TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

WATER QUALITY PARAMETER MONITORING FORM 20679

Completed by PWS (or Agent)		Completed by Laboratory	
PWS Name:	Shin-Etsu Silicones of America	**Laboratory Name:**	A&B Labs
PWS ID#:	TX 0200619	**TCEQ Lab ID #:**	TX275
PWS Address:	5650 Hwy 332 E, Freeport, TX 77541	**Laboratory Address:**	10100 East Frwy, Ste. 100
PWS Contact:	Jeremy Vogel		Houston, Tx 77029
PWS Contact Phone #:	979-230-9595 ext. 664	**Laboratory Contact:**	Shanntall Carpenter or Alisha Hughes
Inhibitor or Stablizer Used (√):	[ ] Phosphate [ ] Silica [ ] Calcium carbonate		
TREATMENT	**Alkalinity Dosage Rate:**	**Inhibitor Dosage Rate:**	**Laboratory Contact Phone #:** 713-453-6060

Sample Information

Sample Type (√):	X	Compliance		Non-compliance
Temperature and pH (Y or N):	Y	Are temperature and pH included on the sampling entity's Laboratory Approval Form on file at the TCEQ?	Y	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: Date (MMDDYY)	Sample Collection: Time - 24 hr (HHMM)	Field Measurements: pH	Field Measurements: Temp (°C)	Replacement? (√)	Original Sample ID #	Original Sample Date (MMDDYY)	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) *
pbcu001	EWQP	5650 E HWY 332, Freeport, Tx 77541	9-10-19	08:30	7.9	25.6				19090747.01	√	√	√	√	√	√	√	√	√	√		
DS01	DSTWQP	5650 E Hwy 332, Freeport, Tx 77541	9-10-19	08:30	7.8	27.1				1 .02	√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		

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 the 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)	Signature	Organization	Date
Lewis Segovia		SESA	9-10-19

Sample Conditions Upon Receipt (√)

√	Samples received unpreserved?		Iced	Ambient

Rejection Code (if applicable): | Actual / Corrected sample temperature: 7.1-8.5-2

Date & Time of Sample Preservation (Acidified): 9.10.19 @ 13:34 | Thermometer ID #: 8.6c 170762 9

Chain of Custody

Relinquished By (Signature)	Date/Time:	Relinquished By Courier (Signature)	Date/Time:
	9-10-19 08:45	Rosa Frederick	9-10-19 13:20
Received By Courier (Signature)	**Date/Time:**	**Received By Lab (Signature)**	**Date/Time:**
Rosa Frederick	9-10-19 11:00		9/10/19 13:20

Laboratory Comments:

TCEQ 20679 (Rev 10/2017)

Laboratory Analysis Report

Total Number of Pages: 12

Job ID : 19090747

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
PWS ID #TX0200619 / Shin-Etsu Silicones of America

Report To :	Client Name:	Shin Etsu Silicones America	P.O.#.: 40213188
	Attn:	Jeremy Vogel	Sample Collected By: Lewis Segouia
	Client Address:	5650 Hwy. 332 E.	Date Collected: 09/10/19
	City, State, Zip:	Freeport, Texas, 77541	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
PbCu001 / EWQP / 5650 E HWY 332, Freeport, TX 77541	Drinking Water	19090747.01
DS01 / DSTWQP / 5650 E HWY 332, Freeport, TX77541	Drinking Water	19090747.02

Released By: Alisha Hughes
Title: Project Manager
Date: 9/17/2019

This Laboratory is NELAP (T104704213-19-20) accredited. Effective: 04/01/2019; Expires: 3/31/2020
Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

Date Received : 09/10/2019 13:20

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 19090747

Date: 9/17/2019

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition

M6	Not calculated. Sample concentration high, more than 4X spike concentration. Control limits do not apply."The sample randomly selcted as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."

LABORATORY TEST RESULTS

Job ID : 19090747

Date 9/17/2019

Client Name: Shin Etsu Silicones America

Attn: Jeremy Vogel

Project Name: PWS ID #TX0200619 / Shin-Etsu Silicones of America

Client Sample ID: PbCu001 / EWQP / 5650 E HWY 332, Freeport, TX 77541

Date Collected: 09/10/19

Time Collected: 08:30

Other Information:

Job Sample ID: 19090747.01

Sample Matrix Drinking Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 200.7									
	Calcium	24.3	mg/L	20	2			09/16/19 17:18	BRR
	Iron	0.021	mg/L	1	0.01	0.3		09/16/19 16:40	BRR
	Manganese	0.046	mg/L	1	0.01	0.05		09/16/19 16:40	BRR
	Sodium	294	mg/L	250	25			09/16/19 16:47	BRR
EPA 300.0									
	Chloride	207	mg/L	50.00	5			09/12/19 18:35	RR
	Sulfate	1.59	mg/L	1.00	0.1			09/13/19 17:52	RR
SM 2320B									
	Alkalinity, as CaCO3[1]	544	mg/L	1	20			09/16/19 11:00	KRS
SM 2340C									
	Total Hardness	145	mg CaCO3/L	1	5			09/17/19 14:30	LEB
SM 2510B									
	Conductance	1365	umho/cm	1	2			09/17/19 13:30	LEB
SM 2540C									
	TDS	912.0	mg/L		10	500		09/12/19 13:00	CO

LABORATORY TEST RESULTS

Job ID : 19090747

Date 9/17/2019

Client Name: Shin Etsu Silicones America

Attn: Jeremy Vogel

Project Name: PWS ID #TX0200619 / Shin-Etsu Silicones of America

Client Sample ID: DS01 / DSTWQP / 5650 E HWY 332, Freeport, TX77541

Date Collected: 09/10/19

Time Collected: 08:30

Other Information:

Job Sample ID: 19090747.02

Sample Matrix Drinking Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 200.7									
	Calcium	24.8	mg/L	20	2			09/16/19 17:22	BRR
	Iron	BRL	mg/L	1	0.01	0.3		09/16/19 17:30	BRR
	Manganese	BRL	mg/L	1	0.01	0.05		09/16/19 17:30	BRR
	Sodium	316	mg/L	250	25			09/16/19 16:51	BRR
EPA 300.0									
	Chloride	196	mg/L	50.00	5			09/12/19 18:57	RR
	Sulfate	BRL	mg/L	1.00	0.1			09/13/19 18:14	RR
SM 2320B									
	Alkalinity, as CaCO3[1]	530	mg/L	1	20			09/16/19 11:00	KRS
SM 2340C									
	Total Hardness	145	mg CaCO3/L	1	5			09/17/19 14:30	LEB
SM 2510B									
	Conductance	1343	umho/cm	1	2			09/17/19 13:30	LEB
SM 2540C									
	TDS	942.0	mg/L		10	500		09/12/19 13:00	CO

[1]-Parameter not available for accreditation

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **SM 2540C** **Reporting Units :** **mg/L**

QC Batch ID : Qb19091271 **Created Date :** 09/12/19 **Created By :** CObuekwe

Samples in This QC Batch : 19090747.01,02

Sample Preparation : PB19091243 **Prep Method :** SM 2540C **Prep Date :** 09/12/19 12:43 **Prep By :** CObuekwe

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
TDS		BRL	mg/L		10		

QC Type: Duplicate

QC Sample ID: 19090717.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
TDS	514.0	490.0	mg/L	4.8	5		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TDS	500	476.0	95.2						80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **EPA 300.0** **Reporting Units :** **mg/L**

QC Batch ID : Qb19091413 **Created Date :** 09/12/19 **Created By :** RRaval

Samples in This QC Batch : 19090747.01,02

Sample Preparation : PB19091410 **Prep Method :** EPA 300.0 **Prep Date :** 09/12/19 09:00 **Prep By :** RRaval

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Chloride	16887-00-6	BRL	mg/L	1.00	0.1		
Sulfate		BRL	mg/L	1.00	0.1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Chloride	1	1.06	106	1	1.03	103	2.9	20	90-110	
Sulfate	1	1.02	102	1	1.08	108	5.7	20	90-110	

QC Type: MS and MSD
QC Sample ID: 19090763.04

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Chloride	163	1	N/A	N/A						80-120	M6
Sulfate	60.7	1	61.8	110						80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **SM 2320B** **Reporting Units :** **mg/L**

QC Batch ID : Qb19091625 **Created Date :** 09/16/19 **Created By :** KRSaranya

Samples in This QC Batch : 19090747.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Alkalinity, as CaCO3		BRL	mg/L	1	20		

QC Type: Duplicate

QC Sample ID: 19090747.02

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Alkalinity, as CaCO3	532	530		0.4	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Alkalinity, as CaCO3	1190	1240	104	1190	1230	103	0.8	20	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **EPA 200.7** **Reporting Units :** **mg/L**

QC Batch ID : Qb19091697 **Created Date :** 09/16/19 **Created By :** BRena

Samples in This QC Batch : 19090747.01,02

Digestion : PB19091639 **Prep Method :** EPA 200.7 **Prep Date :** 09/16/19 10:30 **Prep By :** Mwissman

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Calcium	7440-70-2	BRL	mg/L	1	0.1		
Iron	7439-89-6	BRL	mg/L	1	0.01		
Manganese	7439-95-5	BRL	mg/L	1	0.01		
Sodium	7440-23-5	BRL	mg/L	1	0.1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Calcium	1	0.955	95.5	1	1.038	104	8.4	20	85-115	
Iron	1	0.971	97.1	1	0.993	99.3	2.2	20	85-115	
Manganese	1	1.012	101	1	1.018	102	0.6	20	85-115	
Sodium	1	1.045	105	1	1.037	104	0.8	20	85-115	

QC Type: MS and MSD
QC Sample ID: 19090748.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Calcium	102	1	N/A	N/A						75-125	M6
Iron	0.035	1	1.000	96.5						75-125	
Manganese	BRL	1	1.009	100						75-125	
Sodium	228	1	N/A	N/A						75-125	M6

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **SM 2510B** **Reporting Units :** **umho/cm**

QC Batch ID : Qb19091786 **Created Date :** 09/17/19 **Created By :** LEBell

Samples in This QC Batch : 19090747.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Conductance		BRL	umho/cm	1	2		

QC Type: Duplicate

QC Sample ID: 19090747.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Conductance	1369	1365	umho/cm	0.3	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Conductance	100	101.3	101						90-110	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 19090747 **Date :** 9/17/2019

Analysis : **Method :** **SM 2340C** **Reporting Units :** **mg CaCO3/L**

QC Batch ID : Qb19091787 **Created Date :** 01/17/19 **Created By :** LEBell

Samples in This QC Batch : 19090747.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Total Hardness		BRL	mg CaCO3/L	1	5		

QC Type: Duplicate

QC Sample ID: 19090747.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Total Hardness	145	145	mg CaCO3	0	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Total Hardness	1000	951	95.1	1000	951	95.1	0	20	80-120	

Refer to the Definition page for terms.

Sample Condition Checklist

A&B JobID : **19090747**	Date Received : **09/10/2019**	Time Received : **1:20PM**
Client Name : **Shin Etsu Silicones America**		
Temperature : **9.1-0.5CF=8.6°C**	Sample pH : **7**	
Thermometer ID : **1707629**	pH Paper ID : **72375**	

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**		X	
2.	**Sample(s) in a cooler.**	X		
3.	**If yes, ice in cooler.**	X		
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☑ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**		X	
11.	**All samples were logged or labeled.**	X		
12.	**Sample ID labels match C-O-C ID's**	X		
13.	**Bottle count on C-O-C matches bottles found.**	X		
14.	**Sample volume is sufficient for analyses requested.**	X		
15.	**Samples were received within the hold time.**	X		
16.	**VOA vials completely filled.**			X
17.	**Sample accepted.**	X		
18	**Has client been contacted about sub-out**			X

Comments : Include actions taken to resolve discrepancies/problem:

Split and preserved with 1mL HNO3 LT#81258(9-10-19 @ 13:34); pH <2. -ANA 9-11-19.

Received by : JMontemayor

Check in by/date : AArnett / 09/11/2019