HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 10, 2020

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

RE: Carbon Canister - WWTP OrderNo.: 2001152

Dear Alvin Dorsey:

Hall Environmental Analysis Laboratory received 12 sample(s) on 1/7/2020 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2001152**
Date Reported: **1/10/2020**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/26/2019 8:00:00 AM
Lab ID: 2001152-001
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	1.9	0.71	1.0	H	mg/L	1	1/8/2020 9:29:16 AM	49672
Surr: DNOP	104	0	70-130	H	%Rec	1	1/8/2020 9:29:16 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Fluoride	2.7	0.23	1.0		mg/L	10	1/7/2020 9:30:38 PM	R65625
Chloride	320	25	50		mg/L	100	1/7/2020 9:55:27 PM	R65625
Bromide	ND	0.50	1.0		mg/L	10	1/7/2020 9:30:38 PM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/7/2020 9:30:38 PM	R65625
Sulfate	660	25	50		mg/L	100	1/7/2020 9:55:27 PM	R65625
Nitrate+Nitrite as N	0.89	0.24	2.0	J	mg/L	10	1/7/2020 10:07:51 PM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	47	0.027	1.0		mg/L	1	1/8/2020 7:07:46 PM	49694
Magnesium	12	0.010	1.0		mg/L	1	1/8/2020 7:07:46 PM	49694
Potassium	16	0.062	1.0		mg/L	1	1/8/2020 7:07:46 PM	49694
Sodium	600	4.7	10		mg/L	10	1/8/2020 7:27:11 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	28	3.3	10		µg/L	20	1/7/2020 6:18:10 PM	SL6562
Toluene	7.8	7.0	20	J	µg/L	20	1/7/2020 6:18:10 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 6:18:10 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 6:18:10 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 6:18:10 PM	SL6562
Surr: 1,2-Dichloroethane-d4	94.2	0	70-130		%Rec	20	1/7/2020 6:18:10 PM	SL6562
Surr: 4-Bromofluorobenzene	94.1	0	70-130		%Rec	20	1/7/2020 6:18:10 PM	SL6562
Surr: Dibromofluoromethane	109	0	70-130		%Rec	20	1/7/2020 6:18:10 PM	SL6562
Surr: Toluene-d8	94.1	0	70-130		%Rec	20	1/7/2020 6:18:10 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	4400	5.0	5.0		µmhos/c	1	1/7/2020 12:23:32 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.26			*H	pH units	1	1/7/2020 12:23:32 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/27/2019 8:00:00 AM
Lab ID: 2001152-002
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0	H	mg/L	1	1/8/2020 9:38:24 AM	49672
Surr: DNOP	95.7	0	70-130	H	%Rec	1	1/8/2020 9:38:24 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Fluoride	43	2.3	10	*	mg/L	100	1/7/2020 11:22:18 PM	R65625
Chloride	440	25	50		mg/L	100	1/7/2020 11:22:18 PM	R65625
Bromide	ND	0.50	1.0		mg/L	10	1/7/2020 10:57:29 PM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/7/2020 10:57:29 PM	R65625
Sulfate	1400	25	50		mg/L	100	1/7/2020 11:22:18 PM	R65625
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/7/2020 11:34:43 PM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **ELS**	
Calcium	78	0.14	5.0		mg/L	5	1/10/2020 8:40:01 AM	49720
Magnesium	19	0.010	1.0		mg/L	1	1/10/2020 8:34:20 AM	49720
Potassium	110	0.31	5.0		mg/L	5	1/10/2020 8:40:01 AM	49720
Sodium	620	4.7	10		mg/L	10	1/10/2020 8:46:15 AM	49720
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	68	3.3	10		µg/L	20	1/7/2020 6:47:29 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 6:47:29 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 6:47:29 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 6:47:29 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 6:47:29 PM	SL6562
Surr: 1,2-Dichloroethane-d4	93.2	0	70-130		%Rec	20	1/7/2020 6:47:29 PM	SL6562
Surr: 4-Bromofluorobenzene	99.7	0	70-130		%Rec	20	1/7/2020 6:47:29 PM	SL6562
Surr: Dibromofluoromethane	109	0	70-130		%Rec	20	1/7/2020 6:47:29 PM	SL6562
Surr: Toluene-d8	98.1	0	70-130		%Rec	20	1/7/2020 6:47:29 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	13000	25	25		µmhos/c	5	1/7/2020 4:58:22 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	8.72			*H	pH units	1	1/7/2020 12:27:28 PM	R65634

