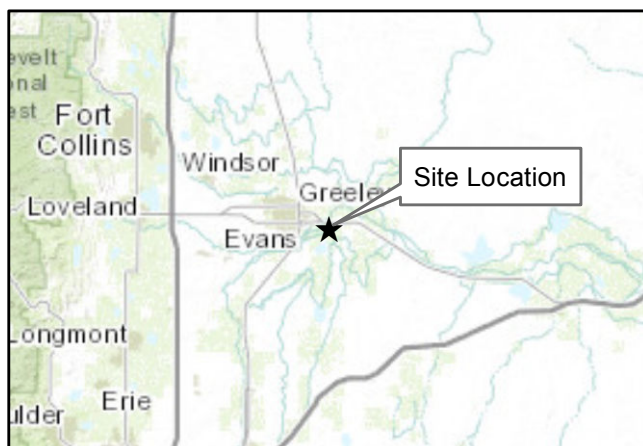


0 375 750 1,500  
Feet



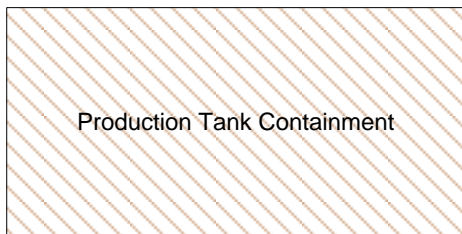
## Figure 1

Site Location Map  
LaSalle 25G-212  
SWNW S25 T5N R65W  
Weld County, Colorado

Drawn By: DBA  
Date: 1/23/2014



Surface  
Drainage



Production Tank Containment



Separator  
Containment



Flares

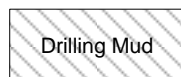
Access Road



Approximate Area  
of Gas Buster

SS03 X

SS01 X ← 10' → X SS02



Drilling Mud



Drilling Mud



LaSalle  
25G-212  
Wellhead

DRAWN BY: CAW

DATE: 3/6/2014

**Facility Diagram**  
PDC Energy, Inc.  
LaSalle 25G-212  
SWNW S25 T5N R65W  
Weld County, CO



**TASMAN**  
GEOSCIENCES

6899 Pecos Street, Unit C  
Denver, CO 80221

LEGEND

X Soil Sample Location

**FIGURE 2**  
SAMPLE LOCATION  
MAP

**Table 1**  
**Soil Laboratory Analytical Data Summary Table - Organic Compounds**  
**PDC Energy, Inc.**  
**LaSalle 25G-212**

| Soil Sample                | Data Collected | GRO            | DRO | ORO | TPH        | Benzene     | Toluene   | Ethylbenzene | Total Xylenes | Naphthalene |
|----------------------------|----------------|----------------|-----|-----|------------|-------------|-----------|--------------|---------------|-------------|
| <b>bgs</b>                 |                | <b>(mg/kg)</b> |     |     |            |             |           |              |               |             |
| <b>SS01 @ 6"</b>           | 3/6/2014       | <0.50          | <50 | <50 | <50        | <0.002      | <0.005    | <0.005       | <0.005        | 0.0117      |
| <b>SS02 @ 6"</b>           | 3/6/2014       | <0.50          | <50 | <50 | <50        | <0.002      | <0.005    | <0.005       | <0.005        | 0.00917     |
| <b>SS03 @ 6"</b>           | 3/6/2014       | <0.50          | <50 | <50 | <50        | <0.002      | <0.005    | <0.005       | <0.005        | 0.00792     |
| <b>COGCC Soil Standard</b> |                |                |     |     | <b>500</b> | <b>0.17</b> | <b>85</b> | <b>100</b>   | <b>175</b>    | <b>23</b>   |

**Notes:**

1). Standards for Soil are taken from 2 CCR 404-1, Table 910-1, effective April 1, 2009.

2). TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO and DRO concentrations.

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

NR - Not Reported

mg/kg - Milligrams per kilogram.

bgs - Below ground surface.

**Bold** values indicate a concentration above the COGCC Table 910-1 soil standards.

Table 2  
Soil Laboratory Analytical Data Summary Table - Inorganic Compounds  
PDC Energy, Inc.  
LaSalle 25G-212

| Soil Sample         | Date Collected | Arsenic | Barium | Cadmium | Chromium | Copper | Lead | Nickel | Selenium | Silver | Zinc   | Mercury | Hexavalent Chromium | Chromium +3 (Calculated) | Calcium | Magnesium | Sodium |
|---------------------|----------------|---------|--------|---------|----------|--------|------|--------|----------|--------|--------|---------|---------------------|--------------------------|---------|-----------|--------|
| bgs                 |                | mg/kg   |        |         |          |        |      |        |          |        |        |         |                     |                          |         |           |        |
| SS01 @ 6"           | 3/6/2014       | 1.38    | 72.6   | 0.162   | 6.94     | 5.4    | 8.0  | 5.89   | 0.119    | <0.114 | 25.1   | <0.0412 | <1.01               | 5.93                     | 725     | 182       | 496    |
| SS02 @ 6"           | 3/6/2014       | 2.86    | 131    | 0.145   | 9.48     | 7.24   | 9.15 | 10.8   | 0.201    | <0.112 | 30     | <0.0562 | <0.982              | 8.5                      | 236     | 43.2      | 75.1   |
| SS03 @ 6"           | 3/6/2014       | 1.70    | 153    | 0.249   | 14.10    | 7.12   | 11.8 | 14.0   | 0.328    | <0.115 | 38.3   | <0.0417 | <1.11               | 13.0                     | 192     | 121       | 1600   |
| COGCC Soil Standard |                | 0.39    | 15,000 | 70      | 23       | 3,100  | 400  | 1,600  | 390      | 390    | 23,000 | 23      | 1.2                 | 120,000                  |         |           |        |

| Soil Sample         | Date Collected | SAR  | Specific Conductance | pH   | Acenaphthene | Anthracene | Benzo(A) anthracene | Benzo(B) fluoranthene | Benzo(K) fluoranthene | Benzo(A) pyrene | Chrysene | Dibenzo(A,H) anthracene | Fluoranthene | Fluorene | Indeno(1,2,3,C,D) pyrene | Pyrene |  |  |
|---------------------|----------------|------|----------------------|------|--------------|------------|---------------------|-----------------------|-----------------------|-----------------|----------|-------------------------|--------------|----------|--------------------------|--------|--|--|
| bgs                 |                | -    | mmhos/cm             | -    | mg/kg        |            |                     |                       |                       |                 |          |                         |              |          |                          |        |  |  |
| SS01 @ 6"           | 3/6/2014       | 4.27 | 8.1                  | 7.88 | <0.005       | <0.005     | <0.005              | <0.005                | <0.005                | <0.005          | <0.005   | <0.005                  | <0.005       | <0.005   | <0.005                   | <0.005 |  |  |
| SS02 @ 6"           | 3/6/2014       | 1.18 | 1.03                 | 7.91 | <0.005       | <0.005     | <0.005              | <0.005                | <0.005                | <0.005          | <0.005   | <0.005                  | <0.005       | <0.005   | <0.005                   | <0.005 |  |  |
| SS03 @ 6"           | 3/6/2014       | 22.3 | 2.64                 | 8.29 | <0.005       | <0.005     | <0.005              | <0.005                | <0.005                | <0.005          | <0.005   | <0.005                  | <0.005       | <0.005   | <0.005                   | <0.005 |  |  |
| COGCC Soil Standard |                | <12  | <4                   | 6-9  | 1,000        | 1,000      | 0.22                | 0.22                  | 22                    | 0.022           | 22       | 0.022                   | 1,000        | 1,000    | 0.22                     | 1,000  |  |  |

Notes:

1). Standards for Soil are taken from 2 CCR 404-1, Table 910-1, effective April 1, 2009.

mg/kg- Milligrams per kilogram

SAR - Sodium adsorption ratio

NR - Not reported

**Bold** values indicate a concentration above the COGCC Table 910-1 soil standards.

mmhos/cm - Millimhos per centimeter

bgs - Below ground surface

## **ATTACHMENT A**

# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 16, 2014

Brandon Bruns  
PDC Energy  
1775 Sherman St. STE. 3000  
Denver, CO 80203  
RE: LaSalle 212

Enclosed are the results of analyses for samples received by Summit Scientific on 03/06/14 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS' or 'Shrewsbury', written in a cursive style.

Ben Shrewsbury  
President / Laboratory Manager



PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| SS01@6"   | 1403040-01    | Soil   | 03/06/14 10:45 | 03/06/14 16:45 |
| SS02@6"   | 1403040-02    | Soil   | 03/06/14 10:50 | 03/06/14 16:45 |
| SS03@6"   | 1403040-03    | Soil   | 03/06/14 10:55 | 03/06/14 16:45 |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212

Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

Summit Scientific  
1403040  
741 Corporate Circle Suite 1 • Golden, Colorado 80401  
303-277-9310 • 303-374-5933 Fax

Client: PDC Energy  
Address:  
City/State/Zip:  
Phone:  
Fax:  
Project Manager: Brandon Bruns  
E-Mail:  
Project Name: LaSalle 212  
Project Number:  
Page 1 of 1

| Sample Description | Date Sampled | Time Sampled | Number of Containers | Preservative     | Matrix                  | Analyze For:    | Special Instruction |
|--------------------|--------------|--------------|----------------------|------------------|-------------------------|-----------------|---------------------|
| SK10V11            | 3/14/14      | 1045         | 1                    | HCl              | Soil                    | Other (Specify) |                     |
| SK020611           | 3/14/14      | 1050         | 1                    | HNO <sub>3</sub> | Groundwater             | Other (Specify) |                     |
| SK030611           | 3/14/14      | 1055         | 1                    | None             | Air - Canister Serial # | Other (Specify) |                     |

Received by: [Signature] Date/Time: 3/16/14 1600  
Received by: [Signature] Date/Time: 3/16/14 1615  
Received by: [Signature] Date/Time: 3/16/14 1600  
Received by: [Signature] Date/Time: 3/16/14 1615

Turn Around Time (Check)  
Same Day ☐ 24 Hours ☐ 48 Hours ☐ 72 Hours ☒ Standard ☐

Notes

Sample Integrity:  
Temperature Upon Receipt: 20  
Intact: ☒ No ☐

www.summit-sc.com

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[Signature]





PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**SS01@6"**  
**1403040-01 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/06/14 10:45**

| Analyte            | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method | Notes |
|--------------------|--------|--------------------|-------|----------|---------|----------|----------|--------|-------|
| C10-C28 (TEPH-DRO) | ND     | 50                 | mg/kg | 1        | 1403060 | 03/07/14 | 03/08/14 | 8015M  |       |
| C28-C36 (TEPH-ORO) | ND     | 50                 | "     | "        | "       | "        | "        | "      |       |

Date Sampled: **03/06/14 10:45**

| Analyte                | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: o-Terphenyl |        | 102 %              | 30-150 |          | "     | "        | "        | "      |       |

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **03/06/14 10:45**

| Analyte                     | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene                     | ND     | 0.0020             | mg/kg | 1        | 1403058 | 03/07/14 | 03/08/14 | EPA 8260B |       |
| Toluene                     | ND     | 0.0050             | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene                | ND     | 0.0050             | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total)             | ND     | 0.0050             | "     | "        | "       | "        | "        | "         |       |
| Gasoline Range Hydrocarbons | ND     | 0.50               | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **03/06/14 10:45**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 108 %              | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 96.1 %             | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 95.9 %             | 21-167 |          | "     | "        | "        | "      |       |

**Semivolatile Organic Compounds by EPA Method 8270D SIM**

Date Sampled: **03/06/14 10:45**

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|--------|-------|

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212

Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

SS01@6"  
1403040-01 (Soil)

### Summit Scientific

#### Semivolatile Organic Compounds by EPA Method 8270D SIM

| Analyte                  | Result      | Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------------------|-------------|-------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthene             | ND          | 5.00  | ug/kg | 1        | 1403064 | 03/10/14 | 03/11/14 | EPA 8270D SIM |       |
| Acenaphthylene           | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Anthracene               | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) anthracene     | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (b) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (k) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (g,h,i) perylene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) pyrene         | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Chrysene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Dibenz (a,h) anthracene  | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluoranthene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluorene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Indeno (1,2,3-cd) pyrene | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| <b>Naphthalene</b>       | <b>11.7</b> | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Phenanthrene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Pyrene                   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |

Date Sampled: 03/06/14 10:45

| Analyte                            | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 2-Methylnaphthalene-d10 |        | 106 %           | 50-150 |          | "     | "        | "        | "      |       |
| Surrogate: Fluoranthene-d10        |        | 117 %           | 50-150 |          | "     | "        | "        | "      |       |

#### Total Metals by EPA Method 6020 - Dry Weight Basis

Date Sampled: 03/06/14 10:45

| Analyte         | Result       | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>Arsenic</b>  | <b>1.38</b>  | 0.114           | mg/kg dry | 1        | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |       |
| <b>Barium</b>   | <b>72.6</b>  | 0.114           | "         | "        | "       | "        | "        | "         |       |
| <b>Cadmium</b>  | <b>0.162</b> | 0.114           | "         | "        | "       | "        | "        | "         |       |
| <b>Chromium</b> | <b>6.94</b>  | 0.569           | "         | "        | "       | "        | "        | "         |       |
| <b>Copper</b>   | <b>5.36</b>  | 0.569           | "         | "        | "       | "        | "        | "         |       |
| <b>Lead</b>     | <b>8.04</b>  | 0.114           | "         | "        | "       | "        | "        | "         |       |
| <b>Nickel</b>   | <b>5.89</b>  | 0.114           | "         | "        | "       | "        | "        | "         |       |
| <b>Selenium</b> | <b>0.119</b> | 0.0569          | "         | "        | "       | "        | "        | "         |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212

Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**SS01@6"**  
**1403040-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA Method 6020 - Dry Weight Basis**

|        |      |       |           |   |         |          |          |           |
|--------|------|-------|-----------|---|---------|----------|----------|-----------|
| Silver | ND   | 0.114 | mg/kg dry | 1 | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |
| Zinc   | 25.1 | 11.4  | "         | " | "       | "        | "        | "         |

**Total Mercury by EPA Method 7471/7470/245.1**

Date Sampled: **03/06/14 10:45**

| Analyte | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|---------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Mercury | ND     | 0.0412          | mg/kg dry | 1        | 1403056 | 03/10/14 | 03/10/14 | EPA 7471 |       |

**Hexavalent Chromium by EPA 7196**

Date Sampled: **03/06/14 10:45**

| Analyte              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|----------------------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Chromium, Hexavalent | ND     | 1.01            | mg/kg dry | 1        | 1403052 | 03/08/14 | 03/10/14 | EPA 7196 |       |

**Calculated Analytes**

Date Sampled: **03/06/14 10:45**

| Analyte               | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method      | Notes |
|-----------------------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| Chromium+3 Calculated | 5.93   | 1.00            | mg/kg | 1        | 1403063 | 03/10/14 | 03/16/14 | Calculation |       |

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: **03/06/14 10:45**

| Analyte   | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method                        | Notes |
|-----------|--------|-----------------|-----------|----------|---------|----------|----------|-------------------------------|-------|
| Calcium   | 725    | 11.4            | mg/kg dry | 1        | 1403088 | 03/13/14 | 03/13/14 | EPA 6020/Mod. USDA60 6(2, 3A) |       |
| Magnesium | 182    | 5.69            | "         | "        | "       | "        | "        | "                             |       |
| Sodium    | 496    | 17.1            | "         | "        | "       | "        | "        | "                             |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**SS01@6"**  
**1403040-01 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: **03/06/14 10:45**

| Analyte                 | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method                                 | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|--|-------|
| Sodium Adsorption Ratio | 4.27   |                    | units | 1        | 1403095 | 03/13/14 | 03/14/14 | EPA<br>6020/Mod.<br>USDA60 6(2,<br>3A) |       |

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/06/14 10:45**

| Analyte                   | Result | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|---------------------------|--------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| Specific Conductance (EC) | 8.10   | 0.0100             | mmhos/cm | 1        | 1403083 | 03/12/14 | 03/12/14 | SM 2510B |       |

Date Sampled: **03/06/14 10:45**

| Analyte | Result | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|---------|--------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| pH      | 7.88   | 0.100              | pH Units | "        | 1403084 | 03/12/14 | 03/12/14 | EPA 9045 |       |

Date Sampled: **03/06/14 10:45**

| Analyte  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|----------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| % Solids | 87.9   |                    | %     | "        | 1403057 | 03/07/14 | 03/10/14 | % calculation |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

Reported:  
03/16/14 22:15

SS02@6"  
1403040-02 (Soil)

### Summit Scientific

#### Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 03/06/14 10:50

| Analyte            | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method | Notes |
|--------------------|--------|-----------------|-------|----------|---------|----------|----------|--------|-------|
| C10-C28 (TEPH-DRO) | ND     | 50              | mg/kg | 1        | 1403060 | 03/07/14 | 03/08/14 | 8015M  |       |
| C28-C36 (TEPH-ORO) | ND     | 50              | "     | "        | "       | "        | "        | "      |       |

Date Sampled: 03/06/14 10:50

| Analyte                | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: o-Terphenyl |        | 103 %           | 30-150 |          | "     | "        | "        | "      |       |

#### Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 03/06/14 10:50

| Analyte                     | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene                     | ND     | 0.0020          | mg/kg | 1        | 1403058 | 03/07/14 | 03/08/14 | EPA 8260B |       |
| Toluene                     | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene                | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total)             | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Gasoline Range Hydrocarbons | ND     | 0.50            | "     | "        | "       | "        | "        | "         |       |

Date Sampled: 03/06/14 10:50

| Analyte                          | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 102 %           | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 94.7 %          | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 92.3 %          | 21-167 |          | "     | "        | "        | "      |       |

#### Semivolatile Organic Compounds by EPA Method 8270D SIM

Date Sampled: 03/06/14 10:50

| Analyte      | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthene | ND     | 5.00            | ug/kg | 1        | 1403064 | 03/10/14 | 03/11/14 | EPA 8270D SIM |       |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**SS02@6"**  
**1403040-02 (Soil)**

### Summit Scientific

#### Semivolatile Organic Compounds by EPA Method 8270D SIM

| Analyte                  | Result      | Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------------------|-------------|-------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthylene           | ND          | 5.00  | ug/kg | 1        | 1403064 | 03/10/14 | 03/11/14 | EPA 8270D SIM |       |
| Anthracene               | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) anthracene     | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (b) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (k) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (g,h,i) perylene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) pyrene         | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Chrysene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Dibenz (a,h) anthracene  | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluoranthene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluorene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Indeno (1,2,3-cd) pyrene | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| <b>Naphthalene</b>       | <b>9.17</b> | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Phenanthrene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Pyrene                   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |

Date Sampled: 03/06/14 10:50

| Analyte                            | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 2-Methylnaphthalene-d10 |        | 66.1 %          | 50-150 |          | "     | "        | "        | "      |       |
| Surrogate: Fluoranthene-d10        |        | 84.5 %          | 50-150 |          | "     | "        | "        | "      |       |

#### Total Metals by EPA Method 6020 - Dry Weight Basis

Date Sampled: 03/06/14 10:50

| Analyte         | Result       | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>Arsenic</b>  | <b>2.86</b>  | 0.112           | mg/kg dry | 1        | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |       |
| <b>Barium</b>   | <b>131</b>   | 0.112           | "         | "        | "       | "        | "        | "         |       |
| <b>Cadmium</b>  | <b>0.145</b> | 0.112           | "         | "        | "       | "        | "        | "         |       |
| <b>Chromium</b> | <b>9.48</b>  | 0.562           | "         | "        | "       | "        | "        | "         |       |
| <b>Copper</b>   | <b>7.24</b>  | 0.562           | "         | "        | "       | "        | "        | "         |       |
| <b>Lead</b>     | <b>9.15</b>  | 0.112           | "         | "        | "       | "        | "        | "         |       |
| <b>Nickel</b>   | <b>10.8</b>  | 0.112           | "         | "        | "       | "        | "        | "         |       |
| <b>Selenium</b> | <b>0.201</b> | 0.0562          | "         | "        | "       | "        | "        | "         |       |
| Silver          | ND           | 0.112           | "         | "        | "       | "        | "        | "         |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

Reported:  
03/16/14 22:15

SS02@6"  
1403040-02 (Soil)

### Summit Scientific

#### Total Metals by EPA Method 6020 - Dry Weight Basis

|      |      |                |   |         |          |          |           |
|------|------|----------------|---|---------|----------|----------|-----------|
| Zinc | 30.0 | 11.2 mg/kg dry | 1 | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |
|------|------|----------------|---|---------|----------|----------|-----------|

#### Total Mercury by EPA Method 7471/7470/245.1

Date Sampled: 03/06/14 10:50

| Analyte | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|---------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Mercury | ND     | 0.0562          | mg/kg dry | 1        | 1403056 | 03/10/14 | 03/10/14 | EPA 7471 |       |

#### Hexavalent Chromium by EPA 7196

Date Sampled: 03/06/14 10:50

| Analyte              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|----------------------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Chromium, Hexavalent | ND     | 0.982           | mg/kg dry | 1        | 1403052 | 03/08/14 | 03/10/14 | EPA 7196 |       |

#### Calculated Analytes

Date Sampled: 03/06/14 10:50

| Analyte               | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method      | Notes |
|-----------------------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| Chromium+3 Calculated | 8.50   | 1.00            | mg/kg | 1        | 1403063 | 03/10/14 | 03/16/14 | Calculation |       |

#### Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 03/06/14 10:50

| Analyte   | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method                        | Notes |
|-----------|--------|-----------------|-----------|----------|---------|----------|----------|-------------------------------|-------|
| Calcium   | 236    | 11.2            | mg/kg dry | 1        | 1403088 | 03/13/14 | 03/13/14 | EPA 6020/Mod. USDA60 6(2, 3A) |       |
| Magnesium | 43.2   | 5.62            | "         | "        | "       | "        | "        | "                             |       |
| Sodium    | 75.1   | 16.9            | "         | "        | "       | "        | "        | "                             |       |

Date Sampled: 03/06/14 10:50

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**SS02@6"**  
**1403040-02 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

|                                |             |       |   |         |          |          |  |
|--------------------------------|-------------|-------|---|---------|----------|----------|--|
| <b>Sodium Adsorption Ratio</b> | <b>1.18</b> | units | 1 | 1403095 | 03/13/14 | 03/14/14 | EPA<br>6020/Mod.<br>USDA60 6(2,<br>3A) |
|--------------------------------|-------------|-------|---|---------|----------|----------|--|

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/06/14 10:50**

| Analyte                          | Result      | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|----------------------------------|-------------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| <b>Specific Conductance (EC)</b> | <b>1.03</b> | 0.0100             | mmhos/cm | 1        | 1403083 | 03/12/14 | 03/12/14 | SM 2510B |       |

Date Sampled: **03/06/14 10:50**

| Analyte   | Result      | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|-----------|-------------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| <b>pH</b> | <b>7.91</b> | 0.100              | pH Units | "        | 1403084 | 03/12/14 | 03/12/14 | EPA 9045 |       |

Date Sampled: **03/06/14 10:50**

| Analyte         | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------|-------------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>% Solids</b> | <b>88.9</b> |                    | %     | "        | 1403057 | 03/07/14 | 03/10/14 | % calculation |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

Reported:  
03/16/14 22:15

**SS03@6"**  
**1403040-03 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/06/14 10:55**

| Analyte            | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method | Notes |
|--------------------|--------|-----------------|-------|----------|---------|----------|----------|--------|-------|
| C10-C28 (TEPH-DRO) | ND     | 50              | mg/kg | 1        | 1403060 | 03/07/14 | 03/08/14 | 8015M  |       |
| C28-C36 (TEPH-ORO) | ND     | 50              | "     | "        | "       | "        | "        | "      |       |

