



## **FIGURES**

**Figure 1: Groundwater Analytical Map (09/12/18)**

**Figure 2: Groundwater Elevation Map (09/12/18)**

**Figure 3: Grab Surface Water Sample Location Map (09/12/18)**



- LEGEND**
- APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE
  - APPROXIMATE FLOW LINE LOCATION
  - APPROXIMATE MONITORING WELL LOCATIONS
  - DESTROYED MONITORING WELL LOCATIONS

**PARAMETERS**

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

µg/L = MICROGRAMS PER LITER

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

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

COGCC - COLORADO OIL AND GAS CONSERVATION COMMISSION

INA = INACCESSIBLE

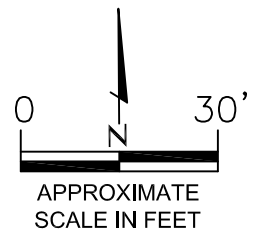
MW-14R  
 09/12/18  
 B = 2.09  
 T = <1.00  
 E = <1.00  
 X = <1.00

MW-12  
 09/12/18  
 B = **137**  
 T = <1.00  
 E = 12.4  
 X = <1.00

MW-16R  
 09/12/18  
 B = <1.00  
 T = <1.00  
 E = <1.00  
 X = <1.00

MW-11R  
 09/12/18  
 B = <1.00  
 T = <1.00  
 E = <1.00  
 X = <1.00

MW-07R  
 09/12/18  
 B = <1.00  
 T = <1.00  
 E = <1.00  
 X = <1.00



GROUNDWATER ANALYTICAL MAP  
 (09/12/18)  
 WARDLAW #20-28  
 FLOW LINE RELEASE  
 40.452377 / -104.550395  
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
 WELD COUNTY, COLORADO  
 REMEDIATION # 10185

DATE 10/25/18

FIG. NO. 1  
 DRAWN BY AMN

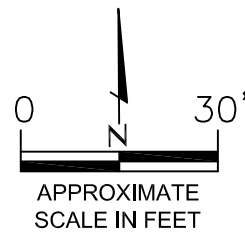




- LEGEND**
- APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE
  - APPROXIMATE FLOW LINE LOCATION
  - APPROXIMATE MONITORING WELL LOCATIONS
  - DESTROYED MONITORING WELL LOCATIONS
  - (4748.25)** GROUNDWATER ELEVATION (FT.)
  - INFERRED GROUNDWATER ELEVATION CONTOUR (FT.)
  - APPROXIMATE GROUNDWATER FLOW DIRECTION

FT. = FEET

NOTE:  
 GROUNDWATER ELEVATION DATA WAS COLLECTED ON 09/12/18.  
 GROUNDWATER ELEVATION DATA COLLECTED FROM MONITORING WELLS  
 MW-07R AND MW-14R WAS NOT USED IN THE CONSTRUCTION OF INFERRED  
 GROUNDWATER ELEVATION CONTOURS.



**GROUNDWATER ELEVATION MAP**  
 (09/12/18)  
 WARDLAW #20-28  
 FLOW LINE RELEASE  
 40.452377 / -104.550395  
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
 WELD COUNTY, COLORADO  
 REMEDIATION # 10185

DATE	10/25/18
FIG. NO.	2

DRAWN BY  
 AMN

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



SW-01	SW-01	SW-01	SW-01
12/12/17	03/16/18	06/13/18	09/12/18
B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-02	SW-02	SW-02	SW-02
12/12/17	03/16/18	06/13/18	09/12/18
B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-04	SW-04	SW-04	SW-04
12/12/17	03/16/18	06/13/18	09/12/18
B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-05 (NOP)  
 SW-06 (NOP)  
 SW-07 (NOP)  
 SW-08 (NOP)  
 SW-09 (NOP)

**LEGEND**

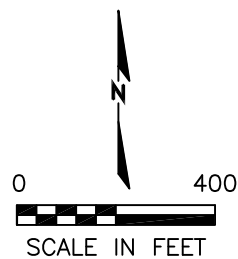
- X APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE
- WELL HEAD LOCATION
- APPROXIMATE LOCATION OF SURFACE WATER SAMPLES SUBMITTED FOR LABORATORY ANALYSIS
- SW-01
- (NOP) NOT ON PLAN

