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

9/05/2014

* Attach Additional Sheets If Necessary

Phone: 333-1880

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.

| 1220 S. St. Fran | CIS DI., Sain | .a re, inivi 6750. | | S | anta F | <u>e, NM 875</u> | 05 | | | | | | | | | |
|------------------|---------------|--------------------|---------------------------------------|---|--|-------------------------------------|--------------------------------|------------|------------------|--------------------------|-------------|--------------|--|--|--|--|
| <u></u> | | | Rele | ease Notifi | catio | n and Co | rrective A | ctio | on | | | | | | | |
| | | | | | | OPERA | OR | | Initia | al Report | \boxtimes | Final Report | | | | |
| Name of Co | mpany V | WPX Energy | Producti | on | | Contact Va | inessa K Fields | | | | | | | | | |
| Address PO | | | | | | Telephone N | No. 505-333-18 | 380 | | | | | | | | |
| Facility Na | ne Rosa l | Jnit #209A | | | | Facility Typ | e Well Site | | | | | | | | | |
| Surface Ow | ner USFS | | | Mineral (| Owner | USFS | | | API No | . 30-039-2 | 7699 | | | | | |
| | | | | LOC | ATIO | N OF REJ | LEASE | | | | | | | | | |
| Unit Letter | Section 24 | Township 31N | Range | Feet from the | North | /South Line | Feet from the | East | /West Line | County | | | | | | |
| 0 | | | 05W | ļ <u> </u> | .1 | | | | | Rio Arriba | | | | | | |
| | | Lat | i tude _36 | onal Lat/Long | is locate | | e -107.41184 | Pecul | | | | | | | | |
| | | | Additi | _ | | | • | Resui | its _. | | | | | | | |
| Type of Rele | | ad Water | | NA J | TUKE | OF RELI | | | Value o D |) d <i>C</i> | 0.000 | c | | | | |
| | | | lectrical o | rid broke resultin | o in | | Release 100BBI | | | Recovered 6 Hour of Disc | | | | | | |
| produced wa | | sici pump to c | rectifeat g | rid broke resultin | ig iii | 8-28-2014 | | | | 10:45 pm | Jovery | | | | | |
| Was Immedia | | Given? | · · · · · · · · · · · · · · · · · · · | | - | If YES, To | | | 10020 | 10.10 p | | | | | | |
| | | \boxtimes | Yes | No 🗌 Not R | equired | | owell NMOCD, | | | CD | | | | | | |
| By Whom? | Vanagaa Ei | alda | | | | | ned e-mail) & by | | | | | | | | | |
| Was a Water | | | | | | | our 8-8-2014 at lume Impacting | | | | | | | | | |
| Was a Water | course recu | | Yes 🗵 | No | | N/A | nume impacting | inc wa | ici coui sc. | | | | | | | |
| If a Watercou | ırse was Im | pacted, Descri | ibe Fully. | * | | | | | | RCVD SE | p q ! | 12 | | | | |
| N/A | | | | | | | | | | Service and the | i | 4 | | | | |
| | | | | | | | | | | OIL COM | | | | | | |
| Describe Cau | se of Probl | em and Remed | dial Action | n Taken * | . | | | | | DIST | <u>. j</u> | | | | | |
| The transfer | pump to the | | | sulting in the pro | duced w | ater spill. Fur | ther investigation | n is ong | going to deter | rmine the car | use of t | the | | | | |
| equipment fa | ilure. | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Describe Are | a Affected | and Cleanup A | Action Tak | en * | | | | | | | | | | | | |
| | | - | | | | | | | | | | | | | | |
| | | | | ending in the exis | | | | | | | | | | | | |
| | | | | lts of the samples ffected area. The | | | | | | | e attac | nea). WPX | | | | |
| Tacked III 120 | o pound of | igs or gypsum | onto the a | irrected area. The | anarytic | ai resurts atta | ched fan within e | .110 14141 | OCD spin of | ittoria. | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | is true and comp | | | | | | | | | | | | |
| | | | | nd/or file certain i se of a C-141 rep | | | | | | | | | | | | |
| | | | | investigate and i | | | | | | | | | | | | |
| | | | | tance of a C-141 | | | | | | | | | | | | |
| federal, state, | or local la | ws and/or regu | Nations) | | | | | | | | | 1 | | | | |
| Cionette | h- | $\lambda \sim 1$ | \sim | | , | | OIL CON | SER' | <u>VATION</u> | <u>DIVISIO</u> | N// | · | | | | |
| Signature: | | 0-V- | <u> Le</u> | \sim | | | | | // | 1 / | 1/ ' | | | | | |
| Printed Name | : Vanessa | K Fields | | | | Approved by | Environmental S | Speciali | st: (s | ug d | | N | | | | |
| Title: Enviro | nmental Sn | ecialist | | | Approval Date: 1//17/14 Expiration-Date: | | | | | | | | | | | |
| | | | • | | | | | | | | | | | | | |
| E-mail Addre | ss: Vaness | a.fields@wpxe | energy.co | n | | Conditions of Approval: Attached □ | | | | | | | | | | |

#NC5/432151260

Fields, Vanessa

From:

Fields, Vanessa

Sent:

Thursday, August 28, 2014 12:05 PM

To:

'Powell, Brandon, EMNRD'; Smith, Cory, EMNRD; 'Ketcham, Shari'

Cc:

Shaw, Buddy

Subject:

Produced water spill Rosa 209A

Importance:

High

Rosa Unit#209A API# 30-039-27699 024 31N 06W Lat 36.88072 Long -107.41139

Good Afternoon,

At 10:45 today (August 28, 2014) it was discovered that the transfer pump to the grid on the Rosa 209A had broke. A estimated release of 100 BBL's of produced water were released off location onto the adjacent wash. Per our conversation earlier Brandon, the spill will be ranked at a 20. WPX is currently evaluating the spill and will provide more information in the C-141.

Please let me know if you have any further questions and/or concerns at this time.

Thank you,

Vanessa Fields Environmental Specialist Office# 505-333-1880 Fax# 505-333-1805 Cell# 505-419-6219

vanessa.fields@wpxenergy.com

WPXENERGY.

Fields, Vanessa

From:

Smith, Cory, EMNRD [Cory.Smith@state.nm.us]

Sent:

Thursday, September 04, 2014 9:39 AM

To:

Fields, Vanessa

Subject:

RE: WPX - prelims for Rosa 209A Spill

Vanessa,

Reviewing the prelims for the Rosa 209A, NMOCD is requesting no further delineation of the release.

Please submit a Final C-141 with all necessary attachments.

Thank you,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

----Original Message----

From: Fields, Vanessa [mailto:Vanessa.Fields@wpxenergy.com]

Sent: Thursday, September 04, 2014 9:32 AM

To: Smith, Cory, EMNRD

Subject: FW: WPX - prelims for Rosa 209A Spill

Vanessa Fields
Environmental Specialist
Office# 505-333-1880
Fax# 505-333-1805
Cell# 505-419-6219
vanessa.fields@wpxenergy.com

----Original Message----

From: Lynn Cook [mailto:lcook@envirotech-inc.com]

Sent: Wednesday, September 03, 2014 4:03 PM

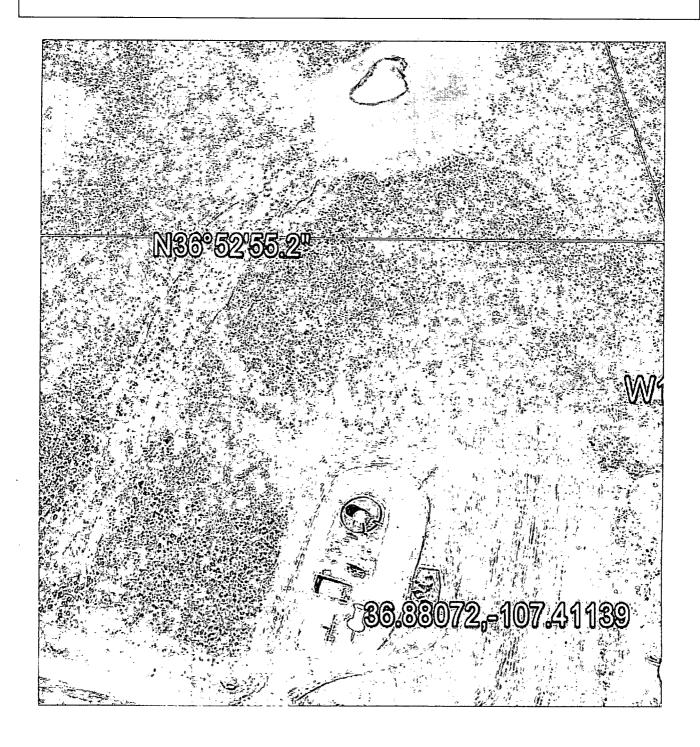
To: Fields, Vanessa; Shaw, Buddy

Subject: WPX - prelims for Rosa 209A Spill

The message is ready to be sent with the following file or link attachments:

P409005 DRAFT 03 Sep 14 1601

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.





Analytical Report

Report Summary

Client: WPX Energy, Inc.

Chain Of Custody Number: 16900

Samples Received: 9/2/2014 4:26:00PM

Job Number: 04108-0136 Work Order: P409005

Project Name/Location: Rosa 209A Spill

| Entire Report Reviewed By: | Date | e: 9/4/14 | |
|----------------------------|------|-----------|--|
| | | | |

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



PO Box 21218

Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

Project Number:

04108-0136

Project Manager:

Vanessa Fields

Reported: 04-Sep-14 12:13

Analyical Report for Samples

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|-------------------------------|---------------|--------|----------|----------|------------------|
| 36.88163-107.41184 | P409005-01A | Soil | 08/29/14 | 09/02/14 | Glass Jar, 4 oz. |
| 36.88127-107.41204 | P409005-02A | Soil | 08/29/14 | 09/02/14 | Glass Jar, 4 oz. |
| 36.88106-107.41193, | P409005-03A | Soil | 08/29/14 | 09/02/14 | Glass Jar, 4 oz. |
| 36.8804-107.41164 Composite 2 | | | | | |
| 36.88129-107.41204, | P409005-04A | Soil | 08/29/14 | 09/02/14 | Glass Jar, 4 oz. |
| 36.88106-107.41193 Composite | | | | | |



PO Box 21218

Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

Project Number:

04108-0136

Project Manager:

Vanessa Fields

Reported:

04-Sep-14 12:13

36.88163-107.41184 P409005-01 (Solid)

| | | Reporting | | | | | | | |
|----------------------------------|----------|-----------|-------|----------|---------|----------|----------|-----------|---------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| Volatile Organics by EPA 8021 | | | | | | | | | <u></u> |
| Benzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Toluene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Ethylbenzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| p,m-Xylene | ND | 0.10 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| o-Xylene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total Xylenes | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total BTEX | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogate: Bromochlorobenzene | | 97.8 % | 50 | -150 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogute: 1,3-Dichlorobenzene | | 95.6 % | 50 | -150 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Nonhalogenated Organics by 8015 | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 4.99 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Diesel Range Organics (C10-C28) | 41.6 | 30.0 | mg/kg | 1 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Surrogate: Benzo[a]pyrene | <u> </u> | 92.4 % | 50- | -200 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Cation/Anion Analysis | | | | | | | | | |
| Chloride | 727 | 10.0 | mg/kg | 1 | 1436015 | 09/03/14 | 09/03/14 | EPA 300.0 | |



Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

PO Box 21218

Project Number:

04108-0136

Project Manager:

Vanessa Fields

Reported: 04-Sep-14 12:13

36.88127-107.41204 P409005-02 (Solid)

| | | Reporting | | | | | | | |
|----------------------------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| Volatile Organics by EPA 8021 | | | | | | | | | |
| Benzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Toluene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Ethylbenzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| p,m-Xylene | ND | 0.10 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| o-Xylene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total Xylenes | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total BTEX | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogate: Bromochlorobenzene | | 101 % | 50-1. | 50 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogate: 1,3-Dichlorobenzene | | 101 % | 50-1. | 50 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Nonhalogenated Organics by 8015 | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 4.99 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Diesel Range Organics (C10-C28) | 42.5 | 29.9 | mg/kg | 1 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Surrogate: Benzofa/pyrene | | 98.3 % | 50-20 | 00 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Cation/Anion Analysis | | | | | | | | | |
| Chloride | 541 | 9.87 | mg/kg | 1 | 1436015 | 09/03/14 | 09/03/14 | EPA 300.0 | |



PO Box 21218

Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

Project Number: Project Manager: 04108-0136 Vanessa Fields Reported: 04-Sep-14 12:13

$36.88106\hbox{--}107.41193, 36.8804\hbox{--}107.41164\ Composite\ 2$

P409005-03 (Solid)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| Volatile Organics by EPA 8021 | | | | | | | | | |
| Benzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Toluene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Ethylbenzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| p,m-Xylene | ND | 0.10 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| o-Xylene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total Xylenes | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total BTEX | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogate: 1,3-Dichlorobenzene | | 101 % | 50- | 150 | 1436009 | 09/03/14 | 09/03/14 | EP.4 8021B | |
| Surrogate: Bromochlorobenzene | | 101 % | 50- | 150 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Nonhalogenated Organics by 8015 | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 4.99 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8015D | - |
| Diesel Range Organics (C10-C28) | ND | 29.9 | mg/kg | 1 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Surrogate: Benzo[a pyrene | | 102 % | 50-2 | 200 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Cation/Anion Analysis | u | | · | | | <u> </u> | | | |
| Chloride | 714 | 9.87 | mg/kg | 1 | 1436015 | 09/03/14 | 09/03/14 | EPA 300.0 | |



Project Name:

Rosa 209A Spill

PO Box 21218 Tulsa OK, 74121-1358 Project Number: Project Manager: 04108-0136 Vanessa Fields **Reported:** 04-Sep-14 12:13

36.88129-107.41204, 36.88106-107.41193 Composite P409005-04 (Solid)

| | | Reporting | | | | | | | |
|----------------------------------|--------|-----------|-------|----------|---------|----------|----------|------------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| Volatile Organics by EPA 8021 | | | | | | <u></u> | | | |
| Benzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Toluene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Ethylbenzene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| p,m-Xylene | ND | 0.10 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| o-Xylene | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total Xylenes | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Total BTEX | ND | 0.05 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8021B | |
| Surrogate: Bromochlorobenzene | | 94.7 % | 50- | 150 | 1436009 | 09/03/14 | 09/03/14 | EP.4 8021B | |
| Surrogate: 1,3-Dichlorobenzene | | 98.9 % | 50- | 150 | 1436009 | 09/03/14 | 09/03/14 | EP.4 8021B | |
| Nonhalogenated Organics by 8015 | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 4.99 | mg/kg | 1 | 1436009 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Diesel Range Organics (C10-C28) | ND | 24.9 | mg/kg | 1 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Surrogate: Benzofa]pyrene | | 72.1 % | 50-2 | 200 | 1436008 | 09/03/14 | 09/03/14 | EPA 8015D | |
| Cation/Anion Analysis | | | | | | | | | |
| Chloride | 707 | 9.92 | mg/kg | 1 | 1436015 | 09/03/14 | 09/03/14 | EPA 300.0 | |



Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

PO Box 21218

Analyte

Ethylbenzene

Surrogate: 1,3-Dichlorobenzene

Surrogate: Bromochlorobenzene

p,m-Xylene

o-Xylene

Project Number:

04108-0136

Project Manager:

Reporting

Limit

Result

48.2

95.7

47.8

2.43

2.50

Vanessa Fields

Spike

Level

Source

Result

%REC

Reported: 04-Sep-14 12:13

RPD

Limit

Notes

%REC

Limits

RPD

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Units

| Blank (1436009-BLK1) | | | | Prepared: 03 | 2-Sep-14. | Analyzed: | 03-Sep-14 | |
|--------------------------------|--------|-------------|-------|--------------|------------|-----------|-----------|--------|
| Benzene | ND | 0.05 | mg/kg | | | | | |
| Toluene | ND | 0.05 | n | | | | | |
| Ethylbenzene | ND | 0.05 | n | | | | | |
| p,m-Xylene | ND | 0.10 | | | | | | |
| o-Xylene | ND | 0.05 | P | | | • | | |
| Total Xylenes | ND | 0.05 | u | | | | | |
| Total BTEX | ND | 0.05 | n | | | | | |
| Surrogate: 1,3-Dichlorobenzene | 0.0506 | | " | 0.0497 | | 102 | 50-150 | . ,, , |
| Surrogate: Bromochlorobenzene | 0.0510 | • | 11 | 0.0497 | | 103 | 50-150 | |
| Duplicate (1436009-DUP1) | Sourc | e: P408125- | 01 | Prepared: 02 | 2-Sep-14 | Analyzed: | 03-Sep-14 | |
| Benzene | ND | 0.05 | mg/kg | | ND | | | 30 |
| Toluene | ND | 0.05 | II. | | ND | | | 30 |
| Ethylbenzene | ND | 0.05 | u | | ND | | | 30 |
| p,m-Xylene | ND | 0.10 | u | | ND | | | 30 |
| o-Xylene | ND | 0.05 | n | | ND | | | 30 |
| Surrogate: 1,3-Dichlorohenzene | 0.0496 | | " | 0.0500 | | 99.4 | 50-150 | |
| Surrogate: Bromochlorobenzene | 0.0507 | | " | 0.0500 | | 101 | 50-150 | |
| Matrix Spike (1436009-MS1) | Source | e: P408125- | 01 | Prepared: 02 | 2-Sep-14 A | Analyzed: | 03-Sep-14 | |
| Benzene | 47.8 | | ug/L | 50.0 | ND | 95.6 | 39-150 | |
| | 47.9 | | 11 | 50.0 | ND | 95.8 | 46-148 | |

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

mg/kg

50.0

100

50.0

2.50

2.50

ND

ND

ND

96.4

95.7

97.4

100

32-160

46-148

46-148

50-150

50-150



PO Box 21218

Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

Project Number: Project Manager: 04108-0136 Vanessa Fields Reported:

04-Sep-14 12:13

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|------------------------------------|--------|-------------|-------|-------------|--------------------|-------------|-----------|----------------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch 1436008 - DRO Extraction EPA | 3550M | _ | | 248 | | | | | | |
| Blank (1436008-BLK1) | | | | Prepared: (| 02-Sep-14 | Analyzed: (| 03-Sep-14 | | | |
| Diesel Range Organics (C10-C28) | ND | 24.9 | mg/kg | | | | | - - | | |
| Surrogate: Benzo[a]pyrene | 19.6 | | " | 19.9 | | 98.4 | 50-200 | - | | |
| LCS (1436008-BS1) | | | | Prepared: (|)2-Sep-14 | Analyzed: (| 3-Sep-14 | | | |
| Diesel Range Organics (C10-C28) | 518 | 25.0 | mg/kg | 500 | | 104 | 38-132 | | | |
| Surrogate: Benzo[a]pyrene | 20.8 | | " | 20.0 | | 104 | 50-200 | | 1 2 | |
| Matrix Spike (1436008-MS1) | Source | e: P408125- | 01 | Prepared: (|)2 - Sep-14 | Analyzed: (| 3-Sep-14 | | | |
| Diesel Range Organics (C10-C28) | 537 | 25.0 | mg/kg | 500 | 42.7 | 99.0 | 38-132 | | | |
| Surrogate: Benzo[a]pyrene | 19.5 | | " | 20.0 | | 97.5 | 50-200 | | | |
| Matrix Spike Dup (1436008-MSD1) | Source | e: P408125- | 01 | Prepared: (| 2-Sep-14 | Analyzed: (| 3-Sep-14 | | | |
| Diesel Range Organics (C10-C28) | 654 | 24.9 | mg/kg | 499 | 42.7 | 123 | 38-132 | 19.6 | 20 | |
| Surrogate: Benzo[a]pyrene | 21.4 | | 11 | 20.0 | | 107 | 50-200 | | | |
| | | | | | | | | | | |



Project Name:

Rosa 209A Spill

PO Box 21218

Project Number:

04108-0136

Reported:

Tulsa OK, 74121-1358

Project Manager:

Vanessa Fields

04-Sep-14 12:13

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|--|-----------------------|--------------------|-------------|----------------|------------------|-------------|----------------|-----|--------------|-------|
| Batch 1436009 - Purge and Trap EPA 5030A | | | · | | | | | | | |
| Blank (1436009-BLK1) | | | | Prepared: (|)2-Sep-14 | Analyzed: 0 | 3-Sep-14 | | | |
| Gasoline Range Organics (C6-C10) | ND | 4.97 | mg/kg | | | | | | | |
| Duplicate (1436009-DUP1) | Sour | ce: P408125- | 01 | Prepared: (|)2-Sep-14 | Analyzed: 0 | 3-Sep-14 | | | |
| Gasoline Range Organics (C6-C10) | ND | 5.00 | mg/kg | | ND | | | | 30 | |
| Matrix Spike (1436009-MS1) | Source: P408125-01 Pr | | Prepared: (|)2-Sep-14 | Analyzed: 0 | 3-Sep-14 | | | | |
| Gasoline Range Organics (C6-C10) | 0.42 | | mg/L | 0.450 | ND | 93.1 | 75-125 | | | |



Project Name:

Rosa 209A Spill

PO Box 21218

Project Number: Project Manager: 04108-0136 . Vanessa Fields **Reported:** 04-Sep-14 12:13

Tulsa OK, 74121-1358

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

| | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------|----------------------|---|--------------------------------|--|---|---|---|---|---|
| Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| | | | | | | | | | |
| | | | Prepared & | ż Analyzed: | : 03-Sep-14 | | | | |
| ND | 9.88 | mg/kg | | | | · - | | | |
| | | | Prepared & | k Analyzed: | : 03-Sep-14 | | | | |
| 498 | 9.85 | mg/kg | 492 | | 101 | 90-110 | | | |
| Sour | ·ce: P409003- | 01 | Prepared & | z Analyzed: | : 03-Sep-14 | | | | |
| 612 | 9.86 | mg/kg | 493 | 102 | 103 | 80-120 | | | |
| Source: P409003-01 | | Prepared & | Prepared & Analyzed: 03-Sep-14 | | | | | | |
| 618 | 9.86 | mg/kg | 493 | 102 | 105 | 80-120 | 1.01 | 20 | |
| | ND 498 Sour 612 Sour | Result Limit ND 9.88 498 9.85 Source: P409003-612 9.86 Source: P409003-612 9.86 | ND 9.88 mg/kg | Result Limit Units Level Prepared & ND 9.88 mg/kg Prepared & 498 9.85 mg/kg 492 Source: P409003-01 Prepared & 612 9.86 mg/kg 493 Source: P409003-01 Prepared & | Result Limit Units Level Result Prepared & Analyzed ND 9.88 mg/kg Prepared & Analyzed 498 9.85 mg/kg 492 Source: P409003-01 Prepared & Analyzed 612 9.86 mg/kg 493 102 Source: P409003-01 Prepared & Analyzed | Result Limit Units Level Result %REC ND 9.88 mg/kg Prepared & Analyzed: 03-Sep-14 498 9.85 mg/kg 492 101 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 612 9.86 mg/kg 493 102 103 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 | Result Limit Units Level Result %REC Limits Prepared & Analyzed: 03-Sep-14 ND 9.88 mg/kg Prepared & Analyzed: 03-Sep-14 498 9.85 mg/kg 492 101 90-110 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 612 9.86 mg/kg 493 102 103 80-120 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 | Result Limit Units Level Result %REC Limits RPD Prepared & Analyzed: 03-Sep-14 ND 9.88 mg/kg Prepared & Analyzed: 03-Sep-14 498 9.85 mg/kg 492 101 90-110 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 612 9.86 mg/kg 493 102 103 80-120 Source: P409003-01 Prepared & Analyzed: 03-Sep-14 | Result Limit Units Level Result %REC Limits RPD Limit Prepared & Analyzed: 03-Sep-14 ND 9.88 mg/kg Prepared & Analyzed: 03-Sep-14 Prepared |



