

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
ELECTRONIC REPORT  
JUN 17 2015  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. 751141038
2. Name of Operator BRIDGECREEK RESOURCES COLO LLC Contact: CARLA S GRAVES Email: cgraves@palomarnr.com		6. If Indian, Allottee or Tribe Name UTE MOUNTAIN UTE
3a. Address 405 URBAN STREET, SUITE 400 LAKEWOOD, CO 80228	3b. Phone No. (include area code) Ph: 303-945-2643	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 20 T31N R14W NWSE 1980FSL 1980FEL 36.884645 N Lat, 108.330312 W Lon		8. Well Name and No. HARRIS HAWK 20-1
		9. API Well No. 30-045-35631-00-S1
		10. Field and Pool, or Exploratory VERDE GALLUP
		11. County or Parish, and State SAN JUAN COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Bridgocreek Resources (Colorado), L.L.C., submits the attached final pit sampling report prepared by Adkins Consulting, Inc. for the Harris Hawk 20-1 well. The conclusion after examination of results will allow reserve pit closure that is protective of human health and the environment. Bridgocreek Resources (Colorado), L.L.C., is requesting approval to proceed in the reserve pit closure.

OIL CONS. DIV DIST. 3

JUL 09 2015

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #305251 verified by the BLM Well Information System  
For BRIDGECREEK RESOURCES COLO LLC, sent to the Durango  
Committed to AFMSS for processing by BARBARA TELECKY on 06/22/2015 (15BDT0304SE)**

Name (Printed/Typed) CARLA S GRAVES	Title REGULATORY ASSISTANT
Signature (Electronic Submission)	Date 06/17/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By 	Title MSC	Date 6/24/15
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office TRES RIOS FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*\* BLM REVISED \*\*

NMOC D

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Adkins Consulting, Inc.  
180 E. 12<sup>th</sup> Street, Suite #5 Durango, CO 81303  
(505)793-1140

June 15, 2015

Mr. Ryan Joyner  
Bureau of Land Management  
Tres Rios Field Office  
Land and Minerals  
15 Burnett Court  
Durango, CO 81301

RE: Reserve Pit Sampling for Closure. Bridgecreek Resources. Harris Hawk 20-1. Sec. 20, T31N.R14W.

Mr. Joyner:

On the behalf of Bridgecreek Resources (Bridgecreek), Adkins Consulting Inc. (ACI) is pleased to submit this report for reserve pit closure sampling.

The reserve pit was sampled by Mr. Andrew Parker and Ms. Sarah Cowley of Adkins Consulting, Inc. on May 27, 2015. Samples were collected for the analysis of constituents listed in the Utu Mountain Ute (UMU) Tribe's "Standards for Spill Clean-up and Reclamation" table and chloride. The UMU Table standards were adopted from the Colorado Oil and Gas Commission's (COGCCs) Table 910-1 located in COGCC's 900 Series Rule.

#### Sampling Methodology

Per NMOCD Rule 19.15.17, a minimum of five (5) discrete samples are required to compose one composite sample of the reserve pit drill cuttings. We elected to obtain six (6) discrete core samples for better representation of drill cuttings. Three cores samples were collected along the northern edge and 3 core samples along the southern edge (see Exhibit 1). Each core sample was collected using a 2-inch PVC sampler. The core sampler was angled at a 45 degrees and penetrated the drill cuttings approximately 7-feet. The reserve pit contained some standing water from the recent rains (Figure 1).



Figure 1: Reserve pit conditions during sampling.

The 6 core samples were volumetrically folded into a 5-gallon bucket. Gently folding the composite core samples blended the contents into a homogenous mixture while avoiding agitation and volatilization. One composite sample was collected from the 5-gallon bucket and submitted to Hall Environmental Analysis Laboratory (HEAL) for the analysis of constituents listed in the UMU Table and chloride.

We elected to use the background sample used in the mixing ratio for pit closure at Prairie Falcon 19-1 that was collected from the spoil piles during the well pad sampling program. Please refer to our "Well Pad Sampling" reported dated May 12, 2015 for details on the background sample. The Harris-Hawk 20-1 and the Prairie Falcon 19-1 is located on the same geologic unit, Cretaceous-Lewis Shale. The Cliff House Sandstone outcrops to the north. The Pictured Cliff Sandstone outcrops to the south. Sampling the spoil piles to obtain a background sample at the Harris Hawk 20-1 would have been redundant; therefore, we determined additional sampling unnecessary.

### Analytical Results and Comparison to Soil Evaluation Values and Calculations

A summary of analytical results are presented in Table 1. The laboratory Certificate of Analysis is located in Appendix A. We compared the results to the UMU Table (December 2007), to the Colorado Soil Evaluation Values (which are the basis of the values in the UMU Table), and NMOCD Rule 19.15.17 for chloride. Constituents exceeding standards are highlighted light red.

The reserve pit composite and the background sample were below UMU table concentrations except for Arsenic and pH (reserve pit sample only). Locally, Arsenic concentration is naturally high as exhibited in the background sample (Spoil Pile). Therefore, Arsenic is not further evaluated. Additionally, pH is also naturally high as shown in the background sample (pH=8.1)

A detailed discussion of constituents exceeding UMU table is presented below. To the right of each constituent listed below is a short explanation demonstrating that constituents that exceed standards are not likely to impair human health and the environment when proper reserve pit closure procedures are followed as outlined in the approved APD.

pH	A mixing ratio of 3 parts clean to 1 part Reserve Pit Composite (3:1 mixing ratio) shows pH concentrations exceed standards by 0.08. pH is important how easily plants intake nutrients in soil. The drill cuttings will be buried 3 to 4 feet below ground surface and capped with native background soil. The drill cuttings will be below the root zone of plants. The 0.08 pH exceedance of the standard will most likely have no impact on revegetation efforts.
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To calculate the mixing ratio, we:

1. Multiplied the "Spoil Pile" (clean) concentration by the clean soil mixing ratio. For example, a mixing ratio of "2:1" has a multiplier of "2".
2. Added the clean soil result to the Reserve Pit Composite concentration.
3. Divided by the number of concentrations added in the numerator (mixing ratio plus 1).
4. If the constituent of concentration exhibits non-detect, the laboratory reporting limit was used. This creates a "worse-case" scenario for the constituent of concern and is most protective of human health and the environment.

For a mixing ration of 2:1, the equation yields:

$$\frac{(\text{clean soil} \times 2) + \text{contituent of concern concentraion}}{3}$$

Table 2 shows the mixing ratio of 3:1 will slightly exceed UMU Table standards for pH. As discussed in the above section, the mixed drill cuttings is not likely to impair human health and the environment.

#### Conclusion

Examination of analytical results and mixing ratios for the reserve pit composite sample, we conclude that mixing clean (Spoil Pile) with drill cuttings is unnecessary except to stabilize drill cuttings for closure. As discussed in the preceding section, a high pH value (the chemical of concern) will be buried three to four feet below ground surface and capped with background soil. Following the closure requirements in the APD and the COA will result in a reserve pit closure that is protective of human health and the environment.

If you have any questions or comments please contact me at 970-570-9535.

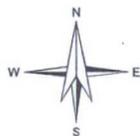
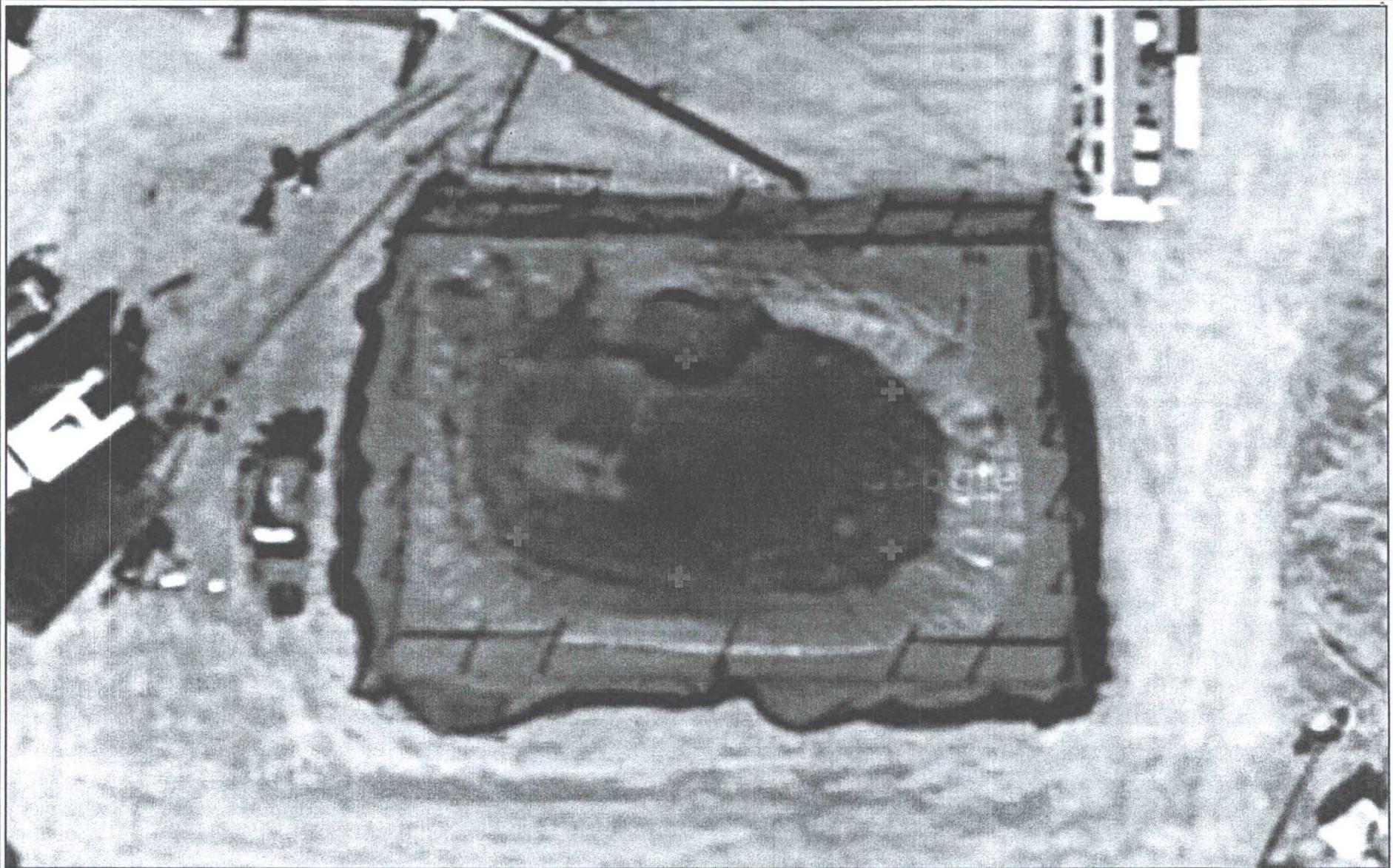


Andrew Parker  
Adkins Consulting, Inc  
Durango, CO  
970-570-9535  
andrew@adkinsenvironmental.com

Cc: Christine Campbell, Bridgescreek Resources  
John Thompson, Walsh Engineering

# Exhibits

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0 10 20  
Feet



**Adkins Consulting Inc.**  
180 East 12th Street  
Durango, CO 81303  
505-793-1140

Reserve Pit Core Sample Locations

Bridgescreek Resources  
Harris Hawk 20-1

Exhibit 1

June 2015

# Tables

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**Table 1: Summary of Analytical Results**

Sample ID	Date	DRO (8015D) mg/kg	MRO (8015D) mg/kg	GRO (8015D) mg/kg	TPH(EPA 8015) mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes (total) mg/kg
Reserve Pit	5/27/2015	170	<49	26	196	0.056	0.19	0.18	0.6
Spoil Pile (Prairie Falcon 19-1)	3/31/2015	<10	<50	<5.0	<65	<0.050	<0.050	<0.050	<0.099
UMU Table (COGCC Table 910-1)					500	0.17	85	100	175
CDPHE-HMWMD/EPA SSLs						5.10	4,700	25	250

**Notes:**

exceeds guidelines  
exceeds EPA SSL Standards

Table 1: Summary of Analytical Results

Sample ID	Date	Chloride mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Chromium VI mg/kg	Copper mg/kg	Lead mg/kg	Nickel mg/kg	Selenium mg/kg	Silver mg/kg
Reserve Pit	5/27/2015	220	0.018	1.6	2800	<0.053	6.3	<2	21	5.1	8.8	<2.9	<0.057
Spill Pile (Prairie Falcon 19-1)	3/31/2015	23	<0.034	3.8	140	<0.10	7.2	<2	6.2	3.4	7.8	<2.5	<0.25
UMIU Table (COGCC Table 910-1)			23	0.39	15,000	70	120,000	23	3,100	400	1,600	390	390
CDPHE-HMWMD/EPA SSLs			95	3.00	22,400	98	180,000	6	4,700	800	2,200	580	580

Notes:

- exceeds guidelines
- exceeds EPA SSL Standards

Table 1: Summary of Analytical Results

Sample ID	Date	Zinc	pH	Naphthalene	Acenaphthene	Fluorene	Anthracene	Fluoranthene	Pyrene	Benzo(A)anthracene
		mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Reserve Pit	5/27/2015	24	12	0.23	0.021	<0.0044	<0.0049	<0.0035	<0.0048	<0.0032
Spoil Pile (Prairie Falcon 19-1)	3/31/2015	27	8.1	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
UMU Table (COGCC Table 910-1)		23,000	6-9	23	1,000	1,000	1,000	1,000	1,000	0.22
CDPHE-HMWMD/EPA SSLs		35,000		17	4,500	3,000	23,000	3,000	2,300	2.90

Notes:

exceeds guidelines:

exceeds EPA SSL Standards:

**Table 1: Summary of Analytical Results**

Sample ID	Date	Chrysene	Benzo(B)fluoranthene	Benzo(K)floranthene	Benzo(A)pyrene	Dibenzo(A,H)anthracene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Reserve Pit	5/27/2015	<0.0030	<0.0043	<0.0060	<0.0052	<0.0038
Spoil Pile (Prairie Falcon 19-1)	3/31/2015	<0.020	<0.020	<0.020	<0.020	<0.020
UMU Table (COGCC Table 910-1)		22	0.22	2.20	0.022	0.022
CDPHE-HMWMD/EPA SSLs		290	2.90	29.00	0.29	0.290

**Notes:**

exceeds guidelines
exceeds EPA SSL Standards

**Table 1: Summary of Analytical Results**

Sample ID	Date	Indeno(1,2,3-cd)pyrene mg/kg	Sodium Absorption Ratio	Electrical Conductivity mmhos/cm	ORP mV
Reserve Pit	5/27/2015	<0.0038	0.38	3.18	26
Spoil Pile (Prairie Falcon 19-1)	3/31/2015	<0.020	5.4	1.32	82
UMU Table (COGCC Table 910-1)		0.22	<12	<4 or 2x background	
CDPHE-HMWMD/EPA SSLs		2.90			

**Notes:**

exceeds guidelines
exceeds EPA SSL Standards

Table 2: Mixing Ratio

Mixing Ratio	Sample ID	DNV (601510)	Ratio (601510)																			
democratic	Reserve Pit	mg/kg	mg/kg	mg/kg																		
1:1	Reserve Pit	90.00	49.50	15.50	12.00	10.25	500	0.17	85	100	175	80,000	33	0.39	15,000							
2:1	Reserve Pit	63.33	49.67	12.00	10.25	110.00	5.10	4,700	25	250	35	3	22,000									
3:1	Reserve Pit	50.00	49.75	10.25	10.25	110.00	0.05	0.09	0.08	0.22	72.25	0.03	3.25	895.00								
UNMU Table (GOGCC Table 910-3)																						
NMFOCD (Rule 19.15.12)																						
CDPH-DMNHWD/DA 514																						

Notes:  
 exceeds guidelines  
 exceeds EPA SSL Standards

Table 2: Mixing Ratio

Mixing Ratio	Sample ID	Cadmium mg/Lg	Chromium mg/Lg	Chromium VI mg/Lg	Copper mg/Lg	Lead mg/Lg	Nickel mg/Lg	Selenium mg/Lg	Silver mg/Lg	Zinc mg/Lg	pH	Triphenylene mg/Lg	Acenaphthene mg/Lg	Fluorene mg/Lg	Anthracene mg/Lg
clean actual	Reserve Pit	0.08	6.75	2.00	13.60	4.25	8.80	2.65	0.15	25.50	10.05	0.13	0.02	0.01	0.01
2:1	Reserve Pit	0.08	6.90	2.00	11.13	3.97	8.47	2.57	0.19	26.00	9.40	0.09	0.02	0.01	0.01
3:1	Reserve Pit	0.09	6.98	2.00	9.90	3.83	8.30	2.53	0.20	26.25	9.08	0.07	0.02	0.01	0.02
[UNU Table (COGC Table 216-1)]		70	120,000	23	3,100	400	1,500	390	390	23,000	6-9	23	1,000	1,000	1,000
[MMAQI (Rule 29.15.17)]		98	180,000	6.30	4,700	800	2,200	540	540	35,000		17	4,500	3,000	23,000
[CPNE-HWMD]/EPA 523															

Notes:  
 exceeds guidelines  
 exceeds EPA SSI Standards

Table 2: Mixing Ratio

Mixing Ratio	Sample ID	Fluoranthene	Pyrene	Benzo(A)anthracene	Chrysene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Benzo(A)pyrene	Dibenzo(A,H)anthracene
clean:actual		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1:1	Reserve Pit	0.01	0.01	0.01	0.01	0.01	0.01	0.013	0.012
2:1	Reserve Pit	0.01	0.01	0.01	0.01	0.01	0.02	0.015	0.015
3:1	Reserve Pit	0.02	0.02	0.02	0.02	0.02	0.02	0.016	0.016
UMU Table (COGCC Table 910-1)		1,000	1,000	0.22	22	0.22	2.20	0.022	0.022
NMOCB (Rule 19.15.17)									
CDPHE-HMWMD/EPA SSLs		3,000	2,300	2.90	290	2.90	29	0.29	0.29

Notes:
exceeds guidelines
exceeds EPA SSL Standards

Table 2: Mixing Ratio

Mixing Ratio	Sample ID	Indeno[1,2,3-cd]pyrene	Sodium Absorption Ratio	Electrical Conductivity
clean:actual		mg/kg	-	mmhos/cm
1:1	Reserve Pit	0.01	3	2.25
2:1	Reserve Pit	0.01	4	1.94
3:1	Reserve Pit	0.02	4	1.79
UMU Table (COGCC Table 910-1)		0.22	<12	<4 or 2x background
NMOCB (Rule 19.15.17)				
CDPHE-MMWMD/EPA SSLs		2.9		

Notes:
exceeds guidelines
exceeds EPA SSL Standards

# Appendix A

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

June 12, 2015

Andrew Parker

Adkins Consulting Inc

180 E. 12th Street #5

Durango, CO 81303

TEL: (505) 793-1140

FAX

RE: Harris Hawk 20-1

OrderNo.: 1505B78

Dear Andrew Parker:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/28/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1505B78

Date Reported: 6/12/2015

CLIENT: Adkins Consulting Inc

Client Sample ID: Reserve Pit

Project: Harris Hawk 20-1

Collection Date: 5/27/2015 3:30:00 PM

Lab ID: 1505B78-001

Matrix: SOIL

Received Date: 5/28/2015 7:00:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: KJH	
Diesel Range Organics (DRO)	170	5.4	9.8		mg/Kg	1	5/29/2015 12:06:18 PM	19441
Motor Oil Range Organics (MRO)	ND	49	49		mg/Kg	1	5/29/2015 12:06:18 PM	19441
Surr: DNOP	101	0	57.9-140		%REC	1	5/29/2015 12:06:18 PM	19441
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB	
Gasoline Range Organics (GRO)	26	2.9	9.6		mg/Kg	2	5/29/2015 8:16:08 PM	19435
Surr: BFB	134	0	75.4-113	S	%REC	2	5/29/2015 8:16:08 PM	19435
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB	
Benzene	0.056	0.010	0.096	J	mg/Kg	2	5/29/2015 8:16:08 PM	19435
Toluene	0.19	0.0098	0.096		mg/Kg	2	5/29/2015 8:16:08 PM	19435
Ethylbenzene	0.18	0.010	0.096		mg/Kg	2	5/29/2015 8:16:08 PM	19435
Xylenes, Total	0.60	0.031	0.19		mg/Kg	2	5/29/2015 8:16:08 PM	19435
Surr: 4-Bromofluorobenzene	104	0	80-120		%REC	2	5/29/2015 8:16:08 PM	19435
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LGT	
Chloride	220	26	30		mg/Kg	20	6/3/2015 2:33:25 PM	19539
<b>EPA METHOD 7471: MERCURY</b>							Analyst: MED	
Mercury	0.018	0.0027	0.031	J	mg/Kg	1	6/2/2015 10:30:15 AM	19476
<b>EPA METHOD 6010B: SOIL METALS</b>							Analyst: JLF	
Arsenic	1.6	0.56	4.8	J	mg/Kg	2	6/6/2015 2:56:45 PM	19491
Barium	2800	0.57	1.9		mg/Kg	20	6/4/2015 11:35:50 AM	19491
Cadmium	ND	0.053	0.19		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Chromium	6.3	0.12	0.58		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Copper	21	0.32	0.58		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Lead	5.1	0.21	0.48		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Nickel	9.8	0.25	0.96		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Selenium	ND	2.9	4.8		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Silver	ND	0.057	0.48		mg/Kg	2	6/6/2015 2:56:45 PM	19491
Zinc	24	1.2	4.8		mg/Kg	2	6/6/2015 2:56:45 PM	19491
<b>SAR SOLUBLE CATIONS</b>							Analyst: JLF	
Sodium Adsorption Ratio	0.38	0	0			1	6/4/2015 3:06:00 PM	19553
<b>EPA METHOD 8270C: PAHS</b>							Analyst: DAM	
Naphthalene	0.23	0.0042	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Acenaphthene	0.021	0.0031	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Fluorene	ND	0.0044	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Anthracene	ND	0.0049	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Fluoranthene	ND	0.0035	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Pyrene	ND	0.0048	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Analytical Report**

Lab Order 1505B78

Date Reported: 6/12/2015

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Adkins Consulting Inc

Client Sample ID: Reserve Pit

Project: Harris Hawk 20-1

Collection Date: 5/27/2015 3:30:00 PM

Lab ID: 1505B78-001

Matrix: SOIL

Received Date: 5/28/2015 7:00:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8270C: PAHS</b>							Analyst: DAM	
Benz(a)anthracene	ND	0.0032	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Chrysene	ND	0.0030	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Benzo(b)fluoranthene	ND	0.0043	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Benzo(k)fluoranthene	ND	0.0060	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Benzo(a)pyrene	ND	0.0052	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Dibenz(a,h)anthracene	ND	0.0038	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Indeno(1,2,3-cd)pyrene	ND	0.0038	0.020		mg/Kg	1	6/1/2015 12:58:45 PM	19479
Surr: Benzo(e)pyrene	85.4	0	32.5-200		%REC	1	6/1/2015 12:58:45 PM	19479
Surr: N-hexadecane	273	0	46.4-117	S	%REC	1	6/1/2015 12:58:45 PM	19479
<b>RESISTIVITY AND EC SOIL</b>							Analyst: JRR	
Conductivity	3180	1.00	1.00		µmhos/c	1	5/28/2015 3:58:00 PM	19442

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

1505B78-001B RESERVE PIT

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.



Collected date/time: 05/27/15 15:30

L767991

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
ORP	26		1	06/01/2015 14:45	WG792462

Wet Chemistry by Method 3060A/7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	06/05/2015 04:40	WG793487

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	12.0		1	06/01/2015 16:10	WG792472

Sample Narrative:

9045D L767991-01 WG792472: 12 at 21.1c

- 1
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

WG/92462

Wet Chemistry by Method 2580 B-2011

QUALITY CONTROL SUMMARY

L767991-01

ONE LAB. NATIONWIDE:



L768158-01 Original Sample (OS) • Duplicate (DUP)

(OS) 06/01/15 14:45 • (DUP) 06/01/15 14:45

Analyte	Original Result mV	DUP Result mV	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
ORP	110	113	1	2.7		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 06/01/15 14:45 • (LCSD) 06/01/15 14:45

Analyte	Spike Amount mV	LCS Result mV	LCSD Result mV	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
ORP	100	105	105	105	105	90.0-110			0.000	20

- 1 Cr
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:



Method Blank (MB)

(MB) 06/05/15 04:36

Analyte	MB Result	MB Qualifier	MB RDL
Chromium,Hexavalent	mg/kg	mg/kg	mg/kg
Chromium,Hexavalent	ND		2.00

L767991-01 Original Sample (OS) • Duplicate (DUP)

(OS) 06/05/15 04:40 • (DUP) 06/05/15 04:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chromium,Hexavalent	mg/kg	mg/kg		%		%
Chromium,Hexavalent	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 06/05/15 04:38 • (LCSD) 06/05/15 04:38

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Chromium,Hexavalent	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Chromium,Hexavalent	59.8	49.2	49.8	82.3	83.3	80.0-120			1.21	20

L767991-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 06/05/15 04:40 • (MS) 06/05/15 04:43 • (MSD) 06/05/15 04:43

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chromium,Hexavalent	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chromium,Hexavalent	20.0	1.08	19.9	19.9	99.5	99.5	1	75.0-125			0.000	20

- 1
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

WG792472

Wet Chemistry by Method 9045D

QUALITY CONTROL SUMMARY

L767991-01

ONE LAB. NATIONWIDE.



L767945-09 Original Sample (OS) • Duplicate (DUP)

(OS) 06/01/15 16:10 • (DUP) 06/01/15 16:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	6.2	6.2	1	0.64	1	1

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 06/01/15 16:10 • (LCSD) 06/01/15 16:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
pH	7.84	7.90	7.90	101	101	98.3-102			0.000	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

Client: Adkins Consulting Inc

Project: Harris Hawk 20-1

Sample ID	MB-19539	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	19539	RunNo:	26612					
Prep Date:	6/3/2015	Analysis Date:	6/3/2015	SeqNo:	792250	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-19539	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	19539	RunNo:	26612					
Prep Date:	6/3/2015	Analysis Date:	6/3/2015	SeqNo:	792251	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	90	110			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

Client: Adkins Consulting Inc

Project: Harris Hawk 20-1

Sample ID	MB-19441	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	19441	RunNo:	26483					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787162	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	57.9	140			

Sample ID	1505B78-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	Reserve Pit	Batch ID:	19441	RunNo:	26483					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787620	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	210	9.9	49.31	170.0	89.0	42.3	146			
Surr: DNOP	4.7		4.931		95.8	57.9	140			

Sample ID	1505B78-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	Reserve Pit	Batch ID:	19441	RunNo:	26483					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787621	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	9.9	49.26	170.0	-80.9	42.3	146	48.7	28.9	RS
Surr: DNOP	4.8		4.926		97.8	57.9	140	0	0	

Sample ID	LCS-19441	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	19441	RunNo:	26483					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787632	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.3	67.8	130			
Surr: DNOP	5.2		5.000		105	57.9	140			

**Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

**Client:** Adkins Consulting Inc

**Project:** Harris Hawk 20-1

Sample ID	MB-19435	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787646	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.7	75.4	113			

Sample ID	LCS-19435	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787647	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.0	64	130			
Surr: BFB	930		1000		93.4	75.4	113			

Sample ID	1505B78-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	Reserve Pit	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787659	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	57	9.6	24.04	25.59	129	47.9	144			
Surr: BFB	2800		1923		144	75.4	113			S

Sample ID	1505B78-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	Reserve Pit	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787660	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	60	9.6	24.06	25.59	144	47.9	144	6.42	29.9	S
Surr: BFB	3000		1925		155	75.4	113	0	0	S

**Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

Client: Adkins Consulting Inc

Project: Harris Hawk 20-1

Sample ID	MB-19435	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787670	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		95.7	80	120			

Sample ID	LCS-19435	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	19435	RunNo:	26493					
Prep Date:	5/28/2015	Analysis Date:	5/29/2015	SeqNo:	787671	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	76.6	128			
Toluene	1.1	0.050	1.000	0	106	75	124			
Ethylbenzene	1.1	0.050	1.000	0	106	79.5	126			
Xylenes, Total	3.2	0.10	3.000	0	106	78.8	124			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

**Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

Client: Adkins Consulting Inc

Project: Harris Hawk 20-1

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Sample ID mb-19479      SampType: MBLK      TestCode: EPA Method 8270C: PAHs</b> <b>Client ID: PBS      Batch ID: 19479      RunNo: 26534</b> <b>Prep Date: 5/31/2015      Analysis Date: 6/1/2015      SeqNo: 788602      Units: mg/Kg</b>										
Naphthalene	ND	0.020								
Acenaphthene	ND	0.020								
Fluorene	ND	0.020								
Anthracene	ND	0.020								
Fluoranthene	ND	0.020								
Pyrene	ND	0.020								
Benz(a)anthracene	ND	0.020								
Chrysene	ND	0.020								
Benzo(b)fluoranthene	ND	0.020								
Benzo(k)fluoranthene	ND	0.020								
Benzo(a)pyrene	ND	0.020								
Dibenz(a,h)anthracene	ND	0.020								
Indeno(1,2,3-cd)pyrene	ND	0.020								
Surr: N-hexadecane	1.6		1.460		110	46.4	117			
Surr: Benzo(e)pyrene	0.26		0.3300		80.1	32.5	200			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Sample ID Ics-19479      SampType: LCS      TestCode: EPA Method 8270C: PAHs</b> <b>Client ID: LCSS      Batch ID: 19479      RunNo: 26534</b> <b>Prep Date: 5/31/2015      Analysis Date: 6/1/2015      SeqNo: 788603      Units: mg/Kg</b>										
Naphthalene	0.28	0.020	0.3300	0	84.1	40.7	111			
Acenaphthene	0.30	0.020	0.3300	0	89.9	41.4	120			
Fluorene	0.31	0.020	0.3300	0	93.7	47	116			
Anthracene	0.30	0.020	0.3300	0	92.3	49.3	114			
Fluoranthene	0.32	0.020	0.3300	0	96.5	54.3	113			
Pyrene	0.24	0.020	0.3300	0	72.3	43.7	118			
Benz(a)anthracene	0.24	0.020	0.3300	0	71.5	43.7	118			
Chrysene	0.22	0.020	0.3300	0	67.3	43.8	108			
Benzo(b)fluoranthene	0.20	0.020	0.3300	0	62.0	46.5	120			
Benzo(k)fluoranthene	0.21	0.020	0.3300	0	64.4	50	111			
Benzo(a)pyrene	0.20	0.020	0.3300	0	61.0	47.8	109			
Dibenz(a,h)anthracene	0.22	0.020	0.3300	0	67.7	57.8	117			
Indeno(1,2,3-cd)pyrene	0.22	0.020	0.3300	0	65.8	46.4	121			
Surr: N-hexadecane	1.6		1.460		111	46.4	117			
Surr: Benzo(e)pyrene	0.27		0.3300		80.5	32.5	200			

**Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
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- R RPD outside accepted recovery limits
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- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1505B78

12-Jun-15

**Client:** Adkins Consulting Inc

**Project:** Harris Hawk 20-1

Sample ID: <b>MB-19491</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>
Client ID: <b>PBS</b>	Batch ID: <b>19491</b>	RunNo: <b>26584</b>
Prep Date: <b>6/1/2015</b>	Analysis Date: <b>6/3/2015</b>	SeqNo: <b>791416</b> Units: <b>mg/Kg</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Zinc	ND	2.5								

Sample ID: <b>LCS-19491</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 6010B: Soil Metals</b>
Client ID: <b>LCSS</b>	Batch ID: <b>19491</b>	RunNo: <b>26584</b>
Prep Date: <b>6/1/2015</b>	Analysis Date: <b>6/3/2015</b>	SeqNo: <b>791417</b> Units: <b>mg/Kg</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	97.3	80	120			
Barium	24	0.10	25.00	0	95.0	80	120			
Cadmium	24	0.10	25.00	0	96.2	80	120			
Chromium	24	0.30	25.00	0	96.2	80	120			
Copper	25	0.30	25.00	0	100	80	120			
Lead	24	0.25	25.00	0	95.6	80	120			
Nickel	24	0.50	25.00	0	95.5	80	120			
Selenium	24	2.5	25.00	0	94.5	80	120			
Silver	4.9	0.25	5.000	0	97.9	80	120			
Zinc	24	2.5	25.00	0	96.7	80	120			

**Qualifiers:**

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- RL Reporting Detection Limit



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: ADKINS CONSULTING I

Work Order Number: 1505B78

RcptNo: 1

Received by/date: *AG* *05/28/15*

Logged By: Ashley Gallegos 5/28/2015 7:00:00 AM *AG*

Completed By: Ashley Gallegos 5/28/2015 7:38:07 AM *AG*

Reviewed By: *AG 05/28/15*

### Chain of Custody

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present:
- 3. How was the sample delivered? Courier

### Log In

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  # of preserved bottles checked for pH: \_\_\_\_\_  
( <2 or >12 unless noted)
- 14. Is it clear what analyses were requested? Yes  No  Adjusted? \_\_\_\_\_
- 15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No  Checked by: \_\_\_\_\_

### Special Handling (if applicable)

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