PARAMETERS

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

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

µg/L = MICROGRAMS PER LITER



**GRAB SURFACE WATER SAMPLE LOCATION MAP**  
 (09/12/18)  
 WARDLAW #20-28  
 FLOW LINE RELEASE  
 40.452377 / -104.550395  
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
 WELD COUNTY, COLORADO  
 REMEDIATION # 10185

DATE: 09/14/18

FIG. NO. 3

DRAWN BY:  
RAL



**EAGLE**  
 ENVIRONMENTAL  
 CONSULTING, INC.  
 4101 INCA STREET, DENVER, CO 80211  
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## **TABLES**

**Table 1: Water Analytical Results Summary**

**Table 2: Groundwater Elevation Summary**

**TABLE 1**  
**WATER ANALYTICAL RESULTS SUMMARY**  
**WARDLAW #20-28**  
**FLOW LINE RELEASE**  
**40.452377 / -104.550395**  
**SE1/4 SE1/4 SEC.28 T6N R64W 6PM**  
**WELD COUNTY, COLORADO**  
**REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>
SW-01 (40.452432487 / -104.550326268)	02/09/17	<1.00	2.54	<1.00	2.58
	02/13/17	<1.00	<1.00	<1.00	<1.00
	02/20/17	<1.00	<1.00	<1.00	<1.00
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	<1.00	<1.00	<1.00	<1.00
	09/12/18	<1.00	<1.00	<1.00	<1.00
SW-02 (40.451283697 / -104.550667387)	02/09/17	<b>100</b>	514	54.9	659
	02/13/17	<b>11.3</b>	83.8	9.64	240
	02/20/17	<1.00	<1.00	<1.00	3.18
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	<1.00	<1.00	<1.00	<1.00
	09/12/18	<1.00	<1.00	<1.00	<1.00
SW-03 (40.451208284 / -104.550759293)	02/09/17	<b>90.7</b>	459	48.8	605
	02/10/17	<b>6.24</b>	40.2	4.92	109
	02/13/17	<b>8.52</b>	42.8	4.36	152
	02/20/17	<1.00	<1.00	<1.00	2.45
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	NOP			
SW-04 (40.450779462 / -104.551161230)	02/10/17	4.92	28.4	<4.00	90.9
	02/13/17	<b>6.80</b>	32.0	<4.00	147
	02/20/17	<1.00	<1.00	<1.00	1.49
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	<1.00	<1.00	<1.00	<1.00
	09/12/18	<1.00	<1.00	<1.00	<1.00



**TABLE 1**  
**WATER ANALYTICAL RESULTS SUMMARY**  
**WARDLAW #20-28**  
**FLOW LINE RELEASE**  
**40.452377 / -104.550395**  
**SE1/4 SE1/4 SEC.28 T6N R64W 6PM**  
**WELD COUNTY, COLORADO**  
**REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>
SW-05 (40.449982352 / -104.551611892)	02/10/17	<4.00	8.20	<4.00	73.8
	02/13/17	<1.00	1.06	<1.00	22.8
	02/20/17	<1.00	<1.00	<1.00	<1.00
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	NOP			
SW-06 (40.449897202 / -104.551692223)	02/10/17	<4.00	<4.00	<4.00	16.5
	02/13/17	<1.00	<1.00	<1.00	<1.00
	02/20/17	<1.00	<1.00	<1.00	<1.00
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	NOP			
SW-07 (40.449690628 / -104.551677355)	02/10/17	<4.00	<4.00	<4.00	<4.00
	02/13/17	<1.00	<1.00	<1.00	<1.00
	02/20/17	<1.00	<1.00	<1.00	<1.00
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	NOP			
SW-08 (40.448928873 / -104.551685603)	02/10/17	<4.00	<4.00	<4.00	<4.00
	02/13/17	<1.00	<1.00	<1.00	<1.00
	02/20/17	<1.00	<1.00	<1.00	<1.00
	03/17/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
	09/14/17	<1.00	<1.00	<1.00	<1.00
	12/12/17	<1.00	<1.00	<1.00	<1.00
	03/16/18	<1.00	<1.00	<1.00	<1.00
	06/13/18	NOP			



**TABLE 1**  
**WATER ANALYTICAL RESULTS SUMMARY**  
**WARDLAW #20-28**  
**FLOW LINE RELEASE**  
**40.452377 / -104.550395**  
**SE1/4 SE1/4 SEC.28 T6N R64W 6PM**  
**WELD COUNTY, COLORADO**  
**REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>	
SW-09 (40.448299817 / -104.551680172)	02/10/17	<4.00	<4.00	<4.00	<4.00	
	02/13/17	<1.00	<1.00	<1.00	<1.00	
	02/20/17	<1.00	<1.00	<1.00	<1.00	
	03/17/17	<1.00	<1.00	<1.00	<1.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	06/13/18	NOP				
GW-01	02/11/17	<b>434</b>	<b>1560</b>	138	<b>1530</b>	
MW-01 (40.452393003 / -104.550433142)	03/27/17	<b>188</b>	<4.00	12.6	327	
	06/15/17	<b>614</b>	<1.00	<1.00	2.26	
	09/14/17	DES				
	12/12/17	DES				
MW-01R (40.452393003 / -104.550433142)	03/13/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-01R2 (40.452393003 / -104.550433142)	06/13/18	<b>198</b>	<1.00	<1.00	<1.00	
	09/12/18	DES				
MW-02 (40.452504816 / -104.550455313)	03/30/17	<1.00	<1.00	6.58	43.4	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/13/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-03 (40.452454447 / -104.550546129)	03/30/17	<1.00	<1.00	<1.00	<1.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/13/18	<1.00	<1.00	<1.00	<1.00	
	06/13/18	<1.00	<1.00	<1.00	<1.00	
	09/12/18	DES				



**TABLE 1**  
**WATER ANALYTICAL RESULTS SUMMARY**  
**WARDLAW #20-28**  
**FLOW LINE RELEASE**  
**40.452377 / -104.550395**  
**SE1/4 SE1/4 SEC.28 T6N R64W 6PM**  
**WELD COUNTY, COLORADO**  
**REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>	
MW-04 (40.452342502 / -104.550577837)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/13/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-05 (40.452208431 / -104.550603406)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/13/18	<1.00	<1.00	<1.00	<1.00	
	06/13/18	DES				
MW-05R (40.452208431 / -104.550603406)	06/13/18	<1.00	<1.00	<1.00	<1.00	
	09/12/18	DES				
MW-06 (40.452070696 / -104.550630887)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/13/18	1.39	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-07 (40.452002981 / -104.55055025)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/15/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-07R (40.452002981 / -104.55055025)	06/13/18	<1.00	<1.00	<1.00	<1.00	
	09/12/18	<1.00	<1.00	<1.00	<1.00	
MW-08 (40.451924937 / -104.550467803)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				



