



FIGURES

Figure 1: Monitoring Well Groundwater Analytical Map (06/13/17 & 06/15/17)

Figure 2: Groundwater Elevation Map (06/13/17 & 06/15/17)

Figure 3: Soil Boring Analytical Map

Figure 4: Grab Surface Water Sample Location Map



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

PARAMETERS

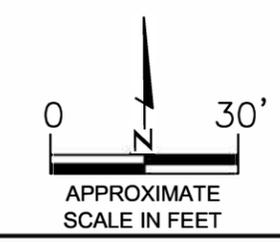
SAMPLE LOCATION	
DATE	
B	= BENZENE (µg/L)
T	= TOLUENE (µg/L)
E	= ETHYLBENZENE (µg/L)
X	= TOTAL XYLENES (µg/L)

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

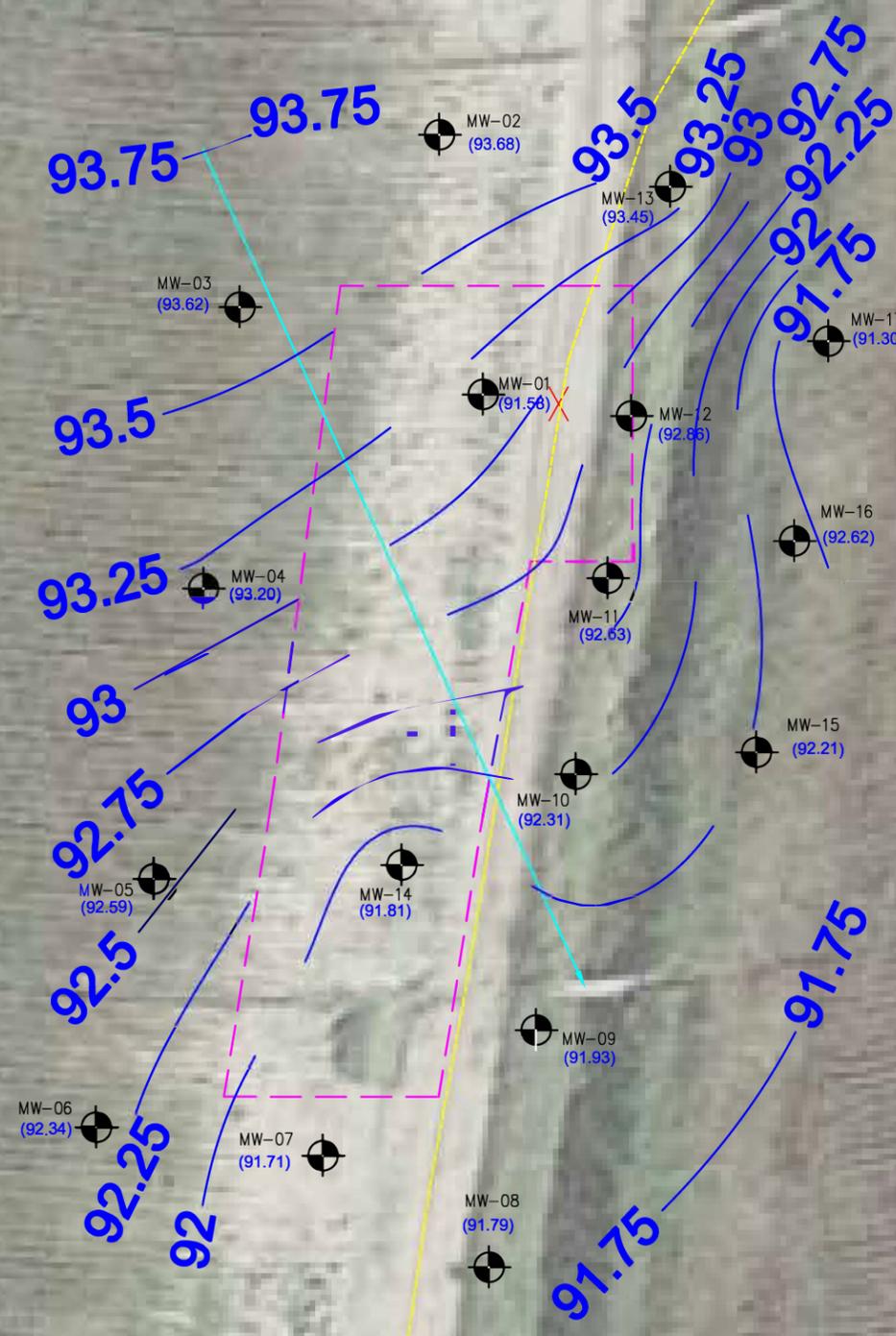


MONITORING WELL GROUNDWATER ANALYTICAL MAP
 (06/13/17 & 06/15/17)
 WARDLAW #20-28
 FLOW LINE RELEASE
 40.452377 / -104.550395
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-22511
 REMEDIATION # 10185

DATE 07/10/17

FIG. NO. 1
 DRAWN BY AN

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



- LEGEND**
- X APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE
 - APPROXIMATE FLOW LINE LOCATION
 - - - APPROXIMATE EXCAVATION BOUNDARIES
 - APPROXIMATE MONITORING WELL LOCATIONS

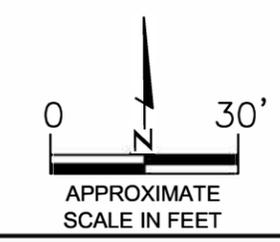
(4748.25) GROUNDWATER ELEVATION (FT.)

- - - INFERRED GROUNDWATER ELEVATION CONTOUR (FT.)

— APPROXIMATE GROUNDWATER FLOW DIRECTION

FT. = FEET

NOTE:
GROUNDWATER ELEVATION DATA WAS COLLECTED ON 06/13/17 AND 06/15/17. GROUNDWATER ELEVATION DATA COLLECTED FROM MONITORING WELLS MW-01, MW-12, MW-15, AND MW-16 WAS NOT USED IN THE CONSTRUCTION OF INFERRED GROUNDWATER ELEVATION CONTOURS.



