From: Beggs, Tauren R - DNR
Sent: Wednesday, June 10, 2015 9:33 AM
To: 'Halbur, Kathy'
Subject: RE: USEPA/Aniwa Aresenic

Thanks Kathy

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Tauren Beggs
Phone: (920) 662-5178
Tauren.Beggs@wisconsin.gov

From: Halbur, Kathy [mailto:halbur.kathy@epa.gov]
Sent: Wednesday, June 10, 2015 9:30 AM
To: Beggs, Tauren R - DNR; Kondreck, Robert
Subject: USEPA/Aniwa Aresenic

FYI
kch

From: Joosten, Valerie A - DNR [mailto:Valerie.Joosten@wisconsin.gov]
Sent: Wednesday, June 10, 2015 9:29 AM
To: Kari Rabideau
Cc: 'Mark Douglas'; Mark E Manske; Tim D Curry; Halbur, Kathy
Subject: RE: USEPA/Aniwa Aresenic

Kari,

We concur that you can accept this special waste in accordance with your special waste acceptance plan for Hickory Meadows Landfill.

Thank you for the notification.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Valerie Joosten, P.E.
Phone: (920) 662-5486
Valerie.Joosten@wisconsin.gov

From: Kari Rabideau [mailto:kari.rabideau@advanceddisposal.com]
Sent: Tuesday, June 09, 2015 3:32 PM
To: Joosten, Valerie A - DNR
Cc: 'Mark Douglas'; Mark E Manske; Tim D Curry
Subject: RE: USEPA/Aniwa Aresenic

Ms. Joosten-

ADS Hickory Meadows Landfill's Special Waste Acceptance Plan requires WDNR written approval prior to the acceptance of wastes derived from the treatment of hazardous wastes (category 40). Please find attached a generator completed Special Waste Profile Sheet (USEPA/ANIWA Aresenic) and supporting analytic data relative to the treatment of characteristically hazardous arsenic impacted soil.

Mark Douglas of Enivronmental Quality Management, has indicated that the soil has been excavated, treated with Free Flow 100 and stockpiled. Confirmation sampling has resulted in ND for TCLP Arsenic.

Mark provided the email chain below of personal involved with the remediation, oversight and management of the project. I've attached for reference should you want to follow up.

To: Halbur, Kathy; lindy_nelson@ios.doi.gov; Borries, Samuel; Bouchee-Cureton, Yolanda; El-Zein, Jason; Glover, John; Maritote, John; Ribordy, Michael; Ropski, Carol; jason.lowery@wi.gov; Rafati, MIchael; Tauren.Beggs@wisconsin.gov; Elizabeth.Evans@dhs.wisconsin.gov; jaime.bodden@co.shawano.wi.us; natalie.easterday@co.shawano.wi.us; Bohlen, Carolyn; Daugavietis, Andre; tammy@reschinsurance.com; Michelle.Hartness@wisconsin.gov; robert.kondreck@tetratech.com;

We appreciate your review and consideration.

Thanks,

Kari A Rabideau | **Environmental Project Manager**

Advanced Disposal Services Hickory Meadows Landfill, LLC

W3105 Schneider Road | Hilbert | WI 54129

T: 920-853-8553 | **F**: 920-853-3513 | **M**: 920-427-9363 | **E**: kari.rabideau@advanceddisposal.com

Connect with us: **AdvancedDisposal.com** **Facebook** **YouTube**

From: Halbur, Kathy <halbur.kathy@epa.gov>
Sent: Tuesday, June 9, 2015 5:21 PM
To: Beggs, Tauren R - DNR
Subject: FW: Aniwa Arsenic Site
Attachments: 1506253 (EQM) Aniwa Arsenic Site final report.pdf

Backfill analytical.
kch

05-Jun-2015

Erik Corbin
Environmental Quality Management, Inc.
1800 Carillon Blvd
Cincinnati, OH 45240

Re: **Aniwa Arsenic Site** Work Order: **1506253**

Dear Erik,

ALS Environmental received 1 sample on 04-Jun-2015 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Tom Beamish

Bill Carey
Project Manager

Certificate No: OH: CL 103

Report of Laboratory Analysis

ALS Group USA, Corp

Date: 05-Jun-15

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
Work Order: **1506253**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1506253-01	Backfill-SC-0615	Soil		06/03/15 14:05	06/04/15 09:15	☐

ALS Group USA, Corp

Date: 05-Jun-15

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
WorkOrder: **1506253**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 05-Jun-15

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
Work Order: 1506253

Case Narrative

Samples for the above noted Work Order were received on 06/04/15. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Metals:
No deviations or anomalies were noted.

Wet Chemistry:
No deviations or anomalies were noted.

ALS Group USA, Corp

Date: *05-Jun-15*

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
Work Order: 1506253
Sample ID: Backfill-SC-0615
Lab ID: 1506253-01
Collection Date: 06/03/15 02:05 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 6/4/15	Analyst: **LR**
Mercury	**0.043**		**0.020**	**mg/Kg-dry**	1	06/05/15 01:07 AM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 6/4/15	Analyst: **ML**
Aluminum	**5,900**		**66**	**mg/Kg-dry**	40	06/05/15 02:59 PM
Antimony	ND		2.1	mg/Kg-dry	4	06/04/15 10:29 PM
Arsenic	**3.3**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Barium	**120**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Beryllium	ND		0.83	mg/Kg-dry	4	06/04/15 10:29 PM
Cadmium	ND		0.83	mg/Kg-dry	4	06/04/15 10:29 PM
Calcium	**5,900**		**210**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Chromium	**13**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Cobalt	**5.0**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Copper	**14**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Iron	**10,000**		**33**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Lead	**24**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Magnesium	**2,100**		**830**	**mg/Kg-dry**	40	06/05/15 02:59 PM
Manganese	**820**		**21**	**mg/Kg-dry**	40	06/05/15 02:59 PM
Nickel	**8.2**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Potassium	**1,500**		**830**	**mg/Kg-dry**	40	06/05/15 02:59 PM
Selenium	ND		2.1	mg/Kg-dry	4	06/04/15 10:29 PM
Silver	ND		2.1	mg/Kg-dry	4	06/04/15 10:29 PM
Sodium	ND		830	mg/Kg-dry	40	06/05/15 02:59 PM
Thallium	ND		2.1	mg/Kg-dry	4	06/04/15 10:29 PM
Vanadium	**20**		**2.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
Zinc	**69**		**4.1**	**mg/Kg-dry**	4	06/04/15 10:29 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**27**		**0.050**	**% of sample**	1	06/04/15 06:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 05-Jun-15

Client: Environmental Quality Management, Inc.

QC BATCH REPORT

Work Order: 1506253

Project: Aniwa Arsenic Site

Batch ID: **71898** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-71898-71898** Units: **mg/Kg** Analysis Date: **06/04/15 11:58 PM**

Client ID: Run ID: **HG1_150604A** SeqNo: **3307874** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-71898-71898** Units: **mg/Kg** Analysis Date: **06/05/15 12:01 AM**

Client ID: Run ID: **HG1_150604A** SeqNo: **3307875** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1812	0.020	0.1665	0	109	80-120	0			

MS Sample ID: **1506239-01BMS** Units: **mg/Kg** Analysis Date: **06/05/15 12:44 AM**

Client ID: Run ID: **HG1_150604A** SeqNo: **3307892** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.155	0.012	0.1036	0.04354	108	75-125	0			

MSD Sample ID: **1506239-01BMSD** Units: **mg/Kg** Analysis Date: **06/05/15 12:53 AM**

Client ID: Run ID: **HG1_150604A** SeqNo: **3307898** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1588	0.012	0.1035	0.04354	111	75-125	0.155	2.41	35	

The following samples were analyzed in this batch: 1506253-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Quality Management, Inc.
Work Order: 1506253
Project: Aniwa Arsenic Site

QC BATCH REPORT

Batch ID: **71880** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-71880-71880** Units: **mg/Kg** Analysis Date: **06/04/15 06:46 PM**
Client ID: Run ID: **ICPMS1_150604A** SeqNo: **3307983** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.003008	0.25								J
Arsenic	ND	0.25								
Barium	0.04127	0.25								J
Beryllium	ND	0.10								
Cadmium	ND	0.10								
Calcium	2.912	25								J
Chromium	0.06355	0.25								J
Cobalt	ND	0.25								
Copper	0.061	0.25								J
Iron	3.814	4.0								J
Lead	ND	0.25								
Magnesium	0.872	10								J
Manganese	0.08885	0.25								J
Nickel	ND	0.25								
Potassium	ND	10								
Selenium	ND	0.25								
Silver	ND	0.25								
Sodium	ND	10								
Thallium	ND	0.25								
Vanadium	ND	0.25								
Zinc	0.1582	0.50								J

MBLK Sample ID: **MBLK-71880-71880** Units: **mg/Kg** Analysis Date: **06/05/15 03:05 PM**
Client ID: Run ID: **ICPMS1_150605A** SeqNo: **3309150** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.642	0.50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Quality Management, Inc.
Work Order: 1506253
Project: Aniwa Arsenic Site

QC BATCH REPORT

Batch ID: **71880** Instrument ID **ICPMS1** Method: **SW6020A**

LCS Sample ID: **LCS-71880-71880** Units: **mg/Kg** Analysis Date: **06/04/15 06:52 PM**
Client ID: Run ID: **ICPMS1_150604A** SeqNo: **3307985** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	4.973	0.25	5	0	99.5	80-120	0			
Arsenic	4.258	0.25	5	0	85.2	80-120	0			
Barium	4.924	0.25	5	0	98.5	80-120	0			
Beryllium	4.192	0.10	5	0	83.8	80-120	0			
Cadmium	4.778	0.10	5	0	95.6	80-120	0			
Calcium	455.8	25	500	0	91.2	80-120	0			
Chromium	5.045	0.25	5	0	101	80-120	0			
Cobalt	4.662	0.25	5	0	93.2	80-120	0			
Copper	4.618	0.25	5	0	92.4	80-120	0			
Iron	484.6	4.0	500	0	96.9	80-120	0			
Lead	4.824	0.25	5	0	96.5	80-120	0			
Magnesium	446.6	10	500	0	89.3	80-120	0			
Manganese	5.1	0.25	5	0	102	80-120	0			
Nickel	4.778	0.25	5	0	95.6	80-120	0			
Potassium	456	10	500	0	91.2	80-120	0			
Selenium	4.584	0.25	5	0	91.7	80-120	0			
Silver	4.864	0.25	5	0	97.3	80-120	0			
Sodium	435.8	10	500	0	87.2	80-120	0			
Thallium	4.703	0.25	5	0	94.1	80-120	0			
Vanadium	5.005	0.25	5	0	100	80-120	0			
Zinc	4.466	0.50	5	0	89.3	80-120	0			

LCS Sample ID: **LCS-71880-71880** Units: **mg/Kg** Analysis Date: **06/05/15 03:11 PM**
Client ID: Run ID: **ICPMS1_150605A** SeqNo: **3309151** Prep Date: **06/04/15** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	4.631	0.50	5	0	92.6	80-120	0			B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Quality Management, Inc.
Work Order: 1506253
Project: Aniwa Arsenic Site

QC BATCH REPORT

Batch ID: **71880** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1506239-06BMS** Units: **mg/Kg** Analysis Date: **06/04/15 09:28 PM**
Client ID: Run ID: **ICPMS1_150604A** SeqNo: **3308032** Prep Date: **06/04/15** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.056	1.3	6.658	0.3695	85.4	75-125	0			
Arsenic	16.87	1.3	6.658	9.543	110	75-125	0			
Barium	242.9	1.3	6.658	225.8	256	75-125	0			SO
Cadmium	7.92	0.53	6.658	0.3588	114	75-125	0			
Calcium	3846	130	665.8	2935	137	75-125	0			SO
Chromium	22.46	1.3	6.658	11.98	157	75-125	0			S
Cobalt	15.28	1.3	6.658	7.583	116	75-125	0			
Copper	25.25	1.3	6.658	17.64	114	75-125	0			
Iron	20830	21	665.8	18130	405	75-125	0			SO
Lead	21.32	1.3	6.658	12.27	136	75-125	0			S
Magnesium	4394	53	665.8	3145	188	75-125	0			SO
Manganese	732.1	1.3	6.658	635.9	1450	75-125	0			SEO
Nickel	30.01	1.3	6.658	20.96	136	75-125	0			S
Potassium	2467	53	665.8	1431	156	75-125	0			S
Selenium	8.418	1.3	6.658	1.403	105	75-125	0			
Silver	6.578	1.3	6.658	0.04303	98.2	75-125	0			
Sodium	929.2	53	665.8	216.4	107	75-125	0			
Thallium	7.425	1.3	6.658	0.1299	110	75-125	0			
Vanadium	40.43	1.3	6.658	24.34	242	75-125	0			S
Zinc	72.84	2.7	6.658	60.42	186	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Quality Management, Inc.
Work Order: 1506253
Project: Aniwa Arsenic Site

QC BATCH REPORT

Batch ID: **71880** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **1506239-06BMSD** Units: **mg/Kg** Analysis Date: **06/04/15 10:17 PM**
Client ID: Run ID: **ICPMS1_150604A** SeqNo: **3308038** Prep Date: **06/04/15** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	5.671	1.3	6.631	0.3695	79.9	75-125	6.056	6.56	25	
Arsenic	15.8	1.3	6.631	9.543	94.4	75-125	16.87	6.56	25	
Barium	223.7	1.3	6.631	225.8	-31.7	75-125	242.9	8.21	25	SO
Cadmium	7.66	0.53	6.631	0.3588	110	75-125	7.92	3.33	25	
Calcium	3684	130	663.1	2935	113	75-125	3846	4.28	25	O
Chromium	21.77	1.3	6.631	11.98	148	75-125	22.46	3.14	25	S
Cobalt	14.75	1.3	6.631	7.583	108	75-125	15.28	3.5	25	
Copper	24.05	1.3	6.631	17.64	96.6	75-125	25.25	4.87	25	
Iron	19790	21	663.1	18130	250	75-125	20830	5.11	25	SO
Lead	20.51	1.3	6.631	12.27	124	75-125	21.32	3.91	25	
Magnesium	4034	53	663.1	3145	134	75-125	4394	8.53	25	SO
Manganese	739	1.3	6.631	635.9	1560	75-125	732.1	0.938	25	SEO
Nickel	28.89	1.3	6.631	20.96	120	75-125	30.01	3.83	25	
Potassium	2305	53	663.1	1431	132	75-125	2467	6.78	25	S
Selenium	7.912	1.3	6.631	1.403	98.2	75-125	8.418	6.19	25	
Silver	6.361	1.3	6.631	0.04303	95.3	75-125	6.578	3.36	25	
Sodium	892.8	53	663.1	216.4	102	75-125	929.2	3.99	25	
Thallium	7.077	1.3	6.631	0.1299	105	75-125	7.425	4.8	25	
Vanadium	40.66	1.3	6.631	24.34	246	75-125	40.43	0.585	25	S
Zinc	68.67	2.7	6.631	60.42	124	75-125	72.84	5.88	25	O

The following samples were analyzed in this batch: 1506253-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Quality Management, Inc.
Work Order: 1506253
Project: Aniwa Arsenic Site

QC BATCH REPORT

Batch ID: **R164863** Instrument ID **MOIST** Method: **E160.3M**

MBLK	Sample ID: **WBLKS-R164863**				Units: **% of sample**		Analysis Date: **06/04/15 06:00 PM**			
Client ID:	Run ID: **MOIST_150604B**				SeqNo: **3308702**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS	Sample ID: **LCS-R164863**				Units: **% of sample**		Analysis Date: **06/04/15 06:00 PM**			
Client ID:	Run ID: **MOIST_150604B**				SeqNo: **3308701**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: **1506154-01B DUP**				Units: **% of sample**		Analysis Date: **06/04/15 06:00 PM**			
Client ID:	Run ID: **MOIST_150604B**				SeqNo: **3308660**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.32	0.050	0	0	0		11.09	17.3	20	

DUP	Sample ID: **1506253-01A DUP**				Units: **% of sample**		Analysis Date: **06/04/15 06:00 PM**			
Client ID: **Backfill-SC-0615**	Run ID: **MOIST_150604B**				SeqNo: **3308696**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	24.99	0.050	0	0	0		26.97	7.62	20	

The following samples were analyzed in this batch: 1506253-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
Houston, TX +1 281 530 5656
Spring City, PA +1 610 948 4903
South Charleston, WV +1 304 356 3168
Everett, WA +1 425 356 2600
Holland, MI +1 616 399 6070
Middletown, PA +1 717 944 5541
Salt Lake City, UT +1 801 266 7700
York, PA +1 717 505 5280

ALS Environmental

Chain of Custody Form

Page 1 of 1

COC ID: 120086

ALS Project Manager: | ALS Work Order #: 1506253

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Dakota Arsenic	A	Tal Metals (Rush) (Level II) Data Package
Work Order		Project Number		B	Tal Metals (Standard Lvl IV) Data Package
Company Name	Environmental Quality Management, Inc.	Bill To Company	Environmental Quality Management, In	C	
Send Report To		Invoice Attn	Accounts Payable	D	
Address	1800 Carillon Blvd	Address	1800 Carillon Blvd	E	
				F	
City/State/Zip	Cincinnati, OH 45240	City/State/Zip	Cincinnati, OH 45240	G	
Phone	(513) 825-7500	Phone	(513) 825-7500	H	
Fax	(513) 825-7495	Fax	(513) 825-7495	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Backfill-SC-0615	6-3-15	1405	Soil	8	1	X					(Rush)					
2	B-12-0615	6-2-15	1657	GW	2	1		X				(Standard)					
3	B-11-0615	6-2-15	1618	GW	2	1		X				(Standard)					
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Groundwater

Soil

Sampler(s) Please Print & Sign: Robert Kendrick | Shipment Method: Fed Ex | Required Turnaround Time: (Check Box) X Std 10 WK Days ☐ 5 WK Days ☐ 3 WK Days X 24 Hour ☐ Other | Results Due Date:

Relinquished by:	Date:	Time:	Received by:
	6-3-15	1430	FED EX
Relinquished by: FED EX	Date: 6/4/15	Time: 0915	Received by (Laboratory):
Logged by (Laboratory): DES	Date: 6/4/15	Time: 1200	Checked by (Laboratory):

Notes: Soil Rush GW Standard Backfill So.1

Cooler ID	Cooler Temp.
	2.8 °C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☑ Level IV SW846/CLP → Groundwater
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Align Open End of FedEx Pouch Here

CUSTODY SEAL

Date: 6-3-15

Signature:

ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

FedEx Express *NEW Package US Airbill*

FedEx Tracking Number 8061 7065 5425

Form ID No. 0200

Recipient's Copy

1 From

Date 6-3-15

Sender's Name Mark Douglas Phone 513-309-3062

Company EQM

Address 1800 Carillon Blvd Dept./Floor/Suite/Room

City Cincinnati State OH ZIP 45240

2 Your Internal Billing Reference Ashland Arsenic

3 To

Recipient's Name Sample Receiving Phone

Company ALS Laboratories

Address 3352 128TH Ave Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for confirmation of your shipping address.

