/Kg	20
Bromomethane (methyl bromide)	Qc, Qr	<100	µg/Kg	100
Chloroethane	Qc	<20.0	µg/Kg	20
Trichlorofluoromethane	Qr	<20.0	µg/Kg	20

continued ...

sample 421918 continued ...

Param	Flag	Result	Units	RL
Acetone	Qr	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)	Qr	<100	µg/Kg	100
2-Hexanone	Qr	<100	µg/Kg	100
trans 1,4-Dichloro-2-butene	Qr	<200	µg/Kg	200
1,1-Dichloroethene	Qr	<20.0	µg/Kg	20
Methylene chloride	B, Qr	<100	µg/Kg	100
MTBE	Qr	<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
1,1-Dichloroethane	Qc, Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr	<20.0	µg/Kg	20
2,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)	Qr	<20.0	µg/Kg	20
Chloroform	Qr	<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr	<20.0	µg/Kg	20
Benzene	Qr	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qc, Qr	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether	Qr	<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr	<20.0	µg/Kg	20
Dibromochloromethane	Qr	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr	<20.0	µg/Kg	20
Chlorobenzene	Qr	<20.0	µg/Kg	20
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr	<20.0	µg/Kg	20
m,p-Xylene	Qr	<20.0	µg/Kg	20
Bromoform	Qc, Qr	<20.0	µg/Kg	20
Styrene	Qr	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20
1,1,2,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr	<20.0	µg/Kg	20

continued ...

sample 421918 continued ...

Param	Flag	Result	Units	RL
1,3,5-Trimethylbenzene	Qr	<20.0	µg/Kg	20
tert-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr	<20.0	µg/Kg	20
sec-Butylbenzene	Qr	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr	<20.0	µg/Kg	20
4-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr	<20.0	µg/Kg	20
n-Butylbenzene	Qr	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qc, Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qc, Qr	<100	µg/Kg	100
Naphthalene	Qc, Qr	<100	µg/Kg	100
Hexachlorobutadiene	Qr	<100	µg/Kg	100

Final Sample from Rupture Site

Summary Report

(Corrected Report)

Cesar Ochoa
Kinder Morgan-El Paso
11621 Railroad Drive
El Paso, TX 79934

Report Date: August 24, 2016

Work Order: 16081507



Project Location: L1100 Hydro Test
Project Name: L1100 Hydro Test

Report Corrections (Work Order 16081507)

- 8/24/16: Added ORO to sample 426388.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
426388	Sample A	soil	2016-08-12	14:00	2016-08-12

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
426388 - Sample A	<50.0	<4.00

Sample: 426388 - Sample A

Param	Flag	Result	Units	RL
Total PCB		<0.00167	mg/Kg	0.00167
Aroclor 1016 (PCB-1016)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1221 (PCB-1221)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1232 (PCB-1232)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1242 (PCB-1242)		<0.00167	mg/Kg	0.00167
Aroclor 1248 (PCB-1248)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1254 (PCB-1254)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1260 (PCB-1260)	Qs	<0.00167	mg/Kg	0.00167
Aroclor 1268 (PCB-1268)	Qs	<0.00167	mg/Kg	0.00167
TCLP Mercury		<0.00500	mg/L	0.005
ORO	Qs	<50.0	mg/Kg	50
Bromochloromethane	Qr, Qs	<20.0	µg/Kg	20
Dichlorodifluoromethane	Qc	<20.0	µg/Kg	20

continued ...

sample 426388 continued ...

