PWS 0910147 AC 20170425 WQP ANALYSIS

ENTERED 05/3/2017

WATER QUALITY PARAMETER CHAIN OF CUSTODY FORM 20679

Section I (PWS Information)

PWS Name: Rock Creek Resort
PWS ID #: 0910147
PWS Contact Name: Jerry Davis
PWS Contact Number: 903-357-1978

PWS Type: ☑ Community ☐ NTNC
Population: ☑ <50,000 ☐ 50,001 to 100,000 ☐ >100,000

☑ Compliance ☐ Noncompliance ☐ Tap Copper Exceedance ☐ Tap Lead Exceedance

☑ Distribution System
☑ Entry Point

DS Samples Required: 1 # DS Samples Submitted: 1
EP Samples Required: 1 # EP Samples Submitted: 1

Inhibitor or stabilizer used: ☐ phosphate ☐ calcium carbonate ☐ silica
N/A

Section II (Completed by Laboratory)

Lab Name: Xenco Laboratory
Laboratory Address: 4147 Greenbriar Dr Stafford TX 77477
Laboratory Contact Name: Gale Denman
Lab Phone: 281-240-4200

Parameters Requested: *Analyses are required for the parameters checked. If inhibitors containing PO4 or silicate are used, then these parameters should also be tested depending on which is used.

Source ID (e.g. DS01, EP001)	Sample Location	Sample Collection Date (MMDDYY)	Sample Collection Time (HHMM)	pH (1925)	pH method	Temp (°C) (1996)	Temp Method	Lab Sample ID	Alkalinity (1927)	Calcium (1919)	Chloride (1017)	Conductivity (1064)	Hardness (1915)	Iron (1028)	Manganese (1032)	Sodium (1052)	Sulfate (1055)	TDS (1930)	O-phosphate (1044)	Silica (1049)
DS01	21400 Fm 901	4-12-17	1:16 PM	7.27	SM4500/H+	21.2	SM2550	550959-01	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
EP001	1483 Rock Creek Rd	4-12-17	1:05 PM	7.01	SM4500/H+	20.8	SM2550	550959-02	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*

I acknowledge that the information on this form is true and correct and sites selected for sampling following TCEQ instructions including but not limited to the measurement of pH and temperature according to approved methods immediately upon collection (within 15 minutes)

Jerry Davis — Name
Jerry Davis — Signature
4-12-17 — Date

Containers
☑ 2 L plastic bottles
☑ 1 L preserved upon receipt

Conditions Upon Receipt
☑ Ice ☐ Ambient
Temp Upon Receipt: ~~2.5°C~~ Jen 4-14-17 1.8°C
Corrected Temp Upon Receipt: 2.5°C
Comments:

Relinquished By (Name, Signature)		Date	Time	Received By: (Name, Signature)	Date	Time	
Jerry Davis		4-12-17	1325	Edward Gresham	4-12-17	1325	
Edward Gresham		4-12-17	1545		4-12-17	1545	

(For TCEQ use only) ☐ Disapproved ☐ Accepted Comments:

Jennifer Graham 4/13/17 1625

Whitney Capps 4/13/17 1625

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Environmental Monitoring Laboratory (E.

Date/ Time Received: 04/13/2017 04:25:00 PM

Work Order #: 550959

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : XDA

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.5	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seal present on shipping container/ cooler?	N/A	
#5 *Custody Seals intact on shipping container/ cooler?	N/A	
#6 Custody Seals intact on sample bottles?	N/A	
#7 *Custody Seals Signed and dated?	N/A	
#8 *Chain of Custody present?	Yes	
#9 Sample instructions complete on Chain of Custody?	Yes	
#10 Any missing/extra samples?	No	
#11 Chain of Custody signed when relinquished/ received?	Yes	
#12 Chain of Custody agrees with sample label(s)?	Yes	
#13 Container label(s) legible and intact?	Yes	
#14 Sample matrix/ properties agree with Chain of Custody?	Yes	
#15 Samples in proper container/ bottle?	Yes	
#16 Samples properly preserved?	Yes	in lab preserved metals with HNO3 (C1383) 04/14/17 11:00
#17 Sample container(s) intact?	Yes	
#18 Sufficient sample amount for indicated test(s)?	Yes	
#19 All samples received within hold time?	Yes	
#20 Subcontract of sample(s)?	Yes	Xenco Houston
#21 VOC samples have zero headspace?	N/A	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	Yes	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: ana

PH Device/Lot#: 213315

Checklist completed by: Angelica Martinez — Date: 04/14/2017

Checklist reviewed by: Gale Denman — Date: 04/17/2017

Analytical Report 550959

for

Environmental Monitoring Laboratory (E.M.L.)

Project Manager: Serissa Beck

Rock Creek Resort

17041275

20-APR-17

Collected By: Client

9701 Harry Hines Blvd
Dallas, TX 75220

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

20-APR-17

Project Manager: **Serissa Beck**
Environmental Monitoring Laboratory (E.M.L.)
P.O. Box 477
Hillsboro, TX 76645

Reference: XENCO Report No(s): **550959**
Rock Creek Resort
Project Address: Rock Creek Resort

Serissa Beck:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 550959. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 550959 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Gale Denman

Gale Denman
Project Manager

Sample Cross Reference 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro.

Rock Creek Resort

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS01 21400 FM 901	W	04-12-17 13:16		550959-001
EP001 1483 Rock Creek Rd	W	04-12-17 13:05		550959-002

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **DS01 21400 FM 901** Matrix: Drinking Water Date Received:04.13.17 16.25

Lab Sample Id: 550959-001 Date Collected: 04.12.17 13.16

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

Tech: DHE % Moisture:

Analyst: DHE Date Prep: 04.18.17 11.58

Seq Number: 3015257 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.1**	0.500	mg/L	04.18.17 16.02		1
Sulfate	14808-79-8	**10.6**	0.500	mg/L	04.18.17 16.02		1

Analytical Method: TDS by SM2540C

Tech: KCS % Moisture:

Analyst: KCS

Seq Number: 3015236 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	TDS	**99.5**	5.00	mg/L	04.18.17 18.38		1

Analytical Method: Hardness, Total by SM2340B

Tech: DEP % Moisture:

Analyst: DEP

Seq Number: 3015297 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hardness, Total (CaCO3)	471-34-1	**82.0**	0.500	mg/L	04.19.17 14.14		1

Analytical Method: Metals per ICP by EPA 200.7 Prep Method: E200.7P

Tech: MLI % Moisture:

Analyst: DEP Date Prep: 04.15.17 10.30

Seq Number: 3015170 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Calcium	7440-70-2	**19.8**	0.200	mg/L	04.17.17 01.48		1
Iron	7439-89-6	<0.200	0.200	mg/L	04.17.17 01.48	U	1
Manganese	7439-96-5	<0.0200	0.0200	mg/L	04.17.17 01.48	U	1
Sodium	7440-23-5	**13.4**	0.500	mg/L	04.17.17 01.48		1

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **DS01 21400 FM 901** Matrix: Drinking Water Date Received:04.13.17 16.25

Lab Sample Id: 550959-001 Date Collected: 04.12.17 13.16

Analytical Method: Alkalinity by SM2320B

Tech: MJP % Moisture:

Analyst: MJP

Seq Number: 3015147 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Alkalinity, Total (CaCO3)	ALK	**94.0**	4.00	mg/L	04.17.17 15.42		1

Analytical Method: Specific Conductance by SM2510B

Tech: MJP % Moisture:

Analyst: MJP

Seq Number: 3015146 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Conductivity	COND	**241**		uS/cm	04.18.17 08.20		1

Certificate of Analytical Results 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **EP001 1483 Rock Creek Rd** Matrix: Drinking Water Date Received:04.13.17 16.25
Lab Sample Id: 550959-002 Date Collected: 04.12.17 13.05

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: DHE % Moisture:
Analyst: DHE Date Prep: 04.18.17 11.58
Seq Number: 3015257 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.2**	0.500	mg/L	04.18.17 16.12		1
Sulfate	14808-79-8	**10.2**	0.500	mg/L	04.18.17 16.12		1

Analytical Method: TDS by SM2540C
Tech: KCS % Moisture:
Analyst: KCS
Seq Number: 3015236 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	TDS	**104**	5.00	mg/L	04.18.17 18.38		1

Analytical Method: Hardness, Total by SM2340B
Tech: DEP % Moisture:
Analyst: DEP
Seq Number: 3015297 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hardness, Total (CaCO3)	471-34-1	**82.0**	0.500	mg/L	04.19.17 14.14		1

Analytical Method: Metals per ICP by EPA 200.7 Prep Method: E200.7P
Tech: MLI % Moisture:
Analyst: DEP Date Prep: 04.15.17 10.30
Seq Number: 3015170 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Calcium	7440-70-2	**19.7**	0.200	mg/L	04.17.17 01.53		1
Iron	7439-89-6	**0.226**	0.200	mg/L	04.17.17 01.53		1
Manganese	7439-96-5	**0.0217**	0.0200	mg/L	04.17.17 01.53		1
Sodium	7440-23-5	**13.2**	0.500	mg/L	04.17.17 01.53		1

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **EP001 1483 Rock Creek Rd** Matrix: Drinking Water Date Received:04.13.17 16.25

Lab Sample Id: 550959-002 Date Collected: 04.12.17 13.05

Analytical Method: Alkalinity by SM2320B

Tech: MJP % Moisture:

Analyst: MJP

Seq Number: 3015147 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Alkalinity, Total (CaCO3)	ALK	**96.2**	4.00	mg/L	04.17.17 15.53		1

Analytical Method: Specific Conductance by SM2510B

Tech: MJP % Moisture:

Analyst: MJP

Seq Number: 3015146 SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Conductivity	COND	**239**		uS/cm	04.18.17 08.20		1

Blank Summary 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **3015146-1-BLK** Matrix: WATER

Lab Sample Id: **3015146-1-BLK**

Analytical Method: **Specific Conductance by SM2510B** Prep Method:

Tech: MJP

Analyst: MJP Date Prep:

Seq Number: 3015146 **SUB: TX104704215**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Conductivity	COND	0.350			uS/cm	04.18.17 08:20		1

Blank Summary 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **3015147-1-BLK** Matrix: WATER

Lab Sample Id: **3015147-1-BLK**

Analytical Method: **Alkalinity by SM2320B** Prep Method:

Tech: MJP

Analyst: MJP Date Prep:

Seq Number: 3015147 **SUB: TX104704215**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Alkalinity, Total (CaCO3)	ALK	<4.00	4.00		mg/L	04.17.17 15:23	U	1

Blank Summary 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **3015236-1-BLK** Matrix: WATER

Lab Sample Id: **3015236-1-BLK**

Analytical Method: **TDS by SM2540C** Prep Method:

Tech: KCS

Analyst: KCS Date Prep:

Seq Number: 3015236 **SUB: TX104704215**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	TDS	<5.00	5.00		mg/L	04.18.17 18:38	U	1

Blank Summary 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **723158-1-BLK** Matrix: WATER

Lab Sample Id: **723158-1-BLK**

Analytical Method: **Metals per ICP by EPA 200.7** Prep Method: E200.7P

Tech: MLI

Analyst: DEP Date Prep: 04.15.17 10:30

Seq Number: 3015170 **SUB: TX104704215**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Calcium	7440-70-2	<0.200	0.200		mg/L	04.17.17 00:57	U	1
Iron	7439-89-6	<0.200	0.200		mg/L	04.17.17 00:57	U	1
Manganese	7439-96-5	<0.0200	0.0200		mg/L	04.17.17 00:57	U	1
Sodium	7440-23-5	<0.500	0.500		mg/L	04.17.17 00:57	U	1

Blank Summary 550959

Environmental Monitoring Laboratory (E.M.L.), Hillsboro, T

Rock Creek Resort

Sample Id: **723291-1-BLK** Matrix: WATER

Lab Sample Id: **723291-1-BLK**

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P

Tech: DHE

Analyst: DHE Date Prep: 04.18.17 11:58

Seq Number: 3015257 **SUB: TX104704215**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.500	0.500		mg/L	04.18.17 10:11	U	1
Sulfate	14808-79-8	<0.500	0.500		mg/L	04.18.17 10:11	U	1

QC Summary 550959

Environmental Monitoring Laboratory (E.M.L.)

Rock Creek Resort

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3015257 — Matrix: Water — Date Prep: 04.18.17
MB Sample Id: 723291-1-BLK — LCS Sample Id: 723291-1-BKS — LCSD Sample Id: 723291-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.500	10.0	9.98	100	10.0	100	90-110	0	20	mg/L	04.18.17 10:21	
Sulfate	<0.500	10.0	9.92	99	10.1	101	90-110	2	20	mg/L	04.18.17 10:21	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3015257 — Matrix: Water — Date Prep: 04.18.17
Parent Sample Id: 550613-001 — MS Sample Id: 550613-001 S — MSD Sample Id: 550613-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5260	500	5760	100	5750	98	90-110	0	20	mg/L	04.18.17 14:04	
Sulfate	1550	500	2030	96	2030	96	90-110	0	20	mg/L	04.18.17 14:04	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3015257 — Matrix: Drinking Water — Date Prep: 04.18.17
Parent Sample Id: 550960-001 — MS Sample Id: 550960-001 S — MSD Sample Id: 550960-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4.80	10.0	14.9	101	14.9	101	90-110	0	20	mg/L	04.18.17 16:31	
Sulfate	11.5	10.0	21.2	97	21.2	97	90-110	0	20	mg/L	04.18.17 16:31	

Analytical Method: TDS by SM2540C
Seq Number: 3015236 — Matrix: Water
MB Sample Id: 3015236-1-BLK — LCS Sample Id: 3015236-1-BKS — LCSD Sample Id: 3015236-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	1040	104	1010	101	80-120	3	10	mg/L	04.18.17 18:38	

Analytical Method: TDS by SM2540C
Seq Number: 3015236 — Matrix: Ground Water
Parent Sample Id: 550881-002 — MD Sample Id: 550881-002 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	126000	127000	1	10	mg/L	04.18.17 18:38	

QC Summary 550959

Environmental Monitoring Laboratory (E.M.L.)

Rock Creek Resort

Analytical Method: Metals per ICP by EPA 200.7 — Prep Method: E200.7P
Seq Number: 3015170 — Matrix: Water — Date Prep: 04.15.17
MB Sample Id: 723158-1-BLK — LCS Sample Id: 723158-1-BKS — LCSD Sample Id: 723158-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Calcium	<0.200	25.0	24.6	98	24.5	98	85-115	0	20	mg/L	04.17.17 01:02	
Iron	<0.200	5.00	4.95	99	4.91	98	85-115	1	20	mg/L	04.17.17 01:02	
Manganese	<0.0200	1.00	0.976	98	0.976	98	85-115	0	20	mg/L	04.17.17 01:02	
Sodium	<0.500	25.0	24.7	99	24.5	98	85-115	1	20	mg/L	04.17.17 01:02	

Analytical Method: Metals per ICP by EPA 200.7 — Prep Method: E200.7P
Seq Number: 3015170 — Matrix: Water — Date Prep: 04.15.17
Parent Sample Id: 550838-001 — MS Sample Id: 550838-001 S — MSD Sample Id: 550838-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Calcium	46.2	25.0	70.0	95	70.5	97	70-130	1	20	mg/L	04.17.17 01:16	
Iron	<0.200	5.00	4.92	98	4.94	99	70-130	0	20	mg/L	04.17.17 01:16	
Manganese	<0.0200	1.00	0.978	98	0.979	98	70-130	0	20	mg/L	04.17.17 01:16	
Sodium	27.4	25.0	52.4	100	52.8	102	70-130	1	20	mg/L	04.17.17 01:16	

Analytical Method: Metals per ICP by EPA 200.7 — Prep Method: E200.7P
Seq Number: 3015170 — Matrix: Water — Date Prep: 04.15.17
Parent Sample Id: 550763-001 — MS Sample Id: 550763-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Calcium	41.7	25.0	68.8	108	70-130	mg/L	04.17.17 02:53	
Iron	<0.200	5.00	5.07	101	70-130	mg/L	04.17.17 02:53	
Manganese	0.0256	1.00	1.00	97	70-130	mg/L	04.17.17 02:53	
Sodium	136	25.0	169	132	70-130	mg/L	04.17.17 02:53	X

Analytical Method: Alkalinity by SM2320B
Seq Number: 3015147 — Matrix: Water
MB Sample Id: 3015147-1-BLK — LCS Sample Id: 3015147-1-BKS — LCSD Sample Id: 3015147-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Alkalinity, Total (CaCO3)	<4.00	250	255	102	255	102	80-120	0	20	mg/L	04.17.17 15:30	

Analytical Method: Alkalinity by SM2320B
Seq Number: 3015147 — Matrix: Drinking Water
Parent Sample Id: 550959-001 — MD Sample Id: 550959-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Alkalinity, Total (CaCO3)	94.0	95.2	1	20	mg/L	04.17.17 15:47	

QC Summary 550959

Environmental Monitoring Laboratory (E.M.L.)

Rock Creek Resort

Analytical Method: **Specific Conductance by SM2510B**

Seq Number: 3015146 Matrix: Water

MB Sample Id: 3015146-1-BLK LCS Sample Id: 3015146-1-BKS LCSD Sample Id: 3015146-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Conductivity	0.350	1410	1420	101	1430	101	80-120	1	20	uS/cm	04.18.17 08:20	

Analytical Method: **Specific Conductance by SM2510B**

Seq Number: 3015146 Matrix: Drinking Water

Parent Sample Id: 550959-001 MD Sample Id: 550959-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Conductivity	241	241	0	20	uS/cm	04.18.17 08:20	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

CHAIN OF CUSTODY

Page ___ Of ___

XENCO LABORATORIES

Setting the Standard since 1990

Stafford, Texas (281-240-4200)

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 550959-1

Client / Reporting Information

Company Name / Branch: EMC - Hillsboro

Company Address: PO BOX 477 Hillsboro TX 76645

Email: home office@yourwaterlab.com

Phone No: 254-582-2622

Project Contact: Serissa Beck

Samplers's Name

Project Information 17041275

Project Name/Number: Rock Creek Resort

Project Location: Rock Creek Resort

Invoice To:

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Alkalinity, Calcium,	Chloride, Conductivity,	Hardness, Iron,	Manganese, Sodium,	Sulfate, TDS, Silica, 4/6/17	10- phosphate SB 4/3/17	Field Comments
1	DS01 21400 FM 901		4/12/17	1316	DW	3								X	X	X	X	X	X	X	
2	EP001 1483 Rock Creek Rd.		4/12/17	1305	DW	3								X	X	X	X	X	X		
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Matrix Codes

S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
W = Wipe
O = Oil
WW = Waste Water
A = Air

Turnaround Time (Business days)

Data Deliverable Information

Notes:

- ☐ Same Day TAT
- ☐ Next Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 3 Day EMERGENCY
- ☐ 5 Day TAT
- ☐ 7 Day TAT
- ☐ Contract TAT
- ☐ Level II Std QC
- ☐ Level III Std QC+ Forms
- ☐ Level 3 (CLP Forms)
- ☐ TRRP Checklist
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ TRRP Level IV
- ☐ UST / RG -411

TAT Starts Day received by Lab, if received by 3:00 pm

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:	Date Time: 1625 4-13-17	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☒

Temp: 1.8 °C IR ID: XDA
Correction Factor: +0.7°C
Corrected Temp: 2.5 °C

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously n

Final 1.000

Page 18 of 20

Thressa Webb

From: Gale Denman [redacted]
Sent: Thursday, May 11, 2017 2:55 PM
To: Thressa Webb
Subject: Fwd: Rock Creek # 0910147 - Xenco/Hardness

Ms Webb please see Mr Regners email requarding the Hardness issue. Thank u for all the help and please accept the report for Rock Creek #550959 Thank you so much. Gale

---------- Forwarded message ----------
From: **Gary Regner** <gary.regner@tceq.texas.gov>
Date: Thu, May 11, 2017 at 2:31 PM
Subject: RE: Rock Creek # 0910147 - Xenco/Hardness
To: Gale Denman [redacted]
Cc: Thressa Webb <Thressa.Webb@tceq.texas.gov>, Calen Roome <Calen.Roome@tceq.texas.gov>

Good afternoon,

We will accept the SM2340B calculation method as long as your lab has Water Supply Division Laboratory Approval to run calcium using an acceptable method, AND you are accredited to run magnesium by TCEQ Lab Accreditation in the Drinking Water Matrix (any method).

If your lab is not currently approved, please contact Calen Roome.

Thank you

Gary Regner | TCEQ Water Supply Division
P.O. Box 13087, MC 155 | Austin, Texas 78753 | 512.239.4528 | Gary.Regner@TCEQ.texas.gov

From: Gale Denman [mailto [redacted]
Sent: Monday, May 08, 2017 3:52 PM

Thressa Webb

From: Thressa Webb
Sent: Monday, April 17, 2017 8:54 AM
To: Thressa Webb
Subject: RE: PWS # 0910147 Rock Creek pH method 150.1
Attachments: EPA_pH_method_150.1.pdf

Hi Jerry,

We got in touch with HACH and found out that all HACH pH and temperature probes use 2550 for temperature. Please note the "method" is how you use the meter. I have attached a sample of the 150.1 method for pH. If this is how you measure the pH, let me know so I can update the form for the 3/7/2017 reports. In the future please use these method numbers on the TCEQ 20679 WQP report form.

Thanks again!

Sincerely,

Thressa G. Webb
Administrative Assistant
Drinking Water Assessment Team
Drinking Water Standards Section
Water Supply Division
Office of Water
TCEQ

Phone | 512-239-6676 | Email | thressa.webb@tceq.texas.gov

From: Davis, Jerry [mailto[redacted]
Sent: Thursday, April 06, 2017 3:07 PM
To: Thressa Webb <Thressa.Webb@Tceq.Texas.Gov>
Subject: RE: Method

Ok I got in touch with the manufacturer which is HACH, they said the method is epa 150.1, 150.2, and 4500 HB. He said they don't have a number for the temperature, that it's all in one.
Sent via the Samsung Galaxy S® 5 ACTIVE™, an AT&T 4G LTE smartphone

-------- Original message --------
From: Thressa Webb <Thressa.Webb@Tceq.Texas.Gov>
Date: 4/6/17 11:57 AM (GMT-06:00)
To: "Davis, Jerry" <[redacted]
Subject: RE: Method

Hello Jerry,

Thanks for getting back to me so quickly.

What we need are the standard method (SD) # the meter used for measuring pH and temperature uses. If you don't have the paperwork on the meter, you can call the manufacturer to get this information. For your information below are the acceptable methods.

Table 2. Approved Methods for WQP Sample Analysis

Parameter	Units	EPA	ASTM3	SM2	Other
pH	pH units	150.1	D1293-12	4500-H B	
		150.2	D1293-99	4500-H-B-00	
			D1293-95		
			D1293-84		
Temperature	degrees C			2550	
				2550-00	

Let us know if you have any questions

Have a great rest of the day!

Sincerely,

Thressa G. Webb
Administrative Assistant
Drinking Water Assessment Team
Drinking Water Standards Section
Water Supply Division
Office of Water
TCEQ

Phone | 512-239-6676 | Email | thressa.webb@tceq.texas.gov

From: Davis, Jerry [mailto[redacted]]
Sent: Thursday, April 06, 2017 11:12 AM
To: Thressa Webb <Thressa.Webb@Tceq.Texas.Gov>
Subject: Method

Thressa,
This is jerry Davis at rock creek resort, the method for both temperature and ph is direct method. Let me know if you need anything else. Thank you.