



01-Oct-2015

Blair Rollins
Oxy USA WTP LP
760 Horizon Dr.
Grand Junction, CO 81506

Re: **Brush Creek PW**

Work Order: **15091420**

Dear Blair,

ALS Environmental received 2 samples on 24-Sep-2015 09:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 18.

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

Sincerely,

A handwritten signature in black ink that reads "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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Environmental 

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Client: Oxy USA WTP LP
Project: Brush Creek PW
Work Order: 15091420

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>
15091420-01	Transfer PW	Water		9/22/2015 09:30	9/24/2015 09:00	<input type="checkbox"/>
15091420-02	Trip Blank	Water		9/22/2015	9/24/2015 09:00	<input type="checkbox"/>

Client: Oxy USA WTP LP
Project: Brush Creek PW
Work Order: 15091420

Case Narrative

Samples for the above noted Work Order were received on 09/24/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

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

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

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No deviations or anomalies were noted.

Extractable Organics:

No deviations or anomalies were noted.

Metals:

No deviations or anomalies were noted.

Wet Chemistry:

No deviations or anomalies were noted.

ALS Group USA, Corp

Date: 01-Oct-15

Client: Oxy USA WTP LP
Project: Brush Creek PW
Sample ID: Transfer PW
Collection Date: 9/22/2015 09:30 AM

Work Order: 15091420
Lab ID: 15091420-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Analyst: IT	
GRO (C6-C10)	140		1.0	mg/L	5	9/24/2015 08:06 PM
Surr: Toluene-d8	87.7		70-130	%REC	5	9/24/2015 08:06 PM
DIESEL RANGE ORGANICS			SW8270		Prep: SW3511 / 9/25/15	Analyst: RM
DRO (C10-C28)	20		0.10	mg/L	1	9/29/2015 05:50 PM
Surr: 4-Terphenyl-d14	99.1		31-176	%REC	1	9/29/2015 05:50 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Analyst: BG	
Benzene	3.5		0.10	mg/L	100	9/30/2015 09:15 AM
Ethylbenzene	1.3		0.10	mg/L	100	9/30/2015 09:15 AM
m,p-Xylene	16		1.0	mg/L	500	9/30/2015 04:36 PM
o-Xylene	3.5		0.10	mg/L	100	9/30/2015 09:15 AM
Toluene	16		0.50	mg/L	500	9/30/2015 04:36 PM
Xylenes, Total	19		1.5	mg/L	500	9/30/2015 04:36 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	500	9/30/2015 04:36 PM
Surr: 1,2-Dichloroethane-d4	98.0		75-120	%REC	100	9/30/2015 09:15 AM
Surr: 4-Bromofluorobenzene	101		80-110	%REC	500	9/30/2015 04:36 PM
Surr: 4-Bromofluorobenzene	102		80-110	%REC	100	9/30/2015 09:15 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	100	9/30/2015 09:15 AM
Surr: Dibromofluoromethane	98.0		85-115	%REC	500	9/30/2015 04:36 PM
Surr: Toluene-d8	98.6		85-110	%REC	100	9/30/2015 09:15 AM
Surr: Toluene-d8	98.6		85-110	%REC	500	9/30/2015 04:36 PM
CHLORIDE			A4500-CL E-97		Analyst: ED	
Chloride	4,100	x	100	mg/L	100	9/29/2015 03:20 PM
SULFATE			A4500-SO4 E-97		Analyst: ED	
Sulfate	98	x	4.0	mg/L	4	9/29/2015 03:20 PM
TOTAL DISSOLVED SOLIDS			A2540 C-97		Prep: Water Ext. / 9/28/15	Analyst: STP
Total Dissolved Solids	7,000		40	mg/L	1	9/28/2015 06:15 PM

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

ALS Group USA, Corp**Date:** 01-Oct-15**Client:** Oxy USA WTP LP**Project:** Brush Creek PW**Work Order:** 15091420**Sample ID:** Trip Blank**Lab ID:** 15091420-02**Collection Date:** 9/22/2015**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
Benzene	ND		0.0010	mg/L	1	9/30/2015 05:46 AM
Ethylbenzene	ND		0.0010	mg/L	1	9/30/2015 05:46 AM
m,p-Xylene	ND		0.0020	mg/L	1	9/30/2015 05:46 AM
o-Xylene	ND		0.0010	mg/L	1	9/30/2015 05:46 AM
Toluene	ND		0.0010	mg/L	1	9/30/2015 05:46 AM
Xylenes, Total	ND		0.0030	mg/L	1	9/30/2015 05:46 AM
Surr: 1,2-Dichloroethane-d4	90.0		75-120	%REC	1	9/30/2015 05:46 AM
Surr: 4-Bromofluorobenzene	96.6		80-110	%REC	1	9/30/2015 05:46 AM
Surr: Dibromofluoromethane	103		85-115	%REC	1	9/30/2015 05:46 AM
Surr: Toluene-d8	99.4		85-110	%REC	1	9/30/2015 05:46 AM

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

Client: Oxy USA WTP LP
Project: Brush Creek PW
WorkOrder: 15091420

QUALIFIERS, ACRONYMS, UNITS

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

<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>
mg/L	Milligrams per Liter

ALS Group USA, Corp

Date: 01-Oct-15

Client: Oxy USA WTP LP
Work Order: 15091420
Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172371** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: GBLKW1-150924-R172371				Units: µg/L		Analysis Date: 9/24/2015 05:33 PM		
Client ID:		Run ID: GC9_150924B				SeqNo: 3475286		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	107.1	0	100	0	107	70-130		0		

LCS		Sample ID: GLCSW1-150924-R172371				Units: µg/L		Analysis Date: 9/24/2015 05:08 PM		
Client ID:		Run ID: GC9_150924B				SeqNo: 3475285		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)	10190	200	10000	0	102	70-130		0		
Surr: Toluene-d8	103.1	0	100	0	103	70-130		0		

MS		Sample ID: 15091413-06A MS				Units: µg/L		Analysis Date: 9/25/2015 12:39 PM		
Client ID:		Run ID: GC9_150924B				SeqNo: 3475299		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)	8622	200	10000	0	86.2	70-130		0		
Surr: Toluene-d8	102.2	0	100	0	102	70-130		0		

MSD		Sample ID: 15091413-06A MSD				Units: µg/L		Analysis Date: 9/25/2015 01:04 AM		
Client ID:		Run ID: GC9_150924B				SeqNo: 3475297		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)	8305	200	10000	0	83.1	70-130	8622	3.74	30	
Surr: Toluene-d8	100.9	0	100	0	101	70-130	102.2	1.34	30	

The following samples were analyzed in this batch:

15091420-01A

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

Client: Oxy USA WTP LP
 Work Order: 15091420
 Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **76561** Instrument ID **SVMS6** Method: **SW8270**

MBLK		Sample ID: DBLKW1-76561-76561				Units: mg/L		Analysis Date: 9/29/2015 02:42 PM		
Client ID:		Run ID: SVMS6_150929A				SeqNo: 3482713		Prep Date: 9/25/2015		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>0.1142</i>	<i>0</i>	<i>0.1143</i>	<i>0</i>	<i>99.9</i>	<i>31-176</i>	<i>0</i>			

LCS		Sample ID: DLCSW1-76561-76561				Units: mg/L		Analysis Date: 9/29/2015 03:03 PM		
Client ID:		Run ID: SVMS6_150929A				SeqNo: 3482715		Prep Date: 9/25/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	7.627	0.10	11.43	0	66.7	44-116	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>0.1111</i>	<i>0</i>	<i>0.1143</i>	<i>0</i>	<i>97.2</i>	<i>31-176</i>	<i>0</i>			

MS		Sample ID: 15091428-01B MS				Units: mg/L		Analysis Date: 9/29/2015 03:24 PM		
Client ID:		Run ID: SVMS6_150929A				SeqNo: 3482717		Prep Date: 9/25/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	9.596	0.10	11.43	0	84	44-116	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>0.104</i>	<i>0</i>	<i>0.1143</i>	<i>0</i>	<i>91</i>	<i>31-176</i>	<i>0</i>			

MSD		Sample ID: 15091428-01B MSD				Units: mg/L		Analysis Date: 9/29/2015 03:44 PM		
Client ID:		Run ID: SVMS6_150929A				SeqNo: 3482718		Prep Date: 9/25/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	9.168	0.10	11.43	0	80.2	44-116	9.596	4.56	30	
<i>Surr: 4-Terphenyl-d14</i>	<i>0.1149</i>	<i>0</i>	<i>0.1143</i>	<i>0</i>	<i>101</i>	<i>31-176</i>	<i>0.104</i>	<i>9.98</i>	<i>30</i>	

The following samples were analyzed in this batch:

15091420-01B

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

Client: Oxy USA WTP LP
 Work Order: 15091420
 Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172679A** Instrument ID **VMS6** Method: **SW8260B**

MBLK				Sample ID: VBLKW2-150929-R172679A				Units: µg/L		Analysis Date: 9/30/2015 04:02 AM	
Client ID:			Run ID: VMS6_150929B			SeqNo: 3483858		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	ND	1.0									
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	21.88	0	20	0	109	75-120		0			
Surr: 4-Bromofluorobenzene	19.97	0	20	0	99.8	80-110		0			
Surr: Dibromofluoromethane	20.83	0	20	0	104	85-115		0			
Surr: Toluene-d8	21.19	0	20	0	106	85-110		0			

LCS				Sample ID: VLCSW3-150929-R172679A				Units: µg/L		Analysis Date: 9/30/2015 08:49 AM	
Client ID:			Run ID: VMS6_150929B			SeqNo: 3483869		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.33	1.0	20	0	102	85-125	0				
Ethylbenzene	19.14	1.0	20	0	95.7	85-125	0				
m,p-Xylene	38.5	2.0	40	0	96.2	75-130	0				
o-Xylene	18.51	1.0	20	0	92.6	80-125	0				
Toluene	19.68	1.0	20	0	98.4	85-125	0				
Xylenes, Total	57.01	3.0	60	0	95	80-126	0				
Surr: 1,2-Dichloroethane-d4	20.18	0	20	0	101	75-120	0				
Surr: 4-Bromofluorobenzene	20.87	0	20	0	104	80-110	0				
Surr: Dibromofluoromethane	20.5	0	20	0	102	85-115	0				
Surr: Toluene-d8	19.9	0	20	0	99.5	85-110	0				

MS					Sample ID: 15091420-01A MS		Units: µg/L		Analysis Date: 9/30/2015 01:37 PM		
Client ID: Transfer PW			Run ID: VMS6_150929B			SeqNo: 3484068		Prep Date:		DF: 100	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	5707	100	2000	3548	108	85-125		0			
Ethylbenzene	2970	100	2000	1265	85.2	85-125		0			
m,p-Xylene	22150	200	4000	20280	46.7	75-130		0		SEO	
o-Xylene	5146	100	2000	3544	80.1	80-125		0			
Toluene	20410	100	2000	19320	54.8	85-125		0		SEO	
Xylenes, Total	27300	300	6000	23820	57.8	80-126		0		S	
Surr: 1,2-Dichloroethane-d4	2057	0	2000	0	103	75-120		0			
Surr: 4-Bromofluorobenzene	2140	0	2000	0	107	80-110		0			
Surr: Dibromofluoromethane	2073	0	2000	0	104	85-115		0			
Surr: Toluene-d8	1935	0	2000	0	96.8	85-110		0			

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

Client: Oxy USA WTP LP
Work Order: 15091420
Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172679A** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 15091420-01A MSD				Units: µg/L		Analysis Date: 9/30/2015 02:03 PM	
Client ID: Transfer PW				Run ID: VMS6_150929B				SeqNo: 3484069		Prep Date:	
										DF: 100	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	5782	100	2000	3548	112	85-125	5707	1.31	30		
Ethylbenzene	3143	100	2000	1265	93.9	85-125	2970	5.66	30		
m,p-Xylene	23400	200	4000	20280	78	75-130	22150	5.48	30	EO	
o-Xylene	5300	100	2000	3544	87.8	80-125	5146	2.95	30		
Toluene	21410	100	2000	19320	105	85-125	20410	4.78	30	EO	
Xylenes, Total	28700	300	6000	23820	81.2	80-126	27300	5.01	30		
Surr: 1,2-Dichloroethane-d4	2032	0	2000	0	102	75-120	2057	1.22	30		
Surr: 4-Bromofluorobenzene	2067	0	2000	0	103	80-110	2140	3.47	30		
Surr: Dibromofluoromethane	1758	0	2000	0	87.9	85-115	2073	16.4	30		
Surr: Toluene-d8	2018	0	2000	0	101	85-110	1935	4.2	30		

The following samples were analyzed in this batch:

15091420-01A

15091420-02A

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

Client: Oxy USA WTP LP
 Work Order: 15091420
 Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172747A** Instrument ID **VMS7** Method: **SW8260B**

MBLK		Sample ID: VLKW1-150930-R172747A				Units: µg/L		Analysis Date: 9/30/2015 03:21 PM		
Client ID:		Run ID: VMS7_150930A				SeqNo: 3485071		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	ND	2.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.42	0	20	0	102	75-120	0			
Surr: 4-Bromofluorobenzene	20.19	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	19.93	0	20	0	99.6	85-115	0			
Surr: Toluene-d8	19.61	0	20	0	98	85-110	0			

LCS		Sample ID: VLCSW1-150930-R172747A				Units: µg/L		Analysis Date: 9/30/2015 01:40 PM		
Client ID:		Run ID: VMS7_150930A				SeqNo: 3485070		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	44.52	2.0	40	0	111	75-130	0			
Toluene	21.75	1.0	20	0	109	85-125	0			
Xylenes, Total	65.9	3.0	60	0	110	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.13	0	20	0	101	75-120	0			
Surr: 4-Bromofluorobenzene	20.1	0	20	0	100	80-110	0			
Surr: Dibromofluoromethane	20.49	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.79	0	20	0	99	85-110	0			

MS		Sample ID: 15091465-03A MS				Units: µg/L		Analysis Date: 10/1/2015 12:14 PM		
Client ID:		Run ID: VMS7_150930A				SeqNo: 3485863		Prep Date:		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	735.2	40	800	0	91.9	75-130	0			
Toluene	361	20	400	0	90.2	85-125	0			
Xylenes, Total	1089	60	1200	0	90.7	80-126	0			
Surr: 1,2-Dichloroethane-d4	411.8	0	400	0	103	75-120	0			
Surr: 4-Bromofluorobenzene	407.4	0	400	0	102	80-110	0			
Surr: Dibromofluoromethane	406.2	0	400	0	102	85-115	0			
Surr: Toluene-d8	390.2	0	400	0	97.6	85-110	0			

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

Client: Oxy USA WTP LP
Work Order: 15091420
Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172747A** Instrument ID **VMS7** Method: **SW8260B**

MSD				Sample ID: 15091465-03A MSD				Units: µg/L		Analysis Date: 10/1/2015 12:38 PM	
Client ID:			Run ID: VMS7_150930A			SeqNo: 3485864		Prep Date:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
m,p-Xylene	774.4	40	800	0	96.8	75-130	735.2	5.19	30		
Toluene	372.6	20	400	0	93.2	85-125	361	3.16	30		
Xylenes, Total	1145	60	1200	0	95.4	80-126	1089	5.03	30		
Surr: 1,2-Dichloroethane-d4	404	0	400	0	101	75-120	411.8	1.91	30		
Surr: 4-Bromofluorobenzene	396.2	0	400	0	99	80-110	407.4	2.79	30		
Surr: Dibromofluoromethane	404	0	400	0	101	85-115	406.2	0.543	30		
Surr: Toluene-d8	387.2	0	400	0	96.8	85-110	390.2	0.772	30		

The following samples were analyzed in this batch:

15091420-01A

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

Client: Oxy USA WTP LP
 Work Order: 15091420
 Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **76607** Instrument ID **TDS** Method: **A2540 C-97**

MBLK		Sample ID: MBLK-76607-76607					Units: mg/L		Analysis Date: 9/28/2015 06:15 PM		
Client ID:			Run ID: TDS_150928A				SeqNo: 3480148		Prep Date: 9/28/2015		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-76607-76607					Units: mg/L		Analysis Date: 9/28/2015 06:15 PM		
Client ID:			Run ID: TDS_150928A			SeqNo: 3480147		Prep Date: 9/28/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Total Dissolved Solids 499 10 495 0 101 80-120 0

DUP				Sample ID: 15091311-01A DUP				Units: mg/L			Analysis Date: 9/28/2015 06:15 PM			
Client ID:				Run ID: TDS_150928A				SeqNo: 3480131			Prep Date: 9/28/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

Total Dissolved Solids 1781 10 0 0 0 0-0 1824 2.39 10

DUP				Sample ID: 15091314-05C DUP				Units: mg/L		Analysis Date: 9/28/2015 06:15 PM			
Client ID:				Run ID: TDS_150928A				SeqNo: 3480133		Prep Date: 9/28/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

Total Dissolved Solids 304 20 0 0 0 0-0 304 0 10

The following samples were analyzed in this batch:

15091420-01C

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

Client: Oxy USA WTP LP
Work Order: 15091420
Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172674** Instrument ID: **GALLERY** Method: **A4500-CI E-97**

MBLK		Sample ID: WBLKW1-150929-R172674				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929A		SeqNo: 3482216		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 0.1712 1.0 Jx

MS		Sample ID: 15091418-01C MS				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929A		SeqNo: 3482228		Prep Date:		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 140.3 4.0 50 99.67 81.2 75-125 0 x

MSD		Sample ID: 15091418-01C MSD				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929A		SeqNo: 3482229		Prep Date:		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 145.9 4.0 50 99.67 92.5 75-125 140.3 3.94 25 x

LCS1		Sample ID: WLCS1W1-150929-R172674				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929A		SeqNo: 3482217		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 9.622 1.0 10 0 96.2 80-120 0 x

LCS2		Sample ID: WLCS2W1-150929-R172674				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929A		SeqNo: 3482233		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 51.35 1.0 50 0 103 80-120 0 x

The following samples were analyzed in this batch:

15091420-01C

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

Client: Oxy USA WTP LP
 Work Order: 15091420
 Project: Brush Creek PW

QC BATCH REPORT

Batch ID: **R172675** Instrument ID **GALLERY** Method: **A4500-SO4 E-97**

MBLK		Sample ID: WBLKW1-150929-R172675				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929B		SeqNo: 3482237		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 0.2322 1.0 Jx

MS		Sample ID: 15091418-01C MS				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929B		SeqNo: 3482241		Prep Date:		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 399.8 4.0 50 377.6 44.5 75-125 0 SOx

MSD		Sample ID: 15091418-01C MSD				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929B		SeqNo: 3482242		Prep Date:		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 387 4.0 50 377.6 19 75-125 399.8 3.24 20 SOx

LCS1		Sample ID: WLCS1W1-150929-R172675				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929B		SeqNo: 3482238		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 9.538 1.0 10 0 95.4 90-110 0 x

LCS2		Sample ID: WLCS2W1-150929-R172675				Units: mg/L		Analysis Date: 9/29/2015 03:20 PM		
Client ID:		Run ID: GALLERY_150929B		SeqNo: 3482239		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 48.75 1.0 50 0 97.5 90-110 0 x

The following samples were analyzed in this batch:

15091420-01C

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



☐ ALS Environmental
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☒ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Customer Information				Project Information			Parameter/Method Request for Analysis											
Purchase Order		Project Name	Brush Creek PW	A	COGCC Table 910-1 water													
Work Order		Project Number		B														
Company Name	OXY USA WTP LP	Bill To Company	OXY USA WTP LP	C														
Send Report To	Blair Rollins	Invoices Attn.		D														
Address	760 Horizon Drive, suite 101	Address	760 Horizon Drive, suite 101	E														
				F														
City/State/Zip	Grand Junction Co. 81506	City/State/Zip	Grand Junction Co. 81506	G														
Phone	970-263-3637	Phone	970-263-3637	H														
Fax		Fax		I														
e-Mail Address	blair_rollins@oxy.com			J														
No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	
1	Transfer PW	09/22/2015	930	Water		10	XX											
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Sampler(s): Please Print & Sign Blair K Rollins		Shipment Method:		Required Turnaround Time: (Check Box) <input type="checkbox"/> 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 3 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:					
<i>[Signature]</i>	9/22/15	1500	<i>[Signature]</i>	9/22/15	1830						
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:	ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)			
<i>[Signature]</i>	9-23-15	10:00	<i>[Signature]</i>	9/24/15	0900		4.4°C	<input checked="" type="checkbox"/> Level II: Standard QC	<input type="checkbox"/> Level III: Raw Data		
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):					<input type="checkbox"/> TRRP LRC	<input type="checkbox"/> TRRP Level IV		
<i>[Signature]</i>	9/24/15	1630						<input type="checkbox"/> Level IV: SW846 Methods/CLP like			
								<input type="checkbox"/> Other:			

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

ORIGIN ID: RLA (616) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 23SEP15
 ACTWGT: 42.00 LB
 CAD: 2284840 NET 13670
 DIMS: 24x15x15 IN
 BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

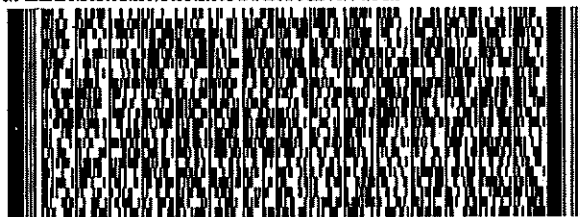
HOLLAND MI 49424

(616) 399-6070

REF: 092315-1

PO: PARACHUTE

DEPT:



FedEx
 Express



REL#
 3785346

THU - 24 SEP 10:30A
PRIORITY OVERNIGHT

TRK#
 0201 **7745 8209 9033**

XX HLMA

49424
GRR
 MI-US



539.2/C686931D0

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS Parachute Custody Seal
 Time 1:00 PM Date 9-23-15
 Name [Signature]

Sample Receipt Checklist

Client Name: OXYUSA - CO

Date/Time Received: 24-Sep-15 09:00

Work Order: 15091420

Received by: DS

Checklist completed by Diane Shaw 24-Sep-15
eSignature Date

Reviewed by: Lee Arnold 24-Sep-15
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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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>4.4/4.4 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>9/24/2015 4:24:00 PM</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: