

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

RECEIVED
2/18/2013

| | | | | |
|--|--|---------------------------------------|--|---|
| 1. OGCC Operator Number: 96850 | | 4. Contact Name Karolina Blaney | | Complete the Attachment Checklist OP OGCC |
| 2. Name of Operator: WPX Energy Rocky Mountain LLC | | Phone: 970 683 2295 | | |
| 3. Address: 1058 County Road 215 City: Parachute State: CO Zip: 81635 | | Fax: 970 285 9573 | | |
| 5. API Number 05-103-11930 | | OGCC Facility ID Number 428956 | | Survey Plat |
| 6. Well/Facility Name: | | 7. Well/Facility Number RGU 33-36-198 | | Directional Survey |
| 8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): RIO BLANCO 103/52 Lot 10 36 15 98W | | | | Surface Equipmt Diagram |
| 9. County: Rio Blanco | | 10. Field Name: Ryan Gulch | | Technical Info Page |
| 11. Federal, Indian or State Lease Number: | | | | Other |

General Notice

| | |
|--|---|
| <input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit) | |
| Change of Surface Footage from Exterior Section Lines: | <input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL |
| Change of Surface Footage to Exterior Section Lines: | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Change of Bottomhole Footage from Exterior Section Lines: | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Change of Bottomhole Footage to Exterior Section Lines: | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> attach directional survey |
| Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer | |
| Latitude | Distance to nearest property line |
| Longitude | Distance to nearest bldg, public rd, utility or RR |
| Ground Elevation | Distance to nearest lease line |
| | Is location in a High Density Area (rule 603b)? Yes/No <input type="checkbox"/> |
| | Distance to nearest well same formation |
| | Surface owner consultation date: |
| GPS DATA: | |
| Date of Measurement | PDOP Reading |
| | Instrument Operator's Name |
| <input type="checkbox"/> CHANGE SPACING UNIT | |
| Formation | Formation Code |
| Spacing order number | Unit Acreage |
| | Unit configuration |
| <input type="checkbox"/> Remove from surface bond | |
| Signed surface use agreement attached | |
| <input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): | |
| Effective Date: | |
| Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual | |
| <input type="checkbox"/> CHANGE WELL NAME | |
| From: | |
| To: | |
| Effective Date: | |
| <input type="checkbox"/> ABANDONED LOCATION: | |
| Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Date Ready for Inspection: | |
| <input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS | |
| Date well shut in or temporarily abandoned: | |
| Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| MIT required if shut in longer than two years. Date of last MIT | |
| <input type="checkbox"/> SPUD DATE: | |
| <input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set) | |
| <input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK | |
| *submit cbl and cement job summaries | |
| Method used | Cementing tool setting/perf depth |
| Cement volume | Cement top |
| Cement bottom | Date |
| <input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. | |
| Final reclamation will commence on approximately | |
| <input type="checkbox"/> Final reclamation is completed and site is ready for inspection. | |

Technical Engineering/Environmental Notice

| | | | |
|---|---|--|--|
| <input type="checkbox"/> Notice of Intent | | <input type="checkbox"/> Report of Work Done | |
| Approximate Start Date: | | Date Work Completed: | |
| Details of work must be described in full on Technical Information Page (Page 2 must be submitted.) | | | |
| <input type="checkbox"/> Intent to Recomplete (submit form 2) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Disposal | |
| <input type="checkbox"/> Change Drilling Plans | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste | |
| <input type="checkbox"/> Gross Interval Changed? | <input type="checkbox"/> Rule 502 variance requested | <input type="checkbox"/> Status Update/Change of Remediation Plans | |
| <input type="checkbox"/> Casing/Cementing Program Change | <input checked="" type="checkbox"/> Other: Arsenic background | for Spills and Releases | |

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Karolina Blaney Date: 2/18/2013 Email: Karolina.Blaney@WPXEnergy.com
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved:

Title:

Date:

CONDITIONS OF APPROVAL, IF ANY:

Chris Canfield
EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: _____ API Number: _____

2. Name of Operator: _____ OGCC Facility ID # _____

3. Well/Facility Name: _____ Well/Facility Number: _____

4. Location (QtrQtr, Sec, Twp, Rng, Meridian): _____

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5.

DESCRIBE PROPOSED OR COMPLETED OPERATIONS



Legend

- Sample Location
- Existing Road
- Existing Pad Limit of Disturbance

RGU 33-36-198
Arsenic Background Sample Location Map
T1S R98W, Section 36

February 6, 2013





12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Report Summary

Friday February 08, 2013

Report Number: L618255

Samples Received: 02/01/13

Client Project:

Description: RGU 33-36-198 cuttings

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

February 08, 2013

Date Received : February 01, 2013
Description : RGU 33-36-198 cuttings

ESC Sample # : L618255-01

Sample ID : RGU-33-36-198

Site ID :

Collected By :
Collection Date : 01/30/13 14:30

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|-----------|----------|------|
| Benzene | 0.034 | 0.0025 | mg/kg | 8021/8015 | 02/05/13 | 5 |
| Toluene | 0.050 | 0.025 | mg/kg | 8021/8015 | 02/05/13 | 5 |
| Ethylbenzene | 0.0074 | 0.0025 | mg/kg | 8021/8015 | 02/05/13 | 5 |
| Total Xylene | 0.055 | 0.0075 | mg/kg | 8021/8015 | 02/05/13 | 5 |
| TPH (GC/FID) Low Fraction | 2.2 | 0.50 | mg/kg | GRO | 02/05/13 | 5 |
| Surrogate Recovery-% | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 98.2 | | % Rec. | 8021/8015 | 02/05/13 | 5 |
| a,a,a-Trifluorotoluene(PID) | 99.0 | | % Rec. | 8021/8015 | 02/05/13 | 5 |
| TPH (GC/FID) High Fraction | 100 | 4.0 | mg/kg | 3546/DRO | 02/07/13 | 1 |
| Surrogate recovery(%) | | | | | | |
| o-Terphenyl | 199. | | % Rec. | 3546/DRO | 02/07/13 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Acenaphthene | 0.0073 | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Benzo(a)anthracene | 0.025 | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Benzo(a)pyrene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Benzo(b)fluoranthene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Benzo(k)fluoranthene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Chrysene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Dibenz(a,h)anthracene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Fluoranthene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Fluorene | 0.018 | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Indeno(1,2,3-cd)pyrene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Naphthalene | 0.12 | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Pyrene | BDL | 0.0060 | mg/kg | 8270C-SIM | 02/06/13 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 48.2 | | % Rec. | 8270C-SIM | 02/06/13 | 1 |
| 2-Fluorobiphenyl | 47.5 | | % Rec. | 8270C-SIM | 02/06/13 | 1 |
| p-Terphenyl-d14 | 35.5 | | % Rec. | 8270C-SIM | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 02/08/13 15:51 Printed: 02/08/13 16:15
L618255-01 (DRO) - high surrogate confirms with MS/D



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REPORT OF ANALYSIS

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

February 08, 2013

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198
Collected By :
Collection Date : 01/30/13 14:30

ESC Sample # : L618255-02

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-------------------------|--------|------------|----------|-------------|----------|------|
| Chromium, Hexavalent | BDL | 2.0 | mg/kg | 3060A/7196A | 02/08/13 | 1 |
| Chromium, Trivalent | 8.8 | 2.0 | mg/kg | Calc. | 02/06/13 | 1 |
| ORP | 72. | | mV | 2580 B-2011 | 02/06/13 | 1 |
| pH | 8.8 | | su | 9045D | 02/05/13 | 1 |
| Sodium Adsorption Ratio | 44. | | | Calc. | 02/05/13 | 1 |
| Specific Conductance | 2300 | | umhos/cm | 9050AMod | 02/07/13 | 1 |
| Mercury | BDL | 0.020 | mg/kg | 7471 | 02/04/13 | 1 |
| Arsenic | 4.8 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |
| Barium | 4300 | 0.25 | mg/kg | 6010B | 02/06/13 | 1 |
| Cadmium | BDL | 0.25 | mg/kg | 6010B | 02/06/13 | 1 |
| Chromium | 8.8 | 0.50 | mg/kg | 6010B | 02/06/13 | 1 |
| Copper | 19. | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |
| Lead | 12. | 0.25 | mg/kg | 6010B | 02/06/13 | 1 |
| Nickel | 6.5 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |
| Selenium | 4.7 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |
| Silver | 0.77 | 0.50 | mg/kg | 6010B | 02/06/13 | 1 |
| Zinc | 33. | 1.5 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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L618255-02 (PH) - 8.8 @ 19.3c



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REPORT OF ANALYSIS

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

February 08, 2013

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198-B-1
Collected By :
Collection Date : 01/30/13 14:45

ESC Sample # : L618255-03

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic | 3.6 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

February 08, 2013

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198-B-2
Collected By :
Collection Date : 01/30/13 14:55

ESC Sample # : L618255-04

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic | 2.6 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

February 08, 2013

Karolina Blaney
WPX Energy
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Parachute, CO 81635

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198-B-3
Collected By :
Collection Date : 01/30/13 15:00

ESC Sample # : L618255-05

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic | 4.1 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

February 08, 2013

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198-B-4
Collected By :
Collection Date : 01/30/13 15:05

ESC Sample # : L618255-06

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic | 3.3 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

February 08, 2013

Karolina Blaney
WPX Energy
1058 County Road 215
Parachute, CO 81635

Date Received : February 01, 2013
Description :
Sample ID : RGU-33-36-198-B-5
Collected By :
Collection Date : 01/30/13 15:10

ESC Sample # : L618255-07

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------|--------|------------|-------|--------|----------|------|
| Arsenic | 5.5 | 1.0 | mg/kg | 6010B | 02/06/13 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|------------------|---------------|----------------|-------------|-----------|-----------|
| L618255-01 | WG635657 | SAMP | o-Terphenyl | R2534058 | J1 |
| L618255-02 | WG635180 | SAMP | Copper | R2530959 | B |
| | WG635180 | SAMP | Lead | R2530959 | B |
| | WG635446 | SAMP | ORP | R2530757 | T8 |

Attachment B
Explanation of QC Qualifier Codes

| Qualifier | Meaning |
|-----------|---|
| B | (EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample. |
| J1 | Surrogate recovery limits have been exceeded; values are outside upper control limits |
| T8 | (ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration. |

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



YOUR LAB OF CHOICE

WPX Energy
Karolina Blaney
1058 County Road 215

Parachute, CO 81635

Quality Assurance Report
Level II

L618255

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February 08, 2013

| Analyte | Result | Laboratory Blank | | Limit | Batch | Date Analyzed |
|-----------------------------|---------|------------------|-------|--------|----------|----------------|
| | | Units | % Rec | | | |
| Mercury | < .02 | mg/kg | | | WG635027 | 02/04/13 10:08 |
| Benzene | < .0005 | mg/kg | | | WG635156 | 02/04/13 17:33 |
| Ethylbenzene | < .0005 | mg/kg | | | WG635156 | 02/04/13 17:33 |
| Toluene | < .005 | mg/kg | | | WG635156 | 02/04/13 17:33 |
| TPH (GC/FID) Low Fraction | < .1 | mg/kg | | | WG635156 | 02/04/13 17:33 |
| Total Xylene | < .0015 | mg/kg | | | WG635156 | 02/04/13 17:33 |
| a,a,a-Trifluorotoluene(FID) | | % Rec. | 99.02 | 59-128 | WG635156 | 02/04/13 17:33 |
| a,a,a-Trifluorotoluene(PID) | | % Rec. | 99.48 | 54-144 | WG635156 | 02/04/13 17:33 |
| Arsenic | < 1 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Barium | < .25 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Cadmium | < .25 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Chromium | < .5 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Copper | 1.50 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Lead | 0.530 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Nickel | < 1 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Selenium | < 1 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Silver | < .5 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Zinc | < 1.5 | mg/kg | | | WG635180 | 02/06/13 11:27 |
| Specific Conductance | 0.760 | umhos/cm | | | WG635717 | 02/07/13 18:40 |
| TPH (GC/FID) High Fraction | < 4 | mg/kg | | | WG635657 | 02/07/13 21:47 |
| o-Terphenyl | | % Rec. | 80.90 | 50-150 | WG635657 | 02/07/13 21:47 |
| Chromium,Hexavalent | < 2 | mg/kg | | | WG635598 | 02/08/13 14:25 |

| Analyte | Units | Duplicate | | RPD | Limit | Ref Samp | Batch |
|----------|-------|-----------|-----------|-------|-------|------------|----------|
| | | Result | Duplicate | | | | |
| Mercury | mg/kg | 0 | 0.00474 | 28.5* | 20 | L618257-01 | WG635027 |
| pH | su | 0 | 0 | 0 | 1 | L618236-03 | WG635309 |
| pH | su | 8.80 | 8.80 | 0 | 1 | L618255-02 | WG635309 |
| ORP | mV | 260. | 260. | 0.385 | 20 | L618497-05 | WG635446 |
| ORP | mV | 260. | 260. | 0.772 | 20 | L618497-06 | WG635446 |
| Arsenic | mg/kg | 4.10 | 3.60 | 13.0 | 20 | L618255-03 | WG635180 |
| Barium | mg/kg | 210. | 239. | 12.9 | 20 | L618255-03 | WG635180 |
| Cadmium | mg/kg | 0 | 0.0295 | NA | 20 | L618255-03 | WG635180 |
| Chromium | mg/kg | 23.0 | 24.7 | 7.13 | 20 | L618255-03 | WG635180 |
| Copper | mg/kg | 10.0 | 11.7 | 15.7 | 20 | L618255-03 | WG635180 |
| Nickel | mg/kg | 9.20 | 9.70 | 5.29 | 20 | L618255-03 | WG635180 |
| Selenium | mg/kg | 7.60 | 7.54 | 0.793 | 20 | L618255-03 | WG635180 |
| Zinc | mg/kg | 37.0 | 40.3 | 8.54 | 20 | L618255-03 | WG635180 |
| Lead | mg/kg | 20.0 | 0 | NA | 20 | L618255-03 | WG635180 |
| Silver | mg/kg | 0 | 0 | 0 | 20 | L618255-03 | WG635180 |

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YOUR LAB OF CHOICE

WPX Energy
Karolina Blaney
1058 County Road 215

Parachute, CO 81635

Quality Assurance Report
Level II

L618255

12065 Lebanon Rd.
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(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 08, 2013

| Analyte | Units | Duplicate | | RPD | Limit | Ref Samp | Batch |
|----------------------|----------|-----------|-----------|------|-------|------------|----------|
| | | Result | Duplicate | | | | |
| Specific Conductance | umhos/cm | 2100 | 2300 | 10.0 | 20 | L618255-02 | WG635717 |
| Chromium,Hexavalent | mg/kg | 160. | 160. | 0 | 20 | L618497-04 | WG635598 |
| Chromium,Hexavalent | mg/kg | 0 | 0 | 0 | 20 | L618497-05 | WG635598 |

| Analyte | Units | Laboratory Control Sample | | % Rec | Limit | Batch |
|-----------------------------|----------|---------------------------|--------|-------|--------------|----------|
| | | Known Val | Result | | | |
| Mercury | mg/kg | 12.4 | 13.9 | 112. | 71.6-127.7 | WG635027 |
| Benzene | mg/kg | .05 | 0.0477 | 95.4 | 76-113 | WG635156 |
| Ethylbenzene | mg/kg | .05 | 0.0516 | 103. | 78-115 | WG635156 |
| Toluene | mg/kg | .05 | 0.0505 | 101. | 76-114 | WG635156 |
| Total Xylene | mg/kg | .15 | 0.160 | 107. | 81-118 | WG635156 |
| a,a,a-Trifluorotoluene(PID) | | | | 101.0 | 54-144 | WG635156 |
| TPH (GC/FID) Low Fraction | mg/kg | 5.5 | 5.23 | 95.1 | 67-135 | WG635156 |
| a,a,a-Trifluorotoluene(FID) | | | | 100.4 | 59-128 | WG635156 |
| pH | su | 5.7 | 5.71 | 100. | 98.25-101.75 | WG635309 |
| ORP | mV | 228 | 228. | 100. | 95.6-104. | WG635446 |
| Arsenic | mg/kg | 237 | 250. | 105. | 83.1-117 | WG635180 |
| Barium | mg/kg | 252 | 276. | 110. | 84.1-116 | WG635180 |
| Cadmium | mg/kg | 191 | 199. | 104. | 83.2-117 | WG635180 |
| Chromium | mg/kg | 128 | 138. | 108. | 81.3-118 | WG635180 |
| Copper | mg/kg | 123 | 138. | 112. | 83.7-116 | WG635180 |
| Lead | mg/kg | 103 | 115. | 112. | 83.1-117 | WG635180 |
| Nickel | mg/kg | 118 | 120. | 102. | 82-118 | WG635180 |
| Selenium | mg/kg | 110 | 122. | 111. | 78.7-122 | WG635180 |
| Silver | mg/kg | 47.3 | 50.0 | 106. | 66.2-134 | WG635180 |
| Zinc | mg/kg | 183 | 190. | 104. | 82-118 | WG635180 |
| Specific Conductance | umhos/cm | 878 | 902. | 103. | 85-115 | WG635717 |
| TPH (GC/FID) High Fraction | mg/kg | 60 | 39.9 | 66.5 | 50-150 | WG635657 |
| o-Terphenyl | | | | 63.00 | 50-150 | WG635657 |
| Chromium,Hexavalent | mg/kg | 261 | 222. | 85.1 | 80-120 | WG635598 |

| Analyte | Units | Laboratory Control Sample Duplicate | | Limit | RPD | Limit | Batch |
|-----------------------------|-------|-------------------------------------|----------|-------|--------|-------|----------|
| | | Result | Ref %Rec | | | | |
| Benzene | mg/kg | 0.0462 | 0.0477 | 92.0 | 76-113 | 3.21 | WG635156 |
| Ethylbenzene | mg/kg | 0.0510 | 0.0516 | 102. | 78-115 | 1.20 | WG635156 |
| Toluene | mg/kg | 0.0491 | 0.0505 | 98.0 | 76-114 | 2.82 | WG635156 |
| Total Xylene | mg/kg | 0.157 | 0.160 | 104. | 81-118 | 2.16 | WG635156 |
| a,a,a-Trifluorotoluene(PID) | | | | 98.52 | 54-144 | | WG635156 |
| TPH (GC/FID) Low Fraction | mg/kg | 5.10 | 5.23 | 93.0 | 67-135 | 2.60 | WG635156 |
| a,a,a-Trifluorotoluene(FID) | | | | 99.91 | 59-128 | | WG635156 |

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| Analyte | Units | Laboratory Control Sample Duplicate | | | Limit | RPD | Limit | Batch |
|----------------------------|--------|-------------------------------------|------|-------|--------------|-------|-------|----------|
| | | Result | Ref | %Rec | | | | |
| pH | su | 5.71 | 5.71 | 100. | 98.25-101.75 | 0 | 20 | WG635309 |
| ORP | mV | 227. | 228. | 100. | 95.6-104. | 0.440 | 20 | WG635446 |
| Specific Conductance | umhos/ | 898. | 902. | 102. | 85-115 | 0.444 | 20 | WG635717 |
| TPH (GC/FID) High Fraction | mg/kg | 50.9 | 39.9 | 85.0 | 50-150 | 24.1* | 20 | WG635657 |
| o-Terphenyl | | | | 82.00 | 50-150 | | | WG635657 |
| Chromium, Hexavalent | mg/kg | 214. | 222. | 82.0 | 80-120 | 3.67 | 20 | WG635598 |

| Analyte | Units | Matrix Spike | | | % Rec | Limit | Ref Samp | Batch |
|-----------------------------|-------|--------------|---------|------|-------|----------|------------|----------|
| | | MS Res | Ref Res | TV | | | | |
| Mercury | mg/kg | 0.291 | 0.00474 | .25 | 115. | 80-120 | L618257-01 | WG635027 |
| Benzene | mg/kg | 0.189 | 0 | .05 | 75.6 | 32-137 | L618217-02 | WG635156 |
| Ethylbenzene | mg/kg | 0.108 | 0 | .05 | 43.3 | 10-150 | L618217-02 | WG635156 |
| Toluene | mg/kg | 0.160 | 0 | .05 | 64.2 | 20-142 | L618217-02 | WG635156 |
| Total Xylene | mg/kg | 0.332 | 0.00850 | .15 | 43.2 | 16-141 | L618217-02 | WG635156 |
| a,a,a-Trifluorotoluene(PID) | | | | | 99.36 | 54-144 | | WG635156 |
| TPH (GC/FID) Low Fraction | mg/kg | 9.82 | 0 | 5.5 | 35.7* | 55-109 | L618217-02 | WG635156 |
| a,a,a-Trifluorotoluene(FID) | | | | | 97.09 | 59-128 | | WG635156 |
| Acenaphthene | mg/kg | 0.0234 | 0 | .033 | 70.8 | 30.4-133 | L617936-20 | WG635239 |
| Anthracene | mg/kg | 0.0237 | 0 | .033 | 71.9 | 24.8-145 | L617936-20 | WG635239 |
| Benzo(a)anthracene | mg/kg | 0.0216 | 0 | .033 | 65.4 | 17.4-147 | L617936-20 | WG635239 |
| Benzo(a)pyrene | mg/kg | 0.0223 | 0 | .033 | 67.7 | 14.5-149 | L617936-20 | WG635239 |
| Benzo(b)fluoranthene | mg/kg | 0.0223 | 0 | .033 | 67.7 | 17-151 | L617936-20 | WG635239 |
| Benzo(k)fluoranthene | mg/kg | 0.0224 | 0 | .033 | 67.8 | 14.8-150 | L617936-20 | WG635239 |
| Chrysene | mg/kg | 0.0220 | 0 | .033 | 66.5 | 15.7-148 | L617936-20 | WG635239 |
| Dibenz(a,h)anthracene | mg/kg | 0.0207 | 0 | .033 | 62.7 | 10-142 | L617936-20 | WG635239 |
| Fluoranthene | mg/kg | 0.0232 | 0 | .033 | 70.2 | 22.9-153 | L617936-20 | WG635239 |
| Fluorene | mg/kg | 0.0239 | 0 | .033 | 72.3 | 28.9-140 | L617936-20 | WG635239 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0210 | 0 | .033 | 63.6 | 10-155 | L617936-20 | WG635239 |
| Naphthalene | mg/kg | 0.0217 | 0 | .033 | 65.7 | 19.5-137 | L617936-20 | WG635239 |
| Pyrene | mg/kg | 0.0228 | 0 | .033 | 69.2 | 18.4-146 | L617936-20 | WG635239 |
| 2-Fluorobiphenyl | | | | | 70.50 | 26.1-136 | | WG635239 |
| Nitrobenzene-d5 | | | | | 66.60 | 12.7-142 | | WG635239 |
| p-Terphenyl-d14 | | | | | 69.50 | 20.5-158 | | WG635239 |
| Arsenic | mg/kg | 54.2 | 3.60 | 50 | 101. | 75-125 | L618255-03 | WG635180 |
| Barium | mg/kg | 270. | 239. | 50 | 62.0* | 75-125 | L618255-03 | WG635180 |
| Cadmium | mg/kg | 49.8 | 0.0295 | 50 | 99.5 | 75-125 | L618255-03 | WG635180 |
| Chromium | mg/kg | 73.1 | 24.7 | 50 | 96.8 | 75-125 | L618255-03 | WG635180 |
| Copper | mg/kg | 61.0 | 11.7 | 50 | 98.6 | 75-125 | L618255-03 | WG635180 |
| Nickel | mg/kg | 56.9 | 9.70 | 50 | 94.4 | 75-125 | L618255-03 | WG635180 |
| Selenium | mg/kg | 58.3 | 7.54 | 50 | 102. | 75-125 | L618255-03 | WG635180 |
| Zinc | mg/kg | 86.9 | 40.3 | 50 | 93.2 | 75-125 | L618255-03 | WG635180 |
| Lead | mg/kg | 64.8 | 0 | 50 | 25.9* | 75-125 | L618255-03 | WG635180 |
| Silver | mg/kg | 46.6 | 0 | 50 | 18.6* | 75-125 | L618255-03 | WG635180 |

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| Analyte | Units | MS Res | Matrix Spike | | TV | % Rec | Limit | Ref Samp | Batch | |
|---|-------|--------|------------------------|-------|-------|------------------|------------------|------------|----------------------|----------------------|
| | | | Ref Res | | | | | | | |
| TPH (GC/FID) High Fraction o-Terphenyl | mg/kg | 144. | 100. | 60 | | 73.0 163.0* | 50-150 50-150 | L618255-01 | WG635657 WG635657 | |
| Chromium,Hexavalent | mg/kg | 20.2 | 0 | 20 | | 101. | 75-125 | L618497-09 | WG635598 | |
| Analyte | Units | MSD | Matrix Spike Duplicate | | Limit | RPD | Limit | Ref Samp | Batch | |
| | | | Ref | %Rec | | | | | | |
| Mercury | mg/kg | 0.259 | 0.291 | 102. | | 80-120 | 11.7 | 20 | L618257-01 | WG635027 |
| Benzene | mg/kg | 0.192 | 0.189 | 76.7 | | 32-137 | 1.51 | 39 | L618217-02 | WG635156 |
| Ethylbenzene | mg/kg | 0.118 | 0.108 | 47.2 | | 10-150 | 8.64 | 44 | L618217-02 | WG635156 |
| Toluene | mg/kg | 0.164 | 0.160 | 65.7 | | 20-142 | 2.33 | 42 | L618217-02 | WG635156 |
| Total Xylene | mg/kg | 0.360 | 0.332 | 46.8 | | 16-141 | 7.91 | 46 | L618217-02 | WG635156 |
| a,a,a-Trifluorotoluene(PID) | | | | 97.96 | | 54-144 | | | | WG635156 |
| TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID) | mg/kg | 12.9 | 9.82 | 47.0* | | 55-109 59-128 | 27.3* | 20 | L618217-02 | WG635156 WG635156 |
| Acenaphthene | mg/kg | 0.0234 | 0.0234 | 70.9 | | 30.4-133 | 0.160 | 27.6 | L617936-20 | WG635239 |
| Anthracene | mg/kg | 0.0255 | 0.0237 | 77.3 | | 24.8-145 | 7.30 | 30 | L617936-20 | WG635239 |
| Benzo(a)anthracene | mg/kg | 0.0233 | 0.0216 | 70.5 | | 17.4-147 | 7.38 | 29.9 | L617936-20 | WG635239 |
| Benzo(a)pyrene | mg/kg | 0.0234 | 0.0223 | 70.9 | | 14.5-149 | 4.71 | 30.9 | L617936-20 | WG635239 |
| Benzo(b)fluoranthene | mg/kg | 0.0232 | 0.0223 | 70.4 | | 17-151 | 3.98 | 34.6 | L617936-20 | WG635239 |
| Benzo(k)fluoranthene | mg/kg | 0.0237 | 0.0224 | 71.7 | | 14.8-150 | 5.68 | 34.5 | L617936-20 | WG635239 |
| Chrysene | mg/kg | 0.0239 | 0.0220 | 72.5 | | 15.7-148 | 8.56 | 30.5 | L617936-20 | WG635239 |
| Dibenz(a,h)anthracene | mg/kg | 0.0214 | 0.0207 | 64.8 | | 10-142 | 3.30 | 34.8 | L617936-20 | WG635239 |
| Fluoranthene | mg/kg | 0.0252 | 0.0232 | 76.5 | | 22.9-153 | 8.49 | 32.8 | L617936-20 | WG635239 |
| Fluorene | mg/kg | 0.0234 | 0.0239 | 70.9 | | 28.9-140 | 1.92 | 30 | L617936-20 | WG635239 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0221 | 0.0210 | 66.8 | | 10-155 | 4.90 | 36.2 | L617936-20 | WG635239 |
| Naphthalene | mg/kg | 0.0222 | 0.0217 | 67.1 | | 19.5-137 | 2.23 | 33 | L617936-20 | WG635239 |
| Pyrene | mg/kg | 0.0248 | 0.0228 | 75.1 | | 18.4-146 | 8.14 | 33.5 | L617936-20 | WG635239 |
| 2-Fluorobiphenyl | | | | 72.40 | | 26.1-136 | | | | WG635239 |
| Nitrobenzene-d5 | | | | 67.90 | | 12.7-142 | | | | WG635239 |
| p-Terphenyl-d14 | | | | 73.50 | | 20.5-158 | | | | WG635239 |
| Arsenic | mg/kg | 50.6 | 54.2 | 94.0 | | 75-125 | 6.87 | 20 | L618255-03 | WG635180 |
| Barium | mg/kg | 380. | 270. | 282.* | | 75-125 | 33.8* | 20 | L618255-03 | WG635180 |
| Cadmium | mg/kg | 46.9 | 49.8 | 93.7 | | 75-125 | 6.00 | 20 | L618255-03 | WG635180 |
| Chromium | mg/kg | 68.7 | 73.1 | 88.0 | | 75-125 | 6.21 | 20 | L618255-03 | WG635180 |
| Copper | mg/kg | 53.2 | 61.0 | 83.0 | | 75-125 | 13.7 | 20 | L618255-03 | WG635180 |
| Nickel | mg/kg | 52.6 | 56.9 | 85.8 | | 75-125 | 7.85 | 20 | L618255-03 | WG635180 |
| Selenium | mg/kg | 54.0 | 58.3 | 92.9 | | 75-125 | 7.66 | 20 | L618255-03 | WG635180 |
| Zinc | mg/kg | 82.2 | 86.9 | 83.8 | | 75-125 | 5.56 | 20 | L618255-03 | WG635180 |
| Lead | mg/kg | 62.5 | 64.8 | 25.0* | | 75-125 | 3.61 | 20 | L618255-03 | WG635180 |
| Silver | mg/kg | 47.0 | 46.6 | 18.8* | | 75-125 | 0.855 | 20 | L618255-03 | WG635180 |
| TPH (GC/FID) High Fraction o-Terphenyl | mg/kg | 166. | 144. | 111. | | 50-150 183.0* | 14.6 | 20 | L618255-01 | WG635657 WG635657 |
| Chromium,Hexavalent | mg/kg | 21.1 | 20.2 | 106. | | 75-125 | 4.36 | 20 | L618497-09 | WG635598 |

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Serial Dilution

Batch number /Run number / Sample number cross reference

WG635027: R2527850: L618255-02
WG635156: R2528537: L618255-01
WG635309: R2529037: L618255-02
WG635304: R2530597: L618255-02
WG635239: R2530640: L618255-01
WG635446: R2530757: L618255-02
WG635180: R2530959: L618255-02 03 04 05 06 07
WG635717: R2533599: L618255-02
WG635657: R2534058: L618255-01
WG635598: R2534397: L618255-02

* * Calculations are performed prior to rounding of reported values.

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.