

State of Colorado
Oil and Gas Conservation Commission

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



FOR OGCC USE ONLY

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

Spill Complaint
Inspection NOAV

Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): _____

OGCC Operator Number: _____

Name of Operator: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact Name and Telephone: _____

No: _____

Fax: _____

API Number: _____

County: _____

Facility Name: _____

Facility Number: _____

Well Name: _____

Well Number: _____

Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____ Latitude: _____ Longitude: _____

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): _____

Site Conditions: Is location within a sensitive area (according to Rule 901e)? Y N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): _____

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Describe how source is to be removed:

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? Y N If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: _____ Date Site Investigation Completed: _____ Date Remediation Plan Submitted: _____
Remediation Start Date: _____ Anticipated Completion Date: _____ Actual Completion Date: _____

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

Print Name: _____ Signed: _____

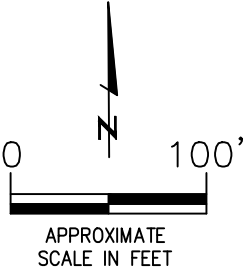
Title: _____ Date: _____

OGCC Approved: _____ Title: _____ Date: _____



LEGEND

- APPROXIMATE EXTENTS OF STATE M36-3, M36-5, 6-36, 7-36, AND 8-36 TANK BATTERY EXCAVATION
- APPROXIMATE EXTENT OF SURFACE STAINING
- PROPOSED EXCAVATION EXTENTS
- PROPOSED MONITORING WELL LOCATIONS
- APPROXIMATE LOCATION OF DCP MIDSTREAM UNDERGROUND UTILITY



PROPOSED MONITORING WELL LOCATION MAP
STATE M36-3, M36-5, 6-36, 7-36, AND 8-36
PRODUCTION TANK RELEASE
40.444259/-104.845056
SW1/4 NW1/4 SEC.36 T6N R67W 6 PM
WELD COUNTY, COLORADO
REMEDIATION # 8495

DATE: 07/16/14

FIG NO.:

2

DRAWN BY:

amn



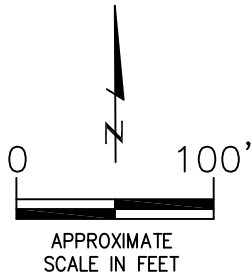
EAGLE
ENVIRONMENTAL
CONSULTING, INC.
4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449




LEGEND

- APPROXIMATE EXTENTS OF STATE M36-3, M36-5, 6-36 7-36, AND 8-36 TANK BATTERY EXCAVATION
- APPROXIMATE EXTENT OF SURFACE STAINING
- PROPOSED EXCAVATION EXTENTS
- APPROXIMATE LOCATION OF DCP MIDSTREAM UNDERGROUND UTILITY

NOTE: PROPOSED EXCAVATION EXTENTS BASED ON SOIL ASSESSMENT DATA, AS WELL AT WETLAND DELINEATION SURVEY. BASED ON THE WETLAND DELINEATION COMPLETED BY SWCA, NO WETLANDS WILL BE AFFECTED BY PROPOSED EXCAVATION ACTIVITIES.



PROPOSED EXCAVATION EXTENTS MAP
STATE M36-3, M36-5, 6-36, 7-36, AND 8-36
PRODUCTION TANK RELEASE
40.444259/-104.845056
SW1/4 NW1/4 SEC.36 T6N R67W 6 PM
WELD COUNTY, COLORADO
REMEDIATION # 8495

DATE:	07/16/14	 <div>EAGLE ENVIRONMENTAL CONSULTING, INC. <small>4101 INCA STREET, DENVER, CO 80211 Ph: 303-433-0479 • F: 303-325-5449</small></div>
FIG NO.:	1	
DRAWN BY:	amn	



July 24, 2014

Mr. Jacob Evans
Noble Energy, Inc.
1600 Broadway, Suite 2211
Denver, Colorado 80202

**Field Assessment and Excavation Report
State M36-3, M36-5, 6-36, 7-36, and 8-36
Production Tank Release
40.444259 / -104.845056
SW¼ NW¼ SEC.36 T6N R67W 6PM
CR 23 & CR 64 3/4, S 1 2/10, NE 5/10 INTO
Weld County, Colorado
Remediation # 8495**

Dear Mr. Evans,

Eagle Environmental Consulting, Inc. (EAGLE) is pleased to present this Field Assessment and Excavation Report (Report) for the State M36-3, M36-5, 6-36, 7-36, and 8-36 tank battery (Site).

1.0 SITE BACKGROUND

Based on records on file with the Colorado Oil and Gas Conservation Commission (COGCC), the State M36-3, M36-5, 6-36, 7-36, and 8-36 Tank Battery is located at latitude: 40.444259 and longitude: -104.845056 in Weld County, Colorado. The tank battery includes two, 300-barrel (bbl) production tanks, one concrete produced water vault (approximately 47.5 bbl), and one fiberglass produced water vault (approximately 120 bbl). The Cache la Poudre River is located approximately 400 feet east of the Site. A topographic site location map is presented as Figure 1. An aerial site location map is presented as Figure 2.

2.0 FIELD ASSESSMENT ACTIVITIES

2.1 Emergency Response and Remedial Activities

On June 20, 2014 and June 21, 2014, Custom Environmental Services, Inc. (Custom) performed emergency response activities related to the unintentional release of approximately 178 bbl of crude oil at the Site as a result of flooding due to heavy precipitation and snow melt (Unintentional Release). Custom deployed hydrophobic pads and booms that were used to absorb crude oil present on the surface adjacent to, and downgradient of the Site.

On June 21, 2014, at the direction of the United States Environmental Protection Agency Region 8 (EPA), a Noble Energy, Inc. (Noble) contractor applied approximately 150 gallons of Petro-Green ADP-7 solution to the impacted surface adjacent to, and downgradient of, the Unintentional Release. Petro-Green ADP-7 is a biodegradable, non-ionic-anionic surfactant that emulsifies petroleum hydrocarbons and promotes biodegradation processes to break down the constituents in situ.

2.2 Biological Survey

On June 21, 2014 and June 24, 2014, SWCA Environmental Consultants (SWCA) completed a biological survey (Survey) of the estimated area associated with the Unintentional Release, as well as the surrounding area. As part of the Survey, SWCA completed a vegetation evaluation and wetlands delineation.

Based on results of the Survey, vegetation communities were impacted by the Unintentional Release, but no evidence of direct impacts to wildlife species was observed. SWCA identified wetlands and waters of the United States within the impacted area that could fall under the jurisdiction of the United States Army Corps of Engineers (USACE) and Clean Water Act regulations. The majority of the petroleum hydrocarbon impacted area as well as the surrounding area was classified as upland floodplains. Within the downgradient, northeast portion of the petroleum hydrocarbon impacted area and surrounding area, SWCA identified 0.054 acre of palustrine scrub-shrub wetlands, 0.104 acre of palustrine emergent wetlands, and 0.019 acre of surface water. A copy of the completed SWCA report, including a figure detailing the designated wetland and surface water areas, is included in Attachment A.

2.3 Field Activities – Field Assessment

On June 20, 2014, EAGLE mobilized to the Site to assess surface conditions following the Unintentional Release. At the time of assessment activities, flood waters had receded back to the normal course of the Cache la Poudre River, and all soil samples collected were located in the unsaturated zone. EAGLE collected five (5) surface soil samples (SS-01 through SS-05) along the west bank of the Cache la Poudre River, northeast of the Unintentional Release.

A portion of each soil sample was placed in a sealable plastic bag for volatile organic compound (VOC) headspace analysis. The bag was sealed, labeled, and allowed to volatilize for approximately five to ten minutes. The other portion of the soil sample was placed in a laboratory supplied, 4-ounce, glass jar and sealed for laboratory analysis. After volatilization, the bagged sample was perforated with the probe of a field portable photoionization detector (PID), using a 10.6 electron volt (eV) lamp, to measure the organic vapor concentration within the headspace. Organic vapor concentrations were recorded in parts per million by volume (ppm-v) for each sample. Overall, the observed PID values ranged from 4.1 ppm-v (SS-03) to 8.7 ppm-v (SS-04). Photoionization detector results are presented in Table 1. The jarred soil samples were placed in a laboratory supplied cooler, filled with ice, for delivery to Origins Laboratory, Inc. in Denver, Colorado.

EAGLE returned to the Site on June 21, 2014, to collect additional soil samples from the area where visible surface staining was present. Based on conversations with representatives of Noble, a determination was made that soil samples were to be collected from eight (8) discrete locations at 1-2” and 3-4” bgs. Sixteen (16) soil samples (SS-06 through SS-21) were collected by EAGLE on June 21, 2014.

A portion of each soil sample was placed in a sealable plastic bag for VOC headspace analysis. The bag was sealed, labeled, and allowed to volatilize for approximately five to ten minutes. The other portion of the soil sample was placed in a laboratory supplied, 4-ounce, glass jar, sealed, and packed in an iced cooler for laboratory analysis. After volatilization, the bagged sample was perforated with the probe of a field portable PID, using a 10.6 eV lamp, to measure the organic vapor concentration within the headspace. Organic vapor concentrations were recorded in ppm-v for each sample. Overall, the observed PID values ranged from 1.4 ppm-v (SS-06@1-2” bgs) to 206 ppm-v (SS-11@3-4” bgs). Photoionization detector results are presented in Table 1. The jarred soil samples were placed in a laboratory supplied cooler, filled with ice, for delivery to Origins Laboratory, Inc. in Denver, Colorado.

Soil samples, SS-01 through SS-21, were submitted to Origins Laboratory Inc. under standard chain of custody protocol, for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, and total petroleum hydrocarbons – gasoline range organics (TPH-GRO) following Environmental Protection Agency (EPA) Method 8260C. Soil samples, SS-01 through SS-21, were also analyzed for total petroleum hydrocarbons – diesel range organics (TPH-DRO) following EPA Method 8015C. In addition, soil samples, SS-06 through SS-21, were also analyzed for specific conductance (EC) following EPA Method 120.1, pH following EPA Method 9045D, and sodium adsorption ratio (SAR) analysis following EPA Method 6010B. The soil samples were received by the laboratory within the required holding time and quality assurance/quality control (QA/QC) parameters.

On June 24, 2014, EAGLE collected a surface water sample from the surface pond located within the northeast section of the area of the Unintentional Release. The surface water sample was collected in 40 milliliter (mL) amber vials and submitted for laboratory analysis of BTEX following EPA Method 8260C. The water sample was transported in an iced cooler, under standard chain-of-custody procedures, to Origins Laboratory, Inc. located in Denver, Colorado, and was received by the laboratory within the required holding time and QA/QC parameters.

From June 25, 2014 through June 30, 2014, EAGLE conducted site assessment activities utilizing a hand auger to complete each borehole, to depths ranging from approximately 18-inches (SS-43) to approximately 72-inches (SS-30) bgs. EAGLE collected twenty-six (26) additional soil samples (SS-22 through SS-48) to vertically and horizontally define adsorbed petroleum hydrocarbon impacts. The overall lithology observed was a silty, sandy clay, interbedded with layers of silty, clayey sand. Boring logs are presented in Attachment B.

A portion of each soil sample was placed in a sealable plastic bag for VOC headspace analysis. The bag was sealed, labeled, and allowed to volatilize for approximately five to ten minutes. The other portion of the soil sample was placed in a laboratory supplied, 4-ounce, glass jar and sealed for laboratory analysis. Following volatilization, the bagged sample was perforated with the probe of a field portable PID, using a 10.6 eV lamp, to measure the organic vapor concentration within the headspace. Organic vapor concentrations were recorded in ppm-v for each sample. The observed PID values ranged from 0.1 ppm-v (SS-29@16-20", SS-33@4-8", SS-35@4-8", SS-44@4-8", SS-45@4-8", and SS-46@4-8" bgs) to 387 ppm-v (SS-30@22-26" bgs). Photoionization detector results are presented in Table 1. Based on PID readings and location of the soil sample in relation to groundwater, one (1) soil sample was selected from each boring for laboratory analysis. The selected jarred soil samples were placed in a laboratory supplied cooler, filled with ice, for delivery to Origins Laboratory, Inc. in Denver, Colorado.

Soil samples, SS-22 through SS-48, were submitted to Origins Laboratory Inc. under standard chain of custody protocol, for analysis of BTEX, naphthalene, and TPH-GRO following EPA Method 8260C. Soil samples, SS-22 through SS-48, were also analyzed for TPH-DRO following EPA Method 8015C. The soil samples were received by the laboratory within the required holding time and quality assurance/quality control (QA/QC) parameters.

Following soil sampling activities, EAGLE collected groundwater samples (SS-22-GW through SS-29-GW, SS-31-GW through SS-48-GW) from each soil boring. Groundwater observed in the soil borings ranged from approximately 21 inches to 48 inches bgs. Utilizing an oil-water interface probe, EAGLE detected approximately 0.3 feet of light non-aqueous phase liquid (LNAPL) in the SS-30 soil boring, and therefore, did not collect a groundwater sample. EAGLE placed four feet of 2-inch polyvinyl chloride (PVC) slotted screen within soil boring, SS-30, for LNAPL abatement activities.

Groundwater samples were collected in 40 milliliter (mL) amber vials and submitted for laboratory analysis of BTEX following EPA Method 8260C. The samples were transported in an iced cooler under standard chain-of-custody procedures to Origins Laboratory, Inc. located in Denver, Colorado, and were received within the required holding time and QA/QC parameters.

Soil and groundwater sample locations are presented in Figures 3 and 4, respectively. Spatial location of each soil and groundwater sample was recorded using a Trimble GeoXT 6000 series instrument.

2.4 Laboratory Analytical Results – Field Assessment

2.4.1 Soil Analytical Results – Field Assessment

Based on laboratory analytical results, the surface soil samples, SS-01 through SS-05, collected downstream along the west bank of the Cache la Poudre River were non-detect for concentrations of BTEX, naphthalene, or TPH (total petroleum hydrocarbons).

Soil samples, SS-06@1-2" (1,500 milligrams per kilogram (mg/kg)), SS-08@1-2" (28,300 mg/kg), SS-09@3-4" (3,244.4 mg/kg), SS-10@1-2" (20,503.6 mg/kg), SS-11@3-4" (41,940 mg/kg), SS-12@1-2" (3,313.6 mg/kg), SS-13@3-4" (830.5 mg/kg), SS-14@1-2" (1,880.5 mg/kg), SS-17@3-4" (643.3 mg/kg), SS-20@1-2" (518 mg/kg), SS-21@3-4" (685.2 mg/kg), and SS-23@6-12" (1,074 mg/kg) contained concentrations of TPH exceeding the COGCC Table 910-1 Regulatory Limit of 500 mg/kg.

Soil sample SS-30@22-26" contained a benzene concentration of 0.8 mg/kg, exceeding the COGCC Table 910-1 Regulatory Limit of 0.17 mg/kg.

Based on Noble's conversations with the COGCC, the highest TPH concentration observed, soil sample, SS-11@3-4", was analyzed for 16 priority polyaromatic hydrocarbons (PAHs) following EPA Method 8270C. Soil sample SS-11@3-4" contained a concentration of benzo(a)pyrene (0.169 mg/kg) exceeding the COGCC Table 910-1 Regulatory Limit of 0.022 mg/kg.

The remaining soil sample locations did not contain concentrations of BTEX, TPH, or naphthalene above laboratory detection limits or COGCC Table 910-1 Regulatory Limits, defining impacts to the north, west, east, and south of the observed stained surface area.

Soil samples SS-06@1-2" through SS-21@3-4" did not contain EC, SAR, or pH values exceeding their respective COGCC Table 910-1 Regulatory Limits.

Soil analytical results are summarized in Table 2 and presented in Figure 3. PAH analytical results are summarized in Table 3. The laboratory analytical reports for the soil samples collected during field assessment activities at the Site are included in Attachment C.

2.4.2 Groundwater Analytical Results – Field Assessment

Groundwater samples, SS-22-GW (25.2 micrograms per liter (µg/L)), SS-23-GW (11.1 µg/L), SS-32-GW (29.1 µg/L), and SS-40-GW (7.8 µg/L) contained concentrations of dissolved benzene exceeding the COGCC Table 910-1 Regulatory Limit of 5 µg/L. All remaining groundwater samples that were collected did not contain concentrations of BTEX exceeding their respective COGCC Table 910-1 Regulatory Limits. Additionally, groundwater samples SS-41-GW through SS-46-GW, collected between the surface impacts and Cache la Poudre River, did not contain concentrations of BTEX at or above the laboratory detection limits.

Groundwater analytical results are summarized in Table 4 and presented in Figure 4. Laboratory analytical reports are included in Attachment C.

3.0 SOIL EXCAVATION ACTIVITIES

3.1 Field Activities - Excavation

From June 24, 2014 through June 30, 2014, EAGLE supervised excavation activities to remove petroleum hydrocarbon impacted soils at the State M36-3, M36-5, 6-36, 7-36, and 8-36 tank battery. BG Services LLC (BG) provided the necessary equipment and personnel to remove and transport petroleum hydrocarbon impacted soil from the Site for disposal at an appropriately permitted facility.

The soil lithology observed within the excavation was a loose, sandy silt from the surface to approximately 3.5 feet bgs. A silty sand was observed from approximately 3.5 feet bgs to approximately 6.5 feet bgs. The soil lithology observed along the east section of the excavation was a sandy silt from the surface to approximately 2 feet bgs, underlain by a sandy clay from approximately 2 to 6 feet bgs, and a loose sand from approximately 6 to 6.5 feet bgs. Groundwater was observed within the excavation at an approximate depth of 5 feet bgs. Petroleum hydrocarbon staining was observed from approximately 3 to 6 feet bgs within the excavated area.

Waste characterization/confirmation soil samples (TBSS-01 through TBSS-43) were collected at various locations to determine the lateral and vertical extent of petroleum hydrocarbon impacts in the soil beneath the removed tank battery infrastructure. A portion of each soil sample was placed in a sealable plastic bag for VOC headspace analysis utilizing a field calibrated PID. Another portion of the soil sample was placed in a 4-ounce glass jar and packed in an iced cooler for laboratory analysis. Observed PID readings ranged from 1.2 ppm-v (TBSS-19@3') to 2,411 ppm-v (TBSS-10@3').

Samples were collected based on the location above the saturation zone where the highest PID reading was observed. Selected jarred soil samples were submitted to Origins Laboratory, Inc., under standard chain of custody procedures, for analysis of BTEX, naphthalene, TPH-GRO, and TPH-DRO following modified EPA Methods 8260c and 8015. PID readings are summarized in Table 1. The soil sample exhibiting the highest PID reading, TBSS-21@3', was also submitted for PAH laboratory analysis following EPA Method 8270C. Based on the location adjacent to the former produced water tank, soil sample, TBSS-04@3.5' was also submitted for laboratory analysis of EC following EPA Method 120.1, pH following EPA Method 9045D, and SAR analysis following EPA Method 6010B. The soil samples were received by the laboratory within the required holding time and QA/QC parameters.

A total of thirteen (13) confirmation soil samples (TBSS-01@3.5', TBSS-04@3.5', TBSS-05@3', TBSS-18@3', TBSS-19@3', TBSS-21@3', TBSS-29@3.5', TBSS-30@3.5', TBSS-31@3.5', TBSS-35@3.5', TBSS-39@3', TBSS-40@3.5', and TBSS-41@3') were submitted for laboratory analysis. Spatial location of each soil sample was recorded using a Trimble GeoXT 6000 series instrument. A site map presenting the limits of the excavation, as well as soil sample locations, is included as Figure 5.

On June 24, 2014, groundwater was observed within the excavation at a depth of approximately 5 feet bgs. A grab groundwater sample (GW-01) was collected, placed in an iced cooler and delivered to Origins Laboratory, Inc., under standard chain of custody protocol, for laboratory analysis of BTEX. The laboratory received the groundwater sample within the required holding time and QA/QC parameters.

Following groundwater sample collection, approximately 55 bbl of petroleum hydrocarbon impacted groundwater was removed by a vacuum truck and transported offsite for disposal. On June 27, 2014, the excavation was extended east to the edge of the lease road, approximately three (3) feet from soil boring, SS-30. To address residual LNAPL observed in soil boring SS-30, approximately 162 bbl of petroleum

hydrocarbon impacted groundwater was removed from the excavation by vacuum truck and transported offsite for disposal at an appropriately permitted facility. On July 1, 2014, EAGLE returned to the Site to gauge soil boring SS-30. Approximately 0.08 feet of residual LNAPL was detected within soil boring SS-30 with an oil/water interface probe. EAGLE removed approximately 0.10 gallons of LNAPL/groundwater and installed a hydrophobic sock for passive LNAPL abatement. Due to the dismantling of the State M36-3, M36-5, 6-36, 7-36, and 8-36 tank battery, EAGLE transported the LNAPL/groundwater and placed it in the produced water tank located at the Noble Dungan #1 tank battery. The Dungan #1 tank battery is located approximately ½ mile north-northwest from the State M36-3, M36-5, 6-36, 7-36, and 8-36 tank battery. Fluids from the Dungan #1 produced water tank are periodically pumped out and transported for disposal at an appropriately permitted facility.

Prior to backfill activities each day, granular activated carbon (GAC) and gypsum was applied to the base of each excavated area. A total of 200 pounds of GAC and 350 pounds of gypsum were applied during excavation activities. EAGLE also installed three, 10-foot, 1-inch, horizontal injection wells (IP-01 through IP-03), that may be utilized for future remedial activities. Injection wells, IP-01 through IP-03, were completed to grade with traffic rated steel flush mounts. The excavation area was then backfilled with pea gravel and structural fill.

The final limits of the State M36-3, M36-5, 6-36, 7-36, and 8-36 excavation extended approximately 65 feet along the north wall, 58 feet along the south wall, 52 feet along the west wall, and 60 feet along the east wall. The excavation was advanced to a total depth of approximately 6.5 feet bgs. Approximately 1,490 cubic yards of soil was removed during excavation activities. A cross section depicting the excavation depths and observed lithology is included as Figure 6.

To aid in determining lateral extents of dissolved petroleum hydrocarbon impacts outside of the excavated area, EAGLE advanced soil borings, TBSB-01 through TBSB-03 for groundwater sample collection. Soil boring locations are included in Figure 5, and boring logs are included in Attachment B.

Groundwater samples (TBSB-01-GW through TBSB-03-GW) were collected in 40 milliliter (mL) amber vials. The groundwater samples were submitted for laboratory analysis of BTEX following EPA Method 8260C. The samples were transported in an iced cooler under standard chain-of-custody procedures to Origins Laboratory, Inc. located in Denver, Colorado, and were received within the required holding time and QA/QC parameters.

3.2 Laboratory Analytical Results - Excavation

3.2.1 Soil Analytical Results - Excavation

Based on soil laboratory analytical results, confirmation soil samples TBSS-01@3.5', TBSS-04@3.5', TBSS-05@3', TBSS-18@3', TBSS-19@3', TBSS-21@3', TBSS-29@3.5', TBSS-30@3.5', TBSS-31@3.5', TBSS-35@3.5', TBSS-39@3', TBSS-40@3.5', and TBSS-41@3' State M36-3, M36-5, 6-36, 7-36, and 8-36 excavation did not contain concentrations of BTEX, naphthalene, TPH-GRO, and TPH-DRO exceeding their respective COGCC Table 910-1 Regulatory Limits.

Soil sample, TBSS-21@3', did not contain concentrations of PAHs exceeding their respective laboratory detection limits and COGCC Table 910-1 Regulatory Limits.

Soil analytical results are summarized in Table 2 and are presented in Figure 7. The PAH results are summarized in Table 3. The laboratory analytical reports for the soil samples collected during source removal activities at the Site are included in Attachment C.

3.2.2 Groundwater Analytical Results - Excavation

The groundwater sample (GW-01) collected on June 24, 2014 from the base of the State M36-3, M36-5, 6-36, 7-36, and 8-36 excavation contained concentrations of dissolved benzene (2,470 µg/L), toluene (1,380 µg/L), ethylbenzene (892 µg/L), and total xylenes (5,890 µg/L) exceeding the COGCC Table 910-1 Regulatory Limits of 5 µg/L, 560 µg/L, 700 µg/L, and 1,400 µg/L, respectively.

The groundwater sample (TBSB-01-GW), collected on the north side of the excavation, contained a concentration of dissolved benzene (68.1 µg/L) exceeding the COGCC Table 910-1 Regulatory Limit of 5 µg/L. Groundwater samples, TBSB-02-GW and TBSB-03-GW, did not contain concentrations of BTEX at or above their respective laboratory reporting limits.

Groundwater analytical results are summarized in Table 4 and presented in Figure 4. The groundwater laboratory analytical report is included in Attachment C.

4.0 CONCLUSIONS

Based on the information presented in this Report, EAGLE concludes the following:

- Surface soil samples, SS-01 through SS-05, collected downstream, along the west bank of the Cache la Poudre River did not contain concentrations of BTEX, naphthalene, or TPH exceeding their respective COGCC Table 910-1 Regulatory Limits.
- On June 21, 2014, at the direction of EPA, approximately 150 gallons of Petro-Green ADP-7 solution was applied to the impacted surface area adjacent to, and northeast of, the Unintentional Release.
- Based on results of the biological survey completed by SWCA, vegetation communities were impacted by the surface release, but no evidence of direct impacts to wildlife species was observed. SWCA identified wetlands and waters of the United States within the impacted area that could fall under the jurisdiction of the USACE and Clean Water regulations. The majority of the petroleum hydrocarbon impacted area as well as the surrounding area was classified as upland floodplains.
- Soil samples, SS-06@1-2", SS-08@1-2", SS-09@3-4", SS-10@1-2", SS-11@3-4", SS-12@1-2", SS-13@3-4", SS-14@1-2", SS-17@3-4", SS-20@1-2", SS-21@3-4", and SS-23@6-12", collected within the impacted surface area adjacent to the State M36-3, M36-5, 6-36, 7-36, and 8-36 production tank release, contained concentrations of TPH exceeding the COGCC Table 910-1 Regulatory Limit.
- Soil sample, SS-30@22-26", contained a concentration of benzene exceeding the COGCC Table 910-1 Regulatory Limit.
- Soil sample, SS-11@3-4", contained a concentration of benzo(a)pyrene exceeding the COGCC Table 910-1 Regulatory Limit.
- Groundwater samples, SS-22-GW, SS-23-GW, SS-32-GW, and SS-40-GW, collected within the associated soil borings, contained concentrations of dissolved benzene exceeding the COGCC Table 910-1 Regulatory Limit.

- Following excavation and groundwater removal activities, approximately 0.08 feet of LNAPL was measured, utilizing an oil-water interface probe, within soil boring SS-30. EAGLE completed LNAPL abatement activities via hand bailing and placed a hydrophobic sock within soil boring SS-30 for passive LNAPL abatement.
- The groundwater sample, GW-01, collected from the base of the excavation, contained dissolved concentrations of BTEX exceeding their respective COGCC Table 910-1 Regulatory Limits.
- The confirmation soil samples collected along the excavation walls did not contain concentrations of BTEX, TPH, or naphthalene exceeding their respective COGCC Table 910-1 Regulatory Limits.
- Groundwater sample, TBSB-01-GW, collected north of the excavation, contained a concentration of dissolved benzene exceeding the COGCC Table 910-1 Regulatory Limit.
- From June 24, 2014, through June 30, 2014, approximately 1,490 cubic yards of impacted soil were removed from the Site and disposed of at an appropriately permitted facility.
- A total of approximately 217 bbl of petroleum hydrocarbon impacted was removed from the excavated area, and disposed of at an appropriately permitted facility, prior to backfilling activities.
- A total of 200 pounds of GAC and 350 pounds of gypsum were placed within the base of the excavation prior to daily backfill activities.
- Three one-inch horizontal injection wells (IP-01 through IP-03) were placed within the excavated area prior to backfill activities.
- Dissolved and adsorbed petroleum hydrocarbon impacts within the soil and groundwater below surface grade have been defined within the area of the Unintentional Release.

5.0 RECOMMENDATIONS

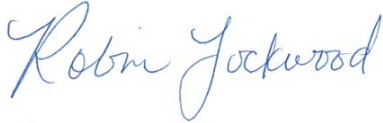
Based on the information presented in this Report, EAGLE recommends the following:

- Complete additional excavation activities within the upland floodplain area, ensuring minimal impacts to the surrounding vegetative communities.
- Following excavation activities, monitor natural attenuation of residual petroleum hydrocarbon impacts remaining at the Site. Monitored natural attenuation is the preferred remedial approach based on the vegetative communities present in the area and low benzene concentrations observed.
- Install permanent groundwater monitoring wells to define and monitor residual dissolved petroleum hydrocarbon impacts within the Unintentional Release area. Install staff gauges within the Cache la Poudre River to monitor surface water elevations of the river. Utilize elevation data obtained from the groundwater monitoring wells and Cache la Poudre River to determine whether there is hydrologic communication between the groundwater and surface water of the Cache la Poudre River.

EAGLE sincerely appreciates the opportunity to provide our services. If you have any questions or require further information, please contact us at (303) 433-0479.

Sincerely,

EAGLE ENVIRONMENTAL CONSULTING, INC.

A handwritten signature in blue ink that reads "Robin Lockwood". The script is cursive and fluid.

Robin Lockwood
Project Scientist

A handwritten signature in blue ink that reads "Martin Eckert III". The script is cursive and includes a stylized "III" at the end.

Martin Eckert III
Principal/Senior Scientist

TABLES

Table 1: Photoionization Detector Results Summary

Table 2: Soil Analytical Results Summary

Table 3: Polycyclic Aromatic Hydrocarbon Analytical Results Summary

Table 4: Groundwater Analytical Results Summary

Sample Location (Latitude / Longitude)	Date	Approximate Depth (inches)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
SS-01 @ surface (40.445981562 / -104.842166414)	06/20/14	surface	5.4	yes
SS-02 @ surface (40.445855905 / -104.84258165)	06/20/14	surface	4.6	yes
SS-03 @ surface (40.445685039 / -104.843011606)	06/20/14	surface	4.1	yes
SS-04 @ surface (40.445510657 / -104.843363798)	06/20/14	surface	8.7	yes
SS-05 @ surface (40.445378447 / -104.843494015)	06/20/14	surface	5.9	yes
SS-06 @ 1-2" (40.444033585 / -104.845026678)	06/21/14	1.0-2.0	1.4	yes
SS-07 @ 3-4" (40.444033585 / -104.845026678)	06/21/14	3.0-4.0	2.9	yes
SS-08 @ 1-2" (40.444194133 / -104.844911559)	06/21/14	1.0-2.0	14.0	yes
SS-09 @ 3-4" (40.444194133 / -104.844911559)	06/21/14	3.0-4.0	17.0	yes
SS-10 @ 1-2" (40.444381772 / -104.844747628)	06/21/14	1.0-2.0	74.2	yes
SS-11 @ 3-4" (40.444381772 / -104.844747628)	06/21/14	3.0-4.0	206	yes
SS-12 @ 1-2" (40.44458152 / -104.84470946)	06/21/14	1.0-2.0	38.0	yes
SS-13 @ 3-4" (40.44458152 / -104.84470946)	06/21/14	3.0-4.0	15.1	yes
SS-14 @ 1-2" (40.444679006 / -104.844377002)	06/21/14	1.0-2.0	7.8	yes
SS-15 @ 3-4" (40.444679006 / -104.844377002)	06/21/14	3.0-4.0	3.2	yes
SS-16 @ 1-2" (40.444877225 / -104.844225377)	06/21/14	1.0-2.0	18.6	yes
SS-17 @ 3-4" (40.444877225 / -104.844225377)	06/21/14	3.0-4.0	13.4	yes
SS-18 @ 1-2" (40.444872764 / -104.843980778)	06/21/14	1.0-2.0	7.8	yes
SS-19 @ 3-4" (40.444872764 / -104.843980778)	06/21/14	3.0-4.0	8.1	yes
SS-20 @ 1-2" (40.444844744 / -104.843751845)	06/21/14	1.0-2.0	6.3	yes
SS-21 @ 3-4" (40.444844744 / -104.843751845)	06/21/14	3.0-4.0	7.2	yes
SS-22 @ 6-12" (40.444194133 / -104.844911559)	06/25/14	6.0-12.0	0.2	yes
SS-23 @ 6-12" (40.444381772 / -104.844747628)	06/25/14	6.0-12.0	56.6	yes
SS-24 @ 12-18" (40.44458152 / -104.84470946)	06/25/14	12.0-18.0	0.3	yes
SS-25 @ 6-12" (40.444877225 / -104.844225377)	06/25/14	6.0-12.0	0.3	yes
SS-26 @ 30-36" (40.444844744 / -104.843751845)	06/25/14	30.0-36.0	0.4	yes
SS-27 @ 4-8" (40.443969064 / -104.845038769)	06/26/14	4.0-8.0	0.2	yes

Sample Location (Latitude / Longitude)	Date	Approximate Depth (inches)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
SS-28 @ 22-26" (40.444048624 / -104.845071473)	06/26/14	22.0-26.0	0.2	yes
SS-29 @ 16-20" (40.444024316 / -104.844993703)	06/26/14	16.0-20.0	0.1	yes
SS-30 @ 22-26" (40.44423293 / -104.844970576)	06/26/14	22.0-26.0	387.0	yes
SS-31 @ 4-8" (40.444159548 / -104.844851054)	06/26/14	4.0-8.0	0.9	yes
SS-32 @ 4-8" (40.444401989 / -104.844780656)	06/26/14	4.0-8.0	1.1	yes
SS-33 @ 4-8" (40.444344011 / -104.844668852)	06/26/14	4.0-8.0	0.1	yes
SS-34 @ 12-16" (40.444609565 / -104.844739569)	06/27/14	12.0-16.0	0.2	yes
SS-35 @ 4-8" (40.444527337 / -104.844575814)	06/27/14	4.0-8.0	0.1	yes
SS-36 @ 8-12" (40.444761834 / -104.844498553)	06/27/14	8.0-12.0	1.9	yes
SS-37 @ 4-8" (40.444662913 / -104.844327325)	06/27/14	4.0-8.0	2.1	yes
SS-38 @ 4-8" (40.444873363 / -104.844334236)	06/27/14	4.0-8.0	2.2	yes
SS-39 @ 4-8" (40.444815128 / -104.844179929)	06/27/14	4.0-8.0	1.8	yes
SS-40 @ 4-8" (40.444992512 / -104.844184169)	06/27/14	4.0-8.0	0.9	yes
SS-41 @ 4-8" (40.444958298 / -104.843786868)	06/27/14	4.0-8.0	1.6	yes
SS-42 @ 4-8" (40.444778035 / -104.843763308)	06/27/14	4.0-8.0	5.8	yes
SS-43 @ 4-8" (40.44488832 / -104.843703757)	06/27/14	4.0-8.0	0.9	yes
SS-44 @ 4-8" (40.444624838 / -104.843855268)	06/27/14	4.0-8.0	0.1	yes
SS-45 @ 4-8" (40.444495488 / -104.843933899)	06/27/14	4.0-8.0	0.1	yes
SS-46 @ 4-8" (40.444300036 / -104.844105806)	06/27/14	4.0-8.0	0.1	yes
SS-47 @ 30-36" (40.445050479 / -104.844150918)	06/30/14	30.0-36.0	2.1	yes
SS-48 @ 18-24" (40.44501361 / -104.844059742)	06/30/14	18.0-24.0	1.6	yes

Sample Location (Latitude / Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
TBSS-01 @ 3.5' (40.444345803 / -104.845189974)	06/24/14	3.5	5.4	yes
TBSS-02 @ 3' (40.444362253 / -104.845174151)	06/24/14	3.0	298.8	no
TBSS-03 @ 4' (40.444379334 / -104.84514961)	06/24/14	4.0	71.8	no
TBSS-04 @ 3.5' (40.444380503 / -104.845153519)	06/24/14	3.5	6.9	no
TBSS-05 @ 3.0' (40.444358534 / -104.845074397)	06/24/14	3.0	1.7	yes
TBSS-06 @ 3.5' (40.44438521 / -104.845117855)	06/24/14	3.5	17.1	no
TBSS-07 @ 3.0' (40.444374035 / -104.845188543)	06/24/14	3.0	4.2	no
TBSS-08 @ 4.5' (40.444342 / -104.845114)	06/24/14	4.0	497.1	no
TBSS-09 @ 5.0' (40.444334 / -104.845124)	06/24/14	5.0	612.2	no
TBSS-10 @ 3.0' (40.444326 / -104.845046)	06/25/14	3.0	2411	no
TBSS-11 @ 2.0' (40.444316487 / -104.845013557)	06/25/14	2.0	603.8	no
TBSS-12 @ 3.5' (40.444314865 / -104.845016549)	06/25/14	3.5	1194	no
TBSS-13 @ 3.5' (40.444344034 / -104.845032027)	06/25/14	3.5	149.8	no
TBSS-14 @ 3.0' (40.444357033 / -104.845031422)	06/25/14	3.0	301	no
TBSS-15 @ 4.5' (40.44435704 / -104.845031431)	06/25/14	4.5	293.8	no
TBSS-16 @ 2.0' (40.444286498 / -104.845159301)	06/25/14	2.0	901.1	no
TBSS-17 @ 4.0' (40.444243 / -104.845154)	06/25/14	4.0	303.3	no
TBSS-18 @ 3.0' (40.444302821 / -104.845218221)	06/25/14	3.0	3.2	yes
TBSS-19 @ 3.0' (40.444258109 / -104.845235796)	06/25/14	3.0	1.2	yes
TBSS-20 @ 3.0' (40.444241558 / -104.845193927)	06/25/14	3.0	79.4	no
TBSS-21 @ 3.0' (40.444267 / -104.845234)	06/25/14	3.0	12.8	yes
TBSS-22 @ 3.5' (40.444374035 / -104.845188543)	06/25/14	3.5	4.4	no
TBSS-23 @ 3.0' (40.44425012 / -104.845043123)	06/26/14	3.0	467.7	no
TBSS-24 @ 3.0' (40.444236776 / -104.845082246)	06/26/14	3.0	1173	no
TBSS-25 @ 3.0' (40.444238795 / -104.845110155)	06/26/14	3.0	371.2	no
TBSS-26 @ 3.5' (40.444237 / -104.845052)	06/26/14	3.5	411.1	no
TBSS-27 @ 3.5' (40.444223 / -104.845048)	06/26/14	3.5	376.6	no
TBSS-28 @ 3.0' (40.444214 / -104.845079)	06/26/14	3.0	370.5	no
TBSS-29 @ 3.5' (40.444338437 / -104.844969236)	06/27/14	3.5	13.4	yes

Sample Location (Latitude / Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
TBSS-30 @ 3.5' (40.44430919 / -104.844960128)	06/27/14	3.5	2.3	yes
TBSS-31 @ 3.5' (40.444246927 / -104.844977048)	06/27/14	3.5	280.8	yes
TBSS-32 @ 3.5' (40.444218256 / -104.845020357)	06/27/14	3.5	477.2	no
TBSS-33 @ 3.0' (40.44423058 / -104.844992242)	06/27/14	3.0	311.1	no
TBSS-34 @ 3.0' (40.444273 / -104.844971)	06/27/14	3.0	165.5	no
TBSS-35 @ 3.5' (40.444392228 / -104.845022434)	06/30/14	3.5	8.4	yes
TBSS-36 @ 3.5' (40.444372 / -104.845065)	06/30/14	3.5	3.1	no
TBSS-37 @ 3.5' (40.444367855 / -104.844987229)	06/30/14	3.5	6.0	no
TBSS-38 @ 3.0' (40.444188007 / -104.845215599)	06/30/14	3.0	11.7	no
TBSS-39 @ 3.0' (40.44417126 / -104.845176684)	06/30/14	3.0	21.6	yes
TBSS-40 @ 3.5' (40.444149399 / -104.845087619)	06/30/14	3.5	8.8	yes
TBSS-41 @ 3.0' (40.444174994 / -104.845018487)	06/30/14	3.0	107.9	yes
TBSS-42 @ 3.0' (40.444205936 / -104.845005406)	06/30/14	3.0	210.1	no
TBSS-43 @ 3.0' (40.444162596 / -104.845044647)	06/30/14	3.0	10.8	no
PID = photoionization detector ppm-v = parts per million by volume				

Sample Location (Latitude / Longitude)	Date	Approximate Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	pH	Specific Conductance (EC)	Sodium Adsorption Ratio
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500		6.0-9.0	<4mmhos/cm	<12
SS-01 @ surface (40.445981562 / -104.842166414)	06/20/14	surface	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-02 @ surface (40.445855905 / -104.84258165)	06/20/14	surface	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-03 @ surface (40.445685039 / -104.843011606)	06/20/14	surface	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-04 @ surface (40.445510657 / -104.843363798)	06/20/14	surface	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-05 @ surface (40.445378447 / -104.843494015)	06/20/14	surface	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-06 @ 1-2" (40.444033585 / -104.845026678)	06/21/14	1.0-2.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	1500	7.90	0.229	1.35
SS-07 @ 3-4" (40.444033585 / -104.845026678)	06/21/14	3.0-4.0	<0.05	<0.05	<0.05	<0.05	<0.2	33.7	414	7.69	0.230	1.35
SS-08 @ 1-2" (40.444194133 / -104.844911559)	06/21/14	1.0-2.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	28300	7.53	0.232	1.42
SS-09 @ 3-4" (40.444194133 / -104.844911559)	06/21/14	3.0-4.0	<0.002	<0.002	<0.002	<0.002	<0.008	4.4	3240	7.46	0.283	0.837
SS-10 @ 1-2" (40.444381772 / -104.844747628)	06/21/14	1.0-2.0	<0.002	<0.002	<0.002	<0.002	<0.008	3.6	20500	8.36	0.0434	0.678
SS-11 @ 3-4" (40.444381772 / -104.844747628)	06/21/14	3.0-4.0	<0.05	<0.05	0.09	1.2	0.7	240	41700	8.18	0.0562	1.07
SS-12 @ 1-2" (40.44458152 / -104.84470946)	06/21/14	1.0-2.0	<0.002	<0.002	<0.002	<0.002	<0.008	13.6	3300	7.73	0.284	1.87
SS-13 @ 3-4" (40.44458152 / -104.84470946)	06/21/14	3.0-4.0	<0.002	<0.002	<0.002	<0.002	<0.008	1.5	829	7.76	0.191	1.44
SS-14 @ 1-2" (40.444679006 / -104.844377002)	06/21/14	1.0-2.0	<0.002	<0.002	<0.002	<0.002	<0.008	0.5	1880	8.48	0.0761	0.787
SS-15 @ 3-4" (40.444679006 / -104.844377002)	06/21/14	3.0-4.0	<0.1	0.2	<0.1	<0.1	<0.4	20.0	179	7.69	0.0643	0.84
SS-16 @ 1-2" (40.444877225 / -104.844225377)	06/21/14	1.0-2.0	<0.1	<0.1	<0.1	<0.1	<0.4	<10.0	392	7.80	0.134	1.24
SS-17 @ 3-4" (40.444877225 / -104.844225377)	06/21/14	3.0-4.0	<0.002	<0.002	0.002	0.01	<0.008	0.3	643	7.54	0.168	1.09
SS-18 @ 1-2" (40.444872764 / -104.843980778)	06/21/14	1.0-2.0	<0.05	<0.05	<0.05	<0.05	<0.2	17.1	293	8.09	0.0806	0.768
SS-19 @ 3-4" (40.444872764 / -104.843980778)	06/21/14	3.0-4.0	<0.05	<0.05	<0.05	<0.05	<0.2	<5.0	89.0	7.90	0.127	0.829
SS-20 @ 1-2" (40.444844744 / -104.843751845)	06/21/14	1.0-2.0	<0.002	0.002	<0.002	<0.002	<0.008	<0.2	518	7.33	0.131	0.588
SS-21 @ 3-4" (40.444844744 / -104.843751845)	06/21/14	3.0-4.0	<0.002	0.003	<0.002	<0.002	<0.008	0.2	685	7.48	0.163	0.491
SS-22 @ 6-12" (40.444194133 / -104.844911559)	06/25/14	6.0-12.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	66.4	NA	NA	NA
SS-23 @ 6-12" (40.444381772 / -104.844747628)	06/25/14	6.0-12.0	<0.05	<0.05	<0.05	0.3	0.3	92.0	982	NA	NA	NA
SS-24 @ 12-18" (40.44458152 / -104.84470946)	06/25/14	12.0-18.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-25 @ 6-12" (40.444877225 / -104.844225377)	06/25/14	6.0-12.0	0.003	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA

Sample Location (Latitude / Longitude)	Date	Approximate Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	pH	Specific Conductance (EC)	Sodium Adsorption Ratio
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500		6.0-9.0	<4mmhos/cm	<12
SS-26 @ 30-36" (40.444844744 / -104.843751845)	06/25/14	30.0-36.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-27 @ 4-8" (40.443969064 / -104.845038769)	06/26/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-28 @ 22-26" (40.444048624 / -104.845071473)	06/26/14	22.0-26.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-29 @ 16-20" (40.444024316 / -104.844993703)	06/26/14	16.0-20.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-30 @ 22-26" (40.44423293 / -104.844970576)	06/26/14	22.0-26.0	0.8	4.3	1.1	8.0	<0.8	191	78.0	NA	NA	NA
SS-31 @ 4-8" (40.444159548 / -104.844851054)	06/26/14	4.0-8.0	<0.002	<0.002	<0.002	0.005	<0.008	0.2	<50.0	NA	NA	NA
SS-32 @ 4-8" (40.444401989 / -104.844780656)	06/26/14	4.0-8.0	<0.002	0.002	<0.002	0.007	<0.008	<0.2	<50.0	NA	NA	NA
SS-33 @ 4-8" (40.444344011 / -104.844668852)	06/26/14	4.0-8.0	<0.002	<0.002	<0.002	0.005	<0.008	<0.2	<50.0	NA	NA	NA
SS-34 @ 12-16" (40.444609565 / -104.844739569)	06/27/14	12.0-16.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-35 @ 4-8" (40.444527337 / -104.844575814)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-36 @ 8-12" (40.444761834 / -104.844498553)	06/27/14	8.0-12.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-37 @ 4-8" (40.444662913 / -104.844327325)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-38 @ 4-8" (40.444873363 / -104.844334236)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-39 @ 4-8" (40.444815128 / -104.844179929)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-40 @ 4-8" (40.444992512 / -104.844184169)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-41 @ 4-8" (40.444958298 / -104.843786868)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-42 @ 4-8" (40.444778035 / -104.843763308)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-43 @ 4-8" (40.44488832 / -104.843703757)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-44 @ 4-8" (40.444624838 / -104.843855268)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-45 @ 4-8" (40.444495488 / -104.843933899)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-46 @ 4-8" (40.444300036 / -104.844105806)	06/27/14	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-47 @ 30-36" (40.445050479 / -104.844150918)	06/30/14	30.0-36.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
SS-48 @ 18-24" (40.44501361 / -104.844059742)	06/30/14	18.0-24.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA

Sample Location (Latitude / Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	pH	Specific Conductance (EC)	Sodium Adsorption Ration
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500		6.0-9.0	<4mmhos/cm	<12
TBSS-01 @ 3.5' (40.444345803 / -104.845189974)	06/24/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-04 @ 3.5' (40.444380503 / -104.845153519)	06/24/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	8.37	0.106	0.448
TBSS-05 @ 3.0' (40.444358534 / -104.845074397)	06/24/14	3.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-18 @ 3.0' (40.444302821 / -104.845218221)	06/25/14	3.0	<0.002	<0.002	<0.002	0.009	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-19 @ 3.0' (40.444258109 / -104.845235796)	06/25/14	3.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-21 @ 3.0' (40.444267 / -104.845234)	06/25/14	3.0	<0.002	<0.002	<0.002	0.04	<0.008	0.6	<50.0	NA	NA	NA
TBSS-29 @ 3.5' (40.444338437 / -104.844969236)	06/27/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-30 @ 3.5' (40.44430919 / -104.844960128)	06/27/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-31 @ 3.5' (40.444246927 / -104.844977048)	06/27/14	3.5	0.05	0.06	0.007	0.04	<0.008	0.6	<50.0	NA	NA	NA
TBSS-35 @ 3.5' (40.444392228 / -104.845022434)	06/30/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-39 @ 3.0' (40.44417126 / -104.845176684)	06/30/14	3.0	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-40 @ 3.5' (40.444149399 / -104.845087619)	06/30/14	3.5	<0.002	<0.002	<0.002	<0.002	<0.008	<0.2	<50.0	NA	NA	NA
TBSS-41 @ 3.0' (40.444174994 / -104.845018487)	06/30/14	3.0	0.06	0.005	0.02	0.1	<0.008	2.3	<50.0	NA	NA	NA
COGCC = Colorado Oil and Gas Conservation Commission mg/kg = milligrams per kilogram mmhos/cm = millimhos per centimeter TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics NA = Not Analyzed Note: Values presented with a less than symbol (<) indicate concentrations were not observed at or above the laboratory reporting limit. Values presented in bold typeface exceed their respective COGCC - Regulatory Limits (Table 910-1).												

Sample Location	Date	Approximate Depth (inches)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(A) anthracene (mg/kg)	Benzo(A) pyrene (mg/kg)	Benzo(B) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(A,H) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(1,2,3,C,D) pyrene (mg/kg)	Pyrene (mg/kg)
COGCC Table 910-1 Regulatory Limit (mg/kg)			1,000	1,000	0.22	0.022	0.22	2.2	22	0.022	1,000	1,000	0.22	1,000
SS-11	06/21/14	3.0-4.0	<0.00833	<0.00833	<0.00833	0.169	<0.00833	<0.00833	0.795	<0.00833	<0.00833	3.55	<0.00833	<0.00833
		Approximate Depth (feet)												
TBSS-21	06/25/14	3.0	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023

COGCC = Colorado Oil and Gas Conservation Commission

mg/kg = milligrams per kilogram

Note: Values presented with a less than symbol (<) indicate concentrations were not observed at or above the laboratory reporting limit.

Values presented in bold typeface exceed their respective COGCC Regulatory Limit (Table 910-1).

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
COGCC Table 910-1 Regulatory Limits (µg/L)		5	560	700	1400
GW-01 (40.444307 / -104.845131)	06/24/14	2470	1380	892	5890
Surface Pond (40.444856 / -104.843792)	06/24/14	<1.0	<1.0	<1.0	<1.0
SS-22-GW (40.444194133 / -104.844911559)	06/25/14	25.2	20.4	<4.0	<4.0
SS-23-GW (40.444381772 / -104.844747628)	06/25/14	11.1	<4.0	<4.0	<4.0
SS-24-GW (40.44458152 / -104.84470946)	06/25/14	<1.0	<1.0	<1.0	<1.0
SS-25-GW (40.444877225 / -104.844225377)	06/25/14	<1.0	<1.0	<1.0	<1.0
SS-26-GW (40.444844744 / -104.843751845)	06/25/14	<1.0	<1.0	<1.0	<1.0
SS-27-GW (40.443969064 / -104.845038769)	06/26/14	<1.0	<1.0	<1.0	<1.0
SS-28-GW (40.444048624 / -104.845071473)	06/26/14	<1.0	<1.0	<1.0	<1.0
SS-29-GW (40.444024316 / -104.844993703)	06/26/14	<1.0	<1.0	<1.0	<1.0
SS-31-GW (40.444159548 / -104.844851054)	06/26/14	<1.0	<1.0	<1.0	<1.0
SS-32-GW (40.444401989 / -104.844780656)	06/26/14	29.1	2.8	<1.0	4.6
SS-33-GW (40.444344011 / -104.844668852)	06/26/14	<1.0	<1.0	<1.0	<1.0
SS-34-GW (40.444609565 / -104.844739569)	06/27/14	1.6	<1.0	<1.0	<1.0
SS-35-GW (40.444527337 / -104.844575814)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-36-GW (40.444761834 / -104.844498553)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-37-GW (40.444662913 / -104.844327325)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-38-GW (40.444873363 / -104.844334236)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-39-GW (40.444815128 / -104.844179929)	06/27/14	3.5	<1.0	<1.0	<1.0
SS-40-GW (40.444992512 / -104.844184169)	06/27/14	7.8	<1.0	<1.0	<1.0
SS-41-GW (40.444958298 / -104.843786868)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-42-GW (40.444778035 / -104.843763308)	06/27/14	<4.0	<4.0	<4.0	<4.0
SS-43-GW (40.44488832 / -104.843703757)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-44-GW (40.444624838 / -104.843855268)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-45-GW (40.444495488 / -104.843933899)	06/27/14	<1.0	<1.0	<1.0	<1.0

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
COGCC Table 910-1 Regulatory Limits (µg/L)		5	560	700	1400
SS-46-GW (40.444300036 / -104.844105806)	06/27/14	<1.0	<1.0	<1.0	<1.0
SS-47-GW (40.445050479 / -104.844150918)	06/30/14	<1.0	<1.0	<1.0	<1.0
SS-48-GW (40.44501361 / -104.844059742)	06/30/14	<1.0	<1.0	<1.0	<1.0
TBSB-01-GW (40.444470809 / -104.845024968)	06/30/14	68.1	<1.0	1.8	15.0
TBSB-02-GW (40.444347698 / -104.845291808)	06/30/14	<1.0	<1.0	<1.0	<1.0
TBSB-03-GW (40.444167498 / -104.845295342)	06/30/14	<1.0	<1.0	<1.0	<1.0
COGCC = Colorado Oil and Gas Conservation Commission µg/L - micrograms per liter Note: Values presented with a less than symbol (<) indicate concentrations were not observed at or above the laboratory reporting limit. Values presented in bold typeface exceed their respective COGCC - Regulatory Limits (Table 910-1).					

FIGURES

Figure 1: Topographic Site Location Map

Figure 2: Aerial Site Location Map

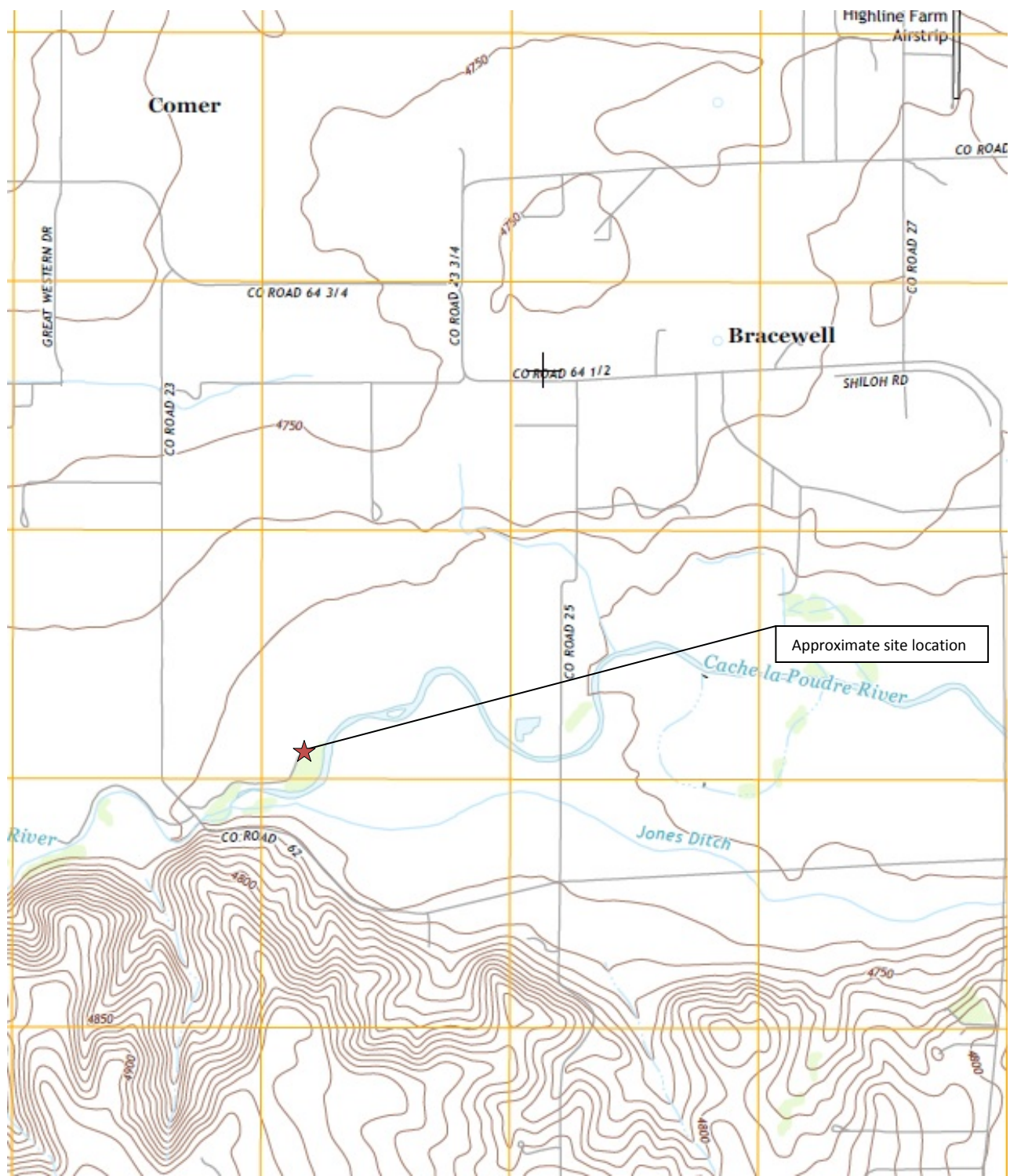
Figure 3: Field Assessment Soil Sample Location Map

Figure 4: Groundwater Sample Location Map

Figure 5: Excavation Soil Sample Location Map

Figure 6: Excavation Cross Section

Figure 7: Excavation Soil Analytical Map



Topographic Site Location Map
 State M36-3, M36-5, 6-36, 7-36, and 8-36
 Production Tank Release
 40.444259/-104.845056
 SW¼ NW¼ SEC.36 T6N R67W 6PM
 Weld County, Colorado
 Remediation # 8495



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

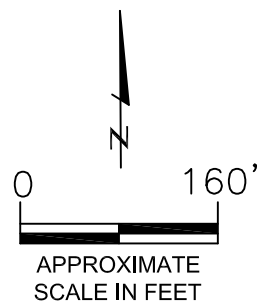
Source: USGS 7.5 Minute Topographic
 Map, Bracewell, CO Quadrangle 2013

Figure 1



LEGEND

COORDINATES OF INFRASTRUCTURE AND RELEASE LOCATION:
 STATE M #36-5 WELL (40.44491/-104.8492)
 RELEASE LOCATION (40.444259/-104.845056)
 TANK BATTERY (40.444274/-104.845117)



AERIAL SITE LOCATION MAP
 STATE M36-3, 36-5, 6-36, 7-36, and 8-36
 PRODUCTION TANK RELEASE
 40.444259 / -104.845056
 SW1/4 NW1/4 SEC.36 T6N R67W 6PM
 WELD COUNTY, COLORADO
 REMEDIATION # 8495

DATE: 07/08/14

FIG. NO.

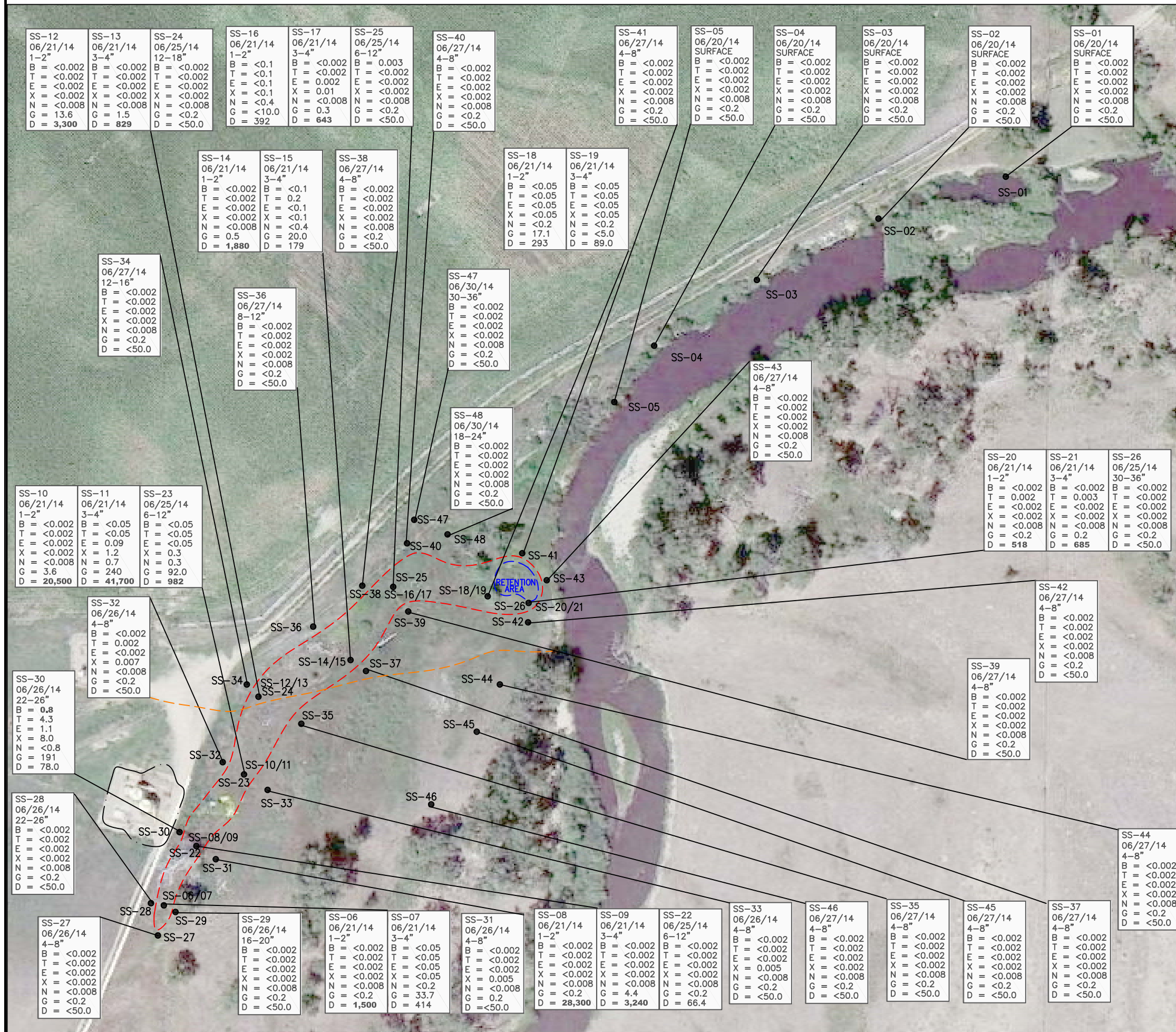
2

DRAWN BY:

mce



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.
 4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449



- LEGEND**
- APPROXIMATE EXTENTS OF STATE M36-3, M36-5, 6-36, 7-36, AND 8-36 TANK BATTERY EXCAVATION
 - APPROXIMATE EXTENT OF SURFACE STAINING
 - PROPOSED EXCAVATION EXTENTS
 - APPROXIMATE SOIL SAMPLE LOCATION
 - APPROXIMATE LOCATION OF DCP MIDSTREAM UNDERGROUND UTILITY

PARAMETERS

SAMPLE LOCATION
DATE
DEPTH (INCHES)
B = BENZENE (mg/kg)
T = TOLUENE (mg/kg)
E = ETHYLBENZENE (mg/kg)
X = TOTAL XYLENES (mg/kg)
N = NAPHTHALENE (mg/kg)
G = TPH - GRO (mg/kg)
D = TPH - DRO (mg/kg)

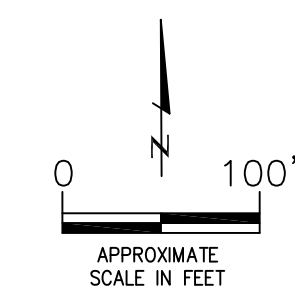
mg/kg = MILLIGRAMS PER KILOGRAM

TPH - GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS
TPH - DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS

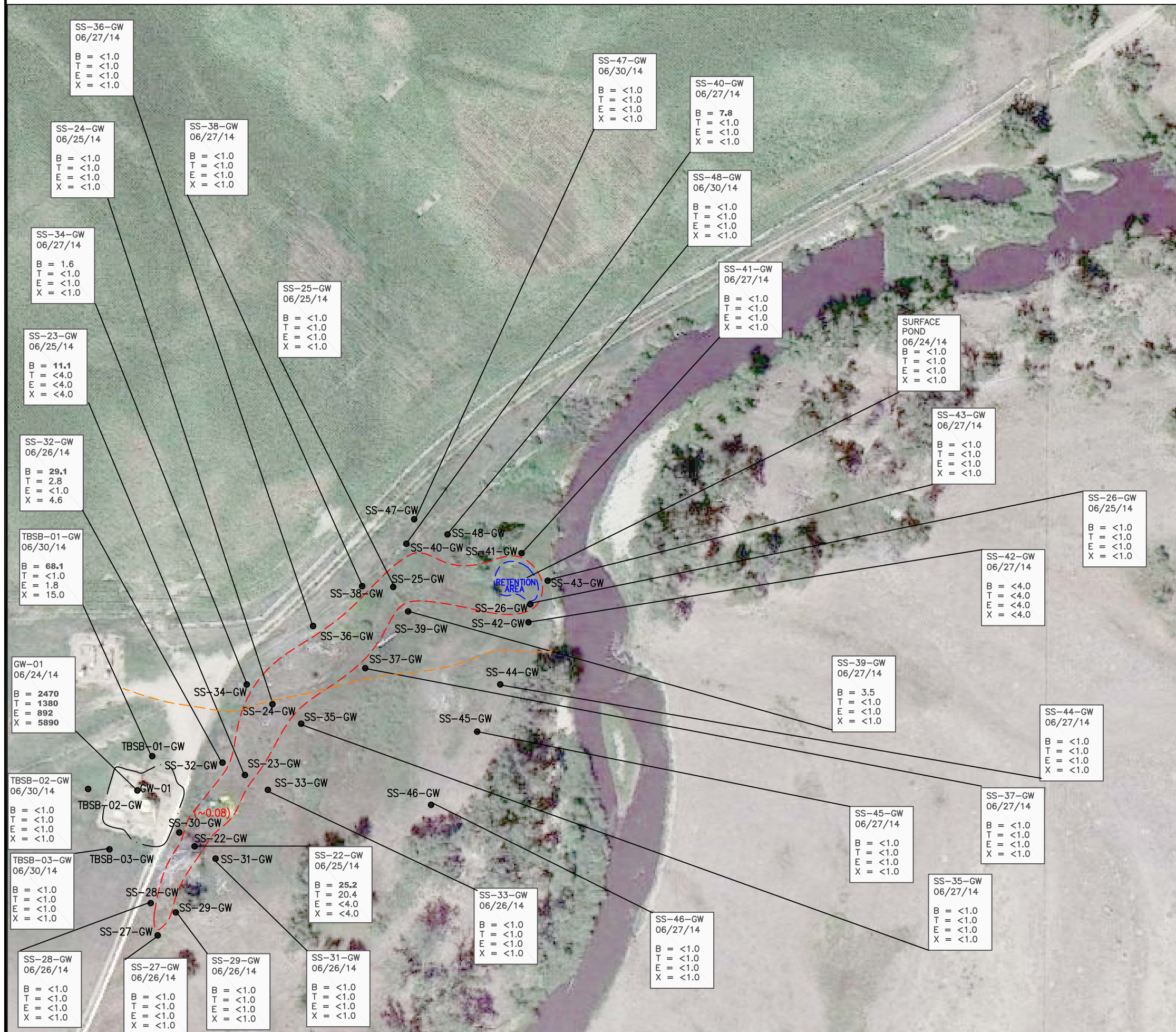
NOTE: VALUES PRESENTED IN BOLD TYPEFACE EXCEED THE COGCC CONCENTRATION LEVELS PRESENTED IN TABLE 910-1.

COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION.

VALUES PRESENTED WITH A LESS THAN SYMBOL (<) INDICATE CONCENTRATIONS WERE NOT OBSERVED AT OR ABOVE THE LABORATORY REPORTING LIMIT.



FIELD ASSESSMENT SOIL SAMPLE LOCATION MAP
STATE M36-3, M36-5, 6-36, 7-36, AND 8-36
PRODUCTION TANK RELEASE
40.444259/-104.845056
SW1/4 NW1/4 SEC.36 T6N R67W 6 PM
WELD COUNTY, COLORADO
REMEDIATION # 8495



LEGEND

— APPROXIMATE EXTENTS OF STATE M36-3, M36-5, 6-36
7-36, AND 8-36 TANK BATTERY EXCAVATION

○ APPROXIMATE EXTENT OF SURFACE STAINING

PROPOSED EXCAVATION EXTENTS

● APPROXIMATE GROUNDWATER SAMPLE LOCATION
SS-25-GW

— APPROXIMATE LOCATION OF DCP MIDSTREAM UNDERGROUND
UTILITY

PARAMETERS

SAMPLE LOCATION

DATE

B = BENZENE (µg/L)

T = TOLUENE (µg/L)

E = ETHYLBENZENE (µg/L)

X = TOTAL XYLENES (µg/L)

µg/L = MICROGRAMS PER LITER

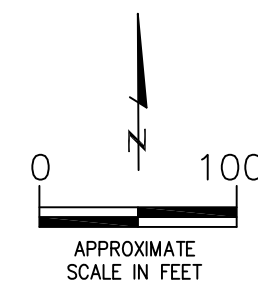
NOTE: VALUES PRESENTED IN BOLD TYPEFACE EXCEED
THE COGCC CONCENTRATION LEVELS PRESENTED IN
TABLE 910-1.

COGCC = COLORADO OIL AND GAS CONSERVATION
COMMISSION.

VALUES PRESENTED WITH A LESS THAN SYMBOL (<)
INDICATE CONCENTRATIONS WERE NOT OBSERVED AT OR
ABOVE THE LABORATORY REPORTING LIMIT.

NOTE: A GROUNDWATER SAMPLE WAS NOT COLLECTED
FROM SOIL BORING SS-30 DUE TO THE PRESENCE OF
LIGHT NONAQUEOUS PHASE LIQUID (LNAPL). A 2-INCH
WELL WAS INSTALLED IN SOIL BORING SS-30 FOR
ADDITIONAL LNAPL ABATEMENT.

(~0.08) APPROXIMATE LNAPL THICKNESS OBSERVED ON 07/01/14.



GROUNDWATER SAMPLE LOCATION MAP
STATE M36-3, M36-5, 6-36, 7-36, AND 8-36
PRODUCTION TANK RELEASE
40.444259/-104.845056
SW1/4 NW1/4 SEC.36 T6N R67W 6 PM
WELD COUNTY, COLORADO
REMEDATION # 8495

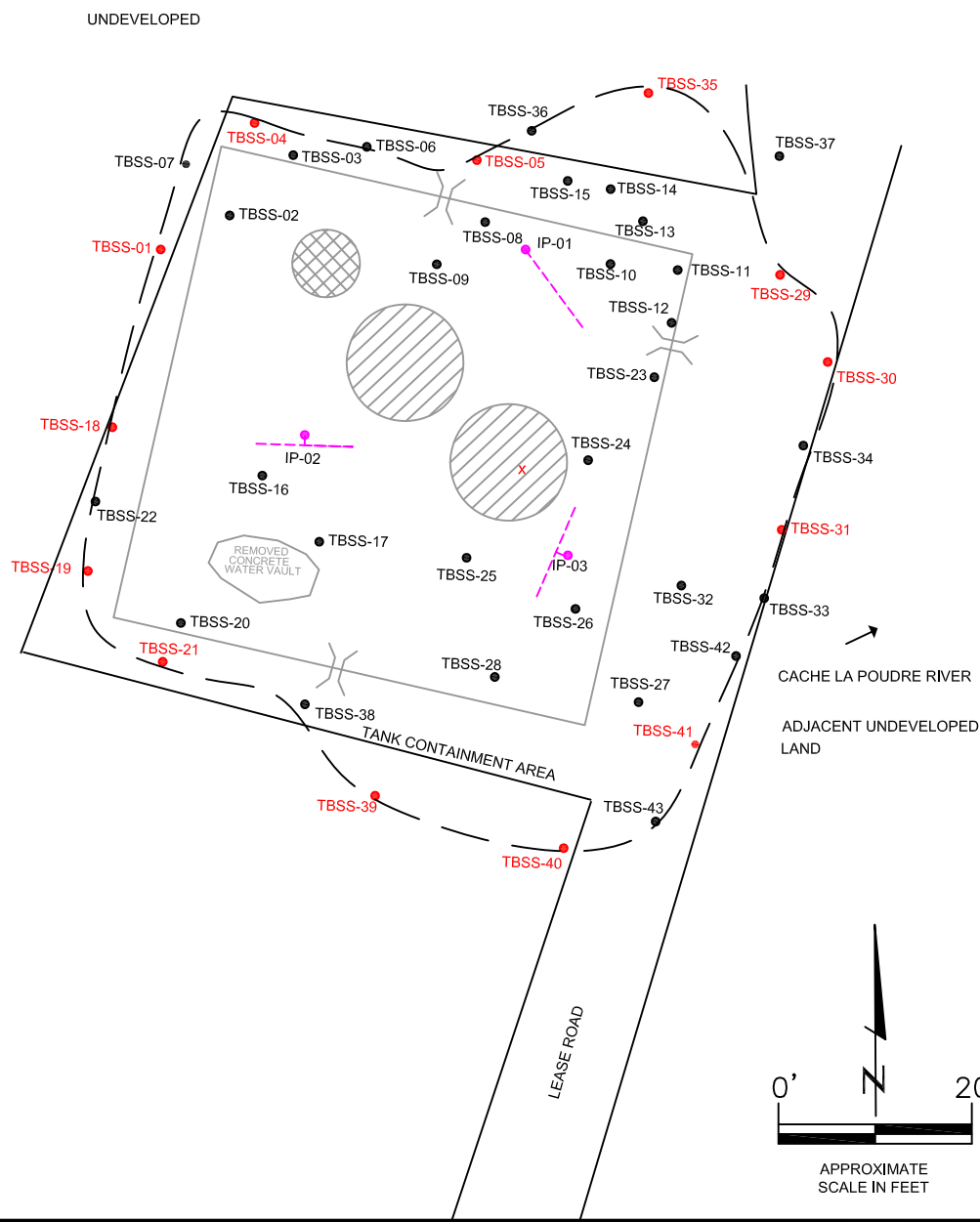
DATE: 07/16/14

FIG NO.: 4

DRAWN BY: amn



EAGLE
ENVIRONMENTAL
CONSULTING, INC.
4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449



LEGEND

- X APPROXIMATE SOURCE AREA
- PREVIOUS 300BBL AST LOCATION
- PREVIOUS FIBERGLASS WATER VAULT LOCATION
- IP-01 APPROXIMATE INJECTION WELL LOCATION
- TBSS-02 SOIL SAMPLES FIELD ANALYZED WITH PHOTOIONIZATION DETECTOR (PID)
- TBSS-01 SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS
- APPROXIMATE EXCAVATION BOUNDARIES

EXCAVATION SOIL SAMPLE LOCATION MAP
 STATE M36-3, M36-5, 6-36, 7-36, AND 8-36
 PRODUCTION TANK RELEASE
 40.444259/-104.845056
 SW1/4 NW1/4 SEC.36 T6N R67W 6 PM
 WELD COUNTY, COLORADO
 REMEDIATION # 8495

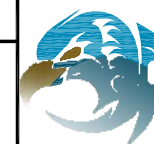
DATE: 07/08/14

FIG. NO.

5

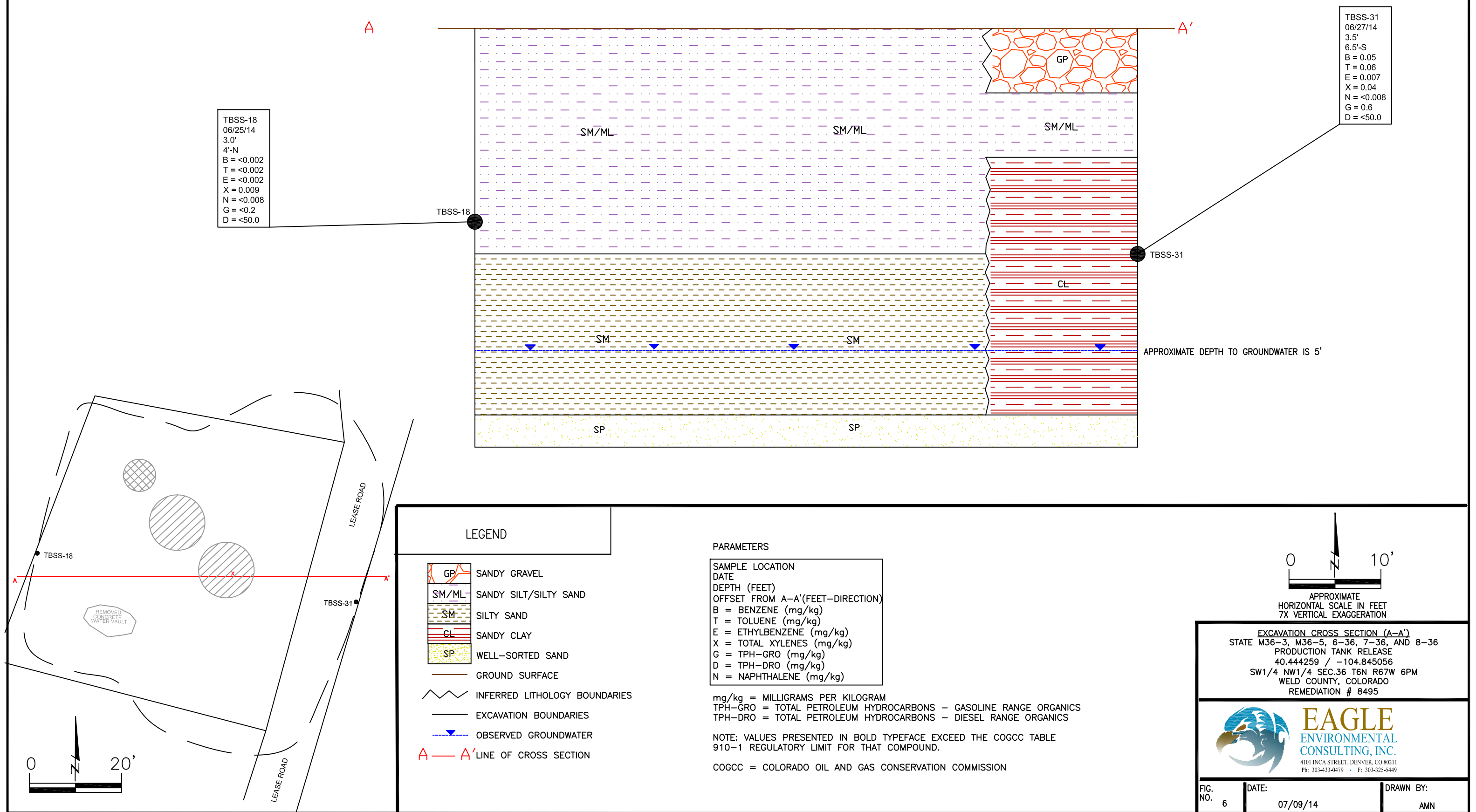
DRAWN BY:

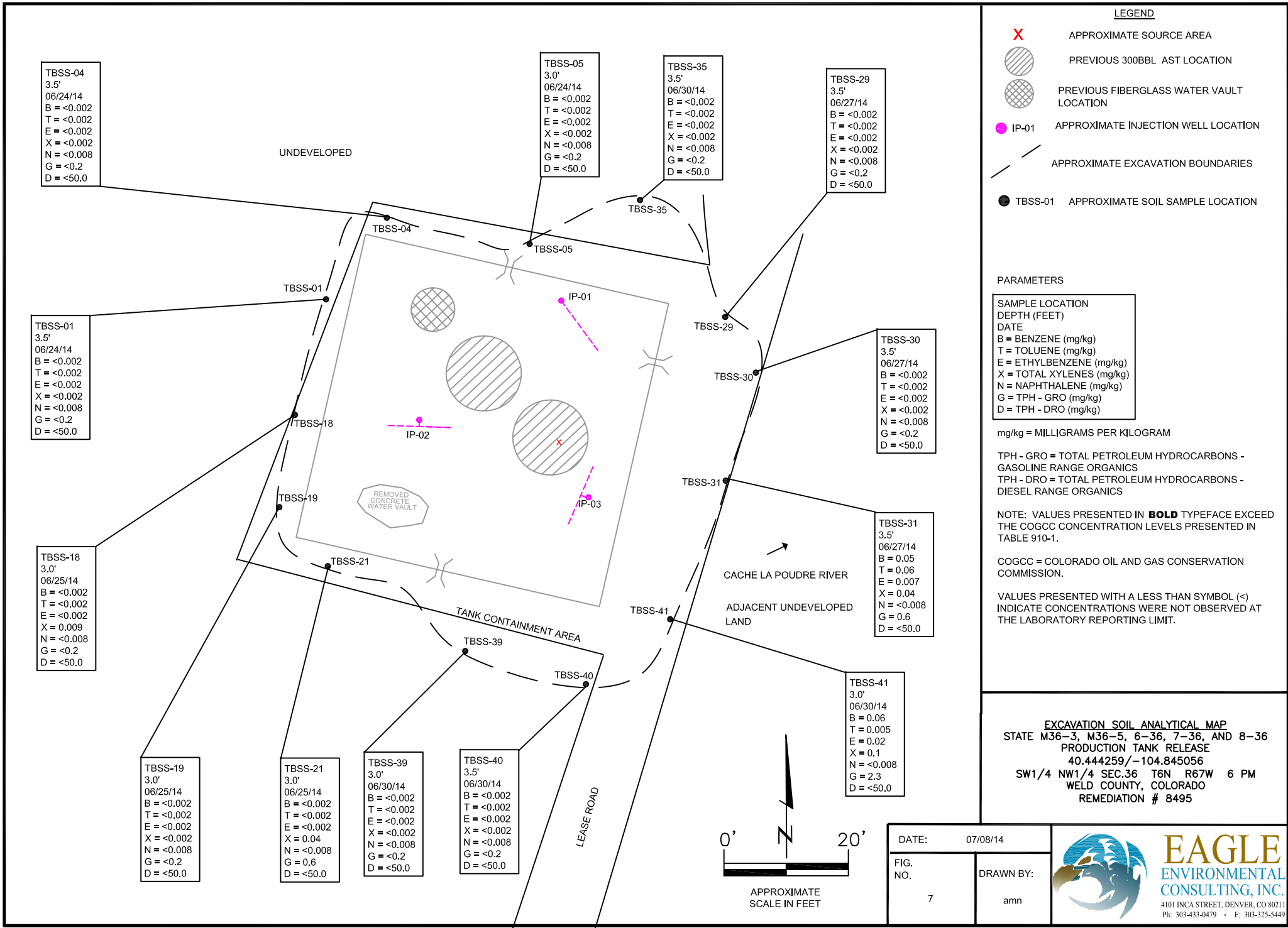
amn



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.
 4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

EXCAVATION CROSS SECTION





ATTACHMENT A

SWCA Biological and Wetland Site Assessment Report



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.

Denver Office
295 Interlocken Boulevard, Suite 300
Broomfield, Colorado 80021
Tel 303.487.1183 Fax 303.487.1245
www.swca.com

June 25, 2014

Scott Park
Environmental Manager
2115 117th Ave
Greeley, CO 80634

RE: Survey Results for the State M36-3, M36-5, 6-36, 7-36, and 8-36 Site in Weld County, Colorado

Dear Mr. Park,

SWCA Environmental Consultants (SWCA) was contracted by Noble Energy, Inc. (Noble) to conduct a biological survey associated with the unintentional release at the State M36-3, M36-5, 6-36, 7-36, and 8-36 site in Weld County, Colorado (hereafter unintentional release) as a result of flooding due to heavy precipitation and snowmelt. The unintentional release site is located approximately three (3) miles southeast of the town of Windsor and is immediately adjacent to the Cache la Poudre River (hereafter Poudre River) (Figure 1). Specifically, spring floods broke the Poudre River bank and undercut two crude oil battery tanks resulting in the displacement of one (1) battery tank and a broken valve. These two (2) tanks are located approximately 400 feet from the banks of the Poudre River. The tanks are located between an irrigated agricultural field and the surrounding floodplain.

On June 21, 2014 the site associated with the unintentional release was evaluated for vegetative communities and wildlife habitats that occur within the area. Hydrocarbon staining was present on vegetation communities and in associated wildlife habitats. No evidence of wildlife coming into direct contact with the hydrocarbons associated with the unintentional release was observed. On June 24, 2014 a wetlands specialist identified and delineated the boundaries of wetlands and other waters of the United States (hereafter waters of the U.S.) that may be under the jurisdiction of the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA) and associated implementing regulations. Following is a summary of the site assessment activities completed by SWCA.

Evaluation of Potential Wildlife Impacts

An evaluation of potential impacts to wildlife was completed during the June 21, 2014 site visit. Survey efforts were completed in 100% of the area impacted by the unintentional release and in adjacent habitats. Surveys were conducted by walking meandering transects through areas with

visual evidence of hydrocarbon staining as well as areas within approximately 100 meters of the unintentional release. Biologists conducting the survey effort recorded all observations of hydrocarbon staining in suitable wildlife habitat, recorded photos of habitats with evidence of hydrocarbon staining from the unintentional release, and were instructed to record all wildlife species observed and any evidence of wildlife species coming into contact with the hydrocarbons associated with the unintentional release. No evidence of wildlife species coming into contact with hydrocarbons was observed. As described in the following section, evidence of impacts to grassland, riparian, and wetland wildlife habitats was observed.

Vegetative Community Description

Vegetative communities were characterized within all areas potentially impacted by the unintentional release (Figure 1) as well as those areas immediately adjacent to the unintentional release. Initial visual observations suggest that hydrocarbons from the compromised tank crossed a two-track road east of the tank battery and spread approximately 60 feet in an upstream direction (southwest) and 490 feet downstream (northeast) to the banks of the Poudre River (Figure 1). Three vegetative communities were identified within the areas impacted by the unintentional release.

The dominant vegetation community within the area impacted by the unintentional release was located within the floodplain east of the two-track access road and consisted of upland vegetation over sandy substrates (Attachment A: Photo 1). This community was strongly dominated by smooth brome (*Bromus inermis*), but also contained other upland grass species, such as western wheatgrass (*Pascopyrum smithii*), and forbs including milkweed (*Asclepias* spp.), western tansy mustard (*Descurainia pinnata*), curly dock (*Rumex crispus*), leafy spurge (*Euphorbia esula*), and field bindweed (*Convolvulus arvensis*). In years where runoff is at normal levels, the majority of this community likely receives no surface flow from the Poudre River.

A narrow riparian corridor dominated by eastern cottonwood (*Populus deltoides*) was observed along the banks of the Poudre River adjacent to the area impacted by the unintentional release. Most trees were approximately 200-300 feet away from the area impacted by the unintentional release, but two individual trees were noted within the area impacted by the unintentional release approximately 50 feet from the tank battery (Attachment A: Photos 1 and 2). Eastern cottonwood saplings were observed at the northern extent of the area impacted by the unintentional release near where hydrocarbons appeared to have entered the Poudre River. The understory of this riparian community was found to vary spatially throughout the area surveyed, but it was generally dominated by grass species found in the upland floodplain community described above. Closer to the Poudre River bank, there were small, scattered, stands of narrowleaf willow (*Salix exigua*), Siberian elm (*Ulmus pumila*), and peachleaf willow (*Salix amygdaloides*). Areas along the Poudre River banks also included other hydrophytic plants such as timothy (*Phleum pratense*), curly dock, and reed canarygrass (*Phalaris arundinacea*).

On the northeastern end of the area associated with the unintentional release, along the banks of the Poudre River, the vegetation community is dominated by hydrophytic species commonly found in palustrine emergent (Attachment A: Photo 3) and scrub-shrub wetlands (Attachment A: Photo 4). This area included a depression where water appeared to break the banks of the Poudre River and also a small inlet directly connected to the main river channel. This vegetation community was characterized as having a scattered upper canopy of peachleaf willow, narrowleaf willow, and

Siberian elm lining the Poudre River. Other common species included quackgrass (*Elymus repens*), timothy, reed canarygrass, Emory's sedge (*Carex emoryi*), perennial pepperweed (*Lepidium latifolium*), Baltic rush (*Juncus balticus*), softstem bulrush (*Schoenoplectus tabernaemontani*), and milkweed.

Wetland Delineations

Wetlands and other waters of the U.S. that could potentially fall under the jurisdiction of the USACE under the Clean Water Act (CWA) and associated implementing regulations were identified within and immediately adjacent to the unintentional release area (Figure 1). Areas containing a dominance of hydrophytic vegetation, hydric soils, and wetland hydrology were identified based on upland/wetland data point pairs as described in the Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) (USACE 2010). Prior to the on-site delineations, existing data were obtained to supplement the on-site delineations. Aerial maps and National Wetland Inventory (NWI) data were analyzed to identify locations of potential wetland communities. Portions of the Poudre River banks are identified by NWI as Palustrine forest, temporarily flooded (PFOA).

At each wetland sample plot, vegetation was recorded for each vegetation stratum (although only the herbaceous stratum was present) and the percent cover by species was determined using an approximate 5-foot radius. Soil pits were established at each sample plot to a depth of 15 to 20 inches. The soil was inspected for the presence of hydric soil indicators as described in the USACE wetland delineation manuals. Hydrology was analyzed for primary and secondary indicators to demonstrate saturation for a portion of the growing season.

The majority of the areas associated with the unintentional release were identified as upland floodplain due to the absence of hydric soils and hydrophytic vegetation. Only those areas identified in Figure 1 as open surface water, palustrine emergent wetland, and palustrine scrub/shrub wetland were determined by SWCA to be wetlands or other waters of the U.S. During the delineations, three feature types were identified and delineated including 0.054 acre of palustrine scrub-shrub wetlands, 0.104 acre of palustrine emergent wetlands, and 0.019 acre of surface water (Figure 1). Because these features are adjacent to the Poudre River (a Traditional Navigable Water) all delineated features are likely to be under USACE jurisdiction and subject to regulations under Section 404 of the Clean Water Act.

Sincerely,



Jon Kehmeier
Principal Ecologist
SWCA Environmental Consultants

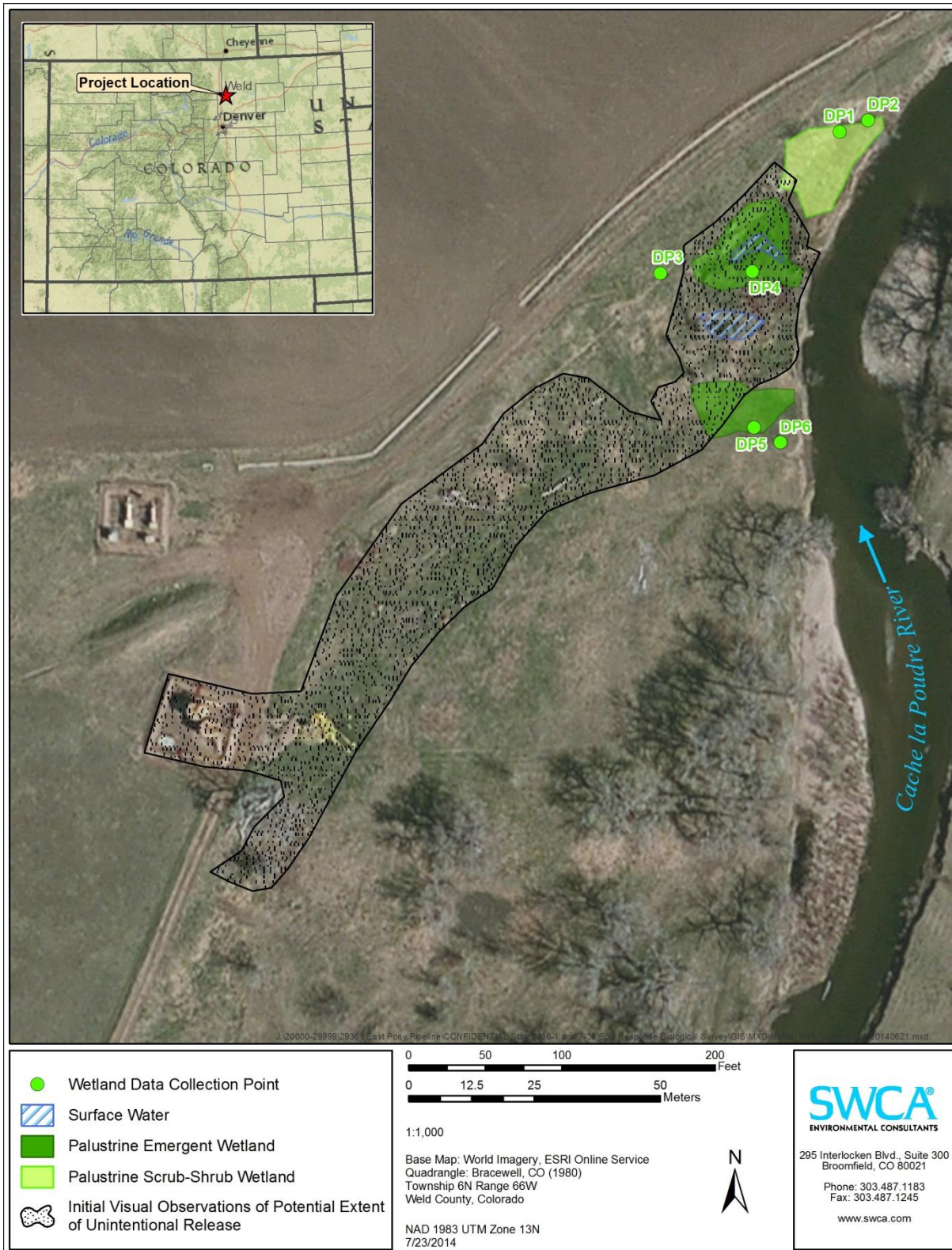


Figure 1. Site assessment overview. Initial visual observations of potential extent of impacts from unintentional release to be confirmed using appropriate field sampling and laboratory analyses.

References

United States Army Corps of Engineers (USACE). March 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region.

_____. 1987. Wetlands Delineation Manual. Technical Report Y-87-1, Department of the Army, Washington, D.C.

Attachment A:
Photos Taken During June 21, 2014 Site Visit



Photo 1. Upland grass community (foreground) and riparian community (background) in and adjacent to areas exhibiting initial visual impacts from the unintended release.



Photo 2. Upland grass community (foreground) and riparian community (background) in and adjacent to areas exhibiting initial visual impacts from the unintended release.



Photo 3. Palustrine emergent wetland vegetation exhibiting initial visual impacts from the unintended release.



Photo 4. Scrub-shrub wetland vegetation exhibiting initial visual impacts from the unintended release.

ATTACHMENT B

Boring Logs

Boring Log/Well Completion Diagram: SS-22

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-30" sandy silty CLAY - dark brown, soft, low plasticity, mod sorted with 5% fine grained sand, 15-20% silt, strong odor, sheen	CL								
	@6-14"moist									
	6-12" strong HC odor		HA	1	100	0.2	N/A	12		
12	@14" wet w/ LPH.		HA	2	100	3.6	N/A			
	@12-18" strong HC odor, staining.									
	@18-24" strong HC odor, staining.		HA	3	100	0.3	N/A	24		
24	@24-30" Slight HC odor.		HA	4	100	2.7	N/A			
	30-48" silty clayey SAND - gray, fine to coarse grained sand, poorly sorted with 10% silt, 10-15% clay, wet	SC	HA	5	100	1.3	N/A	36		
36	@36-48" slight HC odor		HA	6	100	1.1	N/A			
	@42" light brown		HA	7	100	1.9	N/A	48		
48	BoB @ 48"									
60								60		

SS collected @ 0943
GW Collected @ 1156
Water: yellow-LPH,
strong odor, clear.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground
surface

START/COMPLETION DATE: 06/25/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 48 WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 6-12/0943



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-23

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-12" sandy silty CLAY - dark brown, soft, med plasticity, poorly sorted with 5% medium grained sand, 15% silt, moist.	CL								
	6-18" strong HC odor, N/S.		HA	1	100	56.6	N/A			
12	@12" wet 12-30" organics-plant material, moist, wet.							12		
	@ 14" strong odor.	PT	HA	2	100	1.3	N/A			
	@18-24".		HA	3	100	3.6	N/A			
24	@24-30" Slight odor.		HA	4	100	3.0	N/A	24		
	30-36" sandy silty CLAY - dark brown, soft, med plasticity, poorly sorted with 5% medium grained sand, 15% silt, wet, slight HC odor, N/S.	CL	HA	5	100	4.3	N/A			
36	36-42" silty SAND - medium brown, fine to coarse grained sand, poorly sorted with 10-15% silt, wet, N/O, N/S.	SM	HA	6	100	0.9	N/A			
	BoB @ 42"									
48								48		
60								60		

DTW - 12"
SS collected @ 1113
GW Collected @ 1334
Water: clear, N/O, slight sheen.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/25/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 42

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 6-12/1113



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-24

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-30" silty CLAY - dark brown, soft, high plasticity, mod sorted with 10% silt, mod moist, wet @20" N/O, N/S.	CL	HA	1	100	0.3	N/A	12		
12			HA	2	100	0.3	N/A			
24			HA	3	100	0.4	N/A	24		
			HA	4	100	0.5	N/A			
36	30-36" silty clayey SAND - medium to dark brown, fine to coarse grained sand, mod sorted with 5% silt, 10-15% clay, wet, N/O, N/S, @32" light brown.	SC	HA	5	100	0.3	N/A	36		
	BoB @ 36"									DTW - 21" SS collected @ 1314 GW Collected @ 1359 Water: clear, N/O. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								48		
60								60		

START/COMPLETION DATE: 06/25/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 12-18/1314



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-25

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-36" sandy silty CLAY - dark brown, soft, high plasticity, well sorted with 5% fine grained sand, 10% silt, mod moist, N/S. @6-30" slight HC odor.	CL								
			HA	1	100	0.3	N/A	12		
12			HA	2	100	0.1	N/A			
	@18" moist.		HA	3	100	0.5	N/A	24		
24	@20" wet.									
	@24" decrease in sand.		HA	4	100	0.3	N/A			
	@30-36" N/O, N/S.		HA	5	100	0.1	N/A	36		
36	BoB @ 36"									DTW: 14" SS collected @ 1436 GW Collected @ 1445 Water: clear, N/O.
48								48		
	30-36" silty clayey SAND - medium to dark brown, fine to coarse grained sand, mod sorted with 5% silt, 10-15% clay, wet, N/O, N/S, @32" light brown.									HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
60								60		

START/COMPLETION DATE: 06/25/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 6-12/1436



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-26

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-48" sandy silty CLAY - medium to dark brown, soft, low plasticity, moderately sorted with 5-10% fine grained sand, 15-20% silt, mod moist.									
12	@12-24" slight odor, N/S.	CL	HA	1	100	0.2	N/A	12		
24	@24-48" N/O, N/S.		HA	2	100	0.3	N/A			
			HA	3	100	0.2	N/A	24		
	@30-48" Iron present.		HA	4	100	0.1	N/A			
			HA	5	100	0.4	N/A			
36	@36" wet.		HA	6	100	0.5	N/A	36		
	@40-48" gray.		HA	7	100	0.1	N/A			
48								48		
	BoB @ 48"									
60								60		

DTW: 44"
SS collected @ 1516
GW Collected @ 1540
Water: clear, N/O.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/25/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 48

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 30-36/1516



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-27

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-48" sandy silty CLAY - medium brown, soft to medium stiffness, low plasticity, mod sorted with 5% fine grained sand, 15-20% silt, mod moist, N/O, N/S, some organics. @30' wet, N/O, N/S.	CL	HA	1	100	0.1	N/A			DTW: 24" SS collected @ 1017 GW Collected @ 1524 Water: clear, N/O, no sheen.
			HA	2	100	0.2	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.0	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.0	N/A			
			HA	7	100	0.1	N/A	36		
36			HA	8	100	0.1	N/A			
			HA	9	100	0.0	N/A	48		
48	BoB @ 48"							60		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
60										

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 48

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1017



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-28

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-36" sandy silty CLAY - medium to dark brown, soft to medium stiffness, moderate plasticity, mod sorted with 5% fine grained sand, 10-15% silt, mod moist, N/O, N/S. @26" wet.	CL	HA	1	100	0.3	N/A			18" elevation change from SS-8/9
			HA	2	100	0.2	N/A			
12			HA	3	100	0.2	N/A	12		
			HA	4	100	0.1	N/A			
24			HA	5	100	0.2	N/A	24		
			HA	6	100	0.2	N/A			
36	BoB @ 36"							36		DTW: 32" SS collected @ 1047 GW Collected @ 1600 Water: clear, N/O, no sheen.
48								48		
60								60		

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 22-26/1047



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-29

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-24" sandy silty CLAY - medium to dark brown, soft to medium stiffness, mod sorted with 5% fine grained sand, 10% silt, N/O, N/S.	CL	HA	1	100	0.6	N/A			12" elevation change from SS-8/9
			HA	2	100	0.2	N/A			
			HA	3	100	0.1	N/A			
			HA	4	100	0.1	N/A			
			HA	5	100	0.3	N/A			
12								12		
	24-36" silty clayey SAND - medium brown, fine to medium grained sand, moderately sorted with 15% silt, 15% clay, moist, N/O, N/S.	SC	HA	6	100	0.1	N/A			
			HA	7	100	0.2	N/A			
24								24		
36	BoB @ 36"							36		DTW: 32" SS collected @ 1102 GW Collected @ 1555 Water: clear, N/O, no sheen.
48								48		
60								60		

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 16-20/1102

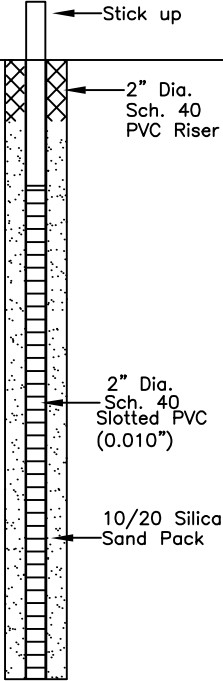


EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-30

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-36" sandy silty CLAY - medium to dark brown, moderate stiffness, poorly sorted with 5% coarse grained sand, 15-20% silt, mod moist. @0-18" strong HC odor, N/S.	CL	HA	1	100	215	N/A			18" Elevation difference from SS-8/9
			HA	2	100	27.3	N/A			
			HA	3	100	1112	N/A			
	@18-26" strong HC odor, slight staining.		HA	4	100	1097	N/A	24		
24	@26" moist. @27" wet. @26-48" strong HC odor and staining.		HA	5	100	387	N/A			
			HA	6	100	997	N/A			
	36-66" silty clayey SAND - medium brown, fine to coarse grained sand, poorly sorted with 10% silt, 15% clay, wet.	SC	HA	7	100	626	N/A			
			HA	8	100	1156	N/A	48		
48	@48-66" strong HC odor, N/S.		HA	9	100	902	N/A			
			HA	10	100	448	N/A			
			HA	11	100	578	N/A			
	66-72" sandy silty CLAY - medium to dark brown, mod stiff, low plasticity, poorly sorted with 5% coarse grained sand, 15-20% silt, mod moist, slight HC odor. BoB @ 72"	CL	HA	12	100	97.9	N/A	72		DTW: 31" SS collected @1440 GW not collected Water: LPH amber, strong odor.
72										
96										
120										HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (INCHES): 6-60"

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (INCHES): 0-6"

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (INCHES): 12-60"

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): 2"

BORING DEPTH (INCHES): 72

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: 22-26/1440



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-31

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-30" silty CLAY - dark brown to black, soft, mod plasticity, mod sorted with 10% silt, mod moist, organics present. @24" wet.	CL	HA	1	100	0.8	N/A			
			HA	2	100	0.9	N/A			
			HA	3	100	1.5	N/A	12		
12			HA	4	100	0.7	N/A			
			HA	5	100	0.5	N/A	24		
24			HA	6	100	0.3	N/A			
	30-36" silty clayey SAND - dark brown, fine to coarse grained sand, mod sorted with 5% silt, 10% clay, wet, N/O, N/S, organics present.	SC	HA	7	100	0.2	N/A	36		
36	BoB @ 36"									DTW: 24" SS collected @ 1505 GW Collected @ 1636 Water: brown, N/O, no sheen. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								48		
60								60		

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1505



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-32

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-8" gravelly silty SAND - brown, fine to coarse grained sand, poorly sorted with 5% gravel, 15-20% silt, mod moist.	SM	HA	1	100	2.1	N/A			
			HA	2	100	1.1	N/A			
12	8-18" sandy silty CLAY - dark gray, mod to stiff, low plasticity, mod sorted with 5% fine to medium grained sand, 10% silt.	CL	HA	3	100	2.1	N/A	12		
			HA	4	100	0.6	N/A			
24	18-28" silty clayey SAND - medium brown, fine to coarse grained, mod sorted with 10% silt, 15% clay, mod moist.	SC	HA	5	100	0.5	N/A	24		
	@25" wet.		HA	6	100	0.4	N/A			
36	28-36" silty CLAY - dark brown, soft, high plasticity, mod sorted with 10% silt, wet.	CL	HA	7	100	0.4	N/A	36		
	BoB @ 36"									
48								48		
60								60		

DTW: 24"
SS collected @ 1551
GW Collected @ 1637
Water: brown, N/O, no sheen.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1551



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-33

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-18" silty CLAY - dark brown, soft, low plasticity, mod sorted with 15-20% silt, organics present, moist	CL	HA	1	100	0.1	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.1	N/A			
	18-36" silty clayey SAND - medium brown, fine to coarse grained sand, poorly sorted with 5% silt, 10% clay. @24" wet.	SC	HA	5	100	0.1	N/A	24		
24			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A	36		
36	BoB @ 36"									DTW: 24" SS collected @ 1604 GW Collected @ 1650 Water: brown, N/O, no sheen. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								48		
60								60		

START/COMPLETION DATE: 06/26/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 2000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1604



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-34

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-16" silty sandy CLAY - dark brown, soft, low plasticity, mod sorted with 20% silt, moist, N/O, N/S.	CL	HA	1	100	0.1	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.1	N/A			
	16-44" silty CLAY - dark brown, soft, low plasticity, mod sorted with 30% silt, moist, N/O, N/S.		HA	5	100	0.1	N/A			
24	@24" Wet.		HA	6	100	0.1	N/A	24		
			HA	7	100	0.1	N/A			
36			HA	8	100	0.1	N/A	36		
	44-48" silty SAND - brown fine to coarse grained sand, poorly sorted with 10% gravel, wet, N/O, N/S.	SM	HA	9	100	0.1	N/A			DTW - 24" SS collected @ 0905 GW Collected @ 1515 Water: N/O, N/S.
48	BoB @ 48"							48		
60								60		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 48

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 12-16/0905



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-35

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-16" silty CLAY - dark brown, soft, low plasticity, mod sorted with 15-20% silt, moist, N/O, N/S.	CL	HA	1	100	0.3	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.1	N/A			
	16-34" sandy CLAY - brown, soft, low plasticity, mod sorted with 25-30% sand, moist, N/O, N/S.		HA	5	100	0.1	N/A			
24	@24" Wet.		HA	6	100	0.1	N/A	24		
			HA	7	100	0.1	N/A			
36	BoB @ 34"							36		DTW: 24" SS collected @ 0931 GW Collected @ 1530 Water: N/O, N/S. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								48		
60								60		

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 34

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/0931



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-36

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-16" silty SAND - dark brown, fine to medium grained sand, mod stiffness, mod sorted with 20-25% silt, moist, N/O, N/S.	SM	HA	1	100	1.1	N/A			8" elevation change from SS-14/15.
			HA	2	100	0.6	N/A			
			HA	3	100	1.9	N/A			
12	@12-20" well sorted cobbles, offset boring to attempt to bypass cobbles.	SC	HA	4	100	0.4	N/A	12		
			HA	5	100	0.1	N/A			
24	16-36" silty clayey SAND - brown, fine to medium grained sand, poorly sorted with 20-25% silt and 10% clay, N/O, N/S. @20" Wet.		HA	6	100	0.1	N/A	24		
			HA	7	100	0.1	N/A			
36	BoB @ 36"							36		DTW - 20" SS collected @ 1011 GW Collected @ 1520 Water: N/O, N/S.
48								48		
60								60		

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 8-12/1011



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-37

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-20" silty CLAY - dark brown, soft, low plasticity, mod sorted with 15-20% fine grained sand, 25-30% silt, moist, N/O, N/S. 20-44" silty CLAY - dark brown, soft, mod sorted with 10-15% silt, N/O, N/S. @22" Wet.	CL	HA	1	100	0.0	N/A			
			HA	2	100	2.1	N/A			
			HA	3	100	0.8	N/A	12		
12			HA	4	100	0.1	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A	36		
36			HA	8	100	0.1	N/A			
			HA	9	100	0.1	N/A	48		
48	BoB @ 44"							60		
60										

DTW: 22"
SS collected @ 1104
GW Collected @ 1545
Water: N/O, N/S.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 44

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1104



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-38

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-20" sandy silty CLAY - dark brown, soft, low plasticity, mod sorted with 25-30% fine to medium grained sand, 10% silt, moist, N/O, N/S. 20-48" sandy CLAY - brown, soft, mod plasticity, well sorted with 15-20% fine to medium grained sand, moist, N/O, N/S.	CL	HA	1	100	0.3	N/A			
			HA	2	100	0.7	N/A			
			HA	3	100	2.0	N/A			
			HA	4	100	2.2	N/A			
			HA	5	100	1.7	N/A	24		
			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A			
			HA	8	100	0.1	N/A			
			HA	9	100	0.1	N/A	48		
48	48-60" silty SAND - brown, fine to coarse grained sand, poorly sorted with 15-20% silt, wet, N/O, N/S.	SM	HA	10	100	0.1	N/A			
			HA	11	100	0.1	N/A			
	BoB @ 60"									DTW: 48" SS collected @1035 GW collected @1540 Water: N/O, N/S HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
72								72		
96								96		
120								120		

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: H. PHILLIPS

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 60

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: 4-8/1035



EAGLE
 ENVIRONMENTAL
 CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
 Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-39

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-16" sandy silty CLAY - dark brown, soft, low plasticity, poorly sorted with 10% fine to medium grained sand, 20-25% silt, moist, N/O, N/S. 16-36" silty CLAY - dark brown, soft, low-moderate plasticity, mod sorted with 25-30% silt, moist, N/O, N/S. @33" Wet.	CL	HA	1	100	0.3	N/A			
			HA	2	100	0.7	N/A			
			HA	3	100	1.8	N/A	12		
12			HA	4	100	0.4	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.0	N/A			
			HA	7	100	0.0	N/A	36		
36	BoB @ 36"									DTW - ~33" SS collected @ 1123 GW Collected @ 1600 Water: N/O, N/S. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48										
60										

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1123



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-40

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-20" sandy silty CLAY - dark brown, soft, poorly sorted, with 10-15% fine grained sand, 15-20% silt, moist, N/O, N/S.	CL	HA	1	100	0.3	N/A			
			HA	2	100	0.7	N/A			
			HA	3	100	0.9	N/A			
12			HA	4	100	0.3	N/A	12		
			HA	5	100	0.0	N/A			
24	20-24" sandy CLAY - brown, soft, mod plasticity, well sorted with 15-20% fine to medium grained sand, moist, N/O, N/S.							24		
	@24" Wet. 24-36" Decomposed wood, wet.	Pt	HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A			
36	BoB @ 36"							36		DTW - 24" SS collected @ 1149 GW Collected @ 1600 Water: N/O, N/S. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								48		
60								60		

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1149



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-41

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-22" sandy silty CLAY - dark brown, soft, low plasticity, poorly sorted with 10% fine to medium grained sand, 15-20% silt, moist, N/O, N/S. 22-36" sandy CLAY - brown, soft, mod plasticity, well sorted with 15-20% fine to medium grained sand, wet, N/O, N/S.	CL	HA	1	100	12.6	N/A			
			HA	2	100	1.6	N/A			
			HA	3	100	0.3	N/A	12		
12			HA	4	100	0.1	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A	36		
36	BoB @ 36"									DTW - 22" SS collected @ 1311 GW Collected @ 1540 Water: N/O, N/S. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48										
60										

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1311



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-42

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-24" silty CLAY - dark brown, soft, low to moderate plasticity, well sorted with 15-20% silt, moist, N/O, N/S. @12" Wet.	CL	HA	1	100	102.1	N/A			
			HA	2	100	5.8	N/A			
			HA	3	100	0.0	N/A	12		
12			HA	4	100	0.0	N/A			
			HA	5	100	0.0	N/A			
24	BoB @ 24"							24		
36								36		DTW - 12" SS collected @ 1349 GW Collected @ 1545 Water: N/O, N/S.
48								48		
60								60		

DTW - 12"
SS collected @ 1349
GW Collected @ 1545
Water: N/O, N/S.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 24

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1349



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-43

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-18" sandy silty CLAY - dark brown, soft, low plasticity, mod sorted with 15% fine to medium grained sand, 20-25% silt, moist, N/O, N/S.	CL	HA	1	100	1.4	N/A			
			HA	2	100	0.9	N/A			
			HA	3	100	1.1	N/A	12		
12			HA	4	100	0.4	N/A			
	BoB @ 18"									
24								24		
36								36		
48								48		
60								60		

DTW - 12"
SS collected @ 1333
GW Collected @ 1545
Water: N/O, N/S.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 18

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1333



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-44

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-36" sandy silty CLAY - dark brown, soft, low plasticity, poorly sorted with 15-20% fine to medium grained sand, 20-25% silt, moist, N/O, N/S.	CL	HA	1	100	0.1	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A			
12			HA	4	100	0.1	N/A	12		
			HA	5	100	0.1	N/A			
24			HA	6	100	0.1	N/A	24		
			HA	7	100	0.1	N/A			
36	BoB @ 36"							36		DTW - 24" SS collected @ 1402 GW Collected @ 1545 Water: N/O, N/S.
48								48		
60								60		

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 36

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1402



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-45

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-40" sandy silty CLAY - dark brown, soft, low plasticity, mod sorted with 20% fine grained sand, 15-20% silt, moist, N/O, N/S. @8" Increase in sand.		HA	1	100	0.1	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.1	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A	36		
36			HA	8	100	0.1	N/A			DTW - 24" SS collected @ 1436 GW Collected @ 1620 Water: N/O, N/S.
	BoB @ 40"									
48								48		
60								60		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 40

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1436



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-46

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-40" sandy silty CLAY - dark brown, soft, low plasticity, mod sorted with 15-20% fine grained sand, 15-20% silt, moist, N/O, N/S. @12" Increase in sand. @ 24" Wet. BoB @ 40"		HA	1	100	0.1	N/A			
			HA	2	100	0.1	N/A			
			HA	3	100	0.1	N/A	12		
12			HA	4	100	0.1	N/A			
			HA	5	100	0.1	N/A	24		
24			HA	6	100	0.1	N/A			
			HA	7	100	0.1	N/A	36		
36			HA	8	100	0.1	N/A			
								48		DTW - 24" SS collected @ 1448 GW Collected @ 1640 Water: N/O, N/S. HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
48								60		
60										

START/COMPLETION DATE: 06/27/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: M. RIANDA

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 40

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 4-8/1448



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-47

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-24" sandy SILT - brown, loose, well sorted with 10-20% fine grained sand, dry, N/O, N/S.	SM	HA	1	100	0.8	N/A			
			HA	2	100	1.4	N/A			
			HA	3	100	0.8	N/A			
			HA	4	100	1.8	N/A	24		
24	24-54" silty CLAY - dark brown, mod soft, mod plasticity, well sorted with 20% silt, dry to moist, N/O, N/S.	CL	HA	5	100	1.6	N/A			
			HA	6	100	2.1	N/A			
			HA	7	100	1.4	N/A			
			HA	8	100	1.3	N/A	48		
48			HA	9	100	0.8	N/A			
	54-60" sandy CLAY - brown, soft, mod plasticity, well sorted with 15% fine grained sand, wet, N/O, N/S.		HA	10	100	1.2	N/A			
	BoB @ 60"									
72								72		
96								96		
120								120		

DTW: 54"
GW collected @ 1525
Cloudy, clear, N/O, no sheen.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/30/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: A. NEWBERRY

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 60

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: 30-36/1515



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: SS-48

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-24" sandy SILT - brown, loose, well sorted with 20% fine grained sand, trace gravel, dry, N/O, N/S.	SM	HA	1	100	0.4	N/A			DTW: 42" GW Collected @ 1415 Cloudy, clear, N/O, no sheen.
			HA	2	100	0.1	N/A			
12			HA	3	100	1.3	N/A	12		
			HA	4	100	1.6	N/A			
24	24-42" silty CLAY - dark brown, mod soft, mod plasticity, well sorted with 25% silt, dry to moist, N/O, N/S.	CL	HA	5	100	0.7	N/A			
			HA	6	100	0.9	N/A			
36			HA	7	100	0.5	N/A	36		
	42-48" sandy CLAY - brown, soft, low plasticity, well sorted with 15-20% fine grained sand, wet, N/O, N/S.		HA	8	100	0.7	N/A			
48	BoB @ 48"							48		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
60								60		

START/COMPLETION DATE: 06/30/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: A. NEWBERRY

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 48

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (INCHES)/TIME: 18-24/1605



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: TBSB-01

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-18" sandy gravelly SILT - brown to dark brown, loose, well sorted with 20% fine grained sand and gravels, dry, N/O, N/S.	SM	HA	1	100	0.4	N/A			
			HA	2	100	1.7	N/A			
			HA	3	100	1.9	N/A			
24	18-36" sandy CLAY - dark brown, semi stiff, low to mod plasticity, well sorted with 10% fine grained sand, dry to moist, N/O, N/S.	CL	HA	4	100	2.0	N/A	24		
			HA	5	100	2.7	N/A			
			HA	6	100	1.1	N/A			
48	36-52" silty SAND - brown and tan, fine to medium grained sand, well sorted with 15% silt, wet, N/O, N/S.	SM	HA	7	100	1.2	N/A			
			HA	8	100	0.8	N/A	48		
			HA	9	100	1.4	N/A			
	52-60" SAND - brown and tan, well sorted, poorly graded, fine to coarse grained sand, wet, N/O, N/S.	SP	HA	10	100	0.6	N/A			
	BoB @ 60"									
72								72		
96								96		
120								120		

DTW: 54"
Cloudy, brown, N/O, no sheen.

HC - Hydrocarbon
BoB - Bottom of Boring
N/O - no odor
N/S - no staining
TOC - top of casing
bgs - below ground surface

START/COMPLETION DATE: 06/30/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: A. NEWBERRY

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 60

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: NA



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: TBSB-02

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-18" sandy SILT - brown to dark brown, loose, well sorted with 15-20% fine to medium grained sand, dry, N/O, N/S.	SM	HA	1	100	1.1	N/A			
			HA	2	100	1.3	N/A			
			HA	3	100	1.7	N/A			
24	18-42" sandy CLAY - dark brown, semi stiff, mod plasticity, well sorted with 20% fine grained sand, dry to moist, N/O, N/S.	CL	HA	4	100	0.3	N/A	24		
			HA	5	100	1.9	N/A			
			HA	6	100	2.1	N/A			
			HA	7	100	2.4	N/A			
48	42-54" silty SAND - brown and tan, fine to medium grained sand, well sorted with 15% silt, moist to wet, N/O, N/S.	SM	HA	8	100	1.6	N/A	48		
			HA	9	100	1.6	N/A			
	54-60" SAND - brown and tan, well sorted, poorly graded, fine to coarse grained sand, wet, N/O, N/S.	SP	HA	10	100	0.9	N/A			
	BoB @ 60"									
72								72		DTW: 48" Cloudy, brown, N/O, no sheen.
96								96		
120								120		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface

START/COMPLETION DATE: 06/30/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: A. NEWBERRY

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 60

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: NA



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

Boring Log/Well Completion Diagram: TBSB-03

PAGE 1 OF 1

DEPTH (INCHES)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (INCHES)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	0-24" sandy gravelly SILT - brown to dark brown, loose, well sorted with 15% fine to medium grained sand and gravels, dry, N/O, N/S.	SM	HA	1	100	1.9	N/A			
			HA	2	100	2.8	N/A			
			HA	3	100	0.8	N/A			
			HA	4	100	0.8	N/A	24		
24	24-42" sandy CLAY - dark brown, medium stiffness, mod plasticity, well sorted with 10% fine grained sand, dry to moist, N/O, N/S. @36" Some ferrous staining.	CL	HA	5	100	1.3	N/A			
			HA	6	100	4.4	N/A			
			HA	7	100	2.1	N/A			
48	42-54" silty SAND - brown and tan, fine to medium grained sand, well sorted with 20% silt, wet, N/O, N/S.	SM	HA	8	100	3.7	N/A	48		
			HA	9	100	1.5	N/A			
	54-60" SAND - brown and tan, well sorted, poorly graded, fine to coarse grained sand, wet, N/O, N/S. BoB @ 60"	SP	HA	10	100	1.2	N/A			
72								72		DTW: 42" Cloudy, brown, N/O, no sheen.
96								96		HC - Hydrocarbon BoB - Bottom of Boring N/O - no odor N/S - no staining TOC - top of casing bgs - below ground surface
120								120		

START/COMPLETION DATE: 06/30/2014

SAND PACK INTERVAL (FEET): NA

PROJECT: STATE M 36-5 & 7-36

BENTONITE/GROUT INTERVAL (FEET): NA

LOGGED BY: A. NEWBERRY

WELL SCREEN INTERVAL (FEET): NA

DRILLING COMPANY/EQUIPMENT: EAGLE / HAND AUGER

WELL DIAMETER (INCHES): NA

BORING DEPTH (INCHES): 60

WELL DEPTH (INCHES): NA

PID INSTRUMENT: MiniRAE 3000

TIME STARTED/COMPLETED:

SAMPLE COLLECTION DEPTH (FEET)/TIME: /1330



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 INCA STREET, DENVER, CO 80211
Ph: 303-433-0479 • F: 303-325-5449

ATTACHMENT C

Laboratory Analytical Reports



June 23, 2014

Eagle Environmental Consulting, Inc.

Anton

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 20, 2014. This project is associated with Origins project number X406251-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-01	X406251-01	Soil	June 20, 2014 16:15	06/20/2014 17:15
SS-02	X406251-02	Soil	June 20, 2014 16:17	06/20/2014 17:15
SS-03	X406251-03	Soil	June 20, 2014 16:18	06/20/2014 17:15
SS-04	X406251-04	Soil	June 20, 2014 16:20	06/20/2014 17:15
SS-05	X406251-05	Soil	June 20, 2014 16:25	06/20/2014 17:15

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

ORIGINS
LABORATORY, INC

www.originslaboratory.com

page 1 of 1

Client: Eagle Env. Consulting
Address: 4101 Inca St.
Telephone Number: (303) 433-0479
Project Manager/Send Report To: Martin Eckert III
Email Address: mee3@eagle-enviro.com
Project Name/Number: State M36-5 + 7-36
Samples Collected By: Andrew Newberry

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
SS-01	6/20/14	6:15	1	X					X		G, BTEX - 8260 DLO - 8015 Naphthalene	1
SS-02		6:17	1									2
SS-03		6:18	1									3
SS-04		6:20	1									4
SS-05		6:25	1									5
												6
												7
												8
												9
												10
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:						
<i>[Signature]</i>	6/20/14	1915	<i>[Signature]</i>	6/20/14	1915	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/>						
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	48 Hr <input type="checkbox"/> Standard <input type="checkbox"/>						
				6/20/14	1915							

Comments:

Date Results Needed:

Origins Laboratory, Inc.

[Signature]

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406251

Client: EAGLE

Client Project ID: STATE 7-36

Checklist Completed by: SR

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/24/14 0540

Airbill #: _____

Matrix(s) Received: (Check all that apply): X Soil/Solid _____ Water _____ Other: _____

Cooler Number/Temperature: _____ 15.1 °C _____ °C _____ °C (Describe) _____ °C

Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	✓			
Is there ice present (document if blue ice is used)	✓			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Were all samples received intact ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		✓		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	✓			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	✓			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	✓			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	✓			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			✓	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) (pH < 2 for samples preserved with HNO ₃ , HCl, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			✓	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/22/14 12:50
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-01

6/20/2014 4:15:00PM

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

Origins Laboratory, Inc.

X406251-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F20011	06/20/2014	06/21/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	89.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F20014	06/20/2014	06/21/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/22/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	129 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.8 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	107 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-02

6/20/2014 4:17:00PM

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

Origins Laboratory, Inc.

X406251-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F20011	06/20/2014	06/21/2014	
------------------	----	------	-------	---	---------	------------	------------	--

Surrogate: o-Terphenyl	99.8 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F20014	06/20/2014	06/21/2014	
-----------------------------	----	-----	-------	---	---------	------------	------------	--

Benzene	ND	0.002	"	"	"	"	06/22/2014	
---------	----	-------	---	---	---	---	------------	--

Toluene	ND	0.002	"	"	"	"	"	
---------	----	-------	---	---	---	---	---	--

Ethylbenzene	ND	0.002	"	"	"	"	"	
--------------	----	-------	---	---	---	---	---	--

Xylenes, total	ND	0.002	"	"	"	"	"	
----------------	----	-------	---	---	---	---	---	--

Napthalene	ND	0.008	"	"	"	"	"	
------------	----	-------	---	---	---	---	---	--

Surrogate: 1,2-Dichloroethane-d4	121 %	70-130			"	"	"	
----------------------------------	-------	--------	--	--	---	---	---	--

Surrogate: Toluene-d8	93.4 %	70-130			"	"	"	
-----------------------	--------	--------	--	--	---	---	---	--

Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	
---------------------------------	-------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-03

6/20/2014 4:18:00PM

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

Origins Laboratory, Inc.

X406251-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F20011	06/20/2014	06/21/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	96.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F20014	06/20/2014	06/21/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/22/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	120 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	92.0 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-04

6/20/2014 4:20:00PM

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

Origins Laboratory, Inc.

X406251-04 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F20011	06/20/2014	06/21/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	80.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F20014	06/20/2014	06/21/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/22/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	127 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	93.6 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-05

6/20/2014 4:25:00PM

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

Origins Laboratory, Inc.

X406251-05 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F20011	06/20/2014	06/21/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	72.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F20014	06/20/2014	06/21/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/22/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	92.9 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F20014 - EPA 5030 (soil)

Blank (4F20014-BLK1)

Prepared: 06/20/2014 Analyzed: 06/20/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	68		ug/kg	62.5		109	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F20014 - EPA 5030 (soil)

LCS (4F20014-BS1)

Prepared: 06/20/2014 Analyzed: 06/20/2014

Benzene	0.09	0.002	mg/kg	0.100		87.5	70-130			
Toluene	0.09	0.002	"	0.100		94.0	70-130			
Ethylbenzene	0.1	0.002	"	0.100		100	70-130			
m,p-Xylene	0.2	0.004	"	0.200		103	70-130			
o-Xylene	0.1	0.002	"	0.100		103	70-130			
Naphthalene	0.1	0.008	"	0.100		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	65		"	62.5		104	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F20014 - EPA 5030 (soil)

Matrix Spike (4F20014-MS1)		Source: X406246-02			Prepared: 06/20/2014 Analyzed: 06/22/2014			QM-07		
Benzene	0.2	0.002	mg/kg	0.100	0.1	25.5	70-130			
Toluene	0.1	0.002	"	0.100	2.7	NR	70-130			
Ethylbenzene	0.1	0.002	"	0.100	0.7	NR	70-130			
m,p-Xylene	0.2	0.004	"	0.200	9.7	NR	70-130			
o-Xylene	0.1	0.002	"	0.100	2.0	NR	70-130			
Naphthalene	0.08	0.008	"	0.100	1.1	NR	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		106	70-130			
Surrogate: Toluene-d8	65		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F20014 - EPA 5030 (soil)

Matrix Spike Dup (4F20014-MSD1)		Source: X406246-02			Prepared: 06/20/2014 Analyzed: 06/22/2014					
Benzene	0.09	0.002	mg/kg	0.100	0.1	NR	70-130	56.9	20	QM-07
Toluene	0.08	0.002	"	0.100	2.7	NR	70-130	58.6	20	QM-07
Ethylbenzene	0.06	0.002	"	0.100	0.7	NR	70-130	63.2	20	QM-07
m,p-Xylene	0.1	0.004	"	0.200	9.7	NR	70-130	60.6	20	QM-07
o-Xylene	0.06	0.002	"	0.100	2.0	NR	70-130	65.9	20	QM-07
Naphthalene	0.04	0.008	"	0.100	1.1	NR	70-130	61.9	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	70		ug/kg	62.5		111	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F20011 - EPA 3580

Blank (4F20011-BLK1)

Prepared: 06/20/2014 Analyzed: 06/20/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 49 g 50.0 98.4 59-131

LCS (4F20011-BS1)

Prepared: 06/20/2014 Analyzed: 06/20/2014

Diesel (C10-C28) 1140 50.0 mg/kg 1000 114 64-121

Surrogate: o-Terphenyl 53 g 50.0 106 59-131

Matrix Spike (4F20011-MS1)

Source: X406251-03

Prepared: 06/20/2014 Analyzed: 06/21/2014

Diesel (C10-C28) 924 50.0 mg/kg 1000 20.3 90.3 53-125

Surrogate: o-Terphenyl 39 g 50.0 78.1 59-131

Matrix Spike Dup (4F20011-MSD1)

Source: X406251-03

Prepared: 06/20/2014 Analyzed: 06/21/2014

Diesel (C10-C28) 948 50.0 mg/kg 1000 20.3 92.8 53-125 2.60 20

Surrogate: o-Terphenyl 41 g 50.0 82.5 59-131

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 08, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 21, 2014. This project is associated with Origins project number X406252-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-06 @ 1-2"	X406252-01	Soil	June 21, 2014 12:23	06/21/2014 16:00
SS-07 @ 3-4"	X406252-02	Soil	June 21, 2014 12:25	06/21/2014 16:00
SS-08 @ 1-2"	X406252-03	Soil	June 21, 2014 12:30	06/21/2014 16:00
SS-09 @ 3-4"	X406252-04	Soil	June 21, 2014 12:37	06/21/2014 16:00
SS-10 @ 1-2"	X406252-05	Soil	June 21, 2014 12:40	06/21/2014 16:00
SS-11 @ 3-4"	X406252-06	Soil	June 21, 2014 12:43	06/21/2014 16:00
SS-12 @ 1-2"	X406252-07	Soil	June 21, 2014 12:46	06/21/2014 16:00
SS-13 @ 3-4"	X406252-08	Soil	June 21, 2014 12:48	06/21/2014 16:00
SS-14 @ 1-2"	X406252-09	Soil	June 21, 2014 12:52	06/21/2014 16:00
SS-15 @ 3-4"	X406252-10	Soil	June 21, 2014 12:55	06/21/2014 16:00
SS-16 @ 1-2"	X406252-11	Soil	June 21, 2014 12:58	06/21/2014 16:00
SS-17 @ 3-4"	X406252-12	Soil	June 21, 2014 13:02	06/21/2014 16:00
SS-18 @ 1-2"	X406252-13	Soil	June 21, 2014 13:06	06/21/2014 16:00
SS-19 @ 3-4"	X406252-14	Soil	June 21, 2014 13:10	06/21/2014 16:00

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-20 @ 1-2"	X406252-15	Soil	June 21, 2014 13:11	06/21/2014 16:00
SS-21 @ 3-4"	X406252-16	Soil	June 21, 2014 13:15	06/21/2014 16:00

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Client: Eagle Environmental Consulting, Inc. Project Manager/Send Report To: M. Eckert
Address: 4101 Inca St Email Address: Mike.Eckert@eagleenv.com
Denver CO 80211 Project Name/Number: STATE M36-5 and 7-36
Telephone Number: 303-771-7811 Samples Collected By: M. Eckert

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #			Other
SS-06-1-2"	06/21/14	12:53	1	<input checked="" type="checkbox"/>								<p>Keep boxes by 06/22/14</p>	
SS-07-3-4"		12:55											
SS-08-1-2"		12:50											
SS-09-3-4"		12:57											
SS-10-1-2"		12:40											
SS-11-3-4"		12:43											
SS-12-1-2"		12:46											
SS-13-3-4"		12:48											
SS-14-1-2"		12:52											
SS-15-3-4"		12:55											
Relinquished By: <u>[Signature]</u>				Time: <u>1600</u>				Date: <u>06/21/14</u>				Turnaround Time: Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>	
Relinquished By: <u>[Signature]</u>				Time: <u>1600</u>				Date: <u>06/21/14</u>				Time: <u>16:00</u>	

Comments:

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 2 of 2

ORIGINS

LABORATORY, INC

Client: Eagle Environmental Consulting, Inc. Project Manager/Send Report To: M. Eckert
Address: 4101 Inca St Email Address: McEckert@eagleenv.com
Denver CO 80211 Project Name/Number: STATE M36-5 and 7-36
Telephone Number: 303-894-7891 Samples Collected By: M. Eckert

1725 Elk Place | Phone: 303.433.1322 | Fox: 303.265.9645 | Denver, CO 80211

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
SS-16-12"	06/21/14	1258	1	X				X			Brix 640, Nitrate, etc DLO-8115 pH, S&T, EC	1
SS-17-3-4"		1302										2
SS-18-1-2"		1306										3
SS-19-3-4"		1310										4
SS-20-1-2"		1311										5
SS-21-3-4"		1315										6
												7
												8
												9
												10

NEED RESULTS BY 06/29/14

Relinquished By: [Signature] Date: 06/21/14 Time: 16:00
Relinquished By: [Signature] Date: 06/21/14 Time: 16:00

Turnaround Time: ☒ Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard

Field Bottle Mandate

Comments:

Origins Laboratory, Inc.

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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X400252 Client: EAGLE
Client Project ID: STATE M 36-5
Checklist Completed by: [Signature] Shipped Via: H/D
Date/time completed: 06/22/14 9:00 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Airbill #: N/A
Matrix(s) Received: (Check all that apply): X Soil/Solid Water Other:
Cooler Number/Temperature: 3.1 °C °C °C (Describe)
Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<u>X</u>			
Is there ice present (document if blue ice is used)	<u>X</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Were all samples received intact ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<u>X</u>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<u>X</u>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<u>X</u>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-06 @ 1-2"

6/21/2014 12:23:00PM

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

Origins Laboratory, Inc.
X406252-01 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.229	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	1500	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	109 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	"
Surrogate: Toluene-d8	95.9 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	122 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.90	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-06 @ 1-2"

6/21/2014 12:23:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-01 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.35		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-07 @ 3-4"

6/21/2014 12:25:00PM

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

Origins Laboratory, Inc.
X406252-02 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.230	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	414	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	72.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	33.7	5.0	mg/kg	25	4F22004	"	06/22/2014
Benzene	ND	0.05	"	"	"	"	06/22/2014
Toluene	ND	0.05	"	"	"	"	"
Ethylbenzene	ND	0.05	"	"	"	"	"
Xylenes, total	ND	0.05	"	"	"	"	"
Napthalene	ND	0.2	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	118 %	70-130			"	"	"
Surrogate: Toluene-d8	94.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.69	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-07 @ 3-4"

6/21/2014 12:25:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

XENCO

X406252-02 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.35	1	944333	06/26/2014	06/26/2014
-------------------------	------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-08 @ 1-2"

6/21/2014 12:30:00PM

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

Origins Laboratory, Inc.
X406252-03 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.232	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	28300	500	mg/kg	10	4F22005	06/22/2014	06/23/2014
------------------	-------	-----	-------	----	---------	------------	------------

Surrogate: o-Terphenyl	124 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	131 %	70-130			"	"	" S-HI
Surrogate: Toluene-d8	96.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	126 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.53	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-08 @ 1-2"

6/21/2014 12:30:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-03 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.42		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-09 @ 3-4"

6/21/2014 12:37:00PM

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

Origins Laboratory, Inc.
X406252-04 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.283	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	3240	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	116 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	4.4	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	125 %	70-130			"	"	"
Surrogate: Toluene-d8	95.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	112 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.46	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-09 @ 3-4"

6/21/2014 12:37:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-04 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.837	1	944333	06/26/2014	06/26/2014
-------------------------	-------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-10 @ 1-2"

6/21/2014 12:40:00PM

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

Origins Laboratory, Inc.
X406252-05 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.0434	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	--------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	20500	500	mg/kg	10	4F22005	06/22/2014	06/23/2014
------------------	-------	-----	-------	----	---------	------------	------------

Surrogate: o-Terphenyl	121 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	3.6	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	"
Surrogate: Toluene-d8	108 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	8.36	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-10 @ 1-2"

6/21/2014 12:40:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-05 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.678	1	944333	06/26/2014	06/26/2014
-------------------------	-------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-11 @ 3-4"

6/21/2014 12:43:00PM

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

Origins Laboratory, Inc.
X406252-06 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.0562	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	--------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	41700	500	mg/kg	10	4F22005	06/22/2014	06/23/2014
------------------	-------	-----	-------	----	---------	------------	------------

Surrogate: o-Terphenyl	147 %	59-131			"	"	" S-HI
------------------------	-------	--------	--	--	---	---	--------

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	240	50.0	mg/kg	250	4F22004	"	06/23/2014
Benzene	ND	0.05	"	25	"	"	06/22/2014
Toluene	ND	0.05	"	"	"	"	"
Ethylbenzene	0.09	0.05	"	"	"	"	"
Xylenes, total	1.2	0.05	"	"	"	"	"
Napthalene	0.7	0.2	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	120 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	93.5 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	122 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

PAHs by GCMS SIM

1-Methylnaphthalene	11.3	0.833	mg/kg	50	944430	06/27/2014	06/27/2014	D
2-Methylnaphthalene	10.8	0.833	"	"	"	"	"	D
Acenaphthene	ND	0.00833	"	5	"	"	"	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-11 @ 3-4"

6/21/2014 12:43:00PM

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

XENCO

X406252-06 (Soil)

PAHs by GCMS SIM

Acenaphthylene	ND	0.00833	mg/kg	5	944430	06/27/2014	06/27/2014	
Anthracene	ND	0.00833	"	"	"	"	"	
Benzo(a)anthracene	ND	0.00833	"	"	"	"	"	
Benzo(a)pyrene	0.169	0.00833	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.00833	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.00833	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.00833	"	"	"	"	"	
Chrysene	0.795	0.00833	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.00833	"	"	"	"	"	
Fluoranthene	ND	0.00833	"	"	"	"	"	
Fluorene	3.55	0.0833	"	50	"	"	"	D
Indeno(1,2,3-c,d)Pyrene	ND	0.00833	"	5	"	"	"	
Naphthalene	0.562	0.0833	"	"	"	"	"	
Phenanthrene	6.42	0.0833	"	50	"	"	"	D
Pyrene	ND	0.00833	"	5	"	"	"	

Surrogate: 2-Fluorobiphenyl	66 %	30-115	"	"	"	"	"
Surrogate: Nitrobenzene-d5	600 %	23-120	"	"	"	"	**
Surrogate: Terphenyl-D14	85 %	18-137	"	"	"	"	"

pH in Soil by EPA 9045D

pH	8.18	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-11 @ 3-4"

6/21/2014 12:43:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-06 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.07		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-12 @ 1-2"

6/21/2014 12:46:00PM

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

Origins Laboratory, Inc.
X406252-07 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.284	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	3300	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	93.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	13.6	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	122 %	70-130			"	"	"
Surrogate: Toluene-d8	95.5 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	123 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.73	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-12 @ 1-2"

6/21/2014 12:46:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-07 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.87	1	944333	06/26/2014	06/26/2014
-------------------------	------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-13 @ 3-4"

6/21/2014 12:48:00PM

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

Origins Laboratory, Inc.
X406252-08 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.191	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	829	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	107 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	1.5	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	120 %	70-130			"	"	"
Surrogate: Toluene-d8	95.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	114 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.76	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-13 @ 3-4"

6/21/2014 12:48:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-08 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.44		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-14 @ 1-2"

6/21/2014 12:52:00PM

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

Origins Laboratory, Inc.
X406252-09 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.0761	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	--------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	1880	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	95.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.5	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	118 %	70-130			"	"	"
Surrogate: Toluene-d8	94.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	111 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	8.48	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-14 @ 1-2"

6/21/2014 12:52:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-09 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.787	1	944333	06/26/2014	06/26/2014
-------------------------	-------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-15 @ 3-4"

6/21/2014 12:55:00PM

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

Origins Laboratory, Inc.
X406252-10 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.0643	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	--------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	179	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	93.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	20.0	10.0	mg/kg	50	4F22004	"	06/22/2014
Benzene	ND	0.1	"	"	"	"	06/22/2014
Toluene	0.2	0.1	"	"	"	"	"
Ethylbenzene	ND	0.1	"	"	"	"	"
Xylenes, total	ND	0.1	"	"	"	"	"
Naphthalene	ND	0.4	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	117 %	70-130			"	"	"
Surrogate: Toluene-d8	94.0 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.69	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-15 @ 3-4"

6/21/2014 12:55:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-10 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.84		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-16 @ 1-2"

6/21/2014 12:58:00PM

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

Origins Laboratory, Inc.
X406252-11 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.134	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	392	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	96.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	10.0	mg/kg	50	4F22004	"	06/22/2014
Benzene	ND	0.1	"	"	"	"	06/22/2014
Toluene	ND	0.1	"	"	"	"	"
Ethylbenzene	ND	0.1	"	"	"	"	"
Xylenes, total	ND	0.1	"	"	"	"	"
Napthalene	ND	0.4	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130			"	"	"
Surrogate: Toluene-d8	94.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.80	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-16 @ 1-2"

6/21/2014 12:58:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-11 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.24		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-17 @ 3-4"
6/21/2014 1:02:00PM

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

Origins Laboratory, Inc.
X406252-12 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.168	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	643	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	97.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.3	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	0.002	0.002	"	"	"	"	"
Xylenes, total	0.01	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	"
Surrogate: Toluene-d8	95.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	112 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.54	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-17 @ 3-4"

6/21/2014 1:02:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-12 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	1.09		1	944333	06/26/2014	06/26/2014
-------------------------	------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-18 @ 1-2"
6/21/2014 1:06:00PM

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

Origins Laboratory, Inc.
X406252-13 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.0806	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	--------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	293	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	107 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	17.1	5.0	mg/kg	25	4F22004	"	06/22/2014
Benzene	ND	0.05	"	"	"	"	06/22/2014
Toluene	ND	0.05	"	"	"	"	"
Ethylbenzene	ND	0.05	"	"	"	"	"
Xylenes, total	ND	0.05	"	"	"	"	"
Napthalene	ND	0.2	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130			"	"	"
Surrogate: Toluene-d8	95.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	8.09	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-18 @ 1-2"

6/21/2014 1:06:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

XENCO

X406252-13 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.768	1	944333	06/26/2014	06/26/2014
-------------------------	-------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-19 @ 3-4"
6/21/2014 1:10:00PM

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

Origins Laboratory, Inc.
X406252-14 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.127	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	89.0	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	84.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	5.0	mg/kg	25	4F22004	"	06/22/2014
Benzene	ND	0.05	"	"	"	"	06/22/2014
Toluene	ND	0.05	"	"	"	"	"
Ethylbenzene	ND	0.05	"	"	"	"	"
Xylenes, total	ND	0.05	"	"	"	"	"
Napthalene	ND	0.2	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
Surrogate: Toluene-d8	93.7 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.90	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-19 @ 3-4"

6/21/2014 1:10:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-14 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.829		1	944333	06/26/2014	06/26/2014
-------------------------	-------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-20 @ 1-2"
6/21/2014 1:11:00PM

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

Origins Laboratory, Inc.
X406252-15 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.131	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	518	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	73.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	0.002	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	"
Surrogate: Toluene-d8	93.6 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.33	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-20 @ 1-2"

6/21/2014 1:11:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

XENCO

X406252-15 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.588	1	944333	06/26/2014	06/26/2014
-------------------------	-------	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-21 @ 3-4"
6/21/2014 1:15:00PM

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

Origins Laboratory, Inc.
X406252-16 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.163	mmhos/cm	1	4F22007	06/22/2014	06/22/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	685	50.0	mg/kg	1	4F22005	06/22/2014	06/22/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	72.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.2	0.2	mg/kg	1	4F22004	"	06/22/2014
Benzene	ND	0.002	"	"	"	"	06/22/2014
Toluene	0.003	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Naphthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	121 %	70-130			"	"	"
Surrogate: Toluene-d8	92.0 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	7.48	pH Units	1	4F22006	06/22/2014	06/22/2014
----	------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-21 @ 3-4"

6/21/2014 1:15:00PM

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit						

XENCO

X406252-16 (Soil)

Sodium Absorption Ratio

Sodium absorption ratio	0.491		1	944333	06/26/2014	06/26/2014
-------------------------	-------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F22004 - EPA 5030 (soil)										
Blank (4F22004-BLK1)					Prepared: 06/22/2014 Analyzed: 06/22/2014					
Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	73		ug/kg	62.5		118	70-130			
Surrogate: Toluene-d8	66		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F22004 - EPA 5030 (soil)										
LCS (4F22004-BS1)					Prepared: 06/22/2014 Analyzed: 06/22/2014					
Benzene	0.1	0.002	mg/kg	0.100		101	70-130			
Toluene	0.1	0.002	"	0.100		98.5	70-130			
Ethylbenzene	0.09	0.002	"	0.100		89.8	70-130			
m,p-Xylene	0.2	0.004	"	0.200		94.2	70-130			
o-Xylene	0.09	0.002	"	0.100		93.0	70-130			
Naphthalene	0.1	0.008	"	0.100		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	71		ug/kg	62.5		114	70-130			
Surrogate: Toluene-d8	66		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F22004 - EPA 5030 (soil)										
Matrix Spike (4F22004-MS1)		Source: X406252-01			Prepared: 06/22/2014 Analyzed: 06/22/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	107	70-130			
Toluene	0.1	0.002	"	0.100	ND	99.2	70-130			
Ethylbenzene	0.09	0.002	"	0.100	ND	88.1	70-130			
m,p-Xylene	0.2	0.004	"	0.200	ND	88.0	70-130			
o-Xylene	0.09	0.002	"	0.100	ND	86.8	70-130			
Naphthalene	0.05	0.008	"	0.100	ND	50.3	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	69		ug/kg	62.5		111	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.8	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F22004 - EPA 5030 (soil)										
Matrix Spike Dup (4F22004-MSD1)		Source: X406252-01			Prepared: 06/22/2014 Analyzed: 06/22/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	114	70-130	6.70	20	
Toluene	0.1	0.002	"	0.100	ND	106	70-130	6.99	20	
Ethylbenzene	0.1	0.002	"	0.100	ND	95.7	70-130	8.33	20	
m,p-Xylene	0.2	0.004	"	0.200	ND	97.8	70-130	10.5	20	
o-Xylene	0.1	0.002	"	0.100	ND	98.4	70-130	12.5	20	
Naphthalene	0.08	0.008	"	0.100	ND	79.8	70-130	45.4	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		109	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control
Origins Laboratory, Inc.

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

Batch 4F22005 - EPA 3580

Blank (4F22005-BLK1)

Prepared: 06/22/2014 Analyzed: 06/22/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 57 g 50.0 113 59-131

LCS (4F22005-BS1)

Prepared: 06/22/2014 Analyzed: 06/22/2014

Diesel (C10-C28) 984 50.0 mg/kg 1000 98.4 64-121

Surrogate: o-Terphenyl 44 g 50.0 87.9 59-131

Matrix Spike (4F22005-MS1)

Source: X406252-02

Prepared: 06/22/2014 Analyzed: 06/22/2014

Diesel (C10-C28) 1260 50.0 mg/kg 1000 414 84.5 53-125

Surrogate: o-Terphenyl 37 g 50.0 74.3 59-131

Matrix Spike Dup (4F22005-MSD1)

Source: X406252-02

Prepared: 06/22/2014 Analyzed: 06/22/2014

Diesel (C10-C28) 1370 50.0 mg/kg 1000 414 96.0 53-125 8.73 20

Surrogate: o-Terphenyl 46 g 50.0 92.2 59-131

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F22006 - NO PREP										
Duplicate (4F22006-DUP1)		Source: X406252-03			Prepared: 06/22/2014 Analyzed: 06/22/2014					
pH	7.62		pH Units		7.53			1.16	25	
Batch 4F22007 - NO PREP										
Blank (4F22007-BLK1)		Prepared: 06/22/2014 Analyzed: 06/22/2014								
Specific Conductance (EC)	0.00180		mmhos/cm							
Duplicate (4F22007-DUP1)		Source: X406252-04			Prepared: 06/22/2014 Analyzed: 06/22/2014					
Specific Conductance (EC)	0.287		mmhos/cm		0.283			1.40	10	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

MS (487976-002 S)		Source: 487976-002 S			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzo(a)anthracene	0.0368	0.00167	mg/kg	0.0333	<0.000100	111	57-100		25	
Chrysene	0.0384	0.00167	"	0.0333	0.00424	103	59-108		25	
Pyrene	0.0402	0.00167	"	0.0333	0.00428	108	52-101		25	
Phenanthrene	0.0312	0.00167	"	0.0333	<0.000211	94	55-98		25	
Naphthalene	0.0242	0.0167	"	0.0333	<0.000218	73	44-112		25	
Indeno(1,2,3-c,d)Pyrene	0.034	0.00167	"	0.0333	0.00292	93	61-110		25	
Fluorene	0.025	0.00167	"	0.0333	<0.0000925	75	50-109		25	
Fluoranthene	0.042	0.00167	"	0.0333	0.00419	114	54-104		25	
Dibenz(a,h)anthracene	0.0292	0.00167	"	0.0333	<0.000134	88	62-115		25	
1-Methylnaphthalene	0.0252	0.0167	"	0.0333	<0.000144	76	56-110		25	
Benzo(g,h,i)perylene	0.0337	0.00167	"	0.0333	0.00364	90	64-105		25	
Benzo(a)pyrene	0.036	0.00167	"	0.0333	0.00307	99	56-99		25	
Anthracene	0.0264	0.00167	"	0.0333	<0.000166	79	59-96		25	
Acenaphthylene	0.0242	0.00167	"	0.0333	<0.0000934	73	46-105		25	
Acenaphthene	0.0243	0.00167	"	0.0333	<0.000153	73	56-100		25	
2-Methylnaphthalene	0.024	0.0167	"	0.0333	<0.0000982	72	42-116		25	
Benzo(k)fluoranthene	0.0288	0.00167	"	0.0333	0.00242	79	59-104		25	
Benzo(b)fluoranthene	0.0379	0.00167	"	0.0333	0.00585	96	62-105		25	
Surrogate: Terphenyl-D14	0.889		PERCENT	1		89	18-137			
Surrogate: Nitrobenzene-d5	0.793		"	1		79	23-120			
Surrogate: 2-Fluorobiphenyl	0.84		"	1		84	30-115			

MSD (487976-002 SD)		Source: 487976-002 SD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzo(b)fluoranthene	0.029	0.00167	mg/kg	0.0333	0.00585	70	62-105	27	25	
Anthracene	0.0254	0.00167	"	0.0333	<0.000166	76	59-96	4	25	
Acenaphthylene	0.0255	0.00167	"	0.0333	<0.0000935	77	46-105	5	25	
Acenaphthene	0.0253	0.00167	"	0.0333	<0.000153	76	56-100	4	25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

MSD (487976-002 SD)		Source: 487976-002 SD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
2-Methylnaphthalene	0.0243	0.0167	mg/kg	0.0333	<0.0000983	73	42-116	1	25	
Benzo(a)pyrene	0.0261	0.00167	"	0.0333	0.00307	69	56-99	32	25	
1-Methylnaphthalene	0.0279	0.0167	"	0.0333	<0.000144	84	56-110	10	25	
Pyrene	0.0282	0.00167	"	0.0333	0.00428	72	52-101	35	25	
Phenanthrene	0.0277	0.00167	"	0.0333	<0.000211	83	55-98	12	25	
Naphthalene	0.024	0.0167	"	0.0333	<0.000218	72	44-112	1	25	
Indeno(1,2,3-c,d)Pyrene	0.0296	0.00167	"	0.0333	0.00292	80	61-110	14	25	
Fluoranthene	0.0302	0.00167	"	0.0333	0.00419	78	54-104	33	25	
Dibenz(a,h)anthracene	0.0297	0.00167	"	0.0333	<0.000134	89	62-115	2	25	
Chrysene	0.029	0.00167	"	0.0333	0.00424	74	59-108	28	25	
Benzo(k)fluoranthene	0.0265	0.00167	"	0.0333	0.00242	72	59-104	8	25	
Benzo(g,h,i)perylene	0.0288	0.00167	"	0.0333	0.00364	76	64-105	16	25	
Fluorene	0.0256	0.00167	"	0.0333	<0.0000926	77	50-109	2	25	
Benzo(a)anthracene	0.0296	0.00167	"	0.0333	<0.000100	89	57-100	22	25	
Surrogate: 2-Fluorobiphenyl	0.761		PERCENT	1		76	30-115			
Surrogate: Terphenyl-D14	0.882		"	1		88	18-137			
Surrogate: Nitrobenzene-d5	0.737		"	1		74	23-120			

LCS (657570-1-BKS)		Source: 657570-1-BKS			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Dibenz(a,h)anthracene	0.0282	0.00167	mg/kg	0.0333	<0.000134	85	62-115		25	
Fluoranthene	0.0275	0.00167	"	0.0333	<0.000124	83	54-104		25	
Fluorene	0.0255	0.00167	"	0.0333	<0.0000925	77	50-109		25	
Indeno(1,2,3-c,d)Pyrene	0.0278	0.00167	"	0.0333	<0.000242	83	61-110		25	
Naphthalene	0.0241	0.0167	"	0.0333	<0.000218	72	44-112		25	
Pyrene	0.0285	0.00167	"	0.0333	<0.000111	86	52-101		25	
Chrysene	0.0293	0.00167	"	0.0333	<0.0000977	88	59-108		25	
Benzo(b)fluoranthene	0.0259	0.00167	"	0.0333	<0.000219	78	62-105		25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

LCS (657570-1-BKS)		Source: 657570-1-BKS			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Phenanthrene	0.0271	0.00167	mg/kg	0.0333	<0.000211	81	55-98		25	
Benzo(g,h,i)perylene	0.0285	0.00167	"	0.0333	<0.000197	86	64-105		25	
Benzo(a)pyrene	0.0261	0.00167	"	0.0333	<0.000128	78	56-99		25	
Benzo(a)anthracene	0.0286	0.00167	"	0.0333	<0.000100	86	57-100		25	
Anthracene	0.0269	0.00167	"	0.0333	<0.000166	81	59-96		25	
Acenaphthylene	0.0242	0.00167	"	0.0333	<0.0000934	73	46-105		25	
Acenaphthene	0.0254	0.00167	"	0.0333	<0.000153	76	56-100		25	
2-Methylnaphthalene	0.0235	0.0167	"	0.0333	<0.0000982	71	42-116		25	
Benzo(k)fluoranthene	0.0276	0.00167	"	0.0333	<0.000221	83	59-104		25	
1-Methylnaphthalene	0.0239	0.0167	"	0.0333	<0.000144	72	56-110		25	
Surrogate: Terphenyl-D14	0.926		PERCENT	1		93	18-137			
Surrogate: Nitrobenzene-d5	0.748		"	1		75	23-120			
Surrogate: 2-Fluorobiphenyl	0.806		"	1		81	30-115			

BLANK (657570-1-BLK)		Source: 657570-1-BLK			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Dibenz(a,h)anthracene	ND	0.00167	mg/kg	0.0333			-		25	
Fluoranthene	ND	0.00167	"	0.0333			-		25	
Fluorene	ND	0.00167	"	0.0333			-		25	
Indeno(1,2,3-c,d)Pyrene	ND	0.00167	"	0.0333			-		25	
Naphthalene	ND	0.0167	"	0.0333			-		25	
Phenanthrene	ND	0.00167	"	0.0333			-		25	
Chrysene	ND	0.00167	"	0.0333			-		25	
Acenaphthene	ND	0.00167	"	0.0333			-		25	
Pyrene	ND	0.00167	"	0.0333			-		25	
1-Methylnaphthalene	ND	0.0167	"	0.0333			-		25	
Benzo(g,h,i)perylene	ND	0.00167	"	0.0333			-		25	
Benzo(b)fluoranthene	ND	0.00167	"	0.0333			-		25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 944430 - SW3550										
BLANK (657570-1-BLK) Source: 657570-1-BLK Prepared: 06/27/2014 Analyzed: 06/27/2014										
Benzo(a)pyrene	ND	0.00167	mg/kg	0.0333			-		25	
Benzo(a)anthracene	ND	0.00167	"	0.0333			-		25	
Acenaphthylene	ND	0.00167	"	0.0333			-		25	
2-Methylnaphthalene	ND	0.0167	"	0.0333			-		25	
Anthracene	ND	0.00167	"	0.0333			-		25	
Benzo(k)fluoranthene	ND	0.00167	"	0.0333			-		25	
Surrogate: Nitrobenzene-d5	0.718		PERCENT	1		72	23-120			
Surrogate: Terphenyl-D14	0.896		"	1		90	18-137			
Surrogate: 2-Fluorobiphenyl	0.781		"	1		78	30-115			
LCSD (657570-1-BSD) Source: 657570-1-BSD Prepared: 06/27/2014 Analyzed: 06/27/2014										
Dibenz(a,h)anthracene	0.0291	0.00166	mg/kg	0.0333	<0.000134	87	62-115	3	25	
Fluoranthene	0.0287	0.00166	"	0.0333	<0.000124	86	54-104	4	25	
Fluorene	0.0267	0.00166	"	0.0333	<0.0000925	80	50-109	5	25	
Indeno(1,2,3-c,d)Pyrene	0.0287	0.00166	"	0.0333	<0.000242	86	61-110	3	25	
Naphthalene	0.0247	0.0166	"	0.0333	<0.000218	74	44-112	2	25	
Chrysene	0.0301	0.00166	"	0.0333	<0.0000977	90	59-108	3	25	
Phenanthrene	0.0267	0.00166	"	0.0333	<0.000210	80	55-98	1	25	
Acenaphthylene	0.0248	0.00166	"	0.0333	<0.0000934	74	46-105	2	25	
Pyrene	0.0293	0.00166	"	0.0333	<0.000111	88	52-101	3	25	
Benzo(k)fluoranthene	0.0288	0.00166	"	0.0333	<0.000221	86	59-104	4	25	
Benzo(g,h,i)perylene	0.0291	0.00166	"	0.0333	<0.000197	87	64-105	2	25	
Benzo(b)fluoranthene	0.0273	0.00166	"	0.0333	<0.000219	82	62-105	5	25	
Benzo(a)pyrene	0.0278	0.00166	"	0.0333	<0.000128	83	56-99	6	25	
Anthracene	0.0264	0.00166	"	0.0333	<0.000166	79	59-96	2	25	
Acenaphthene	0.0256	0.00166	"	0.0333	<0.000153	77	56-100	1	25	
2-Methylnaphthalene	0.0241	0.0166	"	0.0333	<0.0000982	72	42-116	3	25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 944430 - SW3550										
LCSD (657570-1-BSD)		Source: 657570-1-BSD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
1-Methylnaphthalene	0.0249	0.0166	mg/kg	0.0333	<0.000144	75	56-110	4	25	
Benzo(a)anthracene	0.0295	0.00166	"	0.0333	<0.000100	89	57-100	3	25	
Surrogate: Nitrobenzene-d5	0.777		PERCENT	1		78	23-120			
Surrogate: 2-Fluorobiphenyl	0.837		"	1		84	30-115			
Surrogate: Terphenyl-D14	0.952		"	1		95	18-137			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

S-HI High surrogate recovery was confirmed as a matrix effect by a second analysis.

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

D Analyzed at an additional analytical dilution.

** surrogate recovery is outside method control limits most likely due to matrix interference. Sample was re-run for confirmation.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President



June 25, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 24, 2014. This project is associated with Origins project number X406284-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-01	X406284-01	Water	June 24, 2014 11:45	06/24/2014 15:02

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406284

Client: Eagle

Client Project ID: State M #36-5 & 7-36

Checklist Completed by: Jeff Smith

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/24/14 15:06

Airbill #: 122

Matrix(s) Received: (Check all that apply): ☐ Soil/Solid ☒ Water ☐ Other: _____

Cooler Number/Temperature: 18.9 °C / 1 °C / 1 °C (Describe) °C

Thermometer ID: 1002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>Sampled Same Day</u>
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄ / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>			<u>HCL</u>
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

GW-01

6/24/2014 11:45:00AM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406284-01 (Water)

BTEX by EPA 8260C

Benzene	2470	100	ug/L	100	4F24010	06/24/2014	06/24/2014
Toluene	1380	100	"	"	"	"	"
Ethylbenzene	892	100	"	"	"	"	"
Xylenes, total	5890	100	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.4 %	87.3-113			"	"	06/24/2014
Surrogate: Toluene-d8	104 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	99.7 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Blank (4F24010-BLK1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5	98.6		87.3-113			
Surrogate: Toluene-d8	65		"	62.5	104		90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5	99.1		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

LCS (4F24010-BS1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Benzene	51.8	1.0	ug/L	50.0		104	75-126			
Toluene	53.6	1.0	"	50.0		107	78.7-126			
Ethylbenzene	54.7	1.0	"	50.0		109	81-130			
m,p-Xylene	108	2.0	"	100		108	77.2-133			
o-Xylene	53.5	1.0	"	50.0		107	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.7	87.3-113			
Surrogate: Toluene-d8	66		"	62.5		105	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.0	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Matrix Spike (4F24010-MS1)		Source: X406274-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	53.8	1.0	ug/L	50.0	ND	108	74-130			
Toluene	54.6	1.0	"	50.0	0.2	109	73-131			
Ethylbenzene	55.2	1.0	"	50.0	ND	110	76-132			
m,p-Xylene	110	2.0	"	100	ND	110	69-139			
o-Xylene	54.6	1.0	"	50.0	ND	109	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.6	87.3-113			
Surrogate: Toluene-d8	65		"	62.5		104	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Matrix Spike Dup (4F24010-MSD1)		Source: X406274-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	52.2	1.0	ug/L	50.0	ND	104	74-130	3.04	20	
Toluene	54.2	1.0	"	50.0	0.2	108	73-131	0.699	20	
Ethylbenzene	55.2	1.0	"	50.0	ND	110	76-132	0.0181	20	
m,p-Xylene	110	2.0	"	100	ND	110	69-139	0.290	20	
o-Xylene	53.8	1.0	"	50.0	ND	108	74-131	1.51	20	
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		89.6	87.3-113			
Surrogate: Toluene-d8	66		"	62.5		105	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 25, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 24, 2014. This project is associated with Origins project number X406285-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Surface Pond	X406285-01	Water	June 24, 2014 12:00	06/24/2014 15:02

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 1

ORIGINS LABORATORY, INC

Client: Eagle Env. Consulting, Inc.
Address: 4101 Inca St. Denver, CO, 80211
Telephone Number: (303) 433-0479
Email Address: Mce3@eagle-enviro.com

Project Manager: Martin Eckert III
Project Name: State M 36-5 & 7-36
Project Number: -
Samples Collected By: A. Newberry
-Report to: ONL V

Sample ID Description: Surface Pond
Date Sampled: 6/24/14
Time Sampled: 1200
of Containers: 3

Preservative: Unpreserved, HCl, HNO₃, Other
Matrix: Soil, Groundwater, Other
Analysis: METALS - BAC

Relinquished By: [Signature]
Relinquished By: [Signature]

Received By: [Signature]
Received By: [Signature]

Date: 6/24/14
Time: 1502
Date: 6/24/14
Time: 1502

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Denta Danielle Naarstad | [Signature]

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406285

Client: Eagle

Client Project ID: State M 36-5 & 7-36

Checklist Completed by: Jesse Smith

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/24/14 15:04

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: (Describe)

Cooler Number/Temperature: 18.9 °C 1 °C 1 °C 1 °C

Thermometer ID: TD02

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		X		Sampled Same Day
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		X		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	X			HCL
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/25/14 5:14
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Surface Pond

6/24/2014 12:00:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406285-01 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F24010	06/24/2014	06/24/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.3 %	87.3-113			"	"	"
Surrogate: Toluene-d8	104 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	99.2 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Blank (4F24010-BLK1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5	98.6		87.3-113			
Surrogate: Toluene-d8	65		"	62.5	104		90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5	99.1		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

LCS (4F24010-BS1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Benzene	51.8	1.0	ug/L	50.0		104	75-126			
Toluene	53.6	1.0	"	50.0		107	78.7-126			
Ethylbenzene	54.7	1.0	"	50.0		109	81-130			
m,p-Xylene	108	2.0	"	100		108	77.2-133			
o-Xylene	53.5	1.0	"	50.0		107	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.7	87.3-113			
Surrogate: Toluene-d8	66		"	62.5		105	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.0	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Matrix Spike (4F24010-MS1)		Source: X406274-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	53.8	1.0	ug/L	50.0	ND	108	74-130			
Toluene	54.6	1.0	"	50.0	0.2	109	73-131			
Ethylbenzene	55.2	1.0	"	50.0	ND	110	76-132			
m,p-Xylene	110	2.0	"	100	ND	110	69-139			
o-Xylene	54.6	1.0	"	50.0	ND	109	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.6	87.3-113			
Surrogate: Toluene-d8	65		"	62.5		104	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F24010 - EPA 5030B (Water)

Matrix Spike Dup (4F24010-MSD1)		Source: X406274-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	52.2	1.0	ug/L	50.0	ND	104	74-130	3.04	20	
Toluene	54.2	1.0	"	50.0	0.2	108	73-131	0.699	20	
Ethylbenzene	55.2	1.0	"	50.0	ND	110	76-132	0.0181	20	
m,p-Xylene	110	2.0	"	100	ND	110	69-139	0.290	20	
o-Xylene	53.8	1.0	"	50.0	ND	108	74-131	1.51	20	
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		89.6	87.3-113			
Surrogate: Toluene-d8	66		"	62.5		105	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 30, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 24, 2014. This project is associated with Origins project number X406286-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBSS-01 @ 3.5'	X406286-01	Soil	June 24, 2014 10:45	06/24/2014 17:02
TBSS-04 @ 3.5'	X406286-02	Soil	June 24, 2014 11:07	06/24/2014 17:02
TBSS-05 @ 3.0'	X406286-03	Soil	June 24, 2014 11:15	06/24/2014 17:02

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

ORIGINS
LABORATORY, INC

www.originslaboratory.com

X406286 page 1 of 1

Client: Eagle Env. Consulting, Inc. Project Manager/Send Report To: Martin Eckert III
Address: 4101 Inca St. Email Address: Report to: mce3@eagle-enviro.com ONLY
Denver, CO 80211 Project Name/Number: State M 36-5 & 7-36
Telephone Number: (303) 433-0479 Samples Collected By: Andrew Newberry

Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
TBSS-01@3.5'	6/24/14	1045	2	X					X		6, BTX - 2260 DRO - 2015 Naphthalene	1
TBSS-04@3.5'	↓	1107	2	X					X			2
TBSS-05@3.0'	↓	1115	2	X					X			3
												4
												5
												6
												7
												8
												9
												10

Relinquished By: [Signature] Date: 6/24/14 Time: 1702
Relinquished By: [Signature] Date: 6/24/14 Time: 1702

Turnaround Time: Same Day ☒ 24 Hr ☐
48 Hr ☐ 72 Hr ☐ Standard ☐

Comments: Hold samples for PAHs - TBD
Date Results Needed: 6/24/14 1702
Noble

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order:

X406286

Client: Eagle

Client Project ID: State M # 36-5 & 7-36

Checklist Completed by: Jeff Smith

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/24/14 17:04

Airbill #: NA

Matrix(s) Received: (Check all that apply): X Soil/Solid

Water

Other:

(Describe)

Cooler Number/Temperature: 15.4 °C

/

°C

/

°C

/

°C

Thermometer ID: 1002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?				
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	X			PU
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed

Origins Laboratory, Inc.

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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-01 @ 3.5'

6/24/2014 10:45:00AM

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

Origins Laboratory, Inc.
X406286-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F24013	06/24/2014	06/24/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	92.3 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F24007	06/24/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	136 %	70-130			"	"	" S-GC
Surrogate: Toluene-d8	107 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	98.4 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-04 @ 3.5'

6/24/2014 11:07:00AM

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

Origins Laboratory, Inc.
X406286-02 (Soil)

Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.106	mmhos/cm	1	4F24016	06/24/2014	06/25/2014
---------------------------	-------	----------	---	---------	------------	------------

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F24013	06/24/2014	06/24/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	85.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F24007	06/24/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	06/24/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	"
Surrogate: Toluene-d8	95.0 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

Percent Moisture

Percent Moisture	26.4	1	%	1	944171	06/25/2014	06/25/2014
------------------	------	---	---	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-04 @ 3.5'

6/24/2014 11:07:00AM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406286-02 (Soil)

pH in Soil by EPA 9045D

pH	8.37	pH Units	1	4F24015	06/24/2014	06/25/2014
----	------	----------	---	---------	------------	------------

Sodium Absorption Ratio

Sodium absorption ratio	0.448		1	944456	06/28/2014	06/28/2014
-------------------------	-------	--	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-05 @ 3.0'
6/24/2014 11:15:00AM

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

Origins Laboratory, Inc.
X406286-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F24013	06/24/2014	06/24/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	93.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F24007	06/24/2014	06/24/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Naphthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	"
Surrogate: Toluene-d8	97.6 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F24007 - EPA 5030 (soil)										
Blank (4F24007-BLK1)					Prepared: 06/24/2014 Analyzed: 06/24/2014					
Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		108	70-130			
Surrogate: Toluene-d8	66		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	70		"	62.5		112	70-130			

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F24007 - EPA 5030 (soil)										
LCS (4F24007-BS1)					Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	0.1	0.002	mg/kg	0.100		102	70-130			
Toluene	0.1	0.002	"	0.100		105	70-130			
Ethylbenzene	0.1	0.002	"	0.100		99.9	70-130			
m,p-Xylene	0.2	0.004	"	0.200		101	70-130			
o-Xylene	0.1	0.002	"	0.100		103	70-130			
Naphthalene	0.1	0.008	"	0.100		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		108	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F24007 - EPA 5030 (soil)										
Matrix Spike (4F24007-MS1)		Source: X406276-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	0.09	0.002	mg/kg	0.100	ND	91.0	70-130			
Toluene	0.09	0.002	"	0.100	ND	91.3	70-130			
Ethylbenzene	0.09	0.002	"	0.100	ND	87.6	70-130			
m,p-Xylene	0.2	0.004	"	0.200	ND	87.7	70-130			
o-Xylene	0.09	0.002	"	0.100	ND	89.4	70-130			
Naphthalene	0.1	0.008	"	0.100	0.008	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

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

Batch 4F24007 - EPA 5030 (soil)

Matrix Spike Dup (4F24007-MSD1)		Source: X406276-01			Prepared: 06/24/2014 Analyzed: 06/24/2014					
Benzene	0.09	0.002	mg/kg	0.100	ND	93.2	70-130	2.39	20	
Toluene	0.1	0.002	"	0.100	ND	99.5	70-130	8.62	20	
Ethylbenzene	0.1	0.002	"	0.100	ND	96.7	70-130	9.79	20	
m,p-Xylene	0.2	0.004	"	0.200	ND	98.1	70-130	11.2	20	
o-Xylene	0.1	0.002	"	0.100	ND	97.3	70-130	8.47	20	
Naphthalene	0.1	0.008	"	0.100	0.008	108	70-130	4.90	20	
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		106	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control
Origins Laboratory, Inc.

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

Batch 4F24013 - EPA 3580

Blank (4F24013-BLK1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 49 g 50.0 98.6 59-131

LCS (4F24013-BS1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Diesel (C10-C28) 1140 50.0 mg/kg 1000

114 64-121

Surrogate: o-Terphenyl 53 g 50.0 107 59-131

LCS Dup (4F24013-BSD1)

Prepared: 06/24/2014 Analyzed: 06/24/2014

Diesel (C10-C28) 921 50.0 mg/kg 1000

92.1 64-121 21.4 20 QR-02

Surrogate: o-Terphenyl 44 g 50.0 88.7 59-131

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F24015 - NO PREP										
Duplicate (4F24015-DUP1)		Source: X406286-02			Prepared: 06/24/2014 Analyzed: 06/25/2014					
pH	8.39		pH Units		8.37			0.227	25	
Batch 4F24016 - NO PREP										
Blank (4F24016-BLK1)		Prepared: 06/24/2014 Analyzed: 06/25/2014								
Specific Conductance (EC)	0.00180		mmhos/cm							
Duplicate (4F24016-DUP1)		Source: X406286-02			Prepared: 06/24/2014 Analyzed: 06/25/2014					
Specific Conductance (EC)	0.107		mmhos/cm		0.106			0.939	10	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Percent Moisture - Quality Control XENCO

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

Batch 944171 - NONE

BLANK (944171-1-BLK)

Source: 944171-1-BLK

Prepared: 06/25/2014 Analyzed: 06/25/2014

Percent Moisture	ND	1	%	0			-		20	
------------------	----	---	---	---	--	--	---	--	----	--

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President



June 27, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 25, 2014. This project is associated with Origins project number X406297-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBSS-18 @ 3'	X406297-01	Soil	June 25, 2014 13:40	06/25/2014 16:54
TBSS-19 @ 3'	X406297-02	Soil	June 25, 2014 14:00	06/25/2014 16:54
TBSS-21 @ 3'	X406297-03	Soil	June 25, 2014 14:40	06/25/2014 16:54

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X466297

Client: Eagle

Client Project ID: State M #36-5 & 7-36

Checklist Completed by: Jeff Smith

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/25/14 16:58

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: (Describe)

Cooler Number/Temperature: 19.1 °C 1 °C 1 °C 1 °C

Thermometer ID: T222

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		X		Sampled Same Day
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/25/14 6:00
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-18 @ 3'
6/25/2014 1:40:00PM

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

Origins Laboratory, Inc.
X406297-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	84.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.009	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130			"	"	"
Surrogate: Toluene-d8	96.6 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-19 @ 3'
6/25/2014 2:00:00PM

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

Origins Laboratory, Inc.
X406297-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	94.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	108 %	70-130			"	"	"
Surrogate: Toluene-d8	97.5 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-21 @ 3'
6/25/2014 2:40:00PM

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

Origins Laboratory, Inc.
X406297-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	99.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.6	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.04	0.002	"	"	"	"	"
Naphthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"
Surrogate: Toluene-d8	95.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"

PAHs by GCMS SIM

1-Methylnaphthalene	ND	0.023	mg/kg	1	944430	06/27/2014	06/27/2014
2-Methylnaphthalene	ND	0.023	"	"	"	"	"
Acenaphthene	ND	0.0023	"	"	"	"	"
Acenaphthylene	ND	0.0023	"	"	"	"	"
Anthracene	ND	0.0023	"	"	"	"	"

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

TBSS-21 @ 3'
6/25/2014 2:40:00PM

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

XENCO

X406297-03 (Soil)

PAHs by GCMS SIM

Benzo(a)anthracene	ND	0.0023	mg/kg	1	944430	06/27/2014	06/27/2014
Benzo(a)pyrene	ND	0.0023	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.0023	"	"	"	"	"
Benzo(g,h,i)perylene	ND	0.0023	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.0023	"	"	"	"	"
Chrysene	ND	0.0023	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.0023	"	"	"	"	"
Fluoranthene	ND	0.0023	"	"	"	"	"
Fluorene	ND	0.0023	"	"	"	"	"
Indeno(1,2,3-c,d)Pyrene	ND	0.0023	"	"	"	"	"
Naphthalene	ND	0.023	"	"	"	"	"
Phenanthrene	ND	0.0023	"	"	"	"	"
Pyrene	ND	0.0023	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	88 %	30-115			"	"	"
Surrogate: Nitrobenzene-d5	79 %	23-120			"	"	"
Surrogate: Terphenyl-D14	95 %	18-137			"	"	"

Percent Moisture

Percent Moisture	27.5	1	%	1	944329	06/26/2014	06/26/2014
------------------	------	---	---	---	--------	------------	------------

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

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

Batch 4F25014 - EPA 5030 (soil)

Blank (4F25014-BLK1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F25014 - EPA 5030 (soil)										
LCS (4F25014-BS1)					Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	0.1	0.002	mg/kg	0.100		106	70-130			
Toluene	0.1	0.002	"	0.100		104	70-130			
Ethylbenzene	0.1	0.002	"	0.100		105	70-130			
m,p-Xylene	0.2	0.004	"	0.200		105	70-130			
o-Xylene	0.1	0.002	"	0.100		107	70-130			
Naphthalene	0.1	0.008	"	0.100		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.0	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F25014 - EPA 5030 (soil)										
Matrix Spike (4F25014-MS1)		Source: X406297-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	110	70-130			
Toluene	0.1	0.002	"	0.100	ND	105	70-130			
Ethylbenzene	0.1	0.002	"	0.100	ND	101	70-130			
m,p-Xylene	0.2	0.004	"	0.200	0.006	94.9	70-130			
o-Xylene	0.1	0.002	"	0.100	0.002	96.3	70-130			
Naphthalene	0.08	0.008	"	0.100	0.0007	81.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4F25014 - EPA 5030 (soil)										
Matrix Spike Dup (4F25014-MSD1)		Source: X406297-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	103	70-130	6.52	20	
Toluene	0.1	0.002	"	0.100	ND	98.3	70-130	6.37	20	
Ethylbenzene	0.09	0.002	"	0.100	ND	94.7	70-130	6.52	20	
m,p-Xylene	0.2	0.004	"	0.200	0.006	90.4	70-130	4.70	20	
o-Xylene	0.1	0.002	"	0.100	0.002	95.4	70-130	0.958	20	
Naphthalene	0.08	0.008	"	0.100	0.0007	81.6	70-130	0.560	20	
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		100	70-130			

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control
Origins Laboratory, Inc.

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

Batch 4F25011 - EPA 3580

Blank (4F25011-BLK1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 47 g 50.0 93.6 59-131

LCS (4F25011-BS1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28) 960 50.0 mg/kg 1000 96.0 64-121

Surrogate: o-Terphenyl 46 g 50.0 92.3 59-131

LCS Dup (4F25011-BSD1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28) 937 50.0 mg/kg 1000 93.7 64-121 2.37 20

Surrogate: o-Terphenyl 42 g 50.0 84.7 59-131

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

MS (487976-002 S)		Source: 487976-002 S			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Pyrene	0.0402	0.00167	mg/kg	0.0333	0.00428	108	52-101		25	
Dibenz(a,h)anthracene	0.0292	0.00167	"	0.0333	<0.000134	88	62-115		25	
Fluorene	0.025	0.00167	"	0.0333	<0.0000925	75	50-109		25	
Indeno(1,2,3-c,d)Pyrene	0.034	0.00167	"	0.0333	0.00292	93	61-110		25	
Naphthalene	0.0242	0.0167	"	0.0333	<0.000218	73	44-112		25	
Benzo(k)fluoranthene	0.0288	0.00167	"	0.0333	0.00242	79	59-104		25	
Phenanthrene	0.0312	0.00167	"	0.0333	<0.000211	94	55-98		25	
Chrysene	0.0384	0.00167	"	0.0333	0.00424	103	59-108		25	
2-Methylnaphthalene	0.024	0.0167	"	0.0333	<0.0000982	72	42-116		25	
Fluoranthene	0.042	0.00167	"	0.0333	0.00419	114	54-104		25	
Benzo(g,h,i)perylene	0.0337	0.00167	"	0.0333	0.00364	90	64-105		25	
Acenaphthene	0.0243	0.00167	"	0.0333	<0.000153	73	56-100		25	
Acenaphthylene	0.0242	0.00167	"	0.0333	<0.0000934	73	46-105		25	
Anthracene	0.0264	0.00167	"	0.0333	<0.000166	79	59-96		25	
Benzo(a)anthracene	0.0368	0.00167	"	0.0333	<0.000100	111	57-100		25	
Benzo(a)pyrene	0.036	0.00167	"	0.0333	0.00307	99	56-99		25	
Benzo(b)fluoranthene	0.0379	0.00167	"	0.0333	0.00585	96	62-105		25	
1-Methylnaphthalene	0.0252	0.0167	"	0.0333	<0.000144	76	56-110		25	
Surrogate: Terphenyl-D14	0.889		PERCENT	1		89	18-137			
Surrogate: Nitrobenzene-d5	0.793		"	1		79	23-120			
Surrogate: 2-Fluorobiphenyl	0.84		"	1		84	30-115			

MSD (487976-002 SD)		Source: 487976-002 SD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzo(k)fluoranthene	0.0265	0.00167	mg/kg	0.0333	0.00242	72	59-104	8	25	
Benzo(a)anthracene	0.0296	0.00167	"	0.0333	<0.000100	89	57-100	22	25	
Chrysene	0.029	0.00167	"	0.0333	0.00424	74	59-108	28	25	
Benzo(b)fluoranthene	0.029	0.00167	"	0.0333	0.00585	70	62-105	27	25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 944430 - SW3550										
MSD (487976-002 SD)			Source: 487976-002 SD			Prepared: 06/27/2014 Analyzed: 06/27/2014				
Benzo(a)pyrene	0.0261	0.00167	mg/kg	0.0333	0.00307	69	56-99	32	25	
Anthracene	0.0254	0.00167	"	0.0333	<0.000166	76	59-96	4	25	
Acenaphthylene	0.0255	0.00167	"	0.0333	<0.0000935	77	46-105	5	25	
Acenaphthene	0.0253	0.00167	"	0.0333	<0.000153	76	56-100	4	25	
2-Methylnaphthalene	0.0243	0.0167	"	0.0333	<0.0000983	73	42-116	1	25	
1-Methylnaphthalene	0.0279	0.0167	"	0.0333	<0.000144	84	56-110	10	25	
Benzo(g,h,i)perylene	0.0288	0.00167	"	0.0333	0.00364	76	64-105	16	25	
Pyrene	0.0282	0.00167	"	0.0333	0.00428	72	52-101	35	25	
Phenanthrene	0.0277	0.00167	"	0.0333	<0.000211	83	55-98	12	25	
Naphthalene	0.024	0.0167	"	0.0333	<0.000218	72	44-112	1	25	
Indeno(1,2,3-c,d)Pyrene	0.0296	0.00167	"	0.0333	0.00292	80	61-110	14	25	
Fluorene	0.0256	0.00167	"	0.0333	<0.0000926	77	50-109	2	25	
Fluoranthene	0.0302	0.00167	"	0.0333	0.00419	78	54-104	33	25	
Dibenz(a,h)anthracene	0.0297	0.00167	"	0.0333	<0.000134	89	62-115	2	25	
Surrogate: 2-Fluorobiphenyl	0.761		PERCENT	1		76	30-115			
Surrogate: Terphenyl-D14	0.882		"	1		88	18-137			
Surrogate: Nitrobenzene-d5	0.737		"	1		74	23-120			
LCS (657570-1-BKS)			Source: 657570-1-BKS			Prepared: 06/27/2014 Analyzed: 06/27/2014				
Benzo(k)fluoranthene	0.0276	0.00167	mg/kg	0.0333	<0.000221	83	59-104		25	
Chrysene	0.0293	0.00167	"	0.0333	<0.0000977	88	59-108		25	
Pyrene	0.0285	0.00167	"	0.0333	<0.000111	86	52-101		25	
Phenanthrene	0.0271	0.00167	"	0.0333	<0.000211	81	55-98		25	
Naphthalene	0.0241	0.0167	"	0.0333	<0.000218	72	44-112		25	
Indeno(1,2,3-c,d)Pyrene	0.0278	0.00167	"	0.0333	<0.000242	83	61-110		25	
Fluorene	0.0255	0.00167	"	0.0333	<0.0000925	77	50-109		25	
Fluoranthene	0.0275	0.00167	"	0.0333	<0.000124	83	54-104		25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

LCS (657570-1-BKS)		Source: 657570-1-BKS			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzo(g,h,i)perylene	0.0285	0.00167	mg/kg	0.0333	<0.000197	86	64-105		25	
Benzo(b)fluoranthene	0.0259	0.00167	"	0.0333	<0.000219	78	62-105		25	
Benzo(a)pyrene	0.0261	0.00167	"	0.0333	<0.000128	78	56-99		25	
Benzo(a)anthracene	0.0286	0.00167	"	0.0333	<0.000100	86	57-100		25	
Anthracene	0.0269	0.00167	"	0.0333	<0.000166	81	59-96		25	
Acenaphthylene	0.0242	0.00167	"	0.0333	<0.0000934	73	46-105		25	
Acenaphthene	0.0254	0.00167	"	0.0333	<0.000153	76	56-100		25	
2-Methylnaphthalene	0.0235	0.0167	"	0.0333	<0.0000982	71	42-116		25	
1-Methylnaphthalene	0.0239	0.0167	"	0.0333	<0.000144	72	56-110		25	
Dibenz(a,h)anthracene	0.0282	0.00167	"	0.0333	<0.000134	85	62-115		25	
Surrogate: Nitrobenzene-d5	0.748		PERCENT	1		75	23-120			
Surrogate: Terphenyl-D14	0.926		"	1		93	18-137			
Surrogate: 2-Fluorobiphenyl	0.806		"	1		81	30-115			

BLANK (657570-1-BLK)		Source: 657570-1-BLK			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Dibenz(a,h)anthracene	ND	0.00167	mg/kg	0.0333			-		25	
Fluoranthene	ND	0.00167	"	0.0333			-		25	
Fluorene	ND	0.00167	"	0.0333			-		25	
Indeno(1,2,3-c,d)Pyrene	ND	0.00167	"	0.0333			-		25	
Naphthalene	ND	0.0167	"	0.0333			-		25	
Phenanthrene	ND	0.00167	"	0.0333			-		25	
Anthracene	ND	0.00167	"	0.0333			-		25	
Chrysene	ND	0.00167	"	0.0333			-		25	
Pyrene	ND	0.00167	"	0.0333			-		25	
1-Methylnaphthalene	ND	0.0167	"	0.0333			-		25	
Benzo(g,h,i)perylene	ND	0.00167	"	0.0333			-		25	
Benzo(b)fluoranthene	ND	0.00167	"	0.0333			-		25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

BLANK (657570-1-BLK)		Source: 657570-1-BLK			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzo(a)anthracene	ND	0.00167	mg/kg	0.0333		-		25		
Acenaphthylene	ND	0.00167	"	0.0333		-		25		
Acenaphthene	ND	0.00167	"	0.0333		-		25		
2-Methylnaphthalene	ND	0.0167	"	0.0333		-		25		
Benzo(a)pyrene	ND	0.00167	"	0.0333		-		25		
Benzo(k)fluoranthene	ND	0.00167	"	0.0333		-		25		
Surrogate: Nitrobenzene-d5	0.718		PERCENT	1	72	23-120				
Surrogate: Terphenyl-D14	0.896		"	1	90	18-137				
Surrogate: 2-Fluorobiphenyl	0.781		"	1	78	30-115				

LCSD (657570-1-BSD)		Source: 657570-1-BSD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Dibenz(a,h)anthracene	0.0291	0.00166	mg/kg	0.0333	<0.000134	87	62-115	3	25	
Fluoranthene	0.0287	0.00166	"	0.0333	<0.000124	86	54-104	4	25	
Fluorene	0.0267	0.00166	"	0.0333	<0.0000925	80	50-109	5	25	
Indeno(1,2,3-c,d)Pyrene	0.0287	0.00166	"	0.0333	<0.000242	86	61-110	3	25	
Naphthalene	0.0247	0.0166	"	0.0333	<0.000218	74	44-112	2	25	
Chrysene	0.0301	0.00166	"	0.0333	<0.0000977	90	59-108	3	25	
Pyrene	0.0293	0.00166	"	0.0333	<0.000111	88	52-101	3	25	
Anthracene	0.0264	0.00166	"	0.0333	<0.000166	79	59-96	2	25	
Phenanthrene	0.0267	0.00166	"	0.0333	<0.000210	80	55-98	1	25	
Benzo(k)fluoranthene	0.0288	0.00166	"	0.0333	<0.000221	86	59-104	4	25	
Benzo(g,h,i)perylene	0.0291	0.00166	"	0.0333	<0.000197	87	64-105	2	25	
Benzo(b)fluoranthene	0.0273	0.00166	"	0.0333	<0.000219	82	62-105	5	25	
Benzo(a)anthracene	0.0295	0.00166	"	0.0333	<0.000100	89	57-100	3	25	
Acenaphthylene	0.0248	0.00166	"	0.0333	<0.0000934	74	46-105	2	25	
Acenaphthene	0.0256	0.00166	"	0.0333	<0.000153	77	56-100	1	25	
2-Methylnaphthalene	0.0241	0.0166	"	0.0333	<0.0000982	72	42-116	3	25	

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

PAHs by GCMS SIM - Quality Control XENCO

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

Batch 944430 - SW3550

LCSD (657570-1-BSD)		Source: 657570-1-BSD			Prepared: 06/27/2014 Analyzed: 06/27/2014					
1-Methylnaphthalene	0.0249	0.0166	mg/kg	0.0333	<0.000144	75	56-110	4	25	
Benzo(a)pyrene	0.0278	0.00166	"	0.0333	<0.000128	83	56-99	6	25	
Surrogate: Nitrobenzene-d5	0.777		PERCENT	1		78	23-120			
Surrogate: Terphenyl-D14	0.952		"	1		95	18-137			
Surrogate: 2-Fluorobiphenyl	0.837		"	1		84	30-115			

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Percent Moisture - Quality Control

XENCO

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

Batch 944329 - NONE

BLANK (944329-1-BLK)

Source: 944329-1-BLK

Prepared: 06/26/2014 Analyzed: 06/26/2014

Percent Moisture	ND	1	%	0			-		20	
------------------	----	---	---	---	--	--	---	--	----	--

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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.

Noelle Doyle Mathis, President



June 26, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 25, 2014. This project is associated with Origins project number X406298-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-22-GW	X406298-01	Water	June 25, 2014 11:56	06/25/2014 16:53
SS-23-GW	X406298-02	Water	June 25, 2014 13:34	06/25/2014 16:53
SS-24-GW	X406298-03	Water	June 25, 2014 13:59	06/25/2014 16:53
SS-25-GW	X406298-04	Water	June 25, 2014 14:45	06/25/2014 16:53
SS-26-GW	X406298-05	Water	June 25, 2014 15:40	06/25/2014 16:53

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com page 7 of 7

ORIGINS LABORATORY, INC

Client: Eagle Environmental Consulting, Inc.
Address: 4101 Inca St. Denver, CO 80211
Telephone Number: (303) 433-0479
Email Address: Mike@eagle-enviro.com

Project Manager: Martin Eckert III
Project Name: State M 36-5 & 7-36
Project Number: —
Samples Collected By: H. Phillips
April 6 ONLY

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #			Other
SS-22-6W	6/25/14	1156	3	X				X				1	
SS-23-6W	6/25/14	1334	3	X				X				2	
SS-24-GW	6/25/14	1359	3	X				X				3	
SS-25-GW	6/25/14	1445	3	X				X				4	
SS-26-GW	6/25/14	1540	3	X				X				5	
												6	
												7	
												8	
												9	
												10	

Relinquished By: [Signature] Date: 6/25/14 Time: 1653
Relinquished By: [Signature] Date: 6/25/14 Time: 1653

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Data Results Needed: [Signature]

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406798

Client: Eagle

Client Project ID: State M# 36-5 & 7-36

Checklist Completed by: Jeff Smith

Shipped Via: H/12

Date/time completed: 6/25/14

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐ (Describe)

Cooler Number/Temperature: 19.1 °C 1 °C 1 °C 1 °C

Thermometer ID: TR02

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>Sampled Same Day</u>
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<u>6/25/14</u>	<input checked="" type="checkbox"/>		<u>Samples will be analyzed within 7 Days of collection</u>
Additional Comments (if any):				<u>H/20</u>

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed 6/26/14 6:30

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-22-GW

6/25/2014 11:56:00AM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406298-01 (Water)

BTEX by EPA 8260C

Benzene	25.2	4.0	ug/L	4	4F25008	06/25/2014	06/26/2014
Toluene	20.4	4.0	"	"	"	"	"
Ethylbenzene	ND	4.0	"	"	"	"	"
Xylenes, total	ND	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	104 %	87.3-113			"	"	06/25/2014
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-23-GW

6/25/2014 1:34:00PM

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

Origins Laboratory, Inc.

X406298-02 (Water)

BTEX by EPA 8260C

Benzene	11.1	4.0	ug/L	4	4F25008	06/25/2014	06/25/2014
Toluene	ND	4.0	"	"	"	"	"
Ethylbenzene	ND	4.0	"	"	"	"	"
Xylenes, total	ND	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	103 %	87.3-113			"	"	"
Surrogate: Toluene-d8	99.8 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-24-GW

6/25/2014 1:59:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406298-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F25008	06/25/2014	06/25/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	105 %	87.3-113			"	"	"
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-25-GW

6/25/2014 2:45:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406298-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F25008	06/25/2014	06/25/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	103 %	87.3-113			"	"	"
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-26-GW

6/25/2014 3:40:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406298-05 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F25008	06/25/2014	06/25/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	104 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25008 - EPA 5030B (Water)

Blank (4F25008-BLK1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5	104		87.3-113			
Surrogate: Toluene-d8	63		"	62.5	100		90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5	103		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25008 - EPA 5030B (Water)

LCS (4F25008-BS1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Benzene	54.6	1.0	ug/L	50.0	109	75-126
Toluene	52.7	1.0	"	50.0	105	78.7-126
Ethylbenzene	53.9	1.0	"	50.0	108	81-130
m,p-Xylene	107	2.0	"	100	107	77.2-133
o-Xylene	54.2	1.0	"	50.0	108	77.9-126
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5	95.0	87.3-113
Surrogate: Toluene-d8	63		"	62.5	100	90.9-108
Surrogate: 4-Bromofluorobenzene	64		"	62.5	102	88.6-111

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25008 - EPA 5030B (Water)

Matrix Spike (4F25008-MS1)		Source: X406287-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	46.7	1.0	ug/L	50.0	ND	93.3	74-130			
Toluene	45.1	1.0	"	50.0	ND	90.2	73-131			
Ethylbenzene	46.0	1.0	"	50.0	ND	92.0	76-132			
m,p-Xylene	91.5	2.0	"	100	1.0	90.5	69-139			
o-Xylene	48.0	1.0	"	50.0	ND	96.1	74-131			
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.1	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25008 - EPA 5030B (Water)

Matrix Spike Dup (4F25008-MSD1)		Source: X406287-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	45.4	1.0	ug/L	50.0	ND	90.7	74-130	2.85	20	
Toluene	42.6	1.0	"	50.0	ND	85.2	73-131	5.70	20	
Ethylbenzene	43.0	1.0	"	50.0	ND	86.0	76-132	6.70	20	
m,p-Xylene	86.5	2.0	"	100	1.0	85.5	69-139	5.62	20	
o-Xylene	44.6	1.0	"	50.0	ND	89.2	74-131	7.36	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.5	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 26, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 25, 2014. This project is associated with Origins project number X406299-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-22 @ 6-12"	X406299-01	Soil	June 25, 2014 9:43	06/25/2014 16:53
SS-23 @ 6-12"	X406299-02	Soil	June 25, 2014 11:13	06/25/2014 16:53
SS-24 @ 12-18"	X406299-03	Soil	June 25, 2014 13:14	06/25/2014 16:53
SS-25 @ 6-12"	X406299-04	Soil	June 25, 2014 14:36	06/25/2014 16:53
SS-26 @ 30-36"	X406299-05	Soil	June 25, 2014 15:16	06/25/2014 16:53

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406299

Client: Eagle

Client Project ID: State M #36-517-36

Checklist Completed by: Jeff Smith

Shipped Via: HAZ

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/25/14 17:06

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 19.1 °C 1 °C 1 °C (Describe) 1 °C

Thermometer ID: T602

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>Sampled Same Day</u>
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄ / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed 6/25/14 6:19

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-22 @ 6-12"

6/25/2014 9:43:00AM

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

Origins Laboratory, Inc.
X406299-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	66.4	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
Surrogate: o-Terphenyl	103 %	59-131			"	"	"

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"
Surrogate: Toluene-d8	98.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	110 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-23 @ 6-12"

6/25/2014 11:13:00AM

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

Origins Laboratory, Inc.

X406299-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	982	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	-----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	93.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	92.0	5.0	mg/kg	25	4F25014	06/25/2014	06/25/2014
-----------------------------	------	-----	-------	----	---------	------------	------------

Benzene	ND	0.05	"	"	"	"	"
---------	----	------	---	---	---	---	---

Toluene	ND	0.05	"	"	"	"	"
---------	----	------	---	---	---	---	---

Ethylbenzene	ND	0.05	"	"	"	"	"
--------------	----	------	---	---	---	---	---

Xylenes, total	0.3	0.05	"	"	"	"	"
----------------	-----	------	---	---	---	---	---

Naphthalene	0.3	0.2	"	"	"	"	"
-------------	-----	-----	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	98.3 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	100 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-24 @ 12-18"

6/25/2014 1:14:00PM

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

Origins Laboratory, Inc.

X406299-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	91.3 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	115 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	95.8 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-25 @ 6-12"

6/25/2014 2:36:00PM

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

Origins Laboratory, Inc.

X406299-04 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	92.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	0.003	0.002	"	"	"	"	"
---------	-------	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	97.0 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-26 @ 30-36"

6/25/2014 3:16:00PM

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

Origins Laboratory, Inc.

X406299-05 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F25011	06/25/2014	06/25/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	81.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F25014	06/25/2014	06/25/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.1 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25014 - EPA 5030 (soil)

Blank (4F25014-BLK1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25014 - EPA 5030 (soil)

LCS (4F25014-BS1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Benzene	0.1	0.002	mg/kg	0.100		106	70-130			
Toluene	0.1	0.002	"	0.100		104	70-130			
Ethylbenzene	0.1	0.002	"	0.100		105	70-130			
m,p-Xylene	0.2	0.004	"	0.200		105	70-130			
o-Xylene	0.1	0.002	"	0.100		107	70-130			
Naphthalene	0.1	0.008	"	0.100		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.0	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25014 - EPA 5030 (soil)

Matrix Spike (4F25014-MS1)		Source: X406297-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	110	70-130			
Toluene	0.1	0.002	"	0.100	ND	105	70-130			
Ethylbenzene	0.1	0.002	"	0.100	ND	101	70-130			
m,p-Xylene	0.2	0.004	"	0.200	0.006	94.9	70-130			
o-Xylene	0.1	0.002	"	0.100	0.002	96.3	70-130			
Naphthalene	0.08	0.008	"	0.100	0.0007	81.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25014 - EPA 5030 (soil)

Matrix Spike Dup (4F25014-MSD1)		Source: X406297-01			Prepared: 06/25/2014 Analyzed: 06/25/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	103	70-130	6.52	20	
Toluene	0.1	0.002	"	0.100	ND	98.3	70-130	6.37	20	
Ethylbenzene	0.09	0.002	"	0.100	ND	94.7	70-130	6.52	20	
m,p-Xylene	0.2	0.004	"	0.200	0.006	90.4	70-130	4.70	20	
o-Xylene	0.1	0.002	"	0.100	0.002	95.4	70-130	0.958	20	
Naphthalene	0.08	0.008	"	0.100	0.0007	81.6	70-130	0.560	20	
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		100	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F25011 - EPA 3580

Blank (4F25011-BLK1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28)	ND	50.0	mg/kg							
Surrogate: o-Terphenyl	47		g	50.0		93.6	59-131			

LCS (4F25011-BS1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28)	960	50.0	mg/kg	1000		96.0	64-121			
Surrogate: o-Terphenyl	46		g	50.0		92.3	59-131			

LCS Dup (4F25011-BSD1)

Prepared: 06/25/2014 Analyzed: 06/25/2014

Diesel (C10-C28)	937	50.0	mg/kg	1000		93.7	64-121	2.37	20	
Surrogate: o-Terphenyl	42		g	50.0		84.7	59-131			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 27, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 26, 2014. This project is associated with Origins project number X406322-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-27@4"-8"	X406322-01	Soil	June 26, 2014 10:17	06/26/2014 18:22
SS-28@22"-26"	X406322-02	Soil	June 26, 2014 10:47	06/26/2014 18:22
SS-29@16"-20"	X406322-03	Soil	June 26, 2014 11:02	06/26/2014 18:22
SS-30@22"-26"	X406322-04	Soil	June 26, 2014 14:40	06/26/2014 18:22
SS-31@4"-8"	X406322-05	Soil	June 26, 2014 15:05	06/26/2014 18:22
SS-32@4"-8"	X406322-06	Soil	June 26, 2014 15:51	06/26/2014 18:22
SS-33@4"-8"	X406322-07	Soil	June 26, 2014 16:04	06/26/2014 18:22

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Page 3 of 16

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406322

Client: EAGLE

Client Project ID: STATE M #36-5 & 7-36

Checklist Completed by: JR

Shipped Via: H/D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/26/14 1735

Airbill #: _____

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 1 2.3 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/27/14 7:54
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-27@4"-8"

6/26/2014 10:17:00AM

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

Origins Laboratory, Inc.

X406322-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	85.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	115 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	97.8 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	109 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-28@22"-26"

6/26/2014 10:47:00AM

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

Origins Laboratory, Inc.

X406322-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	90.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	94.4 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-29@16"-20"

6/26/2014 11:02:00AM

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

Origins Laboratory, Inc.

X406322-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	84.0 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	94.3 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-30@22"-26"

6/26/2014 2:40:00PM

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

Origins Laboratory, Inc.

X406322-04 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	78.0	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
------------------	------	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	86.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	191	20.0	mg/kg	100	4F26007	06/26/2014	06/27/2014
-----------------------------	-----	------	-------	-----	---------	------------	------------

Benzene	0.8	0.2	"	"	"	"	"
---------	-----	-----	---	---	---	---	---

Toluene	4.3	0.2	"	"	"	"	"
---------	-----	-----	---	---	---	---	---

Ethylbenzene	1.1	0.2	"	"	"	"	"
--------------	-----	-----	---	---	---	---	---

Xylenes, total	8.0	0.2	"	"	"	"	"
----------------	-----	-----	---	---	---	---	---

Naphthalene	ND	0.8	"	"	"	"	"
-------------	----	-----	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130			"	"	"
----------------------------------	--------	--------	--	--	---	---	---

Surrogate: Toluene-d8	100 %	70-130			"	"	"
-----------------------	-------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-31@4"-8"

6/26/2014 3:05:00PM

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

Origins Laboratory, Inc.
X406322-05 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
Surrogate: o-Terphenyl	79.4 %	59-131			"	"	"

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.2	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
Benzene	ND	0.002	"	"	"	"	06/27/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.005	0.002	"	"	"	"	"
Naphthalene	ND	0.008	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	06/26/2014
Surrogate: Toluene-d8	97.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-32@4"-8"

6/26/2014 3:51:00PM

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

Origins Laboratory, Inc.
X406322-06 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
Surrogate: o-Terphenyl	80.5 %	59-131			"	"	"

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	0.002	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.007	0.002	"	"	"	"	"
Naphthalene	ND	0.008	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"
Surrogate: Toluene-d8	98.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-33@4"-8"

6/26/2014 4:04:00PM

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

Origins Laboratory, Inc.
X406322-07 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F26015	06/26/2014	06/26/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	84.5 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F26007	06/26/2014	06/26/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	0.005	0.002	"	"	"	"	"
----------------	-------	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.1 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26007 - EPA 5030 (soil)

Blank (4F26007-BLK1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	69		ug/kg	62.5		110	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26007 - EPA 5030 (soil)

LCS (4F26007-BS1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Benzene	0.1	0.002	mg/kg	0.100		102	70-130			
Toluene	0.1	0.002	"	0.100		97.0	70-130			
Ethylbenzene	0.1	0.002	"	0.100		101	70-130			
m,p-Xylene	0.2	0.004	"	0.200		99.0	70-130			
o-Xylene	0.1	0.002	"	0.100		99.5	70-130			
Naphthalene	0.1	0.008	"	0.100		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	61		"	62.5		96.9	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.5	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26007 - EPA 5030 (soil)

LCS Dup (4F26007-BSD1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Benzene	0.1	0.002	mg/kg	0.100		105	70-130	2.90	20	
Toluene	0.1	0.002	"	0.100		102	70-130	5.30	20	
Ethylbenzene	0.1	0.002	"	0.100		103	70-130	2.25	20	
m,p-Xylene	0.2	0.004	"	0.200		103	70-130	3.99	20	
o-Xylene	0.1	0.002	"	0.100		103	70-130	3.73	20	
Naphthalene	0.1	0.008	"	0.100		100	70-130	1.15	20	
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26015 - EPA 3580

Blank (4F26015-BLK1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 49 g 50.0 98.3 59-131

LCS (4F26015-BS1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Diesel (C10-C28) 960 50.0 mg/kg 1000 96.0 64-121

Surrogate: o-Terphenyl 45 g 50.0 89.7 59-131

Matrix Spike (4F26015-MS1)

Source: X406309-04

Prepared: 06/26/2014 Analyzed: 06/26/2014

Diesel (C10-C28) 1090 50.0 mg/kg 1000 19.4 107 53-125

Surrogate: o-Terphenyl 52 g 50.0 105 59-131

Matrix Spike Dup (4F26015-MSD1)

Source: X406309-04

Prepared: 06/26/2014 Analyzed: 06/26/2014

Diesel (C10-C28) 953 50.0 mg/kg 1000 19.4 93.4 53-125 13.4 20

Surrogate: o-Terphenyl 47 g 50.0 93.4 59-131

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 27, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 26, 2014. This project is associated with Origins project number X406323-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-27-GW	X406323-01	Water	June 26, 2014 15:24	06/26/2014 18:22
SS-28-GW	X406323-02	Water	June 26, 2014 16:00	06/26/2014 18:22
SS-29-GW	X406323-03	Water	June 26, 2014 15:55	06/26/2014 18:22
SS-31-GW	X406323-04	Water	June 26, 2014 16:36	06/26/2014 18:22
SS-32-GW	X406323-05	Water	June 26, 2014 16:37	06/26/2014 18:22
SS-33-GW	X406323-06	Water	June 26, 2014 16:50	06/26/2014 18:22

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 1

ORIGINS LABORATORY, INC

X406323

Client: Eagle Env Consulting
Address: 4101 Inca st
Telephone Number: 303 433 0479
Email Address: mce3@eagle-enviro.com - Report to ONLY

Project Manager: Martin Eckert III
Project Name: State M #36-5 + 7-36
Project Number: -
Samples Collected By: HP/ MC

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis		Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other		
SS-27-GW	6/26/14	1524	3	X				X					1
SS-28-GW		1600	3										2
SS-29-GW		1555	3										3
SS-30-GW		1634	6										4
SS-31-GW		1637	3										5
SS-33-GW		1650	3										6
													7
													8
													9
													10

Relinquished By: [Signature] Date: 6/26/14 Time: 1822
Relinquished By: [Signature] Date: 6/26/14 Time: 1822

Received By: [Signature] Date: 6/26/14 Time: 1822
Received By: [Signature] Date: 6/26/14 Time: 1822

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Date Results Needed: Noble

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406323

Client: EAGLE

Client Project ID: STATE M #36-5 & 7-36

Checklist Completed by: JP

Shipped Via: HT

(UPS, FedEx, Hand-Delivered, Pick-up, etc.)

Date/time completed: 6/26/14 1840

Airbill #: _____

Matrix(s) Received: (Check all that apply): _____ Soil/Solid ☒ Water _____ Other: _____ (Describe)

Cooler Number/Temperature: 134 °C / _____ °C / _____ °C / _____ °C

Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/27/14 6:19
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-27-GW

6/26/2014 3:24:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406323-01 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	102 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-28-GW

6/26/2014 4:00:00PM

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

Origins Laboratory, Inc.

X406323-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	87.3-113			"	"	"
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-29-GW

6/26/2014 3:55:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406323-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	102 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-31-GW

6/26/2014 4:36:00PM

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

Origins Laboratory, Inc.

X406323-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-32-GW

6/26/2014 4:37:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406323-05 (Water)

BTEX by EPA 8260C

Benzene	29.1	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	2.8	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	4.6	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.6 %	87.3-113	"	"	"
Surrogate: Toluene-d8	100 %	90.9-108	"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111	"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-33-GW

6/26/2014 4:50:00PM

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

Origins Laboratory, Inc.

X406323-06 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F26013	06/26/2014	06/26/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	100 %	87.3-113			"	"	"
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26013 - EPA 5030B (Water)

Blank (4F26013-BLK1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5	103		87.3-113			
Surrogate: Toluene-d8	62		"	62.5	99.2		90.9-108			
Surrogate: 4-Bromofluorobenzene	66		"	62.5	105		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26013 - EPA 5030B (Water)

LCS (4F26013-BS1)

Prepared: 06/26/2014 Analyzed: 06/26/2014

Benzene	50.1	1.0	ug/L	50.0		100	75-126			
Toluene	46.8	1.0	"	50.0		93.6	78.7-126			
Ethylbenzene	48.4	1.0	"	50.0		96.8	81-130			
m,p-Xylene	95.8	2.0	"	100		95.8	77.2-133			
o-Xylene	48.3	1.0	"	50.0		96.5	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.5	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26013 - EPA 5030B (Water)

Matrix Spike (4F26013-MS1)		Source: X406312-01			Prepared: 06/26/2014 Analyzed: 06/26/2014					
Benzene	46.8	1.0	ug/L	50.0	ND	93.5	74-130			
Toluene	44.6	1.0	"	50.0	0.4	88.5	73-131			
Ethylbenzene	46.3	1.0	"	50.0	ND	92.6	76-132			
m,p-Xylene	91.4	2.0	"	100	ND	91.4	69-139			
o-Xylene	45.6	1.0	"	50.0	ND	91.2	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.4	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		100	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F26013 - EPA 5030B (Water)

Matrix Spike Dup (4F26013-MSD1)		Source: X406312-01			Prepared: 06/26/2014 Analyzed: 06/26/2014					
Benzene	47.5	1.0	ug/L	50.0	ND	94.9	74-130	1.46	20	
Toluene	45.5	1.0	"	50.0	0.4	90.3	73-131	2.00	20	
Ethylbenzene	47.4	1.0	"	50.0	ND	94.9	76-132	2.48	20	
m,p-Xylene	93.3	2.0	"	100	ND	93.3	69-139	2.01	20	
o-Xylene	47.3	1.0	"	50.0	ND	94.6	74-131	3.57	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.0	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.8	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 28, 2014

Eagle Environmental Consulting, Inc.

Anton

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 27, 2014. This project is associated with Origins project number X406337-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBSS-29@3.5'	X406337-01	Soil	June 27, 2014 9:00	06/27/2014 14:26
TBSS-30@3.5'	X406337-02	Soil	June 27, 2014 9:35	06/27/2014 14:26
TBSS-31@3.5'	X406337-03	Soil	June 27, 2014 10:25	06/27/2014 14:26

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X400337

Client: EAGLE

Client Project ID: Noble

Checklist Completed by: [Signature]

Shipped Via: H/D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/28/14 10:30

Airbill #: 154

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other:

Cooler Number/Temperature: 12.3 °C 1 °C 1 °C (Describe) °C

Thermometer ID: T02

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>			
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date, time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature]

6/28/14 10:44
Date/Time Reviewed

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-29@3.5'

6/27/2014 9:00:00AM

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

Origins Laboratory, Inc.

X406337-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	98.5 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	99.0 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-30@3.5'

6/27/2014 9:35:00AM

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

Origins Laboratory, Inc.

X406337-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	87.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.0 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-31@3.5'

6/27/2014 10:25:00AM

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

Origins Laboratory, Inc.

X406337-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	82.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	0.6	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	-----	-----	-------	---	---------	------------	------------

Benzene	0.05	0.002	"	"	"	"	"
---------	------	-------	---	---	---	---	---

Toluene	0.06	0.002	"	"	"	"	"
---------	------	-------	---	---	---	---	---

Ethylbenzene	0.007	0.002	"	"	"	"	"
--------------	-------	-------	---	---	---	---	---

Xylenes, total	0.04	0.002	"	"	"	"	"
----------------	------	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	97.9 %	70-130			"	"	"
----------------------------------	--------	--------	--	--	---	---	---

Surrogate: Toluene-d8	98.4 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Blank (4F27007-BLK1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Blank (4F27007-BLK2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		103	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

LCS (4F27007-BS1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	0.1	0.002	mg/kg	0.100		112	70-130			
Toluene	0.1	0.002	"	0.100		107	70-130			
Ethylbenzene	0.1	0.002	"	0.100		108	70-130			
m,p-Xylene	0.2	0.004	"	0.200		106	70-130			
o-Xylene	0.1	0.002	"	0.100		106	70-130			
Naphthalene	0.09	0.008	"	0.100		91.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.3	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

LCS (4F27007-BS2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	0.1	0.002	mg/kg	0.100		118	70-130			
Toluene	0.1	0.002	"	0.100		117	70-130			
Ethylbenzene	0.1	0.002	"	0.100		118	70-130			
m,p-Xylene	0.2	0.004	"	0.200		118	70-130			
o-Xylene	0.1	0.002	"	0.100		116	70-130			
Naphthalene	0.09	0.008	"	0.100		92.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	59		ug/kg	62.5		94.5	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike (4F27007-MS1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.07	0.002	mg/kg	0.100	ND	74.9	70-130			
Toluene	0.07	0.002	"	0.100	ND	66.6	70-130			J-02
Ethylbenzene	0.06	0.002	"	0.100	ND	56.9	70-130			J-02
m,p-Xylene	0.1	0.004	"	0.200	ND	54.2	70-130			J-02
o-Xylene	0.06	0.002	"	0.100	0.002	54.7	70-130			J-02
Naphthalene	0.04	0.008	"	0.100	0.003	40.6	70-130			J-02
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	71		"	62.5		113	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike (4F27007-MS2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	98.4	70-130			
Toluene	0.09	0.002	"	0.100	ND	92.1	70-130			
Ethylbenzene	0.09	0.002	"	0.100	ND	90.2	70-130			
m,p-Xylene	0.2	0.004	"	0.200	ND	86.2	70-130			
o-Xylene	0.09	0.002	"	0.100	ND	93.4	70-130			
Naphthalene	0.08	0.008	"	0.100	0.0007	79.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	71		ug/kg	62.5		113	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike Dup (4F27007-MSD1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.08	0.002	mg/kg	0.100	ND	78.5	70-130	4.72	20	
Toluene	0.07	0.002	"	0.100	ND	71.0	70-130	6.34	20	
Ethylbenzene	0.06	0.002	"	0.100	ND	60.5	70-130	6.17	20	J-02
m,p-Xylene	0.1	0.004	"	0.200	ND	58.8	70-130	8.19	20	J-02
o-Xylene	0.06	0.002	"	0.100	0.002	60.7	70-130	10.0	20	J-02
Naphthalene	0.05	0.008	"	0.100	0.003	45.2	70-130	10.0	20	J-02
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		106	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike Dup (4F27007-MSD2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.09	0.002	mg/kg	0.100	ND	91.6	70-130	7.16	20	
Toluene	0.09	0.002	"	0.100	ND	86.6	70-130	6.11	20	
Ethylbenzene	0.09	0.002	"	0.100	ND	88.0	70-130	2.51	20	
m,p-Xylene	0.2	0.004	"	0.200	ND	82.4	70-130	4.58	20	
o-Xylene	0.08	0.002	"	0.100	ND	84.8	70-130	9.67	20	
Naphthalene	0.07	0.008	"	0.100	0.0007	71.5	70-130	11.0	20	
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	61		"	62.5		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Anton
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27008 - EPA 3580

Blank (4F27008-BLK1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 46 g 50.0 91.8 59-131

Blank (4F27008-BLK2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 48 g 50.0 95.2 59-131

LCS (4F27008-BS1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1020 50.0 mg/kg 1000 102 64-121

Surrogate: o-Terphenyl 47 g 50.0 94.4 59-131

LCS (4F27008-BS2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1060 50.0 mg/kg 1000 106 64-121

Surrogate: o-Terphenyl 48 g 50.0 95.4 59-131

Matrix Spike (4F27008-MS1)

Source: X406326-01

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1260 50.0 mg/kg 1000 122 113 53-125

Surrogate: o-Terphenyl 48 g 50.0 95.5 59-131

Matrix Spike (4F27008-MS2)

Source: X406326-02

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1190 50.0 mg/kg 1000 22.4 117 53-125

Surrogate: o-Terphenyl 49 g 50.0 98.5 59-131

Origins Laboratory, Inc.

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27008 - EPA 3580

Matrix Spike Dup (4F27008-MSD1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014				QM-07	
Diesel (C10-C28)	950	50.0	mg/kg	1000	122	82.7	53-125	27.7	20	
Surrogate: o-Terphenyl	44		g	50.0		87.0	59-131			
Matrix Spike Dup (4F27008-MSD2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Diesel (C10-C28)	1050	50.0	mg/kg	1000	22.4	103	53-125	12.8	20	
Surrogate: o-Terphenyl	46		g	50.0		92.2	59-131			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Anton

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

J-02 Reported value failed to meet established quality control criteria for the precision accuracy.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



June 28, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 27, 2014. This project is associated with Origins project number X406339-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-34@12-16"	X406339-01	Soil	June 27, 2014 9:05	06/27/2014 18:21
SS-35@4-8"	X406339-02	Soil	June 27, 2014 9:31	06/27/2014 18:21
SS-36@8-12"	X406339-03	Soil	June 27, 2014 10:11	06/27/2014 18:21
SS-37@4-8"	X406339-04	Soil	June 27, 2014 11:04	06/27/2014 18:21
SS-38@4-8"	X406339-05	Soil	June 27, 2014 10:35	06/27/2014 18:21
SS-39@4-8"	X406339-06	Soil	June 27, 2014 11:23	06/27/2014 18:21
SS-40@4-8"	X406339-07	Soil	June 27, 2014 11:49	06/27/2014 18:21
SS-41@4-8"	X406339-08	Soil	June 27, 2014 13:11	06/27/2014 18:21
SS-42@4-8"	X406339-09	Soil	June 27, 2014 13:49	06/27/2014 18:21
SS-43@4-8"	X406339-10	Soil	June 27, 2014 13:33	06/27/2014 18:21
SS-44@ 4-8"	X406339-11	Soil	June 27, 2014 14:02	06/27/2014 18:21
SS-45@ 4-8"	X406339-12	Soil	June 27, 2014 14:36	06/27/2014 18:21
SS-46@ 4-8"	X406339-13	Soil	June 27, 2014 14:36	06/27/2014 18:21

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 2

X406339

ORIGINS LABORATORY, INC

Client: Eagle Environmental Consulting, Inc.
Address: 4101 Inca St. Denver, CO 80211
Telephone Number: (303) 433-0179
Email Address: MCE3@eagle-enviro.com

Project Manager: Martin Eckert III
Project Name: State M 36-5 & 7-36
Project Number: -
Samples Collected By: Matt R / Evan P

Analysis

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix				Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #	Other		
SS-34 @ 12-16"	6/27/14	0905	1	X									1
SS-35 @ 4-8"		0931	1										2
SS-36 @ 8-12"		1011											3
SS-37 @ 4-8"		1104											4
SS-38 @ 4-8"		1085											5
SS-39 @ 4-8"		1123											6
SS-40 @ 4-8"		1149											7
SS-41 @ 4-8"		1311											8
SS-42 @ 4-8"		1349											9
SS-43 @ 4-8"		1333											10

Relinquished By: [Signature] Date: 6/27/14 Time: 1821
Relinquished By: [Signature] Date: 6/27/14 Time: 1821

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Date Results Needed: 6/27/14

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406339

Client: EAGLE

Client Project ID: STATEM #36-5 + 7-36

Checklist Completed by: MJ

Shipped Via: H/D - P/O
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/27 1831

Airbill #: _____

Matrix(s) Received: (Check all that apply): X Soil/Solid _____ Water _____ Other: _____

Cooler Number/Temperature: _____ / 2.3 °C _____ / _____ °C _____ / _____ °C (Describe)

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	SOIL
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄ / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	SOIL
Additional Comments (if any): <u>SAMPLES 1-10 PICKED UP. 11-13 DROPPED OFF</u>				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date, time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/28/14 5:49
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-34@12-16"

6/27/2014 9:05:00AM

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

Origins Laboratory, Inc.

X406339-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	88.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.3 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-35@4-8"

6/27/2014 9:31:00AM

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

Origins Laboratory, Inc.
X406339-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	90.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"
Surrogate: Toluene-d8	99.3 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	112 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-36@8-12"

6/27/2014 10:11:00AM

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

Origins Laboratory, Inc.

X406339-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	87.3 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.6 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	105 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-37@4-8"

6/27/2014 11:04:00AM

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

Origins Laboratory, Inc.

X406339-04 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	85.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.5 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-38@4-8"

6/27/2014 10:35:00AM

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

Origins Laboratory, Inc.

X406339-05 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	86.0 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	99.0 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	116 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-39@4-8"

6/27/2014 11:23:00AM

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

Origins Laboratory, Inc.

X406339-06 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	90.5 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	98.6 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	112 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-40@4-8"

6/27/2014 11:49:00AM

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

Origins Laboratory, Inc.
X406339-07 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	94.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	120 %	70-130			"	"	"
Surrogate: Toluene-d8	98.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	111 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-41@4-8"

6/27/2014 1:11:00PM

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

Origins Laboratory, Inc.

X406339-08 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	82.0 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	97.8 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-42@4-8"

6/27/2014 1:49:00PM

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

Origins Laboratory, Inc.
X406339-09 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	91.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
Benzene	ND	0.002	"	"	"	"	06/28/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	06/28/2014
Surrogate: Toluene-d8	102 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	94.9 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-43@4-8"

6/27/2014 1:33:00PM

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

Origins Laboratory, Inc.
X406339-10 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	84.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/28/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	06/28/2014
----------------------------------	-------	--------	--	--	---	---	------------

Surrogate: Toluene-d8	102 %	70-130			"	"	"
-----------------------	-------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	98.2 %	70-130			"	"	"
---------------------------------	--------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-44@ 4-8"

6/27/2014 2:02:00PM

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

Origins Laboratory, Inc.
X406339-11 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	87.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
Benzene	ND	0.002	"	"	"	"	06/28/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	115 %	70-130			"	"	06/28/2014
Surrogate: Toluene-d8	101 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.8 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

SS-45@ 4-8"

6/27/2014 2:36:00PM

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

Origins Laboratory, Inc.
X406339-12 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
Surrogate: o-Terphenyl	91.0 %	59-131			"	"	"

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
Benzene	ND	0.002	"	"	"	"	06/28/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4	116 %	70-130			"	"	06/28/2014
Surrogate: Toluene-d8	104 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	96.1 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-46@ 4-8"

6/27/2014 2:36:00PM

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

Origins Laboratory, Inc.

X406339-13 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F27008	06/27/2014	06/27/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	88.0 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F27007	06/27/2014	06/28/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	06/28/2014
---------	----	-------	---	---	---	---	------------

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	118 %	70-130			"	"	06/28/2014
----------------------------------	-------	--------	--	--	---	---	------------

Surrogate: Toluene-d8	104 %	70-130			"	"	"
-----------------------	-------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	96.6 %	70-130			"	"	"
---------------------------------	--------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Blank (4F27007-BLK1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Blank (4F27007-BLK2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		103	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

LCS (4F27007-BS1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	0.1	0.002	mg/kg	0.100		112	70-130			
Toluene	0.1	0.002	"	0.100		107	70-130			
Ethylbenzene	0.1	0.002	"	0.100		108	70-130			
m,p-Xylene	0.2	0.004	"	0.200		106	70-130			
o-Xylene	0.1	0.002	"	0.100		106	70-130			
Naphthalene	0.09	0.008	"	0.100		91.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.3	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

LCS (4F27007-BS2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	0.1	0.002	mg/kg	0.100		118	70-130			
Toluene	0.1	0.002	"	0.100		117	70-130			
Ethylbenzene	0.1	0.002	"	0.100		118	70-130			
m,p-Xylene	0.2	0.004	"	0.200		118	70-130			
o-Xylene	0.1	0.002	"	0.100		116	70-130			
Naphthalene	0.09	0.008	"	0.100		92.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	59		ug/kg	62.5		94.5	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike (4F27007-MS1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.07	0.002	mg/kg	0.100	ND	74.9	70-130			
Toluene	0.07	0.002	"	0.100	ND	66.6	70-130			J-02
Ethylbenzene	0.06	0.002	"	0.100	ND	56.9	70-130			J-02
m,p-Xylene	0.1	0.004	"	0.200	ND	54.2	70-130			J-02
o-Xylene	0.06	0.002	"	0.100	0.002	54.7	70-130			J-02
Naphthalene	0.04	0.008	"	0.100	0.003	40.6	70-130			J-02
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	71		"	62.5		113	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike (4F27007-MS2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.1	0.002	mg/kg	0.100	ND	98.4	70-130			
Toluene	0.09	0.002	"	0.100	ND	92.1	70-130			
Ethylbenzene	0.09	0.002	"	0.100	ND	90.2	70-130			
m,p-Xylene	0.2	0.004	"	0.200	ND	86.2	70-130			
o-Xylene	0.09	0.002	"	0.100	ND	93.4	70-130			
Naphthalene	0.08	0.008	"	0.100	0.0007	79.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	71		ug/kg	62.5		113	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike Dup (4F27007-MSD1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.08	0.002	mg/kg	0.100	ND	78.5	70-130	4.72	20	
Toluene	0.07	0.002	"	0.100	ND	71.0	70-130	6.34	20	
Ethylbenzene	0.06	0.002	"	0.100	ND	60.5	70-130	6.17	20	J-02
m,p-Xylene	0.1	0.004	"	0.200	ND	58.8	70-130	8.19	20	J-02
o-Xylene	0.06	0.002	"	0.100	0.002	60.7	70-130	10.0	20	J-02
Naphthalene	0.05	0.008	"	0.100	0.003	45.2	70-130	10.0	20	J-02
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		106	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27007 - EPA 5030 (soil)

Matrix Spike Dup (4F27007-MSD2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	0.09	0.002	mg/kg	0.100	ND	91.6	70-130	7.16	20	
Toluene	0.09	0.002	"	0.100	ND	86.6	70-130	6.11	20	
Ethylbenzene	0.09	0.002	"	0.100	ND	88.0	70-130	2.51	20	
m,p-Xylene	0.2	0.004	"	0.200	ND	82.4	70-130	4.58	20	
o-Xylene	0.08	0.002	"	0.100	ND	84.8	70-130	9.67	20	
Naphthalene	0.07	0.008	"	0.100	0.0007	71.5	70-130	11.0	20	
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	61		"	62.5		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27008 - EPA 3580

Blank (4F27008-BLK1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 46 g 50.0 91.8 59-131

Blank (4F27008-BLK2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 48 g 50.0 95.2 59-131

LCS (4F27008-BS1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1020 50.0 mg/kg 1000 102 64-121

Surrogate: o-Terphenyl 47 g 50.0 94.4 59-131

LCS (4F27008-BS2)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1060 50.0 mg/kg 1000 106 64-121

Surrogate: o-Terphenyl 48 g 50.0 95.4 59-131

Matrix Spike (4F27008-MS1)

Source: X406326-01

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1260 50.0 mg/kg 1000 122 113 53-125

Surrogate: o-Terphenyl 48 g 50.0 95.5 59-131

Matrix Spike (4F27008-MS2)

Source: X406326-02

Prepared: 06/27/2014 Analyzed: 06/27/2014

Diesel (C10-C28) 1190 50.0 mg/kg 1000 22.4 117 53-125

Surrogate: o-Terphenyl 49 g 50.0 98.5 59-131

Origins Laboratory, Inc.

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27008 - EPA 3580

Matrix Spike Dup (4F27008-MSD1)		Source: X406326-01			Prepared: 06/27/2014 Analyzed: 06/27/2014				QM-07	
Diesel (C10-C28)	950	50.0	mg/kg	1000	122	82.7	53-125	27.7	20	
Surrogate: o-Terphenyl	44		g	50.0		87.0	59-131			
Matrix Spike Dup (4F27008-MSD2)		Source: X406326-02			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Diesel (C10-C28)	1050	50.0	mg/kg	1000	22.4	103	53-125	12.8	20	
Surrogate: o-Terphenyl	46		g	50.0		92.2	59-131			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

J-02 Reported value failed to meet established quality control criteria for the precision accuracy.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 08, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 27, 2014. This project is associated with Origins project number X406345-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-34-GW	X406345-01	Water	June 27, 2014 15:15	06/27/2014 18:21
SS-35-GW	X406345-02	Water	June 27, 2014 15:30	06/27/2014 18:21
SS-36-GW	X406345-03	Water	June 27, 2014 15:20	06/27/2014 18:21
SS-37-GW	X406345-04	Water	June 27, 2014 15:45	06/27/2014 18:21
SS-38-GW	X406345-05	Water	June 27, 2014 15:40	06/27/2014 18:21
SS-39-GW	X406345-06	Water	June 27, 2014 16:00	06/27/2014 18:21
SS-40-GW	X406345-07	Water	June 27, 2014 16:00	06/27/2014 18:21
SS-41-GW	X406345-08	Water	June 27, 2014 15:40	06/27/2014 18:21
SS-42-GW	X406345-09	Water	June 27, 2014 15:45	06/27/2014 18:21
SS-43-GW	X406345-10	Water	June 27, 2014 15:45	06/27/2014 18:21
SS-44-GW	X406345-11	Water	June 27, 2014 15:45	06/27/2014 18:21
SS-45-GW	X406345-12	Water	June 27, 2014 16:20	06/27/2014 18:21
SS-46-GW	X406345-13	Water	June 27, 2014 16:40	06/27/2014 18:21

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

X400345

page 2 of 2

ORIGINS
LABORATORY, INC

Client: Eagle Environmental Consulting, Inc. Project Manager/Send Report To: Martin Eckert III

Address: 4101 Inca St. Email Address: MCE@eagleenviro.com - Report to ONLY

Project Name/Number: State M 36-5 & 7-36

Samples Collected By: Matt R. / Evan P.

Denver, CO, 80211

Telephone Number: (303) 433-0479

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #			Other
SS-34-GW	6/27/14	1515	3						X			BTEX-8260	1
SS-35-GW		1530											2
SS-36-GW		1520											3
SS-37-GW		1545											4
SS-38-GW		1540											5
SS-39-GW		1600											6
SS-40-GW		1600											7
SS-41-GW		1540											8
SS-42-GW		1545											9
SS-43-GW		1545											10

Relinquished By: <u>[Signature]</u>	Date: <u>6/27/14</u>	Time: <u>1821</u>	Relinquished By: <u>[Signature]</u>	Date: <u>6/27/14</u>	Time: <u>1821</u>
Relinquished By:	Date:	Time:	Relinquished By:	Date:	Time:

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Date Results Needed: 6/27/14

Comments:

Origins Laboratory, Inc.

[Signature]

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 2 of 2

ORIGINS

LABORATORY, INC

Client: Eagle Environmental Consulting Project Manager/Send Report To: Martin Eckert III
 Address: 4101 Inca St. Email Address: mce3@eagle-enviro.com - Report to ONLY
Denver, CO, 80211 Project Name/Number: State M 36-5 + 7-36
 Telephone Number: (303) 433-0479 Samples Collected By: Matt R / Evan P

1725 Elk Place | Phone: 303.433.1322 | Fax: 303.265.9645 | Denver, CO 80211

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #		
SS-44-GW	6/27/14	1545	3					X			BTEX - 8260	1
SS-45-GW	↓	1620	↓									2
SS-46-GW	↓	1640	↓									3
												4
												5
												6
												7
												8
												9
												10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<u>[Signature]</u>	6/27/14	1821	<u>[Signature]</u>	6/27/14	1821	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	

Comments: Data Results Needed: Noble

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X40634

Client: EAGLE

Client Project ID: STATE M³⁶⁻⁵ + 7-36

Checklist Completed by: WJ

Shipped Via: H/D

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/27 1240

Airbill #: _____

Matrix(s) Received: (Check all that apply): _____ Soil/Solid X Water _____ Other: _____

Cooler Number/Temperature: _____ / 16.5 °C _____ / _____ °C _____ / _____ °C (Describe) _____ °C

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		X		<u>SAME DAY</u>
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?		X		<u>SEVERAL SAMPLE WITH LIMITED VOLUME</u>
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		X		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	X	X		<u>SOME HCL</u> <u>SOME UNPRESERVED</u>
Additional Comments (if any): <u>45-42-GW HAS NOT MUCH VOLUME DUE TO SEDIMENT</u>				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date, time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

6/30/14 6:01
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-34-GW

6/27/2014 3:15:00PM

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

Origins Laboratory, Inc.

X406345-01 (Water)

BTEX by EPA 8260C

Benzene	1.6	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.5 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-35-GW

6/27/2014 3:30:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.7 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-36-GW

6/27/2014 3:20:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.6 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-37-GW

6/27/2014 3:45:00PM

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

Origins Laboratory, Inc.

X406345-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.2 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-38-GW

6/27/2014 3:40:00PM

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

Origins Laboratory, Inc.

X406345-05 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.6 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-39-GW

6/27/2014 4:00:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-06 (Water)

BTEX by EPA 8260C

Benzene	3.5	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	100 %	87.3-113			"	"	"
Surrogate: Toluene-d8	102 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-40-GW

6/27/2014 4:00:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-07 (Water)

BTEX by EPA 8260C

Benzene	7.8	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.8 %	87.3-113		"	"	"
Surrogate: Toluene-d8	103 %	90.9-108		"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111		"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-41-GW

6/27/2014 3:40:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-08 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.5 %	87.3-113			"	"	"
Surrogate: Toluene-d8	104 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-42-GW

6/27/2014 3:45:00PM

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

Origins Laboratory, Inc.

X406345-09 (Water)

BTEX by EPA 8260C

Benzene	ND	4.0	ug/L	4	4F27014	06/27/2014	06/27/2014
Toluene	ND	4.0	"	"	"	"	"
Ethylbenzene	ND	4.0	"	"	"	"	"
Xylenes, total	ND	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.2 %	87.3-113			"	"	"
Surrogate: Toluene-d8	97.3 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	108 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-43-GW

6/27/2014 3:45:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-10 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.8 %	87.3-113			"	"	"
Surrogate: Toluene-d8	104 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-44-GW

6/27/2014 3:45:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406345-11 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.8 %	87.3-113			"	"	"
Surrogate: Toluene-d8	104 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-45-GW

6/27/2014 4:20:00PM

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

Origins Laboratory, Inc.

X406345-12 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.8 %	87.3-113			"	"	"
Surrogate: Toluene-d8	103 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-46-GW

6/27/2014 4:40:00PM

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

Origins Laboratory, Inc.

X406345-13 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F27014	06/27/2014	06/28/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.1 %	87.3-113			"	"	"
Surrogate: Toluene-d8	102 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27014 - EPA 5030B (Water)

Blank (4F27014-BLK1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5	101		87.3-113			
Surrogate: Toluene-d8	63		"	62.5	100		90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5	104		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27014 - EPA 5030B (Water)

LCS (4F27014-BS1)

Prepared: 06/27/2014 Analyzed: 06/27/2014

Benzene	53.5	1.0	ug/L	50.0		107	75-126			
Toluene	51.9	1.0	"	50.0		104	78.7-126			
Ethylbenzene	52.8	1.0	"	50.0		106	81-130			
m,p-Xylene	105	2.0	"	100		105	77.2-133			
o-Xylene	51.9	1.0	"	50.0		104	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.0	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.9	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		102	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27014 - EPA 5030B (Water)

Matrix Spike (4F27014-MS1)		Source: X406333-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	56.4	1.0	ug/L	50.0	ND	113	74-130			
Toluene	52.4	1.0	"	50.0	ND	105	73-131			
Ethylbenzene	53.7	1.0	"	50.0	ND	107	76-132			
m,p-Xylene	103	2.0	"	100	ND	103	69-139			
o-Xylene	50.6	1.0	"	50.0	ND	101	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.3	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.7	90.9-108			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F27014 - EPA 5030B (Water)

Matrix Spike Dup (4F27014-MSD1)		Source: X406333-01			Prepared: 06/27/2014 Analyzed: 06/27/2014					
Benzene	54.8	1.0	ug/L	50.0	ND	110	74-130	2.90	20	
Toluene	51.6	1.0	"	50.0	ND	103	73-131	1.48	20	
Ethylbenzene	51.9	1.0	"	50.0	ND	104	76-132	3.39	20	
m,p-Xylene	99.4	2.0	"	100	ND	99.4	69-139	3.85	20	
o-Xylene	48.5	1.0	"	50.0	ND	97.0	74-131	4.28	20	
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		90.2	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 01, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 30, 2014. This project is associated with Origins project number X406365-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-47-GW	X406365-01	Water	June 30, 2014 15:25	06/30/2014 17:42
SS-48-GW	X406365-02	Water	June 30, 2014 16:15	06/30/2014 17:42

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 1

ORIGINS

LABORATORY, INC

406365

Client: Eagle Env. Consulting, Inc. Project Manager/Send Report To: Martin Eckert III
 Address: 4101 Inca St Email Address: me3@eagleenviro.com - Report to ONLY
 Denver, CO 80211 Project Name/Number: State M 36-5 & 7-36
 Telephone Number: (303) 433-0479 Samples Collected By: Andrew Macbarray

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
SS-47-6W	6/30/14	1525	3	X				X			BTEX-8260	1
SS-48-6W	6/30/14	1615	3	X				X				2
												3
												4
												5
												6
												7
												8
												9
												10

Relinquished By: <i>[Signature]</i>	Date: 6/30/14	Time: 1742	Received By: <i>[Signature]</i>	Date: 6/30/14	Time: 1742
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Comments:

Date Results Needed: *Mobile*

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: V406365

Client: EAGLE

Client Project ID: STATE M #36-5 + 7-36

Checklist Completed by: MI

Shipped Via: H/D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/30 1757

Airbill #: _____

Matrix(s) Received: (Check all that apply): _____ Soil/Solid ☒ Water _____ Other: _____ (Describe)

Cooler Number/Temperature: 15.8 °C _____ °C _____ °C _____ °C

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) / (pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)		<input checked="" type="checkbox"/>		
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

7/1/14 C.E.

Date/Time Reviewed

Origins Laboratory, Inc.

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-47-GW

6/30/2014 3:25:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406365-01 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F30015	06/30/2014	06/30/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.9 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-48-GW

6/30/2014 4:15:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406365-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F30015	06/30/2014	06/30/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	87.3-113			"	"	"
Surrogate: Toluene-d8	102 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Blank (4F30015-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

LCS (4F30015-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	56.7	1.0	ug/L	50.0	113	75-126
Toluene	54.9	1.0	"	50.0	110	78.7-126
Ethylbenzene	57.5	1.0	"	50.0	115	81-130
m,p-Xylene	113	2.0	"	100	113	77.2-133
o-Xylene	56.2	1.0	"	50.0	112	77.9-126
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5	88.4	87.3-113
Surrogate: Toluene-d8	62		"	62.5	99.6	90.9-108
Surrogate: 4-Bromofluorobenzene	65		"	62.5	105	88.6-111

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Matrix Spike (4F30015-MS1)		Source: X406366-02			Prepared: 06/30/2014 Analyzed: 06/30/2014					
Benzene	62.1	1.0	ug/L	50.0	ND	124	74-130			
Toluene	60.0	1.0	"	50.0	ND	120	73-131			
Ethylbenzene	62.3	1.0	"	50.0	ND	125	76-132			
m,p-Xylene	123	2.0	"	100	ND	123	69-139			
o-Xylene	61.5	1.0	"	50.0	ND	123	74-131			
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		88.9	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		100	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Matrix Spike Dup (4F30015-MSD1)		Source: X406366-02			Prepared: 06/30/2014 Analyzed: 06/30/2014				QM-07	
Benzene	70.9	1.0	ug/L	50.0	ND	142	74-130	13.2	20	
Toluene	67.2	1.0	"	50.0	ND	134	73-131	11.3	20	
Ethylbenzene	68.8	1.0	"	50.0	ND	138	76-132	9.91	20	
m,p-Xylene	136	2.0	"	100	ND	136	69-139	9.90	20	
o-Xylene	68.2	1.0	"	50.0	ND	136	74-131	10.3	20	
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		87.6	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 01, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 30, 2014. This project is associated with Origins project number X406366-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBSB-01-GW	X406366-01	Water	June 30, 2014 11:58	06/30/2014 17:42
TBSB-02-GW	X406366-02	Water	June 30, 2014 12:47	06/30/2014 17:42
TBSB-03-GW	X406366-03	Water	June 30, 2014 13:30	06/30/2014 17:42

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 1

X406366

ORIGINS
LABORATORY, INC

Client: Eagle Environmental Consulting Project Manager/Send Report To: Martin Eckert III
Address: 4101 Inca St. Email Address: me3@eagle-environ.com - Report to ONLY
Denver, CO 80211 Project Name/Number: State M 36-5 + 7-36
Telephone Number: (303) 433-0479 Samples Collected By: Alicia Newberry

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #			Other
TBSB-01-GW	6/30/14	1158	3	X				X				BTEX-2060	1
TBSB-02-GW	6/30/14	1247	1	X				X					2
TBSB-03-GW	6/30/14	1330	1	X				X					3
													4
													5
													6
													7
													8
													9
													10

Relinquished By: And Nly Date: 6/30/14 Time: 1742
Relinquished By: Date: Time:

Received By: Date: 6/30/14 Time: 1742
Received By: Date: Time:

Turnaround Time: ☒ Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard

Data Result Standard: Noble

Comments:

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406366

Client: EAGLE

Client Project ID: STATE M #36-5 + 7-36

Checklist Completed by: WJ

Shipped Via: H/D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/30 1802

Airbill #: _____

Matrix(s) Received: (Check all that apply): _____ Soil/Solid X Water _____ Other: _____ (Describe)

Cooler Number/Temperature: 15.8 °C _____ °C _____ °C _____ °C

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<u>X</u>			
Is there ice present (document if blue ice is used)	<u>X</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Were all samples received intact ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<u>X</u>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		<u>X</u>		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)		<u>X</u>		
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

7/1/12 Ce:Oce
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSB-01-GW

6/30/2014 11:58:00AM

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

Origins Laboratory, Inc.

X406366-01 (Water)

BTEX by EPA 8260C

Benzene	68.1	1.0	ug/L	1	4F30015	06/30/2014	06/30/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	1.8	1.0	"	"	"	"	"
Xylenes, total	15.0	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.2 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSB-02-GW

6/30/2014 12:47:00PM

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

Origins Laboratory, Inc.

X406366-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F30015	06/30/2014	06/30/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	87.3-113			"	"	"
Surrogate: Toluene-d8	101 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSB-03-GW

6/30/2014 1:30:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X406366-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	4F30015	06/30/2014	06/30/2014
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.4 %	87.3-113			"	"	"
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Blank (4F30015-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5	100		87.3-113			
Surrogate: Toluene-d8	63		"	62.5	101		90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5	104		88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

LCS (4F30015-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	56.7	1.0	ug/L	50.0		113	75-126			
Toluene	54.9	1.0	"	50.0		110	78.7-126			
Ethylbenzene	57.5	1.0	"	50.0		115	81-130			
m,p-Xylene	113	2.0	"	100		113	77.2-133			
o-Xylene	56.2	1.0	"	50.0		112	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		88.4	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.6	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		105	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Matrix Spike (4F30015-MS1)		Source: X406366-02			Prepared: 06/30/2014 Analyzed: 06/30/2014					
Benzene	62.1	1.0	ug/L	50.0	ND	124	74-130			
Toluene	60.0	1.0	"	50.0	ND	120	73-131			
Ethylbenzene	62.3	1.0	"	50.0	ND	125	76-132			
m,p-Xylene	123	2.0	"	100	ND	123	69-139			
o-Xylene	61.5	1.0	"	50.0	ND	123	74-131			
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		88.9	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		100	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30015 - EPA 5030B (Water)

Matrix Spike Dup (4F30015-MSD1)		Source: X406366-02			Prepared: 06/30/2014 Analyzed: 06/30/2014				QM-07	
Benzene	70.9	1.0	ug/L	50.0	ND	142	74-130	13.2	20	
Toluene	67.2	1.0	"	50.0	ND	134	73-131	11.3	20	
Ethylbenzene	68.8	1.0	"	50.0	ND	138	76-132	9.91	20	
m,p-Xylene	136	2.0	"	100	ND	136	69-139	9.90	20	
o-Xylene	68.2	1.0	"	50.0	ND	136	74-131	10.3	20	
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		87.6	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	88.6-111			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 01, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 30, 2014. This project is associated with Origins project number X406367-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-47@ 30-36"	X406367-01	Soil	June 30, 2014 15:15	06/30/2014 17:42
SS-48@ 18-24"	X406367-02	Soil	June 30, 2014 16:05	06/30/2014 17:42

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com page 1 of 1

ORIGINS LABORATORY, INC

Client: Eagle Env. Consulting, Inc. Project Manager/Send Report To: Martin Eckert III

Address: 4101 Inca St Email Address: mce3@eagle-env.com - Report to ONLY

Denver, CO, 80211 Project Name/Number: State M 36-5 & 7-36

Telephone Number: (303) 433-0477 Samples Collected By: Andrew Newberry

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
SS-47 @ 30-34"	6/30/14	1515	1	X				X			G, BTEX - 2260 DLO - 2015 Naphthalene	1
SS-48 @ 18-24"	6/30/14	1605	1	X				X				2
												3
												4
												5
												6
												7
												8
												9
												10
Relinquished By: <u>Andrew Newberry</u>	Date: <u>6/30/14</u>	Time: <u>1742</u>	Received By: <u>[Signature]</u>	Date: <u>6/30/14</u>	Time: <u>1742</u>	Turnaround Time: Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>						
Relinquished By: <u>[Signature]</u>	Date: <u>6/30/14</u>	Time: <u>1742</u>	Received By: <u>[Signature]</u>	Date: <u>6/30/14</u>	Time: <u>1742</u>							

Comments: Noble

Date Results Needed: 6/30/14

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y406367

Client: EAGLE

Client Project ID: STATE M # 36-5 + 7-36

Checklist Completed by: MI

Date/time completed: 6/30 1307

Shipped Via: H/A
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: _____

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____ (Describe)

Cooler Number/Temperature: 15.8 °C 1 °C 1 °C 1 °C

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soil
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ -NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soil
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

7/1/14 5:59
Date/Time Reviewed

Origins Laboratory, Inc.



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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-47@ 30-36"

6/30/2014 3:15:00PM

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

Origins Laboratory, Inc.

X406367-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	88.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	98.5 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

SS-48@ 18-24"

6/30/2014 4:05:00PM

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

Origins Laboratory, Inc.

X406367-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	86.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	126 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	96.3 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	111 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Blank (4F30016-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	69		ug/kg	62.5		110	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

LCS (4F30016-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	0.1	0.002	mg/kg	0.100		103	70-130			
Toluene	0.1	0.002	"	0.100		98.4	70-130			
Ethylbenzene	0.1	0.002	"	0.100		98.4	70-130			
m,p-Xylene	0.2	0.004	"	0.200		98.8	70-130			
o-Xylene	0.1	0.002	"	0.100		100	70-130			
Naphthalene	0.1	0.008	"	0.100		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Matrix Spike (4F30016-MS1)		Source: X406367-02			Prepared: 06/30/2014 Analyzed: 06/30/2014			QM-07		
Benzene	0.07	0.002	mg/kg	0.100	ND	71.1	70-130			
Toluene	0.06	0.002	"	0.100	ND	62.6	70-130			
Ethylbenzene	0.06	0.002	"	0.100	ND	58.2	70-130			
m,p-Xylene	0.1	0.004	"	0.200	ND	56.1	70-130			
o-Xylene	0.06	0.002	"	0.100	ND	55.9	70-130			
Naphthalene	0.03	0.008	"	0.100	ND	26.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	73		ug/kg	62.5		117	70-130			
Surrogate: Toluene-d8	58		"	62.5		92.6	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Matrix Spike Dup (4F30016-MSD1)		Source: X406367-02			Prepared: 06/30/2014 Analyzed: 06/30/2014				QM-07	
Benzene	0.08	0.002	mg/kg	0.100	ND	78.2	70-130	9.54	20	
Toluene	0.07	0.002	"	0.100	ND	67.5	70-130	7.50	20	
Ethylbenzene	0.06	0.002	"	0.100	ND	64.1	70-130	9.55	20	
m,p-Xylene	0.1	0.004	"	0.200	ND	59.2	70-130	5.48	20	
o-Xylene	0.06	0.002	"	0.100	ND	59.9	70-130	6.87	20	
Naphthalene	0.03	0.008	"	0.100	ND	26.0	70-130	3.33	20	
Surrogate: 1,2-Dichloroethane-d4	76		ug/kg	62.5		122	70-130			
Surrogate: Toluene-d8	58		"	62.5		92.7	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30008 - EPA 3580

Blank (4F30008-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28)	ND	50.0	mg/kg							
Surrogate: o-Terphenyl	46		g	50.0		91.9	59-131			

LCS (4F30008-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28)	882	50.0	mg/kg	1000		88.2	64-121			
Surrogate: o-Terphenyl	40		g	50.0		80.0	59-131			

Matrix Spike (4F30008-MS1)

Source: X406338-01

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28)	1040	50.0	mg/kg	1000	29.3	101	53-125			
Surrogate: o-Terphenyl	46		g	50.0		92.6	59-131			

Matrix Spike Dup (4F30008-MSD1)

Source: X406338-01

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28)	996	50.0	mg/kg	1000	29.3	96.6	53-125	3.88	20	
Surrogate: o-Terphenyl	46		g	50.0		92.5	59-131			

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President



July 01, 2014

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. June 30, 2014. This project is associated with Origins project number X406368-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBSS-35@ 3.5'	X406368-01	Soil	June 30, 2014 9:02	06/30/2014 17:42
TBSS-39@ 3'	X406368-02	Soil	June 30, 2014 10:55	06/30/2014 17:42
TBSS-40@ 3.5'	X406368-03	Soil	June 30, 2014 11:25	06/30/2014 17:42
TBSS-41@ 3'	X406368-04	Soil	June 30, 2014 14:02	06/30/2014 17:42

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

page 1 of 1

ORIGINS
LABORATORY, INC

406368

Client: Eagle Environmental Consulting
Address: 4101 Inca St.
Telephone Number: (303) 433-0479
Project Manager/Send Report To: Martin Eckert III
Email Address: mce3@eagle-enviro.com - Report to ONLY
Project Name/Number: State M 36-5 & 7-36
Samples Collected By: Andrew Newberry

1725 Elk Place | Phone: 303.433.1322 | Fax: 303.265.9645 | Denver, CO 80211

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #		
TBSS-35 @ 3.5'	6/30/14	902	2	X				X			G, BTEX - 2020 2020 - 2015 Algalbore	Hold samples for PAHs - TBD 1
TBSS-39 @ 3'	6/30/14	1055	1	X				X				2
TBSS-40 @ 3.5'	6/30/14	1125	1	X				X				3
TBSS-41 @ 3'	6/30/14	1402	1	X				X				4
												5 AM
												6
												7
												8
												9
												10

Relinquished By: <u>Andrew Newberry</u>	Date: <u>6/30/14</u>	Time: <u>1732</u>	Received By: <u>[Signature]</u>	Date: <u>6/30/14</u>	Time: <u>1742</u>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Turnaround Time:	Same Day <input checked="" type="checkbox"/>	24 Hr <input type="checkbox"/>
	48 Hr <input type="checkbox"/>	72 Hr <input type="checkbox"/>
	Standard <input type="checkbox"/>	

Delta Baseline Mandated by MHA

Comments:

Origins Laboratory, Inc.

[Signature]

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.

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X406368

Client: EAGLE

Client Project ID: STATEM #36-5 & 7-36

Checklist Completed by: WJ

Shipped Via: H/P

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/30 1814

Airbill #: _____

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 15.8 °C / _____ °C / _____ °C (Describe) _____ °C

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	SOIL
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) / (pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)		X		SOIL
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

7/1/14 5:53
Date/Time Reviewed

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-35@ 3.5'

6/30/2014 9:02:00AM

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

Origins Laboratory, Inc.

X406368-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	86.1 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	95.7 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-39@ 3'

6/30/2014 10:55:00AM

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

Origins Laboratory, Inc.

X406368-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	93.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	118 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	94.6 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-40@ 3.5'

6/30/2014 11:25:00AM

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

Origins Laboratory, Inc.

X406368-03 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	91.3 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
-----------------------------	----	-----	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Toluene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

Ethylbenzene	ND	0.002	"	"	"	"	"
--------------	----	-------	---	---	---	---	---

Xylenes, total	ND	0.002	"	"	"	"	"
----------------	----	-------	---	---	---	---	---

Napthalene	ND	0.008	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	95.2 %	70-130			"	"	"
-----------------------	--------	--------	--	--	---	---	---

Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"
---------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

TBSS-41@ 3'

6/30/2014 2:02:00PM

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

Origins Laboratory, Inc.

X406368-04 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	4F30008	06/30/2014	06/30/2014
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	76.5 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	2.3	0.2	mg/kg	1	4F30016	06/30/2014	06/30/2014
Benzene	0.06	0.002	"	"	"	"	"
Toluene	0.005	0.002	"	"	"	"	"
Ethylbenzene	0.02	0.002	"	"	"	"	"
Xylenes, total	0.1	0.002	"	"	"	"	"
Napthalene	ND	0.008	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
Surrogate: Toluene-d8	96.5 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Blank (4F30016-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Gasoline Range Hydrocarbons	ND	0.2	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.008	"							
Surrogate: 1,2-Dichloroethane-d4	69		ug/kg	62.5		110	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

LCS (4F30016-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Benzene	0.1	0.002	mg/kg	0.100		103	70-130			
Toluene	0.1	0.002	"	0.100		98.4	70-130			
Ethylbenzene	0.1	0.002	"	0.100		98.4	70-130			
m,p-Xylene	0.2	0.004	"	0.200		98.8	70-130			
o-Xylene	0.1	0.002	"	0.100		100	70-130			
Naphthalene	0.1	0.008	"	0.100		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Matrix Spike (4F30016-MS1)		Source: X406367-02			Prepared: 06/30/2014 Analyzed: 06/30/2014			QM-07		
Benzene	0.07	0.002	mg/kg	0.100	ND	71.1	70-130			
Toluene	0.06	0.002	"	0.100	ND	62.6	70-130			
Ethylbenzene	0.06	0.002	"	0.100	ND	58.2	70-130			
m,p-Xylene	0.1	0.004	"	0.200	ND	56.1	70-130			
o-Xylene	0.06	0.002	"	0.100	ND	55.9	70-130			
Naphthalene	0.03	0.008	"	0.100	ND	26.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	73		ug/kg	62.5		117	70-130			
Surrogate: Toluene-d8	58		"	62.5		92.6	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30016 - EPA 5030 (soil)

Matrix Spike Dup (4F30016-MSD1)		Source: X406367-02			Prepared: 06/30/2014 Analyzed: 06/30/2014				QM-07	
Benzene	0.08	0.002	mg/kg	0.100	ND	78.2	70-130	9.54	20	
Toluene	0.07	0.002	"	0.100	ND	67.5	70-130	7.50	20	
Ethylbenzene	0.06	0.002	"	0.100	ND	64.1	70-130	9.55	20	
m,p-Xylene	0.1	0.004	"	0.200	ND	59.2	70-130	5.48	20	
o-Xylene	0.06	0.002	"	0.100	ND	59.9	70-130	6.87	20	
Naphthalene	0.03	0.008	"	0.100	ND	26.0	70-130	3.33	20	
Surrogate: 1,2-Dichloroethane-d4	76		ug/kg	62.5		122	70-130			
Surrogate: Toluene-d8	58		"	62.5		92.7	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015M - Quality Control

Origins Laboratory, Inc.

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

Batch 4F30008 - EPA 3580

Blank (4F30008-BLK1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28) ND 50.0 mg/kg

Surrogate: o-Terphenyl 46 g 50.0 91.9 59-131

LCS (4F30008-BS1)

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28) 882 50.0 mg/kg 1000 88.2 64-121

Surrogate: o-Terphenyl 40 g 50.0 80.0 59-131

Matrix Spike (4F30008-MS1)

Source: X406338-01

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28) 1040 50.0 mg/kg 1000 29.3 101 53-125

Surrogate: o-Terphenyl 46 g 50.0 92.6 59-131

Matrix Spike Dup (4F30008-MSD1)

Source: X406338-01

Prepared: 06/30/2014 Analyzed: 06/30/2014

Diesel (C10-C28) 996 50.0 mg/kg 1000 29.3 96.6 53-125 3.88 20

Surrogate: o-Terphenyl 46 g 50.0 92.5 59-131

Origins Laboratory, Inc.

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.

Ross S Hutto For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

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 recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.



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.

Ross S Hutto For Noelle Doyle Mathis, President