AP-111

MONTHLY WWTS REPORT

December

2020

API Flowrate (gpm)

84FT842.PV

Period	Avg Flow (gpm)
December	7
01-Dec-20 00:00:00	14.54078465
02-Dec-20 00:00:00	36.75096027
03-Dec-20 00:00:00	42.7917303
04-Dec-20 00:00:00	0.227449067
05-Dec-20 00:00:00	0.122130871
06-Dec-20 00:00:00	0.117870871
07-Dec-20 00:00:00	0.121060774
08-Dec-20 00:00:00	50.05915349
09-Dec-20 00:00:00	32.84608113
10-Dec-20 00:00:00	39.8699632
11-Dec-20 00:00:00	0.117266761
12-Dec-20 00:00:00	0.14141555
13-Dec-20 00:00:00	0.153537697
14-Dec-20 00:00:00	0.136810774
15-Dec-20 00:00:00	0.148485613
16-Dec-20 00:00:00	0.135960616
17-Dec-20 00:00:00	0.125849114
18-Dec-20 00:00:00	0.113742945
19-Dec-20 00:00:00	0.141175326
20-Dec-20 00:00:00	0.128693571
21-Dec-20 00:00:00	0.125604177
22-Dec-20 00:00:00	0.118324148
23-Dec-20 00:00:00	0.149511146
24-Dec-20 00:00:00	0.144510094
25-Dec-20 00:00:00	0.148505785
26-Dec-20 00:00:00	0.128510869
27-Dec-20 00:00:00	0.102869023
28-Dec-20 00:00:00	0.100410625
29-Dec-20 00:00:00	0.134052112
30-Dec-20 00:00:00	0.130284367

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 16, 2020

Jake Usrey
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX

RE: Carbon Canister - WWTP OrderNo.: 2012359

Dear Jake Usrey:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/8/2020 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2012359**
Date Reported: **12/16/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/1/2020 3:00:00 PM
Lab ID: 2012359-001 **Matrix:** AQUEOUS **Received Date:** 12/8/2020 7:45:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	2.7	0.90	1.0		mg/L	1	12/9/2020 4:30:58 PM	56850
Surr: DNOP	149	0	70-130	S	%Rec	1	12/9/2020 4:30:58 PM	56850
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	25	4.3	10	*	mg/L	100	12/10/2020 11:56:40 A	R73938
Chloride	470	25	50		mg/L	100	12/10/2020 11:56:40 A	R73938
Bromide	8.4	0.50	1.0		mg/L	10	12/10/2020 11:31:59 A	R73938
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	12/10/2020 11:31:59 A	R73938
Sulfate	360	2.5	5.0		mg/L	10	12/10/2020 11:31:59 A	R73938
Nitrate+Nitrite as N	0.14	0.12	2.0	J	mg/L	10	12/10/2020 12:09:00 P	R73938
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	130	0.92	20		mg/L	20	12/10/2020 12:09:18 P	56876
Magnesium	34	0.051	1.0		mg/L	1	12/10/2020 12:07:26 P	56876
Potassium	130	2.7	20		mg/L	20	12/10/2020 12:09:18 P	56876
Sodium	570	3.7	20		mg/L	20	12/10/2020 12:09:18 P	56876
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	4.5	10		µg/L	20	12/11/2020 1:39:09 AM	SW739
Toluene	ND	4.0	20		µg/L	20	12/11/2020 1:39:09 AM	SW739
Ethylbenzene	ND	4.3	20		µg/L	20	12/11/2020 1:39:09 AM	SW739
Methyl tert-butyl ether (MTBE)	8.0	7.9	20	J	µg/L	20	12/11/2020 1:39:09 AM	SW739
Xylenes, Total	ND	11	30		µg/L	20	12/11/2020 1:39:09 AM	SW739
Surr: 1,2-Dichloroethane-d4	84.0	0	70-130		%Rec	20	12/11/2020 1:39:09 AM	SW739
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	20	12/11/2020 1:39:09 AM	SW739
Surr: Dibromofluoromethane	96.1	0	70-130		%Rec	20	12/11/2020 1:39:09 AM	SW739
Surr: Toluene-d8	100	0	70-130		%Rec	20	12/11/2020 1:39:09 AM	SW739
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **MH**	
Conductivity	4900	10	10		µmhos/c	1	12/10/2020 4:55:29 PM	R73942
SM4500-H+B / 9040C: PH							Analyst: **MH**	
pH	6.09			H	pH units	1	12/10/2020 4:55:29 PM	R73942

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2012359**
Date Reported: **12/16/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/3/2020 2:30:00 PM
Lab ID: 2012359-002 **Matrix:** AQUEOUS **Received Date:** 12/8/2020 7:45:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	2.9	0.90	1.0		mg/L	1	12/9/2020 4:40:39 PM	56850
Surr: DNOP	118	0	70-130		%Rec	1	12/9/2020 4:40:39 PM	56850
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	17	4.3	10	*	mg/L	100	12/10/2020 12:58:21 P	R73938
Chloride	470	25	50		mg/L	100	12/10/2020 12:58:21 P	R73938
Bromide	6.2	0.50	1.0		mg/L	10	12/10/2020 12:33:41 P	R73938
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	12/10/2020 12:33:41 P	R73938
Sulfate	380	2.5	5.0		mg/L	10	12/10/2020 12:33:41 P	R73938
Nitrate+Nitrite as N	0.24	0.12	2.0	J	mg/L	10	12/10/2020 1:10:42 PM	R73938
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	150	0.92	20		mg/L	20	12/10/2020 12:13:25 P	56876
Magnesium	43	0.051	1.0		mg/L	1	12/10/2020 12:11:33 P	56876
Potassium	100	2.7	20		mg/L	20	12/10/2020 12:13:25 P	56876
Sodium	440	3.7	20		mg/L	20	12/10/2020 12:13:25 P	56876
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	4.5	10		µg/L	20	12/11/2020 2:06:15 AM	SW739
Toluene	ND	4.0	20		µg/L	20	12/11/2020 2:06:15 AM	SW739
Ethylbenzene	ND	4.3	20		µg/L	20	12/11/2020 2:06:15 AM	SW739
Methyl tert-butyl ether (MTBE)	9.3	7.9	20	J	µg/L	20	12/11/2020 2:06:15 AM	SW739
Xylenes, Total	ND	11	30		µg/L	20	12/11/2020 2:06:15 AM	SW739
Surr: 1,2-Dichloroethane-d4	83.8	0	70-130		%Rec	20	12/11/2020 2:06:15 AM	SW739
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	20	12/11/2020 2:06:15 AM	SW739
Surr: Dibromofluoromethane	94.9	0	70-130		%Rec	20	12/11/2020 2:06:15 AM	SW739
Surr: Toluene-d8	98.2	0	70-130		%Rec	20	12/11/2020 2:06:15 AM	SW739
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **MH**	
Conductivity	4200	10	10		µmhos/c	1	12/10/2020 4:59:30 PM	R73942
SM4500-H+B / 9040C: PH							Analyst: **MH**	
pH	5.95			H	pH units	1	12/10/2020 4:59:30 PM	R73942

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **MB-56876** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **56876** RunNo: **73939**
Prep Date: **12/9/2020** Analysis Date: **12/10/2020** SeqNo: **2607807** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID: **LCS-56876** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **56876** RunNo: **73939**
Prep Date: **12/9/2020** Analysis Date: **12/10/2020** SeqNo: **2607809** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	48	1.0	50.00	0	95.7	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Potassium	51	1.0	50.00	0	102	85	115			
Sodium	51	1.0	50.00	0	103	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **A5** SampType: **ccv_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607372** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.10	1.600	0	91.9	90	110			
Chloride	7.8	0.50	8.000	0	97.0	90	110			
Bromide	7.9	0.10	8.000	0	98.9	90	110			
Phosphorus, Orthophosphate (As P	7.7	0.50	8.000	0	96.2	90	110			
Sulfate	20	0.50	20.00	0	98.0	90	110			
Nitrate+Nitrite as N	8.2	0.20	8.000	0	103	90	110			

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607377** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607378** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	95.1	90	110			
Chloride	4.7	0.50	5.000	0	94.0	90	110			
Bromide	2.4	0.10	2.500	0	96.3	90	110			
Phosphorus, Orthophosphate (As P	4.5	0.50	5.000	0	90.9	90	110			
Sulfate	9.5	0.50	10.00	0	95.3	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.4	90	110			

Sample ID: **A4** SampType: **ccv_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607388** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.91	0.10	1.000	0	90.5	90	110			
Chloride	4.6	0.50	5.000	0	93.0	90	110			
Bromide	4.8	0.10	5.000	0	96.6	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	93.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **A4** SampType: **ccv_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607388** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	12	0.50	12.50	0	93.9	90	110			
Nitrate+Nitrite as N	4.9	0.20	5.000	0	98.5	90	110			

Sample ID: **A5** SampType: **ccv_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607406** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.10	1.600	0	94.0	90	110			
Chloride	7.8	0.50	8.000	0	97.1	90	110			
Bromide	7.9	0.10	8.000	0	98.9	90	110			
Phosphorus, Orthophosphate (As P	7.7	0.50	8.000	0	96.6	90	110			
Sulfate	20	0.50	20.00	0	98.8	90	110			
Nitrate+Nitrite as N	8.2	0.20	8.000	0	103	90	110			

Sample ID: **A4** SampType: **ccv_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607423** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.92	0.10	1.000	0	92.2	90	110			
Chloride	4.7	0.50	5.000	0	93.5	90	110			
Bromide	4.8	0.10	5.000	0	96.8	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	94.4	90	110			
Sulfate	12	0.50	12.50	0	94.4	90	110			
Nitrate+Nitrite as N	4.9	0.20	5.000	0	98.7	90	110			

Sample ID: **A5** SampType: **ccv_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607440** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.10	1.600	0	93.0	90	110			
Chloride	7.8	0.50	8.000	0	97.4	90	110			
Bromide	7.9	0.10	8.000	0	98.8	90	110			
Phosphorus, Orthophosphate (As P	7.8	0.50	8.000	0	98.0	90	110			
Sulfate	20	0.50	20.00	0	98.2	90	110			
Nitrate+Nitrite as N	8.2	0.20	8.000	0	103	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **A4** SampType: **ccv_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607457** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.92	0.10	1.000	0	92.4	90	110			
Chloride	4.7	0.50	5.000	0	93.4	90	110			
Bromide	4.8	0.10	5.000	0	96.9	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	95.0	90	110			
Sulfate	12	0.50	12.50	0	94.6	90	110			
Nitrate+Nitrite as N	4.9	0.20	5.000	0	98.8	90	110			

Sample ID: **A5** SampType: **ccv_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607474** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.10	1.600	0	92.6	90	110			
Chloride	7.8	0.50	8.000	0	97.8	90	110			
Bromide	7.9	0.10	8.000	0	99.3	90	110			
Phosphorus, Orthophosphate (As P	7.9	0.50	8.000	0	98.8	90	110			
Sulfate	20	0.50	20.00	0	98.7	90	110			
Nitrate+Nitrite as N	8.3	0.20	8.000	0	103	90	110			

Sample ID: **A4** SampType: **ccv_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/11/2020** SeqNo: **2607492** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.92	0.10	1.000	0	92.5	90	110			
Chloride	4.7	0.50	5.000	0	94.0	90	110			
Bromide	4.8	0.10	5.000	0	96.3	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	95.1	90	110			
Sulfate	12	0.50	12.50	0	95.1	90	110			
Nitrate+Nitrite as N	4.9	0.20	5.000	0	98.8	90	110			

Sample ID: **A5** SampType: **ccv_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R73938** RunNo: **73938**
Prep Date: Analysis Date: **12/11/2020** SeqNo: **2607509** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.10	1.600	0	92.7	90	110			
Chloride	7.8	0.50	8.000	0	97.9	90	110			
Bromide	7.9	0.10	8.000	0	99.0	90	110			
Phosphorus, Orthophosphate (As P	7.8	0.50	8.000	0	97.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **A5**	SampType: **ccv_5**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R73938**	RunNo: **73938**							
Prep Date:	Analysis Date: **12/11/2020**	SeqNo: **2607509**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	20	0.50	20.00	0	98.2	90	110			
Nitrate+Nitrite as N	8.2	0.20	8.000	0	103	90	110			

Sample ID: **A4**	SampType: **ccv_4**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R73938**	RunNo: **73938**							
Prep Date:	Analysis Date: **12/11/2020**	SeqNo: **2607524**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.96	0.10	1.000	0	95.7	90	110			
Chloride	4.7	0.50	5.000	0	94.3	90	110			
Bromide	4.8	0.10	5.000	0	96.7	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	94.7	90	110			
Sulfate	12	0.50	12.50	0	97.2	90	110			
Nitrate+Nitrite as N	4.9	0.20	5.000	0	98.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**

16-Dec-20

Client: Western Refining Southwest, Gallup

Project: Carbon Canister - WWTP

Sample ID: **LCS-56850** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **LCSW** Batch ID: **56850** RunNo: **73877**

Prep Date: **12/8/2020** Analysis Date: **12/9/2020** SeqNo: **2606349** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.6	1.0	5.000	0	112	70	130			
Surr: DNOP	0.61		0.5000		123	70	130			

Sample ID: **MB-56850** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **PBW** Batch ID: **56850** RunNo: **73877**

Prep Date: **12/8/2020** Analysis Date: **12/9/2020** SeqNo: **2606350** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	1.1		1.000		112	70	130			

Sample ID: **LCS-56916** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **LCSW** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608571** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.61		0.5000		122	70	130			

Sample ID: **MB-56916** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **PBW** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608572** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.1		1.000		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **MB-1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SW73944** RunNo: **73944**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607749** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	70	130			
Surr: Toluene-d8	9.4		10.00		94.0	70	130			

Sample ID: **LCS 8260** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SW73944** RunNo: **73944**
Prep Date: Analysis Date: **12/10/2020** SeqNo: **2607750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.5	70	130			
Toluene	19	1.0	20.00	0	93.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.1		10.00		91.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012359**
16-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **lcs-1 99.2uS eC**	SampType: **lcs**		TestCode: **SM2510B: Specific Conductance**		
Client ID: **LCSW**	Batch ID: **R73942**		RunNo: **73942**		
Prep Date:	Analysis Date: **12/10/2020**		SeqNo: **2607568**	Units: **µmhos/cm**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	99	10	99.20	0	100	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Andeavor, Gallup** Work Order Number: **2012359** RcptNo: 1

Received By: **Isaiah Ortiz** **12/8/2020 7:45:00 AM** I-OX

Completed By: **Emily Mocho** **12/8/2020 9:34:10 AM**

Reviewed By: JR 12/8/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐ SGL 12/8/20
8. Was preserved added to bottles? Yes ☑ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 4 (<2 or >12 unless noted)
Adjusted? yes
Checked by: SGL 12/8/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

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

16. Additional remarks: added ~1.0mL HNO_3 to sample 001D and ~0.5mL HNO_3 to sample 0020 for metals analysis checked for pH <2 SGL 12/8/20
17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining
Gallup Refinery
Mailing Address: 92 GIANT CROSSING ROAD
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 863 0930
QA/QC Package:
X Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush _____
Project Name: Carbon Canister - WWTP
Project #:
Sample Day's
Project Manager: Jake Usrey
Sampler: WWTP-OPPs
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.3°C ±0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Gas	TPH 8015B (DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4	8081 Pesticides / 8082 PC	8260B (VOA)	8270 (Semi-VOA)	PH	Specific Conductance	Cations	Sulfide	Air Bubbles (Y or N)
						2012359																
12.1.20	3P	H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
12.1.20	3P	H2O	Carbon Canister	125ml-1	H2SO4	001								X								
12.1.20	3P	H2O	Carbon Canister	500ml-1	None	|												X	X			
12.1.20	3P	H2O	Carbon Canister	500ml-1	HNO3	|														X		
12.1.20	3P	H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None	|	X		X													
		H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
		H2O	Carbon Canister	125ml-1	H2SO4									X								
		H2O	Carbon Canister	500ml-1	None													X	X			
		H2O	Carbon Canister	500ml-1	HNO3															X		
		H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
			I-O courier	12/8/20	0745
Date:	Time:	Relinquished by:	Received by:	Date	Time

Carbon Canister

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Western - Refining
Gallup Refinery
Mailing Address: 92 GIANT CROSSING ROAD
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 863 0930
QA/QC Package:
X Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush _____
Project Name: Carbon Canister - WWTP
Project #:
Sample Day's
Project Manager: Jake Usrey
Sampler: WWTP-OPPs
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.8°+0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Gas	TPH 8015B (DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4	8081 Pesticides / 8082 PC	8260B (VOA)	8270 (Semi-VOA)	PH	Specific Conductance	Cations	Sulfide	Air Bubbles (Y or N)
						2012359																
12.3.20	230 P	H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
12.3.20	230p	H2O	Carbon Canister	125ml-1	H2SO4	002								X								
12.3.20	230p	H2O	Carbon Canister	500ml-1	None													X	X			
12.3.20	230p	H2O	Carbon Canister	500ml-1	HNO3															X		
12.3.20	230P	H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None	1	X		X													
		H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
		H2O	Carbon Canister	125ml-1	H2SO4									X								
		H2O	Carbon Canister	500ml-1	None													X	X			
		H2O	Carbon Canister	500ml-1	HNO3															X		
		H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
			In Q Courier	12/8/20	0745
Date:	Time:	Relinquished by:	Received by:	Date	Time

Carbon Canister

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 23, 2020

Jake Usrey
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX

RE: Carbon Canister - WWTP OrderNo.: 2012644

Dear Jake Usrey:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/11/2020 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2012644**
Date Reported: **12/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/8/2020 2:40:00 PM
Lab ID: 2012644-001 **Matrix:** AQUEOUS **Received Date:** 12/11/2020 2:20:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	4.8	0.90	1.0		mg/L	1	12/16/2020 10:02:29 A	56995
Surr: DNOP	108	0	70-130		%Rec	1	12/16/2020 10:02:29 A	56995
EPA METHOD 300.0: ANIONS							Analyst: **JMT**	
Fluoride	17	0.43	1.0	*	mg/L	10	12/17/2020 12:12:11 P	R74104
Chloride	570	25	50		mg/L	100	12/17/2020 12:37:57 P	R74104
Bromide	4.7	0.50	1.0		mg/L	10	12/17/2020 12:12:11 P	R74104
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	12/17/2020 12:12:11 P	R74104
Sulfate	760	25	50		mg/L	100	12/17/2020 12:37:57 P	R74104
Nitrate+Nitrite as N	0.14	0.12	2.0	J	mg/L	10	12/17/2020 12:50:50 P	R74104
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	160	0.46	10		mg/L	10	12/15/2020 1:17:12 PM	56978
Magnesium	47	0.051	1.0		mg/L	1	12/15/2020 1:40:10 PM	56978
Potassium	90	0.14	1.0		mg/L	1	12/15/2020 1:40:10 PM	56978
Sodium	450	1.9	10		mg/L	10	12/15/2020 1:17:12 PM	56978
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	4.5	10		µg/L	20	12/18/2020 5:27:41 AM	R74108
Toluene	ND	4.0	20		µg/L	20	12/18/2020 5:27:41 AM	R74108
Ethylbenzene	ND	4.3	20		µg/L	20	12/18/2020 5:27:41 AM	R74108
Methyl tert-butyl ether (MTBE)	ND	7.9	20		µg/L	20	12/18/2020 5:27:41 AM	R74108
Xylenes, Total	ND	11	30		µg/L	20	12/18/2020 5:27:41 AM	R74108
Surr: 1,2-Dichloroethane-d4	103	0	70-130		%Rec	20	12/18/2020 5:27:41 AM	R74108
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	20	12/18/2020 5:27:41 AM	R74108
Surr: Dibromofluoromethane	109	0	70-130		%Rec	20	12/18/2020 5:27:41 AM	R74108
Surr: Toluene-d8	99.2	0	70-130		%Rec	20	12/18/2020 5:27:41 AM	R74108
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **MH**	
Conductivity	4700	10	10		µmhos/c	1	12/14/2020 6:43:51 PM	R73995
SM4500-H+B / 9040C: PH							Analyst: **MH**	
pH	5.92			H	pH units	1	12/17/2020 1:02:18 PM	R74105

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2012644**
Date Reported: **12/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/9/2020 2:15:00 PM
Lab ID: 2012644-002 **Matrix:** AQUEOUS **Received Date:** 12/11/2020 2:20:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	16	0.90	1.0		mg/L	1	12/16/2020 10:31:16 A	56995
Surr: DNOP	109	0	70-130		%Rec	1	12/16/2020 10:31:16 A	56995
EPA METHOD 300.0: ANIONS							Analyst: **JMT**	
Fluoride	21	0.43	1.0	*	mg/L	10	12/17/2020 1:16:36 PM	R74104
Chloride	470	25	50		mg/L	100	12/17/2020 1:42:21 PM	R74104
Bromide	5.6	0.50	1.0		mg/L	10	12/17/2020 1:16:36 PM	R74104
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	12/17/2020 1:16:36 PM	R74104
Sulfate	730	25	50		mg/L	100	12/17/2020 1:42:21 PM	R74104
Nitrate+Nitrite as N	0.36	0.12	2.0	J	mg/L	10	12/17/2020 1:55:14 PM	R74104
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	130	0.46	10		mg/L	10	12/15/2020 1:19:10 PM	56978
Magnesium	37	0.051	1.0		mg/L	1	12/15/2020 1:42:02 PM	56978
Potassium	98	0.14	1.0		mg/L	1	12/15/2020 1:42:02 PM	56978
Sodium	440	1.9	10		mg/L	10	12/15/2020 1:19:10 PM	56978
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	4.5	10		µg/L	20	12/18/2020 5:56:14 AM	R74108
Toluene	ND	4.0	20		µg/L	20	12/18/2020 5:56:14 AM	R74108
Ethylbenzene	ND	4.3	20		µg/L	20	12/18/2020 5:56:14 AM	R74108
Methyl tert-butyl ether (MTBE)	ND	7.9	20		µg/L	20	12/18/2020 5:56:14 AM	R74108
Xylenes, Total	ND	11	30		µg/L	20	12/18/2020 5:56:14 AM	R74108
Surr: 1,2-Dichloroethane-d4	100	0	70-130		%Rec	20	12/18/2020 5:56:14 AM	R74108
Surr: 4-Bromofluorobenzene	97.0	0	70-130		%Rec	20	12/18/2020 5:56:14 AM	R74108
Surr: Dibromofluoromethane	104	0	70-130		%Rec	20	12/18/2020 5:56:14 AM	R74108
Surr: Toluene-d8	99.4	0	70-130		%Rec	20	12/18/2020 5:56:14 AM	R74108
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **MH**	
Conductivity	4700	10	10		µmhos/c	1	12/14/2020 7:01:09 PM	R73995
SM4500-H+B / 9040C: PH							Analyst: **MH**	
pH	5.57			H	pH units	1	12/17/2020 1:06:39 PM	R74105

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2012644**
Date Reported: **12/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/10/2020 3:20:00 PM
Lab ID: 2012644-003 **Matrix:** AQUEOUS **Received Date:** 12/11/2020 2:20:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	5.7	0.90	1.0		mg/L	1	12/16/2020 10:40:57 A	56995
Surr: DNOP	110	0	70-130		%Rec	1	12/16/2020 10:40:57 A	56995
EPA METHOD 300.0: ANIONS							Analyst: **JMT**	
Fluoride	26	0.43	1.0	*	mg/L	10	12/17/2020 2:46:43 PM	R74104
Chloride	480	25	50		mg/L	100	12/17/2020 3:12:28 PM	R74104
Bromide	7.5	0.50	1.0		mg/L	10	12/17/2020 2:46:43 PM	R74104
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	12/17/2020 2:46:43 PM	R74104
Sulfate	870	25	50		mg/L	100	12/17/2020 3:12:28 PM	R74104
Nitrate+Nitrite as N	0.19	0.12	2.0	J	mg/L	10	12/17/2020 3:25:21 PM	R74104
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	140	0.46	10		mg/L	10	12/15/2020 1:20:50 PM	56978
Magnesium	33	0.051	1.0		mg/L	1	12/15/2020 1:43:55 PM	56978
Potassium	120	1.4	10		mg/L	10	12/15/2020 1:20:50 PM	56978
Sodium	490	1.9	10		mg/L	10	12/15/2020 1:20:50 PM	56978
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	5.2	4.5	10	J	µg/L	20	12/18/2020 6:24:43 AM	R74108
Toluene	ND	4.0	20		µg/L	20	12/18/2020 6:24:43 AM	R74108
Ethylbenzene	ND	4.3	20		µg/L	20	12/18/2020 6:24:43 AM	R74108
Methyl tert-butyl ether (MTBE)	ND	7.9	20		µg/L	20	12/18/2020 6:24:43 AM	R74108
Xylenes, Total	ND	11	30		µg/L	20	12/18/2020 6:24:43 AM	R74108
Surr: 1,2-Dichloroethane-d4	102	0	70-130		%Rec	20	12/18/2020 6:24:43 AM	R74108
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	20	12/18/2020 6:24:43 AM	R74108
Surr: Dibromofluoromethane	108	0	70-130		%Rec	20	12/18/2020 6:24:43 AM	R74108
Surr: Toluene-d8	97.0	0	70-130		%Rec	20	12/18/2020 6:24:43 AM	R74108
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **MH**	
Conductivity	5300	10	10		µmhos/c	1	12/14/2020 7:05:00 PM	R73995
SM4500-H+B / 9040C: PH							Analyst: **MH**	
pH	5.39			H	pH units	1	12/17/2020 1:11:01 PM	R74105

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012644**
23-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **MB-56978** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **56978** RunNo: **74023**
Prep Date: **12/14/2020** Analysis Date: **12/15/2020** SeqNo: **2611995** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID: **LCS-56978** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **56978** RunNo: **74023**
Prep Date: **12/14/2020** Analysis Date: **12/15/2020** SeqNo: **2611997** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	0	98.9	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Potassium	50	1.0	50.00	0	99.9	85	115			
Sodium	50	1.0	50.00	0	99.1	85	115			

Qualifiers:

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H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012644**
23-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R74104**	RunNo: **74104**							
Prep Date:	Analysis Date: **12/17/2020**	SeqNo: **2615009**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R74104**	RunNo: **74104**							
Prep Date:	Analysis Date: **12/17/2020**	SeqNo: **2615010**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	99.4	90	110			
Chloride	4.7	0.50	5.000	0	93.1	90	110			
Bromide	2.4	0.10	2.500	0	97.3	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	91.7	90	110			
Sulfate	9.6	0.50	10.00	0	95.8	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.1	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012644**
23-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **2012644-001BMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **Carbon Canister** Batch ID: **56995** RunNo: **74039**
Prep Date: **12/15/2020** Analysis Date: **12/16/2020** SeqNo: **2612448** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	10	1.0	5.000	4.770	109	70	130			
Surr: DNOP	0.54		0.5000		109	70	130			

Sample ID: **2012644-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **Carbon Canister** Batch ID: **56995** RunNo: **74039**
Prep Date: **12/15/2020** Analysis Date: **12/16/2020** SeqNo: **2612449** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	10	1.0	5.000	4.770	107	70	130	1.04	20	
Surr: DNOP	0.53		0.5000		107	70	130	0	0	

Sample ID: **LCS-56995** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW** Batch ID: **56995** RunNo: **74039**
Prep Date: **12/15/2020** Analysis Date: **12/16/2020** SeqNo: **2612452** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	101	70	130			
Surr: DNOP	0.52		0.5000		104	70	130			

Sample ID: **MB-56995** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW** Batch ID: **56995** RunNo: **74039**
Prep Date: **12/15/2020** Analysis Date: **12/16/2020** SeqNo: **2612453** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	0.96		1.000		95.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012644**
23-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R74108**	RunNo: **74108**
Prep Date:	Analysis Date: **12/18/2020**	SeqNo: **2615296** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R74108**	RunNo: **74108**
Prep Date:	Analysis Date: **12/18/2020**	SeqNo: **2615297** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012644**
23-Dec-20

Client: Western Refining Southwest, Gallup
Project: Carbon Canister - WWTP

Sample ID: **lcs-1 99.2uS eC**	SampType: **lcs**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW**	Batch ID: **R73995**	RunNo: **73995**
Prep Date:	Analysis Date: **12/14/2020**	SeqNo: **2610468** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.20	0	101	85	115			

Sample ID: **lcs-2 99.2uS eC**	SampType: **lcs**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW**	Batch ID: **R73995**	RunNo: **73995**
Prep Date:	Analysis Date: **12/14/2020**	SeqNo: **2610494** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.20	0	105	85	115			

Sample ID: **2012644-003C DUP**	SampType: **dup**	TestCode: **SM2510B: Specific Conductance**
Client ID: **Carbon Canister**	Batch ID: **R73995**	RunNo: **73995**
Prep Date:	Analysis Date: **12/14/2020**	SeqNo: **2610497** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	5300	10						0.0337	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Andeavor, Gallup** Work Order Number: **2012644** RcptNo: 1

Received By: **Isaiah Ortiz** **12/11/2020 2:20:00 PM** I-OK

Completed By: **Emily Mocho** **12/11/2020 2:23:45 PM**

Reviewed By: JR 12/11/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preserved added to bottles? Yes ☑ No ☑ SGL 12/11/20 NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 6 SGL 12/11/20 (<2 or >12 unless noted)
Adjusted? Yes
Checked by: SGL 12/11/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

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

16. Additional remarks: For metals analysis added 0.5mL HNO_3 to sample 001-003D checked for pH <2 SGL 12/11/20
17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining
Gallup Refinery
Mailing Address: 92 GIANT CROSSING ROAD
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 863 0930
QA/QC Package:
X Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush_____
Project Name: Carbon Canister - WWTP
Project #:
Sample Day's
Project Manager: Jake Usrey
Sampler: WWTP-OPPs
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.3°C ±0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Gas	TPH 8015B (DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4	8081 Pesticides / 8082 PC	8260B (VOA)	8270 (Semi-VOA)	PH	Specific Conductance	Cations	Sulfide	Air Bubbles (Y or N)
						2012644																
12/8/20	240P	H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
12/8/20	240P	H2O	Carbon Canister	125ml-1	H2SO4	001								X								
12/8/20	240P	H2O	Carbon Canister	500ml-1	None													X	X			
12/8/20	240P	H2O	Carbon Canister	500ml-1	HNO3															X		
12/8/20	240P	H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													
		H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
		H2O	Carbon Canister	125ml-1	H2SO4									X								
		H2O	Carbon Canister	500ml-1	None													X	X			
		H2O	Carbon Canister	500ml-1	HNO3															X		
		H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
			I Q cassi	12/11/20	1420
Date:	Time:	Relinquished by:	Received by:	Date	Time

Carbon Canister

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Western - Refining
Gallup Refinery
Mailing Address: 92 GIANT CROSSING ROAD
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 863 0930
QA/QC Package:
X Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush_____
Project Name:
Carbon Canister - WWTP
Project #:
Sample Day's
Project Manager: Jake Usrey
Sampler: WWTP-OPPs
On Ice: Yes ☐ No
Sample Temperature: 1.3°C ±0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Gas	TPH 8015B (DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4	8081 Pesticides / 8082 PC	8260B (VOA)	8270 (Semi-VOA)	PH	Specific Conductance	Cations	Sulfide	Air Bubbles (Y or N)
						20126644																
12/9/20	215P	H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
12/9/20	215P	H2O	Carbon Canister	125ml-1	H2SO4	002								X								
12/9/20	215P	H2O	Carbon Canister	500ml-1	None	|												X	X			
12/9/20	215P	H2O	Carbon Canister	500ml-1	HNO3	|														X		
12/9/20	215P	H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None	|	X		X													
		H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
		H2O	Carbon Canister	125ml-1	H2SO4									X								
		H2O	Carbon Canister	500ml-1	None													X	X			
		H2O	Carbon Canister	500ml-1	HNO3															X		
		H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
			I-Q courier	12/11/20	1420
Date:	Time:	Relinquished by:	Received by:	Date	Time

Carbon Canister

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Western - Refining
Gallup Refinery
Mailing Address: 92 GIANT CROSSING ROAD
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 863 0930
QA/QC Package:
X Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush_____
Project Name: Carbon Canister - WWTP
Project #:
Sample Day's
Project Manager: Jake Usrey
Sampler: WWTP-OPPs
On Ice: ■ Yes ☐ No
Sample Temperature: 1.3°C ±0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Gas	TPH 8015B (DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4	8081 Pesticides / 8082 PC	8260B (VOA)	8270 (Semi-VOA)	PH	Specific Conductance	Cations	Sulfide	Air Bubbles (Y or N)
						2012644																
12/10/20	320P	H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
12/10/20	320P	H2O	Carbon Canister	125ml-1	H2SO4	003								X								
12/10/20	320P	H2O	Carbon Canister	500ml-1	None													X	X			
12/10/20	320P	H2O	Carbon Canister	500ml-1	HNO3															X		
12/10/20	320P	H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													
		H2O	Carbon Canister	Plastic 500ml-1	NaOH/Zn Acetate																	
		H2O	Carbon Canister	125ml-1	H2SO4									X								
		H2O	Carbon Canister	500ml-1	None													X	X			
		H2O	Carbon Canister	500ml-1	HNO3															X		
		H2O	Carbon Canister	40ml-3 /125ml-1 Amber	HCL / None		X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
			In Ocorsi	12/11/20	1420
Date:	Time:	Relinquished by:	Received by:	Date	Time

Carbon Canister

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 15819

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
WESTERN REFINING SOUTHWEST, IN 123 W Mills Avenue Suite 200 El Paso, TX79901	267595	15819	DISCHARGE PERMIT

Created By	Comment	Comment Date
cchavez	Monthly Wastewater December 2020 Report 12-31-2020	02/26/2021
cchavez	Accepted for Record 12-26-2021	02/26/2021

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CONDITIONS

Action 15819

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
WESTERN REFINING SOUTHWEST, IN 123 W Mills Avenue Suite 200 El Paso, TX79901	267595	15819	DISCHARGE PERMIT

OCD Reviewer	Condition
cchavez	None