**TABLE 1**  
**WATER ANALYTICAL RESULTS SUMMARY**  
**WARDLAW #20-28**  
**FLOW LINE RELEASE**  
**40.452377 / -104.550395**  
**SE1/4 SE1/4 SEC.28 T6N R64W 6PM**  
**WELD COUNTY, COLORADO**  
**REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	
<b>COGCC Table 910-1 Regulatory Limits (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1400</b>	
MW-09 (40.452077465/-104.550441169)	03/27/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	3.15	<1.00	<1.00	<1.00	
	12/12/17	1.47	<1.00	<1.00	<1.00	
	03/16/18	1.09	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-09R (40.452077465/-104.550441169)	06/13/18	1.07	<1.00	<1.00	<1.00	
	09/12/18	DES				
MW-10 (40.452207178/-104.55040854)	03/28/17	<4.00	<4.00	<4.00	<4.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-11 (40.452321549/-104.550383609)	03/30/17	<1.00	<1.00	<1.00	<1.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-11R (40.452321549/-104.550383609)	06/13/18	<1.00	<1.00	<1.00	<1.00	
	09/12/18	<1.00	<1.00	<1.00	<1.00	
MW-12 (40.45239442/-104.550368154)	03/30/17	<b>210</b>	<b>480</b>	<b>19.8</b>	<b>424</b>	
	06/13/17	<b>2120</b>	<b>5560</b>	<b>251</b>	<b>3510</b>	
	09/14/17	<b>1310</b>	<1.00	<b>52.3</b>	<b>344</b>	
	12/12/17	<b>220</b>	<1.00	<b>31.6</b>	<b>24.7</b>	
	03/16/18	<b>95.7</b>	<4.00	<b>5.60</b>	<4.00	
	06/13/18	<b>96.1</b>	<4.00	<b>4.08</b>	<4.00	
	09/12/18	<b>137</b>	<1.00	<b>12.4</b>	<1.00	
MW-13 (40.452664489 / -104.550339323)	03/30/17	<1.00	<1.00	<1.00	<1.00	
	06/13/17	<1.00	<1.00	<1.00	<1.00	
	09/14/17	<1.00	<1.00	<1.00	<1.00	
	12/12/17	<1.00	<1.00	<1.00	<1.00	
	03/16/18	<1.00	<1.00	<1.00	<1.00	
	05/15/18	DES				
MW-13R (40.452664489 / -104.550339323)	06/13/18	<1.00	<1.00	<1.00	<1.00	
	09/12/18	DES				





**TABLE 2  
GROUNDWATER ELEVATION SUMMARY  
WARDLAW #20-28  
FLOW LINE RELEASE  
40.452377 / -104.550395  
SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
WELD COUNTY, COLORADO  
REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Relative Groundwater Elevation (feet)	Depth to Groundwater (bgs) (feet)	Stickup Height (feet)	
MW-01 (40.452393003 / -104.550433142)	03/28/17	98.78	7.74	91.04	4.88	2.86	
	06/15/17		7.20	91.58	4.34		
	09/14/17	DES					
MW-01R (40.452393003 / -104.550433142)	03/13/18	99.15	7.29	91.86	4.23	3.06	
	05/15/18	DES					
MW-01R2 (40.452393003 / -104.550433142)	06/13/18	98.45	5.79	92.66	2.76	3.03	
	09/12/18	DES					
MW-02 (40.452504816 / -104.550455313)	03/28/17	99.22	NM	NA	NA	2.92	
	03/30/17		9.83	89.39	6.91		
	06/13/17		5.54	93.68	2.62		
	09/14/17		5.41	93.81	2.49		
	12/12/17		6.04	93.18	3.12		
	03/13/18		5.99	93.23	3.07		
	05/15/18	DES					
MW-03 (40.452454447 / -104.550546129)	03/28/17	99.62	NM	NA	NA	3.10	
	03/30/17		12.97	86.65	9.87		
	06/13/17		6.00	93.62	2.90		
	09/14/17		5.89	93.73	2.79		
	12/12/17		6.53	93.09	3.43		
	03/13/18		6.48	93.14	3.38		
	06/13/18	98.22	4.25	95.37	1.15		
	09/12/18	DES					
MW-04 (40.452342502 / -104.550577837)	03/28/17	99.20	6.78	92.42	3.80	2.98	
	06/13/17		6.00	93.20	3.02		
	09/14/17		5.86	93.34	2.88		
	12/12/17		6.50	92.70	3.52		
	03/13/18		6.51	92.69	3.53		
	05/15/18	DES					
MW-05 (40.452208431 / -104.550603406)	03/28/17	98.64	6.63	92.01	3.63	3.00	
	06/13/17		6.05	92.59	3.05		
	09/14/17		5.93	92.71	2.93		
	12/12/17		6.49	92.15	3.49		
	03/13/18		6.56	92.08	3.56		
	05/15/18	DES					
MW-05R (40.452208431 / -104.550603406)	06/13/18	98.42	5.86	92.56	3.14	2.72	
	09/12/18	DES					
MW-06 (40.452070696 / -104.550630887)	03/28/17	98.38	6.44	91.94	3.49	2.95	
	06/13/17		6.04	92.34	3.09		
	09/14/17		5.93	92.45	2.98		
	12/12/17		6.42	91.96	3.47		
	03/13/18		6.52	91.86	3.57		
	05/15/18	DES					



**TABLE 2  
GROUNDWATER ELEVATION SUMMARY  
WARDLAW #20-28  
FLOW LINE RELEASE  
40.452377 / -104.550395  
SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
WELD COUNTY, COLORADO  
REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Relative Groundwater Elevation (feet)	Depth to Groundwater (bgs) (feet)	Stickup Height (feet)	
MW-07 (40.452002981 / -104.55055025)	03/28/17	98.37	6.57	91.80	3.65	2.92	
	06/15/17		6.66	91.71	3.74		
	09/14/17		6.56	91.81	3.64		
	12/12/17		6.91	91.46	3.99		
	03/13/18		7.04	91.33	4.12		
	05/15/18	DES					
MW-07R (40.452002981 / -104.55055025)	06/13/18	98.12	6.12	92.00	3.16	2.96	
	09/12/18		5.47	92.65			
MW-08 (40.451924937 / -104.550467803)	03/28/17	98.32	6.60	91.72	3.89	2.71	
	06/13/17		6.53	91.79	3.82		
	09/14/17		6.41	91.91	3.70		
	12/12/17		6.67	91.65	3.96		
	03/13/18		6.77	91.55	4.06		
	05/15/18	DES					
MW-09 (40.452077465 / -104.550441169)	03/28/17	98.78	7.14	91.64	4.48	2.66	
	06/13/17		6.85	91.93	4.19		
	09/14/17		6.76	92.02	4.10		
	12/12/17		7.03	91.75	4.37		
	03/13/18		7.11	91.67	4.45		
	05/15/18	DES					
MW-09R (40.452077465 / -104.550441169)	06/13/18	98.96	7.40	91.56	4.32	3.08	
	09/12/18	DES					
MW-10 (40.452207178 / -104.55040854)	03/28/17	98.91	NM	NA	NA	2.83	
	06/13/17		6.60	92.31	3.77		
	09/14/17		6.48	92.43	3.65		
	12/12/17		6.92	91.99	4.09		
	03/13/18		6.76	92.15	3.93		
	05/15/18	DES					
MW-11 (40.452321549 / -104.550383609)	03/28/17	99.27	NM	NA	NA	2.74	
	06/13/17		6.64	92.63	3.90		
	09/14/17		6.38	92.89	3.64		
	12/12/17		7.11	92.16	4.37		
	03/13/18		6.96	92.31	4.22		
	05/15/18	DES					
MW-11R (40.452321549 / -104.550383609)	06/13/18	99.24	12.34	86.90	9.44	2.90	
	09/12/18		6.81	92.43	12.34		



**TABLE 2  
GROUNDWATER ELEVATION SUMMARY  
WARDLAW #20-28  
FLOW LINE RELEASE  
40.452377 / -104.550395  
SE1/4 SE1/4 SEC.28 T6N R64W 6PM  
WELD COUNTY, COLORADO  
REMEDATION # 10185**