Param	Flag	Result	Units	RL
Chloromethane (methyl chloride)		<20.0	µg/Kg	20
Vinyl Chloride	Qr	<20.0	µg/Kg	20
Bromomethane (methyl bromide)		<100	µg/Kg	100
Chloroethane	Qs	<20.0	µg/Kg	20
Trichlorofluoromethane		<20.0	µg/Kg	20
Acetone	Qc	<200	µg/Kg	200
Iodomethane (methyl iodide)	Qr, Qs	<100	µg/Kg	100
Carbon Disulfide	Qr	<20.0	µg/Kg	20
Acrylonitrile	Qr	<20.0	µg/Kg	20
2-Butanone (MEK)	Qc, Qr	<100	µg/Kg	100
4-Methyl-2-pentanone (MIBK)		<100	µg/Kg	100
2-Hexanone	Qc	<100	µg/Kg	100
trans 1,4-Dichloro-2-butene		<200	µg/Kg	200
1,1-Dichloroethene	Qr, Qs	<20.0	µg/Kg	20
Methylene chloride	B, Qr	<100	µg/Kg	100
MTBE		<20.0	µg/Kg	20
trans-1,2-Dichloroethene	Qr, Qs	<20.0	µg/Kg	20
1,1-Dichloroethane	Qr	<20.0	µg/Kg	20
cis-1,2-Dichloroethene	Qr, Qs	<20.0	µg/Kg	20
2,2-Dichloropropane	Qr	<20.0	µg/Kg	20
1,2-Dichloroethane (EDC)		<20.0	µg/Kg	20
Chloroform		<20.0	µg/Kg	20
1,1,1-Trichloroethane	Qr	<20.0	µg/Kg	20
1,1-Dichloropropene	Qr, Qs	<20.0	µg/Kg	20
Benzene	Qr, Qs	<20.0	µg/Kg	20
Carbon Tetrachloride	Qr	<20.0	µg/Kg	20
1,2-Dichloropropane	Qs	<20.0	µg/Kg	20
Trichloroethene (TCE)	Qr, Qs	<20.0	µg/Kg	20
Dibromomethane (methylene bromide)	Qr	<20.0	µg/Kg	20
Bromodichloromethane	Qr	<20.0	µg/Kg	20
2-Chloroethyl vinyl ether		<20.0	µg/Kg	20
cis-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
trans-1,3-Dichloropropene	Qr	<20.0	µg/Kg	20
Toluene	Qr, Qs	<20.0	µg/Kg	20
1,1,2-Trichloroethane	Qr	<20.0	µg/Kg	20
1,3-Dichloropropane	Qr	<20.0	µg/Kg	20
Dibromochloromethane	Qr	<20.0	µg/Kg	20
1,2-Dibromoethane (EDB)	Qr	<20.0	µg/Kg	20
Tetrachloroethene (PCE)	Qr, Qs	<20.0	µg/Kg	20
Chlorobenzene	Qr, Qs	<20.0	µg/Kg	20
1,1,1,2-Tetrachloroethane	Qr	<20.0	µg/Kg	20
Ethylbenzene	Qr	<20.0	µg/Kg	20
m,p-Xylene	Qr	<20.0	µg/Kg	20
Bromoform	Qr, Qs	<20.0	µg/Kg	20
Styrene	Qr	<20.0	µg/Kg	20
o-Xylene	Qr	<20.0	µg/Kg	20
1,1,2,2-Tetrachloroethane	Qs	<20.0	µg/Kg	20

continued ...

sample 426388 continued ...

Param	Flag	Result	Units	RL
2-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2,3-Trichloropropane	Qr	<20.0	µg/Kg	20
Isopropylbenzene	Qr	<20.0	µg/Kg	20
Bromobenzene	Qr	<20.0	µg/Kg	20
n-Propylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,3,5-Trimethylbenzene	Qr, Qs	<20.0	µg/Kg	20
tert-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,2,4-Trimethylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,4-Dichlorobenzene (para)	Qr, Qs	<20.0	µg/Kg	20
sec-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,3-Dichlorobenzene (meta)	Qr, Qs	<20.0	µg/Kg	20
p-Isopropyltoluene	Qr, Qs	<20.0	µg/Kg	20
4-Chlorotoluene	Qr	<20.0	µg/Kg	20
1,2-Dichlorobenzene (ortho)	Qr, Qs	<20.0	µg/Kg	20
n-Butylbenzene	Qr, Qs	<20.0	µg/Kg	20
1,2-Dibromo-3-chloropropane	Qr	<100	µg/Kg	100
1,2,3-Trichlorobenzene	Qr, Qs	<100	µg/Kg	100
1,2,4-Trichlorobenzene	Qr, Qs	<100	µg/Kg	100
Naphthalene	Qr	<100	µg/Kg	100
Hexachlorobutadiene	Qr, Qs	<100	µg/Kg	100

ATTACHMENT D

From: Billings, Bradford, EMNRD [mailto:Bradford.Billings@state.nm.us]
Sent: Friday, August 26, 2016 7:59 AM
To: Castellano, Sheila Fennell (Contractor)
Cc: Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD; Bayliss, Randolph, EMNRD
Subject: RE: El Paso Natural Gas Company_Line No. 1103 Spike Test Failure_

Hello Sheila,

Following receipt and review of the data forwarded by your office, the OCD is requiring no further action on this situation, as identified in title of this email. Specifically, the EPNG Company Line No. 1103 Spike Test Failure.

Additionally, the OCD District II Office was contacted by Treaver C. Ashby of the Las Cruces Office of the BLM. The BLM has approved the backfill of the exposed pipeline/trench at this location. OCD is in agreement.

Please submit a Final C-141 Form to the District II Office of the OCD in Artesia, NM. Please detail the outcome on the form and request closure therein. Also, please keep this email for your records as official response to this circumstance.

If there are any questions, please do not hesitate to contact me or the OCD Office in Artesia. Thank you for your efforts.

Sincerely,
Bradford Billings
Hydrologist
EMNRD/OCD