



20-Sep-2018

Kris Rowe
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **CPX TPR Pit - SP3**

Work Order: **1809947**

Dear Kris,

ALS Environmental received 1 sample on 15-Sep-2018 10:00 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 998501

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

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: CPX TPR Pit - SP3
Work Order: 1809947

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>
1809947-01	TPR Pit - SP3	Liquid		9/14/2018 10:30	9/15/2018 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: CPX TPR Pit - SP3
WorkOrder: 1809947

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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.

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

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

ALS Group, USA

Date: 20-Sep-18

Client: HRL Compliance Solutions, Inc
Project: CPX TPR Pit - SP3
Sample ID: TPR Pit - SP3
Collection Date: 9/14/2018 10:30 AM

Work Order: 1809947
Lab ID: 1809947-01
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3511 9/17/18 15:30	Analyst: KB
DRO (C10-C28)	ND		0.75	mg/L	1	9/18/2018 02:00 PM
Surr: 4-Terphenyl-d14	64.3		35-161	%REC	1	9/18/2018 02:00 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D			Analyst: KB
GRO (C6-C10)	530		200	µg/L	1	9/17/2018 08:20 PM
Surr: Toluene-d8	81.0		76-120	%REC	1	9/17/2018 08:20 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C			Analyst: BG
Benzene	55		1.0	µg/L	1	9/17/2018 02:42 PM
Ethylbenzene	7.9		1.0	µg/L	1	9/17/2018 02:42 PM
m,p-Xylene	110		2.0	µg/L	1	9/17/2018 02:42 PM
o-Xylene	29		1.0	µg/L	1	9/17/2018 02:42 PM
Toluene	230		10	µg/L	10	9/17/2018 04:20 PM
Xylenes, Total	140		3.0	µg/L	1	9/17/2018 02:42 PM
Surr: 1,2-Dichloroethane-d4	93.3		75-120	%REC	10	9/17/2018 04:20 PM
Surr: 1,2-Dichloroethane-d4	91.8		75-120	%REC	1	9/17/2018 02:42 PM
Surr: 4-Bromofluorobenzene	92.9		80-110	%REC	10	9/17/2018 04:20 PM
Surr: 4-Bromofluorobenzene	100		80-110	%REC	1	9/17/2018 02:42 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	9/17/2018 02:42 PM
Surr: Dibromofluoromethane	104		85-115	%REC	10	9/17/2018 04:20 PM
Surr: Toluene-d8	93.2		85-110	%REC	1	9/17/2018 02:42 PM
Surr: Toluene-d8	89.8		85-110	%REC	10	9/17/2018 04:20 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056A			Analyst: JDR
Chloride	1,300		250	mg/L	250	9/18/2018 05:05 PM
Sulfate	14		5.0	mg/L	5	9/18/2018 04:45 PM
TOTAL DISSOLVED SOLIDS						
			A2540 C-11		Prep: FILTER 9/19/18 07:27	Analyst: DTS
Total Dissolved Solids	1,500		10	mg/L	1	9/19/2018 04:07 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 1809947
Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **124633** Instrument ID **GC8** Method: **SW8015C**

MBLK		Sample ID: DBLKW1-124633-124633				Units: mg/L		Analysis Date: 9/18/2018 12:03 PM		
Client ID:		Run ID: GC8_180918A				SeqNo: 5263739		Prep Date: 9/17/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	0.10								
<i>Surr: 4-Terphenyl-d14</i>	<i>0.0315</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>75.5</i>	<i>35-161</i>	<i>0</i>			

LCS		Sample ID: DLC SW1-124633-124633				Units: mg/L		Analysis Date: 9/18/2018 12:32 PM		
Client ID:		Run ID: GC8_180918A				SeqNo: 5263740		Prep Date: 9/17/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	3.477	0.10	4.17	0	83.4	60-150	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>0.03067</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>73.5</i>	<i>35-161</i>	<i>0</i>			

LCSD		Sample ID: DLCSDW1-124633-124633				Units: mg/L		Analysis Date: 9/18/2018 01:01 PM		
Client ID:		Run ID: GC8_180918A				SeqNo: 5263741		Prep Date: 9/17/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	3.931	0.10	4.17	0	94.3	60-150	3.477	12.3	30	
<i>Surr: 4-Terphenyl-d14</i>	<i>0.031</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>74.3</i>	<i>35-161</i>	<i>0.03067</i>	<i>1.08</i>	<i>30</i>	

