



30-Jul-2020

Brittany Cocina  
LT Environmental, Inc  
820 Megan Ave. Unit B  
Rifle, CO 81650

Re: **Kowach 1-9**

Work Order: **20071862**

Dear Brittany,

ALS Environmental received 1 sample on 24-Jul-2020 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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 13.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

## Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Work Order:** 20071862

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
20071862-01	SW @ 10	Soil		7/22/2020 14:40	7/24/2020 09:30	<input type="checkbox"/>

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**Client:** LT Environmental, Inc**Project:** Kowach 1-9**Work Order:** 20071862**Case Narrative**

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Batch 159648, Method VOC\_8260\_S, Sample 20071862-01A: One or more VOC surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is required.

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

# ALS Group, USA

Date: 30-Jul-20

**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Sample ID:** SW @ 10  
**Collection Date:** 7/22/2020 02:40 PM

**Work Order:** 20071862  
**Lab ID:** 20071862-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW3550 7/27/20 16:44	Analyst: <b>JZB</b>
DRO (C10-C28)	ND		12	mg/Kg-dry	1	7/28/2020 11:16 AM
Surr: 4-Terphenyl-d14	72.7		33-111	%REC	1	7/28/2020 11:16 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW5035 7/27/20 10:08	Analyst: <b>JZB</b>
GRO (C6-C10)	ND		5.0	mg/Kg-dry	1	7/27/2020 03:45 PM
Surr: Toluene-d8	92.6		71-123	%REC	1	7/27/2020 03:45 PM
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>						
			<b>SW8270E</b>		Prep: SW3546 7/28/20 12:13	Analyst: <b>EEW</b>
Benzo(a)pyrene	ND		5.1	µg/Kg-dry	1	7/28/2020 05:55 PM
Surr: 2-Fluorobiphenyl	86.5		20-140	%REC	1	7/28/2020 05:55 PM
Surr: 4-Terphenyl-d14	71.5		22-172	%REC	1	7/28/2020 05:55 PM
Surr: Nitrobenzene-d5	69.4		28-140	%REC	1	7/28/2020 05:55 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260C</b>		Prep: SW5035 7/27/20 12:32	Analyst: <b>SJB</b>
Benzene	ND		0.044	mg/Kg-dry	1	7/27/2020 10:20 PM
Ethylbenzene	ND		0.044	mg/Kg-dry	1	7/27/2020 10:20 PM
m,p-Xylene	ND		0.088	mg/Kg-dry	1	7/27/2020 10:20 PM
o-Xylene	ND		0.044	mg/Kg-dry	1	7/27/2020 10:20 PM
Toluene	ND		0.044	mg/Kg-dry	1	7/27/2020 10:20 PM
Xylenes, Total	ND		0.13	mg/Kg-dry	1	7/27/2020 10:20 PM
Surr: 1,2-Dichloroethane-d4	99.7		70-130	%REC	1	7/27/2020 10:20 PM
Surr: 4-Bromofluorobenzene	145	S	70-130	%REC	1	7/27/2020 10:20 PM
Surr: Dibromofluoromethane	92.5		70-130	%REC	1	7/27/2020 10:20 PM
Surr: Toluene-d8	103		70-130	%REC	1	7/27/2020 10:20 PM
<b>MOISTURE</b>						
			<b>SW3550C</b>			Analyst: <b>KTP</b>
Moisture	19		0.10	% of sample	1	7/28/2020 12:35 PM

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

Client: LT Environmental, Inc  
 Work Order: 20071862  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159633** Instrument ID **GC8** Method: **SW8015D**

MBLK		Sample ID: DBLKS1-159633-159633				Units: mg/Kg		Analysis Date: 7/27/2020 05:55 PM		
Client ID:		Run ID: GC8_200727A			SeqNo: 6590372		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	4.807	10								J
Surr: 4-Terphenyl-d14	2.712	0	3.33	0	81.4	33-111	0			

LCS				Sample ID: <b>DLCSS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 11:52 AM</b>	
Client ID:			Run ID: <b>GC8_200727A</b>			SeqNo: <b>6589234</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	329.4	10	333	0	98.9	80-121	0				
<i>Surr: 4-Terphenyl-d14</i>	1.813	0	3.33	0	54.4	33-111	0				

MS				Sample ID: 20071839-01A MS			Units: mg/Kg		Analysis Date: 7/27/2020 12:31 PM		
Client ID:			Run ID: GC8_200727A			SeqNo: 6589235		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	335.5	9.9	330.6	5.037	100	80-121		0			
Surr: 4-Terphenyl-d14	1.764	0	3.306	0	53.4	33-111		0			

MSD				Sample ID: 20071839-01A MSD			Units: mg/Kg		Analysis Date: 7/27/2020 01:10 PM		
Client ID:			Run ID: GC8_200727A			SeqNo: 6589236		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	346.7	10	332	5.037	103	80-121	335.5	3.27	30		
Surr: 4-Terphenyl-d14	1.776	0	3.32	0	53.5	33-111	1.764	0.698	30		

The following samples were analyzed in this batch:

20071862-01A

Client: LT Environmental, Inc  
 Work Order: 20071862  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159653** Instrument ID **GC9** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:59 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589248</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
<i>Surr: Toluene-d8</i>	4753	0	5000	0	95.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:14 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589255</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	228700	5,000	250000	0	91.5	71-123	0			
<i>Surr: Toluene-d8</i>	4398	0	5000	0	88	71-123	0			

<b>MS</b>		Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 01:02 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589251</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	252000	5,000	251800	390.1	100	71-123	0			
<i>Surr: Toluene-d8</i>	4401	0	5035	0	87.4	71-123	0			

<b>MSD</b>		Sample ID: <b>20071859-01A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 02:05 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589252</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	254400	5,000	252000	390.1	101	71-123	252000	0.918	30	
<i>Surr: Toluene-d8</i>	4403	0	5040	0	87.4	71-123	4401	0.055	30	

The following samples were analyzed in this batch: 20071862-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071862  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159693** Instrument ID **SVMS6** Method: **SW8270E**

MBLK				Sample ID: <b>SBLKS1-159693-159693</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 01:32 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595052</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	ND	4.2								
Surr: 2-Fluorobiphenyl	3061	0	3333	0	91.8	20-140	0			
Surr: 4-Terphenyl-d14	3606	0	3333	0	108	22-172	0			
Surr: Nitrobenzene-d5	2937	0	3333	0	88.1	28-140	0			

LCS				Sample ID: <b>SLCSS1-159693-159693</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 01:48 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595053</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1059	4.2	1333	0	79.4	40-140	0			
Surr: 2-Fluorobiphenyl	3137	0	3333	0	94.1	20-140	0			
Surr: 4-Terphenyl-d14	4109	0	3333	0	123	22-172	0			
Surr: Nitrobenzene-d5	2700	0	3333	0	81	28-140	0			

MS				Sample ID: <b>20071795-01A MS</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 02:03 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595054</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	964.4	4.1	1326	4.871	72.4	40-140	0			
Surr: 2-Fluorobiphenyl	2960	0	3315	0	89.3	20-140	0			
Surr: 4-Terphenyl-d14	3517	0	3315	0	106	22-172	0			
Surr: Nitrobenzene-d5	2788	0	3315	0	84.1	28-140	0			

MSD				Sample ID: <b>20071795-01A MSD</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 02:19 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595055</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	884.8	4.0	1275	4.871	69	40-140	964.4	8.61	30	
Surr: 2-Fluorobiphenyl	2633	0	3188	0	82.6	20-140	2960	11.7	30	
Surr: 4-Terphenyl-d14	3096	0	3188	0	97.1	22-172	3517	12.7	30	
Surr: Nitrobenzene-d5	2476	0	3188	0	77.6	28-140	2788	11.9	30	

The following samples were analyzed in this batch:

20071862-01A

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



Client: LT Environmental, Inc  
 Work Order: 20071862  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MBLK				Sample ID: <b>MBLK-159648-159648</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 11:47 PM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594710</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
Surr: 1,2-Dichloroethane-d4	1035	0	1000	0	104	70-130	0			
Surr: 4-Bromofluorobenzene	1036	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	844	0	1000	0	84.4	70-130	0			
Surr: Toluene-d8	1008	0	1000	0	101	70-130	0			

LCS				Sample ID: <b>LCS-159648-159648</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 10:41 PM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594708</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	941	30	1000	0	94.1	75-125	0			
Ethylbenzene	973	30	1000	0	97.3	75-125	0			
m,p-Xylene	1949	60	2000	0	97.4	80-125	0			
o-Xylene	981.5	30	1000	0	98.2	75-125	0			
Toluene	939	30	1000	0	93.9	70-125	0			
Xylenes, Total	2930	90	3000	0	97.7	75-125	0			
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1009	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0			
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	0			

MS				Sample ID: <b>20071859-01A MS</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 05:48 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594732</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1101	33	1108	0	99.3	75-125	0			
Ethylbenzene	1153	33	1108	0	104	75-125	0			
m,p-Xylene	2302	66	2216	0	104	80-125	0			
o-Xylene	1140	33	1108	0	103	75-125	0			
Toluene	1088	33	1108	0	98.1	70-125	0			
Xylenes, Total	3442	100	3325	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	1120	0	1108	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	1139	0	1108	0	103	70-130	0			
Surr: Dibromofluoromethane	950.3	0	1108	0	85.7	70-130	0			
Surr: Toluene-d8	1097	0	1108	0	99	70-130	0			

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

Client: LT Environmental, Inc  
 Work Order: 20071862  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071859-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 06:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594733</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1090	33	1109	0	98.3	75-125	1101	0.966	30	
Ethylbenzene	1118	33	1109	0	101	75-125	1153	3.03	30	
m,p-Xylene	2267	67	2219	0	102	80-125	2302	1.51	30	
o-Xylene	1119	33	1109	0	101	75-125	1140	1.92	30	
Toluene	1087	33	1109	0	98	70-125	1088	0.108	30	
Xylenes, Total	3386	100	3328	0	102	75-125	3442	1.64	30	
Surr: 1,2-Dichloroethane-d4	1129	0	1109	0	102	70-130	1120	0.836	30	
Surr: 4-Bromofluorobenzene	1141	0	1109	0	103	70-130	1139	0.145	30	
Surr: Dibromofluoromethane	979.5	0	1109	0	88.3	70-130	950.3	3.03	30	
Surr: Toluene-d8	1102	0	1109	0	99.3	70-130	1097	0.399	30	

The following samples were analyzed in this batch:

20071862-01A

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071862  
**Project:** Kowach 1-9

## QC BATCH REPORT

Batch ID: **R294883** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

<b>LCS</b>		Sample ID: <b>LCS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594621</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

<b>DUP</b>		Sample ID: <b>20071878-01A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.46	0.10	0	0	0	0-0	3.42	1.16	10	

<b>DUP</b>		Sample ID: <b>20071917-03A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.39	0.10	0	0	0	0-0	5.3	1.68	10	

The following samples were analyzed in this batch:

20071862-01A

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



## CHAIN OF CUSTODY

**Failure to complete all section of this form may delay analysis.**

COC number (for client tracking)

Page 1 of 1

[illegible]

Note: (a) **DW** (Drinking water), **SW** (Surface water), **GW** (Ground water), **WW** (Waste water), **S** (Soil), **SL** (Sludge), **SE** (Sediment), **OS** (Other solid material)

ALS Technichem (HK) Pty Ltd Address: 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong Tel: +852 2610 1044 Fax: +852 2610 2021 Em:

3.0° 123

Sample Receipt Checklist

Client Name: LTENV

Date/Time Received: 24-Jul-20 09:30

Work Order: 20071862

Received by: KRW

Checklist completed by Keith Wierenga

24-Jul-20

Reviewed by: Chad Whelton

24-Jul-20

eSignature

Date

eSignature

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): 3.0/3.0 C IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 7/24/2020 3:19:43 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:



30-Jul-2020

Brittany Cocina  
LT Environmental, Inc  
820 Megan Ave. Unit B  
Rifle, CO 81650

Re: **Kowach 1-9**

Work Order: **20071863**

Dear Brittany,

ALS Environmental received 1 sample on 24-Jul-2020 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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 12.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

## Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Work Order:** 20071863

---

**Work Order Sample Summary**

---

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
20071863-01	NW @ 9.5	Soil		7/22/2020 14:50	7/24/2020 09:30	<input type="checkbox"/>

---

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight



# ALS Group, USA

Date: 30-Jul-20

**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Sample ID:** NW @ 9.5  
**Collection Date:** 7/22/2020 02:50 PM

**Work Order:** 20071863  
**Lab ID:** 20071863-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>31</b>		<b>SW8015D</b>		Prep: SW3550 7/27/20 16:44	Analyst: <b>JZB</b>
<i>Surr: 4-Terphenyl-d14</i>	66.0		13	mg/Kg-dry	1	7/28/2020 11:55 AM
			33-111	%REC	1	7/28/2020 11:55 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015D</b>		Prep: SW5035 7/27/20 10:08	Analyst: <b>JZB</b>
<i>Surr: Toluene-d8</i>	92.2		5.1	mg/Kg-dry	1	7/27/2020 04:08 PM
			71-123	%REC	1	7/27/2020 04:08 PM
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>						
<b>Benzo(a)pyrene</b>	<b>ND</b>		<b>SW8270E</b>		Prep: SW3546 7/28/20 12:13	Analyst: <b>EEW</b>
<i>Surr: 2-Fluorobiphenyl</i>	88.2		5.4	µg/Kg-dry	1	7/28/2020 06:11 PM
<i>Surr: 4-Terphenyl-d14</i>	74.5		20-140	%REC	1	7/28/2020 06:11 PM
<i>Surr: Nitrobenzene-d5</i>	85.3		22-172	%REC	1	7/28/2020 06:11 PM
			28-140	%REC	1	7/28/2020 06:11 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
<b>Benzene</b>	<b>ND</b>		<b>SW8260C</b>		Prep: SW5035 7/27/20 12:32	Analyst: <b>SJB</b>
<i>Ethylbenzene</i>	ND		0.049	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>m,p-Xylene</i>	ND		0.049	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>o-Xylene</i>	ND		0.098	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>Toluene</i>	ND		0.049	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>Xylenes, Total</i>	ND		0.049	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	92.9		0.15	mg/Kg-dry	1	7/27/2020 10:37 PM
<i>Surr: 4-Bromofluorobenzene</i>	107		70-130	%REC	1	7/27/2020 10:37 PM
<i>Surr: Dibromofluoromethane</i>	82.3		70-130	%REC	1	7/27/2020 10:37 PM
<i>Surr: Toluene-d8</i>	106		70-130	%REC	1	7/27/2020 10:37 PM
<b>MOISTURE</b>						
<b>Moisture</b>	<b>23</b>		<b>SW3550C</b>			Analyst: <b>KTP</b>
			0.10	% of sample	1	7/28/2020 12:35 PM

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

Client: LT Environmental, Inc  
 Work Order: 20071863  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159633** Instrument ID **GC8** Method: **SW8015D**

MBLK		Sample ID: DBLKS1-159633-159633				Units: mg/Kg		Analysis Date: 7/27/2020 05:55 PM		
Client ID:		Run ID: GC8_200727A			SeqNo: 6590372		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	4.807	10								J
Surr: 4-Terphenyl-d14	2.712	0	3.33	0	81.4	33-111	0			

LCS		Sample ID: <b>DLCSS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 11:52 AM</b>		
Client ID:			Run ID: <b>GC8_200727A</b>			SeqNo: <b>6589234</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	329.4	10	333	0	98.9	80-121	0			
<i>Surr: 4-Terphenyl-d14</i>	1.813	0	3.33	0	54.4	33-111	0			

MS		Sample ID: 20071839-01A MS				Units: mg/Kg		Analysis Date: 7/27/2020 12:31 PM		
Client ID:			Run ID: GC8_200727A			SeqNo: 6589235		Prep Date: 7/27/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	335.5	9.9	330.6	5.037	100	80-121	0			
Surr: 4-Terphenyl-d14	1.764	0	3.306	0	53.4	33-111	0			

MSD				Sample ID: 20071839-01A MSD				Units: mg/Kg			Analysis Date: 7/27/2020 01:10 PM			
Client ID:				Run ID: GC8_200727A				SeqNo: 6589236			Prep Date: 7/27/2020		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
DRO (C10-C28)		346.7	10	332	5.037	103	80-121	335.5	3.27	30				
Surr: 4-Terphenyl-d14		1.776	0	3.32	0	53.5	33-111	1.764	0.698	30				

The following samples were analyzed in this batch:

20071863-01A

Client: LT Environmental, Inc  
 Work Order: 20071863  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159653** Instrument ID **GC9** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:59 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589248</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
<i>Surr: Toluene-d8</i>	4753	0	5000	0	95.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:14 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589255</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	228700	5,000	250000	0	91.5	71-123	0			
<i>Surr: Toluene-d8</i>	4398	0	5000	0	88	71-123	0			

<b>MS</b>		Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 01:02 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589251</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	252000	5,000	251800	390.1	100	71-123	0			
<i>Surr: Toluene-d8</i>	4401	0	5035	0	87.4	71-123	0			

<b>MSD</b>		Sample ID: <b>20071859-01A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 02:05 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589252</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	254400	5,000	252000	390.1	101	71-123	252000	0.918	30	
<i>Surr: Toluene-d8</i>	4403	0	5040	0	87.4	71-123	4401	0.055	30	

The following samples were analyzed in this batch:

20071863-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071863  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159693** Instrument ID **SVMS6** Method: **SW8270E**

MBLK				Sample ID: SBLKS1-159693-159693				Units: µg/Kg		Analysis Date: 7/28/2020 01:32 PM	
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595052		Prep Date: 7/28/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	ND	4.2									
Surr: 2-Fluorobiphenyl	3061	0	3333	0	91.8	20-140		0			
Surr: 4-Terphenyl-d14	3606	0	3333	0	108	22-172		0			
Surr: Nitrobenzene-d5	2937	0	3333	0	88.1	28-140		0			

LCS				Sample ID: SLCSS1-159693-159693			Units: µg/Kg		Analysis Date: 7/28/2020 01:48 PM		
Client ID:		Run ID: SVMS6_200728A			SeqNo: 6595053		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	1059	4.2	1333	0	79.4	40-140	0				
Surr: 2-Fluorobiphenyl	3137	0	3333	0	94.1	20-140	0				
Surr: 4-Terphenyl-d14	4109	0	3333	0	123	22-172	0				
Surr: Nitrobenzene-d5	2700	0	3333	0	81	28-140	0				

MS				Sample ID: 20071795-01A MS				Units: µg/Kg		Analysis Date: 7/28/2020 02:03 PM	
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595054		Prep Date: 7/28/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	964.4	4.1	1326	4.871	72.4	40-140		0			
Surr: 2-Fluorobiphenyl	2960	0	3315	0	89.3	20-140		0			
Surr: 4-Terphenyl-d14	3517	0	3315	0	106	22-172		0			
Surr: Nitrobenzene-d5	2788	0	3315	0	84.1	28-140		0			

MSD				Sample ID: 20071795-01A MSD				Units: µg/Kg		Analysis Date: 7/28/2020 02:19 PM	
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595055		Prep Date: 7/28/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	884.8	4.0	1275	4.871	69	40-140	964.4	8.61	30		
Surr: 2-Fluorobiphenyl	2633	0	3188	0	82.6	20-140	2960	11.7	30		
Surr: 4-Terphenyl-d14	3096	0	3188	0	97.1	22-172	3517	12.7	30		
Surr: Nitrobenzene-d5	2476	0	3188	0	77.6	28-140	2788	11.9	30		

The following samples were analyzed in this batch:

20071863-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071863  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MBLK Sample ID: <b>MBLK-159648-159648</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 11:47 PM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>		SeqNo: <b>6594710</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
Surr: 1,2-Dichloroethane-d4	1035	0	1000	0	104	70-130	0			
Surr: 4-Bromofluorobenzene	1036	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	844	0	1000	0	84.4	70-130	0			
Surr: Toluene-d8	1008	0	1000	0	101	70-130	0			

LCS Sample ID: <b>LCS-159648-159648</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 10:41 PM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>		SeqNo: <b>6594708</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	941	30	1000	0	94.1	75-125	0			
Ethylbenzene	973	30	1000	0	97.3	75-125	0			
m,p-Xylene	1949	60	2000	0	97.4	80-125	0			
o-Xylene	981.5	30	1000	0	98.2	75-125	0			
Toluene	939	30	1000	0	93.9	70-125	0			
Xylenes, Total	2930	90	3000	0	97.7	75-125	0			
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1009	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0			
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	0			

MS Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 05:48 AM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>		SeqNo: <b>6594732</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1101	33	1108	0	99.3	75-125	0			
Ethylbenzene	1153	33	1108	0	104	75-125	0			
m,p-Xylene	2302	66	2216	0	104	80-125	0			
o-Xylene	1140	33	1108	0	103	75-125	0			
Toluene	1088	33	1108	0	98.1	70-125	0			
Xylenes, Total	3442	100	3325	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	1120	0	1108	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	1139	0	1108	0	103	70-130	0			
Surr: Dibromofluoromethane	950.3	0	1108	0	85.7	70-130	0			
Surr: Toluene-d8	1097	0	1108	0	99	70-130	0			

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

Client: LT Environmental, Inc  
 Work Order: 20071863  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071859-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 06:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594733</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1090	33	1109	0	98.3	75-125	1101	0.966	30	
Ethylbenzene	1118	33	1109	0	101	75-125	1153	3.03	30	
m,p-Xylene	2267	67	2219	0	102	80-125	2302	1.51	30	
o-Xylene	1119	33	1109	0	101	75-125	1140	1.92	30	
Toluene	1087	33	1109	0	98	70-125	1088	0.108	30	
Xylenes, Total	3386	100	3328	0	102	75-125	3442	1.64	30	
Surr: 1,2-Dichloroethane-d4	1129	0	1109	0	102	70-130	1120	0.836	30	
Surr: 4-Bromofluorobenzene	1141	0	1109	0	103	70-130	1139	0.145	30	
Surr: Dibromofluoromethane	979.5	0	1109	0	88.3	70-130	950.3	3.03	30	
Surr: Toluene-d8	1102	0	1109	0	99.3	70-130	1097	0.399	30	

The following samples were analyzed in this batch:

20071863-01A

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071863  
**Project:** Kowach 1-9

## QC BATCH REPORT

Batch ID: **R294883** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

<b>LCS</b>		Sample ID: <b>LCS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594621</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

<b>DUP</b>		Sample ID: <b>20071878-01A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.46	0.10	0	0	0	0-0	3.42	1.16	10	

<b>DUP</b>		Sample ID: <b>20071917-03A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.39	0.10	0	0	0	0-0	5.3	1.68	10	

The following samples were analyzed in this batch:

20071863-01A

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





Sample Receipt Checklist

Client Name: LTENV

Date/Time Received: 24-Jul-20 09:30

Work Order: 20071863

Received by: KRW

Checklist completed by Keith Wierenga

24-Jul-20

Reviewed by: Chad Whelton

24-Jul-20

eSignature

Date

eSignature

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): 3.0/3.0 C IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 7/24/2020 3:21:21 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:



30-Jul-2020

Brittany Cocina  
LT Environmental, Inc  
820 Megan Ave. Unit B  
Rifle, CO 81650

Re: **Kowach 1-9**

Work Order: **20071864**

Dear Brittany,

ALS Environmental received 1 sample on 24-Jul-2020 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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 12.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

## Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

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RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Work Order:** 20071864

**Work Order Sample Summary**

---

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
20071864-01	Center @ 10	Soil		7/22/2020 14:35	7/24/2020 09:30	<input type="checkbox"/>

---

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

# ALS Group, USA

Date: 30-Jul-20

**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Sample ID:** Center @ 10  
**Collection Date:** 7/22/2020 02:35 PM

**Work Order:** 20071864  
**Lab ID:** 20071864-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW3550 7/27/20 16:44	Analyst: <b>JZB</b>
DRO (C10-C28)	ND		13	mg/Kg-dry	1	7/28/2020 12:34 PM
Surr: 4-Terphenyl-d14	68.6		33-111	%REC	1	7/28/2020 12:34 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW5035 7/27/20 10:08	Analyst: <b>JZB</b>
GRO (C6-C10)	ND		4.8	mg/Kg-dry	1	7/27/2020 04:31 PM
Surr: Toluene-d8	92.0		71-123	%REC	1	7/27/2020 04:31 PM
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>						
			<b>SW8270E</b>		Prep: SW3546 7/28/20 12:13	Analyst: <b>EEW</b>
Benzo(a)pyrene	ND		5.2	µg/Kg-dry	1	7/28/2020 06:26 PM
Surr: 2-Fluorobiphenyl	84.3		20-140	%REC	1	7/28/2020 06:26 PM
Surr: 4-Terphenyl-d14	66.5		22-172	%REC	1	7/28/2020 06:26 PM
Surr: Nitrobenzene-d5	83.7		28-140	%REC	1	7/28/2020 06:26 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260C</b>		Prep: SW5035 7/27/20 12:32	Analyst: <b>SJB</b>
Benzene	ND		0.047	mg/Kg-dry	1	7/27/2020 10:54 PM
Ethylbenzene	ND		0.047	mg/Kg-dry	1	7/27/2020 10:54 PM
m,p-Xylene	ND		0.093	mg/Kg-dry	1	7/27/2020 10:54 PM
o-Xylene	ND		0.047	mg/Kg-dry	1	7/27/2020 10:54 PM
Toluene	ND		0.047	mg/Kg-dry	1	7/27/2020 10:54 PM
Xylenes, Total	ND		0.14	mg/Kg-dry	1	7/27/2020 10:54 PM
Surr: 1,2-Dichloroethane-d4	102		70-130	%REC	1	7/27/2020 10:54 PM
Surr: 4-Bromofluorobenzene	94.9		70-130	%REC	1	7/27/2020 10:54 PM
Surr: Dibromofluoromethane	95.3		70-130	%REC	1	7/27/2020 10:54 PM
Surr: Toluene-d8	106		70-130	%REC	1	7/27/2020 10:54 PM
<b>MOISTURE</b>						
			<b>SW3550C</b>			Analyst: <b>KTP</b>
Moisture	23		0.10	% of sample	1	7/28/2020 12:35 PM

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

Client: LT Environmental, Inc  
 Work Order: 20071864  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159633** Instrument ID **GC8** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>DBLKS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 05:55 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6590372</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	4.807	10								J
<i>Surr: 4-Terphenyl-d14</i>	2.712	0	3.33	0	81.4	33-111	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 11:52 AM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589234</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	329.4	10	333	0	98.9	80-121	0			
<i>Surr: 4-Terphenyl-d14</i>	1.813	0	3.33	0	54.4	33-111	0			

<b>MS</b>		Sample ID: <b>20071839-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 12:31 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589235</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	335.5	9.9	330.6	5.037	100	80-121	0			
<i>Surr: 4-Terphenyl-d14</i>	1.764	0	3.306	0	53.4	33-111	0			

<b>MSD</b>		Sample ID: <b>20071839-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 01:10 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589236</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	346.7	10	332	5.037	103	80-121	335.5	3.27	30	
<i>Surr: 4-Terphenyl-d14</i>	1.776	0	3.32	0	53.5	33-111	1.764	0.698	30	

The following samples were analyzed in this batch: 20071864-01A

Client: LT Environmental, Inc  
 Work Order: 20071864  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159653** Instrument ID **GC9** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:59 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589248</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
<i>Surr: Toluene-d8</i>	4753	0	5000	0	95.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:14 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589255</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	228700	5,000	250000	0	91.5	71-123	0			
<i>Surr: Toluene-d8</i>	4398	0	5000	0	88	71-123	0			

<b>MS</b>		Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 01:02 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589251</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	252000	5,000	251800	390.1	100	71-123	0			
<i>Surr: Toluene-d8</i>	4401	0	5035	0	87.4	71-123	0			

<b>MSD</b>		Sample ID: <b>20071859-01A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 02:05 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589252</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	254400	5,000	252000	390.1	101	71-123	252000	0.918	30	
<i>Surr: Toluene-d8</i>	4403	0	5040	0	87.4	71-123	4401	0.055	30	

The following samples were analyzed in this batch:

20071864-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071864  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159693** Instrument ID **SVMS6** Method: **SW8270E**

MBLK				Sample ID: <b>SBLKS1-159693-159693</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 01:32 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595052</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	ND	4.2								
Surr: 2-Fluorobiphenyl	3061	0	3333	0	91.8	20-140	0			
Surr: 4-Terphenyl-d14	3606	0	3333	0	108	22-172	0			
Surr: Nitrobenzene-d5	2937	0	3333	0	88.1	28-140	0			

LCS				Sample ID: <b>SLCSS1-159693-159693</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 01:48 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595053</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1059	4.2	1333	0	79.4	40-140	0			
Surr: 2-Fluorobiphenyl	3137	0	3333	0	94.1	20-140	0			
Surr: 4-Terphenyl-d14	4109	0	3333	0	123	22-172	0			
Surr: Nitrobenzene-d5	2700	0	3333	0	81	28-140	0			

MS				Sample ID: <b>20071795-01A MS</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 02:03 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595054</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	964.4	4.1	1326	4.871	72.4	40-140	0			
Surr: 2-Fluorobiphenyl	2960	0	3315	0	89.3	20-140	0			
Surr: 4-Terphenyl-d14	3517	0	3315	0	106	22-172	0			
Surr: Nitrobenzene-d5	2788	0	3315	0	84.1	28-140	0			

MSD				Sample ID: <b>20071795-01A MSD</b>		Units: <b>µg/Kg</b>		Analysis Date: <b>7/28/2020 02:19 PM</b>		
Client ID:		Run ID: <b>SVMS6_200728A</b>		SeqNo: <b>6595055</b>		Prep Date: <b>7/28/2020</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	884.8	4.0	1275	4.871	69	40-140	964.4	8.61	30	
Surr: 2-Fluorobiphenyl	2633	0	3188	0	82.6	20-140	2960	11.7	30	
Surr: 4-Terphenyl-d14	3096	0	3188	0	97.1	22-172	3517	12.7	30	
Surr: Nitrobenzene-d5	2476	0	3188	0	77.6	28-140	2788	11.9	30	

The following samples were analyzed in this batch:

20071864-01A

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



Client: LT Environmental, Inc  
 Work Order: 20071864  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

Sample ID: <b>MBLK-159648-159648</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 11:47 PM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594710</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1035</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1036</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>844</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.4</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-159648-159648			Units: µg/Kg-dry		Analysis Date: 7/28/2020 10:41 PM		
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594708		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	941	30	1000	0	94.1	75-125	0				
Ethylbenzene	973	30	1000	0	97.3	75-125	0				
m,p-Xylene	1949	60	2000	0	97.4	80-125	0				
o-Xylene	981.5	30	1000	0	98.2	75-125	0				
Toluene	939	30	1000	0	93.9	70-125	0				
Xylenes, Total	2930	90	3000	0	97.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0				
Surr: 4-Bromofluorobenzene	1009	0	1000	0	101	70-130	0				
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0				
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	0				

MS				Sample ID: 20071859-01A MS				Units: µg/Kg-dry		Analysis Date: 7/29/2020 05:48 AM	
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594732		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1101	33	1108	0	99.3	75-125	0				
Ethylbenzene	1153	33	1108	0	104	75-125	0				
m,p-Xylene	2302	66	2216	0	104	80-125	0				
o-Xylene	1140	33	1108	0	103	75-125	0				
Toluene	1088	33	1108	0	98.1	70-125	0				
Xylenes, Total	3442	100	3325	0	104	75-125	0				
Surr: 1,2-Dichloroethane-d4	1120	0	1108	0	101	70-130	0				
Surr: 4-Bromofluorobenzene	1139	0	1108	0	103	70-130	0				
Surr: Dibromofluoromethane	950.3	0	1108	0	85.7	70-130	0				
Surr: Toluene-d8	1097	0	1108	0	99	70-130	0				

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

Client: LT Environmental, Inc  
 Work Order: 20071864  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071859-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 06:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594733</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1090	33	1109	0	98.3	75-125	1101	0.966	30	
Ethylbenzene	1118	33	1109	0	101	75-125	1153	3.03	30	
m,p-Xylene	2267	67	2219	0	102	80-125	2302	1.51	30	
o-Xylene	1119	33	1109	0	101	75-125	1140	1.92	30	
Toluene	1087	33	1109	0	98	70-125	1088	0.108	30	
Xylenes, Total	3386	100	3328	0	102	75-125	3442	1.64	30	
Surr: 1,2-Dichloroethane-d4	1129	0	1109	0	102	70-130	1120	0.836	30	
Surr: 4-Bromofluorobenzene	1141	0	1109	0	103	70-130	1139	0.145	30	
Surr: Dibromofluoromethane	979.5	0	1109	0	88.3	70-130	950.3	3.03	30	
Surr: Toluene-d8	1102	0	1109	0	99.3	70-130	1097	0.399	30	

The following samples were analyzed in this batch:

20071864-01A

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

Client: LT Environmental, Inc  
Work Order: 20071864  
Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **R294883** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

<b>LCS</b>		Sample ID: <b>LCS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594621</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

<b>DUP</b>		Sample ID: <b>20071878-01A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.46	0.10	0	0	0	0-0	3.42	1.16	10	

<b>DUP</b>		Sample ID: <b>20071917-03A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.39	0.10	0	0	0	0-0	5.3	1.68	10	

The following samples were analyzed in this batch:

20071864-01A

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

## CHAIN OF CUSTODY

**Failure to complete all section of this form may delay analysis.**

COC number (for client tracking)

Page 1 of 1

[illegible]

Note: (a) **DW** (Drinking water), **SW** (Surface water), **GW** (Ground water), **WW** (Waste water), **S** (Soil), **SL** (Sludge), **SE** (Sediment), **OS** (Other solid material)

**ALS Technichem (HK) Pty Ltd**    **Address:** 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong    **Tel:** +852 2610 1044    **Fax:** +852 2610 2021    **Em:**

3.0° 1R3

Sample Receipt Checklist

Client Name: LTENV

Date/Time Received: 24-Jul-20 09:30

Work Order: 20071864

Received by: KRW

Checklist completed by Keith Wierenga

24-Jul-20

Reviewed by: Chad Whelton

24-Jul-20

eSignature

Date

eSignature

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): 3.0/3.0 C IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 7/24/2020 3:22:58 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:



30-Jul-2020

Brittany Cocina  
LT Environmental, Inc  
820 Megan Ave. Unit B  
Rifle, CO 81650

Re: **Kowach 1-9**

Work Order: **20071865**

Dear Brittany,

ALS Environmental received 1 sample on 24-Jul-2020 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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 12.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

## Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Work Order:** 20071865

## Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
20071865-01	SE @ 10	Soil		7/22/2020 14:25	7/24/2020 09:30	<input type="checkbox"/>

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight



# ALS Group, USA

Date: 30-Jul-20

**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Sample ID:** SE @ 10  
**Collection Date:** 7/22/2020 02:25 PM

**Work Order:** 20071865  
**Lab ID:** 20071865-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>23</b>		<b>SW8015D</b>		Prep: SW3550 7/27/20 16:44	Analyst: <b>JZB</b>
<i>Surr: 4-Terphenyl-d14</i>	61.3		12	mg/Kg-dry	1	7/28/2020 01:13 PM
			33-111	%REC	1	7/28/2020 01:13 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015D</b>		Prep: SW5035 7/27/20 10:08	Analyst: <b>JZB</b>
<i>Surr: Toluene-d8</i>	92.5		4.8	mg/Kg-dry	1	7/27/2020 05:00 PM
			71-123	%REC	1	7/27/2020 05:00 PM
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>						
<b>Benzo(a)pyrene</b>	<b>ND</b>		<b>SW8270E</b>		Prep: SW3546 7/28/20 12:13	Analyst: <b>EEW</b>
<i>Surr: 2-Fluorobiphenyl</i>	85.8		5.0	µg/Kg-dry	1	7/28/2020 06:42 PM
<i>Surr: 4-Terphenyl-d14</i>	67.0		20-140	%REC	1	7/28/2020 06:42 PM
<i>Surr: Nitrobenzene-d5</i>	69.0		22-172	%REC	1	7/28/2020 06:42 PM
			28-140	%REC	1	7/28/2020 06:42 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
<b>Benzene</b>	<b>ND</b>		<b>SW8260C</b>		Prep: SW5035 7/27/20 12:32	Analyst: <b>SJB</b>
<i>Ethylbenzene</i>	ND		0.042	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>m,p-Xylene</i>	ND		0.042	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>o-Xylene</i>	ND		0.083	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>Toluene</i>	ND		0.042	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>Xylenes, Total</i>	ND		0.042	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	104		0.13	mg/Kg-dry	1	7/27/2020 11:11 PM
<i>Surr: 4-Bromofluorobenzene</i>	85.6		70-130	%REC	1	7/27/2020 11:11 PM
<i>Surr: Dibromofluoromethane</i>	89.4		70-130	%REC	1	7/27/2020 11:11 PM
<i>Surr: Toluene-d8</i>	106		70-130	%REC	1	7/27/2020 11:11 PM
<b>MOISTURE</b>						
<b>Moisture</b>	<b>18</b>		<b>SW3550C</b>			Analyst: <b>KTP</b>
			0.10	% of sample	1	7/28/2020 12:35 PM

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

Client: LT Environmental, Inc  
 Work Order: 20071865  
 Project: Kowach 1-9

**QC BATCH REPORT**

Batch ID: **159633** Instrument ID **GC8** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>DBLKS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 05:55 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6590372</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	4.807	10								J
<i>Surr: 4-Terphenyl-d14</i>	2.712	0	3.33	0	81.4	33-111	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-159633-159633</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 11:52 AM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589234</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	329.4	10	333	0	98.9	80-121	0			
<i>Surr: 4-Terphenyl-d14</i>	1.813	0	3.33	0	54.4	33-111	0			

<b>MS</b>		Sample ID: <b>20071839-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 12:31 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589235</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	335.5	9.9	330.6	5.037	100	80-121	0			
<i>Surr: 4-Terphenyl-d14</i>	1.764	0	3.306	0	53.4	33-111	0			

<b>MSD</b>		Sample ID: <b>20071839-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/27/2020 01:10 PM</b>		
Client ID:		Run ID: <b>GC8_200727A</b>				SeqNo: <b>6589236</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	346.7	10	332	5.037	103	80-121	335.5	3.27	30	
<i>Surr: 4-Terphenyl-d14</i>	1.776	0	3.32	0	53.5	33-111	1.764	0.698	30	

The following samples were analyzed in this batch:

20071865-01A

Client: LT Environmental, Inc  
 Work Order: 20071865  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159653** Instrument ID **GC9** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:59 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589248</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
<i>Surr: Toluene-d8</i>	4753	0	5000	0	95.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:14 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589255</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	228700	5,000	250000	0	91.5	71-123	0			
<i>Surr: Toluene-d8</i>	4398	0	5000	0	88	71-123	0			

