



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

27 September 2021

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: COGCC Table 915-1

Enclosed are the results of analyses for samples received by the laboratory on 09/03/21 11:15. The data to follow was performed, in whole or in part, by a subcontract laboratory with an additional report attached.

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

Sincerely,

A handwritten signature in black ink that reads 'Debbie Zufelt'. The script is cursive and fluid, with the first name 'Debbie' and last name 'Zufelt' clearly legible.

Debbie Zufelt
Reports Manager

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: T104704514-21-12

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: T104704398-21-14



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS13	2109048-01	Solid	08/31/21 17:40	09/03/21 11:15	
SS14	2109048-02	Solid	09/01/21 12:25	09/03/21 11:15	
SS15	2109048-03	Solid	09/01/21 12:30	09/03/21 11:15	
SS16	2109048-04	Solid	09/01/21 12:40	09/03/21 11:15	
SS17	2109048-05	Solid	09/01/21 12:50	09/03/21 11:15	
SS18	2109048-06	Solid	09/01/21 13:05	09/03/21 11:15	
SS19	2109048-07	Solid	09/01/21 13:40	09/03/21 11:15	

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS13

2109048-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	50.6	0.100	0.058	mg/L	1	09/21/21 16:33	EPA200.7		AES
Conductivity	519			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	10.9	0.100	0.065	mg/L	1	09/21/21 16:33	EPA200.7		AES
pH	7.13			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	1.58			No Unit	1	09/21/21 16:33	Calculation		AES
Sodium	47.5	1.00	0.079	mg/L	1	09/21/21 16:33	EPA200.7		AES

Total Metals by ICP

Barium	150	5.00	0.390	mg/kg dry	100	09/16/21 14:05	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:05	6010B		AES
Chromium	22.3	5.00	0.400	mg/kg dry	100	09/16/21 14:05	6010B		AES
Copper	19.8	5.00	2.39	mg/kg dry	100	09/16/21 14:05	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:05	6010B		AES
Nickel	14.8	5.00	0.874	mg/kg dry	100	09/16/21 14:05	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:05	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:05	6010B		AES
Zinc	44.8	10.0	1.71	mg/kg dry	100	09/16/21 14:05	6010B		AES

Total Metals by ICPMS

Arsenic	6.15	1.00	0.0950	mg/kg dry	1000	09/14/21 15:50	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:18	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

S-06

GRO C6-C10*	<50.0	50.0	31.2	mg/kg	5	09/10/21 18:57	8015B		MS
DRO >C10-C28*	9790	50.0	21.3	mg/kg	5	09/10/21 18:57	8015B		MS
EXT DRO >C28-C36	3100	50.0	21.3	mg/kg	5	09/10/21 18:57	8015B		MS

Surrogate: 1-Chlorooctane 107 % 44.3-133 09/10/21 18:57 8015B MS

Surrogate: 1-Chlorooctadecane 263 % 38.9-142 09/10/21 18:57 8015B MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS13

2109048-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.250	0.250	0.0885	mg/kg	500	09/09/21 19:31	8260B		MS
Toluene*	<0.250	0.250	0.0670	mg/kg	500	09/09/21 19:31	8260B		MS
Ethylbenzene*	<0.250	0.250	0.0405	mg/kg	500	09/09/21 19:31	8260B		MS
m+p - Xylene*	<0.500	0.500	0.186	mg/kg	500	09/09/21 19:31	8260B		MS
o-Xylene*	<0.250	0.250	0.0700	mg/kg	500	09/09/21 19:31	8260B		MS
Total Xylenes*	<0.750	0.750	0.250	mg/kg	500	09/09/21 19:31	8260B		MS
1,3,5-Trimethylbenzene	<0.250	0.250	0.0450	mg/kg	500	09/09/21 19:31	8260B		MS
1,2,4-Trimethylbenzene	<0.250	0.250	0.0650	mg/kg	500	09/09/21 19:31	8260B		MS
Naphthalene*	1.79	0.250	0.0500	mg/kg	500	09/09/21 19:31	8260B		MS

Surrogate: Dibromofluoromethane 97.2 % 84.6-114 09/09/21 19:31 8260B MS

Surrogate: Toluene-d8 94.8 % 90.4-109 09/09/21 19:31 8260B MS

Surrogate: 4-Bromofluorobenzene 99.5 % 82.5-117 09/09/21 19:31 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	0.547	0.400	0.153	mg/kg	400	09/13/21 23:08	8270C		MS
2-Methylnaphthalene*	4.85	0.400	0.226	mg/kg	400	09/13/21 23:08	8270C		MS
1-Methylnaphthalene	10.3	0.400	0.161	mg/kg	400	09/13/21 23:08	8270C		MS
Acenaphthylene*	<0.196	0.400	0.196	mg/kg	400	09/13/21 23:08	8270C		MS
Acenaphthene*	<0.235	0.400	0.235	mg/kg	400	09/13/21 23:08	8270C		MS
Fluorene*	4.48	0.400	0.142	mg/kg	400	09/13/21 23:08	8270C		MS
Phenanthrene*	9.50	0.400	0.214	mg/kg	400	09/13/21 23:08	8270C		MS
Anthracene*	<0.172	0.400	0.172	mg/kg	400	09/13/21 23:08	8270C		MS
Carbazole*	<0.190	0.400	0.190	mg/kg	400	09/13/21 23:08	8270C		MS
Fluoranthene*	0.463	0.400	0.185	mg/kg	400	09/13/21 23:08	8270C		MS
Pyrene*	1.49	0.400	0.132	mg/kg	400	09/13/21 23:08	8270C		MS
Benzo[a]anthracene*	<0.230	0.400	0.230	mg/kg	400	09/13/21 23:08	8270C		MS
Chrysene*	2.04	0.400	0.172	mg/kg	400	09/13/21 23:08	8270C		MS
Benzo[b]fluoranthene*	<0.192	0.400	0.192	mg/kg	400	09/13/21 23:08	8270C		MS
Benzo[k]fluoranthene*	<0.157	0.400	0.157	mg/kg	400	09/13/21 23:08	8270C		MS
Benzo[a]pyrene*	<0.182	0.400	0.182	mg/kg	400	09/13/21 23:08	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.168	0.400	0.168	mg/kg	400	09/13/21 23:08	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS13

2109048-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Dibenz[a,h]anthracene*	<0.186	0.400	0.186	mg/kg	400	09/13/21 23:08	8270C		MS
Benzo[g,h,i]perylene*	<0.186	0.400	0.186	mg/kg	400	09/13/21 23:08	8270C		MS
Surrogate: Nitrobenzene-d5			102 %	39.6-121		09/13/21 23:08	8270C		MS
Surrogate: 2-Fluorobiphenyl			96.3 %	39.8-134		09/13/21 23:08	8270C		MS
Surrogate: Terphenyl-d14			97.6 %	33.3-136		09/13/21 23:08	8270C		MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS14

2109048-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	72.3	0.100	0.058	mg/L	1	09/21/21 16:39	EPA200.7		AES
Conductivity	462			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	13.4	0.100	0.065	mg/L	1	09/21/21 16:39	EPA200.7		AES
pH	6.90			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	0.30			No Unit	1	09/21/21 16:39	Calculation		AES
Sodium	10.5	1.00	0.079	mg/L	1	09/21/21 16:39	EPA200.7		AES

Total Metals by ICP

Barium	157	5.00	0.390	mg/kg dry	100	09/16/21 14:18	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:18	6010B		AES
Chromium	24.0	5.00	0.400	mg/kg dry	100	09/16/21 14:18	6010B		AES
Copper	20.5	5.00	2.39	mg/kg dry	100	09/16/21 14:18	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:18	6010B		AES
Nickel	13.9	5.00	0.874	mg/kg dry	100	09/16/21 14:18	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:18	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:18	6010B		AES
Zinc	53.5	10.0	1.71	mg/kg dry	100	09/16/21 14:18	6010B		AES

Total Metals by ICPMS

Arsenic	4.36	1.00	0.0950	mg/kg dry	1000	09/14/21 15:54	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:20	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	09/10/21 19:17	8015B		MS
DRO >C10-C28*	48.4	10.0	4.26	mg/kg	1	09/10/21 19:17	8015B		MS
EXT DRO >C28-C36	89.0	10.0	4.26	mg/kg	1	09/10/21 19:17	8015B		MS

Surrogate: 1-Chlorooctane 96.8 % 44.3-133 09/10/21 19:17 8015B MS

Surrogate: 1-Chlorooctadecane 91.7 % 38.9-142 09/10/21 19:17 8015B MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS14

2109048-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/09/21 19:51	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/09/21 19:51	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/09/21 19:51	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/09/21 19:51	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/09/21 19:51	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/09/21 19:51	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/09/21 19:51	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/09/21 19:51	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/09/21 19:51	8260B		MS

Surrogate: Dibromofluoromethane 98.6 % 84.6-114 09/09/21 19:51 8260B MS

Surrogate: Toluene-d8 97.8 % 90.4-109 09/09/21 19:51 8260B MS

Surrogate: 4-Bromofluorobenzene 94.3 % 82.5-117 09/09/21 19:51 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	09/20/21 16:43	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	09/20/21 16:43	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	09/20/21 16:43	8270C		MS
Acenaphthylene*	<0.020	0.040	0.020	mg/kg	40	09/20/21 16:43	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	09/20/21 16:43	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	09/20/21 16:43	8270C		MS
Phenanthrene*	<0.021	0.040	0.021	mg/kg	40	09/20/21 16:43	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	09/20/21 16:43	8270C		MS
Carbazole*	<0.019	0.040	0.019	mg/kg	40	09/20/21 16:43	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/20/21 16:43	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	09/20/21 16:43	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	09/20/21 16:43	8270C		MS
Chrysene*	<0.017	0.040	0.017	mg/kg	40	09/20/21 16:43	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/20/21 16:43	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	09/20/21 16:43	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	09/20/21 16:43	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS14

2109048-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	09/20/21 16:43	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	09/20/21 16:43	8270C		MS
Benzo[g,h,i]perylene*	0.079	0.040	0.019	mg/kg	40	09/20/21 16:43	8270C		MS
Surrogate: Nitrobenzene-d5			65.4 %	39.6-121		09/20/21 16:43	8270C		MS
Surrogate: 2-Fluorobiphenyl			71.6 %	39.8-134		09/20/21 16:43	8270C		MS
Surrogate: Terphenyl-d14			65.3 %	33.3-136		09/20/21 16:43	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS15**2109048-03 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	33.6	0.100	0.058	mg/L	1	09/21/21 16:41	EPA200.7		AES
Conductivity	269			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	7.30	0.100	0.065	mg/L	1	09/21/21 16:41	EPA200.7		AES
pH	7.71			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	0.57			No Unit	1	09/21/21 16:41	Calculation		AES
Sodium	14.1	1.00	0.079	mg/L	1	09/21/21 16:41	EPA200.7		AES

Total Metals by ICP

Barium	224	5.00	0.390	mg/kg dry	100	09/16/21 14:22	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:22	6010B		AES
Chromium	23.1	5.00	0.400	mg/kg dry	100	09/16/21 14:22	6010B		AES
Copper	23.8	5.00	2.39	mg/kg dry	100	09/16/21 14:22	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:22	6010B		AES
Nickel	12.5	5.00	0.874	mg/kg dry	100	09/16/21 14:22	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:22	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:22	6010B		AES
Zinc	53.4	10.0	1.71	mg/kg dry	100	09/16/21 14:22	6010B		AES

Total Metals by ICPMS

Arsenic	3.56	1.00	0.0950	mg/kg dry	1000	09/14/21 16:04	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:22	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	09/10/21 16:13	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	09/10/21 16:13	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	09/10/21 16:13	8015B		MS

Surrogate: 1-Chlorooctane	98.6 %	44.3-133	09/10/21 16:13	8015B	MS
Surrogate: 1-Chlorooctadecane	92.3 %	38.9-142	09/10/21 16:13	8015B	MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS15

2109048-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/09/21 20:10	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/09/21 20:10	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/09/21 20:10	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/09/21 20:10	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/09/21 20:10	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/09/21 20:10	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/09/21 20:10	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/09/21 20:10	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/09/21 20:10	8260B		MS

Surrogate: Dibromofluoromethane 96.9 % 84.6-114 09/09/21 20:10 8260B MS

Surrogate: Toluene-d8 98.1 % 90.4-109 09/09/21 20:10 8260B MS

Surrogate: 4-Bromofluorobenzene 90.4 % 82.5-117 09/09/21 20:10 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	09/14/21 00:06	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	09/14/21 00:06	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	09/14/21 00:06	8270C		MS
Acenaphthylene*	<0.020	0.040	0.020	mg/kg	40	09/14/21 00:06	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	09/14/21 00:06	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	09/14/21 00:06	8270C		MS
Phenanthrene*	<0.021	0.040	0.021	mg/kg	40	09/14/21 00:06	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 00:06	8270C		MS
Carbazole*	<0.019	0.040	0.019	mg/kg	40	09/14/21 00:06	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 00:06	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	09/14/21 00:06	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	09/14/21 00:06	8270C		MS
Chrysene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 00:06	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 00:06	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	09/14/21 00:06	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	09/14/21 00:06	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS15

2109048-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 00:06	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 00:06	8270C		MS
Benzo[g,h,i]perylene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 00:06	8270C		MS
Surrogate: Nitrobenzene-d5			66.5 %	39.6-121		09/14/21 00:06	8270C		MS
Surrogate: 2-Fluorobiphenyl			69.9 %	39.8-134		09/14/21 00:06	8270C		MS
Surrogate: Terphenyl-d14			72.6 %	33.3-136		09/14/21 00:06	8270C		MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS16

2109048-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D	M5	JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	----	-----

Saturated Paste Extraction

Calcium	138	0.200	0.116	mg/L	2	09/21/21 16:44	EPA200.7		AES
Conductivity	1030			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	7.08	0.200	0.131	mg/L	2	09/21/21 16:44	EPA200.7		AES
pH	7.37			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	1.51			No Unit	1	09/21/21 16:44	Calculation		AES
Sodium	67.0	2.00	0.159	mg/L	2	09/21/21 16:44	EPA200.7		AES

Total Metals by ICP

Barium	4930	50.0	3.90	mg/kg dry	1000	09/17/21 16:09	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:26	6010B		AES
Chromium	30.1	5.00	0.400	mg/kg dry	100	09/16/21 14:26	6010B		AES
Copper	47.5	5.00	2.39	mg/kg dry	100	09/16/21 14:26	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:26	6010B		AES
Nickel	13.0	5.00	0.874	mg/kg dry	100	09/16/21 14:26	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:26	6010B		AES
Silver	1.33	1.00	0.688	mg/kg dry	100	09/16/21 14:26	6010B		AES
Zinc	400	10.0	1.71	mg/kg dry	100	09/16/21 14:26	6010B		AES

Total Metals by ICPMS

Arsenic	2.28	1.00	0.0950	mg/kg dry	1000	09/14/21 16:07	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:27	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

S-06

GRO C6-C10*	<100	100	62.5	mg/kg	10	09/10/21 19:38	8015B		MS
DRO >C10-C28*	20300	100	42.6	mg/kg	10	09/10/21 19:38	8015B		MS
EXT DRO >C28-C36	11700	100	42.6	mg/kg	10	09/10/21 19:38	8015B		MS

Surrogate: 1-Chlorooctane	93.7 %	44.3-133	09/10/21 19:38	8015B	MS
Surrogate: 1-Chlorooctadecane	567 %	38.9-142	09/10/21 19:38	8015B	MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS16

2109048-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/11/21 05:15	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/11/21 05:15	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/11/21 05:15	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/11/21 05:15	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/11/21 05:15	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/11/21 05:15	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/11/21 05:15	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/11/21 05:15	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/11/21 05:15	8260B		MS

Surrogate: Dibromofluoromethane 106 % 84.6-114 09/11/21 05:15 8260B MS

Surrogate: Toluene-d8 96.6 % 90.4-109 09/11/21 05:15 8260B MS

Surrogate: 4-Bromofluorobenzene 94.0 % 82.5-117 09/11/21 05:15 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.766	2.00	0.766	mg/kg	2000	09/14/21 00:35	8270C		MS
2-Methylnaphthalene*	<1.13	2.00	1.13	mg/kg	2000	09/14/21 00:35	8270C		MS
1-Methylnaphthalene	<0.804	2.00	0.804	mg/kg	2000	09/14/21 00:35	8270C		MS
Acenaphthylene*	<0.982	2.00	0.982	mg/kg	2000	09/14/21 00:35	8270C		MS
Acenaphthene*	<1.18	2.00	1.18	mg/kg	2000	09/14/21 00:35	8270C		MS
Fluorene*	<0.712	2.00	0.712	mg/kg	2000	09/14/21 00:35	8270C		MS
Phenanthrene*	<1.07	2.00	1.07	mg/kg	2000	09/14/21 00:35	8270C		MS
Anthracene*	<0.858	2.00	0.858	mg/kg	2000	09/14/21 00:35	8270C		MS
Carbazole*	<0.948	2.00	0.948	mg/kg	2000	09/14/21 00:35	8270C		MS
Fluoranthene*	<0.926	2.00	0.926	mg/kg	2000	09/14/21 00:35	8270C		MS
Pyrene*	4.97	2.00	0.658	mg/kg	2000	09/14/21 00:35	8270C		MS
Benzo[a]anthracene*	<1.15	2.00	1.15	mg/kg	2000	09/14/21 00:35	8270C		MS
Chrysene*	12.1	2.00	0.860	mg/kg	2000	09/14/21 00:35	8270C		MS
Benzo[b]fluoranthene*	<0.958	2.00	0.958	mg/kg	2000	09/14/21 00:35	8270C		MS
Benzo[k]fluoranthene*	<0.786	2.00	0.786	mg/kg	2000	09/14/21 00:35	8270C		MS
Benzo[a]pyrene*	<0.908	2.00	0.908	mg/kg	2000	09/14/21 00:35	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.840	2.00	0.840	mg/kg	2000	09/14/21 00:35	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS16

2109048-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Dibenz[a,h]anthracene*	<0.928	2.00	0.928	mg/kg	2000	09/14/21 00:35	8270C		MS
Benzo[g,h,i]perylene*	<0.928	2.00	0.928	mg/kg	2000	09/14/21 00:35	8270C		MS
Surrogate: Nitrobenzene-d5			83.0 %	39.6-121		09/14/21 00:35	8270C		MS
Surrogate: 2-Fluorobiphenyl			77.2 %	39.8-134		09/14/21 00:35	8270C		MS
Surrogate: Terphenyl-d14			95.4 %	33.3-136		09/14/21 00:35	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS17

2109048-05 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	311	0.200	0.116	mg/L	2	09/21/21 16:46	EPA200.7		AES
Conductivity	1480			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	18.7	0.200	0.131	mg/L	2	09/21/21 16:46	EPA200.7		AES
pH	7.34			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	0.64			No Unit	1	09/21/21 16:46	Calculation		AES
Sodium	42.9	2.00	0.159	mg/L	2	09/21/21 16:46	EPA200.7		AES

Total Metals by ICP

Barium	3750	50.0	3.90	mg/kg dry	1000	09/17/21 16:13	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:30	6010B		AES
Chromium	23.6	5.00	0.400	mg/kg dry	100	09/16/21 14:30	6010B		AES
Copper	31.6	5.00	2.39	mg/kg dry	100	09/16/21 14:30	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:30	6010B		AES
Nickel	11.4	5.00	0.874	mg/kg dry	100	09/16/21 14:30	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:30	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:30	6010B		AES
Zinc	598	10.0	1.71	mg/kg dry	100	09/16/21 14:30	6010B		AES

Total Metals by ICPMS

Arsenic	1.63	1.00	0.0950	mg/kg dry	1000	09/14/21 16:11	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:29	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

S-06

GRO C6-C10*	<100	100	62.5	mg/kg	10	09/10/21 19:58	8015B		MS
DRO >C10-C28*	20100	100	42.6	mg/kg	10	09/10/21 19:58	8015B		MS
EXT DRO >C28-C36	12000	100	42.6	mg/kg	10	09/10/21 19:58	8015B		MS

Surrogate: 1-Chlorooctane 99.9 % 44.3-133 09/10/21 19:58 8015B MS

Surrogate: 1-Chlorooctadecane 532 % 38.9-142 09/10/21 19:58 8015B MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS17

2109048-05 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/11/21 05:35	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/11/21 05:35	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/11/21 05:35	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/11/21 05:35	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/11/21 05:35	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/11/21 05:35	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/11/21 05:35	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/11/21 05:35	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/11/21 05:35	8260B		MS

Surrogate: Dibromofluoromethane 105 % 84.6-114 09/11/21 05:35 8260B MS

Surrogate: Toluene-d8 97.0 % 90.4-109 09/11/21 05:35 8260B MS

Surrogate: 4-Bromofluorobenzene 92.2 % 82.5-117 09/11/21 05:35 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.383	1.00	0.383	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
2-Methylnaphthalene*	<0.565	1.00	0.565	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
1-Methylnaphthalene	<0.402	1.00	0.402	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Acenaphthylene*	<0.491	1.00	0.491	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Acenaphthene*	<0.588	1.00	0.588	mg/kg	1000	09/14/21 13:17	8270C		MS
Fluorene*	<0.356	1.00	0.356	mg/kg	1000	09/14/21 13:17	8270C	QM-07, QR-03	MS
Phenanthrene*	<0.536	1.00	0.536	mg/kg	1000	09/14/21 13:17	8270C	QM-07, QR-03	MS
Anthracene*	<0.429	1.00	0.429	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Carbazole*	<0.474	1.00	0.474	mg/kg	1000	09/14/21 13:17	8270C	QM-07, QR-03	MS
Fluoranthene*	<0.463	1.00	0.463	mg/kg	1000	09/14/21 13:17	8270C	QM-07, QR-03	MS
Pyrene*	4.96	1.00	0.329	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Benzo[a]anthracene*	<0.576	1.00	0.576	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Chrysene*	10.8	1.00	0.430	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Benzo[b]fluoranthene*	<0.479	1.00	0.479	mg/kg	1000	09/14/21 13:17	8270C	QM-07, QR-03	MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS17

2109048-05 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Benzo[k]fluoranthene*	<0.393	1.00	0.393	mg/kg	1000	09/14/21 13:17	8270C		MS
Benzo[a]pyrene*	<0.454	1.00	0.454	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Indeno[1,2,3-cd]pyrene*	0.499	1.00	0.420	mg/kg	1000	09/14/21 13:17	8270C	J	MS
Dibenz[a,h]anthracene*	<0.464	1.00	0.464	mg/kg	1000	09/14/21 13:17	8270C	QM-07	MS
Benzo[g,h,i]perylene*	3.71	1.00	0.464	mg/kg	1000	09/14/21 13:17	8270C		MS
Surrogate: Nitrobenzene-d5			79.0 %	39.6-121		09/14/21 13:17	8270C		MS
Surrogate: 2-Fluorobiphenyl			74.5 %	39.8-134		09/14/21 13:17	8270C		MS
Surrogate: Terphenyl-d14			104 %	33.3-136		09/14/21 13:17	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS18**2109048-06 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	111	0.200	0.116	mg/L	2	09/21/21 16:50	EPA200.7		AES
Conductivity	1050			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	17.2	0.200	0.131	mg/L	2	09/21/21 16:50	EPA200.7		AES
pH	7.63			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	1.28			No Unit	1	09/21/21 16:50	Calculation		AES
Sodium	55.0	2.00	0.159	mg/L	2	09/21/21 16:50	EPA200.7		AES

Total Metals by ICP

Barium	291	5.00	0.390	mg/kg dry	100	09/16/21 14:34	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:34	6010B		AES
Chromium	30.3	5.00	0.400	mg/kg dry	100	09/16/21 14:34	6010B		AES
Copper	32.4	5.00	2.39	mg/kg dry	100	09/16/21 14:34	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	09/16/21 14:34	6010B		AES
Nickel	16.8	5.00	0.874	mg/kg dry	100	09/16/21 14:34	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:34	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:34	6010B		AES
Zinc	63.1	10.0	1.71	mg/kg dry	100	09/16/21 14:34	6010B		AES

Total Metals by ICPMS

Arsenic	3.86	1.00	0.0950	mg/kg dry	1000	09/14/21 16:14	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:31	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	09/10/21 16:33	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	09/10/21 16:33	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	09/10/21 16:33	8015B		MS

Surrogate: 1-Chlorooctane	104 %	44.3-133	09/10/21 16:33	8015B	MS
Surrogate: 1-Chlorooctadecane	96.8 %	38.9-142	09/10/21 16:33	8015B	MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS18

2109048-06 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/09/21 21:10	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/09/21 21:10	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/09/21 21:10	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/09/21 21:10	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/09/21 21:10	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/09/21 21:10	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/09/21 21:10	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/09/21 21:10	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/09/21 21:10	8260B		MS

Surrogate: Dibromofluoromethane 98.5 % 84.6-114 09/09/21 21:10 8260B MS

Surrogate: Toluene-d8 99.9 % 90.4-109 09/09/21 21:10 8260B MS

Surrogate: 4-Bromofluorobenzene 91.4 % 82.5-117 09/09/21 21:10 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	09/14/21 13:47	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	09/14/21 13:47	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	09/14/21 13:47	8270C		MS
Acenaphthylene*	<0.020	0.040	0.020	mg/kg	40	09/14/21 13:47	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	09/14/21 13:47	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	09/14/21 13:47	8270C		MS
Phenanthrene*	<0.021	0.040	0.021	mg/kg	40	09/14/21 13:47	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 13:47	8270C		MS
Carbazole*	<0.019	0.040	0.019	mg/kg	40	09/14/21 13:47	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 13:47	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	09/14/21 13:47	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	09/14/21 13:47	8270C		MS
Chrysene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 13:47	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 13:47	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	09/14/21 13:47	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	09/14/21 13:47	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS18

2109048-06 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	09/14/21 13:47	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 13:47	8270C		MS
Benzo[g,h,i]perylene*	<0.019	0.040	0.019	mg/kg	40	09/14/21 13:47	8270C		MS
Surrogate: Nitrobenzene-d5			77.2 %	39.6-121		09/14/21 13:47	8270C		MS
Surrogate: 2-Fluorobiphenyl			83.1 %	39.8-134		09/14/21 13:47	8270C		MS
Surrogate: Terphenyl-d14			84.2 %	33.3-136		09/14/21 13:47	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS19

2109048-07 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Hexavalent Chromium	<0.250	0.250	0.0543	mg/kg	25	09/20/21 13:00	3060A/3500-Cr D		JDA
---------------------	--------	-------	--------	-------	----	----------------	-----------------	--	-----

Saturated Paste Extraction

Calcium	100	0.100	0.058	mg/L	1	09/21/21 16:52	EPA200.7		AES
Conductivity	667			umho/cm @ 25.0°C	1	09/21/21 10:20	ASA#9 10-3.3		VJW
Magnesium	15.0	0.100	0.065	mg/L	1	09/21/21 16:53	EPA200.7		AES
pH	7.49			pH Units	1	09/21/21 08:05	ASA#9 10-3.2		VJW
SAR	0.79			No Unit	1	09/21/21 16:52	Calculation		AES
Sodium	31.9	1.00	0.079	mg/L	1	09/21/21 16:52	EPA200.7		AES

Total Metals by ICP

Barium	233	5.00	0.390	mg/kg dry	100	09/16/21 14:38	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	09/16/21 14:38	6010B		AES
Chromium	30.1	5.00	0.400	mg/kg dry	100	09/16/21 14:38	6010B		AES
Copper	30.1	5.00	2.39	mg/kg dry	100	09/16/21 14:38	6010B		AES
Lead	11.5	10.0	0.906	mg/kg dry	100	09/16/21 14:38	6010B		AES
Nickel	17.5	5.00	0.874	mg/kg dry	100	09/16/21 14:38	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	09/16/21 14:38	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	09/16/21 14:38	6010B		AES
Zinc	137	10.0	1.71	mg/kg dry	100	09/16/21 14:38	6010B		AES

Total Metals by ICPMS

Arsenic	4.67	1.00	0.0950	mg/kg dry	1000	09/14/21 16:18	6020A		AES
---------	------	------	--------	-----------	------	----------------	-------	--	-----

Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	09/16/21 17:33	EPA200.7		AES
-------	-------	------	-------	------	---	----------------	----------	--	-----

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Petroleum Hydrocarbons by GC FID

S-06

GRO C6-C10*	<100	100	62.5	mg/kg	10	09/10/21 20:19	8015B		MS
DRO >C10-C28*	3290	100	42.6	mg/kg	10	09/10/21 20:19	8015B		MS
EXT DRO >C28-C36	2960	100	42.6	mg/kg	10	09/10/21 20:19	8015B		MS

Surrogate: 1-Chlorooctane	97.9 %	44.3-133	09/10/21 20:19	8015B	MS
Surrogate: 1-Chlorooctadecane	177 %	38.9-142	09/10/21 20:19	8015B	MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS19

2109048-07 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	09/10/21 00:47	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	09/10/21 00:47	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	09/10/21 00:47	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	09/10/21 00:47	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	09/10/21 00:47	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0250	mg/kg	50	09/10/21 00:47	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	09/10/21 00:47	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	09/10/21 00:47	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	09/10/21 00:47	8260B		MS

Surrogate: Dibromofluoromethane 102 % 84.6-114 09/10/21 00:47 8260B MS

Surrogate: Toluene-d8 95.9 % 90.4-109 09/10/21 00:47 8260B MS

Surrogate: 4-Bromofluorobenzene 117 % 82.5-117 09/10/21 00:47 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.153	0.400	0.153	mg/kg	400	09/14/21 14:17	8270C		MS
2-Methylnaphthalene*	<0.226	0.400	0.226	mg/kg	400	09/14/21 14:17	8270C		MS
1-Methylnaphthalene	<0.161	0.400	0.161	mg/kg	400	09/14/21 14:17	8270C		MS
Acenaphthylene*	<0.196	0.400	0.196	mg/kg	400	09/14/21 14:17	8270C		MS
Acenaphthene*	<0.235	0.400	0.235	mg/kg	400	09/14/21 14:17	8270C		MS
Fluorene*	<0.142	0.400	0.142	mg/kg	400	09/14/21 14:17	8270C		MS
Phenanthrene*	<0.214	0.400	0.214	mg/kg	400	09/14/21 14:17	8270C		MS
Anthracene*	<0.172	0.400	0.172	mg/kg	400	09/14/21 14:17	8270C		MS
Carbazole*	<0.190	0.400	0.190	mg/kg	400	09/14/21 14:17	8270C		MS
Fluoranthene*	<0.185	0.400	0.185	mg/kg	400	09/14/21 14:17	8270C		MS
Pyrene*	0.555	0.400	0.132	mg/kg	400	09/14/21 14:17	8270C		MS
Benzo[a]anthracene*	<0.230	0.400	0.230	mg/kg	400	09/14/21 14:17	8270C		MS
Chrysene*	0.908	0.400	0.172	mg/kg	400	09/14/21 14:17	8270C		MS
Benzo[b]fluoranthene*	<0.192	0.400	0.192	mg/kg	400	09/14/21 14:17	8270C		MS
Benzo[k]fluoranthene*	<0.157	0.400	0.157	mg/kg	400	09/14/21 14:17	8270C		MS
Benzo[a]pyrene*	<0.182	0.400	0.182	mg/kg	400	09/14/21 14:17	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.168	0.400	0.168	mg/kg	400	09/14/21 14:17	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

SS19

2109048-07 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

Polynuclear Aromatic Compounds by GC/MS

Dibenz[a,h]anthracene*	<0.186	0.400	0.186	mg/kg	400	09/14/21 14:17	8270C		MS
Benzo[g,h,i]perylene*	0.409	0.400	0.186	mg/kg	400	09/14/21 14:17	8270C		MS
Surrogate: Nitrobenzene-d5			79.4 %	39.6-121		09/14/21 14:17	8270C		MS
Surrogate: 2-Fluorobiphenyl			90.7 %	39.8-134		09/14/21 14:17	8270C		MS
Surrogate: Terphenyl-d14			90.3 %	33.3-136		09/14/21 14:17	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

General Chemistry - Quality Control

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

Batch B212203 - General Prep - Wet Chem

Blank (B212203-BLK1)

Prepared: 09/17/21 Analyzed: 09/20/21

Hexavalent Chromium	ND	0.250	mg/kg
---------------------	----	-------	-------

LCS (B212203-BS1)

Prepared: 09/17/21 Analyzed: 09/20/21

Hexavalent Chromium	2.09	0.250	mg/kg	2.00	105	85-115
---------------------	------	-------	-------	------	-----	--------

Saturated Paste Extraction - Quality Control

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

Batch B212158 - Paste Extract

Duplicate (B212158-DUP2)

Source: 2109050-03

Prepared: 09/14/21 Analyzed: 09/21/21

pH	7.58		pH Units		7.55			0.397	20
----	------	--	----------	--	------	--	--	-------	----

Reference (B212158-SRM1)

Prepared: 09/14/21 Analyzed: 09/21/21

pH	8.74		pH Units	9.14		95.6	95-105
----	------	--	----------	------	--	------	--------

Batch B212159 - Paste Extract

Duplicate (B212159-DUP2)

Source: 2109050-03

Prepared: 09/14/21 Analyzed: 09/21/21

Conductivity	937		umho/cm @ 25.0°C		931			0.642	20
--------------	-----	--	------------------	--	-----	--	--	-------	----

Reference (B212159-SRM1)

Prepared: 09/14/21 Analyzed: 09/21/21

Conductivity	7650		umho/cm @ 25.0°C	6720		114	90-110
--------------	------	--	------------------	------	--	-----	--------

Batch B212160 - Paste Extract

Blank (B212160-BLK1)

Prepared: 09/14/21 Analyzed: 09/21/21

Calcium	ND	0.100	mg/L
Magnesium	ND	0.100	mg/L
Sodium	ND	1.00	mg/L

Duplicate (B212160-DUP2)

Source: 2109050-03

Prepared: 09/14/21 Analyzed: 09/21/21

Calcium	180	0.100	mg/L		180			0.293	20
Magnesium	10.7	0.100	mg/L		10.3			3.02	20
SAR	0.57		No Unit		0.57			0.00	20

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

**Saturated Paste Extraction - Quality Control
(Continued)**

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

Batch B212160 - Paste Extract (Continued)

Duplicate (B212160-DUP2) (Continued)

Source: 2109050-03

Prepared: 09/14/21 Analyzed: 09/21/21

Sodium	29.2	1.00	mg/L		28.9			1.10	20	
--------	------	------	------	--	------	--	--	------	----	--

Reference (B212160-SRM1)

Prepared: 09/14/21 Analyzed: 09/21/21

SAR	6.75		No Unit	7.50		90.0	90-110			
-----	------	--	---------	------	--	------	--------	--	--	--

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

Total Metals by ICP - Quality Control

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

Batch B212136 - EPA 3050

Blank (B212136-BLK1)

Prepared: 09/10/21 Analyzed: 09/16/21

Barium	ND	5.00	mg/kg dry
Cadmium	ND	5.00	mg/kg dry
Chromium	ND	5.00	mg/kg dry
Copper	ND	5.00	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 (B212136-BS1)

Prepared: 09/10/21 Analyzed: 09/16/21

Barium	189	5.00	mg/kg dry	200	94.5	80-120
Cadmium	174	5.00	mg/kg dry	200	87.2	80-120
Chromium	186	5.00	mg/kg dry	200	93.1	80-120
Copper	390	5.00	mg/kg dry	400	97.5	80-120
Lead	181	10.0	mg/kg dry	200	90.7	80-120
Nickel	181	5.00	mg/kg dry	200	90.6	80-120
Selenium	756	20.0	mg/kg dry	800	94.5	80-120
Silver	9.54	1.00	mg/kg dry	10.0	95.4	80-120
Zinc	171	10.0	mg/kg dry	200	85.3	80-120

LCS Dup (B212136-BSD1)

Prepared: 09/10/21 Analyzed: 09/16/21

Barium	184	5.00	mg/kg dry	200	91.9	80-120	2.73	20
Cadmium	169	5.00	mg/kg dry	200	84.7	80-120	2.84	20
Chromium	181	5.00	mg/kg dry	200	90.7	80-120	2.54	20
Copper	379	5.00	mg/kg dry	400	94.8	80-120	2.80	20
Lead	179	10.0	mg/kg dry	200	89.4	80-120	1.51	20
Nickel	178	5.00	mg/kg dry	200	89.2	80-120	1.52	20
Selenium	755	20.0	mg/kg dry	800	94.4	80-120	0.111	20
Silver	9.36	1.00	mg/kg dry	10.0	93.6	80-120	1.97	20
Zinc	168	10.0	mg/kg dry	200	83.9	80-120	1.65	20

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

Total Metals by ICPMS - Quality Control

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

Batch B212140 - EPA 3050M

Blank (B212140-BLK1)

Prepared: 09/10/21 Analyzed: 09/14/21

Arsenic	ND	0.100	mg/kg dry							
---------	----	-------	-----------	--	--	--	--	--	--	--

LCS (B212140-BS1)

Prepared: 09/10/21 Analyzed: 09/14/21

Arsenic	4.83	0.100	mg/kg dry	5.00		96.6	80-120			
---------	------	-------	-----------	------	--	------	--------	--	--	--

LCS Dup (B212140-BSD1)

Prepared: 09/10/21 Analyzed: 09/14/21

Arsenic	5.45	0.100	mg/kg dry	5.00		109	80-120	12.0	20	
---------	------	-------	-----------	------	--	-----	--------	------	----	--

Hot Water Extractable - Quality Control

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

Batch B212161 - Hot Water Soluble Metals Extract

Blank (B212161-BLK1)

Prepared: 09/14/21 Analyzed: 09/16/21

Boron	ND	1.20	mg/L							
-------	----	------	------	--	--	--	--	--	--	--

Duplicate (B212161-DUP1)

Source: 2109045-03 Prepared: 09/14/21 Analyzed: 09/16/21

Boron	ND	1.20	mg/L		ND				200	
-------	----	------	------	--	----	--	--	--	-----	--

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

Petroleum Hydrocarbons by GC FID - Quality Control

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

Batch 1090906 - General Prep - Organics

Blank (1090906-BLK1)

Prepared: 09/09/21 Analyzed: 09/10/21

Surrogate: 1-Chlorooctadecane	40.2		mg/kg	50.0		80.3	38.9-142			
Surrogate: 1-Chlorooctane	45.0		mg/kg	50.0		89.9	44.3-133			
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 (1090906-BS1)

Prepared: 09/09/21 Analyzed: 09/10/21

Surrogate: 1-Chlorooctadecane	40.0		mg/kg	50.0		80.0	38.9-142			
Surrogate: 1-Chlorooctane	43.9		mg/kg	50.0		87.8	44.3-133			
DRO >C10-C28	196	10.0	mg/kg	200		98.2	79.3-136			
GRO C6-C10	174	10.0	mg/kg	200		86.9	83.4-129			
Total TPH C6-C28	370	10.0	mg/kg	400		92.5	85.3-130			

LCS Dup (1090906-BSD1)

Prepared: 09/09/21 Analyzed: 09/10/21

Surrogate: 1-Chlorooctadecane	42.9		mg/kg	50.0		85.9	38.9-142			
Surrogate: 1-Chlorooctane	46.7		mg/kg	50.0		93.5	44.3-133			
DRO >C10-C28	197	10.0	mg/kg	200		98.3	79.3-136	0.185	12.1	
GRO C6-C10	177	10.0	mg/kg	200		88.7	83.4-129	2.03	12.6	
Total TPH C6-C28	374	10.0	mg/kg	400		93.5	85.3-130	1.06	11.6	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

VOLATILES BY GC/MS - Quality Control

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

Batch 1090813 - Volatiles

Blank (1090813-BLK1)

Prepared: 09/08/21 Analyzed: 09/09/21

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.11		mg/kg	1.25		89.1	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.29		mg/kg	1.25		103	84.6-114			
Ethylbenzene	ND	0.0250	mg/kg							
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	1.23		mg/kg	1.25		98.2	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (1090813-BS1)

Prepared: 09/08/21 Analyzed: 09/09/21

1,2,4-Trimethylbenzene	0.519	0.0250	mg/kg	0.500		104	62.4-140			
1,3,5-Trimethylbenzene	0.571	0.0250	mg/kg	0.500		114	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.20		mg/kg	1.25		96.1	82.5-117			
Benzene	0.528	0.0250	mg/kg	0.500		106	73-130			
Surrogate: Dibromofluoromethane	1.25		mg/kg	1.25		99.7	84.6-114			
Ethylbenzene	0.511	0.0250	mg/kg	0.500		102	75.4-127			
m+p - Xylene	1.03	0.0500	mg/kg	1.00		103	71.8-133			
Naphthalene	0.485	0.0250	mg/kg	0.500		97.0	28.7-158			
o-Xylene	0.496	0.0250	mg/kg	0.500		99.2	78.6-125			
Toluene	0.510	0.0250	mg/kg	0.500		102	79-122			
Surrogate: Toluene-d8	1.25		mg/kg	1.25		99.6	90.4-109			
Total Xylenes	1.52	0.0750	mg/kg	1.50		102	74.6-130			

LCS Dup (1090813-BSD1)

Prepared: 09/08/21 Analyzed: 09/09/21

1,2,4-Trimethylbenzene	0.506	0.0250	mg/kg	0.500		101	62.4-140	2.44	38.2	
1,3,5-Trimethylbenzene	0.506	0.0250	mg/kg	0.500		101	64.4-138	12.0	39.1	
Surrogate: 4-Bromofluorobenzene	1.21		mg/kg	1.25		96.7	82.5-117			
Benzene	0.526	0.0250	mg/kg	0.500		105	73-130	0.287	17.1	
Surrogate: Dibromofluoromethane	1.25		mg/kg	1.25		100	84.6-114			
Ethylbenzene	0.496	0.0250	mg/kg	0.500		99.2	75.4-127	2.88	16.5	
m+p - Xylene	1.01	0.0500	mg/kg	1.00		101	71.8-133	1.63	19.1	
Naphthalene	0.463	0.0250	mg/kg	0.500		92.6	28.7-158	4.56	64	
o-Xylene	0.486	0.0250	mg/kg	0.500		97.3	78.6-125	2.02	13.2	
Toluene	0.509	0.0250	mg/kg	0.500		102	79-122	0.177	18.3	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

VOLATILES BY GC/MS - Quality Control
(Continued)

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

Batch 1090813 - Volatiles (Continued)

LCS Dup (1090813-BSD1) (Continued)

Prepared: 09/08/21 Analyzed: 09/09/21

Surrogate: Toluene-d8	1.24		mg/kg	1.25		99.4	90.4-109			
Total Xylenes	1.50	0.0750	mg/kg	1.50		99.7	74.6-130	1.75	16.5	

Batch 1090814 - Volatiles

Blank (1090814-BLK1)

Prepared: 09/08/21 Analyzed: 09/10/21

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.11		mg/kg	1.25		88.8	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.23		mg/kg	1.25		98.6	84.6-114			
Ethylbenzene	ND	0.0250	mg/kg							
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	1.22		mg/kg	1.25		97.3	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (1090814-BS1)

Prepared: 09/08/21 Analyzed: 09/10/21

1,2,4-Trimethylbenzene	0.462	0.0250	mg/kg	0.500		92.4	62.4-140			
1,3,5-Trimethylbenzene	0.469	0.0250	mg/kg	0.500		93.7	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.18		mg/kg	1.25		94.4	82.5-117			
Benzene	0.499	0.0250	mg/kg	0.500		99.7	73-130			
Surrogate: Dibromofluoromethane	1.16		mg/kg	1.25		92.6	84.6-114			
Ethylbenzene	0.475	0.0250	mg/kg	0.500		95.1	75.4-127			
m+p - Xylene	0.974	0.0500	mg/kg	1.00		97.4	71.8-133			
Naphthalene	0.329	0.0250	mg/kg	0.500		65.8	28.7-158			
o-Xylene	0.458	0.0250	mg/kg	0.500		91.6	78.6-125			
Toluene	0.499	0.0250	mg/kg	0.500		99.9	79-122			
Surrogate: Toluene-d8	1.21		mg/kg	1.25		97.1	90.4-109			
Total Xylenes	1.43	0.0750	mg/kg	1.50		95.5	74.6-130			

LCS Dup (1090814-BSD1)

Prepared: 09/08/21 Analyzed: 09/09/21

1,2,4-Trimethylbenzene	0.506	0.0250	mg/kg	0.500		101	62.4-140	9.11	38.2	
1,3,5-Trimethylbenzene	0.505	0.0250	mg/kg	0.500		101	64.4-138	7.56	39.1	
Surrogate: 4-Bromofluorobenzene	1.24		mg/kg	1.25		99.4	82.5-117			
Benzene	0.514	0.0250	mg/kg	0.500		103	73-130	3.04	17.1	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

VOLATILES BY GC/MS - Quality Control
(Continued)

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

Batch 1090814 - Volatiles (Continued)

LCS Dup (1090814-BSD1) (Continued)

Prepared: 09/08/21 Analyzed: 09/09/21

Surrogate: Dibromofluoromethane	1.19		mg/kg	1.25		95.0	84.6-114			
Ethylbenzene	0.508	0.0250	mg/kg	0.500		102	75.4-127	6.57	16.5	
m+p - Xylene	1.03	0.0500	mg/kg	1.00		103	71.8-133	5.55	19.1	
Naphthalene	0.392	0.0250	mg/kg	0.500		78.5	28.7-158	17.6	64	
o-Xylene	0.508	0.0250	mg/kg	0.500		102	78.6-125	10.3	13.2	
Toluene	0.505	0.0250	mg/kg	0.500		101	79-122	1.02	18.3	
Surrogate: Toluene-d8	1.24		mg/kg	1.25		99.1	90.4-109			
Total Xylenes	1.54	0.0750	mg/kg	1.50		102	74.6-130	7.10	16.5	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

Polynuclear Aromatic Compounds by GC/MS - Quality Control

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

Batch 1090709 - SW846-3510

Blank (1090709-BLK1)

Prepared: 09/07/21 Analyzed: 09/13/21

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	1.57		mg/kg	2.00		78.5	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Acenaphthylene	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[g,h,i]perylene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Carbazole	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	1.61		mg/kg	2.00		80.4	39.6-121			
Phenanthrene	ND	0.040	mg/kg							
Pyrene	ND	0.040	mg/kg							
Surrogate: Terphenyl-d14	1.79		mg/kg	2.00		89.3	33.3-136			

LCS (1090709-BS1)

Prepared: 09/07/21 Analyzed: 09/13/21

1-Methylnaphthalene	0.333	0.040	mg/kg	0.400		83.3	57.6-108			
Surrogate: 2-Fluorobiphenyl	1.69		mg/kg	2.00		84.5	39.8-134			
2-Methylnaphthalene	0.347	0.040	mg/kg	0.400		86.7	59-106			
Acenaphthene	0.335	0.040	mg/kg	0.400		83.6	60.9-105			
Acenaphthylene	0.360	0.040	mg/kg	0.400		89.9	57.4-107			
Anthracene	0.330	0.040	mg/kg	0.400		82.5	60.8-105			
Benzo[a]anthracene	0.343	0.040	mg/kg	0.400		85.7	56.1-121			
Benzo[a]pyrene	0.302	0.040	mg/kg	0.400		75.6	56.7-115			
Benzo[b]fluoranthene	0.353	0.040	mg/kg	0.400		88.2	45.4-128			
Benzo[g,h,i]perylene	0.333	0.040	mg/kg	0.400		83.3	56.5-107			
Benzo[k]fluoranthene	0.350	0.040	mg/kg	0.400		87.6	49.6-119			
Carbazole	0.337	0.040	mg/kg	0.400		84.3	59.7-107			
Chrysene	0.341	0.040	mg/kg	0.400		85.4	12.2-190			
Dibenz[a,h]anthracene	0.323	0.040	mg/kg	0.400		80.7	59.1-111			
Fluoranthene	0.312	0.040	mg/kg	0.400		78.0	60.6-111			

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1090709 - SW846-3510 (Continued)

LCS (1090709-BS1) (Continued)

Prepared: 09/07/21 Analyzed: 09/13/21

Fluorene	0.339	0.040	mg/kg	0.400		84.8	59.3-108			
Indeno[1,2,3-cd]pyrene	0.329	0.040	mg/kg	0.400		82.3	53.4-116			
Naphthalene	0.350	0.040	mg/kg	0.400		87.6	56.5-106			
Surrogate: Nitrobenzene-d5	1.67		mg/kg	2.00		83.7	39.6-121			
Phenanthrene	0.336	0.040	mg/kg	0.400		83.9	59.9-107			
Pyrene	0.372	0.040	mg/kg	0.400		93.1	51.5-122			
Surrogate: Terphenyl-d14	1.82		mg/kg	2.00		91.2	33.3-136			

LCS Dup (1090709-BSD1)

Prepared: 09/07/21 Analyzed: 09/13/21

1-Methylnaphthalene	0.332	0.040	mg/kg	0.400		83.0	57.6-108	0.358	6.22	
Surrogate: 2-Fluorobiphenyl	1.67		mg/kg	2.00		83.6	39.8-134			
2-Methylnaphthalene	0.343	0.040	mg/kg	0.400		85.8	59-106	1.10	6.23	
Acenaphthene	0.345	0.040	mg/kg	0.400		86.3	60.9-105	3.07	8.18	
Acenaphthylene	0.353	0.040	mg/kg	0.400		88.2	57.4-107	1.87	5	
Anthracene	0.334	0.040	mg/kg	0.400		83.5	60.8-105	1.31	3.68	
Benzo[a]anthracene	0.342	0.040	mg/kg	0.400		85.4	56.1-121	0.313	9.01	
Benzo[a]pyrene	0.297	0.040	mg/kg	0.400		74.2	56.7-115	1.90	4.92	
Benzo[b]fluoranthene	0.343	0.040	mg/kg	0.400		85.7	45.4-128	2.88	7.63	
Benzo[g,h,i]perylene	0.334	0.040	mg/kg	0.400		83.5	56.5-107	0.246	12.5	
Benzo[k]fluoranthene	0.347	0.040	mg/kg	0.400		86.7	49.6-119	1.04	10.6	
Carbazole	0.344	0.040	mg/kg	0.400		86.0	59.7-107	2.03	8.65	
Chrysene	0.335	0.040	mg/kg	0.400		83.7	12.2-190	2.02	21.8	
Dibenz[a,h]anthracene	0.313	0.040	mg/kg	0.400		78.2	59.1-111	3.21	11.6	
Fluoranthene	0.319	0.040	mg/kg	0.400		79.6	60.6-111	2.08	7.54	
Fluorene	0.334	0.040	mg/kg	0.400		83.6	59.3-108	1.49	5.49	
Indeno[1,2,3-cd]pyrene	0.331	0.040	mg/kg	0.400		82.8	53.4-116	0.627	22.3	
Naphthalene	0.349	0.040	mg/kg	0.400		87.2	56.5-106	0.386	4.56	
Surrogate: Nitrobenzene-d5	1.70		mg/kg	2.00		84.8	39.6-121			
Phenanthrene	0.335	0.040	mg/kg	0.400		83.7	59.9-107	0.242	5.21	
Pyrene	0.344	0.040	mg/kg	0.400		86.1	51.5-122	7.79	10.6	
Surrogate: Terphenyl-d14	1.67		mg/kg	2.00		83.5	33.3-136			

Batch 1090817 - SW846-3510

Blank (1090817-BLK1)

Prepared: 09/08/21 Analyzed: 09/14/21

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	1.34		mg/kg	2.00		67.2	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1090817 - SW846-3510 (Continued)

Blank (1090817-BLK1) (Continued)

Prepared: 09/08/21 Analyzed: 09/14/21

Acenaphthylene	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[g,h,i]perylene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Carbazole	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	1.21		mg/kg	2.00		60.5	39.6-121			
Phenanthrene	ND	0.040	mg/kg							
Pyrene	ND	0.040	mg/kg							

Surrogate: Terphenyl-d14	1.43		mg/kg	2.00		71.7	33.3-136			
--------------------------	------	--	-------	------	--	------	----------	--	--	--

LCS (1090817-BS1)

Prepared: 09/08/21 Analyzed: 09/14/21

1-Methylnaphthalene	0.250	0.040	mg/kg	0.400		62.4	57.6-108			
Surrogate: 2-Fluorobiphenyl	1.20		mg/kg	2.00		59.9	39.8-134			
2-Methylnaphthalene	0.254	0.040	mg/kg	0.400		63.6	59-106			
Acenaphthene	0.275	0.040	mg/kg	0.400		68.8	60.9-105			
Acenaphthylene	0.262	0.040	mg/kg	0.400		65.5	57.4-107			
Anthracene	0.268	0.040	mg/kg	0.400		67.0	60.8-105			
Benzo[a]anthracene	0.271	0.040	mg/kg	0.400		67.7	56.1-121			
Benzo[a]pyrene	0.230	0.040	mg/kg	0.400		57.4	56.7-115			
Benzo[b]fluoranthene	0.272	0.040	mg/kg	0.400		68.0	45.4-128			
Benzo[g,h,i]perylene	0.255	0.040	mg/kg	0.400		63.7	56.5-107			
Benzo[k]fluoranthene	0.274	0.040	mg/kg	0.400		68.6	49.6-119			
Carbazole	0.270	0.040	mg/kg	0.400		67.6	59.7-107			
Chrysene	0.268	0.040	mg/kg	0.400		66.9	12.2-190			
Dibenz[a,h]anthracene	0.245	0.040	mg/kg	0.400		61.3	59.1-111			
Fluoranthene	0.268	0.040	mg/kg	0.400		67.1	60.6-111			
Fluorene	0.266	0.040	mg/kg	0.400		66.5	59.3-108			
Indeno[1,2,3-cd]pyrene	0.258	0.040	mg/kg	0.400		64.4	53.4-116			
Naphthalene	0.250	0.040	mg/kg	0.400		62.5	56.5-106			

Surrogate: Nitrobenzene-d5	1.16		mg/kg	2.00		57.8	39.6-121			
----------------------------	------	--	-------	------	--	------	----------	--	--	--

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1090817 - SW846-3510 (Continued)

LCS (1090817-BS1) (Continued)

Prepared: 09/08/21 Analyzed: 09/14/21

Phenanthrene	0.270	0.040	mg/kg	0.400		67.5	59.9-107			
Pyrene	0.279	0.040	mg/kg	0.400		69.8	51.5-122			
Surrogate: Terphenyl-dl4	1.32		mg/kg	2.00		66.1	33.3-136			

LCS Dup (1090817-BSD1)

Prepared: 09/08/21 Analyzed: 09/14/21

1-Methylnaphthalene	0.242	0.040	mg/kg	0.400		60.5	57.6-108	3.13	6.22	
Surrogate: 2-Fluorobiphenyl	1.28		mg/kg	2.00		63.9	39.8-134			
2-Methylnaphthalene	0.262	0.040	mg/kg	0.400		65.4	59-106	2.81	6.23	
Acenaphthene	0.267	0.040	mg/kg	0.400		66.7	60.9-105	3.05	8.18	
Acenaphthylene	0.265	0.040	mg/kg	0.400		66.2	57.4-107	1.04	5	
Anthracene	0.255	0.040	mg/kg	0.400		63.7	60.8-105	5.04	3.68	QR-04
Benzo[a]anthracene	0.282	0.040	mg/kg	0.400		70.5	56.1-121	4.08	9.01	
Benzo[a]pyrene	0.236	0.040	mg/kg	0.400		59.0	56.7-115	2.79	4.92	
Benzo[b]fluoranthene	0.284	0.040	mg/kg	0.400		71.0	45.4-128	4.44	7.63	
Benzo[g,h,i]perylene	0.257	0.040	mg/kg	0.400		64.2	56.5-107	0.751	12.5	
Benzo[k]fluoranthene	0.257	0.040	mg/kg	0.400		64.2	49.6-119	6.64	10.6	
Carbazole	0.275	0.040	mg/kg	0.400		68.7	59.7-107	1.69	8.65	
Chrysene	0.273	0.040	mg/kg	0.400		68.1	12.2-190	1.88	21.8	
Dibenz[a,h]anthracene	0.247	0.040	mg/kg	0.400		61.6	59.1-111	0.500	11.6	
Fluoranthene	0.256	0.040	mg/kg	0.400		63.9	60.6-111	4.84	7.54	
Fluorene	0.267	0.040	mg/kg	0.400		66.8	59.3-108	0.499	5.49	
Indeno[1,2,3-cd]pyrene	0.260	0.040	mg/kg	0.400		65.1	53.4-116	0.996	22.3	
Naphthalene	0.249	0.040	mg/kg	0.400		62.3	56.5-106	0.341	4.56	
Surrogate: Nitrobenzene-d5	1.13		mg/kg	2.00		56.3	39.6-121			
Phenanthrene	0.258	0.040	mg/kg	0.400		64.4	59.9-107	4.69	5.21	
Pyrene	0.260	0.040	mg/kg	0.400		64.9	51.5-122	7.23	10.6	
Surrogate: Terphenyl-dl4	1.27		mg/kg	2.00		63.5	33.3-136			

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Margaret Spaulding Central Tank Battery
Project Manager: Kyle Siesser

Reported:
09/27/21 07:48

Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

QR-04 The RPD for the BS/BSD was outside of historical limits.

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.

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

M5 Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.

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

Debbie Zufelt, Reports Manager

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(970) 247-4220
Fax: (970) 247-4227

service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC		P.O. #:		Bill to (if different):		ANALYSIS REQUEST																																			
Project Manager: Kyle Siesser		Company:																																							
Address: PO Box 1653		Attn:																																							
City: Durango		State: CO		Zip: 81302																																					
Phone #: 970-764-7356		Email: ksiesser@cottonwoodconsulting.com		Address:																																					
Additional Report To:		City:		State:		Zip:																																			
Project Name: Margaret Spaulding Central Tank Battery		Phone #:																																							
Project Number:		Fax or Email:																																							
Sampler Name (Print): Emma Miller / Kyle Siesser		Matrix (check one)		# of containers																																					
FOR LAB USE ONLY		Collected																																							
Lab I.D.		Date		Time		GROUNDWATER		SURFACEWATER		WASTEWATER		PRODUCEDWATER		SOIL		OTHER :		No preservation (general)		HNO ₃		HCl		H ₂ SO ₄		Other:		Other:													
2109-048-01		8/31/21		1740										X				3														X									
-02		9/1/21		1230										X				3														X									
-03				1230										X				3														X									
-04				1240										X				3														X									
-05				1250										X				3														X									
-06				1305										X				3														X									
-07				1340										X				3														X									
Relinquished By:		Date: 9/13/21		Time: 1115		Received By: <i>Danville Zupet</i>		ADDITIONAL REMARKS:		Report to State? (Circle)																															
Relinquished By:		Date:		Time:		Received By:				Yes <input type="radio"/> No <input checked="" type="radio"/>																															
Relinquished By:		Date:		Time:		Received By:																																			
Delivered By: (Circle One)		Temperature at receipt:		CHECKED BY:																																					
Sampler: UPS - FedEx - Kangaroo - Other:		5.2/5.12		D3																																					

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