City Holland State MI ZIP 49424

HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☒ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. ☐ Obtain recip. Acct. No.

☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight 20 lbs. Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **EQM - CINCINNATI** Date/Time Received: **04-Jun-15 09:15**

Work Order: **1506253** Received by: **DS**

Checklist completed by Diane Shaw eSignature 04-Jun-15 Date Reviewed by: Bill Carey eSignature 04-Jun-15 Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.8 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	6/4/2015 12:52:13 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	_		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: Halbur, Kathy <halbur.kathy@epa.gov>
Sent: Friday, June 5, 2015 3:46 PM
To: Beggs, Tauren R - DNR
Cc: Warren Hohn; tammy@reschinsurance.com
Subject: Treated Soil Results
Attachments: 1506165 Aniwa Arsenic Site.pdf

Tauren:

Treated soil is non-detect TCLP for Arsenic. So, we are planning to ship as non-haz waste to ADS Hickory Meadows Landfill in Hilbert, hopefully beginning on Wednesday (6/10). The second sample analysis in the attached is for the initial backfill sample.

Kathy

Kathy Halbur
Federal On-Scene Coordinator
United States Environmental Protection Agency, Region 5
2984 Shawano Avenue
Green Bay, WI 54313

office: 920-662-5424
cell: 920-634-9072
email: halbur.kathy@epa.gov

ALS Group USA, Corp

Date: *05-Jun-15*

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
Work Order: 1506165
Sample ID: SS-Waste-0615
Lab ID: 1506165-01
Collection Date: 6/2/2015 02:30 PM
Matrix: TCLP EXTRACT

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TCLP METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3005A / 6/4/15	Analyst: **JEC**
Arsenic	ND		0.010	mg/L	1	6/5/2015 01:14 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *05-Jun-15*

Client: Environmental Quality Management, Inc.
Project: Aniwa Arsenic Site
Work Order: 1506165
Sample ID: SS-Backfill-0615
Lab ID: 1506165-02
Collection Date: 6/2/2015 02:50 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 6/4/15	Analyst: **LR**
Mercury	ND		0.013	mg/Kg-dry	1	6/5/2015 12:28 AM
METALS BY ICP-MS			**SW6020A**		Prep: SW3050B / 6/3/15	Analyst: **ML**
Aluminum	**1,500**		**0.70**	**mg/Kg-dry**	1	6/3/2015 07:20 PM
Antimony	ND		0.35	mg/Kg-dry	1	6/4/2015 05:23 PM
Arsenic	**1.6**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Barium	**13**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Beryllium	ND		0.14	mg/Kg-dry	1	6/4/2015 05:23 PM
Cadmium	ND		0.14	mg/Kg-dry	1	6/4/2015 05:23 PM
Calcium	**6,300**		**35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Chromium	**4.9**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Cobalt	**1.7**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Copper	**6.2**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Iron	**4,900**		**5.6**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Lead	**1.4**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Magnesium	**4,000**		**14**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Manganese	**81**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Nickel	**3.4**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Potassium	**170**		**14**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Selenium	**0.39**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Silver	ND		0.35	mg/Kg-dry	1	6/4/2015 05:23 PM
Thallium	ND		0.35	mg/Kg-dry	1	6/4/2015 05:23 PM
Vanadium	**10**		**0.35**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
Zinc	**8.3**		**0.70**	**mg/Kg-dry**	1	6/4/2015 05:23 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**2.1**		**0.050**	**% of sample**	1	6/3/2015 06:12 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.