



June 10, 2020

Ms. Karen Olson
PDC Energy, Inc.
1775 Sherman Street Suite 3000
Denver, CO 80203

**2nd Quarter 2020 Monitoring Well Installation and Groundwater Monitoring
Report
Warren McMillan 2
Lat./Long. 40.293236/-104.711610
SW 1/4 SW 1/4 Sec.19 T4N R65W 6PM
Weld County, Colorado
Remediation Project #13978**

Dear Ms. Olson,

Eagle Environmental Consulting, Inc. (EAGLE) is pleased to present this 2nd Quarter 2020 Monitoring Well Installation and Groundwater Monitoring Report for PDC Energy, Inc. (PDC) for the above referenced site. This report summarizes monitoring well installation/groundwater monitoring activities and analytical results for the 2nd quarter 2020.

1.0 SITE BACKGROUND

The Warren McMillan 2 site is located approximately 3.5 miles east-northeast of Gilcrest within the southwest quarter of the southwest quarter of Section 19, Township 4 North, Range 65 West of the 6th Prime Meridian. The site is located at latitude: 40.293236 and longitude: -104.711610 and is surrounded by agricultural land.

The soil lithology observed beneath the site consists of a silty fine to medium-grained sand from the surface to approximately 6 feet below ground surface (bgs), underlain by a clayey fine-grained sand from approximately 6 to 12 feet bgs. The soil lithology observed at MW-05, MW-06, MW-08, MW-09 consists of a fine-grained sandy clay from approximately 6 to 15 feet bgs. The soil lithology observed at MW-10 and MW-11 consists of a silty fine-grained sandy clay from the surface to approximately 12 feet bgs. Groundwater beneath the site ranges from approximately 4.2 to 7.1 feet bgs and generally flows to the north-northwest.

2.0 MONITORING WELL INSTALLATION ACTIVITIES

On April 15, 2020, EAGLE advanced two soil borings to define petroleum hydrocarbon impacts beneath the site. The soil borings were completed as monitoring wells MW-10 through MW-11. EAGLE advanced MW-10 and MW-11 to approximately 12 feet bgs utilizing a 7822DT Series Geoprobe track rig. Due to an agricultural burn that damaged MW-01 through MW-09, EAGLE repaired the damaged monitoring wells and surveyed MW-01 through MW-11 following installation activities on April 15, 2020.

2.1 Field Work Preparation and Planning

The Utility Notification Center of Colorado (UNCC) was contacted at least 72 hours in advance of drilling activities to confirm that no unmarked utilities or other obstacles were present within the proposed drilling locations. Tier II facility owners were also contacted to confirm the necessary buried utility notifications were completed.

2.2 Soil Boring Screening Activities

EAGLE field screened and logged each soil boring location for soil description, soil classification, moisture content, staining, and volatile organic compound (VOC) concentrations. EAGLE also recorded the spatial location of each soil boring using a Trimble GeoXT 6000 series instrument. Well completion diagrams/boring logs for MW-10 and MW-11 are included in Attachment A.

2.3 Soil Sampling Procedures

During soil boring advancement activities, soil samples were collected continuously within 5-foot, plastic sample liners. The samples within the plastic liners were separated in 2.5-foot intervals for soil identification and analysis. A portion of soil from each interval was placed in a sealable plastic bag for 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.

Based on the PID reading and sample locations, soil samples MW-10@2.5-5' and MW-11@2.5-5' were submitted to Origins Laboratory, Inc. (Origins), following standard chain-of-custody (COC) procedures. The soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons – gasoline range organics (TPH-GRO) following Environmental Protection Agency (EPA) Method 8260D and TPH – diesel range organics (DRO) following EPA Method 8015D.

2.4 Soil Sample Analytical Results

Based on laboratory analytical results, soil samples MW-10@2.5-5' and MW-11@2.5-5' did not contain concentrations of BTEX or TPH exceeding the applicable Colorado Oil and Gas Conservation Commission (COGCC) Table 910-1 regulatory limits. Soil sample locations and analytical results are presented in Figure 1. Soil sample analytical results are also summarized in Table 1. The soil laboratory analytical report is included in Attachment B.

3.0 GROUNDWATER MONITORING ACTIVITIES

EAGLE completed the 2nd quarter 2020 groundwater monitoring event at the site on May 19, 2020. Groundwater samples were collected from MW-01 through MW-11. In addition, EAGLE developed monitoring wells MW-10 through MW-11.