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/28/2019 8:00:00 AM
Lab ID: 2001152-003
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0	H	mg/L	1	1/8/2020 9:47:30 AM	49672
Surr: DNOP	99.8	0	70-130	H	%Rec	1	1/8/2020 9:47:30 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	600	4.6	20	*	mg/L	200	1/8/2020 5:35:50 PM	R65658
Chloride	720	25	50		mg/L	100	1/8/2020 12:24:22 AM	R65625
Bromide	1.2	0.50	1.0		mg/L	10	1/7/2020 11:59:32 PM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/7/2020 11:59:32 PM	R65625
Sulfate	870	25	50		mg/L	100	1/8/2020 12:24:22 AM	R65625
Nitrate+Nitrite as N	1.5	0.24	2.0	J	mg/L	10	1/8/2020 12:36:47 AM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	1.8	0.027	1.0		mg/L	1	1/8/2020 7:29:20 PM	49694
Magnesium	4.0	0.010	1.0		mg/L	1	1/8/2020 7:29:20 PM	49694
Potassium	540	0.62	10		mg/L	10	1/8/2020 7:48:03 PM	49694
Sodium	730	4.7	10		mg/L	10	1/8/2020 7:48:03 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	130	3.3	10		µg/L	20	1/7/2020 7:16:47 PM	SL6562
Toluene	9.4	7.0	20	J	µg/L	20	1/7/2020 7:16:47 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 7:16:47 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 7:16:47 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 7:16:47 PM	SL6562
Surr: 1,2-Dichloroethane-d4	91.0	0	70-130		%Rec	20	1/7/2020 7:16:47 PM	SL6562
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	20	1/7/2020 7:16:47 PM	SL6562
Surr: Dibromofluoromethane	109	0	70-130		%Rec	20	1/7/2020 7:16:47 PM	SL6562
Surr: Toluene-d8	99.2	0	70-130		%Rec	20	1/7/2020 7:16:47 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	7800	5.0	5.0		µmhos/c	1	1/7/2020 12:31:50 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	4.39			H	pH units	1	1/7/2020 12:31:50 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/29/2019 8:00:00 AM
Lab ID: 2001152-004
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0	H	mg/L	1	1/8/2020 9:56:42 AM	49672
Surr: DNOP	108	0	70-130	H	%Rec	1	1/8/2020 9:56:42 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Fluoride	200	2.3	10	*	mg/L	100	1/8/2020 1:51:14 AM	R65625
Chloride	270	25	50		mg/L	100	1/8/2020 1:51:14 AM	R65625
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 1:26:25 AM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 1:26:25 AM	R65625
Sulfate	610	25	50		mg/L	100	1/8/2020 1:51:14 AM	R65625
Nitrate+Nitrite as N	5.5	0.24	2.0		mg/L	10	1/8/2020 2:03:39 AM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	15	0.027	1.0		mg/L	1	1/8/2020 7:50:15 PM	49694
Magnesium	5.0	0.010	1.0		mg/L	1	1/8/2020 7:50:15 PM	49694
Potassium	320	0.62	10		mg/L	10	1/8/2020 7:52:04 PM	49694
Sodium	540	4.7	10		mg/L	10	1/8/2020 7:52:04 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	3.3	10		µg/L	20	1/7/2020 7:46:04 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 7:46:04 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 7:46:04 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 7:46:04 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 7:46:04 PM	SL6562
Surr: 1,2-Dichloroethane-d4	98.0	0	70-130		%Rec	20	1/7/2020 7:46:04 PM	SL6562
Surr: 4-Bromofluorobenzene	96.0	0	70-130		%Rec	20	1/7/2020 7:46:04 PM	SL6562
Surr: Dibromofluoromethane	113	0	70-130		%Rec	20	1/7/2020 7:46:04 PM	SL6562
Surr: Toluene-d8	98.6	0	70-130		%Rec	20	1/7/2020 7:46:04 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	5000	5.0	5.0		µmhos/c	1	1/7/2020 12:49:10 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.06			*H	pH units	1	1/7/2020 12:49:10 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/30/2019 8:00:00 AM
Lab ID: 2001152-005
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0	H	mg/L	1	1/8/2020 10:05:49 AM	49672
Surr: DNOP	105	0	70-130	H	%Rec	1	1/8/2020 10:05:49 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Fluoride	64	2.3	10	*	mg/L	100	1/8/2020 2:53:18 AM	R65625
Chloride	230	25	50		mg/L	100	1/8/2020 2:53:18 AM	R65625
Bromide	0.97	0.50	1.0	J	mg/L	10	1/8/2020 2:28:28 AM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 2:28:28 AM	R65625
Sulfate	560	25	50		mg/L	100	1/8/2020 2:53:18 AM	R65625
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 3:05:42 AM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	30	0.027	1.0		mg/L	1	1/8/2020 7:53:58 PM	49694
Magnesium	8.6	0.010	1.0		mg/L	1	1/8/2020 7:53:58 PM	49694
Potassium	96	0.062	1.0		mg/L	1	1/8/2020 7:53:58 PM	49694
Sodium	430	2.4	5.0		mg/L	5	1/10/2020 8:48:24 AM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	3.3	10		µg/L	20	1/7/2020 8:44:29 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 8:44:29 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 8:44:29 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 8:44:29 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 8:44:29 PM	SL6562
Surr: 1,2-Dichloroethane-d4	89.9	0	70-130		%Rec	20	1/7/2020 8:44:29 PM	SL6562
Surr: 4-Bromofluorobenzene	95.9	0	70-130		%Rec	20	1/7/2020 8:44:29 PM	SL6562
Surr: Dibromofluoromethane	107	0	70-130		%Rec	20	1/7/2020 8:44:29 PM	SL6562
Surr: Toluene-d8	95.2	0	70-130		%Rec	20	1/7/2020 8:44:29 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	3800	5.0	5.0		µmhos/c	1	1/7/2020 12:53:37 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.20			*H	pH units	1	1/7/2020 12:53:37 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 12/31/2019 8:00:00 AM
Lab ID: 2001152-006
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	3.4	0.71	1.0		mg/L	1	1/8/2020 10:14:58 AM	49672
Surr: DNOP	112	0	70-130		%Rec	1	1/8/2020 10:14:58 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Fluoride	42	2.3	10	*	mg/L	100	1/8/2020 4:20:09 AM	R65625
Chloride	730	25	50		mg/L	100	1/8/2020 4:20:09 AM	R65625
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 3:55:19 AM	R65625
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 3:55:19 AM	R65625
Sulfate	670	25	50		mg/L	100	1/8/2020 4:20:09 AM	R65625
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 4:32:34 AM	R65625
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	100	0.027	1.0		mg/L	1	1/8/2020 7:57:54 PM	49694
Magnesium	29	0.010	1.0		mg/L	1	1/8/2020 7:57:54 PM	49694
Potassium	71	0.062	1.0		mg/L	1	1/8/2020 7:57:54 PM	49694
Sodium	700	4.7	10		mg/L	10	1/8/2020 7:59:44 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	41	3.3	10		µg/L	20	1/7/2020 9:13:31 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 9:13:31 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 9:13:31 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 9:13:31 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 9:13:31 PM	SL6562
Surr: 1,2-Dichloroethane-d4	90.3	0	70-130		%Rec	20	1/7/2020 9:13:31 PM	SL6562
Surr: 4-Bromofluorobenzene	97.3	0	70-130		%Rec	20	1/7/2020 9:13:31 PM	SL6562
Surr: Dibromofluoromethane	110	0	70-130		%Rec	20	1/7/2020 9:13:31 PM	SL6562
Surr: Toluene-d8	95.5	0	70-130		%Rec	20	1/7/2020 9:13:31 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	5200	5.0	5.0		µmhos/c	1	1/7/2020 12:57:31 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	8.99			*H	pH units	1	1/7/2020 12:57:31 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/1/2020 8:00:00 AM
Lab ID: 2001152-007
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0		mg/L	1	1/8/2020 10:24:09 AM	49672
Surr: DNOP	104	0	70-130		%Rec	1	1/8/2020 10:24:09 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	41	2.3	10	*	mg/L	100	1/8/2020 6:13:03 PM	R65658
Chloride	410	25	50		mg/L	100	1/8/2020 6:13:03 PM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 5:48:15 PM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 5:48:15 PM	R65658
Sulfate	640	25	50		mg/L	100	1/8/2020 6:13:03 PM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 6:25:27 PM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	57	0.027	1.0		mg/L	1	1/8/2020 8:01:53 PM	49694
Magnesium	14	0.010	1.0		mg/L	1	1/8/2020 8:01:53 PM	49694
Potassium	86	0.062	1.0		mg/L	1	1/8/2020 8:01:53 PM	49694
Sodium	570	4.7	10		mg/L	10	1/8/2020 8:11:30 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	93	3.3	10		µg/L	20	1/7/2020 11:09:18 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 11:09:18 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 11:09:18 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 11:09:18 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 11:09:18 PM	SL6562
Surr: 1,2-Dichloroethane-d4	97.6	0	70-130		%Rec	20	1/7/2020 11:09:18 PM	SL6562
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	20	1/7/2020 11:09:18 PM	SL6562
Surr: Dibromofluoromethane	115	0	70-130		%Rec	20	1/7/2020 11:09:18 PM	SL6562
Surr: Toluene-d8	96.3	0	70-130		%Rec	20	1/7/2020 11:09:18 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	4200	5.0	5.0		µmhos/c	1	1/7/2020 1:01:36 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.23			*H	pH units	1	1/7/2020 1:01:36 PM	R65634

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/2/2020 8:00:00 AM
Lab ID: 2001152-008
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	0.80	0.71	1.0	J	mg/L	1	1/8/2020 10:33:14 AM	49672
Surr: DNOP	103	0	70-130		%Rec	1	1/8/2020 10:33:14 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	27	2.3	10	*	mg/L	100	1/8/2020 7:39:55 PM	R65658
Chloride	330	25	50		mg/L	100	1/8/2020 7:39:55 PM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 7:15:06 PM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 7:15:06 PM	R65658
Sulfate	570	25	50		mg/L	100	1/8/2020 7:39:55 PM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 7:52:20 PM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	51	0.027	1.0		mg/L	1	1/8/2020 8:13:41 PM	49694
Magnesium	13	0.010	1.0		mg/L	1	1/8/2020 8:13:41 PM	49694
Potassium	51	0.062	1.0		mg/L	1	1/8/2020 8:13:41 PM	49694
Sodium	470	2.4	5.0		mg/L	5	1/10/2020 8:59:15 AM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	3.3	10		µg/L	20	1/7/2020 11:38:05 PM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/7/2020 11:38:05 PM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/7/2020 11:38:05 PM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/7/2020 11:38:05 PM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/7/2020 11:38:05 PM	SL6562
Surr: 1,2-Dichloroethane-d4	98.4	0	70-130		%Rec	20	1/7/2020 11:38:05 PM	SL6562
Surr: 4-Bromofluorobenzene	99.8	0	70-130		%Rec	20	1/7/2020 11:38:05 PM	SL6562
Surr: Dibromofluoromethane	117	0	70-130		%Rec	20	1/7/2020 11:38:05 PM	SL6562
Surr: Toluene-d8	99.1	0	70-130		%Rec	20	1/7/2020 11:38:05 PM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	3600	5.0	5.0		µmhos/c	1	1/7/2020 1:05:40 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.19			*H	pH units	1	1/7/2020 1:05:40 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/3/2020 8:00:00 AM
Lab ID: 2001152-009
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	1.7	0.71	1.0		mg/L	1	1/8/2020 10:42:20 AM	49672
Surr: DNOP	104	0	70-130		%Rec	1	1/8/2020 10:42:20 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	19	2.3	10	*	mg/L	100	1/8/2020 8:41:58 PM	R65658
Chloride	240	25	50		mg/L	100	1/8/2020 8:41:58 PM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 8:17:09 PM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 8:17:09 PM	R65658
Sulfate	740	25	50		mg/L	100	1/8/2020 8:41:58 PM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 8:54:23 PM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	49	0.027	1.0		mg/L	1	1/8/2020 8:17:53 PM	49694
Magnesium	12	0.010	1.0		mg/L	1	1/8/2020 8:17:53 PM	49694
Potassium	36	0.062	1.0		mg/L	1	1/8/2020 8:17:53 PM	49694
Sodium	520	4.7	10		mg/L	10	1/8/2020 8:19:51 PM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	3.3	10		µg/L	20	1/8/2020 12:06:51 AM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/8/2020 12:06:51 AM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/8/2020 12:06:51 AM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/8/2020 12:06:51 AM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/8/2020 12:06:51 AM	SL6562
Surr: 1,2-Dichloroethane-d4	92.9	0	70-130		%Rec	20	1/8/2020 12:06:51 AM	SL6562
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	20	1/8/2020 12:06:51 AM	SL6562
Surr: Dibromofluoromethane	109	0	70-130		%Rec	20	1/8/2020 12:06:51 AM	SL6562
Surr: Toluene-d8	97.1	0	70-130		%Rec	20	1/8/2020 12:06:51 AM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	3500	5.0	5.0		µmhos/c	1	1/7/2020 1:09:33 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.50			*H	pH units	1	1/7/2020 1:09:33 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/4/2020 8:00:00 AM
Lab ID: 2001152-010
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	0.94	0.71	1.0	J	mg/L	1	1/8/2020 10:51:29 AM	49672
Surr: DNOP	107	0	70-130		%Rec	1	1/8/2020 10:51:29 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	14	2.3	10	*	mg/L	100	1/8/2020 10:08:50 PM	R65658
Chloride	230	25	50		mg/L	100	1/8/2020 10:08:50 PM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 9:44:01 PM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 9:44:01 PM	R65658
Sulfate	660	25	50		mg/L	100	1/8/2020 10:08:50 PM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 10:21:15 PM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	44	0.027	1.0		mg/L	1	1/8/2020 8:22:01 PM	49694
Magnesium	10	0.010	1.0		mg/L	1	1/8/2020 8:22:01 PM	49694
Potassium	28	0.062	1.0		mg/L	1	1/8/2020 8:22:01 PM	49694
Sodium	450	2.4	5.0		mg/L	5	1/10/2020 9:01:21 AM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	ND	3.3	10		µg/L	20	1/8/2020 12:35:36 AM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/8/2020 12:35:36 AM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/8/2020 12:35:36 AM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/8/2020 12:35:36 AM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/8/2020 12:35:36 AM	SL6562
Surr: 1,2-Dichloroethane-d4	96.3	0	70-130		%Rec	20	1/8/2020 12:35:36 AM	SL6562
Surr: 4-Bromofluorobenzene	99.5	0	70-130		%Rec	20	1/8/2020 12:35:36 AM	SL6562
Surr: Dibromofluoromethane	116	0	70-130		%Rec	20	1/8/2020 12:35:36 AM	SL6562
Surr: Toluene-d8	102	0	70-130		%Rec	20	1/8/2020 12:35:36 AM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	3300	5.0	5.0		µmhos/c	1	1/7/2020 1:13:30 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.56			*H	pH units	1	1/7/2020 1:13:30 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/5/2020 8:00:00 AM
Lab ID: 2001152-011 **Matrix:** AQUEOUS **Received Date:** 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	0.71	1.0		mg/L	1	1/8/2020 11:00:38 AM	49672
Surr: DNOP	105	0	70-130		%Rec	1	1/8/2020 11:00:38 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	14	2.3	10	*	mg/L	100	1/8/2020 11:10:54 PM	R65658
Chloride	220	25	50		mg/L	100	1/8/2020 11:10:54 PM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/8/2020 10:46:05 PM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/8/2020 10:46:05 PM	R65658
Sulfate	650	25	50		mg/L	100	1/8/2020 11:10:54 PM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/8/2020 11:23:18 PM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	46	0.027	1.0		mg/L	1	1/8/2020 8:26:07 PM	49694
Magnesium	10	0.010	1.0		mg/L	1	1/8/2020 8:26:07 PM	49694
Potassium	24	0.062	1.0		mg/L	1	1/8/2020 8:26:07 PM	49694
Sodium	410	2.4	5.0		mg/L	5	1/10/2020 9:03:30 AM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	22	3.3	10		µg/L	20	1/8/2020 1:32:58 AM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/8/2020 1:32:58 AM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/8/2020 1:32:58 AM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/8/2020 1:32:58 AM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/8/2020 1:32:58 AM	SL6562
Surr: 1,2-Dichloroethane-d4	90.5	0	70-130		%Rec	20	1/8/2020 1:32:58 AM	SL6562
Surr: 4-Bromofluorobenzene	100	0	70-130		%Rec	20	1/8/2020 1:32:58 AM	SL6562
Surr: Dibromofluoromethane	112	0	70-130		%Rec	20	1/8/2020 1:32:58 AM	SL6562
Surr: Toluene-d8	101	0	70-130		%Rec	20	1/8/2020 1:32:58 AM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	3300	5.0	5.0		µmhos/c	1	1/7/2020 1:17:23 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.58			*H	pH units	1	1/7/2020 1:17:23 PM	R65634

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

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, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Carbon Canister
Project: Carbon Canister - WWTP
Collection Date: 1/6/2020 8:00:00 AM
Lab ID: 2001152-012
Matrix: AQUEOUS
Received Date: 1/7/2020 8:50:00 AM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: **BRM**	
Diesel Range Organics (DRO)	1.4	0.71	1.0		mg/L	1	1/8/2020 11:09:50 AM	49672
Surr: DNOP	110	0	70-130		%Rec	1	1/8/2020 11:09:50 AM	49672
EPA METHOD 300.0: ANIONS							Analyst: **CAS**	
Fluoride	3.7	0.23	1.0		mg/L	10	1/9/2020 12:12:56 AM	R65658
Chloride	170	25	50		mg/L	100	1/9/2020 12:37:45 AM	R65658
Bromide	ND	0.50	1.0		mg/L	10	1/9/2020 12:12:56 AM	R65658
Phosphorus, Orthophosphate (As P)	ND	2.5	5.0	H	mg/L	10	1/9/2020 12:12:56 AM	R65658
Sulfate	550	25	50		mg/L	100	1/9/2020 12:37:45 AM	R65658
Nitrate+Nitrite as N	ND	0.24	2.0		mg/L	10	1/9/2020 12:50:09 AM	R65658
EPA METHOD 200.7: TOTAL METALS							Analyst: **bcv**	
Calcium	44	0.027	1.0		mg/L	1	1/8/2020 8:30:14 PM	49694
Magnesium	9.9	0.010	1.0		mg/L	1	1/8/2020 8:30:14 PM	49694
Potassium	17	0.062	1.0		mg/L	1	1/8/2020 8:30:14 PM	49694
Sodium	360	2.4	5.0		mg/L	5	1/10/2020 9:05:38 AM	49694
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: **DJF**	
Benzene	54	3.3	10		µg/L	20	1/8/2020 2:01:38 AM	SL6562
Toluene	ND	7.0	20		µg/L	20	1/8/2020 2:01:38 AM	SL6562
Ethylbenzene	ND	2.6	20		µg/L	20	1/8/2020 2:01:38 AM	SL6562
Methyl tert-butyl ether (MTBE)	ND	9.1	20		µg/L	20	1/8/2020 2:01:38 AM	SL6562
Xylenes, Total	ND	9.1	30		µg/L	20	1/8/2020 2:01:38 AM	SL6562
Surr: 1,2-Dichloroethane-d4	92.5	0	70-130		%Rec	20	1/8/2020 2:01:38 AM	SL6562
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	20	1/8/2020 2:01:38 AM	SL6562
Surr: Dibromofluoromethane	114	0	70-130		%Rec	20	1/8/2020 2:01:38 AM	SL6562
Surr: Toluene-d8	103	0	70-130		%Rec	20	1/8/2020 2:01:38 AM	SL6562
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JRR**	
Conductivity	2800	5.0	5.0		µmhos/c	1	1/7/2020 1:21:19 PM	R65634
SM4500-H+B / 9040C: PH							Analyst: **JRR**	
pH	9.56			*H	pH units	1	1/7/2020 1:21:19 PM	R65634

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

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#: **2001152**
10-Jan-20

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

Sample ID: **MB-49694** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **49694** RunNo: **65666**
Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255752** 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-49694** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **49694** RunNo: **65666**
Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255754** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	99.6	85	115			
Magnesium	47	1.0	50.00	0	93.5	85	115			
Potassium	47	1.0	50.00	0	93.3	85	115			
Sodium	50	1.0	50.00	0	99.5	85	115			

Sample ID: **2001152-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **Carbon Canister** Batch ID: **49694** RunNo: **65666**
Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255756** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	94	1.0	50.00	46.50	95.2	70	130			
Magnesium	58	1.0	50.00	11.54	93.8	70	130			
Potassium	64	1.0	50.00	16.45	95.3	70	130			

Sample ID: **2001152-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **Carbon Canister** Batch ID: **49694** RunNo: **65666**
Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255757** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	95	1.0	50.00	46.50	96.3	70	130	0.573	20	
Magnesium	59	1.0	50.00	11.54	94.8	70	130	0.800	20	
Potassium	64	1.0	50.00	16.45	96.0	70	130	0.620	20	

Sample ID: **2001152-003DMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **Carbon Canister** Batch ID: **49694** RunNo: **65666**
Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255763** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	51	1.0	50.00	1.788	98.4	70	130			
Magnesium	51	1.0	50.00	3.965	94.4	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#: **2001152**

10-Jan-20

Client: Western Refining Southwest, Gallup

Project: Carbon Canister - WWTP

Sample ID: **2001152-003DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **Carbon Canister** Batch ID: **49694** RunNo: **65666**

Prep Date: **1/8/2020** Analysis Date: **1/8/2020** SeqNo: **2255764** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	1.788	94.5	70	130	3.88	20	
Magnesium	50	1.0	50.00	3.965	92.1	70	130	2.33	20	

Sample ID: **MB-49694** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PBW** Batch ID: **49694** RunNo: **65690**

Prep Date: **1/8/2020** Analysis Date: **1/10/2020** SeqNo: **2256575** Units: **mg/L**

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

Sample ID: **LCS-49694** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **LCSW** Batch ID: **49694** RunNo: **65690**

Prep Date: **1/8/2020** Analysis Date: **1/10/2020** SeqNo: **2256577** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	48	1.0	50.00	0	96.1	85	115			

Sample ID: **MB-49720** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PBW** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256579** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.035	1.0								J
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID: **LCS-49720** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **LCSW** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256586** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	99.2	85	115			
Magnesium	49	1.0	50.00	0	97.4	85	115			
Potassium	48	1.0	50.00	0	96.1	85	115			
Sodium	47	1.0	50.00	0	93.6	85	115			

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#: **2001152**

10-Jan-20

Client: Western Refining Southwest, Gallup

Project: Carbon Canister - WWTP

Sample ID: **2001152-002DMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **Carbon Canister** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256588** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	67	1.0	50.00	18.80	96.9	70	130			

Sample ID: **2001152-002DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **Carbon Canister** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256589** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	67	1.0	50.00	18.80	95.9	70	130	0.742	20	

Sample ID: **2001152-002DMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **Carbon Canister** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256591** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	120	5.0	50.00	78.50	90.6	70	130			
Potassium	150	5.0	50.00	108.2	85.4	70	130			

Sample ID: **2001152-002DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **Carbon Canister** Batch ID: **49720** RunNo: **65690**

Prep Date: **1/9/2020** Analysis Date: **1/10/2020** SeqNo: **2256592** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	130	5.0	50.00	78.50	94.9	70	130	1.74	20	
Potassium	150	5.0	50.00	108.2	89.2	70	130	1.25	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001152**
10-Jan-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: **R65625** RunNo: **65625**
Prep Date: Analysis Date: **1/7/2020** SeqNo: **2254250** 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-b** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R65625** RunNo: **65625**
Prep Date: Analysis Date: **1/7/2020** SeqNo: **2254252** 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	96.4	90	110			
Chloride	4.7	0.50	5.000	0	93.0	90	110			
Bromide	2.4	0.10	2.500	0	94.8	90	110			
Phosphorus, Orthophosphate (As P	4.5	0.50	5.000	0	90.0	90	110			
Sulfate	9.5	0.50	10.00	0	94.9	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	95.8	90	110			

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R65658** RunNo: **65658**
Prep Date: Analysis Date: **1/8/2020** SeqNo: **2255253** 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: **R65658** RunNo: **65658**
Prep Date: Analysis Date: **1/8/2020** SeqNo: **2255254** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	103	90	110			
Chloride	4.8	0.50	5.000	0	96.8	90	110			
Bromide	2.5	0.10	2.500	0	99.8	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	96.8	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#: **2001152**
10-Jan-20

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

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R65658**	RunNo: **65658**							
Prep Date:	Analysis Date: **1/8/2020**	SeqNo: **2255254**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.8	0.50	10.00	0	98.1	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.6	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#: **2001152**

10-Jan-20

Client: Western Refining Southwest, Gallup

Project: Carbon Canister - WWTP

Sample ID: **LCS-49672**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **49672**	RunNo: **65636**
Prep Date: **1/7/2020**	Analysis Date: **1/8/2020**	SeqNo: **2254756** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	115	71.8	135			
Surr: DNOP	0.55		0.5000		110	70	130			

Sample ID: **MB-49672**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **49672**	RunNo: **65636**
Prep Date: **1/7/2020**	Analysis Date: **1/8/2020**	SeqNo: **2254757** 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	1.0		1.000		102	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#: **2001152**
10-Jan-20

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

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL65623**	RunNo: **65623**
Prep Date:	Analysis Date: **1/7/2020**	SeqNo: **2254186** 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	9.7		10.00		97.0	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.7		10.00		97.5	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL65623**	RunNo: **65623**
Prep Date:	Analysis Date: **1/7/2020**	SeqNo: **2254187** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.0	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	9.9		10.00		99.5	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#: **2001152**
10-Jan-20

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

Sample ID: **lcs-1 99.9uS eC**	SampType: **lcs**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW**	Batch ID: **R65634**	RunNo: **65634**
Prep Date:	Analysis Date: **1/7/2020**	SeqNo: **2254575** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	5.0	99.90	0	100	85	115			

Sample ID: **lcs-2 99.9uS eC**	SampType: **lcs**	TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW**	Batch ID: **R65634**	RunNo: **65634**
Prep Date:	Analysis Date: **1/7/2020**	SeqNo: **2254601** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	5.0	99.90	0	101	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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **2001152** RcptNo: **1**

Received By: **Desiree Dominguez** **1/7/2020 8:50:00 AM** DD

Completed By: **Isaiah Ortiz** **1/7/2020 9:23:10 AM** I-Ox

Reviewed By: ENM 1/7/20

Chain of Custody

1. Is Chain of Custody sufficiently 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 preservative added to bottles?	Yes ☑	No ☐	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	HNO3 NA ☑ mg 01/10/20
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: 24 (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? Yes
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 ☐	Checked by: YG 1/7/20

Special Handling (if applicable)

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

Person Notified:	Alvin Dorsey	Date	1/7/2020
By Whom:	Yazmine Garduno	Via:	☐ eMail ☑ Phone ☐ Fax ☐ In Person
Regarding:	Contacted Alvin regarding receiving sample frozen.		
Client Instructions:	Approved YG 1/7/20		

16. Additional remarks:

Sample -001C was received frozen. Addded ~0.5ml of HNO3 to samples -001D- 012D for <2 pH metals analysis. From amber -001B poured off into a 125 unp. bottle for concutivity and anions analysis due sample -001C received frozen. YG 1/7/20

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good	Yes			
2	0.8	Good	Yes			

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:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush _____
Project Name: Carbon Canister - WWTP
Project #:
Sample Day's 12/26/2019 1/6/2020
Project Manager:
Sampler: WWTP-OPPs
On Ice: (3) ☒ Yes ☐ No -0.1+0.4=0.3°c
Sample Temperature: 0.4+0.4=0.8°c, 0.3+0.4=0.7°c

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	Preservative Type	HEAL No 2001752	BTEX + MTBE + (8021)B	BTEX + MTBE + TPH (Ga	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	Anions	Air Bubbles (Y or N)
12/26/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-001	X		X					X				X	X	X		
12/27/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-002	X		X					X				X	X	X		
12/28/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-003	X		X					X				X	X	X		
12/29/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-004	X		X					X				X	X	X		
12/30/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-005	X		X					X				X	X	X		
12/31/2019	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-006	X		X					X				X	X	X		
1/1/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-007	X		X					X				X	X	X		
1/2/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-008	X		X					X				X	X	X		
1/3/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-009	X		X					X				X	X	X		
1/4/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-010	X		X					X				X	X	X		
1/5/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-011	X		X					X				X	X	X		
1/6/2020	08:00AM	H2O	Carbon Canister	Multiple Containers	H2S04/HN03/HCL/NONE	-012	X		X					X				X	X	X		

Date	Time	Relinquished by	Received by	Date	Time
01-06-2020	11:00	Alvin Dorsey	courier	1/7/20	8:50

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.