The following samples were analyzed in this batch: 1809947-01B

Client: HRL Compliance Solutions, Inc
 Work Order: 1809947
 Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **R244606** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: GBLKW1-180917-R244606				Units: µg/L		Analysis Date: 9/17/2018 06:53 PM		
Client ID:		Run ID: GC9_180917A				SeqNo: 5262057		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	ND	200								
Surr: Toluene-d8	84.24	0	100	0	84.2	76-120	0			

LCS		Sample ID: GLCSW1-180917-R244606				Units: µg/L		Analysis Date: 9/17/2018 05:54 PM		
Client ID:		Run ID: GC9_180917A				SeqNo: 5262056		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	8040	200	10000	0	80.4	76-126	0			
Surr: Toluene-d8	89.87	0	100	0	89.9	76-120	0			

MS		Sample ID: 1809939-01A MS				Units: µg/L		Analysis Date: 9/17/2018 10:17 PM		
Client ID:		Run ID: GC9_180917A				SeqNo: 5262064		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	11390	200	10000	0	114	76-126	0			
Surr: Toluene-d8	110	0	100	0	110	76-120	0			

MSD		Sample ID: 1809939-01A MSD				Units: µg/L		Analysis Date: 9/17/2018 10:46 PM		
Client ID:		Run ID: GC9_180917A				SeqNo: 5262065		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	11610	200	10000	0	116	76-126	11390	1.96	30	
Surr: Toluene-d8	112.2	0	100	0	112	76-120	110	2.01	30	

The following samples were analyzed in this batch: 1809947-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1809947
Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **R244520a** Instrument ID **VMS6** Method: **SW8260C**

MBLK				Sample ID: VBLKW1-180917-R244520a				Units: µg/L		Analysis Date: 9/17/2018 01:26 PM	
Client ID:			Run ID: VMS6_180917A			SeqNo: 5262098		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	2.0									
o-Xylene	0.25	1.0								J	
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	19.1	0	20	0	95.5	75-120	0				
Surr: 4-Bromofluorobenzene	17.53	0	20	0	87.6	80-110	0				
Surr: Dibromofluoromethane	21.4	0	20	0	107	85-115	0				
Surr: Toluene-d8	17.99	0	20	0	90	85-110	0				

LCS				Sample ID: VLCSW2-180917-R244520a				Units: µg/L		Analysis Date: 9/17/2018 01:50 PM	
Client ID:			Run ID: VMS6_180917A			SeqNo: 5262099		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.79	1.0	20	0	109	85-125	0				
Ethylbenzene	18.68	1.0	20	0	93.4	76-123	0				
m,p-Xylene	37.9	2.0	40	0	94.8	75-130	0				
o-Xylene	18.44	1.0	20	0	92.2	76-127	0				
Toluene	20.44	1.0	20	0	102	76-125	0				
Xylenes, Total	56.34	3.0	60	0	93.9	76-127	0				
Surr: 1,2-Dichloroethane-d4	17.84	0	20	0	89.2	75-120	0				
Surr: 4-Bromofluorobenzene	20.18	0	20	0	101	80-110	0				
Surr: Dibromofluoromethane	20.45	0	20	0	102	85-115	0				
Surr: Toluene-d8	18.95	0	20	0	94.8	85-110	0				

MS				Sample ID: 1809768-11A MS			Units: µg/L		Analysis Date: 9/17/2018 10:20 PM		
Client ID:			Run ID: VMS6_180917A			SeqNo: 5262123		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	968	50	1000	0	96.8	85-125	0				
Ethylbenzene	807	50	1000	0	80.7	76-123	0				
m,p-Xylene	1642	100	2000	25.5	80.8	75-130	0				
o-Xylene	804.5	50	1000	0	80.4	76-127	0				
Toluene	919.5	50	1000	0	92	76-125	0				
Xylenes, Total	2446	150	3000	0	81.5	76-127	0				
Surr: 1,2-Dichloroethane-d4	882	0	1000	0	88.2	75-120	0				
Surr: 4-Bromofluorobenzene	1008	0	1000	0	101	80-110	0				
Surr: Dibromofluoromethane	1014	0	1000	0	101	85-115	0				
Surr: Toluene-d8	940.5	0	1000	0	94	85-110	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 1809947
Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **R244520a** Instrument ID **VMS6** Method: **SW8260C**