3.1 Groundwater Sampling Procedures

Prior to groundwater sample collection, each monitoring well was gauged for depth to water and purged a minimum of three well volumes using a disposable polyvinyl chloride (PVC) bailer. Following recharge, groundwater samples were collected in 40 milliliter (mL) amber vials and submitted for laboratory analysis of BTEX following EPA Method 8260D. The samples were transported in an iced cooler, under standard COC procedures, to Origins.

3.2 Groundwater Elevation Data

Groundwater elevation contours were constructed utilizing groundwater elevation data collected during the May 19, 2020 groundwater monitoring event. Groundwater elevation during the 2nd quarter 2020 increased an average of 0.22 feet compared to the 1st quarter 2020 groundwater monitoring event. Groundwater elevation data is presented in Figure 2 and included in Table 2.

3.3 Groundwater Analytical Results

Based on laboratory analytical results, the groundwater sample collected from MW-02 contained a benzene concentration exceeding the COGCC Table 910-1 regulatory limit of 5 micrograms per liter ($\mu\text{g/L}$) with a concentration of 51.4 $\mu\text{g/L}$. All other groundwater samples submitted for laboratory analysis did not contain concentrations of BTEX exceeding the applicable COGCC Table 910-1 regulatory limits. Groundwater analytical results are presented in Figure 3 and included in Table 3. The groundwater laboratory analytical report is included in Attachment B.

4.0 CONCLUSION

Monitoring wells MW-10 through MW-11 were installed at the site on April 15, 2020. Soil samples MW-10@2.5-5' and MW-11@2.5-5' did not contain concentrations of BTEX or TPH exceeding applicable COGCC Table 910-1 regulatory limits. EAGLE repaired damaged monitoring wells MW-01 through MW-09 and surveyed MW-01 through MW-11 on April 15, 2020.

On May 19, 2020, EAGLE sampled MW-01 through MW-11. Based on laboratory analytical results, the groundwater sample collected from MW-02 contained a benzene concentration exceeding the COGCC Table 910-1 regulatory limit. Groundwater impacts have been defined beneath the site following the installation of MW-10 and MW-11.

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

Sincerely,

EAGLE ENVIRONMENTAL CONSULTING, INC.



Daniel Coloccia
Project Scientist

FIGURES

Figure 1: Monitoring Well Soil Sample Location Map

Figure 2: Groundwater Elevation Map (5/19/20)

Figure 3: Groundwater Sample Location Map

MW-10@2.5-5'
4/15/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-02@2.5-5'
2/3/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-11@2.5-5'
4/15/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-07@5-7.5'
2/3/2020
5-7.5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-03@5-7.5'
2/3/2020
5-7.5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = **51.9**
D = **547**

MW-06@2.5-5'
2/3/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-01@5-7.5'
2/3/2020
5-7.5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-08@7.5-10'
2/3/2020
7.5-10'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-04@2.5-5'
2/3/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-09@7.5-10'
2/3/2020
7.5-10'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

MW-05@2.5-5'
2/3/2020
2.5-5'
B = <0.0500
T = <0.0500
E = <0.0500
X = <0.0500
G = <5.00
D = <50.0

LEGEND

- X APPROXIMATE RELEASE LOCATION
- APPROXIMATE EXCAVATION EXTENTS (2019)
- ⊕ APPROXIMATE MONITORING WELL LOCATION

PARAMETERS

SOIL SAMPLE LOCATION	
DATE	
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)

mg/kg = MILLIGRAMS PER KILOGRAM

TPH-GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS

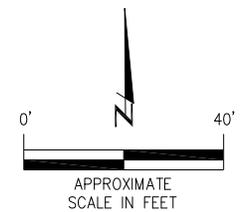
TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS

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

VALUES PRESENTED IN **BOLD** FONT INDICATE CONCENTRATION EXCEEDS THE APPLICABLE COGCC TABLE 910-1 REGULATORY LIMIT.

COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

ALL EQUIPMENT AND STRUCTURES HAVE BEEN REMOVED FROM THE SITE.



MONITORING WELL SOIL SAMPLE LOCATION MAP
WARREN MCMILLAN 2
LAT./LONG. 40.293236/-104.711610
SW 1/4 SW 1/4 SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDATION PROJECT #13978

DATE:
6/3/20

FIG. NO.
1

DRAWN BY:
DAC



EAGLE
ENVIRONMENTAL
CONSULTING, INC.
8900 W 44th Ave, Wheat Ridge, CO 80033
Ph: 303-433-0479 F: 303-325-5449

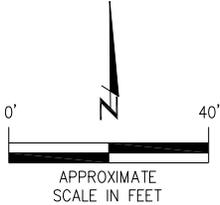


LEGEND

- X APPROXIMATE RELEASE LOCATION
- APPROXIMATE EXCAVATION EXTENTS (2019)
- ⊕ APPROXIMATE MONITORING WELL LOCATION
- (98.25) RELATIVE GROUNDWATER ELEVATION (FT.)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR (FT.)
- ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION
FT. = FEET

HYDRAULIC GRADIENT = 0.0096 FEET PER FOOT
(MEASURED BETWEEN MW-09 AND MW-02)

ALL EQUIPMENT AND STRUCTURES HAVE BEEN
REMOVED FROM THE SITE.



GROUNDWATER ELEVATION MAP
(5/19/20)
WARREN MCMILLAN 2
LAT./LONG. 40.293236/-104.711610
SW 1/4 SW 1/4 SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDATION PROJECT #13978

DATE:
6/3/20
FIG. NO.
2
DRAWN BY:
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MW-10
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-11
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-02
5/19/20
B = **51.4**
T = <1.00
E = 5.04
X = 3.21

MW-03
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-07
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-01
5/19/20
B = <4.00
T = <4.00
E = <4.00
X = <4.00

MW-06
5/19/20
B = <4.00
T = <4.00
E = <4.00
X = <4.00

MW-04
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-08
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-05
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

MW-09
5/19/20
B = <1.00
T = <1.00
E = <1.00
X = <1.00

LEGEND

- X APPROXIMATE RELEASE LOCATION
- APPROXIMATE EXCAVATION EXTENTS (2019)
- ⊕ APPROXIMATE MONITORING WELL LOCATION

PARAMETERS

GROUNDWATER SAMPLE LOCATION
DATE
B = BENZENE (µg/L)
T = TOLUENE (µg/L)
E = ETHYLBENZENE (µg/L)
X = TOTAL XYLENES (µg/L)

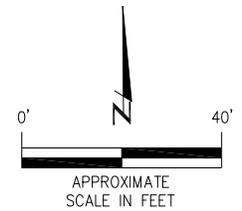
µg/L = MICROGRAMS PER LITER

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

VALUES IN **BOLD** TYPEFACE EXCEED COGCC TABLE 910-1 REGULATORY LIMITS

COGCC – COLORADO OIL AND GAS CONSERVATION COMMISSION

ALL EQUIPMENT AND STRUCTURES HAVE BEEN REMOVED FROM THE SITE.



GROUNDWATER SAMPLE LOCATION MAP
WARREN MCMILLAN 2
LAT./LONG. 40.293236/-104.711610
SW 1/4 SW 1/4 SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDATION PROJECT #13978

DATE:
6/3/20
FIG. NO.
3
DRAWN BY:
DAC

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TABLES

Table 1: Soil Analytical Results Summary

Table 2: Groundwater Elevation Summary

Table 3: Groundwater Analytical Results Summary

TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY
WARREN MCMILLAN 2
LAT./LONG. 40.293236/ -104.711610
SWSW SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDIATION PROJECT #13978

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	500	
SS1 @ 4' (40.293236/-104.711610)	07/30/19	4	0.580	0.810	1.28	19.2	482	536
BSS1 @ 9' (40.293233/-104.711589)	08/07/19	9	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
ESS1 @ 8' (40.293265/-104.711493)	08/08/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
SESS1 @ 8' (40.293128/-104.711490)	08/13/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
SSS1 @ 7' (40.293128/-104.711584)	08/14/19	7	<0.0500	<0.0500	0.662	4.39	293	962
SWSS1 @ 7' (40.293149/-104.711635)	08/14/19	7	<0.0500	<0.0500	1.32	1.18	296	981
WSS1 @ 7' (40.293205/-104.711631)	08/14/19	7	<0.0500	<0.0500	0.838	<0.0500	60.8	1080
NWSS1 @ 6' (40.293287/-104.711613)	08/14/19	6	<0.0500	<0.0500	0.0695	<0.0500	202	1000
NSS1 @ 6' (40.293300/-104.711554)	08/14/19	6	<0.0500	<0.0500	<0.0500	<0.0500	23.1	177
NESS1 @ 6' (40.293306/-104.711500)	08/14/19	6	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
SSS2 @ 8' (40.293044/-104.711555)	10/08/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
WSS2 @ 8' (40.293024/-104.711721)	10/09/19	8	<0.00200	<0.00200	<0.00200	<0.00200	12.3	264
SWSS2 @ 8' (40.292943/-104.711718)	10/09/19	8	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<50.0
SSS4 @ 8' (40.292907/-104.711644)	10/09/19	8	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<50.0
SESS2 @ 8' (40.292921/-104.711576)	10/09/19	8	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<50.0
SSS3 @ 8' (40.292971/-104.711520)	10/09/19	8	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<50.0
WSS3 @ 8' (40.293101/-104.711709)	10/14/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
WSS4 @ 8' (40.293173/-104.711722)	10/14/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0

TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY
WARREN MCMILLAN 2
LAT./LONG. 40.293236/ -104.711610
SWSW SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDIATION PROJECT #13978

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	500	
NSS2 @ 8' (40.293351/-104.711601)	10/14/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
NWSS2 @ 8' (40.293235/-104.711733)	10/14/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
NWSS3 @ 8' (40.293264/-104.711673)	10/14/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
NWSS4 @ 8' (40.293333/-104.711697)	12/12/19	8	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-01 @ 5-7.5' (40.293231, -104.711592)	02/03/20	5 - 7.5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-02 @ 2.5-5' (40.293357, -104.711591)	02/03/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-03 @ 5-7.5' (40.293295, -104.711492)	02/03/20	5 - 7.5	<0.0500	<0.0500	<0.0500	<0.0500	51.9	547
MW-04 @ 2.5-5' (40.293186, -104.711483)	02/03/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-05 @ 2.5-5' (40.293124, -104.711586)	02/03/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-06 @ 2.5-5' (40.293168, -104.711701)	02/03/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-07 @ 5-7.5' (40.293283, -104.711704)	02/03/20	5 - 7.5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-08 @ 7.5-10' (40.293034, -104.711628)	02/03/20	7.5 - 10	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-09 @ 7.5-10' (40.292899, -104.711625)	02/03/20	7.5 - 10	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-10 @ 2.5-5' (40.293407, -104.711676)	04/15/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<50.0
MW-11 @ 2.5-5' (40.293415, -104.711527)	04/15/20	2.5 - 5	<0.0500	<0.0500	<0.0500	<0.0500	<5.00	<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 laboratory detection limits.

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

TABLE 2
GROUNDWATER ELEVATION SUMMARY
WARREN MCMILLAN 2
LAT./LONG. 40.293236/-104.711610
SW 1/4 SW 1/4 SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDIATION PROJECT #13978

Sample Location (Latitude/Longitude)	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Depth to Groundwater from Ground Surface (feet)	Groundwater Elevation (feet)
MW-01 (40.293231, -104.711592)	02/13/20	99.13	8.83	5.73	90.30
	05/19/20	98.54	8.07	4.59	90.47
MW-02 (40.293357, -104.711591)	02/13/20	98.29	8.41	5.49	89.88
	05/19/20	97.82	7.91	4.46	89.91
MW-03 (40.293295, -104.711492)	02/13/20	98.34	8.22	5.19	90.12
	05/19/20	97.06	6.92	4.32	90.14
MW-04 (40.293186, -104.711483)	02/13/20	98.78	8.34	5.51	90.44
	05/19/20	98.04	7.53	4.57	90.51
MW-05 (40.293124, -104.711586)	02/13/20	99.03	8.37	5.45	90.66
	05/19/20	97.60	6.89	3.57	90.71
MW-06 (40.293168, -104.711701)	02/13/20	99.49	8.99	5.79	90.50
	05/19/20	98.55	7.88	4.68	90.67
MW-07 (40.293283, -104.711704)	02/13/20	99.08	10.32	7.15	88.76
	05/19/20	98.21	7.99	4.51	90.22
MW-08 (40.293034, -104.711628)	02/13/20	100.00	9.10	5.85	90.90
	05/19/20	99.29	8.33	4.95	90.96
MW-09 (40.292899, -104.711625)	02/13/20	99.80	8.45	6.24	91.55
	05/19/20	100.00	8.49	5.28	91.51
MW-10 (40.293407, -104.711676)	05/19/20	96.75	7.06	4.60	89.69
MW-11 (40.293415, -104.711527)	05/19/20	96.52	6.79	4.27	89.73

Note: Depth to groundwater from ground surface is calculated from subtracting the well stickup height from the measured depth of groundwater from top of casing. Due to an agricultural burn that damaged MW-01 through MW-09, EAGLE repaired the damaged monitoring wells and surveyed MW-01 through MW-11 following monitoring well installation activities on April 15, 2020.



TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY
WARREN MCMILLAN 2
LAT./LONG. 40.293236/-104.711610
SW 1/4 SW 1/4 SEC.19 T4N R65W 6PM
WELD COUNTY, COLORADO
REMEDIATION PROJECT #13978

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 @ 9' (40.293233/-104.711589)	08/07/19	107	11.1	180	667
MW-01 (40.293231, -104.711592)	02/13/20	<1.00	<1.00	1.72	<1.00
	05/19/20	<4.00	<4.00	<4.00	<4.00
MW-02 (40.293357, -104.711591)	02/13/20	153	<1.00	59.9	207
	05/19/20	51.4	<1.00	5.04	3.21
MW-03 (40.293295, -104.711492)	02/13/20	<1.00	<1.00	<1.00	<1.00
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-04 (40.293186, -104.711483)	02/13/20	<1.00	<1.00	<1.00	<1.00
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-05 (40.293124, -104.711586)	02/13/20	<1.00	<1.00	<1.00	<1.00
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-06 (40.293168, -104.711701)	02/13/20	<4.00	<4.00	<4.00	<4.00
	05/19/20	<4.00	<4.00	<4.00	<4.00
MW-07 (40.293283, -104.711704)	02/13/20	<1.00	<1.00	<1.00	3.61
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-08 (40.293034, -104.711628)	02/13/20	<1.00	<1.00	<1.00	<1.00
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-09 (40.292899, -104.711625)	02/13/20	<1.00	<1.00	<1.00	<1.00
	05/19/20	<1.00	<1.00	<1.00	<1.00
MW-10 (40.293407, -104.711676)	05/19/20	<1.00	<1.00	<1.00	3.61
MW-11 (40.293415, -104.711527)	05/19/20	<1.00	<1.00	<1.00	<1.00

COGCC = Colorado Oil and Gas Conservation Commission

µg/L - micrograms per liter

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

Note: Values presented with a less than symbol (<) did not contain concentrations at or above laboratory detection limits.



ATTACHMENT A

Well Completion Diagrams/Boring Logs

Boring Log/Well Completion Diagram: MW-10

DEPTH (FT)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (FT)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	(0-12') silty/sandy CLAY - brown to light brown, dry to wet, soft to stiff, low to medium plasticity, moderately graded with ~10% silt, 5% fine grained sand			1	60	1.3	N/A		Wet @ ~5'	
5	@6-8' - gray staining, HC odor	CL	DP	2	80	1.4				
10				3	100	5.5				
						2.3				
						1.9				
						1.5				
	BoB @12'									

PVC - Polyvinyl Chloride
 DP - Direct Push
 N/A - Not Applicable
 HC/O - Hydrocarbon Odor
 HC/S - Hydrocarbon Staining
 HA - Hand Auger
 BoB - Bottom of Boring
 N/O - No odor
 N/S - No staining

START/COMPLETION DATE: 4-15-2020		SAND PACK INTERVAL (FEET): 1.5-12	
PROJECT: WARREN MCMILLAN UNIT 2		BENTONITE/GROUT INTERVAL (FEET): 0-1.5	
LOGGED BY: G. CONGDON		WELL SCREEN INTERVAL (FEET): 2-12	
DRILLING COMPANY/EQUIPMENT: EAGLE/GEOPROBE		WELL DIAMETER (IN): 2	BOREHOLE DIAMETER (IN): 3.25
BORING DEPTH (FEET): 12	WELL DEPTH (FEET): 12	<p>EAGLE ENVIRONMENTAL CONSULTING, INC. 8000 W 44th Ave, Wheat Ridge, CO 80033 Ph: 303-433-0479 F: 303-325-5449</p>	
PID INSTRUMENT: MiniRAE 3000			
TIME STARTED/COMPLETED: 1101/1111			
SAMPLE COLLECTION DEPTH (FEET)/TIME: 2.5-5/1104			

Boring Log/Well Completion Diagram: MW-11

DEPTH (FT)	LITHOLOGY	SAMPLE				OVM/OVA (PPM)	BLOW COUNT (per 0.5 FT)	DEPTH (FT)	WELL CONSTRUCTION DETAIL	COMMENTS
	DESCRIPTION	GRAPHIC LOG	TYPE	NUMBER	RECOVERY %					
0	(0-12') silty/sandy CLAY - brown to light brown, dry to wet, soft to stiff, low to medium plasticity, moderately graded with ~10% silt, ~10% fine grained sand			1	70	2.1	N/A		Wet @ ~5'	
3.4										
5	@5-7' - slight gray staining, no HC odor	CL	DP	2	70	61.3				
2.6										
10				3	100	1.9				
1.8										
	BoB @12'									

PVC - Polyvinyl Chloride
 DP - Direct Push
 N/A - Not Applicable
 HC/O - Hydrocarbon Odor
 HC/S - Hydrocarbon Staining
 HA - Hand Auger
 BoB - Bottom of Boring
 N/O - No odor
 N/S - No staining

START/COMPLETION DATE: 4-15-2020		SAND PACK INTERVAL (FEET): 1.5-12	
PROJECT: WARREN MCMILLAN UNIT 2		BENTONITE/GROUT INTERVAL (FEET): 0-1.5	
LOGGED BY: G. CONGDON		WELL SCREEN INTERVAL (FEET): 2-12	
DRILLING COMPANY/EQUIPMENT: EAGLE/GEOPROBE		WELL DIAMETER (IN): 2	BOREHOLE DIAMETER (IN): 3.25
BORING DEPTH (FEET): 12	WELL DEPTH (FEET): 12	<p>EAGLE ENVIRONMENTAL CONSULTING, INC. 8000 W 44th Ave, Wheat Ridge, CO 80033 Ph: 303-433-0479 F: 303-325-5449</p>	
PID INSTRUMENT: MiniRAE 3000			
TIME STARTED/COMPLETED: 1041/1054			
SAMPLE COLLECTION DEPTH (FEET)/TIME: 2.5-5/1045			

ATTACHMENT B

Laboratory Analytical Reports



April 22, 2020

Eagle Environmental Consulting, Inc.

Dan Coloccia

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - PDC - Warren McMilan Unit 2

Project Number - [none]

Attached are your analytical results for PDC - Warren McMilan Unit 2 received by Origins Laboratory, Inc. April 15, 2020. This project is associated with Origins project number Y004216-01.

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.
8000 W 44th Ave
Wheat Ridge CO 80033

Dan Coloccia
Project Number: [none]
Project: PDC - Warren McMilan Unit 2

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-10@2.5-5'	Y004216-01	Soil	April 15, 2020 11:04	04/15/2020 12:23
MW-11@2.5-5'	Y004216-02	Soil	April 15, 2020 10:53	04/15/2020 12:23

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: Y004216

Client: Eagle

Client Project ID: PDC Warren McMilan Unit

Checklist Completed by: JG

Shipped Via: HD

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

Date/time completed: 4/15/2020

Airbill #: N/A

Matrix(s) Received: (Check all that apply): 7 Soil/Solid Water Other:

Cooler Number/Temperature: 1 15.7 °C / °C / °C (Describe) °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 ⁽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 HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+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.

Jm
 Reviewed by (Project Manager)

4-17-20
 Date/Time Reviewed

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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

MW-10@2.5-5'
4/15/2020 11:04:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y004216-01 (Soil)

BTEX/TVPH by EPA 8260D

Benzene	ND	0.0500	mg/kg	25	B0D1510	ZZZ	04/15/2020	04/15/2020	U
Toluene	ND	0.0500	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	0.0500	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.0500	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	5.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.4 %	70-130			"	"	"	"	

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	B0D1507	TEM	04/15/2020	04/15/2020	U
Surrogate: o-Terphenyl	69.1 %	50-150			"	"	"	"	

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

MW-11@2.5-5'
4/15/2020 10:53:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y004216-02 (Soil)

BTEX/TVPH by EPA 8260D

Benzene	ND	0.0500	mg/kg	25	B0D1510	ZZZ	04/15/2020	04/15/2020	U
Toluene	ND	0.0500	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	0.0500	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.0500	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	5.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.9 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	98.1 %	70-130			"	"	"	"	

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	B0D1507	TEM	04/15/2020	04/15/2020	U
Surrogate: o-Terphenyl	81.4 %	50-150			"	"	"	"	

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0D1507 - EPA 3580										
Blank (B0D1507-BLK1)					Prepared: 04/15/2020 Analyzed: 04/15/2020					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Surrogate: o-Terphenyl	19		"	25.0		75.7	50-150			

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

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

Batch B0D1507 - EPA 3580

LCS (B0D1507-BS1)

Prepared: 04/15/2020 Analyzed: 04/15/2020

Diesel (C10-C28)	920	50.0	mg/kg	1000		92.0	70-130			
Surrogate: <i>o</i> -Terphenyl	48		"	50.0		96.1	50-150			

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

Extractable Petroleum Hydrocarbons by 8015D - 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 B0D1507 - EPA 3580

Matrix Spike (B0D1507-MS1)	Source: Y004204-01			Prepared: 04/15/2020 Analyzed: 04/15/2020						
Diesel (C10-C28)	920	50.0	mg/kg	1000	ND	92.0	70-130			
Surrogate: o-Terphenyl	44		"	50.0		88.1	50-150			

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0D1507 - EPA 3580										
Matrix Spike Dup (B0D1507-MSD1)		Source: Y004204-01			Prepared: 04/15/2020 Analyzed: 04/15/2020					
Diesel (C10-C28)	934	50.0	mg/kg	1000	ND	93.4	70-130	1.56	35	
Surrogate: o-Terphenyl	45		"	50.0		89.4	50-150			

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

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

Batch B0D1510 - EPA 5030 (soil)

Blank (B0D1510-BLK1)

Prepared: 04/15/2020 Analyzed: 04/15/2020

Benzene	ND	0.00200	mg/kg							U
Toluene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		104	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		95.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B0D1510 - EPA 5030 (soil)

LCS (B0D1510-BS1)

Prepared: 04/15/2020 Analyzed: 04/15/2020

Benzene	0.106	0.00200	mg/kg	0.100		106	70-130			
Toluene	0.105	0.00200	"	0.100		105	70-130			
Ethylbenzene	0.108	0.00200	"	0.100		108	70-130			
m,p-Xylene	0.209	0.00400	"	0.200		105	70-130			
o-Xylene	0.103	0.00200	"	0.100		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		112	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

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

Batch B0D1510 - EPA 5030 (soil)

Matrix Spike (B0D1510-MS1)	Source: Y004227-01			Prepared: 04/15/2020 Analyzed: 04/15/2020						
Benzene	0.0926	0.00200	mg/kg	0.100	ND	92.6	70-130			
Toluene	0.0913	0.00200	"	0.100	ND	91.3	70-130			
Ethylbenzene	0.0943	0.00200	"	0.100	ND	94.3	70-130			
m,p-Xylene	0.184	0.00400	"	0.200	ND	91.8	70-130			
o-Xylene	0.0883	0.00200	"	0.100	ND	88.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		109	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMilan Unit 2

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

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

Batch B0D1510 - EPA 5030 (soil)

Matrix Spike Dup (B0D1510-MSD1)	Source: Y004227-01			Prepared: 04/15/2020 Analyzed: 04/15/2020						
Benzene	0.0999	0.00200	mg/kg	0.100	ND	99.9	70-130	7.50	20	
Toluene	0.0917	0.00200	"	0.100	ND	91.7	70-130	0.481	20	
Ethylbenzene	0.0981	0.00200	"	0.100	ND	98.1	70-130	3.89	20	
m,p-Xylene	0.191	0.00400	"	0.200	ND	95.4	70-130	3.84	20	
o-Xylene	0.0907	0.00200	"	0.100	ND	90.7	70-130	2.75	20	
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		108	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		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.
8000 W 44th Ave
Wheat Ridge CO 80033

Dan Coloccia
Project Number: [none]
Project: PDC - Warren McMilan Unit 2

Notes and Definitions

U Sample is Non-Detect.

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.



May 27, 2020

Eagle Environmental Consulting, Inc.

Dan Coloccia

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - PDC - Warren McMillan Unit 2

Project Number - [none]

Attached are your analytical results for PDC - Warren McMillan Unit 2 received by Origins Laboratory, Inc. May 19, 2020. This project is associated with Origins project number Y005263-01.

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.
8000 W 44th Ave
Wheat Ridge CO 80033

Dan Coloccia
Project Number: [none]
Project: PDC - Warren McMillan Unit 2

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	Y005263-01	Water	May 19, 2020 12:15	05/19/2020 14:36
MW-02	Y005263-02	Water	May 19, 2020 12:20	05/19/2020 14:36
MW-03	Y005263-03	Water	May 19, 2020 12:25	05/19/2020 14:36
MW-04	Y005263-04	Water	May 19, 2020 12:30	05/19/2020 14:36
MW-05	Y005263-05	Water	May 19, 2020 12:35	05/19/2020 14:36
MW-06	Y005263-06	Water	May 19, 2020 12:40	05/19/2020 14:36
MW-07	Y005263-07	Water	May 19, 2020 12:45	05/19/2020 14:36
MW-08	Y005263-08	Water	May 19, 2020 12:50	05/19/2020 14:36
MW-09	Y005263-09	Water	May 19, 2020 12:55	05/19/2020 14:36
MW-10	Y005263-10	Water	May 19, 2020 13:00	05/19/2020 14:36
MW-11	Y005263-11	Water	May 19, 2020 13:05	05/19/2020 14:36

Origins Laboratory, Inc.



The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2



Y00S26312

www.originslaboratory.com

page 1 of 2

Client: Eagle Env. Consulting
 Address: 8000 W 44th Ave
Wheat Ridge, CO 80033
 Telephone Number: 303.433-0479
 Email Address: dcoloccia@eagle-env.com

Project Manager: Daniel Coloccia
 Project Name: PDC - Warren McMillan 2
 Project Number: _____
 Samples Collected By: GEC

Fax: 303.265.9645 | Phone: 303.433.1322

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	BTEX	
MW-01	5/19/10	1215	3	X	X	X		X					1
MW-02		1220											2
MW-03		1225											3
MW-04		1230											4
MW-05		1235											5
MW-06		1240											6
MW-07		1245											7
MW-08		1250											8
MW-09		1255											9
MW-10		1300											10
Relinquished By: <u>[Signature]</u>	Date: <u>5/19/10</u>	Time: <u>1336</u>	Time: <u>1436</u>	Received By: <u>[Signature]</u>			Date: <u>5/19/10</u>	Time: <u>1436</u>	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/> Standard				
Relinquished By: _____	Date: _____	Time: _____	Time: _____	Received By: _____			Date: _____	Time: _____	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>				

Temp Received- 7.1 Date Results Needed

Origins Laboratory, Inc.

[Signature]

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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: Y005263

Client: Apex

Client Project ID: PDC-Warren McMillan

Checklist Completed by: JKDK

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

Date/time completed: 05 / 19 / 2020

Airbill #: N/A

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

Cooler Number/Temperature: 1 12.4 °C / °C / °C (Describe)

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 ⁽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 type="checkbox"/>	<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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+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.

jm
 Reviewed by (Project Manager)

5-20-20
 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-01

5/19/2020 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-01 (Water)

BTEX by EPA 8260D

Benzene	ND	4.00	ug/L	4	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	4.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	4.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	4.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	95.2 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-02

5/19/2020 12:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-02 (Water)

BTEX by EPA 8260D

Benzene	51.4	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	5.04	1.00	"	"	"	ZZZ	"	"	
Xylenes, total	3.21	1.00	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.7 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-03

5/19/2020 12:25:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-03 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	93.2 %	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.

Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-04

5/19/2020 12:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-04 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	93.9 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-05

5/19/2020 12:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-05 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	92.6 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-06

5/19/2020 12:40:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-06 (Water)

BTEX by EPA 8260D

Benzene	ND	4.00	ug/L	4	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	4.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	4.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	4.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	94.1 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-07

5/19/2020 12:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-07 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	94.5 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-08

5/19/2020 12:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-08 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	93.3 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-09

5/19/2020 12:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-09 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.6 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-10
5/19/2020 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-10 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	95.2 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

MW-11

5/19/2020 1:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y005263-11 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E2003	ZZZ	05/20/2020	05/20/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	95.6 %	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.

Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B0E2003 - EPA 5030B (Water)

Blank (B0E2003-BLK1)

Prepared: 05/20/2020 Analyzed: 05/20/2020

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5	92.4		70-130			
Surrogate: Toluene-d8	61		"	62.5	96.9		70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5	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.

Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B0E2003 - EPA 5030B (Water)

LCS (B0E2003-BS1)

Prepared: 05/20/2020 Analyzed: 05/20/2020

Benzene	43.0	1.00	ug/L	50.0		86.0	70-130			
Toluene	40.4	1.00	"	50.0		80.7	70-130			
Ethylbenzene	49.7	1.00	"	50.0		99.4	70-130			
m,p-Xylene	99.0	2.00	"	100		99.0	70-130			
o-Xylene	45.8	1.00	"	50.0		91.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		103	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B0E2003 - EPA 5030B (Water)

Matrix Spike (B0E2003-MS1)	Source: Y005256-01			Prepared: 05/20/2020 Analyzed: 05/20/2020						
Benzene	54.2	1.00	ug/L	50.0	ND	108	70-130			
Toluene	50.2	1.00	"	50.0	ND	100	70-130			
Ethylbenzene	63.6	1.00	"	50.0	ND	127	70-130			
m,p-Xylene	125	2.00	"	100	ND	125	70-130			
o-Xylene	55.7	1.00	"	50.0	ND	111	70-130			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		101	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.3	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	70-130			

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The results in 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.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: PDC - Warren McMillan Unit 2

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B0E2003 - EPA 5030B (Water)

Matrix Spike Dup (B0E2003-MSD1)	Source: Y005256-01			Prepared: 05/20/2020 Analyzed: 05/20/2020						
Benzene	53.4	1.00	ug/L	50.0	ND	107	70-130	1.34	20	
Toluene	50.4	1.00	"	50.0	ND	101	70-130	0.258	20	
Ethylbenzene	63.1	1.00	"	50.0	ND	126	70-130	0.821	20	
m,p-Xylene	124	2.00	"	100	ND	124	70-130	0.965	20	
o-Xylene	56.0	1.00	"	50.0	ND	112	70-130	0.483	20	
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		103	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

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Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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