GROUNDWATER ELEVATION MAP
(06/13/17 & 06/15/17)
 WARDLAW #20-28
 FLOW LINE RELEASE
 40.452377 / -104.550395
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-22511
 REMEDIATION # 10185

DATE
07/10/17

FIG. NO.
2

DRAWN BY
AN





SB-01@2.5-3'
06/02/17
2.5-3'

B = **0.188**
T = 1.20
E = 1.41
X = 2.84
N = <0.175
G = 37.7
D = <50.0

SB-02@2.5-3'
06/02/17
2.5-3'

B = **3.28**
T = 45.4
E = 6.63
X = 100
N = 1.44
G = **3040**
D = **1290**

SB-03@2.5-3'
06/02/17
2.5-3'

B = **0.520**
T = 6.26
E = 1.93
X = 21.3
N = 0.671
G = 332
D = **683**

- LEGEND**
- APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE
 - APPROXIMATE FLOW LINE LOCATION
 - APPROXIMATE EXCAVATION BOUNDARIES
 - APPROXIMATE MONITORING WELL LOCATIONS
 - APPROXIMATE SOIL BORING LOCATIONS

PARAMETERS

SAMPLE LOCATION
DATE
DEPTH (FEET)

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

mg/kg = MILLIGRAMS PER KILOGRAM

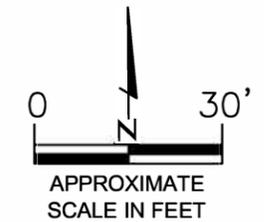
TPH-GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS

TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS

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

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

COGCC - COLORADO OIL AND GAS CONSERVATION COMMISSION



SOIL BORING ANALYTICAL MAP
WARDLAW #20-28
FLOW LINE RELEASE
40.452377 / -104.550395
SE1/4 SE1/4 SEC.28 T6N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-22511
REMEDATION # 10185

DATE 08/07/17

FIG. NO. 3

DRAWN BY AN





SW-01	SW-01	SW-01	SW-01	SW-01
02/09/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <1.0	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = 2.54	T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <1.00				
X = 2.58	X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-02	SW-02	SW-02	SW-02	SW-02
02/09/17	02/13/17	02/20/17	03/17/17	06/13/17
B = 100	B = 11.3	B = <1.00	B = <1.00	B = <1.00
T = 514	T = 83.8	T = <1.00	T = <1.00	T = <1.00
E = 54.9	E = 9.64	E = <1.00	E = <1.00	E = <1.00
X = 659	X = 240	X = 3.18	X = <1.00	X = <1.00

SW-04	SW-04	SW-04	SW-04	SW-04
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = 4.92	B = 6.80	B = <1.00	B = <1.00	B = <1.00
T = 28.4	T = 32.0	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <4.00	E = <1.00	E = <1.00	E = <1.00
X = 90.9	X = 147	X = 1.49	X = <1.00	X = <1.00

SW-03	SW-03	SW-03	SW-03	SW-03
02/09/17	02/10/17	02/13/17	02/20/17	03/17/17
B = 90.7	B = 6.24	B = 8.52	B = <1.00	B = <1.00
T = 459	T = 40.2	T = 42.8	T = <1.00	T = <1.00
E = 48.8	E = 4.92	E = 4.36	E = <1.00	E = <1.00
X = 605	X = 109	X = 152	X = 2.45	X = <1.00

SW-05	SW-05	SW-05	SW-05	SW-05
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <4.00	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = 8.20	T = 1.06	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = 73.8	X = 22.8	X = <1.00	X = <1.00	X = <1.00

SW-06	SW-06	SW-06	SW-06	SW-06
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <4.00	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <4.00	T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = 16.5	X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-08	SW-08	SW-08	SW-08	SW-08
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <4.00	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <4.00	T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <4.00	X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-07	SW-07	SW-07	SW-07	SW-07
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <4.00	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <4.00	T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <4.00	X = <1.00	X = <1.00	X = <1.00	X = <1.00

SW-09	SW-09	SW-09	SW-09	SW-09
02/10/17	02/13/17	02/20/17	03/17/17	06/13/17
B = <4.00	B = <1.00	B = <1.00	B = <1.00	B = <1.00
T = <4.00	T = <1.00	T = <1.00	T = <1.00	T = <1.00
E = <4.00	E = <1.00	E = <1.00	E = <1.00	E = <1.00
X = <4.00	X = <1.00	X = <1.00	X = <1.00	X = <1.00

LEGEND

✗ APPROXIMATE LOCATION OF UNINTENTIONAL RELEASE

□ WELL HEAD LOCATION

● APPROXIMATE LOCATION OF SURFACE WATER SAMPLES SUBMITTED FOR LABORATORY ANALYSIS

PARAMETERS

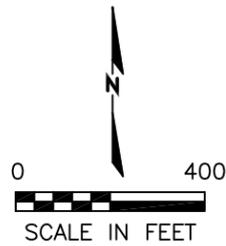
SURFACE WATER SAMPLE LOCATION DATE
B = BENZENE (µg/L)
T = TOLUENE (µg/L)
E = ETHYLBENZENE (µg/L)
X = TOTAL XYLENES (µg/L)

µg/L = MICROGRAMS PER LITER

NOTES: VALUES PRESENTED IN **BOLD** EXCEEDING COGCC TABLE 910-1 REGULATORY LIMITS

COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

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



GRAB SURFACE WATER SAMPLE LOCATION MAP
 WARDLAW #20-28
 FLOW LINE RELEASE
 40.452377 / -104.550395
 SE1/4 SE1/4 SEC.28 T6N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-22511
 REMEDIATION # 10185

DATE: 08/07/17

FIG. NO. 4

DRAWN BY:
RAL



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



TABLES

Table 1: Water Analytical Results Summary

Table 2: Groundwater Elevation Summary

Table 3: Soil Analytical Results 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
API # 05-123-22511
REMEDATION # 10185**

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
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
SW-02 (40.451283697/-104.550667387)	02/09/17	100	514	54.9	659
	02/13/17	11.3	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
SW-03 (40.451208284/-104.550759293)	02/09/17	90.7	459	48.8	605
	02/10/17	6.24	40.2	4.92	109
	02/13/17	8.52	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
SW-04 (40.450779462/-104.551161230)	02/10/17	4.92	28.4	<4.00	90.9
	02/13/17	6.80	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
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
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
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

**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
API # 05-123-22511
REMEDATION # 10185**

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
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
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
GW-01	02/11/17	434	1560	138	1530
MW-01 (40.452393003/-104.550433142)	03/27/17	188	<4.00	12.6	327
	06/15/17	614	<1.00	<1.00	2.26
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
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
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
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
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
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
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
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

**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
API # 05-123-22511
REMEDATION # 10185**

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
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
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
MW-12 (40.45239442/-104.550368154)	03/30/17	210	480	19.8	424
	06/13/17	2120	5560	251	3510
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
MW-14 (40.452664489/-104.550339323)	03/28/17	<4.00	<4.00	<4.00	<4.00
	06/15/17	96.0	<1.00	<1.00	23.6
MW-15 (40.452232004/-104.550269649)	03/30/17	<1.00	<1.00	<1.00	<1.00
	06/15/17	<1.00	<1.00	<1.00	<1.00
MW-16 (40.452334255/-104.550243785)	03/30/17	<1.00	<1.00	<1.00	<1.00
	06/15/17	<1.00	<1.00	<1.00	<1.00
MW-17 (40.452418346/-104.55022411)	03/30/17	<1.00	<1.00	<1.00	<1.00
	06/13/17	<1.00	<1.00	<1.00	<1.00
COGCC = Colorado Oil and Gas Conservation Commission NS = Not Sampled µg/L - micrograms per liter Note: Values presented with a less than symbol (<) indicate concentrations were not observed at or above the laboratory reporting limit. Values presented in bold typeface exceed their respective COGCC - Regulatory Limits (Table 910-1).					

**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
API # 05-123-22511
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	

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
API # 05-123-22511
REMEDIAATION # 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-13 (40.452664489/-104.550339323)	03/28/17	100.00	NM	NA	NA	2.64
	06/13/17		6.55	93.45	3.91	
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	
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	
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	
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	

NOTES:

All wells completed as PVC stick ups.
bgs= below ground surface

TOC = top of casing
NA = not applicable

PVC = polyvinyl chloride

NM = not measured

TABLE 3
SOIL 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
API # 05-123-22511
REMEDIATION # 10185

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500	
SS-01 @ 0-0.25' (40.452447524/-104.550227221)	02/09/17	0-0.25	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	60.6
SS-02 @ 0-0.25' (40.452349385/-104.550234539)	02/09/17	0-0.25	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0
SS-03 @ 0-0.25' (40.45225096/-104.550256109)	02/09/17	0-0.25	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-04 @ 0-0.25' (40.452269542/-104.550446517)	02/09/17	0-0.25	3.11	33.3	10.3	116	7.71	2110	10700
SS-05 @ 0-0.25' (40.452438231/-104.550337801)	02/09/17	0-0.25	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0
SS-06 @ 0-0.25' (40.452359194/-104.550355944)	02/09/17	0-0.25	0.910	7.79	5.47	53.0	1.21	820	1610
SS-07 @ 0-0.25' (40.451329451/-104.550618245)	02/09/17	0-0.25	<0.002	0.003	0.005	0.013	<0.007	<0.200	<50.0
SS-08 @ 2.5' (40.452408473/-104.550377526)	02/10/17	2.5	0.540	12.4	2.14	37.4	0.590	1310	1730
SS-09 @ 2.5' (40.452381167/-104.550378831)	02/10/17	2.5	0.982	22.5	5.59	72.1	1.37	2690	4000
SS-10 @ 2.5' (40.452368941/-104.550381277)	02/10/17	2.5	0.228	2.59	0.826	10.8	0.504	432	1220
SS-11 @ 2.5' (40.452354426/-104.550505746)	02/11/17	2.5	<0.050	<0.050	<0.050	<0.050	0.218	<5.00	<50.0
SS-12 @ 2.5' (40.452420814/-104.550474765)	02/11/17	2.5	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0
SS-13 @ 2.5' (40.452438664/-104.550409312)	02/11/17	2.5	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0



TABLE 3
SOIL 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
API # 05-123-22511
REMEDIATION # 10185

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500	
SS-14 @ 2.5' (40.452451844/-104.550470629)	02/11/17	2.5	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0
SS-15 @ 2.5' (40.452280017/-104.550531153)	02/11/17	2.5	<0.050	0.144	<0.050	0.108	<0.175	<5.00	<50.0
SS-16 @ 2.5' (40.452200008/-104.550556068)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-17 @ 2.5' (40.452141253/-104.550438293)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-18 @ 2.5' (40.452208054/-104.550429149)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-19 @ 2.5' (40.452269681/-104.550416571)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SS-20 @ 2.5' (40.452334006/-104.550387928)	02/13/17	2.5	<0.050	<0.050	<0.050	<0.050	<0.175	<5.00	<50.0
SS-21 @ 2.5' (40.452353541/-104.550366664)	02/13/17	2.5	0.058	0.670	0.660	8.19	0.349	152	1010
SS-22 @ 2.5' (40.452381911/-104.550361448)	02/13/17	2.5	0.308	4.24	1.93	18.5	0.458	477	1160
SS-23 @ 2.5' (40.452431894/-104.550373124)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	0.334	<50.0
SS-24 @ 2.5' (40.452119438/-104.550560733)	02/13/17	2.5	0.002	0.013	0.010	0.027	<0.007	0.211	<50.0
SS-25 @ 2.5' (40.452068747/-104.550529751)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0

TABLE 3
SOIL 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
API # 05-123-22511
REMEDIATION # 10185

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500	
SS-26 @ 2.5' (40.452067728/-104.550497261)	02/13/17	2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-02 @ 0-2.5' (40.452504816/-104.550455313)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-03 @ 0-2.5' (40.452454447/-104.550546129)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-04 @ 0-2.5' (40.452342502/-104.550577837)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-05 @ 0-2.5' (40.452208431/-104.550603406)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-06 @ 0-2.5' (40.452070696/-104.550630887)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-07 @ 0-2.5' (40.452002981/-104.55055025)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-08 @ 0-2.5' (40.451924937/-104.550467803)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-09 @ 0-2.5' (40.452077465/-104.550441169)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-10 @ 0-2.5' (40.452207178/-104.55040854)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-11 @ 0-2.5' (40.452321549/-104.550383609)	03/27/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-13 @ 0-2.5' (40.452664489/-104.550339323)	03/28/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-15 @ 0-2.5' (40.452232004/-104.550269649)	03/28/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0



TABLE 3
SOIL 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
API # 05-123-22511
REMEDIATION # 10185

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
COGCC Table 910-1 Regulatory Limits (mg/kg)			0.17	85	100	175	23	500	
MW-16 @ 0-2.5' (40.452334255/-104.550243785)	03/28/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
MW-17 @ 0-2.5' (40.452418346/-104.55022411)	03/28/17	0-2.5	<0.002	<0.002	<0.002	<0.002	<0.007	<0.200	<50.0
SB-01 @ 2.5-3' (40.452398119/-104.550348642)	06/02/17	2.5-3	0.188	1.20	1.41	2.84	<0.175	37.7	<50.0
SB-02 @ 2.5-3' (40.452371856/-104.550365576)	06/02/17	2.5-3	3.28	45.4	6.63	100	1.44	3040	1290
SB-03 @ 2.5-3' (40.452344614/-104.550363885)	06/02/17	2.5-3	0.520	6.26	1.93	21.3	0.671	332	683

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

Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit.





ATTACHMENT A

Laboratory Analytical Reports



June 08, 2017

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. June 02, 2017. This project is associated with Origins project number Y706035-01.

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

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

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

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

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

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



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

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

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

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-01@2.5-3'	Y706035-01	Soil	June 2, 2017 10:05	06/02/2017 15:00
SB-02@2.5-3'	Y706035-02	Soil	June 2, 2017 9:45	06/02/2017 15:00
SB-03@2.5-3'	Y706035-03	Soil	June 2, 2017 9:30	06/02/2017 15:00

Origins Laboratory, Inc.



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

Jen Pellegrini For Noelle Doyle Mathis, President

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

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

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 7106035

Client: Eagle Env -

Client Project ID: Noble - Wardlaw

Checklist Completed by: Dale

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

Date/time completed: 6-2-12 1520

Airbill #: N/A

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

Cooler Number/Temperature: 1 6.2 °C °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 ≤ 5°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		Sampled same Day
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCl, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH).		<input checked="" type="checkbox"/>		
Additional Comments (if any):				

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

Reviewed by: APD (Project Manager)

Date/Time Reviewed: 6/5/12

Origins Laboratory, Inc.



The results in 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

SB-01@2.5-3'
6/2/2017 10:05:00AM

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

Origins Laboratory, Inc.
Y706035-01 (Soil)

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

Diesel (C10-C28)	ND	50.0	mg/kg	1	B7F0203	06/02/2017	06/07/2017	U
Surrogate: <i>o</i> -Terphenyl	71.3 %	59-131			"	"	"	

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	37.7	5.00	mg/kg	25	B7F0202	06/02/2017	06/03/2017	
Benzene	0.188	0.050	"	"	"	"	"	
Toluene	1.20	0.050	"	"	"	"	"	
Ethylbenzene	1.41	0.050	"	"	"	"	"	
Xylenes, total	2.84	0.050	"	"	"	"	"	
Napthalene	ND	0.175	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	99.3 %	70-130			"	"	"	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	

Origins Laboratory, Inc.



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

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

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

SB-02@2.5-3'
6/2/2017 9:45:00AM

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

Origins Laboratory, Inc.
Y706035-02 (Soil)

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

Diesel (C10-C28)	1290	50.0	mg/kg	1	B7F0203	06/02/2017	06/07/2017	
Surrogate: <i>o</i> -Terphenyl	130 %	59-131			"	"	"	

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	3040	50.0	mg/kg	250	B7F0202	06/02/2017	06/06/2017	
Benzene	3.28	0.050	"	25	"	"	06/03/2017	
Toluene	45.4	0.498	"	250	"	"	06/06/2017	
Ethylbenzene	6.63	0.050	"	25	"	"	06/03/2017	
Xylenes, total	100	0.498	"	250	"	"	06/06/2017	
Naphthalene	1.44	0.175	"	25	"	"	06/03/2017	
Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130			"	"	"	
Surrogate: Toluene-d8	103 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	118 %	70-130			"	"	"	

Origins Laboratory, Inc.



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

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

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

SB-03@2.5-3'
6/2/2017 9:30:00AM

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

Origins Laboratory, Inc.
Y706035-03 (Soil)

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

Diesel (C10-C28)	683	50.0	mg/kg	1	B7F0203	06/02/2017	06/07/2017	
Surrogate: <i>o</i> -Terphenyl	101 %	59-131			"	"	"	

GBTEX + Napthalene by 8260C

Gasoline Range Hydrocarbons	332	5.00	mg/kg	25	B7F0202	06/02/2017	06/03/2017	
Benzene	0.520	0.050	"	"	"	"	"	
Toluene	6.26	0.050	"	"	"	"	"	
Ethylbenzene	1.93	0.050	"	"	"	"	"	
Xylenes, total	21.3	0.050	"	"	"	"	"	
Naphthalene	0.671	0.175	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130			"	"	"	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"	

Origins Laboratory, Inc.



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

Eagle Environmental Consulting, Inc.
 4101 Inca Street
 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
Batch B7F0202 - EPA 5030 (soil)										
Blank (B7F0202-BLK1)										
					Prepared: 06/02/2017 Analyzed: 06/02/2017					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Naphthalene	ND	0.007	"							U
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.7	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.6	70-130			

Origins Laboratory, Inc.



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

Eagle Environmental Consulting, Inc.
 4101 Inca Street
 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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B7F0202 - EPA 5030 (soil)

LCS (B7F0202-BS1)

Prepared: 06/02/2017 Analyzed: 06/02/2017

Benzene	0.096	0.002	mg/kg	0.100		96.0	70-130			
Toluene	0.094	0.002	"	0.100		94.4	70-130			
Ethylbenzene	0.097	0.002	"	0.100		97.1	70-130			
m,p-Xylene	0.192	0.004	"	0.200		96.0	70-130			
o-Xylene	0.097	0.002	"	0.100		97.2	70-130			
Naphthalene	0.107	0.007	"	0.100		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		99.3	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - 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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B7F0202 - EPA 5030 (soil)

Matrix Spike (B7F0202-MS1)	Source: Y706009-01			Prepared: 06/02/2017 Analyzed: 06/02/2017						
Benzene	0.106	0.002	mg/kg	0.100	ND	106	70-130			
Toluene	0.102	0.002	"	0.100	ND	102	70-130			
Ethylbenzene	0.105	0.002	"	0.100	ND	105	70-130			
m,p-Xylene	0.205	0.004	"	0.200	ND	102	70-130			
o-Xylene	0.104	0.002	"	0.100	ND	104	70-130			
Naphthalene	0.105	0.007	"	0.100	0.001	104	70-130			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.2	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - 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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B7F0202 - EPA 5030 (soil)

Matrix Spike Dup (B7F0202-MSD1)	Source: Y706009-01			Prepared: 06/02/2017 Analyzed: 06/02/2017						
Benzene	0.091	0.002	mg/kg	0.100	ND	90.5	70-130	15.6	20	
Toluene	0.088	0.002	"	0.100	ND	88.1	70-130	14.8	20	
Ethylbenzene	0.088	0.002	"	0.100	ND	88.0	70-130	17.2	20	
m,p-Xylene	0.175	0.004	"	0.200	ND	87.7	70-130	15.5	20	
o-Xylene	0.087	0.002	"	0.100	ND	87.0	70-130	17.4	20	
Naphthalene	0.092	0.007	"	0.100	0.001	91.4	70-130	12.6	20	
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		103	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.8	70-130			

Origins Laboratory, Inc.



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

Eagle Environmental Consulting, Inc.
 4101 Inca Street
 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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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

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

Batch B7F0203 - EPA 3580

Blank (B7F0203-BLK1)

Prepared: 06/02/2017 Analyzed: 06/06/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Surrogate: o-Terphenyl	46		"	50.0		91.1	59-131			

LCS (B7F0203-BS1)

Prepared: 06/02/2017 Analyzed: 06/06/2017

Diesel (C10-C28)	927	50.0	mg/kg	1000		92.7	64-121			
Surrogate: o-Terphenyl	46		"	50.0		92.3	59-131			

Matrix Spike (B7F0203-MS1)

Source: Y706009-01

Prepared: 06/02/2017 Analyzed: 06/06/2017

Diesel (C10-C28)	815	50.0	mg/kg	1000	ND	81.5	53-125			
Surrogate: o-Terphenyl	41		"	50.0		82.2	59-131			

Matrix Spike Dup (B7F0203-MSD1)

Source: Y706009-01

Prepared: 06/02/2017 Analyzed: 06/06/2017

Diesel (C10-C28)	785	50.0	mg/kg	1000	ND	78.5	53-125	3.72	20	
Surrogate: o-Terphenyl	38		"	50.0		76.8	59-131			

Origins Laboratory, Inc.



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

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

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

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.

Jen Pellegrini For Noelle Doyle Mathis, President



June 22, 2017

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. June 13, 2017. This project is associated with Origins project number Y706165-01.

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

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

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

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

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

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



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

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

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

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-02	Y706165-01	Water	June 13, 2017 11:30	06/13/2017 16:08
MW-03	Y706165-02	Water	June 13, 2017 11:40	06/13/2017 16:08
MW-04	Y706165-03	Water	June 13, 2017 11:50	06/13/2017 16:08
MW-05	Y706165-04	Water	June 13, 2017 12:00	06/13/2017 16:08
MW-06	Y706165-05	Water	June 13, 2017 12:10	06/13/2017 16:08
MW-08	Y706165-06	Water	June 13, 2017 12:40	06/13/2017 16:08
MW-09	Y706165-07	Water	June 13, 2017 12:30	06/13/2017 16:08
MW-10	Y706165-08	Water	June 13, 2017 12:20	06/13/2017 16:08
MW-11	Y706165-09	Water	June 13, 2017 13:20	06/13/2017 16:08
MW-12	Y706165-10	Water	June 13, 2017 13:10	06/13/2017 16:08
MW-13	Y706165-11	Water	June 13, 2017 13:00	06/13/2017 16:08
MW-17	Y706165-12	Water	June 13, 2017 12:50	06/13/2017 16:08
SW-01	Y706165-13	Water	June 13, 2017 13:45	06/13/2017 16:08
SW-02	Y706165-14	Water	June 13, 2017 13:50	06/13/2017 16:08

Origins Laboratory, Inc.



The results in 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

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-03	Y706165-15	Water	June 13, 2017 13:55	06/13/2017 16:08
SW-04	Y706165-16	Water	June 13, 2017 14:00	06/13/2017 16:08
SW-05	Y706165-17	Water	June 13, 2017 14:10	06/13/2017 16:08
SW-06	Y706165-18	Water	June 13, 2017 14:15	06/13/2017 16:08
SW-07	Y706165-19	Water	June 13, 2017 14:25	06/13/2017 16:08
SW-08	Y706165-20	Water	June 13, 2017 14:30	06/13/2017 16:08
SW-09	Y706165-21	Water	June 13, 2017 14:35	06/13/2017 16:08
MW-01	Y706204-01	Water	June 15, 2017 12:10	06/15/2017 18:40
MW-07	Y706204-02	Water	June 15, 2017 12:00	06/15/2017 18:40
MW-14	Y706204-03	Water	June 15, 2017 11:50	06/15/2017 18:40
MW-15	Y706204-04	Water	June 15, 2017 11:40	06/15/2017 18:40
MW-16	Y706204-05	Water	June 15, 2017 11:30	06/15/2017 18:40

Origins Laboratory, Inc.



The results in 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

www.originslaboratory.com

YOUS page 1 of 3

ORIGINS
 LABORATORY, INC

Client: EAGLE ENV. CONSULTING
 Address: 4101 INCA ST.
DENVER, CO 80211
 Telephone Number: 303-433-0429
 Email Address: MCE@EAGLE-ENVIR.O.COM

Project Manager: MARTIN ECKERT III
 Project Name: WARDLAW 20-28
 Project Number: ---
 Samples Collected By: SV

1725 EIK Pidge | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis		Sample Instructions				
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #	Other						
MW-02	6/13/17	1130	3		✓												
MW-03		1140															
MW-04		1150															
MW-05		1200															
MW-06		1210															
MW-08		1240															
MW-09		1230															
MW-10		1220															
MW-11		1320															
MW-12		1310															
Relinquished By:	Date:		Time:		Received By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:						
	6/13/17		1608			6-13-17	1608		6-13-17		Same Day <input type="checkbox"/>	24 Hr <input type="checkbox"/>					
											48 Hr <input type="checkbox"/>	72 Hr <input type="checkbox"/>					
											Standard <input checked="" type="checkbox"/>						

Date Results Needed: ANDRLE

Temp Received: 74°L

Relinquished By: JACOB

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

www.originslaboratory.com

770165

page 2 of 3

ORIGINS
 LABORATORY, INC

Client: EAGLE ENV. CONSULTING
 Address: 4101 INCA ST.
DENVER, CO 80211
 Telephone Number: 303-433-0437
 Email Address: MCE@EAGLE-EMVIRG.COM

Project Manager: MARTIN ECKERT III
 Project Name: WARDLAW 20-28
 Project Number: -
 Samples Collected By: SV

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

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions		
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Conister #			Other	
MW-13	6/13/17	1300	3											
MW-17		1250												
SW-01		1345												
SW-02		1350												
SW-03		1355												
SW-04		1400												
SW-05		1410												
SW-06		1415												
SW-07		1425												
SW-08		1430												
Relinquished By:	Date: 6/13/17	Time: 1608	Time: 1608	Received By:	Date: 6-13-17	Time: 1605	Received By:	Date: 6-13-17	Time: 1605	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:	Received By:	Date:	Time:					

Temp Received: 74°
 Date Results Needed: NOBLE
 Bill To: JACO B

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

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 4706165 Client: Eagle Env
 Client Project ID: Noble - Wardlaw 20-28
 Checklist Completed by: Paul Shipped Via: HD
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Date/time completed: 6-14-12 1106 Airbill #: NA
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1 12.4 °C / _____ °C / _____ °C (Describe)
 Thermometer ID: T065

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	/			
Is there ice present (document if blue ice is used)	/			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		/		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		/		
Were all samples received intact ⁽¹⁾ ?	/			
Was adequate sample volume provided ⁽¹⁾ ?	/			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		/		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	/			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	/			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	/			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	/			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		/		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)		/		
Additional Comments (if any):				

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

Reviewed by (Project Manager)

Date/Time Reviewed 6-14-12 1106

Origins Laboratory, Inc.



The results in 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: 4706204 Client: Eagle Env
 Client Project ID: Noble - Wardlaw
 Checklist Completed by: Dan Shipped Via: HD
 Date/time completed: 6-16-17 1057 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: N/A
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1 / 2-1 °C / °C / °C (Describe)
 Thermometer ID: TC03

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

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

Reviewed by [Signature] Date/Time Reviewed 6-16-17 1057

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-02
6/13/2017 11:30:00AM

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

Origins Laboratory, Inc.
Y706165-01 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.8 %	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-03
6/13/2017 11:40:00AM

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

Origins Laboratory, Inc.
Y706165-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	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-04
6/13/2017 11:50:00AM

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

Origins Laboratory, Inc.
Y706165-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.3 %	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-05
6/13/2017 12:00:00PM

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

Origins Laboratory, Inc.
Y706165-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.4 %	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-06
6/13/2017 12:10:00PM

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

Origins Laboratory, Inc.
Y706165-05 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.5 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.4 %	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-08
6/13/2017 12:40:00PM

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

Origins Laboratory, Inc.
Y706165-06 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.6 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %	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-09
6/13/2017 12:30:00PM

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

Origins Laboratory, Inc.
Y706165-07 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	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-10
6/13/2017 12:20:00PM

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

Origins Laboratory, Inc.
Y706165-08 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.6 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.6 %	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-11
6/13/2017 1:20:00PM

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

Origins Laboratory, Inc.
Y706165-09 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.4 %	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
6/13/2017 1:10:00PM

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

Origins Laboratory, Inc.
Y706165-10 (Water)

BTEX by EPA 8260C

Benzene	2120	50.0	ug/L	50	B7F1401	06/14/2017	06/15/2017	
Toluene	5560	50.0	"	"	"	"	"	
Ethylbenzene	251	4.00	"	4	"	"	06/15/2017	
Xylenes, total	3510	50.0	"	50	"	"	06/15/2017	
Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	06/15/2017	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.8 %	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-13
6/13/2017 1:00:00PM

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

Origins Laboratory, Inc.
Y706165-11 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	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-17
6/13/2017 12:50:00PM

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

Origins Laboratory, Inc.
Y706165-12 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %	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

SW-01
6/13/2017 1:45:00PM

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

Origins Laboratory, Inc.
Y706165-13 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.2 %	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

SW-02
6/13/2017 1:50:00PM

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

Origins Laboratory, Inc.
Y706165-14 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.3 %	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

SW-03
6/13/2017 1:55:00PM

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

Origins Laboratory, Inc.
Y706165-15 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.3 %	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

SW-04
6/13/2017 2:00:00PM

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

Origins Laboratory, Inc.
Y706165-16 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.5 %	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

SW-05
6/13/2017 2:10:00PM

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

Origins Laboratory, Inc.
Y706165-17 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.3 %	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

SW-06
6/13/2017 2:15:00PM

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

Origins Laboratory, Inc.
Y706165-18 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.8 %	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

SW-07
6/13/2017 2:25:00PM

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

Origins Laboratory, Inc.
Y706165-19 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.0 %	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

SW-08
6/13/2017 2:30:00PM

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

Origins Laboratory, Inc.
Y706165-20 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	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

SW-09
6/13/2017 2:35:00PM

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

Origins Laboratory, Inc.
Y706165-21 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1401	06/14/2017	06/15/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.7 %	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-01
6/15/2017 12:10:00PM

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

Origins Laboratory, Inc.
Y706204-01 (Water)

BTEX by EPA 8260C

Benzene	614	10.0	ug/L	10	B7F1602	06/16/2017	06/19/2017	
Toluene	ND	1.00	"	1	"	"	06/16/2017	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	2.26	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	99.8 %	84-121			"	"	"	
Surrogate: Toluene-d8	97.4 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	95.9 %	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-07
6/15/2017 12:00:00PM

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

Origins Laboratory, Inc.
Y706204-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1602	06/16/2017	06/16/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.8 %	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-14
6/15/2017 11:50:00AM

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

Origins Laboratory, Inc.
Y706204-03 (Water)

BTEX by EPA 8260C

Benzene	96.0	1.00	ug/L	1	B7F1602	06/16/2017	06/16/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	23.6	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.8 %	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-15
6/15/2017 11:40:00AM

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

Origins Laboratory, Inc.
Y706204-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1602	06/16/2017	06/16/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.3 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.9 %	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-16
6/15/2017 11:30:00AM

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

Origins Laboratory, Inc.
Y706204-05 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B7F1602	06/16/2017	06/16/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.0 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	96.9 %	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Blank (B7F1401-BLK1)

Prepared: 06/14/2017 Analyzed: 06/14/2017

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	61		"	62.5		97.2	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.0	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Blank (B7F1401-BLK2)

Prepared: 06/14/2017 Analyzed: 06/14/2017

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	61		"	62.5	98.3		84-121			
Surrogate: Toluene-d8	64		"	62.5	102		85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	97.5		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

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

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

Batch B7F1401 - EPA 5030B (Water)

LCS (B7F1401-BS1)

Prepared: 06/14/2017 Analyzed: 06/14/2017

Benzene	49.1	1.00	ug/L	50.0		98.2	73.3-129			
Toluene	51.0	1.00	"	50.0		102	76.2-123			
Ethylbenzene	48.1	1.00	"	50.0		96.2	73.6-130			
m,p-Xylene	103	2.00	"	100		103	76.1-126			
o-Xylene	48.0	1.00	"	50.0		96.1	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.3	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.8	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		100	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

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

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

Batch B7F1401 - EPA 5030B (Water)

LCS (B7F1401-BS2)

Prepared: 06/14/2017 Analyzed: 06/14/2017

Benzene	57.3	1.00	ug/L	50.0		115	73.3-129			
Toluene	58.8	1.00	"	50.0		118	76.2-123			
Ethylbenzene	54.8	1.00	"	50.0		110	73.6-130			
m,p-Xylene	119	2.00	"	100		119	76.1-126			
o-Xylene	56.3	1.00	"	50.0		113	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.6	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.0	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Matrix Spike (B7F1401-MS1)	Source: Y706143-01			Prepared: 06/14/2017 Analyzed: 06/15/2017						
Benzene	53.7	1.00	ug/L	50.0	ND	107	74-130			
Toluene	54.9	1.00	"	50.0	ND	110	73-131			
Ethylbenzene	65.8	1.00	"	50.0	ND	132	76-132			
m,p-Xylene	124	2.00	"	100	ND	124	69-139			
o-Xylene	59.4	1.00	"	50.0	ND	119	74-131			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.9	84-121			
Surrogate: Toluene-d8	61		"	62.5		96.9	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.0	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Matrix Spike (B7F1401-MS2)	Source: Y706143-02			Prepared: 06/14/2017 Analyzed: 06/14/2017						
Benzene	50.3	1.00	ug/L	50.0	ND	101	74-130			
Toluene	52.1	1.00	"	50.0	ND	104	73-131			
Ethylbenzene	48.4	1.00	"	50.0	ND	96.9	76-132			
m,p-Xylene	106	2.00	"	100	ND	106	69-139			
o-Xylene	48.3	1.00	"	50.0	ND	96.7	74-131			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.6	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.4	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Matrix Spike Dup (B7F1401-MSD1)	Source: Y706143-01			Prepared: 06/14/2017 Analyzed: 06/15/2017						
Benzene	48.9	1.00	ug/L	50.0	ND	97.8	74-130	9.47	20	
Toluene	48.5	1.00	"	50.0	ND	96.9	73-131	12.5	20	
Ethylbenzene	54.2	1.00	"	50.0	ND	108	76-132	19.5	20	
m,p-Xylene	101	2.00	"	100	ND	101	69-139	20.3	20	QR-02
o-Xylene	49.3	1.00	"	50.0	ND	98.6	74-131	18.5	20	
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.7	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.6	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

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

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

Batch B7F1401 - EPA 5030B (Water)

Matrix Spike Dup (B7F1401-MSD2)	Source: Y706143-02			Prepared: 06/14/2017 Analyzed: 06/14/2017						
Benzene	50.2	1.00	ug/L	50.0	ND	100	74-130	0.199	20	
Toluene	51.1	1.00	"	50.0	ND	102	73-131	2.05	20	
Ethylbenzene	48.2	1.00	"	50.0	ND	96.5	76-132	0.393	20	
m,p-Xylene	104	2.00	"	100	ND	104	69-139	1.33	20	
o-Xylene	48.7	1.00	"	50.0	ND	97.3	74-131	0.680	20	
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.2	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.8	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.3	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

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

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

Batch B7F1602 - EPA 5030B (Water)

Blank (B7F1602-BLK1)

Prepared: 06/16/2017 Analyzed: 06/16/2017

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	60		"	62.5	96.6		84-121			
Surrogate: Toluene-d8	65		"	62.5	104		85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5	96.5		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

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

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

Batch B7F1602 - EPA 5030B (Water)

Blank (B7F1602-BLK2)

Prepared: 06/16/2017 Analyzed: 06/16/2017

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	62		"	62.5		99.7	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.7	85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.7	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

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

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

Batch B7F1602 - EPA 5030B (Water)

LCS (B7F1602-BS1)

Prepared: 06/16/2017 Analyzed: 06/16/2017

Benzene	54.0	1.00	ug/L	50.0		108	73.3-129			
Toluene	58.1	1.00	"	50.0		116	76.2-123			
Ethylbenzene	52.4	1.00	"	50.0		105	73.6-130			
m,p-Xylene	113	2.00	"	100		113	76.1-126			
o-Xylene	53.3	1.00	"	50.0		107	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.4	84-121			
Surrogate: Toluene-d8	65		"	62.5		104	85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.4	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

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

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

Batch B7F1602 - EPA 5030B (Water)

LCS (B7F1602-BS2)

Prepared: 06/16/2017 Analyzed: 06/16/2017

Benzene	46.4	1.00	ug/L	50.0		92.8	73.3-129			
Toluene	46.5	1.00	"	50.0		93.0	76.2-123			
Ethylbenzene	46.5	1.00	"	50.0		92.9	73.6-130			
m,p-Xylene	93.3	2.00	"	100		93.3	76.1-126			
o-Xylene	45.8	1.00	"	50.0		91.6	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.3	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.5	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	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

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

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

Batch B7F1602 - EPA 5030B (Water)

Matrix Spike (B7F1602-MS1)	Source: Y706190-02			Prepared: 06/16/2017 Analyzed: 06/16/2017						
Benzene	57.4	1.00	ug/L	50.0	ND	115	74-130			
Toluene	61.2	1.00	"	50.0	ND	122	73-131			
Ethylbenzene	54.3	1.00	"	50.0	ND	109	76-132			
m,p-Xylene	114	2.00	"	100	ND	114	69-139			
o-Xylene	49.6	1.00	"	50.0	ND	99.2	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.9	84-121			
Surrogate: Toluene-d8	65		"	62.5		105	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		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

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

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

Batch B7F1602 - EPA 5030B (Water)

Matrix Spike (B7F1602-MS2)	Source: Y706190-08			Prepared: 06/16/2017 Analyzed: 06/16/2017						
Benzene	51.9	1.00	ug/L	50.0	ND	104	74-130			
Toluene	55.1	1.00	"	50.0	ND	110	73-131			
Ethylbenzene	52.0	1.00	"	50.0	ND	104	76-132			
m,p-Xylene	112	2.00	"	100	ND	112	69-139			
o-Xylene	49.6	1.00	"	50.0	ND	99.2	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.7	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B7F1602 - EPA 5030B (Water)										
Matrix Spike Dup (B7F1602-MSD1)			Source: Y706190-02			Prepared: 06/16/2017 Analyzed: 06/16/2017				
Benzene	51.0	1.00	ug/L	50.0	ND	102	74-130	11.9	20	
Toluene	48.9	1.00	"	50.0	ND	97.7	73-131	22.4	20	QR-02
Ethylbenzene	40.0	1.00	"	50.0	ND	80.0	76-132	30.3	20	QR-02
m,p-Xylene	78.2	2.00	"	100	ND	78.2	69-139	37.0	20	QR-02
o-Xylene	34.2	1.00	"	50.0	ND	68.3	74-131	36.9	20	QM-07, QR-03
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		93.6	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	68		"	62.5		109	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

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

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

Batch B7F1602 - EPA 5030B (Water)

Matrix Spike Dup (B7F1602-MSD2)	Source: Y706190-08			Prepared: 06/16/2017 Analyzed: 06/16/2017						
Benzene	49.9	1.00	ug/L	50.0	ND	99.8	74-130	3.89	20	
Toluene	53.4	1.00	"	50.0	ND	107	73-131	3.00	20	
Ethylbenzene	50.2	1.00	"	50.0	ND	100	76-132	3.48	20	
m,p-Xylene	109	2.00	"	100	ND	109	69-139	2.90	20	
o-Xylene	48.9	1.00	"	50.0	ND	97.7	74-131	1.46	20	
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.1	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.1	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

Notes and Definitions

U Sample is Non-Detect.

QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

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

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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.

Jen Pellegrini For Noelle Doyle Mathis, President