



ANALYTICAL SUMMARY REPORT

January 22, 2016

EOG Resources Inc
600 17th St Ste 1000 N
Denver, CO 80202

Work Order: C16010236
Project Name: Not Indicated

Energy Laboratories, Inc. Casper WY received the following 4 samples for EOG Resources Inc on 1/11/2016 for analysis.

| Lab ID | Client Sample ID | Collect Date | Receive Date | Matrix | Test |
|---------------|------------------|----------------|--------------|--------|---|
| C16010236-001 | CC1 | 01/06/16 12:40 | 01/11/16 | Soil | Metals, Saturated Paste Cancelled Sample Conductivity Ultrasonic Extraction Methanol Extraction for Volatiles Diesel Range Organics Gasoline Range Organics pH, Saturated Paste Saturated Paste Sodium Adsorption Ratio Services Provided by Lab Volatile Organics, Methanol Extraction SW8260B VOCs, BTEX |
| C16010236-002 | CC2 | 01/06/16 13:05 | 01/11/16 | Soil | Same As Above |
| C16010236-003 | CC3 | 01/06/16 13:10 | 01/11/16 | Soil | Same As Above |
| C16010236-004 | CC4 | 01/06/16 13:20 | 01/11/16 | Soil | Same As Above |

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

CLIENT: EOG Resources Inc
Project: Not Indicated
Work Order: C16010236

Report Date: 01/22/16

CASE NARRATIVE

BRANCH LABORATORY SUBCONTRACT ANALYSIS

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

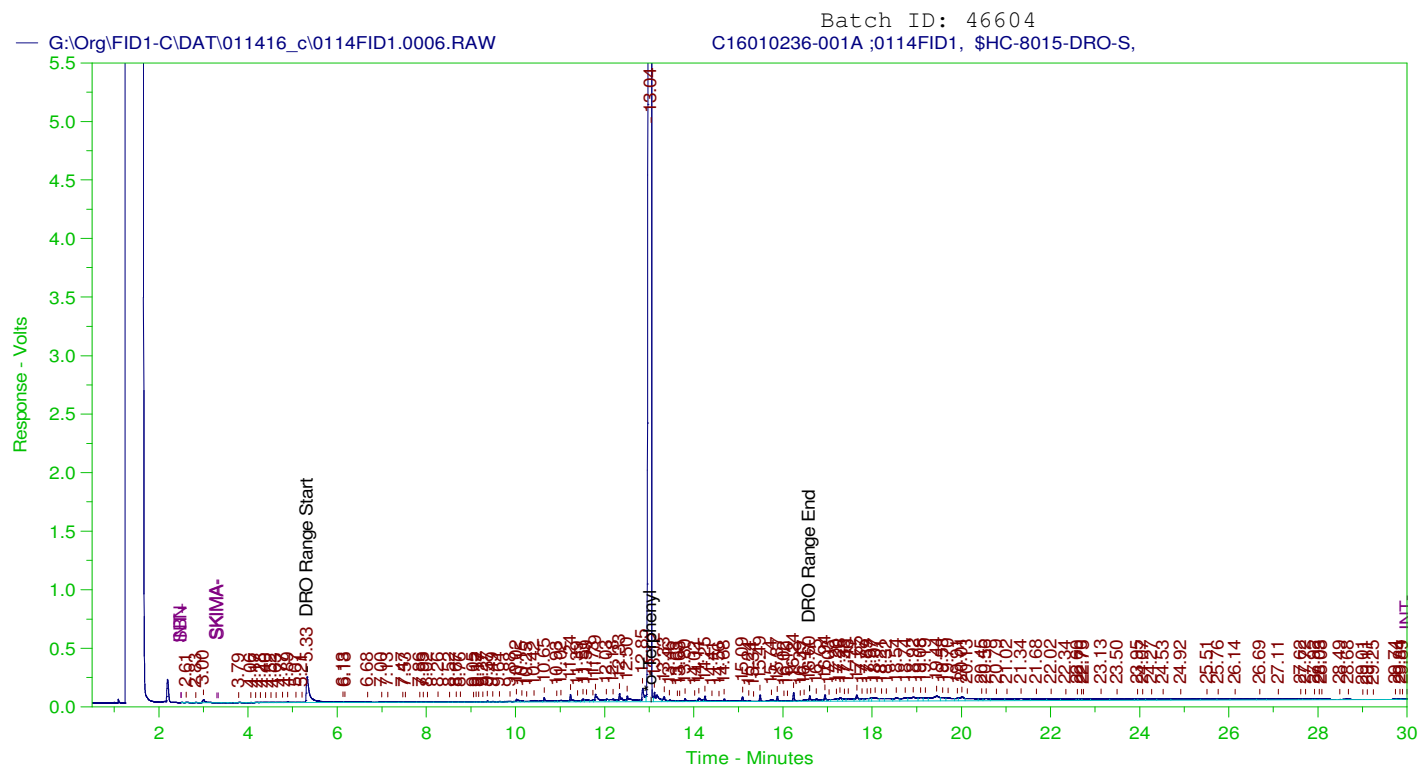
Client: EOG Resources Inc
Project: Not Indicated
Lab ID: C16010236-001
Client Sample ID: CC1