<b>MS</b>		Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 01:02 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589251</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	252000	5,000	251800	390.1	100	71-123	0			
<i>Surr: Toluene-d8</i>	4401	0	5035	0	87.4	71-123	0			

<b>MSD</b>		Sample ID: <b>20071859-01A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 02:05 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589252</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	254400	5,000	252000	390.1	101	71-123	252000	0.918	30	
<i>Surr: Toluene-d8</i>	4403	0	5040	0	87.4	71-123	4401	0.055	30	

The following samples were analyzed in this batch: 20071865-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071865  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159693** Instrument ID **SVMS6** Method: **SW8270E**

MBLK				Sample ID: SBLKS1-159693-159693				Units: µg/Kg		Analysis Date: 7/28/2020 01:32 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595052		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	ND	4.2										
Surr: 2-Fluorobiphenyl	3061	0	3333	0	91.8	20-140		0				
Surr: 4-Terphenyl-d14	3606	0	3333	0	108	22-172		0				
Surr: Nitrobenzene-d5	2937	0	3333	0	88.1	28-140		0				

LCS				Sample ID: SLCSS1-159693-159693			Units: µg/Kg		Analysis Date: 7/28/2020 01:48 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595053		Prep Date: 7/28/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	1059	4.2	1333	0	79.4	40-140		0			
Surr: 2-Fluorobiphenyl	3137	0	3333	0	94.1	20-140		0			
Surr: 4-Terphenyl-d14	4109	0	3333	0	123	22-172		0			
Surr: Nitrobenzene-d5	2700	0	3333	0	81	28-140		0			

MS				Sample ID: 20071795-01A MS				Units: µg/Kg		Analysis Date: 7/28/2020 02:03 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595054		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	964.4	4.1	1326	4.871	72.4	40-140		0				
Surr: 2-Fluorobiphenyl	2960	0	3315	0	89.3	20-140		0				
Surr: 4-Terphenyl-d14	3517	0	3315	0	106	22-172		0				
Surr: Nitrobenzene-d5	2788	0	3315	0	84.1	28-140		0				

MSD				Sample ID: 20071795-01A MSD				Units: µg/Kg		Analysis Date: 7/28/2020 02:19 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595055		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	884.8	4.0	1275	4.871	69	40-140	964.4	8.61	30			
Surr: 2-Fluorobiphenyl	2633	0	3188	0	82.6	20-140	2960	11.7	30			
Surr: 4-Terphenyl-d14	3096	0	3188	0	97.1	22-172	3517	12.7	30			
Surr: Nitrobenzene-d5	2476	0	3188	0	77.6	28-140	2788	11.9	30			

The following samples were analyzed in this batch:

20071865-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071865  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

Sample ID: <b>MBLK-159648-159648</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 11:47 PM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594710</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1035</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1036</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>844</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.4</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-159648-159648			Units: µg/Kg-dry		Analysis Date: 7/28/2020 10:41 PM		
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594708		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	941	30	1000	0	94.1	75-125	0				
Ethylbenzene	973	30	1000	0	97.3	75-125	0				
m,p-Xylene	1949	60	2000	0	97.4	80-125	0				
o-Xylene	981.5	30	1000	0	98.2	75-125	0				
Toluene	939	30	1000	0	93.9	70-125	0				
Xylenes, Total	2930	90	3000	0	97.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0				
Surr: 4-Bromofluorobenzene	1009	0	1000	0	101	70-130	0				
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0				
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	0				

MS				Sample ID: 20071859-01A MS		Units: µg/Kg-dry		Analysis Date: 7/29/2020 05:48 AM		
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594732		Prep Date: 7/27/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1101	33	1108	0	99.3	75-125	0			
Ethylbenzene	1153	33	1108	0	104	75-125	0			
m,p-Xylene	2302	66	2216	0	104	80-125	0			
o-Xylene	1140	33	1108	0	103	75-125	0			
Toluene	1088	33	1108	0	98.1	70-125	0			
Xylenes, Total	3442	100	3325	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	1120	0	1108	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	1139	0	1108	0	103	70-130	0			
Surr: Dibromofluoromethane	950.3	0	1108	0	85.7	70-130	0			
Surr: Toluene-d8	1097	0	1108	0	99	70-130	0			

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

Client: LT Environmental, Inc  
 Work Order: 20071865  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071859-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 06:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594733</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1090	33	1109	0	98.3	75-125	1101	0.966	30	
Ethylbenzene	1118	33	1109	0	101	75-125	1153	3.03	30	
m,p-Xylene	2267	67	2219	0	102	80-125	2302	1.51	30	
o-Xylene	1119	33	1109	0	101	75-125	1140	1.92	30	
Toluene	1087	33	1109	0	98	70-125	1088	0.108	30	
Xylenes, Total	3386	100	3328	0	102	75-125	3442	1.64	30	
Surr: 1,2-Dichloroethane-d4	1129	0	1109	0	102	70-130	1120	0.836	30	
Surr: 4-Bromofluorobenzene	1141	0	1109	0	103	70-130	1139	0.145	30	
Surr: Dibromofluoromethane	979.5	0	1109	0	88.3	70-130	950.3	3.03	30	
Surr: Toluene-d8	1102	0	1109	0	99.3	70-130	1097	0.399	30	

The following samples were analyzed in this batch:

20071865-01A

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071865  
**Project:** Kowach 1-9

## QC BATCH REPORT

Batch ID: **R294883** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

<b>LCS</b>		Sample ID: <b>LCS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594621</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

<b>DUP</b>		Sample ID: <b>20071878-01A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.46	0.10	0	0	0	0-0	3.42	1.16	10	

<b>DUP</b>		Sample ID: <b>20071917-03A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.39	0.10	0	0	0	0-0	5.3	1.68	10	

The following samples were analyzed in this batch:

20071865-01A

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



## CHAIN OF CUSTODY

**Failure to complete all section of this form may delay analysis.**

COC number (for client tracking)

Page 1 of 1

[illegible]

Note: (a) **DW** (Drinking water), **SW** (Surface water), **GW** (Ground water), **WW** (Waste water), **S** (Soil), **SL** (Sludge), **SE** (Sediment), **OS** (Other solid material)

ALS Technichem (HK) Pty Ltd Address: 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong Tel: +852 2610 1044 Fax: +852 2610 2021 Em:

3.0" R3



Sample Receipt Checklist

Client Name: LTENV

Date/Time Received: 24-Jul-20 09:30

Work Order: 20071865

Received by: KRW

Checklist completed by Keith Wierenga

24-Jul-20

Reviewed by: Chad Whelton

24-Jul-20

eSignature

Date

eSignature

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): 3.0/3.0 C IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 7/24/2020 3:24:39 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:



30-Jul-2020

Brittany Cocina  
LT Environmental, Inc  
820 Megan Ave. Unit B  
Rifle, CO 81650

Re: **Kowach 1-9**

Work Order: **20071866**

Dear Brittany,

ALS Environmental received 1 sample on 24-Jul-2020 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control 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:

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

## Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** LT Environmental, Inc  
**Project:** Kowach 1-9  
**Work Order:** 20071866

---

**Work Order Sample Summary**

---

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
20071866-01	NE @ 12	Soil		7/22/2020 09:20	7/24/2020 09:30	<input type="checkbox"/>

---

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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 Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

# ALS Group, USA

Date: 30-Jul-20

Client: LT Environmental, Inc  
Project: Kowach 1-9  
Sample ID: NE @ 12  
Collection Date: 7/22/2020 09:20 AM