Tulsa OK, 74121-1358

Project Name:

Rosa 209A Spill

PO Box 21218

Project Number: Project Manager: 04108-0136

Vanessa Fields

Reported: 04-Sep-14 12:13

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference

Kush

CHAIN OF CUSTODY RECORD

16900

| | Client: Lyonara | Project Name / Location: | | | | | ANALYSIS / PARAMETERS | | | | | | | | | | | | | |
|---------------|--|--------------------------|---------------------|--------------------|--------------|---------------|-----------------------|--------------------|-------------------|---------------|-----------|----------|----------|-------------|-------------|----------|--------|--------------|----------|---------------|
| | Email results to: D. Client Phone No.: | Sampler Name: Client No. | Prac | | OU11 | 1 | TPH (Method 8015) | BTEX (Method 8021) | VOC (Method 8260) | RCRA 8 Metals | r / Anion | | with H/P | Table 910-1 | TPH (418.1) | CHLORIDE | | | le Cool | Sample Intact |
| | Sample No./ Identification | i Lab No. I | No./Vol of Conta | | | HCI | TPH (| втех | 00 V | RCR/ | Cation / | <u>2</u> | TCLP | 00 | ТРН | 몽 | | | Sample | Samp |
| | 36.88163 | DO PUR 085-01 | 14 | 22 | | | X | X | | | _ | | | | | | | | 4 | Υ |
| | 36.88127 -107.41204 36.88106,36.8804 -107.411204 36.88127 36.88120 -107.411204 | -02 | | <u></u> | | | | + | | | | | 3 | | \ | | | | | \bot |
| 7 | 40,41193 107,211160 | -03 | | \ | | | + | \rightarrow | | | | | | | | | | | | \bot |
| . 1 | 7 10,41204 10,41193 | 7 7 1 | | <u> </u> | | | | - { | | | _ | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | \dashv | |
| , | | | . , <u>.</u> | | | | | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | |
| (San Days) | | | | | | | | | | | | | | | | | | | _ | |
| \mathcal{I} | | | | | | | | | | | | | | | | | | | | |
| | Relinquished by: (Signature) | | Date | Time | Receiv | ed by: (S | Signati | ure) | | | | | · | | | | a | Date /と/山 | Tin | пе 26 |
| | Relinquished by (Signature) | 9 | 124 | 26 | Receiv | ed by: (S | Signati | ure) | | | | | | | | | | | | 7 |
| | Sample Matrix | | | | | - Tinguin | | | | | | | | | | | | | | |
| | Soil Solid Sludge Aqueous Oth | | | | | | | | | <u> </u> | | | | | | | | - | | |
| | ☐ Sample(s) dropped off after hours to secure drop off area. | | } e | n V Anal | I C ytica | te Labor | C rator |) y | | | 5. | Ι, | 2 | , G- | , 1.1 | D (| 3. | | | |
| | 5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • T | | ee Spring | ıs • 65 M | 1ercad | o Street, | Suite 1 | 15, D | urang | jo, C(| O 813 | 01 • | labor | atory | @envi | otech-i | nc.cor | n | | |