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08 May 2023

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: McDaniel (OWP) 1-11

Enclosed are the results of analyses for samples received by the laboratory on 04/21/23 08:10. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, reading 'Jeremy D. Allen'.

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-23-17

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-23-16



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PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS01	2304256-01	Solid	04/20/23 10:10	04/21/23 08:10	
BG01	2304256-02	Solid	04/20/23 11:25	04/21/23 08:10	

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Jeremy D Allen, Laboratory Director

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Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

SS01

2304256-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/05/23 15:15	3060A/3500-Cr B		CAI
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Saturated Paste Extraction

Calcium	22.3	0.100	0.058	mg/L	1	05/03/23 16:07	EPA200.7		AES
Conductivity	732			umho/cm@25 C	1	05/02/23 10:57	ASA#9 10-3.3		KRW
Magnesium	4.23	0.100	0.065	mg/L	1	05/03/23 16:07	EPA200.7		AES
pH	8.49			pH Units	1	05/02/23 10:57	ASA#9 10-3.2		KRW
SAR	6.62			No Unit	1	05/03/23 16:07	Calculation		AES
Sodium	130	1.00	0.079	mg/L	1	05/03/23 16:07	EPA200.7		AES

Total Metals by ICP

Barium	12900	500	94.2	mg/kg dry	10000	05/03/23 15:00	6010B		AES
Cadmium	8.53	5.00	1.29	mg/kg dry	100	05/02/23 16:32	6010B		AES
Chromium	24.0	5.00	4.53	mg/kg dry	100	05/02/23 16:32	6010B		AES
Copper	45.8	10.0	4.61	mg/kg dry	100	05/02/23 16:32	6010B		AES
Lead	178	10.0	1.88	mg/kg dry	100	05/02/23 16:32	6010B		AES
Nickel	20.8	5.00	1.41	mg/kg dry	100	05/02/23 16:32	6010B		AES
Selenium	<20.0	20.0	9.47	mg/kg dry	100	05/02/23 16:31	6010B		AES
Silver	<1.00	1.00	0.460	mg/kg dry	100	05/02/23 16:31	6010B		AES
Zinc	200	10.0	1.24	mg/kg dry	100	05/02/23 16:32	6010B		AES

Total Metals by ICPMS

Arsenic	6.26	1.00	0.158	mg/kg dry	1000	05/02/23 13:29	6020A		AES
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Hot Water Extractable

Boron	<0.300	0.300	0.142	mg/L	1	05/02/23 20:30	EPA200.7		AES
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	11.9	10.0	6.25	mg/kg	1	04/27/23 02:58	8015B		MS
DRO >C10-C28*	146	10.0	4.26	mg/kg	1	04/27/23 02:58	8015B		MS
EXT DRO >C28-C36	164	10.0	4.26	mg/kg	1	04/27/23 02:58	8015B		MS

Surrogate: 1-Chlorooctane 106 % 48.2-134 04/27/23 02:58 8015B MS

Surrogate: 1-Chlorooctadecane 116 % 49.1-148 04/27/23 02:58 8015B MS

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Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

SS01

2304256-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	0.0336	0.0250	0.00885	mg/kg	50	04/29/23 19:03	8260B		MS
Toluene*	0.0136	0.0250	0.00670	mg/kg	50	04/29/23 19:03	8260B	J	MS
Ethylbenzene*	0.383	0.0250	0.00405	mg/kg	50	04/29/23 19:03	8260B		MS
m+p - Xylene*	1.23	0.0500	0.0186	mg/kg	50	04/29/23 19:03	8260B		MS
o-Xylene*	0.554	0.0250	0.00700	mg/kg	50	04/29/23 19:03	8260B		MS
Total Xylenes*	1.79	0.0750	0.0256	mg/kg	50	04/29/23 19:03	8260B		MS
1,3,5-Trimethylbenzene	0.0185	0.0250	0.00450	mg/kg	50	04/29/23 19:03	8260B	J	MS
1,2,4-Trimethylbenzene	0.0906	0.0250	0.00650	mg/kg	50	04/29/23 19:03	8260B		MS
Naphthalene*	0.338	0.0250	0.00500	mg/kg	50	04/29/23 19:03	8260B		MS

Surrogate: Dibromofluoromethane 102 % 84.6-114 04/29/23 19:03 8260B MS

Surrogate: Toluene-d8 100 % 90.4-109 04/29/23 19:03 8260B MS

Surrogate: 4-Bromofluorobenzene 102 % 82.5-117 04/29/23 19:03 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	0.148	0.040	0.015	mg/kg	40	04/27/23 21:07	8270C		CK
2-Methylnaphthalene*	0.248	0.040	0.023	mg/kg	40	04/27/23 21:07	8270C		CK
1-Methylnaphthalene	0.188	0.040	0.016	mg/kg	40	04/27/23 21:07	8270C		CK
Acenaphthene*	0.142	0.040	0.024	mg/kg	40	04/27/23 21:07	8270C		CK
Fluorene*	0.210	0.040	0.014	mg/kg	40	04/27/23 21:07	8270C		CK
Anthracene*	0.110	0.040	0.017	mg/kg	40	04/27/23 21:07	8270C		CK
Fluoranthene*	0.302	0.040	0.019	mg/kg	40	04/27/23 21:07	8270C		CK
Pyrene*	0.308	0.040	0.013	mg/kg	40	04/27/23 21:07	8270C		CK
Benzo[a]anthracene*	0.065	0.040	0.023	mg/kg	40	04/27/23 21:07	8270C		CK
Chrysene	0.074	0.040	0.017	mg/kg	40	04/27/23 21:07	8270C		CK
Benzo[b]fluoranthene*	0.041	0.040	0.019	mg/kg	40	04/27/23 21:07	8270C		CK
Benzo[k]fluoranthene*	0.028	0.040	0.016	mg/kg	40	04/27/23 21:07	8270C	J	CK
Benzo[a]pyrene*	0.037	0.040	0.018	mg/kg	40	04/27/23 21:07	8270C	J	CK
Indeno[1,2,3-cd]pyrene*	0.019	0.040	0.017	mg/kg	40	04/27/23 21:07	8270C	J	CK
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	04/27/23 21:07	8270C		CK

Surrogate: Nitrobenzene-d5 68.8 % 39.6-121 04/27/23 21:07 8270C CK

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Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

SS01

2304256-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Surrogate: 2-Fluorobiphenyl	80.0 %	39.8-134				04/27/23 21:07	8270C		CK
Surrogate: Terphenyl-dl4	71.8 %	33.3-136				04/27/23 21:07	8270C		CK

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Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

BG01

2304256-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/05/23 15:15	3060A/3500-Cr B		CAI
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Saturated Paste Extraction

Calcium	47.4	0.100	0.058	mg/L	1	05/03/23 16:11	EPA200.7		AES
Conductivity	428			umho/cm/@25 C	1	05/02/23 10:57	ASA#9 10-3.3		KRW
Magnesium	9.76	0.100	0.065	mg/L	1	05/03/23 16:12	EPA200.7		AES
pH	7.83			pH Units	1	05/02/23 10:57	ASA#9 10-3.2		KRW
SAR	1.15			No Unit	1	05/03/23 16:11	Calculation		AES
Sodium	33.3	1.00	0.079	mg/L	1	05/03/23 16:11	EPA200.7		AES

Total Metals by ICP

Barium	9170	500	94.2	mg/kg dry	10000	05/03/23 15:02	6010B		AES
Cadmium	6.55	5.00	1.29	mg/kg dry	100	05/02/23 16:36	6010B		AES
Chromium	19.9	5.00	4.53	mg/kg dry	100	05/02/23 16:36	6010B		AES
Copper	34.1	10.0	4.61	mg/kg dry	100	05/02/23 16:36	6010B		AES
Lead	<10.0	10.0	1.88	mg/kg dry	100	05/02/23 16:36	6010B		AES
Nickel	24.5	5.00	1.41	mg/kg dry	100	05/02/23 16:36	6010B		AES
Selenium	<20.0	20.0	9.47	mg/kg dry	100	05/02/23 16:36	6010B		AES
Silver	<1.00	1.00	0.460	mg/kg dry	100	05/02/23 16:36	6010B		AES
Zinc	52.2	10.0	1.24	mg/kg dry	100	05/02/23 16:36	6010B		AES

Total Metals by ICPMS

Arsenic	4.60	1.00	0.158	mg/kg dry	1000	05/02/23 13:30	6020A		AES
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Hot Water Extractable

Boron	0.328	0.300	0.142	mg/L	1	05/02/23 20:33	EPA200.7		AES
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Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B231089 - General Prep - Wet Chem

Blank (B231089-BLK1)

Prepared: 05/01/23 Analyzed: 05/05/23

Hexavalent Chromium	ND	0.250	mg/kg dry							
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LCS (B231089-BS1)

Prepared: 05/01/23 Analyzed: 05/05/23

Hexavalent Chromium	2.26	0.250	mg/kg dry	2.50		90.3	85-115			
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Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B231116 - Paste Extract

Blank (B231116-BLK1)

Prepared: 05/02/23 Analyzed: 05/03/23

Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

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Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

Total Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B231081 - EPA 3050

Blank (B231081-BLK1)

Prepared: 04/28/23 Analyzed: 05/02/23

Barium	ND	5.00	mg/kg dry
Cadmium	ND	5.00	mg/kg dry
Chromium	ND	5.00	mg/kg dry
Copper	ND	10.0	mg/kg dry
Lead	ND	10.0	mg/kg dry
Nickel	ND	5.00	mg/kg dry
Selenium	ND	20.0	mg/kg dry
Silver	ND	1.00	mg/kg dry
Zinc	ND	10.0	mg/kg dry

LCS (B231081-BS1)

Prepared: 04/28/23 Analyzed: 05/02/23

Barium	179	5.00	mg/kg dry	200	89.5	80-120
Cadmium	171	5.00	mg/kg dry	200	85.6	80-120
Chromium	181	5.00	mg/kg dry	200	90.4	80-120
Copper	374	10.0	mg/kg dry	400	93.6	80-120
Lead	176	10.0	mg/kg dry	200	87.8	80-120
Nickel	172	5.00	mg/kg dry	200	86.1	80-120
Selenium	727	20.0	mg/kg dry	800	90.9	80-120
Silver	8.49	1.00	mg/kg dry	10.0	84.9	80-120
Zinc	165	10.0	mg/kg dry	200	82.5	80-120

LCS Dup (B231081-BSD1)

Prepared: 04/28/23 Analyzed: 05/02/23

Barium	190	5.00	mg/kg dry	200	95.1	80-120	6.11	20
Cadmium	179	5.00	mg/kg dry	200	89.7	80-120	4.76	20
Chromium	193	5.00	mg/kg dry	200	96.3	80-120	6.28	20
Copper	401	10.0	mg/kg dry	400	100	80-120	6.86	20
Lead	185	10.0	mg/kg dry	200	92.7	80-120	5.40	20
Nickel	183	5.00	mg/kg dry	200	91.6	80-120	6.19	20
Selenium	775	20.0	mg/kg dry	800	96.8	80-120	6.29	20
Silver	9.16	1.00	mg/kg dry	10.0	91.6	80-120	7.57	20
Zinc	173	10.0	mg/kg dry	200	86.3	80-120	4.49	20

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Total Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B231082 - EPA 3050M

Blank (B231082-BLK1)

Prepared: 04/28/23 Analyzed: 05/02/23

Arsenic	ND	0.100	mg/kg dry							
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LCS (B231082-BS1)

Prepared: 04/28/23 Analyzed: 05/02/23

Arsenic	4.72	0.100	mg/kg dry	5.00		94.4	80-120			
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LCS Dup (B231082-BSD1)

Prepared: 04/28/23 Analyzed: 05/02/23

Arsenic	5.13	0.100	mg/kg dry	5.00		103	80-120	8.36	20	
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Hot Water Extractable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B231099 - General Prep-SOILS

Blank (B231099-BLK1)

Prepared: 05/01/23 Analyzed: 05/02/23

Boron	ND	0.300	mg/L							
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Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3042624 - General Prep - Organics

Blank (3042624-BLK1)

Prepared & Analyzed: 04/26/23

Surrogate: 1-Chlorooctadecane	50.4		mg/kg	50.0		101	49.1-148			
Surrogate: 1-Chlorooctane	47.4		mg/kg	49.6		95.6	48.2-134			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							

LCS (3042624-BS1)

Prepared & Analyzed: 04/26/23

Surrogate: 1-Chlorooctadecane	49.0		mg/kg	50.0		98.1	49.1-148			
Surrogate: 1-Chlorooctane	44.6		mg/kg	49.6		90.0	48.2-134			
DRO >C10-C28	182	10.0	mg/kg	200		91.1	72.5-126			
GRO C6-C10	195	10.0	mg/kg	200		97.7	78.5-124			
Total TPH C6-C28	378	10.0	mg/kg	400		94.4	77.6-123			

LCS Dup (3042624-BSD1)

Prepared & Analyzed: 04/26/23

Surrogate: 1-Chlorooctadecane	55.8		mg/kg	50.0		112	49.1-148			
Surrogate: 1-Chlorooctane	49.5		mg/kg	49.6		100	48.2-134			
DRO >C10-C28	193	10.0	mg/kg	200		96.5	72.5-126	5.77	21	
GRO C6-C10	197	10.0	mg/kg	200		98.3	78.5-124	0.642	17.7	
Total TPH C6-C28	390	10.0	mg/kg	400		97.4	77.6-123	3.15	18.5	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3042824 - Volatiles**Blank (3042824-BLK1)**

Prepared: 04/28/23 Analyzed: 04/29/23

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.24		mg/kg	1.25		99.4	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.23		mg/kg	1.25		98.0	84.6-114			
Ethylbenzene	0.00482	0.0250	mg/kg							J
m+p - Xylene	ND	0.0500	mg/kg							
Naphthalene	ND	0.0250	mg/kg							
o-Xylene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	mg/kg							
Surrogate: Toluene-d8	1.21		mg/kg	1.25		97.0	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (3042824-BS1)

Prepared: 04/28/23 Analyzed: 04/29/23

1,2,4-Trimethylbenzene	0.498	0.0250	mg/kg	0.500		99.6	62.4-140			
1,3,5-Trimethylbenzene	0.501	0.0250	mg/kg	0.500		100	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.24		mg/kg	1.25		99.2	82.5-117			
Benzene	0.456	0.0250	mg/kg	0.500		91.3	73-130			
Surrogate: Dibromofluoromethane	1.22		mg/kg	1.25		97.7	84.6-114			
Ethylbenzene	0.486	0.0250	mg/kg	0.500		97.2	75.4-127			
m+p - Xylene	1.01	0.0500	mg/kg	1.00		101	71.8-133			
Naphthalene	0.453	0.0250	mg/kg	0.500		90.7	28.7-158			
o-Xylene	0.499	0.0250	mg/kg	0.500		99.8	78.6-125			
Toluene	0.500	0.0250	mg/kg	0.500		99.9	79-122			
Surrogate: Toluene-d8	1.23		mg/kg	1.25		98.1	90.4-109			
Total Xylenes	1.51	0.0750	mg/kg	1.50		100	74.6-130			

LCS Dup (3042824-BSD1)

Prepared: 04/28/23 Analyzed: 04/29/23

1,2,4-Trimethylbenzene	0.486	0.0250	mg/kg	0.500		97.3	62.4-140	2.33	38.2	
1,3,5-Trimethylbenzene	0.491	0.0250	mg/kg	0.500		98.2	64.4-138	2.00	39.1	
Surrogate: 4-Bromofluorobenzene	1.27		mg/kg	1.25		102	82.5-117			
Benzene	0.473	0.0250	mg/kg	0.500		94.6	73-130	3.62	17.1	
Surrogate: Dibromofluoromethane	1.28		mg/kg	1.25		102	84.6-114			
Ethylbenzene	0.473	0.0250	mg/kg	0.500		94.7	75.4-127	2.65	16.5	
m+p - Xylene	0.984	0.0500	mg/kg	1.00		98.4	71.8-133	2.23	19.1	
Naphthalene	0.412	0.0250	mg/kg	0.500		82.3	28.7-158	9.68	64	
o-Xylene	0.481	0.0250	mg/kg	0.500		96.2	78.6-125	3.75	13.2	
Toluene	0.471	0.0250	mg/kg	0.500		94.1	79-122	5.93	18.3	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

VOLATILES BY GC/MS - Quality Control
(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3042824 - Volatiles (Continued)

LCS Dup (3042824-BSD1) (Continued)

Prepared: 04/28/23 Analyzed: 04/29/23

Surrogate: Toluene-d8	1.24		mg/kg	1.25		98.9	90.4-109			
Total Xylenes	1.46	0.0750	mg/kg	1.50		97.6	74.6-130	2.73	16.5	

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

Polynuclear Aromatic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3042120 - SW846-3510

Blank (3042120-BLK1)

Prepared: 04/21/23 Analyzed: 04/27/23

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	2.20		mg/kg	2.00		110	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Anthracene	ND	0.040	mg/kg							
Benzo[a]anthracene	ND	0.040	mg/kg							
Benzo[a]pyrene	ND	0.040	mg/kg							
Benzo[b]fluoranthene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Chrysene	ND	0.040	mg/kg							
Dibenz[a,h]anthracene	ND	0.040	mg/kg							
Fluoranthene	ND	0.040	mg/kg							
Fluorene	ND	0.040	mg/kg							
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg							
Naphthalene	ND	0.040	mg/kg							
Surrogate: Nitrobenzene-d5	2.17		mg/kg	2.00		108	39.6-121			
Pyrene	ND	0.040	mg/kg							
Surrogate: Terphenyl-d14	1.55		mg/kg	2.00		77.6	33.3-136			

LCS (3042120-BS1)

Prepared: 04/21/23 Analyzed: 04/27/23

1-Methylnaphthalene	0.383	0.040	mg/kg	0.400		95.7	57.6-108			
Surrogate: 2-Fluorobiphenyl	3.06		mg/kg	2.00		153	39.8-134			S-04
2-Methylnaphthalene	0.400	0.040	mg/kg	0.400		99.9	59-106			
Acenaphthene	0.366	0.040	mg/kg	0.400		91.4	60.9-105			
Acenaphthylene	0.387	0.040	mg/kg	0.400		96.7	57.4-107			
Anthracene	0.358	0.040	mg/kg	0.400		89.6	60.8-105			
Benzo[a]anthracene	0.376	0.040	mg/kg	0.400		93.9	56.1-121			
Benzo[a]pyrene	0.409	0.040	mg/kg	0.400		102	56.7-115			
Benzo[b]fluoranthene	0.392	0.040	mg/kg	0.400		97.9	45.4-128			
Benzo[g,h,i]perylene	0.410	0.040	mg/kg	0.400		103	56.5-107			
Benzo[k]fluoranthene	0.397	0.040	mg/kg	0.400		99.4	49.6-119			
Carbazole	0.364	0.040	mg/kg	0.400		91.0	59.7-107			
Chrysene	0.374	0.040	mg/kg	0.400		93.5	12.2-190			
Dibenz[a,h]anthracene	0.395	0.040	mg/kg	0.400		98.7	59.1-111			
Fluoranthene	0.375	0.040	mg/kg	0.400		93.8	60.6-111			
Fluorene	0.374	0.040	mg/kg	0.400		93.4	59.3-108			
Indeno[1,2,3-cd]pyrene	0.419	0.040	mg/kg	0.400		105	53.4-116			
Naphthalene	0.390	0.040	mg/kg	0.400		97.6	56.5-106			

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

Polynuclear Aromatic Compounds by GC/MS - Quality Control
(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3042120 - SW846-3510 (Continued)

LCS (3042120-BS1) (Continued)

Prepared: 04/21/23 Analyzed: 04/27/23

Surrogate: Nitrobenzene-d5	3.14		mg/kg	2.00		157	39.6-121			S-04
Phenanthrene	0.363	0.040	mg/kg	0.400		90.7	59.9-107			
Pyrene	0.379	0.040	mg/kg	0.400		94.7	51.5-122			
Surrogate: Terphenyl-d14	2.38		mg/kg	2.00		119	33.3-136			

LCS Dup (3042120-BS1)

Prepared: 04/21/23 Analyzed: 04/27/23

1-Methylnaphthalene	0.384	0.040	mg/kg	0.400		96.0	57.6-108	0.235	6.22	
Surrogate: 2-Fluorobiphenyl	3.06		mg/kg	2.00		153	39.8-134			S-04
2-Methylnaphthalene	0.381	0.040	mg/kg	0.400		95.3	59-106	4.78	6.23	
Acenaphthene	0.352	0.040	mg/kg	0.400		88.1	60.9-105	3.71	8.18	
Acenaphthylene	0.381	0.040	mg/kg	0.400		95.2	57.4-107	1.59	5	
Anthracene	0.361	0.040	mg/kg	0.400		90.1	60.8-105	0.612	3.68	
Benzo[a]anthracene	0.374	0.040	mg/kg	0.400		93.4	56.1-121	0.582	9.01	
Benzo[a]pyrene	0.403	0.040	mg/kg	0.400		101	56.7-115	1.64	4.92	
Benzo[b]fluoranthene	0.376	0.040	mg/kg	0.400		94.0	45.4-128	4.09	7.63	
Benzo[g,h,i]perylene	0.395	0.040	mg/kg	0.400		98.8	56.5-107	3.66	12.5	
Benzo[k]fluoranthene	0.403	0.040	mg/kg	0.400		101	49.6-119	1.43	10.6	
Carbazole	0.371	0.040	mg/kg	0.400		92.8	59.7-107	1.93	8.65	
Chrysene	0.374	0.040	mg/kg	0.400		93.6	12.2-190	0.120	21.8	
Dibenz[a,h]anthracene	0.398	0.040	mg/kg	0.400		99.4	59.1-111	0.717	11.6	
Fluoranthene	0.384	0.040	mg/kg	0.400		95.9	60.6-111	2.28	7.54	
Fluorene	0.384	0.040	mg/kg	0.400		96.1	59.3-108	2.86	5.49	
Indeno[1,2,3-cd]pyrene	0.409	0.040	mg/kg	0.400		102	53.4-116	2.50	22.3	
Naphthalene	0.381	0.040	mg/kg	0.400		95.2	56.5-106	2.52	4.56	
Surrogate: Nitrobenzene-d5	3.05		mg/kg	2.00		152	39.6-121			S-04
Phenanthrene	0.365	0.040	mg/kg	0.400		91.1	59.9-107	0.465	5.21	
Pyrene	0.377	0.040	mg/kg	0.400		94.3	51.5-122	0.389	10.6	
Surrogate: Terphenyl-d14	2.42		mg/kg	2.00		121	33.3-136			

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: McDaniel (OWP) 1-11
Project Manager: Kyle Siesser

Reported:
05/08/23 14:09

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis
*Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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75 Suttle St Durango, CO 81303

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Cottonwood Consulting LLC

Project Manager: Kyle Siesser

Address: PO Box 1653

City: Durango

State: CO

Zip: 81302

Phone #: 970-764-7356

Email: ksiesser@cottonwoodconsulting.com

Additional Report To:

Project Name: McDaniel (OWP) 1-11

Project Number:

Sampler Name (Print): Joseph LaFortune

FOR LAB USE ONLY

Lab I.D.

2504-256

Sample Name or Location

01

02

SS01

B601

4-20-23

1010

4-20-23

1125

GROUNDWATER

SURFACEWATER

WASTEWATER

PRODUCEDWATER

SOIL

OTHER :

No preservation (general)

HNO₃

HCl

H₂SO₄

Other:

Other:

COGCC Table 915

COGCC Table 915 Inorganics

ANALYSIS REQUEST

Report to State? (Circle)

Yes

No

Please provide Cottonwood EDD

Temperature at receipt: 3.0°C

CHECKED BY: VSW

Laser #2 on ice

Relinquished By:

Relinquished By:

Delivered By: (Circle One)

Sampler: UPS - FedEx - Kangaroo - Other:

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

† GAL cannot always accept verbal changes. Please fax or email written change requests.

Page 16 of 17 2304256 GAL FINAL 05 08 23 1409 05/08/23 14:09:32

SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood Consulting

Work Order # 2304-256

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo

Custody Seals on Box/Cooler Present: ☐ Yes ☒ No

Seals Intact: ☐ Yes ☐ No

Thermometer Used: #2 Samples on Ice, cooling process has begun: ☒ Yes ☐ No

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: Observed Temp: 3.0 °C Correction Factor: 0 °C Final Temp: 3.0 °C

* Temp should be above freezing to 6°C

Date/Initials of person
examining contents: MPN 4/21/23

Labeled by Initials:
(If different than above) _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Dissolved Testing Needed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11.
Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Labels match COC: -Includes Date/Time/ID	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
Matrix:	WT <input checked="" type="checkbox"/> SL <input type="checkbox"/> OT	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____