Report Date: 01/22/16
Collection Date: 01/06/16 12:40
Date Received: 01/11/16
Matrix: Soil

| Analyses | Result | Units | Qualifiers | RL | MCL/ QCL | Method | Analysis Date / By |
|-----------------------------------|--------|----------|------------|----------|-------------|------------|------------------------|
| SATURATED PASTE EXTRACT | | | | | | | |
| Conductivity, sat. paste | 1.48 | mmhos/cm | | 0.01 | | ASAM10-3 | 01/20/16 14:02 / eli-b |
| pH, sat. paste | 7.2 | s.u. | | 0.1 | | ASAM10-3.2 | 01/20/16 14:02 / eli-b |
| Calcium, sat. paste | 8.06 | meq/L | D | 0.08 | | SW6010B | 01/21/16 15:44 / eli-b |
| Magnesium, sat. paste | 1.59 | meq/L | | 0.08 | | SW6010B | 01/21/16 15:44 / eli-b |
| Sodium, sat. paste | 1.97 | meq/L | | 0.04 | | SW6010B | 01/21/16 15:44 / eli-b |
| Sodium Adsorption Ratio (SAR) | 0.9 | unitless | | 0.1 | | USDA20B | 01/22/16 11:17 / smm |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | |
| Benzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| Ethylbenzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| m+p-Xylenes | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| o-Xylene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| Toluene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| Xylenes, Total | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:22 / dm |
| Surr: 1,2-Dichlorobenzene-d4 | 98.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:22 / dm |
| Surr: Dibromofluoromethane | 95.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:22 / dm |
| Surr: p-Bromofluorobenzene | 85.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:22 / dm |
| Surr: Toluene-d8 | 94.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:22 / dm |
| ORGANIC CHARACTERISTICS | | | | | | | |
| Diesel Range Organics (DRO) | ND | mg/kg | | 10 | | SW8015B | 01/14/16 16:59 / bah |
| Total Extractable Hydrocarbons | ND | mg/kg | | 10 | | SW8015B | 01/14/16 16:59 / bah |
| Surr: o-Terphenyl | 78.0 | %REC | | 32-106 | | SW8015B | 01/14/16 16:59 / bah |
| Gasoline Range Organics (GRO) | ND | mg/kg | | 4.0 | | SW8015B | 01/15/16 22:52 / jlr |
| Total Purgeable Hydrocarbons | ND | mg/kg | | 4.0 | | SW8015B | 01/15/16 22:52 / jlr |
| Surr: Trifluorotoluene | 115 | %REC | | 53.8-137 | | SW8015B | 01/15/16 22:52 / jlr |

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C16010236-001A ;0114FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\011416_c\0114FID1.0006.RAW
Date & Time Acquired: 1/14/2016 16:59:59
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_122115_R1.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_122115_R1.CAL
Sample Weight: 31.3 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 69425
Rt range for Diesel Range Organics (C10 to C28): 5.21 to 16.72
Rt range for Oil Range Organics (C28 to C40+): 16.58 to End Time

| SURROGATE COMPOUND | RT | ACTUAL | MEASURED | %REC |
|--------------------|--------|--------|----------|-------|
| *o-Terphenyl | 13.041 | 63.898 | 49.944 | 78.16 |

DRO Area:7287276 DRO AMOUNT: 3.353551
TEH Area:1.618894E+07 TEH AMOUNT: 7.450032
Oil Area:8766801 OIL AMOUNT: 4.034418



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

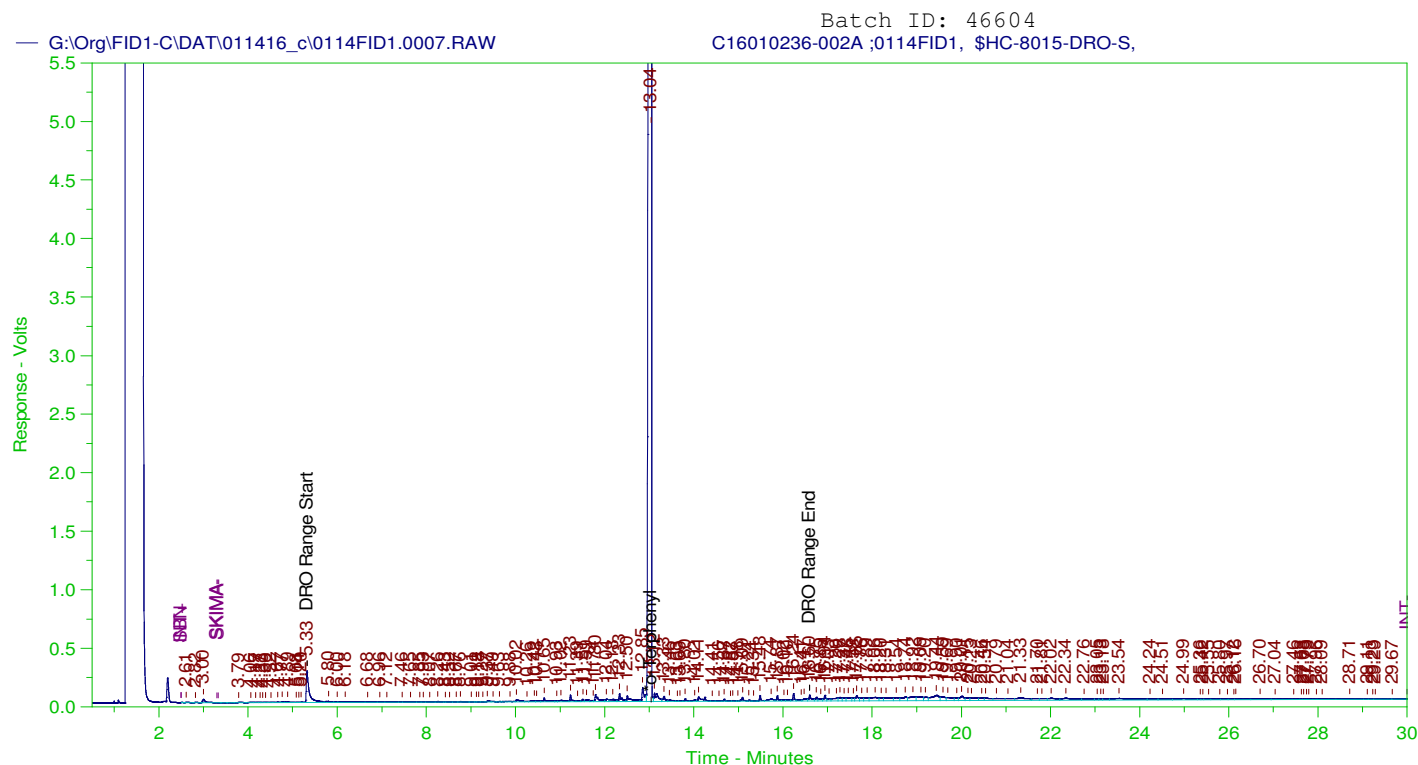
Client: EOG Resources Inc
Project: Not Indicated
Lab ID: C16010236-002
Client Sample ID: CC2

Report Date: 01/22/16
Collection Date: 01/06/16 13:05
Date Received: 01/11/16
Matrix: Soil

| Analyses | Result | Units | Qualifiers | RL | MCL/ QCL | Method | Analysis Date / By |
|-----------------------------------|--------|----------|------------|----------|-------------|------------|------------------------|
| SATURATED PASTE EXTRACT | | | | | | | |
| Conductivity, sat. paste | 11.6 | mmhos/cm | | 0.01 | | ASAM10-3 | 01/20/16 14:02 / eli-b |
| pH, sat. paste | 7.1 | s.u. | | 0.1 | | ASAM10-3.2 | 01/20/16 14:02 / eli-b |
| Calcium, sat. paste | 83.5 | meq/L | | 0.05 | | SW6010B | 01/21/16 13:01 / eli-b |
| Magnesium, sat. paste | 12.8 | meq/L | | 0.08 | | SW6010B | 01/21/16 13:01 / eli-b |
| Sodium, sat. paste | 77.3 | meq/L | D | 0.1 | | SW6010B | 01/21/16 13:01 / eli-b |
| Sodium Adsorption Ratio (SAR) | 11.1 | unitless | | 0.1 | | USDA20B | 01/22/16 11:17 / smm |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | |
| Benzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| Ethylbenzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| m+p-Xylenes | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| o-Xylene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| Toluene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| Xylenes, Total | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 04:58 / dm |
| Surr: 1,2-Dichlorobenzene-d4 | 92.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:58 / dm |
| Surr: Dibromofluoromethane | 94.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:58 / dm |
| Surr: p-Bromofluorobenzene | 81.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:58 / dm |
| Surr: Toluene-d8 | 91.0 | %REC | | 70-130 | | SW8260B | 01/20/16 04:58 / dm |
| ORGANIC CHARACTERISTICS | | | | | | | |
| Diesel Range Organics (DRO) | ND | mg/kg | | 10 | | SW8015B | 01/14/16 17:45 / bah |
| Total Extractable Hydrocarbons | ND | mg/kg | | 10 | | SW8015B | 01/14/16 17:45 / bah |
| Surr: o-Terphenyl | 79.0 | %REC | | 32-106 | | SW8015B | 01/14/16 17:45 / bah |
| Gasoline Range Organics (GRO) | ND | mg/kg | | 4.0 | | SW8015B | 01/15/16 23:28 / jlr |
| Total Purgeable Hydrocarbons | ND | mg/kg | | 4.0 | | SW8015B | 01/15/16 23:28 / jlr |
| Surr: Trifluorotoluene | 115 | %REC | | 53.8-137 | | SW8015B | 01/15/16 23:28 / jlr |

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C16010236-002A ;0114FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\011416_c\0114FID1.0007.RAW
Date & Time Acquired: 1/14/2016 17:45:57
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_122115_R1.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_122115_R1.CAL
Sample Weight: 30.8 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 69425
Rt range for Diesel Range Organics (C10 to C28): 5.21 to 16.72
Rt range for Oil Range Organics (C28 to C40+): 16.58 to End Time

| SURROGATE COMPOUND | RT | ACTUAL | MEASURED | %REC | |
|--------------------|--------|--------|----------|-------|---|
| *o-Terphenyl | 13.042 | 64.935 | 51.045 | 78.61 | - |

DRO Area:7914677 DRO AMOUNT: 3.701405
TEH Area:1.86247E+07 TEH AMOUNT: 8.710092
Oil Area:1.05574E+07 OIL AMOUNT: 4.937309



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

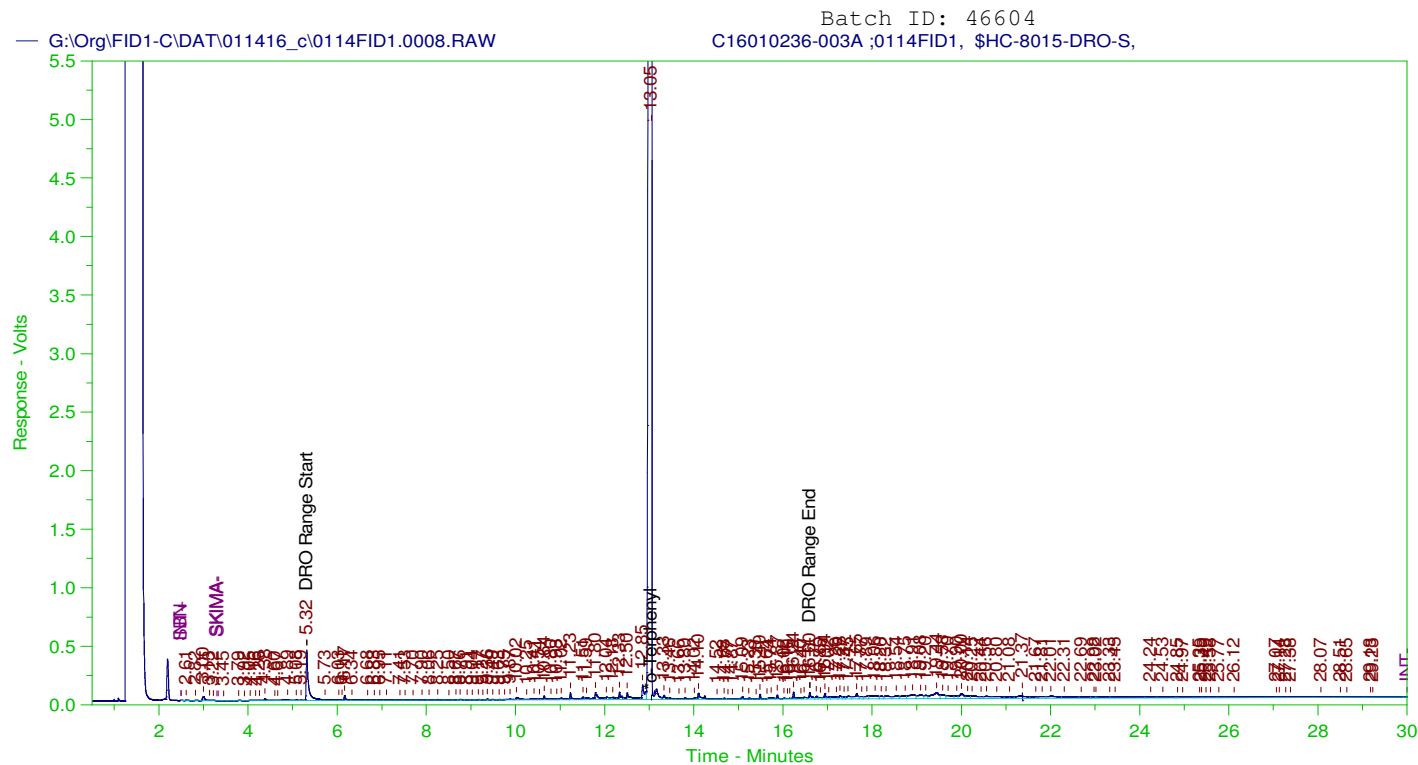
Client: EOG Resources Inc
Project: Not Indicated
Lab ID: C16010236-003
Client Sample ID: CC3

Report Date: 01/22/16
Collection Date: 01/06/16 13:10
Date Received: 01/11/16
Matrix: Soil

| Analyses | Result | Units | Qualifiers | RL | MCL/ QCL | Method | Analysis Date / By |
|-----------------------------------|--------|----------|------------|----------|-------------|------------|------------------------|
| SATURATED PASTE EXTRACT | | | | | | | |
| Conductivity, sat. paste | 7.94 | mmhos/cm | | 0.01 | | ASAM10-3 | 01/20/16 14:02 / eli-b |
| pH, sat. paste | 7.1 | s.u. | | 0.1 | | ASAM10-3.2 | 01/20/16 14:02 / eli-b |
| Calcium, sat. paste | 50.9 | meq/L | | 0.05 | | SW6010B | 01/21/16 13:05 / eli-b |
| Magnesium, sat. paste | 7.95 | meq/L | | 0.08 | | SW6010B | 01/21/16 13:05 / eli-b |
| Sodium, sat. paste | 25.2 | meq/L | D | 0.1 | | SW6010B | 01/21/16 13:05 / eli-b |
| Sodium Adsorption Ratio (SAR) | 4.6 | unitless | | 0.1 | | USDA20B | 01/22/16 11:17 / smm |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | |
| Benzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| Ethylbenzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| m+p-Xylenes | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| o-Xylene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| Toluene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| Xylenes, Total | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 05:33 / dm |
| Surr: 1,2-Dichlorobenzene-d4 | 94.0 | %REC | | 70-130 | | SW8260B | 01/20/16 05:33 / dm |
| Surr: Dibromofluoromethane | 98.0 | %REC | | 70-130 | | SW8260B | 01/20/16 05:33 / dm |
| Surr: p-Bromofluorobenzene | 85.0 | %REC | | 70-130 | | SW8260B | 01/20/16 05:33 / dm |
| Surr: Toluene-d8 | 94.0 | %REC | | 70-130 | | SW8260B | 01/20/16 05:33 / dm |
| ORGANIC CHARACTERISTICS | | | | | | | |
| Diesel Range Organics (DRO) | ND | mg/kg | | 10 | | SW8015B | 01/14/16 18:31 / bah |
| Total Extractable Hydrocarbons | ND | mg/kg | | 10 | | SW8015B | 01/14/16 18:31 / bah |
| Surr: o-Terphenyl | 89.0 | %REC | | 32-106 | | SW8015B | 01/14/16 18:31 / bah |
| Gasoline Range Organics (GRO) | ND | mg/kg | | 4.0 | | SW8015B | 01/16/16 00:05 / jlr |
| Total Purgeable Hydrocarbons | ND | mg/kg | | 4.0 | | SW8015B | 01/16/16 00:05 / jlr |
| Surr: Trifluorotoluene | 116 | %REC | | 53.8-137 | | SW8015B | 01/16/16 00:05 / jlr |

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C16010236-003A ;0114FID1, \$HC-8015-DRO-S,

Raw File: G:\Org\FID1-C\DAT\011416_c\0114FID1.0008.RAW

Date & Time Acquired: 1/14/2016 18:31:54

Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_122115_R1.met

Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_122115_R1.CAL

Sample Weight: 31.7 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 69425

Rt range for Diesel Range Organics (C10 to C28): 5.21 to 16.72

Rt range for Oil Range Organics (C28 to C40+): 16.58 to End Time

| SURROGATE COMPOUND | RT | ACTUAL | MEASURED | %REC |
|--------------------|--------|--------|----------|-------|
| *o-Terphenyl | 13.048 | 63.091 | 56.515 | 89.58 |

DRO Area:7531941 DRO AMOUNT: 3.422408

TEH Area:1.800385E+07 TEH AMOUNT: 8.180696

Oil Area:1.022882E+07 OIL AMOUNT: 4.64783



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

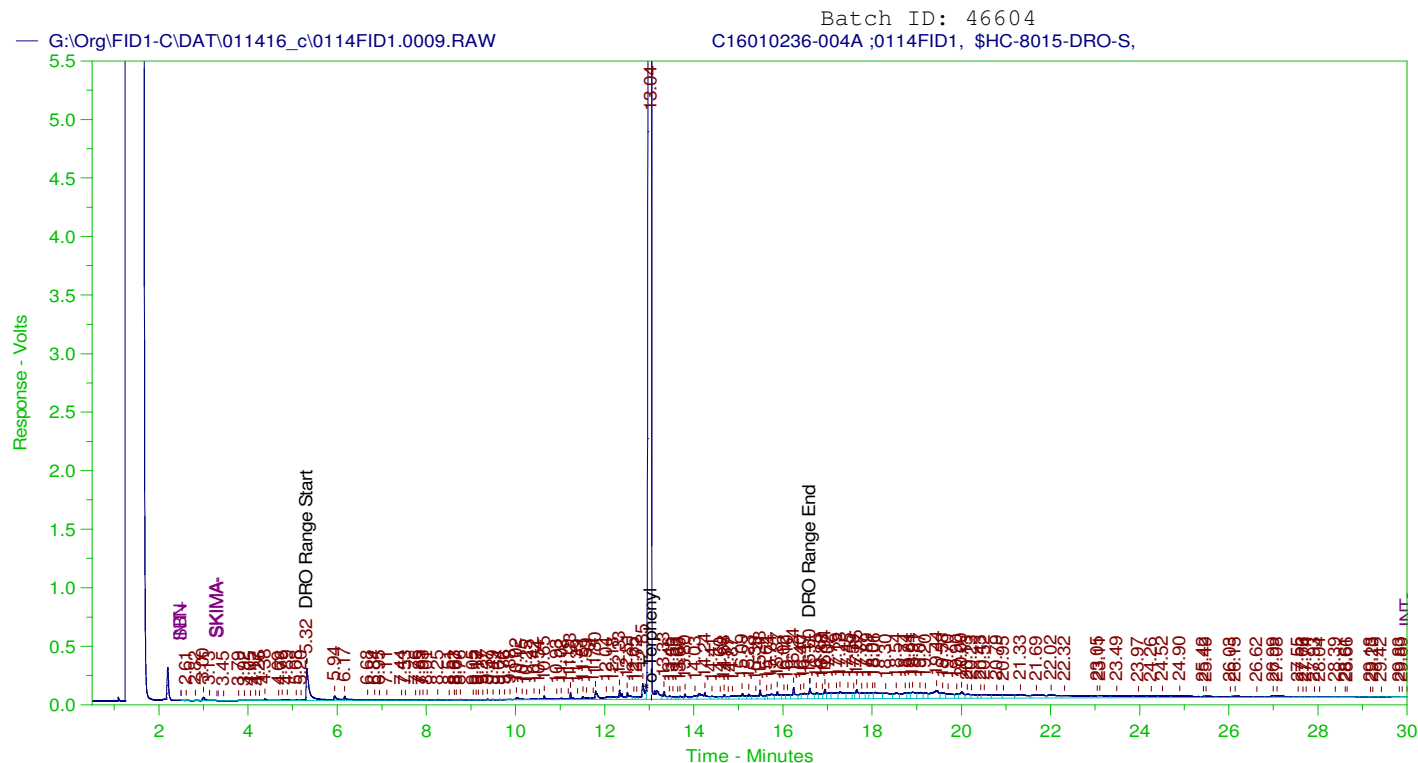
Client: EOG Resources Inc
Project: Not Indicated
Lab ID: C16010236-004
Client Sample ID: CC4

Report Date: 01/22/16
Collection Date: 01/06/16 13:20
Date Received: 01/11/16
Matrix: Soil

| Analyses | Result | Units | Qualifiers | RL | MCL/ QCL | Method | Analysis Date / By |
|-----------------------------------|--------|----------|------------|----------|-------------|------------|------------------------|
| SATURATED PASTE EXTRACT | | | | | | | |
| Conductivity, sat. paste | 6.23 | mmhos/cm | | 0.01 | | ASAM10-3 | 01/20/16 14:02 / eli-b |
| pH, sat. paste | 7.2 | s.u. | | 0.1 | | ASAM10-3.2 | 01/20/16 14:02 / eli-b |
| Calcium, sat. paste | 30.4 | meq/L | | 0.05 | | SW6010B | 01/21/16 13:08 / eli-b |
| Magnesium, sat. paste | 3.77 | meq/L | | 0.08 | | SW6010B | 01/21/16 13:08 / eli-b |
| Sodium, sat. paste | 27.0 | meq/L | D | 0.1 | | SW6010B | 01/21/16 13:08 / eli-b |
| Sodium Adsorption Ratio (SAR) | 6.5 | unitless | | 0.1 | | USDA20B | 01/22/16 11:17 / smm |
| VOLATILE ORGANIC COMPOUNDS | | | | | | | |
| Benzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| Ethylbenzene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| m+p-Xylenes | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| o-Xylene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| Toluene | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| Xylenes, Total | ND | mg/kg | | 0.2 | | SW8260B | 01/20/16 06:08 / dm |
| Surr: 1,2-Dichlorobenzene-d4 | 97.0 | %REC | | 70-130 | | SW8260B | 01/20/16 06:08 / dm |
| Surr: Dibromofluoromethane | 122 | %REC | | 70-130 | | SW8260B | 01/20/16 06:08 / dm |
| Surr: p-Bromofluorobenzene | 80.0 | %REC | | 70-130 | | SW8260B | 01/20/16 06:08 / dm |
| Surr: Toluene-d8 | 88.0 | %REC | | 70-130 | | SW8260B | 01/20/16 06:08 / dm |
| ORGANIC CHARACTERISTICS | | | | | | | |
| Diesel Range Organics (DRO) | ND | mg/kg | | 10 | | SW8015B | 01/14/16 19:17 / bah |
| Total Extractable Hydrocarbons | 12 | mg/kg | | 10 | | SW8015B | 01/14/16 19:17 / bah |
| Surr: o-Terphenyl | 82.0 | %REC | | 32-106 | | SW8015B | 01/14/16 19:17 / bah |
| Gasoline Range Organics (GRO) | ND | mg/kg | | 4.0 | | SW8015B | 01/16/16 00:42 / jlr |
| Total Purgeable Hydrocarbons | ND | mg/kg | | 4.0 | | SW8015B | 01/16/16 00:42 / jlr |
| Surr: Trifluorotoluene | 114 | %REC | | 53.8-137 | | SW8015B | 01/16/16 00:42 / jlr |

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C16010236-004A ;0114FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\011416_c\0114FID1.0009.RAW
Date & Time Acquired: 1/14/2016 19:17:53
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_122115_R1.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_122115_R1.CAL
Sample Weight: 32.6 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 69425
Rt range for Diesel Range Organics (C10 to C28): 5.21 to 16.72
Rt range for Oil Range Organics (C28 to C40+): 16.58 to End Time

| SURROGATE COMPOUND | RT | ACTUAL | MEASURED | %REC |
|--------------------|--------|--------|----------|-------|
| *o-Terphenyl | 13.044 | 61.35 | 50.525 | 82.36 |

DRO Area:1.17849E+07 DRO AMOUNT: 5.207056
TEH Area:2.821636E+07 TEH AMOUNT: 12.46716
Oil Area:1.64825E+07 OIL AMOUNT: 7.282655



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|----------------------------|---------------------------|--------|----------|------|------|------------------|------------|-----|------------------|------|
| Method: ASAM10-3 | | | | | | | | | Batch: B_R255293 | |
| Lab ID: B16010995-005A DUP | Sample Duplicate | | | | | Run: SUB-B255293 | | | 01/20/16 14:02 | |
| Conductivity, sat. paste | | 0.710 | mmhos/cm | 0.10 | | | | 1.4 | 30 | |
| Lab ID: LCS-1601201402 | Laboratory Control Sample | | | | | Run: SUB-B255293 | | | 01/20/16 14:02 | |
| Conductivity, sat. paste | | 12.5 | mmhos/cm | 0.10 | 92 | 70 | 130 | | | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|----------------------------|---------------------------|--------|-------|------|------|------------------|------------|-----|------------------|----------------|
| Method: ASAM10-3.2 | | | | | | | | | Batch: B_R255293 | |
| Lab ID: B16010995-005A DUP | Sample Duplicate | | | | | Run: SUB-B255293 | | | | 01/20/16 14:02 |
| pH, sat. paste | | 7.30 | s.u. | 0.10 | | | | 1.4 | 10 | |
| Lab ID: LCS-1601201402 | Laboratory Control Sample | | | | | Run: SUB-B255293 | | | | 01/20/16 14:02 |
| pH, sat. paste | | 7.10 | s.u. | 0.10 | 100 | 90 | 110 | | | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|-----------------------------------|-------|---------------------------|-------|-------|------------------|-----------|------------|-----|----------|----------------|
| Method: SW6010B | | | | | | | | | | Batch: B_96351 |
| Lab ID: LCS-96351 | 3 | Laboratory Control Sample | | | Run: SUB-B255335 | | | | | 01/21/16 12:44 |
| Calcium, sat. paste | | 81.1 | meq/L | 0.083 | 103 | 70 | 130 | | | |
| Magnesium, sat. paste | | 52.2 | meq/L | 0.082 | 105 | 70 | 130 | | | |
| Sodium, sat. paste | | 115 | meq/L | 0.21 | 110 | 70 | 130 | | | |
| Lab ID: C16010236-001A | 3 | Sample Matrix Spike | | | Run: SUB-B255335 | | | | | 01/21/16 12:51 |
| Calcium, sat. paste | | 56.6 | meq/L | 0.083 | 108 | 70 | 130 | | | |
| Magnesium, sat. paste | | 82.2 | meq/L | 0.082 | 99 | 70 | 130 | | | |
| Sodium, sat. paste | | 43.6 | meq/L | 0.21 | 99 | 70 | 130 | | | |
| Lab ID: B16010995-005A DUP | 3 | Sample Duplicate | | | Run: SUB-B255335 | | | | | 01/21/16 12:54 |
| Calcium, sat. paste | | 5.18 | meq/L | 0.050 | | | | 1.2 | 30 | |
| Magnesium, sat. paste | | 0.975 | meq/L | 0.082 | | | | 2.0 | 30 | |
| Sodium, sat. paste | | 0.419 | meq/L | 0.043 | | | | 0.6 | 30 | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|----------------------------------|-------|-------------------------------------|-------|------|------|-------------------------|------------|-----|----------|----------------|
| Method: SW8015B | | | | | | | | | | Batch: 46604 |
| Lab ID: MB-46604 | 3 | Method Blank | | | | Run: FID1-C_160114A | | | | 01/14/16 14:41 |
| Diesel Range Organics (DRO) | | ND | mg/kg | 10 | | | | | | |
| Total Extractable Hydrocarbons | | ND | mg/kg | 10 | | | | | | |
| Surr: o-Terphenyl | | | | 0.67 | 79 | 56 | 147 | | | |
| Lab ID: LCS-46604 | 3 | Laboratory Control Sample | | | | Run: FID1-C_160114A | | | | 01/14/16 15:28 |
| Diesel Range Organics (DRO) | | 534 | mg/kg | 10 | 80 | 58.7 | 106 | | | |
| Total Extractable Hydrocarbons | | 541 | mg/kg | 10 | 81 | 60 | 109 | | | |
| Surr: o-Terphenyl | | | | 0.67 | 89 | 56 | 147 | | | |
| Lab ID: LCSD-46604 | 3 | Laboratory Control Sample Duplicate | | | | Run: FID1-C_160114A | | | | 01/14/16 16:14 |
| Diesel Range Organics (DRO) | | 547 | mg/kg | 10 | 82 | 58.7 | 106 | 2.2 | 20 | |
| Total Extractable Hydrocarbons | | 553 | mg/kg | 10 | 83 | 60 | 109 | 2.3 | 20 | |
| Surr: o-Terphenyl | | | | 0.67 | 101 | 56 | 147 | | | |
| Lab ID: C16010235-001AMS | 3 | Sample Matrix Spike | | | | Run: FID1-C_160114A | | | | 01/14/16 23:07 |
| Diesel Range Organics (DRO) | | 541 | mg/kg | 10 | 84 | 60 | 140 | | | |
| Total Extractable Hydrocarbons | | 549 | mg/kg | 10 | 83 | 60 | 140 | | | |
| Surr: o-Terphenyl | | | | 0.67 | 104 | 32 | 106 | | | |
| Lab ID: C16010235-001AMSD | 3 | Sample Matrix Spike Duplicate | | | | Run: FID1-C_160114A | | | | 01/14/16 23:53 |
| Diesel Range Organics (DRO) | | 525 | mg/kg | 10 | 83 | 60 | 140 | 2.9 | 20 | |
| Total Extractable Hydrocarbons | | 533 | mg/kg | 10 | 83 | 60 | 140 | 2.8 | 20 | |
| Surr: o-Terphenyl | | | | 0.67 | 102 | 32 | 106 | 0.0 | 30 | |
| Method: SW8015B | | | | | | | | | | Batch: 46610 |
| Lab ID: LCS-46610 | 3 | Laboratory Control Sample | | | | Run: PIDELCD1-C_160115A | | | | 01/15/16 17:19 |
| Gasoline Range Organics (GRO) | | 18.4 | mg/kg | 2.0 | 92 | 70 | 130 | | | |
| Total Purgeable Hydrocarbons | | 22.6 | mg/kg | 2.0 | 113 | 54.2 | 133 | | | |
| Surr: Trifluorotoluene | | | | 0.40 | 111 | 53.8 | 137 | | | |
| Lab ID: LCSD-46610 | 3 | Laboratory Control Sample Duplicate | | | | Run: PIDELCD1-C_160115A | | | | 01/15/16 17:56 |
| Gasoline Range Organics (GRO) | | 18.8 | mg/kg | 2.0 | 94 | 70 | 130 | 2.1 | 20 | |
| Total Purgeable Hydrocarbons | | 22.9 | mg/kg | 2.0 | 115 | 54.2 | 133 | 1.6 | 20 | |
| Surr: Trifluorotoluene | | | | 0.40 | 113 | 53.8 | 137 | | | |
| Lab ID: MB-46610 | 3 | Method Blank | | | | Run: PIDELCD1-C_160115A | | | | 01/15/16 18:33 |
| Gasoline Range Organics (GRO) | | ND | mg/kg | 2.0 | | | | | | |
| Total Purgeable Hydrocarbons | | ND | mg/kg | 2.0 | | | | | | |
| Surr: Trifluorotoluene | | | | 0.40 | 96 | 53.8 | 137 | | | |
| Lab ID: C16010236-004AMS | 2 | Sample Matrix Spike | | | | Run: PIDELCD1-C_160115A | | | | 01/16/16 02:32 |
| Total Purgeable Hydrocarbons | | 20.3 | mg/kg | 4.0 | 101 | 22.4 | 153 | | | |
| Surr: Trifluorotoluene | | | | 0.80 | 113 | 53.8 | 137 | | | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|--------------------------------|-------|--------|-------|------|------|-----------|------------|-----|----------|-------------------------|
| Method: SW8015B | | | | | | | | | | Analytical Run: R208251 |
| Lab ID: CCV_0114FID102r | | | | | | | | | | 01/14/16 13:55 |
| Total Extractable Hydrocarbons | 2 | 685 | mg/kg | 10 | 103 | 85 | 115 | | | |
| Surr: o-Terphenyl | | | | 0.67 | 113 | 56 | 147 | | | |
| Method: SW8015B | | | | | | | | | | Analytical Run: R208253 |
| Lab ID: CCV_0115HP102r | | | | | | | | | | 01/15/16 14:14 |
| Total Purgeable Hydrocarbons | 2 | 22.1 | mg/kg | 2.0 | 111 | 85 | 115 | | | |
| Surr: Trifluorotoluene | | | | 0.40 | 102 | 70 | 130 | | | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|------------------------------|-------|-------------------------------------|-------|------|-----------------------|-----------|------------|-----|----------------|--------------|
| Method: SW8260B | | | | | | | | | | Batch: 46641 |
| Lab ID: MB-46641 | 10 | Method Blank | | | Run: 5975VOC1_160119B | | | | 01/19/16 23:42 | |
| Benzene | | ND | mg/kg | 0.20 | | | | | | |
| Ethylbenzene | | ND | mg/kg | 0.20 | | | | | | |
| m+p-Xylenes | | ND | mg/kg | 0.20 | | | | | | |
| o-Xylene | | ND | mg/kg | 0.20 | | | | | | |
| Toluene | | ND | mg/kg | 0.20 | | | | | | |
| Xylenes, Total | | ND | mg/kg | 0.20 | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | | | | 0.20 | 111 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | | | | 0.20 | 94 | 70 | 130 | | | |
| Surr: p-Bromofluorobenzene | | | | 0.20 | 109 | 70 | 130 | | | |
| Surr: Toluene-d8 | | | | 0.20 | 101 | 70 | 130 | | | |
| Lab ID: LCS-46641 | 10 | Laboratory Control Sample | | | Run: 5975VOC1_160119B | | | | 01/20/16 06:43 | |
| Benzene | | 2.30 | mg/kg | 0.20 | 115 | 70 | 130 | | | |
| Ethylbenzene | | 2.58 | mg/kg | 0.20 | 129 | 70 | 130 | | | |
| m+p-Xylenes | | 5.23 | mg/kg | 0.20 | 131 | 70 | 130 | | | S |
| o-Xylene | | 2.54 | mg/kg | 0.20 | 127 | 70 | 130 | | | |
| Toluene | | 2.58 | mg/kg | 0.20 | 129 | 70 | 130 | | | |
| Xylenes, Total | | 7.77 | mg/kg | 0.20 | 129 | 70 | 130 | | | |
| Surr: 1,2-Dichlorobenzene-d4 | | | | 0.20 | 107 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | | | | 0.20 | 107 | 70 | 130 | | | |
| Surr: p-Bromofluorobenzene | | | | 0.20 | 103 | 70 | 130 | | | |
| Surr: Toluene-d8 | | | | 0.20 | 110 | 70 | 130 | | | |
| Lab ID: LCSD-46641 | 10 | Laboratory Control Sample Duplicate | | | Run: 5975VOC1_160119B | | | | 01/20/16 07:18 | |
| Benzene | | 2.30 | mg/kg | 0.20 | 115 | 70 | 130 | 0.0 | 20 | |
| Ethylbenzene | | 2.58 | mg/kg | 0.20 | 129 | 70 | 130 | 0.3 | 20 | |
| m+p-Xylenes | | 5.10 | mg/kg | 0.20 | 128 | 70 | 130 | 2.5 | 20 | |
| o-Xylene | | 2.50 | mg/kg | 0.20 | 125 | 70 | 130 | 1.6 | 20 | |
| Toluene | | 2.54 | mg/kg | 0.20 | 127 | 70 | 130 | 1.2 | 20 | |
| Xylenes, Total | | 7.60 | mg/kg | 0.20 | 127 | 70 | 130 | 2.2 | 20 | |
| Surr: 1,2-Dichlorobenzene-d4 | | | | 0.20 | 103 | 70 | 130 | 0.0 | 10 | |
| Surr: Dibromofluoromethane | | | | 0.20 | 101 | 70 | 130 | 0.0 | 10 | |
| Surr: p-Bromofluorobenzene | | | | 0.20 | 102 | 70 | 130 | 0.0 | 10 | |
| Surr: Toluene-d8 | | | | 0.20 | 105 | 70 | 130 | 0.0 | 10 | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: EOG Resources Inc

Report Date: 01/22/16

Project: Not Indicated

Work Order: C16010236

| Analyte | Count | Result | Units | RL | %REC | Low Limit | High Limit | RPD | RPDLimit | Qual |
|------------------------------|-------|--|-------|------|------|-----------|------------|-------------------------|----------|------|
| Method: SW8260B | | | | | | | | Analytical Run: R208352 | | |
| Lab ID: 19-JAN-16_CCV_20 | 10 | Continuing Calibration Verification Standard | | | | | | 01/19/16 22:32 | | |
| Benzene | | 1.96 | mg/kg | 0.20 | 98 | 70 | 130 | | | |
| Ethylbenzene | | 2.27 | mg/kg | 0.20 | 114 | 70 | 130 | | | |
| m+p-Xylenes | | 4.73 | mg/kg | 0.20 | 118 | 70 | 130 | | | |
| o-Xylene | | 2.34 | mg/kg | 0.20 | 117 | 70 | 130 | | | |
| Toluene | | 2.37 | mg/kg | 0.20 | 118 | 70 | 130 | | | |
| Xylenes, Total | | 7.06 | mg/kg | 0.20 | 118 | 70 | 130 | | | |
| Surr: 1,2-Dichlorobenzene-d4 | | | | 0.20 | 100 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | | | | 0.20 | 105 | 70 | 130 | | | |
| Surr: p-Bromofluorobenzene | | | | 0.20 | 100 | 70 | 130 | | | |
| Surr: Toluene-d8 | | | | 0.20 | 99 | 70 | 130 | | | |

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Work Order Receipt Checklist

EOG Resources Inc

C16010236

Login completed by: Dorian Quis

Date Received: 1/11/2016

Reviewed by: Kathy Hamre

Received by: res

Reviewed Date: 1/12/2016

Carrier name: NDA

| | | | |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on all shipping container(s)/cooler(s)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on all sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Temp Blank received in all shipping container(s)/cooler(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |
| Container/Temp Blank temperature: | 0.9°C On Ice | | |
| Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None



Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT (Provide as much information as possible.)

| | | | | | |
|---|--|---|---------------------------|--|---|
| Company Name: EOG Resources, Inc. | | Project Name, PWS, Permit, Etc. Sample Origin State: | | EPA/State Compliance: Yes <input type="radio"/> No <input checked="" type="radio"/> | |
| Report Mail Address (Required): 600 17th Street, Suite 1000N Denver, CO 80202 | | Contact Name: Jessica Marten Phone/Fax: (303) 262-2862 Cell: (303) 358-9263 | | Sampler: (Please Print) Theo Federer | |
| <input checked="" type="checkbox"/> No Hard Copy Email: jessica_marten@eogresources.com | | Invoice Contact & Phone: Jessica Marten (303) 262-2862 | | Quote/Bottle Order: | |
| Invoice Address (Required): 600 17th Street, Suite 1000N Denver, CO 80202 | | | | | |
| <input checked="" type="checkbox"/> No Hard Copy Email: jessica_marten@eogresources.com | | | | | |
| Special Report/Formats: <input checked="" type="checkbox"/> DW <input type="checkbox"/> POTW/WWTP State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC | | | | | |
| Special Report/Formats: <input checked="" type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC | | | | | |
| SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) | | Collection Date | Collection Time | MATRIX | Number of Containers Sample Type: A W S V B O DW Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water |
| 1 CC 1 | | | 12:40pm | S | |
| 2 CC 2 | | | 1:05pm | S | |
| 3 CC 3 | | | 1:10pm | S | |
| 4 CC 4 | | | 1:20pm | S | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| Relinquished by (print): Theo Federer | | Date/Time: 1-7-16 7:00am | Signature: [Signature] | | Signature: |
| Relinquished by (print): | | Date/Time: | Signature: | | Signature: |
| Sample Disposal: <input type="radio"/> Return to Client: <input type="radio"/> Lab Disposal: <input checked="" type="radio"/> | | Received by Laboratory: 1/11/16 9:42 | | Signature: [Signature] | |

Shipped by: 15-1104

Cooler ID(s): C50

Receipt Temp: 1104

On Ice: 0.9 °C

On Bottle: N

Custody Seal: Y N

Intact: Y N

Signature Match: Y N

LABORATORY USE ONLY

Standard Turnaround (TAT): R U S H

SEE ATTACHED

ANALYSIS REQUESTED

Electrical Conductivity (EC) ★ ★ ★ ★ ★

Sodium Adsorption Ratio (SAR) ★ ★ ★ ★ ★

pH ★ ★ ★ ★ ★

Petroleum Contamination Parameter Analysis ★ ★ ★ ★ ★

Total Petroleum Hydrocarbons (TPH) ★ ★ ★ ★ ★

TCRP-Metals ★ ★ ★ ★ ★

Comments: C16D1D330

Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page

Shipped by: 15-1104

Cooler ID(s): C50

Receipt Temp: 1104

On Ice: 0.9 °C

On Bottle: N

Custody Seal: Y N

Intact: Y N

Signature Match: Y N

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.