



April 22, 2016

Mr. Jacob Evans  
Noble Energy, Inc.  
1625 Broadway, Suite 2200  
Denver, Colorado 80202

**Source Excavation Report  
Noffsinger #44-15  
Produced Water Release  
40.304825 / -104.755041  
SE1/4 SE1/4 Sec.15 T4N R66W 6PM  
Weld County, Colorado  
API # 05-123-16529**

Dear Mr. Evans,

Eagle Environmental Consulting, Inc. (EAGLE) is pleased to present this Source Excavation Report for the Noffsinger #44-15 location (site).

## **1.0 SITE BACKGROUND**

EAGLE was requested by Noble Energy, Inc. (Noble) to perform subsurface assessment activities at the site. During maintenance activities, an unintentional release was discovered from the water vault and produced water and production line running from the separator to the tank battery. The water vault associated with the Noffsinger #44-15 well was removed, and adsorbed hydrocarbon impacts were visually observed. Noble supervised the initial assessment that indicated additional remedial activities would be needed. On September 14, 2015, excavation activities began on the Noffsinger #44-15 site, with Noble personnel performing the oversight. EAGLE was requested to collect soil samples on an “on-call basis”.

The following narrative details source excavation activities that were completed at the site.

## **2.0 SITE DESCRIPTION**

The Noffsinger #44-15 site is located within the southeast quarter of the southeast quarter of Section 15, Township 4 north, Range 66 west, of the 6<sup>th</sup> Prime Meridian, in Weld County, Colorado. The removed water vault associated with the Noffsinger #44-15 site was located at latitude: 40.304825 and longitude: -104.755041. A topographic site location map is presented as Figure 1. An aerial site location map is presented as Figure 2.

### **2.1 Site Hydrogeology**

The soil lithology observed within the excavation was loose sand from the surface to approximately 6.5 feet below ground surface (bgs). Groundwater was observed within the excavation at approximately 5.5 feet bgs.

### **3.0 SOIL EXCAVATION ACTIVITIES**

On September 14, 2015, Noble supervised excavation activities to remove adsorbed petroleum hydrocarbon impacts beneath the water vault associated with the Noffsinger #44-15 well. BG Services LLC (BG) provided the necessary equipment and personnel for excavation activities.

EAGLE collected confirmation soil samples (SS-01 through SS-04) along the side walls of the excavation. A portion of each soil sample was placed in a sealable plastic bag, for volatile organic compound (VOC) headspace analysis utilizing a field calibrated photoionization detector (PID). Another portion of the soil sample was placed in a 2-ounce glass jar and packed in an iced cooler for laboratory analysis. Jarred soil samples were submitted to Origins Laboratory, Inc. (Origins), under standard chain of custody procedures, for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, total petroleum hydrocarbons – gasoline range organics (TPH-GRO), and total petroleum hydrocarbons – diesel range organics (TPH-DRO) following modified EPA Methods 8260c and 8015. The soil samples were received within the required holding time for each laboratory analysis.

A total of four confirmation soil samples (SS-01@04', SS-02@04', SS-03@04', and SS-04@04') collected from the excavation 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 3.

On September 14, 2015, groundwater was observed within the excavation at a depth of approximately 5.5 feet bgs. EAGLE collected and placed a grab groundwater sample (GW-01) within an iced cooler and delivered the sample to Origins, under standard chain of custody protocol, for analysis of BTEX following modified EPA method 8260c. The groundwater sample was received within the required holding time for each laboratory analysis.

Following groundwater sample collection, a total of 50 pounds of granular activated carbon (GAC) and 50 pounds of gypsum were applied to the base during excavation activities. The excavation was backfilled pea gravel and clean structural fill at the end of the day.

The final limits of the Noffsinger #44-15 excavation extended approximately 22 feet north to south, and 21 feet east to west. The excavation was advanced to a depth of approximately 6.5 feet bgs. Approximately 120 cubic yards of soil was removed during excavation activities, and transported offsite for disposal at an appropriately permitted facility.

### **3.1 Laboratory Analytical Results**

#### **3.1.1 Soil Analytical Results**

Based on soil laboratory analytical results, confirmation soil samples SS-01@04', SS-02@04', SS-03@04', and SS-04@04', collected from the Noffsinger #44-15 excavation did not contain concentrations of BTEX, naphthalene, or TPH exceeding applicable COGCC Table 910-1 regulatory limits.

Soil analytical results are summarized in Table 1 and presented in Figure 3. The laboratory analytical report for the soil samples collected during source removal activities at the Noffsinger #44-15 site are included in Attachment A.

### **3.1.2 Groundwater Analytical Results**

Based on groundwater laboratory analytical results, the groundwater sample (GW-01) collected on September 14, 2015, from the base of the Noffsinger #44-15 excavation, contained a concentration of benzene (83.6 micrograms per liter ( $\mu\text{g/L}$ )) exceeding the COGCC Table 910-1 regulatory limit of 5  $\mu\text{g/L}$ . Groundwater analytical results are summarized in Table 2. The groundwater laboratory analytical report is included in Attachment A.

## **CONCLUSIONS**

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

- Approximately 120 cubic yards of soil was removed from the Noffsinger #44-15 excavation on September 14, 2015.
- Confirmation soil samples (SS-01@04', SS-02@04', SS-03@04', and SS-04@04') collected from the Noffsinger #44-15 excavation did not contain concentrations of BTEX, naphthalene, or TPH exceeding their respective COGCC Table 910-1 regulatory limits and/or laboratory reporting limits.
- Grab groundwater sample, GW-01, collected from the base of the Noffsinger #44-15 excavation on September 14, 2015, contained a concentration of benzene exceeding the COGCC Table 910-1 regulatory limit.
- Following groundwater sample collection, a total of 50 pounds of granular activated carbon (GAC) and 50 pounds of gypsum were applied to the base during excavation activities.

## **RECOMMENDATIONS**

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

- Install groundwater monitoring wells to define and monitor dissolved petroleum hydrocarbon impacts at the site.

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.**



Robin Lockwood  
Project Scientist



Martin Eckert III  
Senior Project Manager

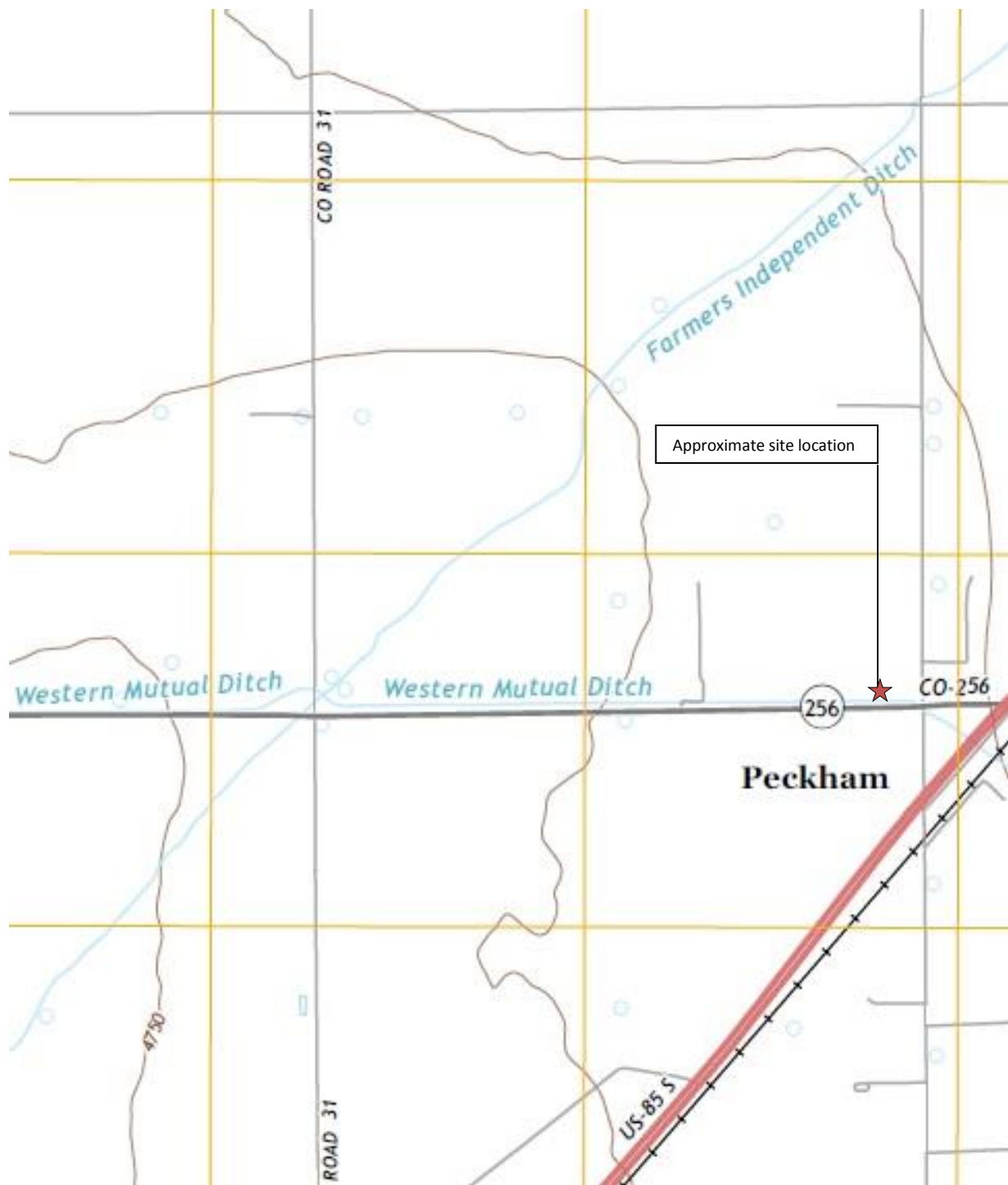
## **FIGURES**

**Figure 1: Topographic Site Location Map**

**Figure 2: Aerial Site Location Map**

**Figure 3: Soil Sample Analytical Map**

**Figure 4: Groundwater Sample Location Map**



**Topographic Site Location Map**

Noffsinger #44-15  
 Produced Water Release  
 40.304825/-104.755041  
 SE¼ SE¼ SEC.15 T4N R66W 6PM  
 Weld County, Colorado  
 API # 05-123-16529

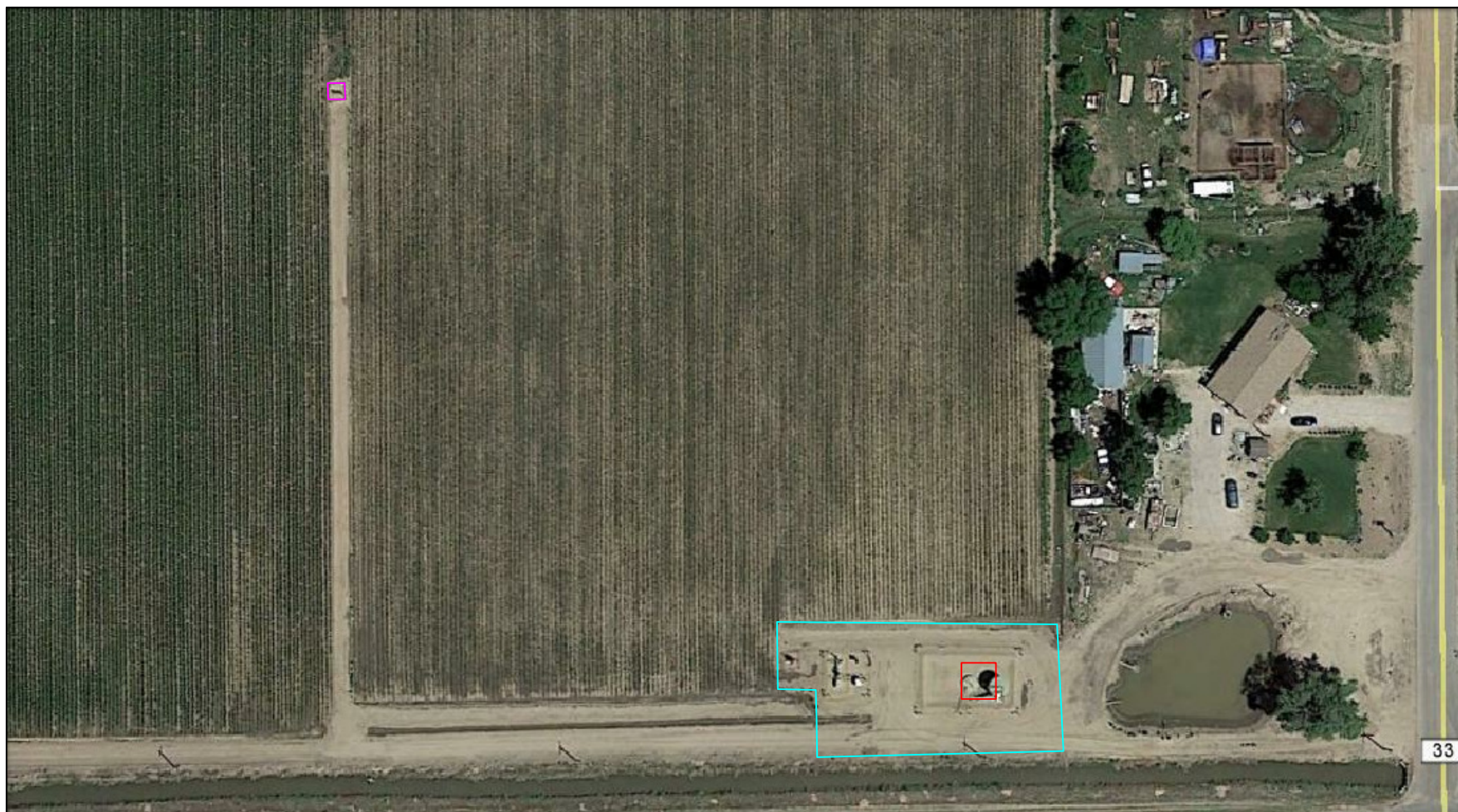
Source: USGS 7.5 Minute Topographic  
 Map, Milliken, CO Quadrangle 2013

**Figure 1**



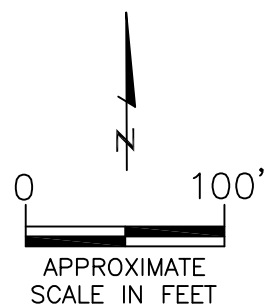
**EAGLE**  
 ENVIRONMENTAL  
 CONSULTING, INC.





# LEGEND

- NOFFSINGER #44-15 TANK BATTERY
- NOFFSINGER #44-15 WELL PAD (40.3058 / -104.75641)
- APPROXIMATE LOCATION OF WATER VAULT REMOVAL/EXCAVATION



## AERIAL SITE LOCATION MAP

NOFFSINGER #44-15  
PRODUCED WATER RELEASE  
40.304825/ -104.755041  
SE1/4 SE1/4 SEC.15 T4N R66W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-16529

DATE:  
04/15/16

FIG. NO.	DRAWN BY:
2	ar



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



# **LEGEND**

- APPROXIMATE EXCAVATION BOUNDARIES
- SS-02 APPROXIMATE LOCATION OF SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS

## **PARAMETERS**

### **SOIL SAMPLE LOCATION**

DATE  
DEPTH (FEET)  
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

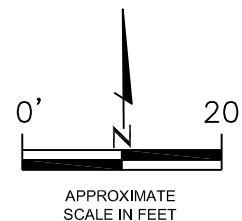
TPH-GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS

TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS

NOTE: VALUES PRESENTED WITH A LESS THAN SYMBOL (<) DID NOT CONTAIN CONCENTRATIONS AT OR ABOVE LABORATORY DETECTION LIMITS

NOTE: SITE HAS BEEN DECOMMISSIONED.  
AERIAL IS NOT INDICATIVE OF CURRENT INFRASTRUCTURE.

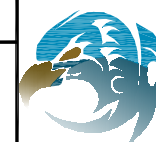
**SOIL SAMPLE ANALYTICAL MAP**  
NOFFSINGER #44-15  
PRODUCED WATER RELEASE  
40.304825/-104.755041  
SE1/4 SE1/4 SEC.15 T4N R66W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-16529



DATE: 04/15/16

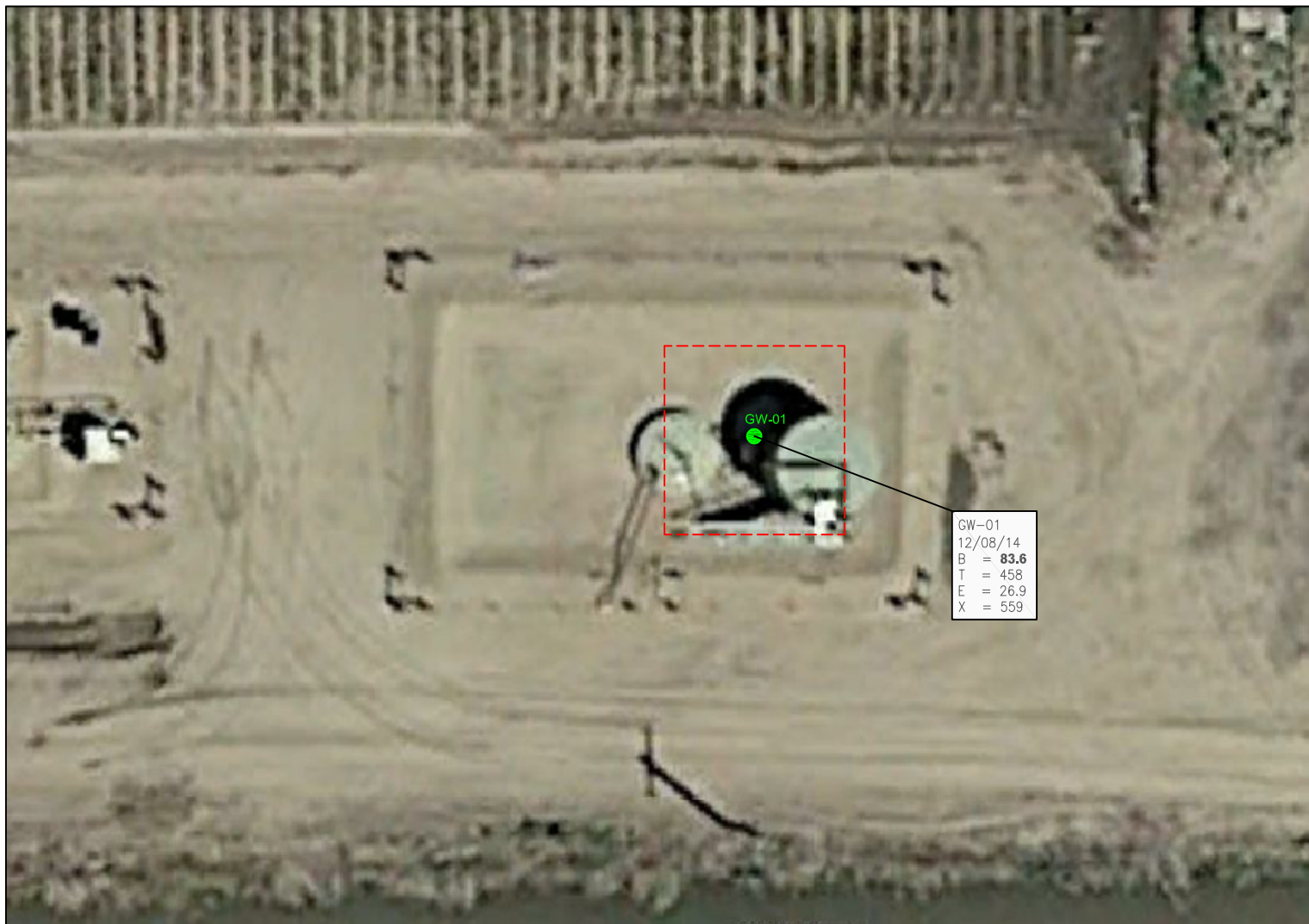
FIG. NO. 3

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GW-01  
12/08/14  
B = **83.6**  
T = 458  
E = 26.9  
X = 559

# LEGEND

- APPROXIMATE EXCAVATION BOUNDARIES
- GW-01 APPROXIMATE LOCATION OF GROUNDWATER SAMPLE SUBMITTED FOR LABORATORY ANALYSIS

GROUNDWATER 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

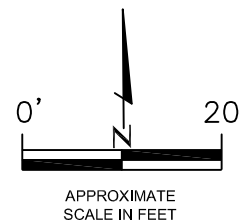
NOTE: VALUES PRESENTED WITH A LESS THAN SYMBOL (<) DID NOT CONTAIN CONCENTRATIONS AT OR ABOVE LABORATORY DETECTION LIMITS

VALUES PRESENTED IN **BOLD** TYPEFACE EXCEED THE COGCC TABLES 910-1 REGULATORY LIMITS.

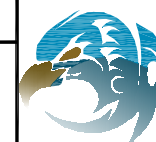
COGCC - COLORADO OIL AND GAS CONSERVATION COMMISSION

NOTE: SITE HAS BEEN DECOMMISSIONED.  
AERIAL IS NOT INDICATIVE OF CURRENT INFRASTRUCTURE.

GROUNDWATER SAMPLE LOCATION MAP  
NOFFSINGER #44-15  
PRODUCED WATER RELEASE  
40.304825/-104.755041  
SE1/4 SE1/4 SEC.15 T4N R66W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-16529



DATE:	04/15/16
FIG. NO.	4
DRAWN BY:	ar



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



## **TABLES**

**Table 1:     Soil Analytical Results Summary**

**Table 2:     Groundwater Analytical Results Summary**

TABLE 1  
SOIL ANALYTICAL RESULTS SUMMARY  
NOFFSINGER #44-15  
PRODUCED WATER RELEASE  
40.304825 / -104.755041  
SE¼ SE¼ SEC.15 T4N R66W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-16529

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)
<b>COGCC Table 910-1 Regulatory Limits (mg/kg)</b>			<b>0.17</b>	<b>85</b>	<b>100</b>	<b>175</b>	<b>23</b>	<b>500</b>	
SS-01 @ 04' (40.304843 / -104.755021)	09/14/15	4	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-02 @ 04' (40.304789 / -104.755012)	09/14/15	4	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-03 @ 04' (40.304830 / -104.754976)	09/14/15	4	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-04 @ 04' (40.304818 / -104.755054)	09/14/15	4	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
COGCC = Colorado Oil and Gas Conservation Commission mg/kg = milligrams per kilogram TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics  Note: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit.									



TABLE 2  
GROUNDWATER ANALYTICAL RESULTS SUMMARY  
NOFFSINGER #44-15  
PRODUCED WATER RELEASE  
40.304825 / -104.755041  
SE¼ SE¼ SEC.15 T4N R66W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-16529

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>
GW-01 (40.304830 / -104.755007)	09/14/15	<b>83.6</b>	458	26.9	559
<p>COGCC = Colorado Oil and Gas Conservation Commission µg/L - micrograms per liter</p> <p>Note: Values presented with a less than symbol (&lt;) indicate concentrations were not observed at or above the laboratory reporting limit.</p> <p>Values presented in <b>bold</b> typeface exceed their respective COGCC - Regulatory Limits (Table 910-1).</p>					

## **ATTACHMENT A**

### **Laboratory Analytical Reports**





September 15, 2015

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

**Project Name - Noble - Noffsinger #44-15**

**Project Number - [none]**

Attached are your analytical results for Noble - Noffsinger #44-15 received by Origins Laboratory, Inc. September 14, 2015. This project is associated with Origins project number X509174-01.

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 - Noffsinger #44-15

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-01	X509174-01	Water	September 14, 2015 14:20	09/14/2015 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 - Noffsinger #44-15

www.originslaboratory.com

page 1 of 1

**ORIGINS**  
LABORATORY, INC

Client: EAGLE ENV CONSULTING

Address: 4101 Inca St  
Denver, CO 80211

Telephone Number: 303 433 0479

Email Address: MCE@eagle-env.com

Project Manager: MARTIN ECKERT III

Project Name: NOFFSINGER #44-15

Project Number: —

Samples Collected By: A. BOWMAN

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	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Canister #		
GW-01	9/14/15	1420	3	X				X			BrX	1
												2
												3
												4
												5
												6
												7
												8
												9
												10

Relinquished By: *[Signature]*

Relinquished By: *[Signature]*

Date: 9/14/15

Date: 9/14/15

Time: 1600

Time: 1600

Received By: *[Signature]*

Date: 9/14/15

Time: 1600

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

Date Results Needed: *Noble*

Temp Received: 15

BRU TO PAUL

1725 Elk Place

Denver, CO 80211

Origins Laboratory, Inc.

*Jefe Pellegrini*

The results in 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 - Noffsinger #44-15

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: XS09174

Client: Eagle

Client Project ID: Noffsinger #44-15

Checklist Completed by: Jeff Smith

Shipped Via: H/D

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

Date/time completed: 9/14/15

Airbill #: NA

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

Cooler Number/Temperature: 1 / 1.5 °C 1 / 1 °C 1 / 1 °C 1 / 1 °C

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<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 <sup>(1)</sup> ?	<u>X</u>			
Was adequate sample volume provided <sup>(1)</sup> ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<u>X</u>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<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 <sup>(1)</sup> ? (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 <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<u>X</u>			
Additional Comments (if any): <u>HCC</u>				

<sup>(1)</sup> 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) Jeff Smith

Date/Time Reviewed 9/14/15

Origins Laboratory, Inc.

*Jefe Pellegrini*

The results in 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 - Noffsinger #44-15

GW-01

9/14/2015 2:20:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X509174-01 (Water)

## BTEX by EPA 8260C

Benzene	83.6	4.0	ug/L	4	5111012	09/14/2015	09/14/2015
Toluene	458	4.0	"	"	"	"	"
Ethylbenzene	26.9	4.0	"	"	"	"	"
Xylenes, total	559	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4

106 %

84-121

"

"

"

Surrogate: Toluene-d8

98.6 %

85-115

"

"

"

Surrogate: 4-Bromofluorobenzene

103 %

84-114

"

"

"

Origins Laboratory, Inc.

The results in 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 - Noffsinger #44-15

**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 5111012 - EPA 5030B (Water)**

**Blank (5111012-BLK1)**

Prepared: 09/11/2015 Analyzed: 09/14/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5	105		84-121			
Surrogate: Toluene-d8	61		"	62.5	97.2		85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5	102		84-114			

Origins Laboratory, Inc.



The results in 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 - Noffsinger #44-15

**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 5111012 - EPA 5030B (Water)**

**LCS (5111012-BS1)**

Prepared: 09/11/2015 Analyzed: 09/14/2015

Benzene	48.4	1.0	ug/L	50.0		96.8	75-126			
Toluene	47.9	1.0	"	50.0		95.8	78.7-126			
Ethylbenzene	50.7	1.0	"	50.0		101	80-130			
m,p-Xylene	102	2.0	"	100		102	77.2-133			
o-Xylene	50.7	1.0	"	50.0		101	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.8	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	84-114			

Origins Laboratory, Inc.



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

Jen Pellegrini For Noelle Doyle Mathis, President

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - Noffsinger #44-15

**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 5111012 - EPA 5030B (Water)**

Matrix Spike (5111012-MS1)		Source: X509090-02			Prepared: 09/11/2015 Analyzed: 09/14/2015					
Benzene	54.0	1.0	ug/L	50.0	ND	108	74-130			
Toluene	53.4	1.0	"	50.0	ND	107	73-131			
Ethylbenzene	57.4	1.0	"	50.0	ND	115	76-132			
m,p-Xylene	114	2.0	"	100	ND	114	69-139			
o-Xylene	57.3	1.0	"	50.0	ND	115	74-131			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.3	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.0	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	84-114			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - Noffsinger #44-15

**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 5111012 - EPA 5030B (Water)**

Matrix Spike Dup (5111012-MSD1)		Source: X509090-02			Prepared: 09/11/2015 Analyzed: 09/14/2015					
Benzene	52.0	1.0	ug/L	50.0	ND	104	74-130	3.70	20	
Toluene	50.0	1.0	"	50.0	ND	99.9	73-131	6.60	20	
Ethylbenzene	51.6	1.0	"	50.0	ND	103	76-132	10.5	20	
m,p-Xylene	103	2.0	"	100	ND	103	69-139	10.1	20	
o-Xylene	51.1	1.0	"	50.0	ND	102	74-131	11.5	20	
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.2	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.5	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - Noffsinger #44-15

### 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.



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September 15, 2015

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

**Project Name - Noble - Noffsinger #44-15**

**Project Number - [none]**

Attached are your analytical results for Noble - Noffsinger #44-15 received by Origins Laboratory, Inc. September 14, 2015. This project is associated with Origins project number X509175-01.

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 - Noffsinger #44-15

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-01 @ 4'	X509175-01	Soil	September 14, 2015 13:45	09/14/2015 16:00
SS-02 @ 4'	X509175-02	Soil	September 14, 2015 13:50	09/14/2015 16:00
SS-03 @ 4'	X509175-03	Soil	September 14, 2015 13:55	09/14/2015 16:00
SS-04 @ 4'	X509175-04	Soil	September 14, 2015 14:00	09/14/2015 16:00

Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

www.originslaboratory.com

X509175

ORIGINS  
LABORATORY, INC

page 1 of 1

Client: EAGLE ENV CONSULTING  
Address: 4101 INCA ST  
DENVER CO 80211  
Telephone Number: 303 433 0479  
Email Address: MCE30@eagle-env.co.com

Project Manager: MARTIN ECKERT III  
Project Name: NOFFSINGER #44-15  
Project Number: ---  
Samples Collected By: A. Romas

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		Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa	Other	
SS-01e4'	9/14/15	1345	2	X				X		X	X	1
SS-02e4'		1350	1									2
SS-03e4'		1355	1									3
SS-04e4'		1400	1									4
												5
												6
												7
												8
												9
												10

Relinquished By: <u>[Signature]</u>	Date: <u>9/14/15</u>	Time: <u>1600</u>	Received By: <u>[Signature]</u>	Date: <u>9/14/15</u>	Time: <u>1600</u>	Turnaround Time: <input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	

Date Results Needed Noble

Temp Received-

Ball to Rail

Origins Laboratory, Inc.

*Jefe Pellegrini*

The results in 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 - Noffsinger #44-15

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X509175

Client: Eagle

Client Project ID: Noffsinger #44-15

Checklist Completed by: Jeff Smith

Shipped Via: HD  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 9/14/13

Airbill #: NA

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

Cooler Number/Temperature: 1 11.5 °C 1 °C 1 °C (Describe) 1 °C

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<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 <sup>(1)</sup> ? (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 <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup> 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.

Jeff Smith  
Reviewed by (Project Manager)

7/14/13  
Date/Time Reviewed

Origins Laboratory, Inc.

*Jefe Pellegrini*

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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

SS-01 @ 4'  
9/14/2015 1:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X509175-01 (Soil)

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	5114009	09/14/2015	09/15/2015
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	71.6 %	59-131			"	"	"
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## GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5114005	09/14/2015	09/14/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.007	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
Surrogate: Toluene-d8	94.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - Noffsinger #44-15

SS-02 @ 4'

9/14/2015 1:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

X509175-02 (Soil)

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	5114009	09/14/2015	09/15/2015
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	79.5 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

## GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5114005	09/14/2015	09/14/2015
-----------------------------	----	-------	-------	---	---------	------------	------------

Benzene	ND	0.002	"	"	"	"	"
---------	----	-------	---	---	---	---	---

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

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

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

Napthalene	ND	0.007	"	"	"	"	"
------------	----	-------	---	---	---	---	---

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Surrogate: Toluene-d8	94.4 %	70-130			"	"	"
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Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"
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Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

SS-03 @ 4'  
9/14/2015 1:55:00PM

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

Origins Laboratory, Inc.  
X509175-03 (Soil)

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	5114009	09/14/2015	09/15/2015
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	82.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

## GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5114005	09/14/2015	09/14/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.007	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	113 %	70-130			"	"	"
Surrogate: Toluene-d8	94.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

SS-04 @ 4'  
9/14/2015 2:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X509175-04 (Soil)

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	5114009	09/14/2015	09/15/2015
------------------	----	------	-------	---	---------	------------	------------

Surrogate: o-Terphenyl	81.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

## GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5114005	09/14/2015	09/14/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"
Napthalene	ND	0.007	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"
Surrogate: Toluene-d8	94.9 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

**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
<b>Batch 5114005 - EPA 5030 (soil)</b>										
<b>Blank (5114005-BLK1)</b>					Prepared: 09/14/2015 Analyzed: 09/14/2015					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Naphthalene	ND	0.007	"							
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		100	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.4	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - Noffsinger #44-15

**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
<b>Batch 5114005 - EPA 5030 (soil)</b>										
<b>LCS (5114005-BS1)</b>					Prepared: 09/14/2015 Analyzed: 09/14/2015					
Benzene	0.089	0.002	mg/kg	0.100		89.2	70-130			
Toluene	0.086	0.002	"	0.100		85.6	70-130			
Ethylbenzene	0.090	0.002	"	0.100		90.2	70-130			
m,p-Xylene	0.181	0.004	"	0.200		90.6	70-130			
o-Xylene	0.089	0.002	"	0.100		89.5	70-130			
Naphthalene	0.084	0.007	"	0.100		83.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	58		ug/kg	62.5		93.6	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

**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
<b>Batch 5114005 - EPA 5030 (soil)</b>										
<b>Matrix Spike (5114005-MS1)</b>		<b>Source: X509155-01</b>			Prepared: 09/14/2015 Analyzed: 09/14/2015					
Benzene	0.090	0.002	mg/kg	0.100	ND	90.5	70-130			
Toluene	0.090	0.002	"	0.100	ND	90.4	70-130			
Ethylbenzene	0.090	0.002	"	0.100	ND	90.3	70-130			
m,p-Xylene	0.174	0.004	"	0.200	ND	86.9	70-130			
o-Xylene	0.088	0.002	"	0.100	ND	87.8	70-130			
Naphthalene	0.089	0.007	"	0.100	0.001	87.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		100	70-130			
Surrogate: Toluene-d8	62		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	70-130			

Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Noffsinger #44-15

**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
<b>Batch 5114005 - EPA 5030 (soil)</b>										
<b>Matrix Spike Dup (5114005-MSD1)</b>	<b>Source: X509155-01</b>				Prepared: 09/14/2015 Analyzed: 09/14/2015					
Benzene	0.101	0.002	mg/kg	0.100	ND	101	70-130	11.3	20	
Toluene	0.098	0.002	"	0.100	ND	98.2	70-130	8.27	20	
Ethylbenzene	0.097	0.002	"	0.100	ND	97.4	70-130	7.65	20	
m,p-Xylene	0.195	0.004	"	0.200	ND	97.3	70-130	11.3	20	
o-Xylene	0.097	0.002	"	0.100	ND	97.3	70-130	10.3	20	
Naphthalene	0.096	0.007	"	0.100	0.001	94.1	70-130	6.75	20	
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.7	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	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 - Noffsinger #44-15

## 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
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## Extractable Petroleum Hydrocarbons by 8015C - Quality Control

### Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 5I14009 - EPA 3580

#### Blank (5I14009-BLK1)

Prepared: 09/14/2015 Analyzed: 09/14/2015

Diesel (C10-C28)	ND	50.0	mg/kg							
Surrogate: o-Terphenyl	44		"	50.0		87.2	59-131			

#### LCS (5I14009-BS1)

Prepared: 09/14/2015 Analyzed: 09/14/2015

Diesel (C10-C28)	954	50.0	mg/kg	1000		95.4	64-121			
Surrogate: o-Terphenyl	53		"	50.0		106	59-131			

#### LCS Dup (5I14009-BSD1)

Prepared: 09/14/2015 Analyzed: 09/14/2015

Diesel (C10-C28)	882	50.0	mg/kg	1000		88.2	64-121	7.81	20	
Surrogate: o-Terphenyl	43		"	50.0		86.8	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 - Noffsinger #44-15

### 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.



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