

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY PARAMETER MONITORING FORM 20679

Completed by PWS (or Agent)

PWS Name: Muleshoe Municipal water System

PWS ID#: TX0090001

PWS Address: 215 S 1st ST

PWS Contact: Ramon M. Sanchez

PWS Contact Phone #: (806)272-4528

TO
PACE
(FLORIDA)

03-20-18

Inhibitor or Stabilizer Used (Y):

Phosphate: ☐ Silica: ☐ Calcium carbonate: ☐

TREATMENT: Alkalinity Dosage Rate: N/A Inhibitor Dosage Rate: N/A

Laboratory

Laboratory A

Laboratory Contact: Pace Analytical Services
8 E Tower Cir Ormond Bch 32174
T-104704184-16-10
Aaron Crump
386-676-4851

Sample Information

Sample Type (Y): ☒ Compliance ☐ Non-compliance

Sample Collector (Y): ☒ Public Water System ☐ Accredited Lab ☐ 3rd Party Contractor --> LAB ID

Temperature and pH (Y or N): ☒ Are temperature and pH included on the sampling entity's Laboratory Approval Form on file at the TCEQ? ☒ Were temperature and pH measured in the field within 15 minutes of sample collection?

Parameters Requested: Analyses are required for the parameters checked. * If inhibitors containing phosphate or silica are used, then these parameters should also be analyzed depending on which is in use.

Facility ID (e.g. DS01, PBCU001)	Sample Point ID (e.g. DSTWQP, EWQP)	Sample Location	Sample Collection		Field Measurements		Replacement?	Original Sample ID #	Original Sample Date (MMDDYY)	Lab Sample ID	Sample Conditions Upon Receipt (Y)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			Date (MMDDYY)	Time - 24 hr (HHMM)	pH	Temp (°C)					Alkalinity (1027)	Calcium (1016)	Chloride (1017)	Conductivity (1004)	Hardness (1018)	Iron (1020)	Manganese (1030)	Sodium (1032)	Sulfate (1035)	TDS (1030)	O-Phosphate (1044)	Silica (1049)*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
PBCU004	EWQP	745 S Hwy 214	032018	10:52 AM	7.44	16.4 ^{°C}		AW26663-1		7584112-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

I acknowledge that information on this form is true and correct and sites selected for sampling follow the instructions in the TCEQ Monitoring and Sample Collection Guidance for Water Quality Parameters. This includes, but not limited to this measurement of pH and temperature immediately upon collection. Falsification of this form or tampering with water samples is a crime punishable under state and/or federal law. (Texas Penal Code, Title 8, Chapter 37.10)

Name of Authorized PWS Representative (Print): John P. Garza

Signature: [Signature]

Organization: City of Muleshoe

Date: 03/20/2018

Sample Conditions Upon Receipt (Y)

✓ Samples received unpreserved? ☒ Field ☐ Ambient ☐

Rejection Code (if applicable):

Date & Time of Sample Preservation (Addition): N/A 3-20-18

Thermometer ID #: 315

Chain of Custody

Relinquished By (Signature): [Signature] Date: 3-20-18

Received By (Signature): [Signature] Date: 3-20-18

Relinquished By (Signature): [Signature] Date: 3/20/18

Received By Lab (Signature): [Signature] Date: 3-24-18

per PACE COC attached 3/24/18

Chain of Custody

WO# : 35381698

PWS_0090001_AC_20180510_WQP Analysis Report



x	Samples were sent d
---	---------------------

State Of Origin: TX

Workorder: 7584112

Workorder Name:0090001 Muleshoe WQP

Owner Received Date: 3/20/2018 Results Requested By: 4/4/2018

Report To						Subcontract To						Requested Analysis																			
Amy Bryant Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123						Pace Analytical Ormond Beach 8 East Tower Circle Ormond Beach, FL 32174 Phone (386)672-5668						Alkalinity	Ca, Fe, Mn, Na, Hardness	Chloride, Sulfate	Conductivity	TDS															
						Preserved Containers																									
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	HNO3	Unpreserved																								
1	PBCU004 EWQP 745 S Hwy 214	PS	3/20/2018 10:52	7584112001	Drinking														X	X	X	X	X								
2	DS01 DSTWQP 104 E 8th ST	PS	3/20/2018 10:36	7584112002	Drinking														X	X	X	X	X								
3	DS02 DSTWQP 310 W 9th ST	PS	3/20/2018 11:42	7584112003	Drinking									X	X	X	X	X													
4	DS03 DSTWQP 1914 W Ave B	PS	3/20/2018 13:15	7584112004	Drinking									X	X	X	X	X													
5																															
														Comments																	
Transfers		Released By		Date/Time		Received By		Date/Time		Testing requested is on the Water Quality Parameter Monitoring Form. This form must also be completed by the work lab and included in report. ADB 3/21/2018																					
1						AS/PULCE		3/21/18																							
2								21 5:15 PM																							
3																															
Cooler Temperature on Receipt °C				Custody Seal Y or N				Received on Ice Y or N				Samples Intact Y or N																			

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.



Sample Condition Upon Receipt Form (SCUR)

Project # **W0# : 35381698**
Project Manager: **PM: ADC Due Date: 04/02/18**
Client: **CLIENT: PACDAL**
PWS_0090001_AC_20180510_WQP Analysis Report

Date and Initials of person:
Examining contents:
Label:
Deliver:
pH:

Thermometer Used: T315 Date: 3/21/18 Time: 1110 Initials: Cnm

State of Origin: _____

Cooler #1 Temp.°C 1.1 (Visual) FLD (Correction Factor) 2.1 (Actual) ☐ Samples on ice, cooling process has begun
Cooler #2 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #3 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #4 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #5 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun
Cooler #6 Temp.°C _____ (Visual) _____ (Correction Factor) _____ (Actual) ☐ Samples on ice, cooling process has begun

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Shipping Method: ☐ First Overnight ☒ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ International Priority
☐ Other _____

Billing: ☐ Recipient ☐ Sender ☐ Third Party ☐ Credit Card ☐ Unknown

Tracking # 4338 4397 9407

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No Ice: Wet Blue Dry None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other _____

Samples shorted to lab (If Yes, complete) Shorted Date: _____ Shorted Time: _____ Qty: _____

Comments:

Chain of Custody Present	☒ Yes ☐ No ☐ N/A	
Chain of Custody Filled Out	☒ Yes ☐ No ☐ N/A	
Relinquished Signature & Sampler Name COC	☒ Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☒ Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☐ Yes ☐ No ☒ N/A	
Sufficient Volume	☒ Yes ☐ No ☐ N/A	
Correct Containers Used	☒ Yes ☐ No ☐ N/A	
Containers Intact	☒ Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☒ Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☒ Yes ☐ No ☐ N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	☒ Yes ☐ No ☐ N/A	
Headspace in VOA Vials? (>6mm):	☐ Yes ☐ No ☒ N/A	
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	

Client Notification/ Resolution:
Person Contacted: _____ Date/Time: _____

Comments/ Resolution (use back for additional comments): _____

PWS_0090001_AC_20180510_WQP Analysis Report

April 17, 2018

Mario Rodriguez
Advanced Analysis
3407 Clovis Road
Lubbock, TX 79415

RE: Project: 0090001 Muleshoe WQP
Pace Project No.: 7584112

Dear Mario Rodriguez:

Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Amy Bryant

[REDACTED]
(972)727-1123
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Lab ID	Sample ID	Matrix	Date Collected	Date Received
7584112001	PBCU004 EWQP 745 S Hwy 214	Drinking Water	03/20/18 10:52	03/20/18 18:00
7584112002	DS01 DSTWQP 104 E 8th ST	Drinking Water	03/20/18 10:36	03/20/18 18:00
7584112003	DS02 DSTWQP 310 W 9th ST	Drinking Water	03/20/18 11:42	03/20/18 18:00
7584112004	DS03 DSTWQP 1914 W Ave B	Drinking Water	03/20/18 13:15	03/20/18 18:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7584112001	PBCU004 EWQP 745 S Hwy 214	EPA 200.7	SC1	5	PASI-O
		SM 2320B	AGS	1	PASI-O
		SM 2510B	MAJ	1	PASI-O
		SM 2540C	SA1	1	PASI-O
		EPA 300.0	CMB	2	PASI-O
7584112002	DS01 DSTWQP 104 E 8th ST	EPA 200.7	SC1	5	PASI-O
		SM 2320B	AGS	1	PASI-O
		SM 2510B	MAJ	1	PASI-O
		SM 2540C	SA1	1	PASI-O
		EPA 300.0	CMB	2	PASI-O
7584112003	DS02 DSTWQP 310 W 9th ST	EPA 200.7	SC1	5	PASI-O
		SM 2320B	AGS	1	PASI-O
		SM 2510B	MAJ	1	PASI-O
		SM 2540C	SA1	1	PASI-O
		EPA 300.0	CMB	2	PASI-O
7584112004	DS03 DSTWQP 1914 W Ave B	EPA 200.7	SC1	5	PASI-O
		SM 2320B	AGS	1	PASI-O
		SM 2510B	MAJ	1	PASI-O
		SM 2540C	SA1	1	PASI-O
		EPA 300.0	CMB	2	PASI-O

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

ANALYTICAL RESULTS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Sample: PBCU004 EWQP 745 S Hwy 214		Lab ID: 7584112001	Collected: 03/20/18 10:52	Received: 03/20/18 18:00	Matrix: Drinking Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, DW No Prep		Analytical Method: EPA 200.7						
Calcium	67600	ug/L	500	1		04/03/18 00:00	7440-70-2	
Iron	ND	ug/L	40.0	1		04/03/18 00:00	7439-89-6	
Manganese	ND	ug/L	5.0	1		04/03/18 00:00	7439-96-5	
Sodium	47600	ug/L	1000	1		04/03/18 00:00	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B)	217000	ug/L	3300	1		04/03/18 00:00		
2320B Alkalinity		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO3	219	mg/L	5.0	1		03/30/18 19:36		
2510B Specific Conductance		Analytical Method: SM 2510B						
Specific Conductance @ 25C	575	umhos/cm	2.0	1		03/28/18 18:55		
2540C Total Dissolved Solids		Analytical Method: SM 2540C						
Total Dissolved Solids	357	mg/L	5.0	1		03/27/18 07:27		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Chloride	13.6	mg/L	5.0	1		03/25/18 10:58	16887-00-6	
Sulfate	44.8	mg/L	5.0	1		03/25/18 10:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

ANALYTICAL RESULTS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Sample: DS01 DSTWQP 104 E 8th ST		Lab ID: 7584112002		Collected: 03/20/18 10:36		Received: 03/20/18 18:00		Matrix: Drinking Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, DW No Prep		Analytical Method: EPA 200.7							
Calcium	71000	ug/L	500	1			04/03/18 00:05	7440-70-2	
Iron	ND	ug/L	40.0	1			04/03/18 00:05	7439-89-6	
Manganese	ND	ug/L	5.0	1			04/03/18 00:05	7439-96-5	
Sodium	50100	ug/L	1000	1			04/03/18 00:05	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	224000	ug/L	3300	1			04/03/18 00:05		
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity, Total as CaCO3	222	mg/L	5.0	1			03/30/18 19:41		
2510B Specific Conductance		Analytical Method: SM 2510B							
Specific Conductance @ 25C	600	umhos/cm	2.0	1			03/28/18 19:00		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	373	mg/L	5.0	1			03/27/18 07:29		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	16.4	mg/L	5.0	1			03/25/18 12:04	16887-00-6	
Sulfate	47.4	mg/L	5.0	1			03/25/18 12:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

ANALYTICAL RESULTS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Sample: DS02 DSTWQP 310 W 9th ST	Lab ID: 7584112003	Collected: 03/20/18 11:42	Received: 03/20/18 18:00	Matrix: Drinking Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, DW No Prep	Analytical Method: EPA 200.7							
Calcium	68200	ug/L	500	1		04/03/18 00:11	7440-70-2	
Iron	ND	ug/L	40.0	1		04/03/18 00:11	7439-89-6	
Manganese	ND	ug/L	5.0	1		04/03/18 00:11	7439-96-5	
Sodium	48300	ug/L	1000	1		04/03/18 00:11	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	219000	ug/L	3300	1		04/03/18 00:11		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Total as CaCO3	219	mg/L	5.0	1		03/30/18 19:46		
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance @ 25C	576	umhos/cm	2.0	1		03/28/18 19:05		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	353	mg/L	5.0	1		03/27/18 07:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	14.0	mg/L	5.0	1		03/25/18 12:26	16887-00-6	
Sulfate	45.1	mg/L	5.0	1		03/25/18 12:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

ANALYTICAL RESULTS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Sample: DS03 DSTWQP 1914 W Ave B **Lab ID:** 7584112004 **Collected:** 03/20/18 13:15 **Received:** 03/20/18 18:00 **Matrix:** Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, DW No Prep		Analytical Method: EPA 200.7						
Calcium	68500	ug/L	500	1		04/03/18 00:28	7440-70-2	
Iron	ND	ug/L	40.0	1		04/03/18 00:28	7439-89-6	
Manganese	ND	ug/L	5.0	1		04/03/18 00:28	7439-96-5	
Sodium	48400	ug/L	1000	1		04/03/18 00:28	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B)	219000	ug/L	3300	1		04/03/18 00:28		
2320B Alkalinity		Analytical Method: SM 2320B						
Alkalinity, Total as CaCO3	217	mg/L	5.0	1		03/30/18 20:01		
2510B Specific Conductance		Analytical Method: SM 2510B						
Specific Conductance @ 25C	570	umhos/cm	2.0	1		03/28/18 19:09		
2540C Total Dissolved Solids		Analytical Method: SM 2540C						
Total Dissolved Solids	355	mg/L	5.0	1		03/27/18 07:31		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Chloride	14.3	mg/L	5.0	1		03/25/18 12:48	16887-00-6	
Sulfate	45.4	mg/L	5.0	1		03/25/18 12:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

QUALITY CONTROL DATA

Project: 0090001 Muleshoe WQP
Pace Project No.: 7584112

QC Batch:	435987	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 MET No Prep Drinking Water
Associated Lab Samples:	7584112001, 7584112002, 7584112003, 7584112004		

METHOD BLANK: 2368518 Matrix: Water
Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	ug/L	ND	500	04/02/18 23:21	
Iron	ug/L	ND	40.0	04/02/18 23:21	
Manganese	ug/L	ND	5.0	04/02/18 23:21	
Sodium	ug/L	ND	1000	04/02/18 23:21	
Tot Hardness asCaCO3 (SM 2340B	ug/L	ND	3300	04/02/18 23:21	

LABORATORY CONTROL SAMPLE: 2368519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	12500	12700	101	85-115	
Iron	ug/L	2500	2630	105	85-115	
Manganese	ug/L	250	256	102	85-115	
Sodium	ug/L	12500	12600	101	85-115	
Tot Hardness asCaCO3 (SM 2340B	ug/L	82700	83300	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2368520 2368521

Parameter	Units	35381827003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	37.1 mg/L	12500	12500	48700	49400	93	98	70-130	1	20	
Iron	ug/L	142	2500	2500	2780	2820	106	107	70-130	1	20	
Manganese	ug/L	5.6	250	250	262	263	103	103	70-130	0	20	
Sodium	ug/L	53700	12500	12500	64900	65900	89	97	70-130	2	20	
Tot Hardness asCaCO3 (SM 2340B	ug/L	131000	82700	82700	211000	213000	96	100	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2368522 2368523

Parameter	Units	35382081004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	20.1 mg/L	12500	12500	32800	32600	101	100	70-130	1	20	
Iron	ug/L	29.5J	2500	2500	2770	2760	110	109	70-130	0	20	
Manganese	ug/L	2.5U	250	250	260	258	104	103	70-130	1	20	
Sodium	ug/L	74300	12500	12500	86600	85700	98	91	70-130	1	20	
Tot Hardness asCaCO3 (SM 2340B	ug/L	70400	82700	82700	154000	154000	101	101	70-130	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

QC Batch: 436850 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

METHOD BLANK: 2372346 Matrix: Water
Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	03/30/18 18:46	

LABORATORY CONTROL SAMPLE: 2372347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	253	236	93	90-110	

SAMPLE DUPLICATE: 2372348

Parameter	Units	35381152002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	124	123	1	20	

SAMPLE DUPLICATE: 2372349

Parameter	Units	92377634001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	148	151	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

QC Batch:	436078	Analysis Method:	SM 2510B
QC Batch Method:	SM 2510B	Analysis Description:	2510B Specific Conductance
Associated Lab Samples:	7584112001, 7584112002, 7584112003, 7584112004		

METHOD BLANK: 2368992 Matrix: Water

Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance @ 25C	umhos/cm	ND	2.0	03/28/18 18:11	

LABORATORY CONTROL SAMPLE: 2368993

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance @ 25C	umhos/cm	1410	1480	104	95-105	

SAMPLE DUPLICATE: 2368994

Parameter	Units	35380267004 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25C	umhos/cm	23600	23600	0	20	

SAMPLE DUPLICATE: 2368995

Parameter	Units	35381182002 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25C	umhos/cm	50600	50800	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

QC Batch:	435718	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	7584112001, 7584112002, 7584112003, 7584112004		

METHOD BLANK: 2367466 Matrix: Water

Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	03/27/18 07:22	

LABORATORY CONTROL SAMPLE: 2367467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	291	97	90-110	

SAMPLE DUPLICATE: 2367468

Parameter	Units	35381306003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	334	338	1	5	

SAMPLE DUPLICATE: 2367469

Parameter	Units	7584112002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	373	354	5	5	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

QUALITY CONTROL DATA

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

QC Batch: 435352 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

METHOD BLANK: 2365943 Matrix: Water
Associated Lab Samples: 7584112001, 7584112002, 7584112003, 7584112004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	5.0	03/24/18 23:13	
Sulfate	mg/L	ND	5.0	03/24/18 23:13	

LABORATORY CONTROL SAMPLE: 2365944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Sulfate	mg/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2365945 2365946

Parameter	Units	7584112001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.6	50	50	63.5	64.9	100	103	90-110	2	20	
Sulfate	mg/L	44.8	50	50	99.0	99.8	108	110	90-110	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PWS_0090001_AC_20180510_WQP Analysis Report

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0090001 Muleshoe WQP

Pace Project No.: 7584112

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7584112001	PBCU004 EWQP 745 S Hwy 214	EPA 200.7	435987		
7584112002	DS01 DSTWQP 104 E 8th ST	EPA 200.7	435987		
7584112003	DS02 DSTWQP 310 W 9th ST	EPA 200.7	435987		
7584112004	DS03 DSTWQP 1914 W Ave B	EPA 200.7	435987		
7584112001	PBCU004 EWQP 745 S Hwy 214	SM 2320B	436850		
7584112002	DS01 DSTWQP 104 E 8th ST	SM 2320B	436850		
7584112003	DS02 DSTWQP 310 W 9th ST	SM 2320B	436850		
7584112004	DS03 DSTWQP 1914 W Ave B	SM 2320B	436850		
7584112001	PBCU004 EWQP 745 S Hwy 214	SM 2510B	436078		
7584112002	DS01 DSTWQP 104 E 8th ST	SM 2510B	436078		
7584112003	DS02 DSTWQP 310 W 9th ST	SM 2510B	436078		
7584112004	DS03 DSTWQP 1914 W Ave B	SM 2510B	436078		
7584112001	PBCU004 EWQP 745 S Hwy 214	SM 2540C	435718		
7584112002	DS01 DSTWQP 104 E 8th ST	SM 2540C	435718		
7584112003	DS02 DSTWQP 310 W 9th ST	SM 2540C	435718		
7584112004	DS03 DSTWQP 1914 W Ave B	SM 2540C	435718		
7584112001	PBCU004 EWQP 745 S Hwy 214	EPA 300.0	435352		
7584112002	DS01 DSTWQP 104 E 8th ST	EPA 300.0	435352		
7584112003	DS02 DSTWQP 310 W 9th ST	EPA 300.0	435352		
7584112004	DS03 DSTWQP 1914 W Ave B	EPA 300.0	435352		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.