Sample Location (Latitude/Longitude)	Date	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Relative Groundwater Elevation (feet)	Depth to Groundwater (bgs) (feet)	Stickup Height (feet)
MW-12 (40.45239442 / -104.550368154)	03/28/17	99.34	NM	NA	NA	2.71
	03/30/17		13.64	85.70	10.93	
	06/13/17		6.48	92.86	3.77	
	09/14/17		6.26	93.08	3.55	
	12/12/17		6.97	92.37	4.26	
	03/13/18		6.88	92.46	4.17	
	06/13/18		6.39	92.95	3.68	
	09/12/18		6.47	92.87	3.76	
MW-13 (40.452664489 / -104.550339323)	03/28/17	100.00	NM	NA	NA	2.64
	06/13/17		6.55	93.45	3.91	
	09/14/17		6.31	93.69	3.67	
	12/12/17		6.89	93.11	4.25	
	03/13/18		6.83	93.17	4.19	
	05/15/18			DES		
MW-13R (40.452664489 / -104.550339323)	06/13/18	100.45	10.61	89.84	7.79	2.82
	09/12/18			DES		
MW-14 (40.452664489 / -104.550339323)	03/28/17	98.41	7.32	91.09	4.60	2.72
	06/15/17		6.60	91.81	3.88	
	09/14/17		6.48	91.93	3.76	
	12/12/17		7.08	91.33	4.36	
	03/13/18		7.11	91.30	4.39	
	05/15/18			DES		
MW-14R (40.452664489 / -104.550339323)	06/13/18	98.48	5.95	92.53	3.03	2.92
	09/12/18		5.59	92.89	2.67	
MW-15 (40.452232004 / -104.550269649)	03/28/17	99.54	NM	NA	NA	2.82
	06/15/17		7.33	92.21	4.51	
	09/14/17			DES		
MW-16 (40.452334255 / -104.550243785)	03/28/17	99.73	NM	NA	NA	2.86
	06/15/17		7.11	92.62	4.25	
	09/14/17			DES		
MW-16R (40.452334255 / -104.550243785)	03/13/18	100.29	7.90	92.39	4.68	3.22
	06/13/18		7.40	92.89	4.18	
	09/12/18		7.60	92.69	4.18	
MW-17 (40.452418346 / -104.55022411)	03/28/17	99.72	NM	NA	NA	2.75
	06/15/17		8.42	91.30	5.67	
	09/14/17			DES		
MW-17R (40.452418346 / -104.55022411)	03/13/18	100.08	7.61	92.47	4.63	2.98
	06/13/18		6.77	93.31	3.79	
	09/12/18		7.12	92.96	3.79	
<b>NOTES:</b> All wells completed as PVC stick ups.    TOC = top of casing    PVC = polyvinyl chloride    NM = not measured bgs= below ground surface    NA = not applicable    DES = Destroyed						





## **ATTACHMENT A**

### **Laboratory Analytical Report**

October 26, 2018

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

**Project Name - Noble - Wardlaw #20-28**

**Project Number - [none]**

Attached are your analytical results for Noble - Wardlaw #20-28 received by Origins Laboratory, Inc. September 12, 2018. This project is associated with Origins project number Y809135-01.

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



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Wardlaw #20-28

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-07R	Y809135-01	Water	September 12, 2018 12:44	09/12/2018 14:04
MW-11R	Y809135-02	Water	September 12, 2018 12:34	09/12/2018 14:04
MW-12	Y809135-03	Water	September 12, 2018 12:22	09/12/2018 14:04
MW-14R	Y809135-04	Water	September 12, 2018 12:13	09/12/2018 14:04
MW-16R	Y809135-05	Water	September 12, 2018 12:05	09/12/2018 14:04
MW-17R	Y809135-06	Water	September 12, 2018 11:56	09/12/2018 14:04
SW-01	Y809135-07	Water	September 12, 2018 12:47	09/12/2018 14:04
SW-02	Y809135-08	Water	September 12, 2018 12:50	09/12/2018 14:04
SW-04	Y809135-09	Water	September 12, 2018 12:54	09/12/2018 14:04

Per the email from Alex on 10/26/18, sample ID SW-03 was changed to SW-04.

Origins Laboratory, Inc.



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



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 1/20/135

Client: Eagle Env.

Client Project ID: Noble - Wardlaw 20-28

Checklist Completed by: J. Pellegrini

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

Date/time completed: 9-12-16

Airbill #: NA

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

Cooler Number/Temperature: 159 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C (Describe)

Thermometer ID: 6203

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

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

Reviewed by (Project Manager) [Signature]

Date/Time Reviewed 9/13/18

Origins Laboratory, Inc.

Jefe Pellegrini

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

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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**MW-07R**

**9/12/2018 12:44:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-01 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.3 %	84-114			"	"	"	"	

Origins Laboratory, Inc.



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

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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**MW-11R**

**9/12/2018 12:34:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B81202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	106 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.2 %	84-114			"	"	"	"	

Origins Laboratory, Inc.



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

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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**MW-12**

**9/12/2018 12:22:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-03 (Water)**

**BTEX by EPA 8260C**

Benzene	137	1.00	ug/L	1	B81202	KDK	09/12/2018	09/12/2018	
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	12.4	1.00	"	"	"	KDK	"	"	
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	98.1 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	"	

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**MW-14R**

**9/12/2018 12:13:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-04 (Water)**

**BTEX by EPA 8260C**

Benzene	2.09	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	99.1 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	"	

Origins Laboratory, Inc.



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

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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Wardlaw #20-28

**MW-16R**

**9/12/2018 12:05:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-05 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	99.3 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.7 %	84-114			"	"	"	"	

Origins Laboratory, Inc.



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

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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**MW-17R**

**9/12/2018 11:56:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-06 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	99.1 %	84-114			"	"	"	"	

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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**SW-01**

**9/12/2018 12:47:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-07 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.6 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	99.5 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	98.9 %	84-114			"	"	"	"	

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 Denver CO 80211

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**SW-02**

**9/12/2018 12:50:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-08 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B81202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	99.7 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.8 %	84-114			"	"	"	"	

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 Denver CO 80211

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

**SW-04**

**9/12/2018 12:54:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y809135-09 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B811202	KDK	09/12/2018	09/12/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.4 %	84-114			"	"	"	"	

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B811202 - EPA 5030B (Water)**

**Blank (B811202-BLK1)**

Prepared: 09/12/2018 Analyzed: 09/12/2018

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	67		"	62.5	108		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5	100		84-114			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B811202 - EPA 5030B (Water)**

**LCS (B811202-BS1)**

Prepared: 09/12/2018 Analyzed: 09/12/2018

Benzene	48.4	1.00	ug/L	50.0		96.7	73.3-129			
Toluene	54.1	1.00	"	50.0		108	76.2-123			
Ethylbenzene	49.4	1.00	"	50.0		98.9	73.6-130			
m,p-Xylene	103	2.00	"	100		103	76.1-126			
o-Xylene	48.9	1.00	"	50.0		97.8	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		103	84-121			
Surrogate: Toluene-d8	65		"	62.5		104	85-115			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	84-114			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B811202 - EPA 5030B (Water)**

Matrix Spike (B811202-MS1)	Source: Y809125-01			Prepared: 09/12/2018 Analyzed: 09/12/2018						
Benzene	55.9	1.00	ug/L	50.0	ND	112	74-130			
Toluene	53.0	1.00	"	50.0	ND	106	73-131			
Ethylbenzene	55.3	1.00	"	50.0	0.100	110	76-132			
m,p-Xylene	113	2.00	"	100	ND	113	69-139			
o-Xylene	54.8	1.00	"	50.0	0.110	109	74-131			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.0	85-115			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		108	84-114			

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 Denver CO 80211

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - Wardlaw #20-28

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B811202 - EPA 5030B (Water)**

Matrix Spike Dup (B811202-MSD1)	Source: Y809125-01			Prepared: 09/12/2018 Analyzed: 09/12/2018						
Benzene	51.8	1.00	ug/L	50.0	ND	104	74-130	7.71	20	
Toluene	59.9	1.00	"	50.0	ND	120	73-131	12.3	20	
Ethylbenzene	55.4	1.00	"	50.0	0.100	111	76-132	0.0542	20	
m,p-Xylene	115	2.00	"	100	ND	115	69-139	1.28	20	
o-Xylene	54.9	1.00	"	50.0	0.110	110	74-131	0.273	20	
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		103	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	84-114			

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4101 Inca Street  
Denver CO 80211

Martin C Eckert III  
Project Number: [none]  
Project: Noble - Wardlaw #20-28

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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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Jen Pellegrini For Noelle Doyle Mathis, President