Work Order: 20071866  
Lab ID: 20071866-01  
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW3550 7/29/20 13:00	Analyst: <b>JZB</b>
DRO (C10-C28)	ND		12	mg/Kg-dry	1	7/29/2020 06:27 PM
Surr: 4-Terphenyl-d14	75.7		33-111	%REC	1	7/29/2020 06:27 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015D</b>		Prep: SW5035 7/27/20 10:08	Analyst: <b>JZB</b>
GRO (C6-C10)	ND		4.9	mg/Kg-dry	1	7/27/2020 05:23 PM
Surr: Toluene-d8	89.1		71-123	%REC	1	7/27/2020 05:23 PM
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>						
			<b>SW8270E</b>		Prep: SW3546 7/28/20 12:13	Analyst: <b>EEW</b>
Benzo(a)pyrene	ND		5.2	µg/Kg-dry	1	7/28/2020 06:57 PM
Surr: 2-Fluorobiphenyl	85.1		20-140	%REC	1	7/28/2020 06:57 PM
Surr: 4-Terphenyl-d14	58.7		22-172	%REC	1	7/28/2020 06:57 PM
Surr: Nitrobenzene-d5	80.3		28-140	%REC	1	7/28/2020 06:57 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260C</b>		Prep: SW5035 7/27/20 12:32	Analyst: <b>BG</b>
Benzene	ND		0.029	mg/Kg-dry	1	7/28/2020 06:13 PM
Ethylbenzene	ND		0.029	mg/Kg-dry	1	7/28/2020 06:13 PM
m,p-Xylene	ND		0.059	mg/Kg-dry	1	7/28/2020 06:13 PM
o-Xylene	ND		0.029	mg/Kg-dry	1	7/28/2020 06:13 PM
Toluene	ND		0.029	mg/Kg-dry	1	7/28/2020 06:13 PM
Xylenes, Total	ND		0.088	mg/Kg-dry	1	7/28/2020 06:13 PM
Surr: 1,2-Dichloroethane-d4	97.6		70-130	%REC	1	7/28/2020 06:13 PM
Surr: 4-Bromofluorobenzene	96.2		70-130	%REC	1	7/28/2020 06:13 PM
Surr: Dibromofluoromethane	95.5		70-130	%REC	1	7/28/2020 06:13 PM
Surr: Toluene-d8	98.1		70-130	%REC	1	7/28/2020 06:13 PM
<b>MOISTURE</b>						
			<b>SW3550C</b>			Analyst: <b>KTP</b>
Moisture	23		0.10	% of sample	1	7/28/2020 12:35 PM

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071866  
**Project:** Kowach 1-9

**QC BATCH REPORT**

Batch ID: **160771** Instrument ID **GC8** Method: **SW8015D**

MBLK		Sample ID: DBLKS1-160771-160771				Units: mg/Kg		Analysis Date: 7/29/2020 01:15 PM		
Client ID:		Run ID: GC8_200729A			SeqNo: 6596022		Prep Date: 7/29/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	3.31	10	0	0	0		0			J
Surr: 4-Terphenyl-d14	2.96	0	3.33	0	88.9	33-111	0			

LCS				Sample ID: <b>DLCSS1-160771-160771</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/29/2020 01:54 PM</b>			
Client ID:			Run ID: <b>GC8_200729A</b>			SeqNo: <b>6596023</b>		Prep Date: <b>7/29/2020</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
DRO (C10-C28)	354.1	10	333	0	106	80-121	0						
<i>Surr: 4-Terphenyl-d14</i>	2.069	0	3.33	0	62.1	33-111	0						

MS				Sample ID: 20072087-01A MS		Units: mg/Kg		Analysis Date: 7/29/2020 02:33 PM		
Client ID:			Run ID: GC8_200729A		SeqNo: 6596024		Prep Date: 7/29/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	379.6	9.9	328.6	91.62	87.6	80-121		0		
Surr: 4-Terphenyl-d14	2.276	0	3.286	0	69.2	33-111		0		

MSD				Sample ID: 20072087-01A MSD			Units: mg/Kg		Analysis Date: 7/29/2020 03:12 PM		
Client ID:			Run ID: GC8_200729A			SeqNo: 6596025		Prep Date: 7/29/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	317.1	9.5	317.8	91.62	70.9	80-121	379.6	17.9	30	S	
Surr: 4-Terphenyl-d14	1.955	0	3.178	0	61.5	33-111	2.276	15.1	30		

The following samples were analyzed in this batch:

20071866-01A

Client: LT Environmental, Inc  
 Work Order: 20071866  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159653** Instrument ID **GC9** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:59 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589248</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000	0	0	0		0			
<i>Surr: Toluene-d8</i>	4753	0	5000	0	95.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-159653-159653</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 10:14 AM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589255</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	228700	5,000	250000	0	91.5	71-123	0			
<i>Surr: Toluene-d8</i>	4398	0	5000	0	88	71-123	0			

<b>MS</b>		Sample ID: <b>20071859-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 01:02 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589251</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	252000	5,000	251800	390.1	100	71-123	0			
<i>Surr: Toluene-d8</i>	4401	0	5035	0	87.4	71-123	0			

<b>MSD</b>		Sample ID: <b>20071859-01A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/27/2020 02:05 PM</b>		
Client ID:		Run ID: <b>GC9_200727A</b>				SeqNo: <b>6589252</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	254400	5,000	252000	390.1	101	71-123	252000	0.918	30	
<i>Surr: Toluene-d8</i>	4403	0	5040	0	87.4	71-123	4401	0.055	30	

The following samples were analyzed in this batch:

20071866-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071866  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159693** Instrument ID **SVMS6** Method: **SW8270E**

MBLK				Sample ID: SBLKS1-159693-159693				Units: µg/Kg		Analysis Date: 7/28/2020 01:32 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595052		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	ND	4.2										
Surr: 2-Fluorobiphenyl	3061	0	3333	0	91.8	20-140		0				
Surr: 4-Terphenyl-d14	3606	0	3333	0	108	22-172		0				
Surr: Nitrobenzene-d5	2937	0	3333	0	88.1	28-140		0				

LCS				Sample ID: SLCSS1-159693-159693			Units: µg/Kg		Analysis Date: 7/28/2020 01:48 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595053		Prep Date: 7/28/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzo(a)pyrene	1059	4.2	1333	0	79.4	40-140	0				
Surr: 2-Fluorobiphenyl	3137	0	3333	0	94.1	20-140	0				
Surr: 4-Terphenyl-d14	4109	0	3333	0	123	22-172	0				
Surr: Nitrobenzene-d5	2700	0	3333	0	81	28-140	0				

MS				Sample ID: 20071795-01A MS				Units: µg/Kg		Analysis Date: 7/28/2020 02:03 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595054		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	964.4	4.1	1326	4.871	72.4	40-140		0				
Surr: 2-Fluorobiphenyl	2960	0	3315	0	89.3	20-140		0				
Surr: 4-Terphenyl-d14	3517	0	3315	0	106	22-172		0				
Surr: Nitrobenzene-d5	2788	0	3315	0	84.1	28-140		0				

MSD				Sample ID: 20071795-01A MSD				Units: µg/Kg		Analysis Date: 7/28/2020 02:19 PM		
Client ID:			Run ID: SVMS6_200728A			SeqNo: 6595055		Prep Date: 7/28/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzo(a)pyrene	884.8	4.0	1275	4.871	69	40-140	964.4	8.61	30			
Surr: 2-Fluorobiphenyl	2633	0	3188	0	82.6	20-140	2960	11.7	30			
Surr: 4-Terphenyl-d14	3096	0	3188	0	97.1	22-172	3517	12.7	30			
Surr: Nitrobenzene-d5	2476	0	3188	0	77.6	28-140	2788	11.9	30			

The following samples were analyzed in this batch:

20071866-01A

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



Client: LT Environmental, Inc  
 Work Order: 20071866  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159538** Instrument ID **VMS8** Method: **SW8260C**