MSD				Sample ID: 1809768-11A MSD			Units: µg/L		Analysis Date: 9/17/2018 10:44 PM	
Client ID:				Run ID: VMS6_180917A			SeqNo: 5262126		Prep Date:	
									DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1032	50	1000	0	103	85-125	968	6.4	30	
Ethylbenzene	853	50	1000	0	85.3	76-123	807	5.54	30	
m,p-Xylene	1768	100	2000	25.5	87.1	75-130	1642	7.39	30	
o-Xylene	856	50	1000	0	85.6	76-127	804.5	6.2	30	
Toluene	957.5	50	1000	0	95.8	76-125	919.5	4.05	30	
Xylenes, Total	2624	150	3000	0	87.4	76-127	2446	7	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	860	0	1000	0	86	75-120	882	2.53	30	
<i>Surr: 4-Bromofluorobenzene</i>	994.5	0	1000	0	99.4	80-110	1008	1.35	30	
<i>Surr: Dibromofluoromethane</i>	979	0	1000	0	97.9	85-115	1014	3.46	30	
<i>Surr: Toluene-d8</i>	926	0	1000	0	92.6	85-110	940.5	1.55	30	

The following samples were analyzed in this batch: 1809947-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1809947
Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **124859** Instrument ID **TDS** Method: **A2540 C-11**

MBLK		Sample ID: MBLK-124859-124859				Units: mg/L		Analysis Date: 9/19/2018 04:07 PM		
Client ID:		Run ID: TDS_180919C				SeqNo: 5268257		Prep Date: 9/19/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

LCS		Sample ID: LCS-124859-124859				Units: mg/L		Analysis Date: 9/19/2018 04:07 PM		
Client ID:		Run ID: TDS_180919C				SeqNo: 5268258		Prep Date: 9/19/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 479 10 495 0 96.8 80-120 0

DUP		Sample ID: 1809949-01D DUP				Units: mg/L		Analysis Date: 9/19/2018 04:07 PM		
Client ID:		Run ID: TDS_180919C				SeqNo: 5268261		Prep Date: 9/19/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 7094 10 0 0 0 0-0 7131 0.52 10

The following samples were analyzed in this batch:

1809947-01D

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

Client: HRL Compliance Solutions, Inc
Work Order: 1809947
Project: CPX TPR Pit - SP3

QC BATCH REPORT

Batch ID: **R244721** Instrument ID **IC4** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R244721				Units: mg/L		Analysis Date: 9/18/2018 02:50 PM		
Client ID:		Run ID: IC4_180918B				SeqNo: 5265055		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

LCS		Sample ID: LCS-R244721				Units: mg/L		Analysis Date: 9/18/2018 03:09 PM		
Client ID:		Run ID: IC4_180918B				SeqNo: 5265056		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.126	1.0	10	0	91.3	88-110	0			
Sulfate	9.638	1.0	10	0	96.4	85-110	0			

MS		Sample ID: 1809686-03A MS				Units: mg/L		Analysis Date: 9/18/2018 09:33 PM		
Client ID:		Run ID: IC4_180918B				SeqNo: 5265076		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	680.7	50	500	207.3	94.7	75-125	0			
Sulfate	481.9	50	500	17.95	92.8	75-125	0			

MSD		Sample ID: 1809686-03A MSD				Units: mg/L		Analysis Date: 9/18/2018 09:52 PM		
Client ID:		Run ID: IC4_180918B				SeqNo: 5265077		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	681.6	50	500	207.3	94.8	75-125	680.7	0.132	20	
Sulfate	487.9	50	500	17.95	94	75-125	481.9	1.24	20	

The following samples were analyzed in this batch:

1809947-01C

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

Chain-of-Custody

WORKORDER
#

1809947





Form 202r0

[illegible]

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments: <div style="text-align: right; margin-right: 20px;"> M13 SR2 4.2% </div> <div style="font-size: 2em; text-align: center;"> Post Treatment @ </div>	QC PACKAGE (check below)	
		LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Kris Rowe	9/14/18	1245
RECEIVED BY		M. Martinez	9-14-18	1245
RELINQUISHED BY		M. Martinez	9-14-18	1830
RECEIVED BY		Keith Wilfong	9/15/18	1000
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 15-Sep-18 10:00

Work Order: 1809947

Received by: KRW

Checklist completed by Keith Wurenga 17-Sep-18
eSignature Date

Reviewed by: Chad Whelton 18-Sep-18
eSignature Date

Matrices: Water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.2/4.2 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>9/17/2018 9:06:18 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: