EAGLE
ENVIRONMENTAL
CONSULTING, INC.

4101 Inca Street, Denver, CO 80211 • Phone: 303-433-0479 • Fax: 303-325-5449 • www.eagle-enviro.com

September 3, 2014

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

Field Assessment and Excavation Report
Pergola #1-15 – Water Vault Release
NE¼ SE¼ SEC.15 T1S R68W 6PM
39.963000/-104.981439
Adams County, Colorado
API # 05-001-08797

Dear Mr. Evans,

Eagle Environmental Consulting, Inc. (EAGLE) is pleased to present this Field Assessment and Excavation Report for the above referenced site.

SITE BACKGROUND

Based on records on file with the Colorado Oil and Gas Conservation Commission (COGCC), the Pergola #1-15 well was completed on December 31, 1986 to a total depth of 8,840 feet below ground surface (bgs) and is located at latitude: 39.962289 and longitude: -104.98071 in Adams County, Colorado. A topographical site location map is presented as Figure 1. An aerial site location map is presented as Figure 2.

EAGLE was requested by Noble Energy, Inc. (Noble), to perform subsurface assessment activities at the site in response to potential soil and groundwater impacts following removal of the water vault associated with the Pergola #1-15 well. On May 14, 2014, EAGLE collected soil samples, SS-01 through SS-05 following removal of the Pergola #1-15 water vault. Groundwater was not observed within the excavation at the time of the water vault removal.

Based on field analysis, soil sample SS-04 @ 4.5', collected from the sidewall of the excavation, and soil sample SS-05 @ 8', collected from the base of the excavation, were submitted to eAnalytics Laboratory for laboratory 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 Environmental Protection Agency (EPA) methods 8260 and 8015. In addition, soil sample SS-04 @ 4.5' was analyzed for Sodium Adsorption Ratio (SAR) following United States Department of Agriculture (USDA) Method 20B, Specific Conductance (EC) following USDA method 3, and pH following EPA method 9045D. Both soil samples were delivered to the laboratory following standard chain of custody procedures.

Laboratory analysis of soil samples, SS-04 and SS-05, indicated concentrations of toluene, ethylbenzene, total xylenes, and total petroleum hydrocarbons – diesel range organics (TPH-DRO) did not exceed their respective COGCC Table 910-1 regulatory limits. Soil samples SS-04 and SS-05 contained concentrations of benzene and total petroleum hydrocarbons – gasoline range organics (TPH-GRO)

exceeding the COGCC Table 910-1 regulatory limits, requiring remedial action at the site. The following narrative details excavation activities that were completed at the site. SAR, EC, and pH concentrations within SS-04 were observed below their respective COGCC Table 910-1 regulatory limits.

SOIL EXCAVATION ACTIVITIES

On June 4, 2014, EAGLE supervised excavation activities to remove adsorbed petroleum hydrocarbon impacts beneath the water vault associated with the Pergola #1-15 well. BG Services LLC (BG) provided the necessary equipment and personnel to remove and transport petroleum hydrocarbon impacted soil from the site.

The soil lithology observed within the excavation was a sandy silt from the surface to approximately 1.5 feet bgs. A silty sandy, clay was observed from approximately 1.5 feet bgs to 18.5 feet bgs, with a silty clay from 18.5-19 feet bgs. Groundwater was observed at the bottom of the excavation at approximately 18 feet bgs in the eastern portion of the excavation.

Waste characterization/confirmation soil samples (SS-06 through SS-38) were collected at various locations to determine the lateral and vertical extent of petroleum hydrocarbon impacts in the soil beneath and adjacent to the water vault's approximate location. 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 4-ounce glass jar and packed in an iced cooler for laboratory analysis. Observed PID readings during the excavation ranged from 0.6 parts per million by volume (ppm-v) (SS-09@7') to 2,051 ppm-v (SS-08@8.5').

Based on location and PID analysis, selected jarred soil samples were submitted to eAnalytics Laboratory, Inc., located in Loveland, Colorado, under standard chain of custody procedures, for analysis of BTEX, naphthalene, TPH-GRO, and TPH-DRO following modified Environmental Protection Agency (EPA) Methods 8260c and 8015. The soil samples were received within the required holding time for each laboratory analysis.

A total of twelve (12) confirmation soil samples (SS-09@6', SS-10@6', SS-12@7', SS-19@8', SS-20@19', SS-21@9', SS-22@9', SS-23@17', SS-30@12', SS-36@12', SS-37@12', and SS-38@12') were submitted for laboratory analysis. Soil samples, SS-09@7', SS-10@7', SS-12@7', SS-19@8', SS-21@9', SS-22@9', SS-30@12', SS-36@12', SS-37@12', and SS-38@12' were collected from the sidewalls of the excavation, while soil samples, SS-20@19' and SS-23@17', were collected from the floor of the excavation. Spatial location of each soil sample was recorded using a Trimble GeoXT 6000 series instrument. PID readings are summarized in Table 1. A site map presenting the limits of the excavation, as well as soil sample locations, is included as Figure 3.

On June 5, 2014, groundwater was observed within the eastern portion of the excavation at a depth of approximately 18 feet bgs. A grab groundwater sample (GW-01) was collected, placed in an iced cooler, and delivered to Origins, under standard chain of custody protocol. Groundwater sample, GW-01, was analyzed for BTEX following modified EPA Method 8260c. The laboratory received the groundwater sample within the required holding time for the laboratory analysis.

The final limits of the Pergola #1-15 excavation extended approximately 28 feet north to south, and 38 feet east to west. The excavation was advanced to a depth of approximately 17 feet bgs on the west side of the excavation, and approximately 19 feet bgs on the east side of the excavation. The eastern portion of the excavation was extended to approximately 19 feet bgs due to observed staining and elevated PID readings. Approximately 910 cubic yards of soil was removed during excavation activities. Soil was transported offsite for disposal at an appropriately permitted facility.

Following collection of confirmatory soil samples, the excavation was backfilled with clean fill and compacted to grade.

LABORATORY ANALYTICAL RESULTS

Based on soil laboratory analytical results, confirmation soil samples SS-09@6', SS-10@6', SS-12@7', SS-19@8', SS-20@19', SS-23@17', SS-30@12', SS-36@12', SS-37@12', and SS-38@12' collected from the Pergola #1-15 excavation did not contain concentrations of BTEX, naphthalene, TPH-GRO, or TPH-DRO exceeding their respective COGCC Table 910-1 regulatory limits.

Soil samples SS-04@4.5' and SS-05@8', collected following the water vault removal, contained concentrations of benzene and TPH exceeding their respective COGCC Table 910-1 regulatory limits. Based on the laboratory analytical results for soil samples SS-04@4.5' and SS-05@8', the excavation was extended vertically to a total depth of approximately 17 feet bgs. Soil samples SS-23@17' and SS-20@19' were collected as confirmation soil samples for the floor beneath soil samples SS-04@4.5' and SS-05@8', respectively.

Soil samples SS-21@9' and SS-22@9', collected from the then sidewall of the excavation, contained concentrations of benzene and TPH exceeding their respective COGCC Table 910-1 regulatory limits. Based on the laboratory analytical results, the excavation was extended to the east and south, and vertically to a total depth of 19 feet bgs. Groundwater was observed at approximately 18 feet bgs, and therefore, soil samples were not collected within the saturated zone. A groundwater sample (GW-01) was collected to determine if petroleum hydrocarbon impacts had migrated to the groundwater table. Based on groundwater laboratory analytical results, confirmation groundwater sample, GW-01, did not contain concentrations of BTEX exceeding their respective COGCC Table 910-1 regulatory limits.

Soil analytical results are summarized in Table 2 and are presented in Figure 4. The laboratory analytical reports for the soil samples collected during source removal activities at the Pergola #1-15 site are included in Attachment A.

Groundwater analytical results are summarized in Table 3 and are presented in Figure 5. The laboratory analytical reports for the groundwater sample collected during source removal activities at the Pergola #1-15 site are included in Attachment A.

CONCLUSIONS

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

- Approximately 910 cubic yards of soil was removed from the Pergola #1-15 site between June 4, 2014 and June 5, 2014.
- Confirmation soil samples (SS-09@6', SS-10@6', SS-12@7', SS-19@8', SS-20@19', SS-23@17', SS-30@12', SS-36@12', SS-37@12', and SS-38@12') collected from the sidewalls and floor of the Pergola #1-15 excavation did not contain concentrations of BTEX, naphthalene, TPH-GRO, and TPH-DRO exceeding their respective COGCC Table 910-1 regulatory limits.
- The confirmation groundwater sample (GW-01) collected from the base of the eastern portion of the Pergola #1-15 excavation did not contain concentrations of BTEX exceeding their respective COGCC Table 910-1 regulatory limits.

RECOMMENDATIONS

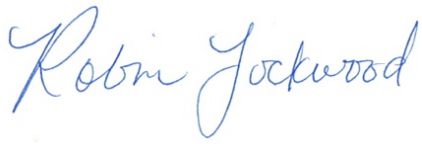
Based on the information presented in this report, EAGLE recommends the following:

- No further assessment or remediation is warranted for the Pergola #1-15 water vault release site at this time.

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,

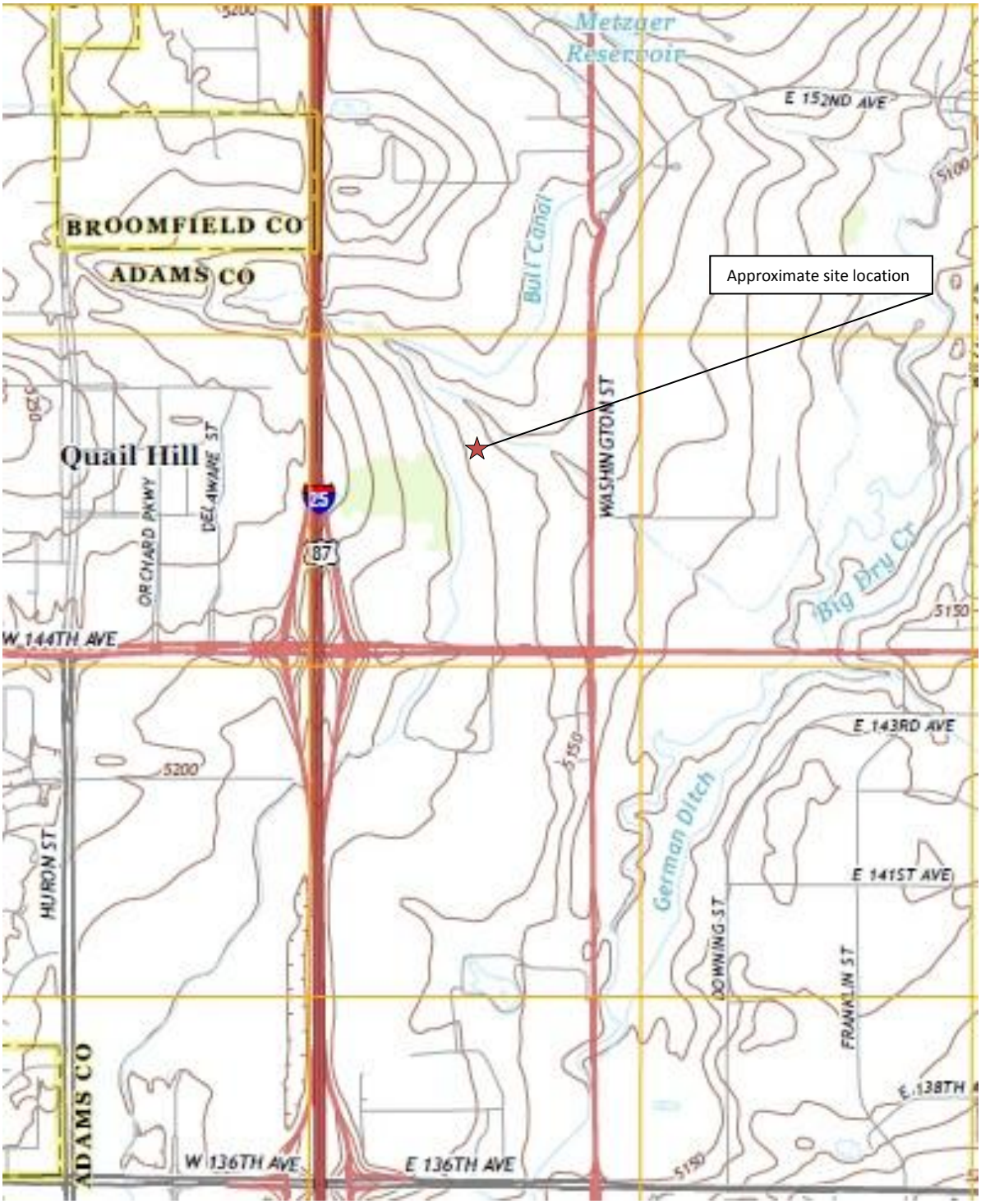
EAGLE ENVIRONMENTAL CONSULTING, INC.



Robin Lockwood
Project Scientist

Martin Eckert III
Senior Project Manager

FIGURES



N

Site Location Map
Pergola #1-15 – Water Vault Release
39.963000/-104.981439
NESE SEC.15 T1S R68W 6PM
Adams County, CO
API # 05-001-08797

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

Figure 1

EAGLE ENVIRONMENTAL CONSULTING, INC.

LEGEND

LATITUDE/LONGTITUDE OF INFRASTRUCTURE AND RELEASE LOCATION:

RELEASE LOCATION	(39.963000/−104.981439)
PERGOLA #1−15 WELL PAD	(39.962289/−104.98071)

APPROXIMATE LOCATION OF REMOVED WATER VAULT

N

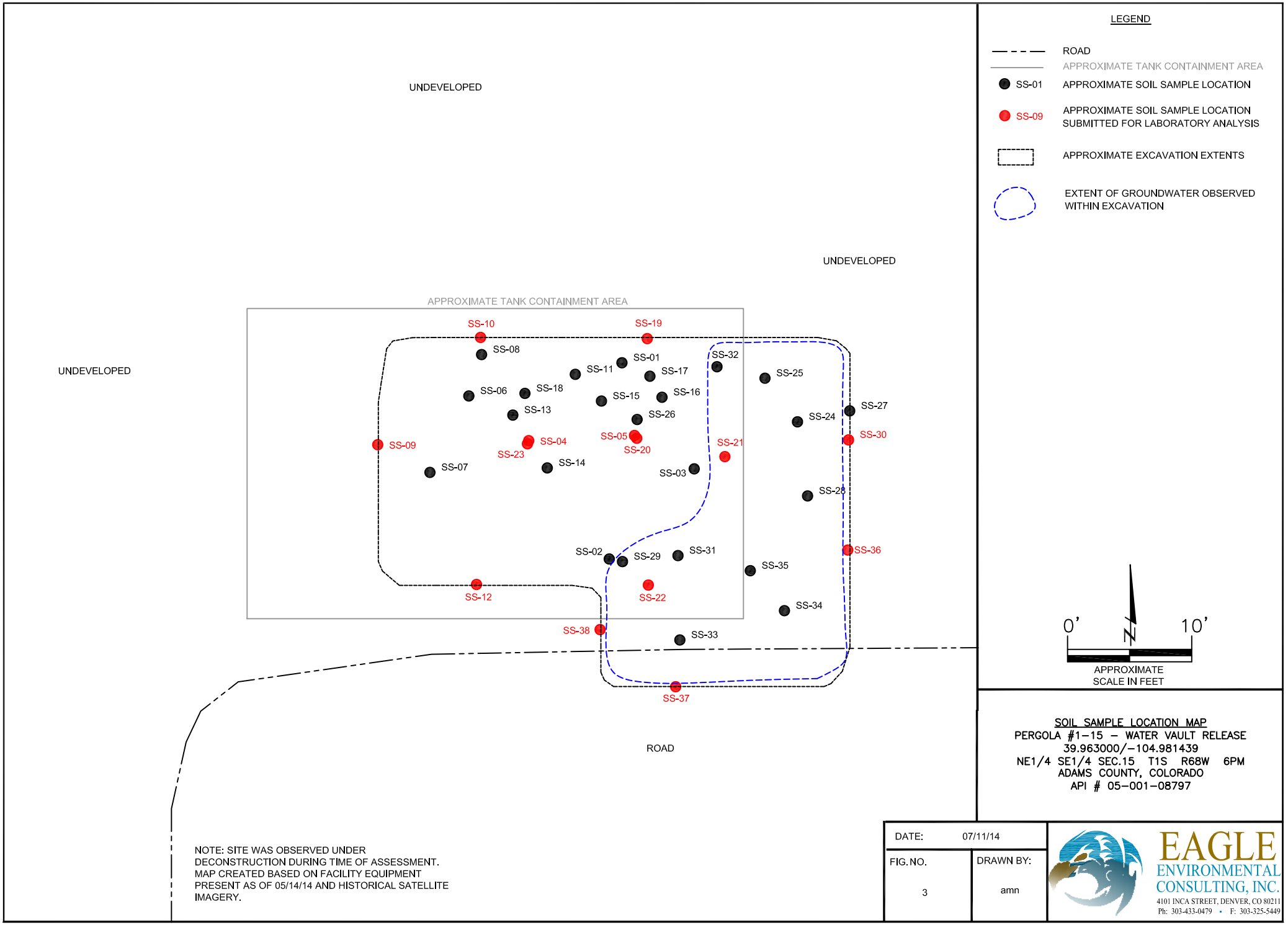
0 30'

APPROXIMATE SCALE IN FEET

AERIAL SITE LOCATION MAP
PERGOLA #1−15 − WATER VAULT RELEASE
39.963000/−104.981439
NE1/4 SE1/4 SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05−001−08797

DATE: 05/14/14	
FIG. NO. 2	DRAWN BY: amn

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

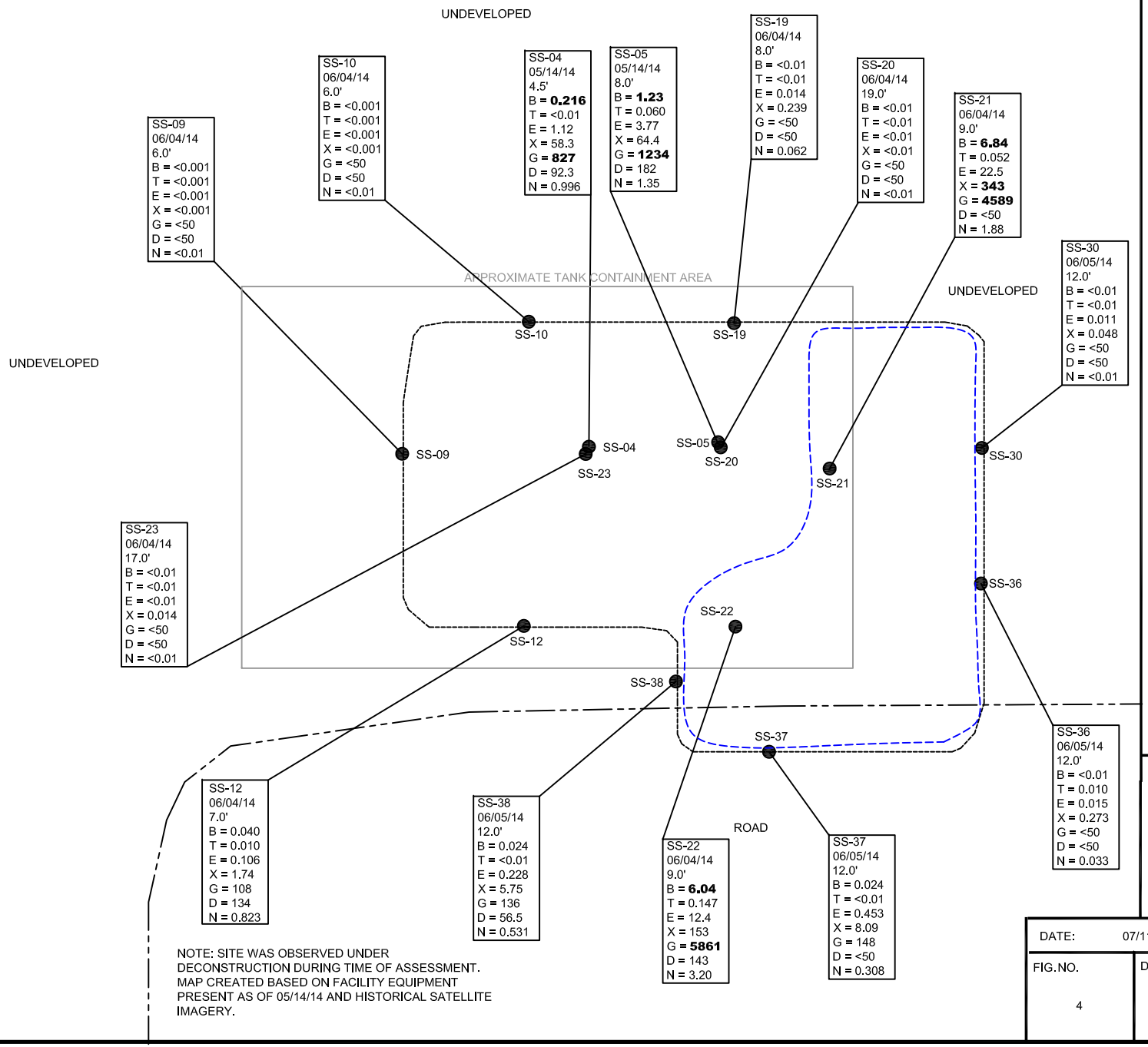


NOTE: SITE WAS OBSERVED UNDER DECONSTRUCTION DURING TIME OF ASSESSMENT. MAP CREATED BASED ON FACILITY EQUIPMENT PRESENT AS OF 05/14/14 AND HISTORICAL SATELLITE IMAGERY.

SOIL SAMPLE LOCATION MAP
PERGOLA #1-15 – WATER VAULT RELEASE
39.963000/-104.981439
NE1/4 SE1/4 SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

DATE:	07/11/14
FIG.NO. 3	DRAWN BY: amn

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



LEGEND

ROAD

APPROXIMATE TANK CONTAINMENT AREA

SS-09 APPROXIMATE SOIL SAMPLE LOCATION SUBMITTED FOR LABORATORY ANALYSIS

APPROXIMATE EXCAVATION EXTENTS

EXTENT OF GROUNDWATER OBSERVED WITHIN EXCAVATION

PARAMETERS

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

VALUES PRESENTED WITH A "<" SYMBOL INDICATE CONCENTRATIONS WERE NOT OBSERVED ABOVE THE LABORATORY'S REPORTING LIMIT.

COGCC - COLORADO OIL AND GAS CONSERVATION COMMISSION

0' N 10'

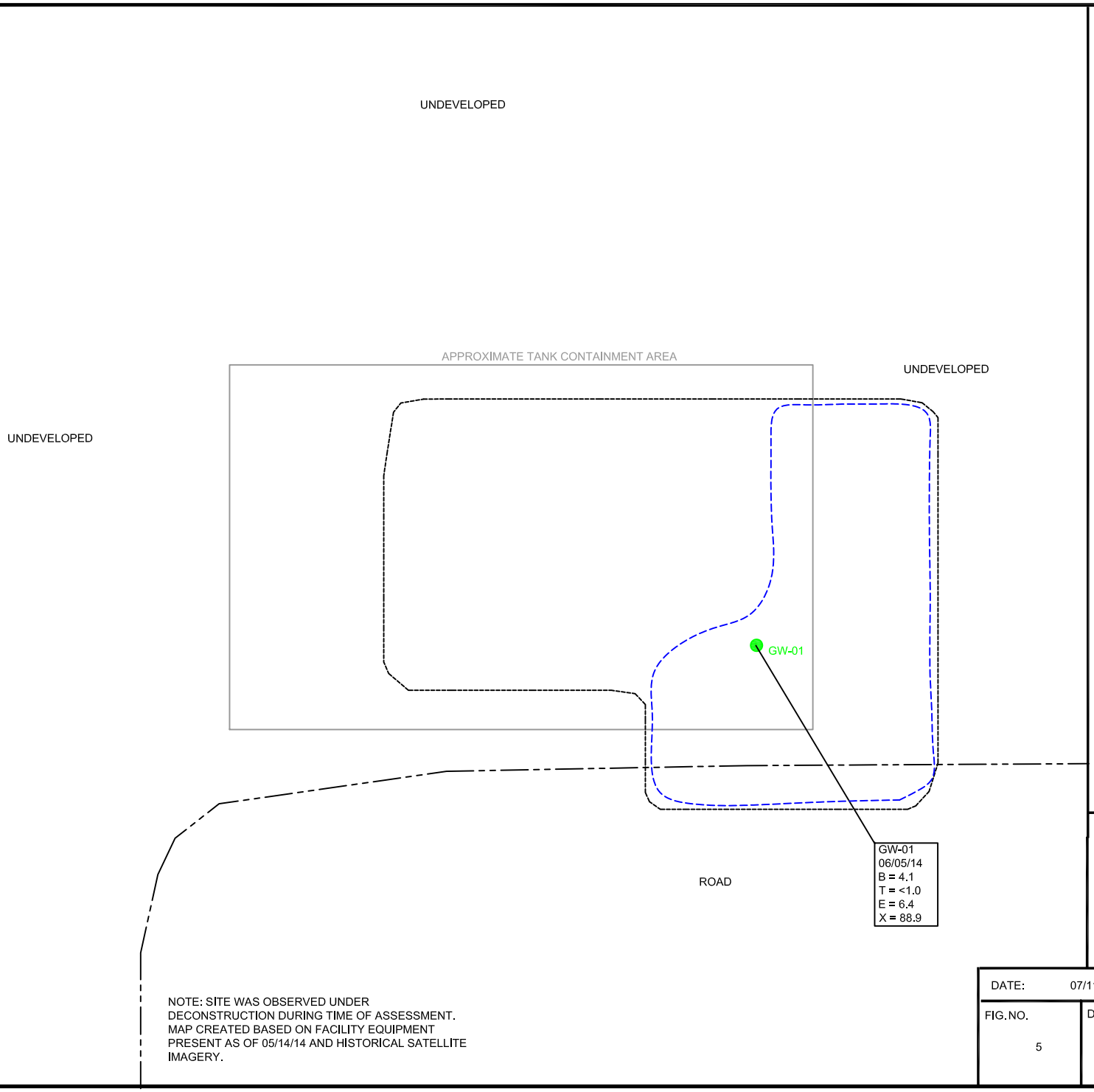
APPROXIMATE SCALE IN FEET

SOIL SAMPLE ANALYTICAL MAP

PERGOLA #1-15 – WATER VAULT PULL
39.963000/-104.981439
NE1/4 SE1/4 SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

DATE:	07/11/14
FIG.NO.	DRAWN BY:
4	amn

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



NOTE: SITE WAS OBSERVED UNDER DECONSTRUCTION DURING TIME OF ASSESSMENT. MAP CREATED BASED ON FACILITY EQUIPMENT PRESENT AS OF 05/14/14 AND HISTORICAL SATELLITE IMAGERY.

LEGEND

- ROAD
- APPROXIMATE TANK CONTAINMENT AREA
- GW-01 APPROXIMATE GROUNDWATER SAMPLE LOCATION
- APPROXIMATE EXCAVATION EXTENTS
- EXTENT OF GROUNDWATER OBSERVED WITHIN EXCAVATION

PARAMETERS

SAMPLE LOCATION
DATE SAMPLE COLLECTED
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.

VALUES PRESENTED WITH A "<" SYMBOL INDICATE CONCENTRATIONS WERE NOT OBSERVED ABOVE THE LABORATORY'S REPORTING LIMIT.

COGCC - COLORADO OIL AND GAS CONSERVATION COMMISSION

0' N 10'

APPROXIMATE SCALE IN FEET

GROUNDWATER SAMPLE ANALYTICAL MAP

PERGOLA #1-15 – WATER VAULT RELEASE
39.963000/-104.981439
NE1/4 SE1/4 SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

DATE:	07/11/14
FIG. NO.	5
DRAWN BY:	amn

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

TABLES

TABLE 1
PHOTOIONIZATION DETECTOR RESULTS SUMMARY
PERGOLA #1-15 - WATER VAULT RELEASE
39.963000/-104.981439
NE¼ SE¼ SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
SS-01 @ 4.5' (39.963024381 / -104.981441029)	05/14/14	4.5	1791	No
SS-02 @ 4.5' (39.962984276 / -104.98144686)	05/14/14	4.5	1683	No
SS-03 @ 5' (39.963010323 / -104.981420579)	05/14/14	5.0	1298	No
SS-04 @ 4.5' (39.963007888 / -104.981459774)	05/14/14	4.5	2137	Yes
SS-05 @ 8' (39.963009982 / -104.981442834)	05/14/14	8.0	1076	Yes
SS-06 @ 8' (39.963054 / -104.981491)	06/04/14	8.0	1121	no
SS-07 @ 7' (39.963022 / -104.981510)	06/04/14	7.0	1201	no
SS-08 @ 8.5' (39.963044 / -104.981494)	06/04/14	8.5	2051	no
SS-09 @ 6' (39.963026974 / -104.98151792)	06/04/14	6.0	0.6	yes
SS-10 @ 6' (39.963057943 / -104.981490126)	06/04/14	6.0	1.7	yes
SS-11 @ 7' (39.963036 / -104.981446)	06/04/14	7.0	1915	no
SS-12 @ 7' (39.962987172 / -104.981475971)	06/04/14	7.0	1508	yes
SS-13 @ 10' (39.963034 / -104.981469)	06/04/14	10.0	1657	no
SS-14 @ 13' (39.963025 / -104.981466)	06/04/14	13.0	376	yes
SS-15 @ 6' (39.963024 / -104.981432)	06/04/14	6.0	1504	no
SS-16 @ 15' (39.963029 / -104.981416)	06/04/14	15.0	842	no
SS-17 @ 17' (39.963040 / -104.981416)	06/04/14	17.0	707	no
SS-18 @ 11' (39.963040 / -104.981466)	06/04/14	11.0	432	no
SS-19 @ 8' (39.963055387 / -104.981437399)	06/04/14	8.0	377	yes
SS-20 @ 19' (39.963027 / -104.981425)	06/04/14	19.0	2.2	yes
SS-21 @ 9' (39.963029027 / -104.981407763)	06/04/14	9.0	1731	yes
SS-22 @ 9' (39.962995825 / -104.981440279)	06/04/14	9.0	1279	yes
SS-23 @ 17' (39.963028 / -104.981483)	06/04/14	17.0	219	yes
SS-24 @ 9' (39.963016 / -104.981392)	06/05/14	9.0	40.9	no
SS-25 @ 14' (39.963034 / -104.981402)	06/05/14	14.0	76.2	no
SS-26 @ 17' (39.963035 / -104.981416)	06/05/14	17.0	78	no
SS-27 @ 10' (39.963020 / -104.981384)	06/05/14	10.0	76.7	no

EAGLE ENVIRONMENTAL CONSULTING, INC.

TABLE 1
PHOTOIONIZATION DETECTOR RESULTS SUMMARY
PERGOLA #1-15 - WATER VAULT RELEASE
39.963000/-104.981439
NE¼ SE¼ SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Laboratory Analyzed (y/n)
SS-28 @ 17.5 (39.963001 / -104.981400)	06/05/14	17.5	1119	no
SS-29 @ 18' (39.962998 / -104.981438)	06/05/14	18.0	1198	no
SS-30 @ 12' (39.963016211 / -104.98138429)	06/05/14	12.0	353	no
SS-31 @ 18.5' (39.962999 / -104.981430)	06/05/14	18.5	1858	no
SS-32 @ 18' (39.963048 / -104.981433)	06/05/14	18.0	300	no
SS-33 @ 8' (39.962973 / -104.981424)	06/05/14	8.0	1223	no
SS-34 @ 15' (39.962978 / -104.981407)	06/05/14	15.0	1519	no
SS-35 @ 19' (39.962989 / -104.981411)	06/05/14	19.0	873	no
SS-36 @ 12' (39.962982994 / -104.981391004)	06/05/14	12.0	662	yes
SS-37 @ 12' (39.962956544 / -104.981434493)	06/05/14	12.0	783	yes
SS-38 @ 12' (39.962986929 / -104.981469116)	06/05/14	12.0	828	yes

PID = photoionization detector
ppm-v = parts per million by volume

EAGLE ENVIRONMENTAL CONSULTING, INC.

TABLE 2
SOIL ANALYTICAL RESULTS SUMMARY
PERGOLA #1-15 - WATER VAULT RELEASE
39.963000/-104.981439
NE¼ SE¼ SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

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)	Specific Conductance (mmhos/cm)	pH (pH units)	SAR
COGCC Table 910-1 Regulatory Limits (mg/kg)			**0.17**	**85**	**100**	**175**	**23**	**500**		**<4 mmhos/cm**	**6 to 9**	**<12^5**
SS-04 @ 4.5'	05/14/14	4.5	**0.216**	<0.01	1.12	58.3	0.996	**827**	92.3	2.10	8.1	25.7
(39.963007888 / -104.981459774)												
SS-05 @ 8'	05/14/14	8.0	**1.23**	0.060	3.77	64.4	1.35	**1234**	182	NA	NA	NA
(39.963009982 / -104.981442834)												
SS-09 @ 6'	06/04/14	6.0	<0.01	<0.01	<0.01	<0.01	<0.01	<50	<50	NA	NA	NA
(39.963026974 / -104.98151792)												
SS-10 @ 6'	06/04/14	6.0	<0.01	<0.01	<0.01	<0.01	<0.01	<50	<50	NA	NA	NA
(39.963057943 / -104.981490126)												
SS-12 @ 7'	06/04/14	7.0	0.040	0.010	0.106	1.74	0.823	108	134	NA	NA	NA
(39.962987172 / -104.981475971)												
SS-19 @ 8'	06/04/14	8.0	<0.01	<0.01	0.014	0.239	0.062	<50	<50	NA	NA	NA
(39.963055387 / -104.981437399)												
SS-20 @ 19'	06/04/14	19.0	<0.01	<0.01	<0.01	<0.01	<0.01	<50	<50	NA	NA	NA
(39.963027 / -104.981425)												
SS-21 @ 9'	06/04/14	9.0	**6.84**	0.052	22.5	**343**	1.88	**4589**	<50	NA	NA	NA
(39.963029027 / -104.981407763)												
SS-22 @ 9'	06/04/14	9.0	**6.04**	0.147	12.4	153	3.20	**5861**	143	NA	NA	NA
(39.962995825 / -104.981440279)												
SS-23 @ 17'	06/04/14	17.0	<0.01	<0.01	<0.01	0.014	<0.01	<50	<50	NA	NA	NA
(39.963028 / -104.981483)												
SS-30 @ 12'	06/05/14	12.0	<0.01	<0.01	0.011	0.048	<0.01	<50	<50	NA	NA	NA
(39.963016211 / -104.98138429)												
SS-36 @ 12'	06/05/14	12.0	<0.01	0.010	0.015	0.273	0.033	<50	<50	NA	NA	NA
(39.962982994 / -104.981391004)												
SS-37 @ 12'	06/05/14	12.0	0.024	<0.01	0.453	8.09	0.308	148	<50	NA	NA	NA
(39.962956544 / -104.981434493)												
SS-38 @ 12'	06/05/14	12.0	0.024	<0.01	0.228	5.75	0.531	136	56.5	NA	NA	NA
(39.962986929 / -104.981469116)												

COGCC = Colorado Oil and Gas Conservation Commission
mg/kg = milligrams per kilogram
mmhos/cm = millimhos per centimeter
NA = Not Analyzed
NA = Not Analyzed
TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics
TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics
SAR = Sodium Adsoption Ratio
Notes: Values presented with a less than symbol (<) indicate concentrations were not observe above the laboratory's reporting limit.
Values presented in bold typeface exceed their respective COGCC - Regulatory Limits (Table 910-1).

EAGLE ENVIRONMENTAL CONSULTING, INC.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PERGOLA #1-15 - WATER VAULT RELEASE
39.963000/-104.981439
NE¼ SE¼ SEC.15 T1S R68W 6PM
ADAMS COUNTY, COLORADO
API # 05-001-08797

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	06/05/14	4.1	<1.0	6.4	88.9

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 aabove the laboratory's reporting limit.

EAGLE ENVIRONMENTAL CONSULTING, INC.

ATTACHMENT A

Laboratory Analytical Reports

Test Report

eANALYTICS
LABORATORY

June 8, 2014

Client:	Eagle Environmental / Noble Energy
Project:	Pergola #1-15
Lab ID:	1558
Date Samples Received:	6/6/2014
Number of Samples:	1
Sample Condition:	Samples arrived intact and in appropriate sample containers
Sample Temperature:	Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Sincerely,

Christopher Dieken
Quality Assurance Manager

Todd Rhea
Laboratory Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody Form

eANALYTICS LABORATORY

1767 Rocky Mountain Avenue Loveland CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION

(*New Clients please fill out completely)

Company: Eagle Environmental Consulting, Inc.

Project: Pergola #1-15

Project Manager: Martin Eckert

Sampler: Hannah Phillips

Phone/Email: 303-433-0479

Address: 4101 Inca Street, Denver, Colorado 80211

ANALYSIS INFORMATION

(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	BTEX Naphthalene (EPA 8260)	TPH - GRO/DRO (EPA 8260/8015)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Other Analysis
1	SS-30@12'	6/5/14 1153 AM/PM	1	S	X	X	X				

Comments:

Turnaround Time (Business Days)

TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ○ 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- X Same Day (3x)

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact: (Yes) / No

Received Within Temperature Range (2-6°C): (Yes) / No

Sample Preservative: (Ice) None Acid Other

Record of Custody

Relinquished by: K Hl — Date 6/6/14 — Time — AM/PM

Company: Eagle Env Consulting

Received by: — Date — Time — AM/PM

Company:

Relinquished by: — Date — Time — AM/PM

Company:

Received by: — Date 6/16/14 — Time 1630 AM/PM

Company: eANALYTICS

WO # 1558

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil
Sample Analysis

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1558
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Sampled	Date Analyzed	Lab ID	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
SS-30 @ 12'	< 0.01	< 0.01	**0.011**	**0.048**	< 0.01	< 50	< 50	06/05/14	06/06/14	1558	1

Soil
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1558
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
SS-30 @ 12'	104	105	89	90	06/05/14	06/06/14	1558	1

Soil
Quality Control - Analyses

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1558
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Analyzed		Lab ID
	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Laboratory Control Sample	91	94	97	103	98	101	92	06/06/14	LCS	1558 1
(70-130%)										
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/06/14	MB	1558 1
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			

Test Report

eANALYTICS
LABORATORY

June 6, 2014

Client:	Eagle Environmental / Noble Energy
Project:	Pergola #1-15
Lab ID:	1545
Date Samples Received:	6/5/2014
Number of Samples:	4
Sample Condition:	Samples arrived intact and in appropriate sample containers
Sample Temperature:	Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Sincerely,

Christopher Dieken
Quality Assurance Manager

Todd Rhea
Laboratory Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody Form

eANALYTICS LABORATORY

1767 Rocky Mountain Avenue Loveland CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION
(*New Clients please fill out completely)

Company: Eagle Environmental Consulting, Inc.
Project: Pergola #1-15
Project Manager: Martin Eckert
Sampler: Hannah Phillips
Phone/Email: 303-433-0479
Address: 4101 Inca Street
Denver, Colorado 80211

ANALYSIS INFORMATION
(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	BTEX Naphthalene (EPA 8260)	TPH - GRO/DRO (EPA 8260/8015)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Other Analysis
1	SS-36@12'	6/5/14 1408 AM/PM	1	S	X	X	X				
2	SS-37@12'	6/5/14 1510 AM/PM	1	S	X	X	X				
3	SS-38@12'	6/5/14 1509 AM/PM	1	S	X	X	X				
4	GW-01	6/5/14 1100 AM/PM	3	W	X						
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									

Comments:

Turnaround Time (Business Days)
TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ○ 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- X Same Day (3x) Noble Standard

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact: (Yes) No
Received Within Temperature Range (2-6°C): (Yes) No
Sample Preservative: (Ice) None Acid Other

Record of Custody

Relinquished by: K Wal K Date 6/5/14
Company: Eagle Env Consulting Time
Received by: Date
Company: Time
Relinquished by: Date
Company: Time
Received by: Date 6/5/14
Company: eANALYTICS Time 1700

WO # 1545

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil
Sample Analysis

eANALYTICS
LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Sampled	Date Analyzed	Lab ID	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
SS-36 @ 12'	< 0.01	**0.010**	**0.015**	**0.273**	**0.033**	< 50	< 50	06/05/14	06/05/14	1545	1
SS-37 @ 12'	**0.024**	< 0.01	**0.453**	**8.09**	**0.308**	**148**	< 50	06/05/14	06/05/14	1545	2
SS-38 @ 12'	**0.024**	< 0.01	**0.228**	**5.75**	**0.531**	**136**	**56.5**	06/05/14	06/05/14	1545	3

eANALYTICS
LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15		
Analysis:	Volatile Organics	Method:	EPA8260

Sample Name	Benzene ug/L	Toluene ug/L	Ethyl-benzene ug/L	Total Xylenes ug/L	Date Sampled	Date Analyzed	Lab ID	
GW-01	**4.1**	< 1.0	**6.4**	**88.9**	06/05/14	06/05/14	1545	4

Soil
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
SS-36 @ 12'	100	94	108	90	06/05/14	06/05/14	1545	1
SS-37 @ 12'	99	86	96	88	06/05/14	06/05/14	1545	2
SS-38 @ 12'	110	100	87	111	06/05/14	06/05/14	1545	3

Water
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID
GW-01	98	102	100	96	06/05/14	06/05/14	1545 4

Soil
Quality Control - Analyses

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Analyzed		Lab ID
	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Laboratory Control Sample	104	99	104	96	95	97	92	06/05/14	LCS	1545 1
(70-130%)										
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/05/14	MB	1545 1
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			

eANALYTICS
LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1545
Project:	Pergola #1-15		
Analysis:	Volatile Organics	Method:	EPA8260

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Date Analyzed		Lab ID	
	% Rec	% Rec	% Rec	% Rec				
Laboratory Control Sample	92	98	102	104	06/05/14	LCS	1545	1
(70-130%)								
Method Blank	< 1.0	< 1.0	< 1.0	< 1.0	06/05/14	MB	1545	1
	ug/L	ug/L	ug/L	ug/L				

Test Report

eANALYTICS
LABORATORY

June 5, 2014

Client:	Eagle Environmental / Noble Energy
Project:	Pergola #1-15
Lab ID:	1532
Date Samples Received:	6/5/2014
Number of Samples:	1
Sample Condition:	Samples arrived intact and in appropriate sample containers
Sample Temperature:	Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Sincerely,

Christopher Dieken
Quality Assurance Manager

Todd Rhea
Laboratory Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody Form

eANALYTICS LABORATORY

1767 Rocky Mountain Avenue Loveland CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION
(*New Clients please fill out completely)

Company: Eagle Environmental Consulting, Inc.
Project: Pergola #1-15
Project Manager: Martin Eckert
Sampler: Hannah Phillips
Phone/Email: 303-433-0479
Address: 4101 Inca Street
Denver, Colorado 80211

ANALYSIS INFORMATION
(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	BTEX Naphthalene (EPA 8260)	TPH - GRO/DRO (EPA 8260/8015)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Other Analysis
1	SS-12 @ 7'	6/4/14 1413 AM/PM	1	S	X	X	X				
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									
		AM/PM									

Comments:

Turnaround Time (Business Days)
TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ○ 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- ☒ Same Day (3x) (Noble Standard)

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact: (Yes) No
Received Within Temperature Range (2-6°C): (Yes) No
Sample Preservative: Ice / None — Acid / Other

Record of Custody

Relinquished by: [signature] Date 6/5/14
Company: Eagle Env Consulting Time 0905 AM/PM
Received by: Date
Company: Time AM/PM
Relinquished by: Date
Company: Time AM/PM
Received by: [signature] Date 6/5/14
Company: eANALYTICS Time 9:10 AM/PM

WO # 1532

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil
Sample Analysis

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1532
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Sampled	Date Analyzed	Lab ID	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
SS-12 @ 7'	**0.040**	**0.010**	**0.106**	**1.74**	**0.823**	**108**	**134**	06/04/14	06/05/14	1532	1

Soil
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1532
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
SS-12 @ 7'	105	104	87	99	06/04/14	06/05/14	1532	1

Soil
Quality Control - Analyses

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1532
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Analyzed		Lab ID
	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Laboratory Control Sample	92	95	97	103	103	95	94	06/05/14	LCS	1532 1
(70-130%)										
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/05/14	MB	1532 1
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			

Test Report

eANALYTICS
LABORATORY

June 5, 2014

Client:	Eagle Environmental / Noble Energy
Project:	Pergola #1-15
Lab ID:	1526
Date Samples Received:	6/4/2014
Number of Samples:	7
Sample Condition:	Samples arrived intact and in appropriate sample containers
Sample Temperature:	Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Sincerely,

Christopher Dieken
Quality Assurance Manager

Todd Rhea
Laboratory Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody For

eANALYTICS LABORATORY

1767 Rocky Mountain Avenue Loveland CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION

(*New Clients please fill out completely)

Company: Eagle Environmental Consulting, Inc.

Project: Pergola #1-15

Project Manager: Martin Eckert / Robin Lockwood

Sampler: Hannah Phillips

Phone/Email: 303-433-0479

Address: 4101 Inca Street

Denver, Colorado 80211

ANALYSIS INFORMATION

(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	Naphthalene (EPA 8260)	TPH - GRO (EPA 8260)	TPH - DRO (EPA 8015)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Other Analysis
1	SS-09 @ 6	6/4/14 1009 AM/PM	1	S	X	X	X	X				
2	SS-10 @ 6	6/4/14 1009 AM/PM	1	S								
3	SS-19 @ 8	6/4/14 1115 AM/PM	1	S								
4	SS-20 @ 19	6/4/14 1400 AM/PM	1	S								
5	SS-21 @ 9	6/4/14 1405 AM/PM	1	S								
6	SS-22 @ 9	6/4/14 1406 AM/PM	1	S								
7	SS-23 @ 17	6/4/14 1407 AM/PM	1	S								
		AM/PM										
		AM/PM										
		AM/PM										
		AM/PM										
		AM/PM										
		AM/PM										
		AM/PM										
		AM/PM										

Comments:

Turnaround Time (Business Days)

TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ○ 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- X Next Bus Morn (Noble Pricing)

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact: (Yes) / No

Received Within Temperature Range (2-6°C): (Yes) / No

Sample Preservative: (Ice) None Acid Other

Record of Custody

Relinquished by: Hannah Phillips Date 6/4/14 Time 1600 AM/PM

Company: Eagle Environmental

Received by: Date Time AM/PM

Company:

Relinquished by: Date Time AM/PM

Company:

Received by: Date 6/4/14 Time 1600 AM/PM

Company: eANALYTICS

WO # 1526

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil
Sample Analysis

eANALYTICS
LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1526
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Sampled	Date Analyzed	Lab ID	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
SS-09 @ 6	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/04/14	06/04/14	1526	1
SS-10 @ 6	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/04/14	06/04/14	1526	2
SS-19 @ 8	< 0.01	< 0.01	**0.014**	**0.239**	**0.062**	< 50	< 50	06/04/14	06/04/14	1526	3
SS-20 @ 19	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/04/14	06/04/14	1526	4
SS-21 @ 9	**6.84**	**0.052**	**22.5**	**343**	**1.88**	**4589**	< 50	06/04/14	06/04/14	1526	5
SS-22 @ 9	**6.04**	**0.147**	**12.4**	**153**	**3.20**	**5861**	**143**	06/04/14	06/04/14	1526	6
SS-23 @ 17	< 0.01	< 0.01	< 0.01	**0.014**	< 0.01	< 50	< 50	06/04/14	06/04/14	1526	7

Soil
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1526
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
SS-09 @ 6	97	96	102	105	06/04/14	06/04/14	1526	1
SS-10 @ 6	97	100	99	96	06/04/14	06/04/14	1526	2
SS-19 @ 8	107	97	98	98	06/04/14	06/04/14	1526	3
SS-20 @ 19	102	96	97	99	06/04/14	06/04/14	1526	4
SS-21 @ 9	101	99	96	95	06/04/14	06/04/14	1526	5
SS-22 @ 9	101	102	100	95	06/04/14	06/04/14	1526	6
SS-23 @ 17	106	98	98	98	06/04/14	06/04/14	1526	7

Soil
Quality Control - Analyses

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1526
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Analyzed		Lab ID
	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Laboratory Control Sample	94	101	93	101	90	93	101	06/04/14	LCS	1526 1
(70-130%)										
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	06/04/14	MB	1526 1
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			

Test Report

eANALYTICS
LABORATORY

May 14, 2014

Client:	Eagle Environmental / Noble Energy
Project:	Pergola #1-15
Lab ID:	1381
Date Samples Received:	5/14/2014
Number of Samples:	2
Sample Condition:	Samples arrived intact and in appropriate sample containers
Sample Temperature:	Within acceptable range of 2-6° C, or as specified in EPA Method

The quality control procedures associated with the requested analyses were satisfactorily passed before the samples were run.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Sincerely,

Christopher Dieken
Quality Assurance Manager

Todd Rhea
Laboratory Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody Form

eANALYTICS LABORATORY

1767 Rocky Mountain Avenue Loveland CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION

(*New Clients please fill out completely)

Company: Eagle Environmental Consulting, Inc.

Project: Pergola #1-15

Project Manager: Martin Eckert / Robin Lockwood

Sampler: Andrew Newberry

Phone/Email: 303-433-0479

Address: 4101 Inca Street

Denver, Colorado 80211

ANALYSIS INFORMATION

(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	Naphthalene (EPA 8260)	TPH - GRO (EPA 8260)	TPH - DRO (EPA 8015)	SAR (US Dept of Ag Method 20B)	EC (US Dept of Ag Method 3)	pH (EPA 9045D)	Other Analysis
1	SS-04 @ 4.5'	5-14-14 1132 AM/PM	1	S	X	X	X	X	X	X	X	
2	SS-05 @ 8'	5-14-14 1130 AM/PM	1	S	X	X	X	X				
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										
		AM / PM										

Comments:

dilution likely needed - high PIDs

Turnaround Time (Business Days)

TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ○ 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- ☒ Next Bus Morn (Noble Pricing)

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact	(Yes) / No	
Received Within Temperature Range (2-6°C)	(Yes) / No	
Sample Preservative	(Ice) None	Acid Other

Record of Custody

Relinquished by:	Andrew Newberry	Date 5-14-14
Company: Eagle Environmental		Time 1222 AM/PM
Received by:		Date
Company:		Time AM/PM
Relinquished by:		Date
Company:		Time AM/PM
Received by:		Date 5-14-14
Company:	eANALYTICS	Time 1222 AM/PM

WO # 1381

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil
Sample Analysis

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1381
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Sampled	Date Analyzed	Lab ID	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
SS-04 @ 4.5'	**0.216**	< 0.01	**1.12**	**58.3**	**0.996**	**827**	**92.3**	05/14/14	05/14/14	1381	1
SS-05 @ 8'	**1.23**	**0.060**	**3.77**	**64.4**	**1.35**	**1234**	**182**	05/14/14	05/14/14	1381	2

Soil
Sample Analysis

eANALYTICS
LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1381
Project:	Pergola #1-15		
Analysis:	pH EC SAR	Method:	EPA9045D USDA 60 (3) USDA 60 (20B)

Sample Name	pH su	EC mmhos/cm	SAR ratio	Date Sampled	Date Analyzed	Lab ID	
SS-04 @ 4.5'	**8.1**	**2.10**	**25.7**	05/14/14	05/14/14	1381	1

Soil
Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1381
Project:	Pergola #1-15	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
SS-04 @ 4.5'	106	94	90	88	05/14/14	05/14/14	1381	1
SS-05 @ 8'	91	101	106	107	05/14/14	05/14/14	1381	2

Soil
Quality Control - Analyses

eANALYTICS LABORATORY

Client:	Eagle Environmental / Noble Energy	Lab ID:	1381
Project:	Pergola #1-15		
Analysis:	Volatile Organics TPH	Method:	EPA8260 EPA8260/8015

Sample Name	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Napth-thalene	TPH GRO C6-C10	TPH DRO C10-C28	Date Analyzed		Lab ID
	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Laboratory Control Sample	91	104	102	104	90	93	95	05/14/14	LCS	1381 1
(70-130%)										
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 50	< 50	05/14/14	MB	1381 1
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			