Date Sampled: **03/06/14 10:55**

| Analyte                        | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: <i>o</i> -Terphenyl |        | 106 %           | 30-150 |          | "     | "        | "        | "      |       |

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **03/06/14 10:55**

| Analyte                     | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene                     | ND     | 0.0020          | mg/kg | 1        | 1403058 | 03/07/14 | 03/08/14 | EPA 8260B |       |
| Toluene                     | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene                | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total)             | ND     | 0.0050          | "     | "        | "       | "        | "        | "         |       |
| Gasoline Range Hydrocarbons | ND     | 0.50            | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **03/06/14 10:55**

| Analyte                          | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 105 %           | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 95.3 %          | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 95.8 %          | 21-167 |          | "     | "        | "        | "      |       |

**Semivolatile Organic Compounds by EPA Method 8270D SIM**

Date Sampled: **03/06/14 10:55**

| Analyte      | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method           | Notes |
|--------------|--------|-----------------|-------|----------|---------|----------|----------|------------------|-------|
| Acenaphthene | ND     | 5.00            | ug/kg | 1        | 1403064 | 03/10/14 | 03/11/14 | EPA 8270D<br>SIM |       |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212

Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**SS03@6"**  
**1403040-03 (Soil)**

### Summit Scientific

#### Semivolatile Organic Compounds by EPA Method 8270D SIM

| Analyte                  | Result      | Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------------------|-------------|-------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthylene           | ND          | 5.00  | ug/kg | 1        | 1403064 | 03/10/14 | 03/11/14 | EPA 8270D SIM |       |
| Anthracene               | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) anthracene     | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (b) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (k) fluoranthene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (g,h,i) perylene   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Benzo (a) pyrene         | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Chrysene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Dibenz (a,h) anthracene  | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluoranthene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Fluorene                 | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Indeno (1,2,3-cd) pyrene | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| <b>Naphthalene</b>       | <b>7.92</b> | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Phenanthrene             | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |
| Pyrene                   | ND          | 5.00  | "     | "        | "       | "        | "        | "             |       |

Date Sampled: 03/06/14 10:55

| Analyte                            | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 2-Methylnaphthalene-d10 |        | 135 %           | 50-150 |          | "     | "        | "        | "      |       |
| Surrogate: Fluoranthene-d10        |        | 133 %           | 50-150 |          | "     | "        | "        | "      |       |

#### Total Metals by EPA Method 6020 - Dry Weight Basis

Date Sampled: 03/06/14 10:55

| Analyte         | Result       | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>Arsenic</b>  | <b>1.70</b>  | 0.115           | mg/kg dry | 1        | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |       |
| <b>Barium</b>   | <b>153</b>   | 0.115           | "         | "        | "       | "        | "        | "         |       |
| <b>Cadmium</b>  | <b>0.249</b> | 0.115           | "         | "        | "       | "        | "        | "         |       |
| <b>Chromium</b> | <b>14.1</b>  | 0.576           | "         | "        | "       | "        | "        | "         |       |
| <b>Copper</b>   | <b>7.12</b>  | 0.576           | "         | "        | "       | "        | "        | "         |       |
| <b>Lead</b>     | <b>11.8</b>  | 0.115           | "         | "        | "       | "        | "        | "         |       |
| <b>Nickel</b>   | <b>14.0</b>  | 0.115           | "         | "        | "       | "        | "        | "         |       |
| <b>Selenium</b> | <b>0.328</b> | 0.0576          | "         | "        | "       | "        | "        | "         |       |
| Silver          | ND           | 0.115           | "         | "        | "       | "        | "        | "         |       |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

Reported:  
03/16/14 22:15

SS03@6"  
1403040-03 (Soil)

Summit Scientific

**Total Metals by EPA Method 6020 - Dry Weight Basis**

|      |      |                |   |         |          |          |           |
|------|------|----------------|---|---------|----------|----------|-----------|
| Zinc | 38.3 | 11.5 mg/kg dry | 1 | 1403055 | 03/16/14 | 03/16/14 | EPA 6020A |
|------|------|----------------|---|---------|----------|----------|-----------|

**Total Mercury by EPA Method 7471/7470/245.1**

Date Sampled: 03/06/14 10:55

| Analyte | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|---------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Mercury | ND     | 0.0417          | mg/kg dry | 1        | 1403056 | 03/10/14 | 03/10/14 | EPA 7471 |       |

**Hexavalent Chromium by EPA 7196**

Date Sampled: 03/06/14 10:55

| Analyte              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|----------------------|--------|-----------------|-----------|----------|---------|----------|----------|----------|-------|
| Chromium, Hexavalent | ND     | 1.11            | mg/kg dry | 1        | 1403052 | 03/08/14 | 03/10/14 | EPA 7196 |       |

**Calculated Analytes**

Date Sampled: 03/06/14 10:55

| Analyte               | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method      | Notes |
|-----------------------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| Chromium+3 Calculated | 13.0   | 1.00            | mg/kg | 1        | 1403063 | 03/10/14 | 03/16/14 | Calculation |       |

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: 03/06/14 10:55

| Analyte   | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method                        | Notes |
|-----------|--------|-----------------|-----------|----------|---------|----------|----------|-------------------------------|-------|
| Calcium   | 192    | 12.8            | mg/kg dry | 1        | 1403088 | 03/13/14 | 03/13/14 | EPA 6020/Mod. USDA60 6(2, 3A) |       |
| Magnesium | 121    | 6.39            | "         | "        | "       | "        | "        | "                             |       |
| Sodium    | 1600   | 19.2            | "         | "        | "       | "        | "        | "                             |       |

Date Sampled: 03/06/14 10:55

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**SS03@6"**  
**1403040-03 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

|                                |             |       |   |         |          |          |  |
|--------------------------------|-------------|-------|---|---------|----------|----------|--|
| <b>Sodium Adsorption Ratio</b> | <b>22.3</b> | units | 1 | 1403095 | 03/13/14 | 03/14/14 | EPA<br>6020/Mod.<br>USDA60 6(2,<br>3A) |
|--------------------------------|-------------|-------|---|---------|----------|----------|--|

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/06/14 10:55**

| Analyte                          | Result      | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|----------------------------------|-------------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| <b>Specific Conductance (EC)</b> | <b>2.64</b> | 0.0100             | mmhos/cm | 1        | 1403083 | 03/12/14 | 03/12/14 | SM 2510B |       |

Date Sampled: **03/06/14 10:55**

| Analyte   | Result      | Reporting<br>Limit | Units    | Dilution | Batch   | Prepared | Analyzed | Method   | Notes |
|-----------|-------------|--------------------|----------|----------|---------|----------|----------|----------|-------|
| <b>pH</b> | <b>8.29</b> | 0.100              | pH Units | "        | 1403084 | 03/12/14 | 03/12/14 | EPA 9045 |       |

Date Sampled: **03/06/14 10:55**

| Analyte         | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------|-------------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>% Solids</b> | <b>78.3</b> |                    | %     | "        | 1403057 | 03/07/14 | 03/10/14 | % calculation |       |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403060 - EPA 3550A**

**Blank (1403060-BLK1)**

Prepared & Analyzed: 03/07/14

|                    |    |    |       |
|--------------------|----|----|-------|
| C10-C28 (TEPH-DRO) | ND | 50 | mg/kg |
| C28-C36 (TEPH-ORO) | ND | 50 | "     |

**LCS (1403060-BS1)**

Prepared & Analyzed: 03/07/14

|                    |     |    |       |     |      |        |
|--------------------|-----|----|-------|-----|------|--------|
| C10-C28 (TEPH-DRO) | 494 | 50 | mg/kg | 496 | 99.7 | 73-134 |
|--------------------|-----|----|-------|-----|------|--------|

**Matrix Spike (1403060-MS1)**

**Source: 1403042-04**

Prepared & Analyzed: 03/07/14

|                    |     |    |       |     |    |     |        |
|--------------------|-----|----|-------|-----|----|-----|--------|
| C10-C28 (TEPH-DRO) | 494 | 50 | mg/kg | 492 | ND | 100 | 50-148 |
|--------------------|-----|----|-------|-----|----|-----|--------|

**Matrix Spike Dup (1403060-MSD1)**

**Source: 1403042-04**

Prepared & Analyzed: 03/07/14

|                    |     |    |       |     |    |     |        |      |    |
|--------------------|-----|----|-------|-----|----|-----|--------|------|----|
| C10-C28 (TEPH-DRO) | 529 | 50 | mg/kg | 495 | ND | 107 | 50-148 | 6.88 | 13 |
|--------------------|-----|----|-------|-----|----|-----|--------|------|----|

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403058 - EPA 5030 Soil MS**

**Blank (1403058-BLK1)**

Prepared & Analyzed: 03/07/14

|                                  |        |        |       |        |  |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|--|------|--------|--|--|--|
| Benzene                          | ND     | 0.0020 | mg/kg |        |  |      |        |  |  |  |
| Toluene                          | ND     | 0.0050 | "     |        |  |      |        |  |  |  |
| Ethylbenzene                     | ND     | 0.0050 | "     |        |  |      |        |  |  |  |
| Xylenes (total)                  | ND     | 0.0050 | "     |        |  |      |        |  |  |  |
| Gasoline Range Hydrocarbons      | ND     | 0.50   | "     |        |  |      |        |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0402 |        | "     | 0.0380 |  | 106  | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0369 |        | "     | 0.0383 |  | 96.4 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0351 |        | "     | 0.0383 |  | 91.7 | 21-167 |  |  |  |

**LCS (1403058-BS1)**

Prepared & Analyzed: 03/07/14

|                                  |        |        |       |        |  |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|--|------|--------|--|--|--|
| Benzene                          | 0.139  | 0.0020 | mg/kg | 0.145  |  | 95.5 | 58-130 |  |  |  |
| Toluene                          | 0.136  | 0.0050 | "     | 0.145  |  | 93.8 | 61-134 |  |  |  |
| Ethylbenzene                     | 0.139  | 0.0050 | "     | 0.145  |  | 95.6 | 74-139 |  |  |  |
| m,p-Xylene                       | 0.278  | 0.010  | "     | 0.291  |  | 95.5 | 73-137 |  |  |  |
| o-Xylene                         | 0.140  | 0.0050 | "     | 0.145  |  | 96.1 | 73-141 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0374 |        | "     | 0.0385 |  | 97.1 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0380 |        | "     | 0.0388 |  | 98.0 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0388 |        | "     | 0.0388 |  | 100  | 21-167 |  |  |  |

**Matrix Spike (1403058-MS1)**

Source: 1403025-01

Prepared & Analyzed: 03/07/14

|                                  |        |        |       |        |    |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|----|------|--------|--|--|--|
| Benzene                          | 0.0990 | 0.0020 | mg/kg | 0.143  | ND | 69.4 | 30-131 |  |  |  |
| Toluene                          | 0.0933 | 0.0050 | "     | 0.143  | ND | 65.4 | 30-134 |  |  |  |
| Ethylbenzene                     | 0.0960 | 0.0050 | "     | 0.143  | ND | 67.3 | 22-153 |  |  |  |
| m,p-Xylene                       | 0.190  | 0.010  | "     | 0.285  | ND | 66.8 | 10-159 |  |  |  |
| o-Xylene                         | 0.0956 | 0.0050 | "     | 0.143  | ND | 67.0 | 31-151 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0415 |        | "     | 0.0377 |    | 110  | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0371 |        | "     | 0.0380 |    | 97.5 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0383 |        | "     | 0.0380 |    | 101  | 21-167 |  |  |  |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

Reported:  
03/16/14 22:15

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403058 - EPA 5030 Soil MS**

| Matrix Spike Dup (1403058-MSD1)  | Source: 1403025-01 |        |       | Prepared & Analyzed: 03/07/14 |    |      |        |      |    |  |
|----------------------------------|--------------------|--------|-------|-------------------------------|----|------|--------|------|----|--|
| Benzene                          | 0.0951             | 0.0020 | mg/kg | 0.150                         | ND | 63.5 | 30-131 | 4.01 | 34 |  |
| Toluene                          | 0.0913             | 0.0050 | "     | 0.150                         | ND | 61.0 | 30-134 | 2.22 | 30 |  |
| Ethylbenzene                     | 0.0922             | 0.0050 | "     | 0.150                         | ND | 61.6 | 22-153 | 3.95 | 24 |  |
| m,p-Xylene                       | 0.183              | 0.010  | "     | 0.299                         | ND | 61.1 | 10-159 | 4.04 | 68 |  |
| o-Xylene                         | 0.0914             | 0.0050 | "     | 0.150                         | ND | 61.0 | 31-151 | 4.51 | 38 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0460             |        | "     | 0.0396                        |    | 116  | 23-173 |      |    |  |
| Surrogate: Toluene-d8            | 0.0389             |        | "     | 0.0399                        |    | 97.5 | 20-170 |      |    |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0401             |        | "     | 0.0399                        |    | 100  | 21-167 |      |    |  |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**Semivolatile Organic Compounds by EPA Method 8270D SIM - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403064 - EPA 5030 Soil MS**

**Blank (1403064-BLK1)**

Prepared: 03/10/14 Analyzed: 03/11/14

|                                    |      |      |       |      |  |      |        |  |  |  |
|------------------------------------|------|------|-------|------|--|------|--------|--|--|--|
| Acenaphthene                       | ND   | 5.00 | ug/kg |      |  |      |        |  |  |  |
| Acenaphthylene                     | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Anthracene                         | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Benzo (a) anthracene               | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Benzo (b) fluoranthene             | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Benzo (k) fluoranthene             | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Benzo (g,h,i) perylene             | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Benzo (a) pyrene                   | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Chrysene                           | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Dibenz (a,h) anthracene            | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Fluoranthene                       | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Fluorene                           | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Indeno (1,2,3-cd) pyrene           | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Naphthalene                        | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Phenanthrene                       | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Pyrene                             | ND   | 5.00 | "     |      |  |      |        |  |  |  |
| Surrogate: 2-Methylnaphthalene-d10 | 26.1 |      | "     | 34.6 |  | 75.3 | 50-150 |  |  |  |
| Surrogate: Fluoranthene-d10        | 36.0 |      | "     | 34.8 |  | 103  | 50-150 |  |  |  |

**LCS (1403064-BS1)**

Prepared: 03/10/14 Analyzed: 03/11/14

|                                    |      |      |       |      |  |      |        |  |  |  |
|------------------------------------|------|------|-------|------|--|------|--------|--|--|--|
| Acenaphthene                       | 29.5 | 5.00 | ug/kg | 33.3 |  | 88.5 | 50-150 |  |  |  |
| Acenaphthylene                     | 29.3 | 5.00 | "     | 33.3 |  | 87.8 | 50-150 |  |  |  |
| Anthracene                         | 35.0 | 5.00 | "     | 33.3 |  | 105  | 50-150 |  |  |  |
| Benzo (a) anthracene               | 27.3 | 5.00 | "     | 33.3 |  | 81.8 | 50-150 |  |  |  |
| Benzo (b) fluoranthene             | 27.3 | 5.00 | "     | 33.3 |  | 82.0 | 50-150 |  |  |  |
| Benzo (k) fluoranthene             | 30.9 | 5.00 | "     | 33.3 |  | 92.7 | 50-150 |  |  |  |
| Benzo (g,h,i) perylene             | 33.8 | 5.00 | "     | 33.3 |  | 101  | 50-150 |  |  |  |
| Benzo (a) pyrene                   | 29.0 | 5.00 | "     | 33.3 |  | 86.9 | 50-150 |  |  |  |
| Chrysene                           | 32.6 | 5.00 | "     | 33.3 |  | 97.7 | 50-150 |  |  |  |
| Dibenz (a,h) anthracene            | 32.4 | 5.00 | "     | 33.3 |  | 97.1 | 50-150 |  |  |  |
| Fluoranthene                       | 34.1 | 5.00 | "     | 33.3 |  | 102  | 50-150 |  |  |  |
| Fluorene                           | 26.9 | 5.00 | "     | 33.3 |  | 80.8 | 50-150 |  |  |  |
| Indeno (1,2,3-cd) pyrene           | 31.3 | 5.00 | "     | 33.3 |  | 94.0 | 50-150 |  |  |  |
| Naphthalene                        | 29.2 | 5.00 | "     | 33.3 |  | 87.5 | 50-150 |  |  |  |
| Phenanthrene                       | 27.8 | 5.00 | "     | 33.3 |  | 83.4 | 50-150 |  |  |  |
| Pyrene                             | 30.3 | 5.00 | "     | 33.3 |  | 90.8 | 50-150 |  |  |  |
| Surrogate: 2-Methylnaphthalene-d10 | 28.5 |      | "     | 34.6 |  | 82.2 | 50-150 |  |  |  |
| Surrogate: Fluoranthene-d10        | 35.7 |      | "     | 34.8 |  | 102  | 50-150 |  |  |  |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**Semivolatile Organic Compounds by EPA Method 8270D SIM - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403064 - EPA 5030 Soil MS**

**LCS Dup (1403064-BSD1)**

Prepared: 03/10/14 Analyzed: 03/11/14

|                                    |      |      |       |      |  |      |        |        |    |  |
|------------------------------------|------|------|-------|------|--|------|--------|--------|----|--|
| Acenaphthene                       | 29.3 | 5.00 | ug/kg | 33.3 |  | 87.8 | 50-150 | 0.874  | 20 |  |
| Acenaphthylene                     | 29.1 | 5.00 | "     | 33.3 |  | 87.4 | 50-150 | 0.456  | 20 |  |
| Anthracene                         | 34.4 | 5.00 | "     | 33.3 |  | 103  | 50-150 | 1.66   | 20 |  |
| Benzo (a) anthracene               | 26.8 | 5.00 | "     | 33.3 |  | 80.3 | 50-150 | 1.85   | 20 |  |
| Benzo (b) fluoranthene             | 27.3 | 5.00 | "     | 33.3 |  | 81.8 | 50-150 | 0.242  | 20 |  |
| Benzo (k) fluoranthene             | 30.9 | 5.00 | "     | 33.3 |  | 92.8 | 50-150 | 0.152  | 20 |  |
| Benzo (g,h,i) perylene             | 32.9 | 5.00 | "     | 33.3 |  | 98.6 | 50-150 | 2.82   | 20 |  |
| Benzo (a) pyrene                   | 28.9 | 5.00 | "     | 33.3 |  | 86.8 | 50-150 | 0.0771 | 20 |  |
| Chrysene                           | 31.9 | 5.00 | "     | 33.3 |  | 95.7 | 50-150 | 2.05   | 20 |  |
| Dibenz (a,h) anthracene            | 32.2 | 5.00 | "     | 33.3 |  | 96.6 | 50-150 | 0.527  | 20 |  |
| Fluoranthene                       | 33.6 | 5.00 | "     | 33.3 |  | 101  | 50-150 | 1.39   | 20 |  |
| Fluorene                           | 26.5 | 5.00 | "     | 33.3 |  | 79.6 | 50-150 | 1.43   | 20 |  |
| Indeno (1,2,3-cd) pyrene           | 31.1 | 5.00 | "     | 33.3 |  | 93.3 | 50-150 | 0.752  | 20 |  |
| Naphthalene                        | 28.8 | 5.00 | "     | 33.3 |  | 86.5 | 50-150 | 1.19   | 20 |  |
| Phenanthrene                       | 27.8 | 5.00 | "     | 33.3 |  | 83.3 | 50-150 | 0.125  | 20 |  |
| Pyrene                             | 30.2 | 5.00 | "     | 33.3 |  | 90.6 | 50-150 | 0.297  | 20 |  |
| Surrogate: 2-Methylnaphthalene-d10 | 27.3 |      | "     | 34.6 |  | 78.9 | 50-150 |        |    |  |
| Surrogate: Fluoranthene-d10        | 33.6 |      | "     | 34.8 |  | 96.5 | 50-150 |        |    |  |

**Duplicate (1403064-DUP1)**

Source: 1403039-01

Prepared: 03/10/14 Analyzed: 03/11/14

|                                    |      |      |       |      |      |      |        |      |     |  |
|------------------------------------|------|------|-------|------|------|------|--------|------|-----|--|
| Acenaphthene                       | ND   | 5.00 | ug/kg |      | ND   |      |        |      | 200 |  |
| Acenaphthylene                     | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Anthracene                         | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Benzo (a) anthracene               | 1.45 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Benzo (b) fluoranthene             | 2.18 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Benzo (k) fluoranthene             | 1.88 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Benzo (g,h,i) perylene             | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Benzo (a) pyrene                   | 1.40 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Chrysene                           | 1.43 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Dibenz (a,h) anthracene            | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Fluoranthene                       | 1.67 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Fluorene                           | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Indeno (1,2,3-cd) pyrene           | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Naphthalene                        | 12.5 | 5.00 | "     |      | 13.0 |      |        | 3.99 | 200 |  |
| Phenanthrene                       | ND   | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Pyrene                             | 2.88 | 5.00 | "     |      | ND   |      |        |      | 200 |  |
| Surrogate: 2-Methylnaphthalene-d10 | 13.6 |      | "     | 17.3 |      | 78.4 | 50-150 |      |     |  |
| Surrogate: Fluoranthene-d10        | 15.2 |      | "     | 17.4 |      | 87.4 | 50-150 |      |     |  |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
03/16/14 22:15

**Semivolatile Organic Compounds by EPA Method 8270D SIM - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403064 - EPA 5030 Soil MS**

| Matrix Spike (1403064-MS1)         |      | Source: 1403040-01 |       |      | Prepared: 03/10/14 |      | Analyzed: 03/11/14 |       |
|------------------------------------|------|--------------------|-------|------|--------------------|------|--------------------|-------|
| Acenaphthene                       | 16.8 | 5.00               | ug/kg | 33.3 | ND                 | 50.4 | 50-150             |       |
| Acenaphthylene                     | 16.4 | 5.00               | "     | 33.3 | ND                 | 49.3 | 50-150             | QM-07 |
| Anthracene                         | 18.8 | 5.00               | "     | 33.3 | ND                 | 56.3 | 50-150             |       |
| Benzo (a) anthracene               | 19.5 | 5.00               | "     | 33.3 | ND                 | 58.5 | 50-150             |       |
| Benzo (b) fluoranthene             | 20.1 | 5.00               | "     | 33.3 | ND                 | 60.4 | 50-150             |       |
| Benzo (k) fluoranthene             | 19.0 | 5.00               | "     | 33.3 | ND                 | 57.1 | 50-150             |       |
| Benzo (g,h,i) perylene             | 19.9 | 5.00               | "     | 33.3 | ND                 | 59.7 | 50-150             |       |
| Benzo (a) pyrene                   | 19.3 | 5.00               | "     | 33.3 | ND                 | 58.0 | 50-150             |       |
| Chrysene                           | 18.5 | 5.00               | "     | 33.3 | ND                 | 55.6 | 50-150             |       |
| Dibenz (a,h) anthracene            | 21.2 | 5.00               | "     | 33.3 | ND                 | 63.5 | 50-150             |       |
| Fluoranthene                       | 19.4 | 5.00               | "     | 33.3 | ND                 | 58.2 | 50-150             |       |
| Fluorene                           | 17.5 | 5.00               | "     | 33.3 | ND                 | 52.6 | 50-150             |       |
| Indeno (1,2,3-cd) pyrene           | 19.6 | 5.00               | "     | 33.3 | ND                 | 58.7 | 50-150             |       |
| Naphthalene                        | 26.2 | 5.00               | "     | 33.3 | 11.7               | 43.5 | 50-150             | QM-07 |
| Phenanthrene                       | 18.1 | 5.00               | "     | 33.3 | ND                 | 54.3 | 50-150             |       |
| Pyrene                             | 19.5 | 5.00               | "     | 33.3 | ND                 | 58.4 | 50-150             |       |
| Surrogate: 2-Methylnaphthalene-d10 | 11.0 |                    | "     | 17.3 |                    | 63.9 | 50-150             |       |
| Surrogate: Fluoranthene-d10        | 13.7 |                    | "     | 17.4 |                    | 79.0 | 50-150             |       |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**Total Metals by EPA Method 6020 - Dry Weight Basis - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403055 - EPA 3050B**

**Blank (1403055-BLK1)**

Prepared & Analyzed: 03/16/14

|          |    |        |           |
|----------|----|--------|-----------|
| Arsenic  | ND | 0.500  | mg/kg wet |
| Barium   | ND | 0.500  | "         |
| Cadmium  | ND | 0.100  | "         |
| Chromium | ND | 0.500  | "         |
| Copper   | ND | 0.500  | "         |
| Lead     | ND | 0.100  | "         |
| Nickel   | ND | 0.100  | "         |
| Selenium | ND | 0.0500 | "         |
| Silver   | ND | 0.100  | "         |
| Zinc     | ND | 10.0   | "         |

**LCS (1403055-BS1)**

Prepared & Analyzed: 03/16/14

|          |      |        |           |      |      |        |
|----------|------|--------|-----------|------|------|--------|
| Arsenic  | 47.2 | 0.500  | mg/kg wet | 45.9 | 103  | 80-120 |
| Barium   | 439  | 0.500  | "         | 459  | 95.7 | 80-120 |
| Cadmium  | 3.95 | 0.100  | "         | 4.59 | 85.9 | 80-120 |
| Chromium | 466  | 0.500  | "         | 459  | 101  | 80-120 |
| Copper   | 46.8 | 0.500  | "         | 45.9 | 102  | 80-120 |
| Lead     | 41.7 | 0.100  | "         | 45.9 | 90.9 | 80-120 |
| Nickel   | 46.4 | 0.100  | "         | 45.9 | 101  | 80-120 |
| Selenium | 44.1 | 0.0500 | "         | 45.9 | 96.0 | 80-120 |
| Silver   | 4.37 | 0.100  | "         | 4.59 | 95.1 | 80-120 |
| Zinc     | 475  | 10.0   | "         | 459  | 103  | 80-120 |

**LCS Dup (1403055-BSD1)**

Prepared & Analyzed: 03/16/14

|          |      |        |           |      |      |        |      |    |
|----------|------|--------|-----------|------|------|--------|------|----|
| Arsenic  | 46.6 | 0.453  | mg/kg wet | 45.3 | 103  | 80-120 | 1.28 | 20 |
| Barium   | 434  | 0.453  | "         | 453  | 95.7 | 80-120 | 1.28 | 20 |
| Cadmium  | 3.90 | 0.0907 | "         | 4.53 | 85.9 | 80-120 | 1.28 | 20 |
| Chromium | 460  | 0.453  | "         | 453  | 101  | 80-120 | 1.28 | 20 |
| Copper   | 46.2 | 0.453  | "         | 45.3 | 102  | 80-120 | 1.28 | 20 |
| Lead     | 41.2 | 0.0907 | "         | 45.3 | 90.9 | 80-120 | 1.28 | 20 |
| Nickel   | 45.8 | 0.0907 | "         | 45.3 | 101  | 80-120 | 1.28 | 20 |
| Selenium | 43.5 | 0.0453 | "         | 45.3 | 96.0 | 80-120 | 1.28 | 20 |
| Silver   | 4.31 | 0.0907 | "         | 4.53 | 95.1 | 80-120 | 1.28 | 20 |
| Zinc     | 469  | 9.07   | "         | 453  | 103  | 80-120 | 1.28 | 20 |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**Total Metals by EPA Method 6020 - Dry Weight Basis - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403055 - EPA 3050B**

| Matrix Spike (1403055-MS1) |      | Source: 1403039-01 |           |      | Prepared & Analyzed: 03/16/14 |      |        |  |  |       |
|----------------------------|------|--------------------|-----------|------|-------------------------------|------|--------|--|--|-------|
| Arsenic                    | 40.4 | 0.514              | mg/kg dry | 51.4 | 0.878                         | 77.0 | 75-125 |  |  |       |
| Barium                     | 434  | 0.514              | "         | 514  | 6.35                          | 83.2 | 75-125 |  |  |       |
| Cadmium                    | 4.00 | 0.103              | "         | 5.14 | 0.106                         | 75.7 | 75-125 |  |  |       |
| Chromium                   | 427  | 0.514              | "         | 514  | 0.895                         | 82.8 | 75-125 |  |  |       |
| Copper                     | 45.0 | 0.514              | "         | 51.4 | 7.11                          | 73.7 | 75-125 |  |  | QM-07 |
| Lead                       | 51.9 | 0.103              | "         | 51.4 | 16.0                          | 70.0 | 75-125 |  |  | QM-07 |
| Nickel                     | 42.5 | 0.103              | "         | 51.4 | 0.572                         | 81.6 | 75-125 |  |  |       |
| Selenium                   | 40.0 | 0.0514             | "         | 51.4 | 0.0272                        | 77.7 | 75-125 |  |  |       |
| Silver                     | 4.35 | 0.103              | "         | 5.14 | 0.104                         | 82.7 | 75-125 |  |  |       |
| Zinc                       | 426  | 10.3               | "         | 514  | 30.7                          | 76.9 | 75-125 |  |  |       |

| Matrix Spike Dup (1403055-MSD1) |      | Source: 1403039-01 |           |      | Prepared & Analyzed: 03/16/14 |      |        |       |    |       |
|---------------------------------|------|--------------------|-----------|------|-------------------------------|------|--------|-------|----|-------|
| Arsenic                         | 40.3 | 0.592              | mg/kg dry | 56.6 | 0.878                         | 69.7 | 75-125 | 0.368 | 25 | QM-07 |
| Barium                          | 450  | 0.592              | "         | 566  | 6.35                          | 78.5 | 75-125 | 3.65  | 25 |       |
| Cadmium                         | 4.31 | 0.118              | "         | 5.66 | 0.106                         | 74.3 | 75-125 | 7.57  | 25 | QM-07 |
| Chromium                        | 438  | 0.592              | "         | 566  | 0.895                         | 77.2 | 75-125 | 2.57  | 25 |       |
| Copper                          | 45.1 | 0.592              | "         | 56.6 | 7.11                          | 67.1 | 75-125 | 0.147 | 25 | QM-07 |
| Lead                            | 58.5 | 0.118              | "         | 56.6 | 16.0                          | 75.1 | 75-125 | 11.8  | 25 |       |
| Nickel                          | 43.3 | 0.118              | "         | 56.6 | 0.572                         | 75.5 | 75-125 | 1.84  | 25 |       |
| Selenium                        | 41.3 | 0.0592             | "         | 56.6 | 0.0272                        | 73.0 | 75-125 | 3.31  | 25 | QM-07 |
| Silver                          | 4.74 | 0.118              | "         | 5.66 | 0.104                         | 81.9 | 75-125 | 8.47  | 25 |       |
| Zinc                            | 424  | 11.8               | "         | 566  | 30.7                          | 69.5 | 75-125 | 0.536 | 25 | QM-07 |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**Total Mercury by EPA Method 7471/7470/245.1 - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source | %REC |        | RPD |       |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403056 - EPA 7471A**

|  |       |        |           |                               |        |                               |        |       |    |  |       |
|--|-------|--------|-----------|-------------------------------|--------|-------------------------------|--------|-------|----|--|-------|
| <b>Blank (1403056-BLK1)</b>            |       |        |           | Prepared & Analyzed: 03/10/14 |        |                               |        |       |    |  |       |
| Mercury                                | ND    | 0.0400 | mg/kg wet |                               |        |                               |        |       |    |  |       |
| <b>LCS (1403056-BS1)</b>               |       |        |           | Prepared & Analyzed: 03/10/14 |        |                               |        |       |    |  |       |
| Mercury                                | 0.271 | 0.0340 | mg/kg wet | 0.272                         |        | 99.6                          | 80-120 |       |    |  |       |
| <b>LCS Dup (1403056-BSD1)</b>          |       |        |           | Prepared & Analyzed: 03/10/14 |        |                               |        |       |    |  |       |
| Mercury                                | 0.271 | 0.0340 | mg/kg wet | 0.272                         |        | 99.8                          | 80-120 | 0.120 | 20 |  |       |
| <b>Matrix Spike (1403056-MS1)</b>      |       |        |           | <b>Source: 1403039-01</b>     |        | Prepared & Analyzed: 03/10/14 |        |       |    |  |       |
| Mercury                                | 0.255 | 0.0303 | mg/kg dry | 0.243                         | 0.0193 | 97.2                          | 80-120 |       |    |  |       |
| <b>Matrix Spike Dup (1403056-MSD1)</b> |       |        |           | <b>Source: 1403039-01</b>     |        | Prepared & Analyzed: 03/10/14 |        |       |    |  |       |
| Mercury                                | 0.356 | 0.0405 | mg/kg dry | 0.324                         | 0.0193 | 104                           | 80-120 | 32.9  | 20 |  | QM-07 |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
03/16/14 22:15

**Hexavalent Chromium by EPA 7196 - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source | %REC |        | RPD |       |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403052 - General Preparation**

|                                   |      |      |           |      |                                       |      |        |       |    |  |       |
|-----------------------------------|------|------|-----------|------|---------------------------------------|------|--------|-------|----|--|-------|
| <b>Blank (1403052-BLK1)</b>       |      |      |           |      | Prepared: 03/08/14 Analyzed: 03/10/14 |      |        |       |    |  |       |
| Chromium, Hexavalent              | ND   | 1.00 | mg/kg wet |      |                                       |      |        |       |    |  |       |
| <b>LCS (1403052-BS1)</b>          |      |      |           |      | Prepared: 03/08/14 Analyzed: 03/10/14 |      |        |       |    |  |       |
| Chromium, Hexavalent              | 56.6 | 1.25 | mg/kg wet | 64.0 |                                       | 88.4 | 85-115 |       |    |  |       |
| <b>LCS Dup (1403052-BSD1)</b>     |      |      |           |      | Prepared: 03/08/14 Analyzed: 03/10/14 |      |        |       |    |  |       |
| Chromium, Hexavalent              | 56.4 | 1.25 | mg/kg wet | 63.5 |                                       | 88.8 | 85-115 | 0.354 | 20 |  |       |
| <b>Duplicate (1403052-DUP1)</b>   |      |      |           |      | Prepared: 03/08/14 Analyzed: 03/10/14 |      |        |       |    |  |       |
| Chromium, Hexavalent              | ND   | 1.18 | mg/kg dry |      | ND                                    |      |        |       | 20 |  |       |
| <b>Matrix Spike (1403052-MS1)</b> |      |      |           |      | Prepared: 03/08/14 Analyzed: 03/10/14 |      |        |       |    |  |       |
| Chromium, Hexavalent              | 28.7 | 1.18 | mg/kg dry | 22.6 | ND                                    | 127  | 85-115 |       |    |  | QM-07 |

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source | %REC |        | RPD |       |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403088 - General Preparation**

**Blank (1403088-BLK1)**

Prepared & Analyzed: 03/13/14

|           |    |      |           |
|-----------|----|------|-----------|
| Calcium   | ND | 10.0 | mg/kg wet |
| Magnesium | ND | 5.00 | "         |
| Sodium    | ND | 15.0 | "         |

**LCS (1403088-BS1)**

Prepared & Analyzed: 03/13/14

|           |     |      |           |     |      |        |
|-----------|-----|------|-----------|-----|------|--------|
| Calcium   | 362 | 10.0 | mg/kg wet | 382 | 94.8 | 80-120 |
| Magnesium | 166 | 5.00 | "         | 191 | 86.9 | 80-120 |
| Sodium    | 421 | 15.0 | "         | 477 | 88.2 | 80-120 |

**LCS Dup (1403088-BSD1)**

Prepared & Analyzed: 03/13/14

|           |     |      |           |     |      |        |      |    |
|-----------|-----|------|-----------|-----|------|--------|------|----|
| Calcium   | 380 | 10.0 | mg/kg wet | 371 | 102  | 80-120 | 4.94 | 20 |
| Magnesium | 172 | 5.00 | "         | 186 | 92.7 | 80-120 | 3.60 | 20 |
| Sodium    | 464 | 15.0 | "         | 464 | 100  | 80-120 | 9.83 | 20 |

**Matrix Spike (1403088-MS1)**

**Source: 1403039-01**

Prepared & Analyzed: 03/13/14

|           |     |      |           |     |      |     |        |  |       |
|-----------|-----|------|-----------|-----|------|-----|--------|--|-------|
| Calcium   | 545 | 9.44 | mg/kg dry | 377 | 29.1 | 137 | 75-125 |  | QM-07 |
| Magnesium | 253 | 4.72 | "         | 189 | 15.7 | 126 | 75-125 |  | QM-07 |
| Sodium    | 701 | 14.2 | "         | 472 | 58.2 | 136 | 75-125 |  | QM-07 |

**Matrix Spike Dup (1403088-MSD1)**

**Source: 1403039-01**

Prepared & Analyzed: 03/13/14

|           |     |      |           |     |      |      |        |      |    |       |
|-----------|-----|------|-----------|-----|------|------|--------|------|----|-------|
| Calcium   | 428 | 10.2 | mg/kg dry | 409 | 29.1 | 97.6 | 75-125 | 24.0 | 25 |       |
| Magnesium | 200 | 5.11 | "         | 204 | 15.7 | 90.3 | 75-125 | 23.4 | 25 |       |
| Sodium    | 542 | 15.3 | "         | 511 | 58.2 | 94.7 | 75-125 | 25.5 | 25 | QM-07 |

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

| Analyte | Reporting |       |       | Spike | Source | %REC |        | RPD |       |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1403057 - General Preparation**

**Duplicate (1403057-DUP1)**      **Source: 1403040-03**      Prepared & Analyzed: 03/10/14

|          |      |  |   |  |      |  |  |      |    |  |
|----------|------|--|---|--|------|--|--|------|----|--|
| % Solids | 77.0 |  | % |  | 78.3 |  |  | 1.67 | 20 |  |
|----------|------|--|---|--|------|--|--|------|----|--|

**Batch 1403083 - General Preparation**

**Blank (1403083-BLK1)**      Prepared & Analyzed: 03/12/14

|                           |    |        |          |  |  |  |  |  |  |  |
|---------------------------|----|--------|----------|--|--|--|--|--|--|--|
| Specific Conductance (EC) | ND | 0.0100 | mmhos/cm |  |  |  |  |  |  |  |
|---------------------------|----|--------|----------|--|--|--|--|--|--|--|

**Duplicate (1403083-DUP1)**      **Source: 1403040-01**      Prepared & Analyzed: 03/12/14

|                           |      |        |          |  |      |  |  |      |    |  |
|---------------------------|------|--------|----------|--|------|--|--|------|----|--|
| Specific Conductance (EC) | 8.30 | 0.0100 | mmhos/cm |  | 8.10 |  |  | 2.48 | 20 |  |
|---------------------------|------|--------|----------|--|------|--|--|------|----|--|

**Batch 1403084 - General Preparation**

**LCS (1403084-BS1)**      Prepared & Analyzed: 03/12/14

|    |      |       |          |      |  |      |       |  |  |  |
|----|------|-------|----------|------|--|------|-------|--|--|--|
| pH | 7.98 | 0.100 | pH Units | 8.00 |  | 99.8 | 0-200 |  |  |  |
|----|------|-------|----------|------|--|------|-------|--|--|--|

**Duplicate (1403084-DUP1)**      **Source: 1403040-01**      Prepared & Analyzed: 03/12/14

|    |      |       |          |  |      |  |  |       |    |  |
|----|------|-------|----------|--|------|--|--|-------|----|--|
| pH | 7.85 | 0.100 | pH Units |  | 7.88 |  |  | 0.381 | 20 |  |
|----|------|-------|----------|--|------|--|--|-------|----|--|

Summit Scientific

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PDC Energy  
1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: LaSalle 212  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
03/16/14 22:15

### Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.

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