Sample ID: <b>MBLK-159538-159538</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/23/2020 11:06 PM</b>				
Client ID:		Run ID: <b>VMS8_200723B</b>			SeqNo: <b>6585288</b>		Prep Date: <b>7/23/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	7	30								J
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	17	30								J
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>976</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1004</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>858.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>85.8</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>997</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.7</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-159538-159538				Units: µg/Kg-dry		Analysis Date: 7/23/2020 10:17 PM	
Client ID:			Run ID: VMS8_200723B			SeqNo: 6585287		Prep Date: 7/23/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	906	30	1000	0	90.6	75-125	0				
Ethylbenzene	956	30	1000	0	95.6	75-125	0				
m,p-Xylene	1886	60	2000	0	94.3	80-125	0				
o-Xylene	950.5	30	1000	0	95	75-125	0				
Toluene	924	30	1000	0	92.4	70-125	0				
Xylenes, Total	2836	90	3000	0	94.6	75-125	0				
Surr: 1,2-Dichloroethane-d4	947.5	0	1000	0	94.8	70-130	0				
Surr: 4-Bromofluorobenzene	984	0	1000	0	98.4	70-130	0				
Surr: Dibromofluoromethane	997	0	1000	0	99.7	70-130	0				
Surr: Toluene-d8	1020	0	1000	0	102	70-130	0				

MS				Sample ID: 20071708-01A MS			Units: µg/Kg-dry		Analysis Date: 7/24/2020 04:48 AM		
Client ID:			Run ID: VMS8_200723B			SeqNo: 6585293		Prep Date: 7/23/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	3888	140	4643	0	83.8	75-125	0				
Ethylbenzene	4439	140	4643	19.65	95.2	75-125	0				
m,p-Xylene	9098	280	9286	28.9	97.7	80-125	0				
o-Xylene	4541	140	4643	0	97.8	75-125	0				
Toluene	4399	140	4643	47.4	93.7	70-125	0				
Xylenes, Total	13640	420	13930	0	97.9	75-125	0				
Surr: 1,2-Dichloroethane-d4	4499	0	4643	0	96.9	70-130	0				
Surr: 4-Bromofluorobenzene	4754	0	4643	0	102	70-130	0				
Surr: Dibromofluoromethane	3991	0	4643	0	85.9	70-130	0				
Surr: Toluene-d8	4889	0	4643	0	105	70-130	0				

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071866  
**Project:** Kowach 1-9

## QC BATCH REPORT

Batch ID: **159538** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071708-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/24/2020 05:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200723B</b>			SeqNo: <b>6585294</b>		Prep Date: <b>7/23/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	4252	140	4552	0	93.4	75-125	3888	8.93	30	
Ethylbenzene	4466	140	4552	19.65	97.7	75-125	4439	0.611	30	
m,p-Xylene	8882	270	9105	28.9	97.2	80-125	9098	2.4	30	
o-Xylene	4386	140	4552	0	96.4	75-125	4541	3.46	30	
Toluene	4286	140	4552	47.4	93.1	70-125	4399	2.61	30	
Xylenes, Total	13270	410	13660	0	97.2	75-125	13640	2.76	30	
Surr: 1,2-Dichloroethane-d4	4345	0	4552	0	95.5	70-130	4499	3.48	30	
Surr: 4-Bromofluorobenzene	4589	0	4552	0	101	70-130	4754	3.54	30	
Surr: Dibromofluoromethane	4052	0	4552	0	89	70-130	3991	1.52	30	
Surr: Toluene-d8	4436	0	4552	0	97.4	70-130	4889	9.71	30	

The following samples were analyzed in this batch:

20071866-01A

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

Client: LT Environmental, Inc  
 Work Order: 20071866  
 Project: Kowach 1-9

# QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

Sample ID: <b>MBLK-159648-159648</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/28/2020 11:47 PM</b>				
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594710</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1035</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1036</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>844</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.4</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-159648-159648			Units: µg/Kg-dry		Analysis Date: 7/28/2020 10:41 PM		
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594708		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	941	30	1000	0	94.1	75-125	0				
Ethylbenzene	973	30	1000	0	97.3	75-125	0				
m,p-Xylene	1949	60	2000	0	97.4	80-125	0				
o-Xylene	981.5	30	1000	0	98.2	75-125	0				
Toluene	939	30	1000	0	93.9	70-125	0				
Xylenes, Total	2930	90	3000	0	97.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0				
Surr: 4-Bromofluorobenzene	1009	0	1000	0	101	70-130	0				
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0				
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	0				

MS				Sample ID: 20071859-01A MS				Units: µg/Kg-dry		Analysis Date: 7/29/2020 05:48 AM	
Client ID:			Run ID: VMS8_200728B			SeqNo: 6594732		Prep Date: 7/27/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1101	33	1108	0	99.3	75-125	0				
Ethylbenzene	1153	33	1108	0	104	75-125	0				
m,p-Xylene	2302	66	2216	0	104	80-125	0				
o-Xylene	1140	33	1108	0	103	75-125	0				
Toluene	1088	33	1108	0	98.1	70-125	0				
Xylenes, Total	3442	100	3325	0	104	75-125	0				
Surr: 1,2-Dichloroethane-d4	1120	0	1108	0	101	70-130	0				
Surr: 4-Bromofluorobenzene	1139	0	1108	0	103	70-130	0				
Surr: Dibromofluoromethane	950.3	0	1108	0	85.7	70-130	0				
Surr: Toluene-d8	1097	0	1108	0	99	70-130	0				

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

Client: LT Environmental, Inc  
 Work Order: 20071866  
 Project: Kowach 1-9

## QC BATCH REPORT

Batch ID: **159648** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: <b>20071859-01A MSD</b>			Units: <b>µg/Kg-dry</b>		Analysis Date: <b>7/29/2020 06:05 AM</b>	
Client ID:		Run ID: <b>VMS8_200728B</b>			SeqNo: <b>6594733</b>		Prep Date: <b>7/27/2020</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1090	33	1109	0	98.3	75-125	1101	0.966	30	
Ethylbenzene	1118	33	1109	0	101	75-125	1153	3.03	30	
m,p-Xylene	2267	67	2219	0	102	80-125	2302	1.51	30	
o-Xylene	1119	33	1109	0	101	75-125	1140	1.92	30	
Toluene	1087	33	1109	0	98	70-125	1088	0.108	30	
Xylenes, Total	3386	100	3328	0	102	75-125	3442	1.64	30	
Surr: 1,2-Dichloroethane-d4	1129	0	1109	0	102	70-130	1120	0.836	30	
Surr: 4-Bromofluorobenzene	1141	0	1109	0	103	70-130	1139	0.145	30	
Surr: Dibromofluoromethane	979.5	0	1109	0	88.3	70-130	950.3	3.03	30	
Surr: Toluene-d8	1102	0	1109	0	99.3	70-130	1097	0.399	30	

The following samples were analyzed in this batch:

20071866-01A

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

**Client:** LT Environmental, Inc  
**Work Order:** 20071866  
**Project:** Kowach 1-9

## QC BATCH REPORT

Batch ID: **R294883** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

<b>LCS</b>		Sample ID: <b>LCS-R294883</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594621</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

<b>DUP</b>		Sample ID: <b>20071878-01A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.46	0.10	0	0	0	0-0	3.42	1.16	10	

<b>DUP</b>		Sample ID: <b>20071917-03A DUP</b>				Units: % of sample		Analysis Date: <b>7/28/2020 12:35 PM</b>		
Client ID:		Run ID: <b>MOIST_200728C</b>				SeqNo: <b>6594617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.39	0.10	0	0	0	0-0	5.3	1.68	10	

The following samples were analyzed in this batch:

20071866-01A

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



## CHAIN OF CUSTODY

**Failure to complete all section of this form may delay analysis.**

COC number (for client tracking)

Page 1 of 1

20071866

[illegible]

Note: (a) **DW** (Drinking water), **SW** (Surface water), **GW** (Ground water), **WW** (Waste water), **S** (Soil), **SL** (Sludge), **SE** (Sediment), **OS** (Other solid material)

ALS Technichem (HK) Pty Ltd Address: 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong Tel: +852 2610 1044 Fax: +852 2610 2021 Em:

3.0°C R3

Sample Receipt Checklist

Client Name: LTENV

Date/Time Received: 24-Jul-20 09:30

Work Order: 20071866

Received by: KRW

Checklist completed by Keith Wierenga

24-Jul-20

Reviewed by: Chad Whelton

24-Jul-20

eSignature

Date

eSignature

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): 3.0/3.0 C IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 7/24/2020 3:27:50 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: