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05 December 2023

Jacob Harter  
Cottonwood Consulting  
PO Box 1653  
Durango, CO 81302  
RE: Harris (OWP) #5

Enclosed are the results of analyses for samples received by the laboratory on 11/15/23 17:07. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

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

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen  
Laboratory Director

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

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-23-18

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

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PO Box 1653  
Durango CO, 81302

Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS04	2311208-01	Solid	11/15/23 10:25	11/15/23 17:07	
SS05	2311208-02	Solid	11/15/23 10:30	11/15/23 17:07	

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A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

## SS04

## 2311208-01 (Soil)

Sampled Date: 11/15/23 10:25

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

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	11/29/23 15:56	3060A/3500-Cr B		CAI
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## Saturated Paste Extraction

Calcium	59.0	0.100	0.058	mg/L	1	11/28/23 21:04	EPA200.7		AES
Conductivity	562			umho/cm@25 C	1	11/21/23 10:27	ASA#9 10-3.3		AES
Magnesium	15.5	0.100	0.065	mg/L	1	11/28/23 21:04	EPA200.7		AES
pH	8.02			pH Units	1	11/21/23 10:27	ASA#9 10-3.2		AES
SAR	0.97			No Unit	1	11/28/23 21:04	Calculation		AES
Sodium	32.4	1.00	0.079	mg/L	1	11/28/23 21:04	EPA200.7		AES

## Total Metals by ICP

Barium	184	5.00	0.942	mg/kg dry	100	12/04/23 16:05	6010B		AES
Cadmium	<5.00	5.00	1.29	mg/kg dry	100	12/04/23 16:05	6010B		AES
Chromium	15.5	5.00	4.53	mg/kg dry	100	12/04/23 16:05	6010B		AES
Copper	21.7	10.0	4.61	mg/kg dry	100	12/04/23 16:05	6010B		AES
Lead	<10.0	10.0	1.88	mg/kg dry	100	12/04/23 16:05	6010B		AES
Nickel	11.0	5.00	1.41	mg/kg dry	100	12/04/23 16:05	6010B		AES
Selenium	<20.0	20.0	9.47	mg/kg dry	100	12/04/23 16:04	6010B		AES
Silver	<1.00	1.00	0.460	mg/kg dry	100	12/04/23 16:04	6010B		AES
Zinc	36.5	10.0	1.24	mg/kg dry	100	12/04/23 16:05	6010B		AES

## Total Metals by ICPMS

Arsenic	5.63	1.00	0.158	mg/kg dry	1000	12/04/23 13:43	6020A		AES
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## Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	11/28/23 23:14	EPA200.7		AES
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## Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

## Petroleum Hydrocarbons by GC FID

DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	11/18/23 00:56	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	11/18/23 00:56	8015B		MS
GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	11/18/23 00:56	8015B		MS

Surrogate: 1-Chlorooctadecane

69.6 %	49.1-148	11/18/23	8015B	MS
		00:56		

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Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

## SS04

## 2311208-01 (Soil)

Sampled Date: 11/15/23 10:25

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

## Petroleum Hydrocarbons by GC FID

Surrogate: 1-Chlorooctane	70.1 %	48.2-134				11/18/23 00:56	8015B		MS
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## VOLATILES BY GC/MS

1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	11/22/23 20:27	8260B		ZZZ
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	11/22/23 20:27	8260B		ZZZ
Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	11/22/23 20:27	8260B		ZZZ
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	11/22/23 20:27	8260B		ZZZ
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	11/22/23 20:27	8260B		ZZZ
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	11/22/23 20:27	8260B		ZZZ
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	11/22/23 20:27	8260B		ZZZ
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	11/22/23 20:27	8260B		ZZZ
Total Xylenes*	<0.0750	0.0750	0.0256	mg/kg	50	11/22/23 20:27	8260B		ZZZ

Surrogate: 4-Bromofluorobenzene	97.8 %	82.5-117				11/22/23 20:27	8260B		ZZZ
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Surrogate: Dibromofluoromethane	89.9 %	84.6-114				11/22/23 20:27	8260B		ZZZ
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Surrogate: Toluene-d8	99.7 %	90.4-109				11/22/23 20:27	8260B		ZZZ
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## Polynuclear Aromatic Compounds by GC/MS

1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	11/20/23 19:31	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	11/20/23 19:31	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	11/20/23 19:31	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	11/20/23 19:31	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	11/20/23 19:31	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	11/20/23 19:31	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 19:31	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	11/20/23 19:31	8270C		MS
Chrysene	<0.017	0.040	0.017	mg/kg	40	11/20/23 19:31	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 19:31	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 19:31	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	11/20/23 19:31	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	11/20/23 19:31	8270C		MS

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Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

**SS04**

**2311208-01 (Soil)**

**Sampled Date: 11/15/23 10:25**

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

**Polynuclear Aromatic Compounds by GC/MS**

<b>Naphthalene*</b>	<0.015	0.040	0.015	mg/kg	40	11/20/23 19:31	8270C		MS
<b>Pyrene*</b>	<0.013	0.040	0.013	mg/kg	40	11/20/23 19:31	8270C		MS
<i>Surrogate: 2-Fluorobiphenyl</i>			80.8 %	39.8-134		11/20/23 19:31	8270C		MS
<i>Surrogate: Nitrobenzene-d5</i>			63.3 %	39.6-121		11/20/23 19:31	8270C		MS
<i>Surrogate: Terphenyl-d14</i>			85.7 %	33.3-136		11/20/23 19:31	8270C		MS

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

## SS05

## 2311208-02 (Soil)

Sampled Date: 11/15/23 10:30

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

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	11/29/23 15:56	3060A/3500-Cr B		CAI
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## Saturated Paste Extraction

Calcium	35.8	0.100	0.058	mg/L	1	11/28/23 21:10	EPA200.7		AES
Conductivity	271			umho/cm@25 C	1	11/21/23 10:27	ASA#9 10-3.3		AES
Magnesium	8.14	0.100	0.065	mg/L	1	11/28/23 21:10	EPA200.7		AES
pH	7.88			pH Units	1	11/21/23 10:27	ASA#9 10-3.2		AES
SAR	0.23			No Unit	1	11/28/23 21:10	Calculation		AES
Sodium	5.81	1.00	0.079	mg/L	1	11/28/23 21:10	EPA200.7		AES

## Total Metals by ICP

Barium	181	5.00	0.942	mg/kg dry	100	12/04/23 16:10	6010B		AES
Cadmium	<5.00	5.00	1.29	mg/kg dry	100	12/04/23 16:10	6010B		AES
Chromium	14.0	5.00	4.53	mg/kg dry	100	12/04/23 16:10	6010B		AES
Copper	17.2	10.0	4.61	mg/kg dry	100	12/04/23 16:10	6010B		AES
Lead	<10.0	10.0	1.88	mg/kg dry	100	12/04/23 16:10	6010B		AES
Nickel	9.90	5.00	1.41	mg/kg dry	100	12/04/23 16:10	6010B		AES
Selenium	<20.0	20.0	9.47	mg/kg dry	100	12/04/23 16:09	6010B		AES
Silver	<1.00	1.00	0.460	mg/kg dry	100	12/04/23 16:09	6010B		AES
Zinc	33.9	10.0	1.24	mg/kg dry	100	12/04/23 16:10	6010B		AES

## Total Metals by ICPMS

Arsenic	4.14	1.00	0.158	mg/kg dry	1000	12/04/23 13:44	6020A		AES
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## Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	11/28/23 23:20	EPA200.7		AES
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## Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

## Petroleum Hydrocarbons by GC FID

DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	11/17/23 17:39	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	11/17/23 17:39	8015B		MS
GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	11/17/23 17:39	8015B		MS

Surrogate: 1-Chlorooctadecane

79.2 % 49.1-148

11/17/23  
17:39

8015B

MS

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Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

## SS05

2311208-02 (Soil)

Sampled Date: 11/15/23 10:30

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

## Petroleum Hydrocarbons by GC FID

Surrogate: 1-Chlorooctane	78.8 %	48.2-134				11/17/23 17:39	8015B		MS
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## VOLATILES BY GC/MS

1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	11/22/23 20:50	8260B		ZZZ
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	11/22/23 20:50	8260B		ZZZ
Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	11/22/23 20:50	8260B		ZZZ
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	11/22/23 20:50	8260B		ZZZ
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	11/22/23 20:50	8260B		ZZZ
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	11/22/23 20:50	8260B		ZZZ
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	11/22/23 20:50	8260B		ZZZ
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	11/22/23 20:50	8260B		ZZZ
Total Xylenes*	<0.0750	0.0750	0.0256	mg/kg	50	11/22/23 20:50	8260B		ZZZ

Surrogate: 4-Bromofluorobenzene	97.7 %	82.5-117				11/22/23 20:50	8260B		ZZZ
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Surrogate: Dibromofluoromethane	89.7 %	84.6-114				11/22/23 20:50	8260B		ZZZ
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Surrogate: Toluene-d8	97.8 %	90.4-109				11/22/23 20:50	8260B		ZZZ
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## Polynuclear Aromatic Compounds by GC/MS

1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	11/20/23 20:03	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	11/20/23 20:03	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	11/20/23 20:03	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	11/20/23 20:03	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	11/20/23 20:03	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	11/20/23 20:03	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 20:03	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	11/20/23 20:03	8270C		MS
Chrysene	<0.017	0.040	0.017	mg/kg	40	11/20/23 20:03	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 20:03	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/20/23 20:03	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	11/20/23 20:03	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	11/20/23 20:03	8270C		MS

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Jeremy D Allen, Laboratory Director

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Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

**SS05**

**2311208-02 (Soil)**

**Sampled Date: 11/15/23 10:30**

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**

<b>Naphthalene*</b>	<0.015	0.040	0.015	mg/kg	40	11/20/23 20:03	8270C		MS
<b>Pyrene*</b>	<0.013	0.040	0.013	mg/kg	40	11/20/23 20:03	8270C		MS
<i>Surrogate: 2-Fluorobiphenyl</i>			79.4 %	39.8-134		11/20/23 20:03	8270C		MS
<i>Surrogate: Nitrobenzene-d5</i>			56.5 %	39.6-121		11/20/23 20:03	8270C		MS
<i>Surrogate: Terphenyl-d14</i>			91.5 %	33.3-136		11/20/23 20:03	8270C		MS

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Durango CO, 81302

Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

### General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B233506 - General Prep - Wet Chem</b>										
<b>Blank (B233506-BLK1)</b>										
Prepared: 11/22/23 Analyzed: 11/29/23										
Hexavalent Chromium	ND	0.250	mg/kg dry							
<b>LCS (B233506-BS1)</b>										
Prepared: 11/22/23 Analyzed: 11/29/23										
Hexavalent Chromium	2.41	0.250	mg/kg dry	2.50		96.5	85-115			

### Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B233478 - Paste Extract</b>										
<b>Reference (B233478-SRM1)</b>										
Prepared: 11/20/23 Analyzed: 11/21/23										
pH	7.64		pH Units	7.35		104	92-108			
<b>Batch B233482 - Paste Extract</b>										
<b>Reference (B233482-SRM1)</b>										
Prepared: 11/20/23 Analyzed: 11/21/23										
Conductivity	4890		umho/cm@2 5C	6480		75.5	90-110			BS3
<b>Batch B233484 - General Prep-SOILS</b>										
<b>Blank (B233484-BLK1)</b>										
Prepared: 11/20/23 Analyzed: 11/28/23										
Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							
<b>Reference (B233484-SRM1)</b>										
Prepared: 11/20/23 Analyzed: 11/28/23										
SAR	5.69		No Unit	6.20		91.8	90-110			

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

### Total Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B233507 - EPA 3050

##### Blank (B233507-BLK1)

Prepared: 11/22/23 Analyzed: 12/04/23

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

##### LCS (B233507-BS1)

Prepared: 11/22/23 Analyzed: 12/04/23

Barium	187	5.00	mg/kg dry	200		93.4	80-120			
Cadmium	175	5.00	mg/kg dry	200		87.7	80-120			
Chromium	190	5.00	mg/kg dry	200		95.1	80-120			
Copper	396	10.0	mg/kg dry	400		98.9	80-120			
Lead	178	10.0	mg/kg dry	200		89.1	80-120			
Nickel	180	5.00	mg/kg dry	200		89.8	80-120			
Selenium	770	20.0	mg/kg dry	800		96.3	80-120			
Silver	8.88	1.00	mg/kg dry	10.0		88.8	80-120			
Zinc	167	10.0	mg/kg dry	200		83.7	80-120			

##### LCS Dup (B233507-BSD1)

Prepared: 11/22/23 Analyzed: 12/04/23

Barium	186	5.00	mg/kg dry	200		93.1	80-120	0.334	20	
Cadmium	174	5.00	mg/kg dry	200		86.9	80-120	0.942	20	
Chromium	189	5.00	mg/kg dry	200		94.7	80-120	0.436	20	
Copper	396	10.0	mg/kg dry	400		99.0	80-120	0.0422	20	
Lead	178	10.0	mg/kg dry	200		88.8	80-120	0.427	20	
Nickel	179	5.00	mg/kg dry	200		89.6	80-120	0.220	20	
Selenium	762	20.0	mg/kg dry	800		95.2	80-120	1.12	20	
Silver	8.86	1.00	mg/kg dry	10.0		88.6	80-120	0.244	20	
Zinc	166	10.0	mg/kg dry	200		82.9	80-120	1.03	20	

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

### Total Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B233508 - EPA 3050M

##### Blank (B233508-BLK1)

Prepared: 11/22/23 Analyzed: 12/04/23

Arsenic	ND	0.100	mg/kg dry							
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##### LCS (B233508-BS1)

Prepared: 11/22/23 Analyzed: 12/04/23

Arsenic	5.26	0.100	mg/kg dry	5.00		105	80-120			
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##### LCS Dup (B233508-BSD1)

Prepared: 11/22/23 Analyzed: 12/04/23

Arsenic	5.20	0.100	mg/kg dry	5.00		104	80-120	1.06	20	
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### Hot Water Extractable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B233479 - General Prep-SOILS

##### Blank (B233479-BLK1)

Prepared: 11/20/23 Analyzed: 11/28/23

Boron	ND	1.20	mg/L							
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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

### Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 3111723 - General Prep - Organics

##### Blank (3111723-BLK1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	48.5		mg/kg	50.0		97.0	49.1-148			
Surrogate: 1-Chlorooctane	46.5		mg/kg	50.0		92.9	48.2-134			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							

##### LCS (3111723-BS1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	51.3		mg/kg	50.0		103	49.1-148			
Surrogate: 1-Chlorooctane	50.6		mg/kg	50.0		101	48.2-134			
DRO >C10-C28	180	10.0	mg/kg	200		89.8	66.5-118			
GRO C6-C10	181	10.0	mg/kg	200		90.7	66.4-123			
Total TPH C6-C28	361	10.0	mg/kg	400		90.2	77.6-123			

##### LCS Dup (3111723-BSD1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	54.6		mg/kg	50.0		109	49.1-148			
Surrogate: 1-Chlorooctane	54.6		mg/kg	50.0		109	48.2-134			
DRO >C10-C28	184	10.0	mg/kg	200		92.2	66.5-118	2.73	21	
GRO C6-C10	186	10.0	mg/kg	200		93.2	66.4-123	2.69	17.7	
Total TPH C6-C28	371	10.0	mg/kg	400		92.7	77.6-123	2.71	18.5	

#### Batch 3111724 - General Prep - Organics

##### Blank (3111724-BLK1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	56.5		mg/kg	50.0		113	49.1-148			
Surrogate: 1-Chlorooctane	53.6		mg/kg	50.0		107	48.2-134			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							

##### LCS (3111724-BS1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	62.9		mg/kg	50.0		126	49.1-148			
Surrogate: 1-Chlorooctane	58.2		mg/kg	50.0		116	48.2-134			
DRO >C10-C28	212	10.0	mg/kg	200		106	66.5-118			
GRO C6-C10	211	10.0	mg/kg	200		105	66.4-123			
Total TPH C6-C28	423	10.0	mg/kg	400		106	77.6-123			

##### LCS Dup (3111724-BSD1)

Prepared &amp; Analyzed: 11/17/23

Surrogate: 1-Chlorooctadecane	56.8		mg/kg	50.0		114	49.1-148			
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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

**Petroleum Hydrocarbons by GC FID - Quality Control  
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111724 - General Prep - Organics (Continued)**

**LCS Dup (3111724-BSD1) (Continued)**

Prepared & Analyzed: 11/17/23

<i>Surrogate: 1-Chlorooctane</i>	55.3		mg/kg	50.0		111	48.2-134			
DRO >C10-C28	194	10.0	mg/kg	200		97.2	66.5-118	8.62	21	
GRO C6-C10	191	10.0	mg/kg	200		95.6	66.4-123	9.87	17.7	
Total TPH C6-C28	386	10.0	mg/kg	400		96.4	77.6-123	9.24	18.5	

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

## VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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## Batch 3112219 - Volatiles

## Blank (3112219-BLK1)

Prepared &amp; Analyzed: 11/22/23

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
<i>Surrogate: 4-Bromofluorobenzene</i>	1.17		mg/kg	1.25		94.0	82.5-117			
Benzene	ND	0.0250	mg/kg							
<i>Surrogate: Dibromofluoromethane</i>	1.21		mg/kg	1.25		97.1	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							
<i>Surrogate: Toluene-d8</i>	1.26		mg/kg	1.25		101	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

## LCS (3112219-BS1)

Prepared &amp; Analyzed: 11/22/23

1,2,4-Trimethylbenzene	0.533	0.0250	mg/kg	0.500		107	62.4-140			
1,3,5-Trimethylbenzene	0.540	0.0250	mg/kg	0.500		108	64.4-138			
<i>Surrogate: 4-Bromofluorobenzene</i>	1.24		mg/kg	1.25		99.3	82.5-117			
Benzene	0.522	0.0250	mg/kg	0.500		104	73-130			
<i>Surrogate: Dibromofluoromethane</i>	1.22		mg/kg	1.25		97.9	84.6-114			
Ethylbenzene	0.557	0.0250	mg/kg	0.500		111	75.4-127			
m+p - Xylene	1.06	0.0500	mg/kg	1.00		106	71.8-133			
Naphthalene	0.476	0.0250	mg/kg	0.500		95.2	28.7-158			
o-Xylene	0.509	0.0250	mg/kg	0.500		102	78.6-125			
Toluene	0.508	0.0250	mg/kg	0.500		102	79-122			
<i>Surrogate: Toluene-d8</i>	1.26		mg/kg	1.25		101	90.4-109			
Total Xylenes	1.57	0.0750	mg/kg	1.50		105	74.6-130			

## LCS Dup (3112219-BS1)

Prepared &amp; Analyzed: 11/22/23

1,2,4-Trimethylbenzene	0.545	0.0250	mg/kg	0.500		109	62.4-140	2.20	38.2	
1,3,5-Trimethylbenzene	0.546	0.0250	mg/kg	0.500		109	64.4-138	1.05	39.1	
<i>Surrogate: 4-Bromofluorobenzene</i>	1.23		mg/kg	1.25		98.5	82.5-117			
Benzene	0.535	0.0250	mg/kg	0.500		107	73-130	2.55	17.1	
<i>Surrogate: Dibromofluoromethane</i>	1.17		mg/kg	1.25		93.5	84.6-114			
Ethylbenzene	0.574	0.0250	mg/kg	0.500		115	75.4-127	3.04	16.5	
m+p - Xylene	1.11	0.0500	mg/kg	1.00		111	71.8-133	4.13	19.1	
Naphthalene	0.531	0.0250	mg/kg	0.500		106	28.7-158	10.9	64	
o-Xylene	0.518	0.0250	mg/kg	0.500		104	78.6-125	1.66	13.2	
Toluene	0.525	0.0250	mg/kg	0.500		105	79-122	3.25	18.3	

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

**VOLATILES BY GC/MS - Quality Control  
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3112219 - Volatiles (Continued)**

**LCS Dup (3112219-BSD1) (Continued)**

Prepared & Analyzed: 11/22/23

<i>Surrogate: Toluene-d8</i>	1.27		mg/kg	1.25		101	90.4-109			
Total Xylenes	1.63	0.0750	mg/kg	1.50		108	74.6-130	3.34	16.5	

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

### Polynuclear Aromatic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 3111717 - SW846-3510

#### Blank (3111717-BLK1)

Prepared: 11/17/23 Analyzed: 11/20/23

1-Methylnaphthalene	ND	0.040	mg/kg							
<i>Surrogate: 2-Fluorobiphenyl</i>	1.80		mg/kg	2.00		90.1	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Anthracene	ND	0.040	mg/kg							
Benzo[a]anthracene	ND	0.040	mg/kg							
Benzo[a]pyrene	ND	0.040	mg/kg							
Benzo[b]fluoranthene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Chrysene	ND	0.040	mg/kg							
Dibenz[a,h]anthracene	ND	0.040	mg/kg							
Fluoranthene	ND	0.040	mg/kg							
Fluorene	0.020	0.040	mg/kg							J
Indeno[1,2,3-cd]pyrene	0.023	0.040	mg/kg							J
Naphthalene	ND	0.040	mg/kg							
<i>Surrogate: Nitrobenzene-d5</i>	1.34		mg/kg	2.00		67.0	39.6-121			
Pyrene	ND	0.040	mg/kg							
<i>Surrogate: Terphenyl-d14</i>	1.79		mg/kg	2.00		89.5	33.3-136			

#### LCS (3111717-BS1)

Prepared: 11/17/23 Analyzed: 11/20/23

1-Methylnaphthalene	0.336	0.040	mg/kg	0.400		84.1	57.6-108			
<i>Surrogate: 2-Fluorobiphenyl</i>	1.87		mg/kg	2.00		93.7	39.8-134			
2-Methylnaphthalene	0.366	0.040	mg/kg	0.400		91.4	59-106			
Acenaphthene	0.358	0.040	mg/kg	0.400		89.4	60.9-105			
Acenaphthylene	0.372	0.040	mg/kg	0.400		93.0	57.4-107			
Anthracene	0.365	0.040	mg/kg	0.400		91.2	60.8-105			
Benzo[a]anthracene	0.341	0.040	mg/kg	0.400		85.3	56.1-121			
Benzo[a]pyrene	0.375	0.040	mg/kg	0.400		93.7	56.7-115			
Benzo[b]fluoranthene	0.349	0.040	mg/kg	0.400		87.2	45.4-128			
Benzo[g,h,i]perylene	0.406	0.040	mg/kg	0.400		101	56.5-107			
Benzo[k]fluoranthene	0.373	0.040	mg/kg	0.400		93.1	49.6-119			
Carbazole	0.378	0.040	mg/kg	0.400		94.5	59.7-107			
Chrysene	0.364	0.040	mg/kg	0.400		91.0	12.2-190			
Dibenz[a,h]anthracene	0.401	0.040	mg/kg	0.400		100	59.1-111			
Fluoranthene	0.390	0.040	mg/kg	0.400		97.5	60.6-111			
Fluorene	0.374	0.040	mg/kg	0.400		93.4	59.3-108			
Indeno[1,2,3-cd]pyrene	0.400	0.040	mg/kg	0.400		100	53.4-116			
Naphthalene	0.338	0.040	mg/kg	0.400		84.6	56.5-106			

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting  
PO Box 1653  
Durango CO, 81302

Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

Reported:  
12/05/23 13:57

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111717 - SW846-3510 (Continued)**

**LCS (3111717-BS1) (Continued)**

Prepared: 11/17/23 Analyzed: 11/20/23

Surrogate: Nitrobenzene-d5	1.38		mg/kg	2.00		69.2	39.6-121			
Phenanthrene	0.367	0.040	mg/kg	0.400		91.8	59.9-107			
Pyrene	0.338	0.040	mg/kg	0.400		84.6	51.5-122			
Surrogate: Terphenyl-d14	1.64		mg/kg	2.00		81.8	33.3-136			

**LCS Dup (3111717-BSD1)**

Prepared: 11/17/23 Analyzed: 11/20/23

1-Methylnaphthalene	0.341	0.040	mg/kg	0.400		85.2	57.6-108	1.35	6.22	
Surrogate: 2-Fluorobiphenyl	1.83		mg/kg	2.00		91.7	39.8-134			
2-Methylnaphthalene	0.364	0.040	mg/kg	0.400		90.9	59-106	0.568	6.23	
Acenaphthene	0.350	0.040	mg/kg	0.400		87.5	60.9-105	2.14	8.18	
Acenaphthylene	0.363	0.040	mg/kg	0.400		90.8	57.4-107	2.44	5	
Anthracene	0.365	0.040	mg/kg	0.400		91.3	60.8-105	0.0986	3.68	
Benzo[a]anthracene	0.343	0.040	mg/kg	0.400		85.6	56.1-121	0.377	9.01	
Benzo[a]pyrene	0.377	0.040	mg/kg	0.400		94.3	56.7-115	0.606	4.92	
Benzo[b]fluoranthene	0.354	0.040	mg/kg	0.400		88.4	45.4-128	1.38	7.63	
Benzo[g,h,i]perylene	0.393	0.040	mg/kg	0.400		98.2	56.5-107	3.25	12.5	
Benzo[k]fluoranthene	0.376	0.040	mg/kg	0.400		93.9	49.6-119	0.823	10.6	
Carbazole	0.368	0.040	mg/kg	0.400		92.1	59.7-107	2.60	8.65	
Chrysene	0.360	0.040	mg/kg	0.400		90.0	12.2-190	1.09	21.8	
Dibenz[a,h]anthracene	0.392	0.040	mg/kg	0.400		98.0	59.1-111	2.19	11.6	
Fluoranthene	0.383	0.040	mg/kg	0.400		95.8	60.6-111	1.73	7.54	
Fluorene	0.370	0.040	mg/kg	0.400		92.5	59.3-108	1.02	5.49	
Indeno[1,2,3-cd]pyrene	0.394	0.040	mg/kg	0.400		98.6	53.4-116	1.48	22.3	
Naphthalene	0.339	0.040	mg/kg	0.400		84.6	56.5-106	0.0916	4.56	
Surrogate: Nitrobenzene-d5	1.38		mg/kg	2.00		68.8	39.6-121			
Phenanthrene	0.372	0.040	mg/kg	0.400		93.0	59.9-107	1.24	5.21	
Pyrene	0.338	0.040	mg/kg	0.400		84.4	51.5-122	0.127	10.6	
Surrogate: Terphenyl-d14	1.65		mg/kg	2.00		82.6	33.3-136			

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Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
Project Name / Number: Harris (OWP) #5  
Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

### Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
BS3	Laboratory control sample did not meet laboratory acceptance criteria.
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

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A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Project: Table 915-1  
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Project Manager: Jacob Harter

**Reported:**  
12/05/23 13:57

### Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
B233482-SRM1	Conductivity on Paste Extract	Conductivity	BS3	Laboratory control sample did not meet laboratory acceptance criteria.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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**SAMPLE CONDITION RECEIPT FORM**

Client Name: Cottonwood Consulting

Work Order # 2311-208

Courier:  Fed Ex  UPS  USPS  Client  Kangaroo

Custody Seals on Box/Cooler Present:  Yes  No      Seals Intact:  Yes  No

Thermometer Used: 2      Samples on ice, cooling process has begun:  Yes  No

Type of Ice:  Wet  Blue  None

Cooler Temp: Observed Temp: 15.9 °C      Correction Factor: 0 °C      Final Temp: 15.9 °C

\*Temp should be above freezing to 6°C

Date/Initials of person examining contents: 11/16/23  
    
Labeled by Initials:     
(If different than above)

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

Client Notification/Resolution:

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_