Email information for report date:

1/10/19 15:48

B033518

Hydro Resources

Attn: Aaron Marsh

[redacted]

PO Box 525

Dripping Springs, TX 78620

We at ATL appreciate your business and thank you for allowing us to partner in servicing your environmental needs.

Call or email us today at samplingbryan@aqua-techlabs.com for more information or to set up an event.

Sincerely,
June M. Brien
Executive Technical Director

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
Phone: (979) 778-3707
Fax: (979) 778-3193

AQUA-TECH LABORATORIES, INC.

AUSTIN OFFICE
7500 Hwy 71 W, Suite 105
Austin, TX 78735
Phone: (512) 301-9559
Fax: (512) 301-9552

The analyses summarized in this report were performed by Aqua-Tech Laboratories, Inc. unless otherwise noted. Aqua-Tech Laboratories, Inc. holds accreditation from the State of Texas in accordance with TNI and/or through the TCEQ Drinking Water Commercial Laboratory Approval Program.

The following abbreviations indicate certification status:

NEL	TNI accredited parameter.
ANR	Accreditation not required by the State of Texas.
DWP	Accreditation through the TCEQ Drinking Water Commercial Laboratory Approval Program.
INF	Aqua-Tech Laboratories, Inc. is not accredited for this parameter. It is reported on an informational basis only.

Subcontracted data summarized in this report is indicated by "Sub" in the Lab column.

TCEQ DW Lab ID TX 239

General Definitions:

NR	Not Reported.
RPD	Relative Percent Difference.
% R	Percent Recovery.
dry	Results with the "dry" unit designation are reported on a "dry weight" basis.
SQL	The Sample Quantitation Limit is the value below which the parameter cannot reliably be detected. The SQL includes all sample preparations, dilutions and / or concentrations.
Adj MDL	The Adjusted Method Detection Limit is the MDL value adjusted for any sample dilutions or concentrations .
MDL	The Method Detection Limit is the lowest theoretical value that is statistically different from zero for a specific method, taking into account all preparation steps and instrument settings.

All samples are reported on an "as received" basis unless the designation "dry" is added to the reported unit.

Copies of Aqua-Tech Laboratories, Inc. procedures and individual sampling plans are available upon request. Note that samples are collected by Aqua-Tech Laboratories, Inc. personnel unless otherwise noted in the "Sample Collected" field of this report as "Client" or "CLT".

Samples included in this report were received in acceptable condition according to Aqua-Tech Laboratories, Inc. procedures and 40 CFR, Chapter I, Subchapter D, Part 136.3, TABLE II. - *Required containers, preservation techniques, and holding times*, unless otherwise noted in this report.

Record Retention:

All reports, raw data, and associated quality control data are kept on file for 10 years before being destroyed. Any client that would like copies of records must contact Aqua-Tech Laboratories, Inc. no later than six months prior to the scheduled disposal. An administrative fee for retrieval and distribution will apply.

This report was approved by:

June M. Brien, Technical Director

corp@aqua-techlabs.com www.aqua-techlabs.com

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Analytical Report

Hydro Resources

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B033518

EP001 WELLHOUSE (PBCU001)

Collected: 12/19/18 09:10 by CLIENT
Received: 12/20/18 15:47 by Kelly Kukowski

Type: Grab
Matrix: Drinking Water
C-O-C #: 290098

Lab ID# B033518-01

	Result	Units	Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
General Chemistry											
Total Dissolved Solids	**1280**	mg/L		25.0	25.0	25.0	*Bryan*	12/21/18 11:20 AKS	SM2540 C 2011	M093405	*NEL*
Total Alkalinity as CaCO3 (pH4.5)	**334**	mg/L		5.00	20.0	20.0	*Bryan*	12/26/18 13:05 LAM	SM2320 B 2011	M093472	*DWP*
Total Hardness (EDTA) as CaCO3	**520**	mg/L		1.00	2.00	2.00	*Bryan*	01/02/19 10:32 LAM	SM2340 C 2011	M093690	*NEL*
Specific Conductance (adjusted to 25.0°C)	**2060**	uS/cm	C-02	2.00	3.33	3.33	*Bryan*	12/27/18 13:38 LAM	SM2510 B 2011	M093556	*DWP,NEL*
Metals (Total)											
Calcium	**107**	mg/L		0.023	0.235	1.02	*Bryan*	12/26/18 13:18 PNS	EPA 200.7 R4.4	M093483	*DWP*
Iron	**1.34**	mg/L		0.002	0.002	0.010	*Bryan*	12/26/18 14:03 PNS	EPA 200.7 R4.4	M093488	*NEL*
Manganese	**0.010**	mg/L		0.002	0.002	0.005	*Bryan*	12/26/18 14:03 PNS	EPA 200.7 R4.4	M093488	*NEL*
Sodium	**230**	mg/L		0.011	0.112	1.02	*Bryan*	12/26/18 13:18 PNS	EPA 200.7 R4.4	M093483	*NEL*
General Chemistry											
Sulfate as SO4	**506**	mg/L		0.01	30	30	*Sub*	12/26/18 08:57 ANA	EPA 300.0	SUB	*NEL*
Chloride	**137**	mg/L		0.02		5	*Sub*	12/22/18 08:08 ANA	EPA 300.0	SUB	*NEL*

BREAKROOM SINK (DS01)

Collected: 12/19/18 09:20 by CLIENT
Received: 12/20/18 15:47 by Kelly Kukowski

Type: Grab
Matrix: Drinking Water
C-O-C #: 290098

Lab ID# B033518-02

	Result	Units	Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
General Chemistry											
Total Dissolved Solids	**1280**	mg/L		25.0	25.0	25.0	*Bryan*	12/21/18 11:20 AKS	SM2540 C 2011	M093405	*NEL*
Total Alkalinity as CaCO3 (pH4.5)	**342**	mg/L		5.00	20.0	20.0	*Bryan*	12/26/18 13:05 LAM	SM2320 B 2011	M093472	*DWP*
Total Hardness (EDTA) as CaCO3	**540**	mg/L		1.00	1.00	1.00	*Bryan*	01/09/19 08:01 LAM	SM2340 C 2011	M093708	*NEL*
Specific Conductance (adjusted to 25.0°C)	**2020**	uS/cm	C-02	2.00	3.33	3.33	*Bryan*	12/27/18 13:38 LAM	SM2510 B 2011	M093556	*DWP,NEL*
Metals (Total)											
Calcium	**99.9**	mg/L		0.023	0.230	1.00	*Bryan*	01/09/19 19:02 PNS	EPA 200.7 R4.4	M093783	*DWP*
Iron	**1.52**	mg/L		0.002	0.001	0.005	*Bryan*	01/09/19 19:40 PNS	EPA 200.7 R4.4	M093782	*NEL*
Manganese	**0.009**	mg/L		0.002	0.001	0.005	*Bryan*	01/09/19 19:40 PNS	EPA 200.7 R4.4	M093782	*NEL*
Sodium	**234**	mg/L		0.011	0.110	1.00	*Bryan*	01/09/19 19:02 PNS	EPA 200.7 R4.4	M093783	*NEL*
General Chemistry											
Sulfate as SO4	**486**	mg/L		0.01	30	30	*Sub*	12/26/18 09:22 ANA	EPA 300.0	SUB	*NEL*
Chloride	**137**	mg/L		0.02		5	*Sub*	12/22/18 08:32 ANA	EPA 300.0	SUB	*NEL*

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Explanation of Notes

C-02	Result confirmed by re-analysis.
J	Analyte detected below the SQL but above the MDL.

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General Chemistry - Quality Control

	Result	Units	Notes		SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Specific Conductance (adjusted to 25.0°C) - SM2510 B 2011														*Bryan*
Initial Cal Check	572	uS/cm				12/27/18 13:38 LAM	563		102	85 - 115			1812178	
Blank	<2.00	uS/cm		2.00	2.00	12/27/18 13:38 LAM							M093556	
Duplicate	412	uS/cm		2.00	2.00	12/27/18 13:38 LAM		410			0.487	2.36	M093556	
Duplicate	2040	uS/cm		3.33	3.33	12/27/18 13:38 LAM		2060			0.976	2.36	M093556	
LCS	567	uS/cm		2.00	2.00	12/27/18 13:38 LAM	564		101	90 - 110			M093556	
LCS Dup	564	uS/cm		2.00	2.00	12/27/18 13:38 LAM	564		100	90 - 110	0.530	10	M093556	
Total Alkalinity as CaCO3 (pH4.5) - SM2320 B 2011														*Bryan*
Initial Cal Check	6.87	mg/L				12/26/18 13:05 LAM	6.86		100	97 - 103			1812154	
Initial Cal Check	9.14	mg/L				12/26/18 13:05 LAM	9.18		99.6	97 - 103			1812154	
Duplicate	<20.0	mg/L		20.00	20.0	12/26/18 13:05 LAM		<20.0				6.16	M093472	
LCS	76.0	mg/L		20.00	20.0	12/26/18 13:05 LAM	80.6		94.3	90.2 - 116			M093472	
LCS Dup	77.9	mg/L		20.00	20.0	12/26/18 13:05 LAM	80.6		96.7	90.2 - 116	2.47	11.3	M093472	
MRL Check	19.0	mg/L		4.00	4.00	12/26/18 13:05 LAM	20.2		94.3	70 - 130			M093472	
Total Dissolved Solids - SM2540 C 2011														*Bryan*
Blank	<25.0	mg/L		25.00	25.0	12/21/18 11:20 AKS							M093405	
Duplicate	1210	mg/L		25.00	25.0	12/21/18 11:20 AKS		1280			5.64	14.9	M093405	
Total Hardness (EDTA) as CaCO3 - SM2340 C 2011														*Bryan*
Initial Cal Check	20.0	mg/L				01/02/19 10:32 LAM	19.5		103	85 - 115			1901008	
Blank	<1.00	mg/L		1.00	1.00	01/02/19 10:32 LAM							M093690	
Duplicate	8.00	mg/L		2.00	2.00	01/02/19 10:32 LAM		8.00			0.00	8.9	M093690	
LCS	98.0	mg/L		1.00	1.00	01/02/19 10:32 LAM	100		98.0	90 - 110			M093690	
LCS Dup	100	mg/L		1.00	1.00	01/02/19 10:32 LAM	100		100	90 - 110	2.02	10	M093690	
Matrix Spike	204	mg/L		2.00	2.00	01/02/19 10:32 LAM	200	8.00	98.0	81.6 - 118			M093690	
MRL Check	4.00	mg/L		1.00	1.00	01/02/19 10:32 LAM	4.00		100	70 - 130			M093690	
Initial Cal Check	20.0	mg/L				01/09/19 08:01 LAM	19.5		103	85 - 115			1901046	
Blank	<1.00	mg/L		1.00	1.00	01/09/19 08:01 LAM							M093708	
Duplicate	540	mg/L		1.00	1.00	01/09/19 08:01 LAM		540			0.00	8.9	M093708	
LCS	100	mg/L		1.00	1.00	01/09/19 08:01 LAM				90 - 110			M093708	
LCS Dup	100	mg/L		1.00	1.00	01/09/19 08:01 LAM				90 - 110		3.91	M093708	
Matrix Spike	640	mg/L		1.00	1.00	01/09/19 08:01 LAM		540		81.6 - 118			M093708	

Metals (Total) - Quality Control

	Result	Units	Notes		SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
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Metals (Total) - Quality Control

	Result	Units	Notes		SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Calcium - EPA 200.7 R4.4														*Bryan*
Blank	<0.050	mg/L		0.05	0.050	01/09/19 18:27 PNS							M093783	
LCS	4.88	mg/L		0.05	0.050	01/09/19 18:48 PNS	5.00		97.6	84.5 - 115.4			M093783	
LCS Dup	4.95	mg/L		0.05	0.050	01/09/19 18:51 PNS	5.00		98.9	84.5 - 115.4	1.34	20	M093783	
Duplicate	99.1	mg/L		1.00	1.00	01/09/19 18:55 PNS		99.9			0.711	20	M093783	
Matrix Spike	194	mg/L		1.00	1.00	01/09/19 18:59 PNS	100	99.9	94.1	69.5 - 130.4			M093783	
Blank	<0.102	mg/L		0.10	0.102	12/26/18 12:29 PNS							M093483	
LCS	10.2	mg/L		0.10	0.104	12/26/18 12:33 PNS	10.0		102	84.5 - 115.4			M093483	
LCS Dup	10.0	mg/L		0.10	0.104	12/26/18 12:36 PNS	10.0		100	84.5 - 115.4	1.28	20	M093483	
Duplicate	4.82	mg/L		1.02	1.02	12/26/18 12:40 PNS		4.67			3.05	20	M093483	
Matrix Spike	100	mg/L		1.04	1.04	12/26/18 12:57 PNS	100	4.67	95.8	69.5 - 130.4			M093483	
Iron - EPA 200.7 R4.4														*Bryan*
Blank	<0.005	mg/L		0.01	0.005	01/09/19 19:06 PNS							M093782	
LCS	0.533	mg/L		0.01	0.005	01/09/19 19:10 PNS	0.500		107	84.5 - 115.4			M093782	
LCS Dup	0.506	mg/L		0.01	0.005	01/09/19 19:13 PNS	0.500		101	84.5 - 115.4	5.09	20	M093782	
Duplicate	1.51	mg/L		0.01	0.005	01/09/19 19:16 PNS		1.52			0.577	20	M093782	
Matrix Spike	2.11	mg/L		0.01	0.005	01/10/19 13:29 PNS	0.500	1.52	118	69.5 - 130.4			M093782	
Blank	<0.010	mg/L		0.01	0.010	12/26/18 13:26 PNS							M093488	
LCS	1.04	mg/L		0.01	0.010	12/26/18 13:29 PNS	1.00		104	84.5 - 115.4			M093488	
LCS Dup	0.977	mg/L		0.01	0.010	12/26/18 13:46 PNS	1.00		97.7	84.5 - 115.4	5.92	20	M093488	
Duplicate	0.033	mg/L		0.01	0.010	12/26/18 13:49 PNS		0.033			0.527	20	M093488	
Matrix Spike	0.945	mg/L		0.01	0.010	12/26/18 13:53 PNS	1.00	0.033	91.2	69.5 - 130.4			M093488	
Manganese - EPA 200.7 R4.4														*Bryan*
Blank	<0.005	mg/L	*J (0.003)*	0.01	0.005	01/09/19 19:06 PNS							M093782	
LCS	0.515	mg/L		0.01	0.005	01/09/19 19:10 PNS	0.500		103	84.5 - 115.4			M093782	
LCS Dup	0.512	mg/L		0.01	0.005	01/09/19 19:13 PNS	0.500		102	84.5 - 115.4	0.671	20	M093782	
Duplicate	0.009	mg/L		0.01	0.005	01/09/19 19:16 PNS		0.009			0.308	20	M093782	
Matrix Spike	0.511	mg/L		0.01	0.005	01/09/19 19:19 PNS	0.500	0.009	100	69.5 - 130.4			M093782	
Blank	<0.005	mg/L		0.01	0.005	12/26/18 13:26 PNS							M093488	
LCS	1.03	mg/L		0.01	0.005	12/26/18 13:29 PNS	1.00		103	84.5 - 115.4			M093488	
LCS Dup	0.959	mg/L		0.01	0.005	12/26/18 13:46 PNS	1.00		95.9	84.5 - 115.4	7.53	20	M093488	
Duplicate	0.010	mg/L		0.01	0.005	12/26/18 13:49 PNS		0.011			5.90	20	M093488	
Matrix Spike	0.888	mg/L		0.01	0.005	12/26/18 13:52 PNS	1.00	0.011	87.7	69.5 - 130.4			M093488	

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Metals (Total) - Quality Control

	Result	Units	Notes		SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Sodium - EPA 200.7 R4.4														*Bryan*
Blank	<0.050	mg/L	*J (0.041)*	0.05	0.050	01/09/19 18:27 PNS							M093783	
LCS	5.15	mg/L		0.05	0.050	01/09/19 18:48 PNS	5.00		103	84.5 - 115.4			M093783	
LCS Dup	5.19	mg/L		0.05	0.050	01/09/19 18:51 PNS	5.00		104	84.5 - 115.4	0.722	20	M093783	
Duplicate	228	mg/L		1.00	1.00	01/09/19 18:55 PNS		234			2.46	20	M093783	
Matrix Spike	322	mg/L		1.00	1.00	01/09/19 18:59 PNS	100	234	88.5	69.5 - 130.4			M093783	
Blank	<0.102	mg/L		0.10	0.102	12/26/18 12:29 PNS							M093483	
LCS	10.1	mg/L		0.10	0.104	12/26/18 12:32 PNS	10.0		101	84.5 - 115.4			M093483	
LCS Dup	10.1	mg/L		0.10	0.104	12/26/18 12:36 PNS	10.0		101	84.5 - 115.4	0.688	20	M093483	
Duplicate	1.51	mg/L		1.02	1.02	12/26/18 12:39 PNS		1.45			4.10	20	M093483	
Matrix Spike	103	mg/L		1.04	1.04	12/26/18 12:57 PNS	100	1.45	101	69.5 - 130.4			M093483	

Preparation Procedures - Quality Control

	Result	Units	Notes		SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Turbidity - SM2130 B 2011														*Bryan*
Blank	<1.0	NTU		1.00	1.0	12/26/18 16:44 MRG							M093504	
Blank	<1.0	NTU		1.00	1.0	12/26/18 16:44 MRG							M093504	

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Sample Preparation Summary

Sample	Method	Prepared	Lab	Bottle	Initial	Units	Final	Units	External Dilution Factor	Batch
B033518-01										
Calcium	EPA 200.7 R4.4	12/26/18 10:29 PNS	Bryan	C	1.00	mL	10.2	mL	1	M093483
Iron	EPA 200.7 R4.4	12/26/18 10:41 PNS	Bryan	C	10.0	mL	10.2	mL	1	M093488
Manganese	EPA 200.7 R4.4	12/26/18 10:41 PNS	Bryan	C	10.0	mL	10.2	mL	1	M093488
Sample Acidified to pH<2 in Lab	N/A	12/20/18 17:04 KK	Bryan	C	1000	mL	1000	mL	1	M093367
Sodium	EPA 200.7 R4.4	12/26/18 10:29 PNS	Bryan	C	1.00	mL	10.2	mL	1	M093483
Specific Conductance (adjusted to 25.0°C)	SM2510 B 2011	12/27/18 13:38 LAM	Bryan	B	15.0	mL	25.0	mL	1	M093556
Total Alkalinity as CaCO3 (pH4.5)	SM2320 B 2011	12/26/18 13:05 LAM	Bryan	A	50.0	mL	200	mL	1	M093472
Total Dissolved Solids	SM2540 C 2011	12/21/18 11:20 AKS	Bryan	B	50.0	mL	50.0	mL	1	M093405
Total Hardness (EDTA) as CaCO3	SM2340 C 2011	1/2/19 10:32 LAM	Bryan	C	25.0	mL	50.0	mL	1	M093690
Turbidity	SM2130 B 2011	12/26/18 16:44 MRG	Bryan	C	10.0	mL	10.0	mL	1	M093504
See sub-contract reports for preparation information of subcontracted analyses.										
B033518-02										
Calcium	EPA 200.7 R4.4	1/4/19 10:32 PNS	Bryan	C	2.50	mL	25.0	mL	1	M093783
Iron	EPA 200.7 R4.4	1/4/19 10:30 PNS	Bryan	C	50.0	mL	25.0	mL	1	M093782
Manganese	EPA 200.7 R4.4	1/4/19 10:30 PNS	Bryan	C	50.0	mL	25.0	mL	1	M093782
Sample Acidified to pH<2 in Lab	N/A	12/20/18 17:04 KK	Bryan	C	1000	mL	1000	mL	1	M093367
Sodium	EPA 200.7 R4.4	1/4/19 10:32 PNS	Bryan	C	2.50	mL	25.0	mL	1	M093783
Specific Conductance (adjusted to 25.0°C)	SM2510 B 2011	12/27/18 13:38 LAM	Bryan	B	15.0	mL	25.0	mL	1	M093556
Total Alkalinity as CaCO3 (pH4.5)	SM2320 B 2011	12/26/18 13:05 LAM	Bryan	A	50.0	mL	200	mL	1	M093472
Total Dissolved Solids	SM2540 C 2011	12/21/18 11:20 AKS	Bryan	B	50.0	mL	50.0	mL	1	M093405
Total Hardness (EDTA) as CaCO3	SM2340 C 2011	1/2/19 17:22 PNS	Bryan	C	50.0	mL	50.0	mL	1	M093708
Turbidity	SM2130 B 2011	12/26/18 16:44 MRG	Bryan	C	10.0	mL	10.0	mL	1	M093504
See sub-contract reports for preparation information of subcontracted analyses.										

290098

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY PARAMETER MONITORING FORM 20679

Completed by PWS (or Agent)

PWS Name:	Frac Sand Terminal	**Laboratory Name:**	
PWS ID#:	TX 1420617	**TCEQ Lab ID #:**	
PWS Address:	5577 N IH35 Cotulla TX	**Laboratory Address:**	Aqua-Tech Laboratories, Inc. 635 Phil Gramm Blvd Bryan, TX 77807 TX 239
PWS Contact:	Chandler Atkins		
PWS Contact Phone #:	512 797-1360	**Laboratory Contact:**	Marianne Guzman 979-778-9797

Inhibitor or Stablizer Used (√): ☐ Phosphate ☐ Silica ☐ Calcium carbonate

TREATMENT — **Alkalinity Dosage Rate:** — **Inhibitor Dosage Rate:** — **Laboratory Contact Phone #:**

Sample Information

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

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

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	EP001-Wellhouse	121918	9:10 AM	7.24	20.8				-01A,B,C 803351B	√	√	√	√	√	√	√	√	√	√		
DS01	DSTWQP	Breakroom Sink	121918	9:20 AM	7.37	20.4 (2KA)				-02A,B,C	√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
								MEEKS			√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		

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
Chandler Atkins		Hydro Resources	12-20-18

Sample Conditions Upon Receipt (√)

☐ Samples received unpreserved? ☑ Iced ☐ Ambient

Rejection Code (if applicable): — Actual / Corrected sample temperature: 5.3/5.3 CT

Date & Time of Sample Preservation (Acidified): 122018 to 1704 MEEKS — Thermometer ID #: 07155710

Chain of Custody

Relinquished By (Signature)	Date/Time:	Relinquished By Courier (Signature)	Date/Time:
Chandler Atkins	12-20-18 15:47	MEEKS	
Received By Courier (Signature)	**Date/Time:**	**Received By Lab (Signature)**	**Date/Time:**
		Kelly Kukowski	12/20/18 1547

Laboratory Comments:

TCEQ 20679 (Rev 01/2018)

Ana-Lab Corp.
P.O. Box 9000
Kilgore, TX 75663
903/984-0551

LELAP-accredited #02008

Report

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Aqua-Tech Laboratories (Austin
John Brien
635 Phil Gramm Blvd.
Bryan, TX 77807-9104

Account
AQU5-C

Project
856531

This report consists of this Table of Contents and the following pages:

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 12/27/2018

Account	*Project*
AQU5-C	856531

Report To

Aqua-Tech Laboratories (Austin
John Brien
635 Phil Gramm Blvd.
Bryan, TX 77807-9104

Results

1745462 **B033518-01** *Received:* 12/21/2018

Drinking Water *Collected by:* Client Aqua-Tech Laboratori *PO:*
Taken: 12/19/2018 09:10:00

EPA 300.0 2.1 *Prepared:* 815314 12/22/2018 08:08:00 *Analyzed* 815314 12/22/2018 08:08:00 AMB

	Parameter	*Results*	*Units*	*RL*	*Flag*	*CAS*	*Bottle*
N	**Chloride**	**137**	**mg/L**	5.00			01

EPA 300.0 2.1 *Prepared:* 815563 12/26/2018 08:57:00 *Analyzed* 815563 12/26/2018 08:57:00 KRR

	Parameter	*Results*	*Units*	*RL*	*Flag*	*CAS*	*Bottle*
N	**Sulfate**	**506**	**mg/L**	30.0			01

1745464 **B033518-02** *Received:* 12/21/2018

Drinking Water *Collected by:* Client Aqua-Tech Laboratori *PO:*
Taken: 12/19/2018 09:20:00

EPA 300.0 2.1 *Prepared:* 815314 12/22/2018 08:32:00 *Analyzed* 815314 12/22/2018 08:32:00 AMB

	Parameter	*Results*	*Units*	*RL*	*Flag*	*CAS*	*Bottle*
N	**Chloride**	**137**	**mg/L**	5.00			01

EPA 300.0 2.1 *Prepared:* 815563 12/26/2018 09:22:00 *Analyzed* 815563 12/26/2018 09:22:00 KRR

	Parameter	*Results*	*Units*	*RL*	*Flag*	*CAS*	*Bottle*
N	**Sulfate**	**486**	**mg/L**	30.0			01

Sample Preparation

1745462 **B033518-01** *Received:* 12/21/2018

Prepared: 12/27/2018 00:00:00 *Analyzed* 12/27/2018 00:00:00 TWV

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 12/27/2018

1745462	**B033518-01**						*Received:*	12/21/2018	
		Prepared:		*12/27/2018*	*00:00:00*	*Analyzed*	*12/27/2018*	*00:00:00*	*TWV*
z	**TCEQ WQP Form**	**See attached**							
		Prepared:	*815109*	*12/21/2018*	*00:00:00*	*Analyzed*	*815109*	*12/21/2018*	*00:00:00*	*CCP*
	Cooler Temperature	**0.3**		**degrees**					01
1745464	**B033518-02**						*Received:*	12/21/2018	
		Prepared:	*815109*	*12/21/2018*	*00:00:00*	*Analyzed*	*815109*	*12/21/2018*	*00:00:00*	*CCP*
	Cooler Temperature	**0.3**		**degrees**					01

Qualifiers:

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201-18, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.
These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

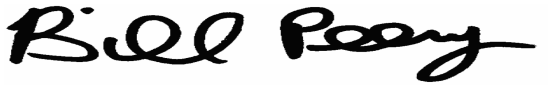
Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 12/27/2018



Bill Peery, MS, VP Technical Services

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results Summary

Printed 12/27/2018 Page 1 of 2

Project **856531**

Report To

Aqua-Tech Laboratories (Austin
John Brien
635 Phil Gramm Blvd.
Bryan, TX 77807-9104

TX1420017

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Drinking Water	**Ion Chromatography**								**EPA 300.0 2.1**		
1745462	**B033518-01**										
	Collection:	12/19/2018	09:10:00	Client				*Received:*	12/21/2018		
	Prepared: 815314										
				Analyzed:	815314			12/22/18	08:08:00		
Chloride		**137**	0.0196	0.196	0.300	5.00		**mg/L**	5.00	01	10.00
	Prepared: 815563										
				Analyzed:	815563			12/26/18	08:57:00		
Sulfate		**506**	0.00775	0.775	0.300	30.0		**mg/L**	5.00	01	100.00
1745464	**B033518-02**										
	Collection:	12/19/2018	09:20:00	Client				*Received:*	12/21/2018		
	Prepared: 815314										
				Analyzed:	815314			12/22/18	08:32:00		
Chloride		**137**	0.0196	0.196	0.300	5.00		**mg/L**	5.00	01	10.00
	Prepared: 815563										
				Analyzed:	815563			12/26/18	09:22:00		
Sulfate		**486**	0.00775	0.775	0.300	30.0		**mg/L**	5.00	01	100.00

MDL is Method Detection Limit (40 CFR 136 Appendix B)

SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)

MQL is the Method Quantitation Limit and corresponds to a low standard

MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results Summary

Printed 12/27/2018 Page 2 of 2

Project 856531

Report To

Aqua-Tech Laboratories (Austin
John Brien
635 Phil Gramm Blvd.
Bryan, TX 77807-9104

TX1420017

Qualifiers:

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201-18, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.
These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.

Bill Peery

Bill Peery, MS, VP Technical Services

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Quality Control

Printed 12/27/2018

TX1420017

Account	Project
AQU5-C	856531

Report To

Aqua-Tech Laboratories (Austin
John Brien
635 Phil Gramm Blvd.
Bryan, TX 77807-9104

Analytical Set **815314** **EPA 300.0 2.1**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	815314	0.058	0.0196	0.300	mg/L	119449605

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chloride	9.64	10.0	mg/L	96.4	90.0 - 110	119449601
	9.80	10.0	mg/L	98.0	90.0 - 110	119449616
	9.84	10.0	mg/L	98.4	90.0 - 110	119449628

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Chloride	815314	4.81	4.81	5.00	85.0 - 110	96.2	96.2	mg/L	0	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chloride	1745540	167	167	120	50.0	80.0 - 120	94.0	94.0	mg/L	0	20.0
	1745684	42.7	43.7	32.8	10.0	80.0 - 120	99.0	109	mg/L	9.62	20.0

Analytical Set **815563** **EPA 300.0 2.1**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Sulfate	815563	0.074	0.00775	0.300	mg/L	119454949

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Sulfate	9.92	10.0	mg/L	99.2	90.0 - 110	119454945
	10.3	10.0	mg/L	103	90.0 - 110	119454956

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Sulfate	815563	5.03	5.08	5.00	88.0 - 110	101	102	mg/L	0.989	20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Sulfate	1745464	568	570	486	100	80.0 - 120	82.0	84.0	mg/L	2.41	20.0

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; CCV - Continuing Calibration Verification

AQUA-TECH LABORATORIES, INC.

ATL - Bryan Facility:
635 Phil Gramm Blvd.
Bryan, TX 77807
(979) 778-3707
Fax (979) 778-3193

ATL - Austin Facility:
7500 Hwy 71 W, Suite 105
Austin, TX 78735
(512) 301-9559
Fax (512) 301-9552

Chain-of-Custody & Analysis Request

T104704371

SHIPPED TO:
Ana-Lab Corp. (NELAP Cert. T104704201)
2600 Dudley Road
Kilgore, TX 75662
Phone: (903) 984-0551
Fax: (903) 984-5914

C-O-C #

7 - B033518

Page 1 of 1

All analyses must be performed by a TNI approved method certified by the TCEQ. Contact ATL's sample custodian via voice and email if your methods do not meet this criteria.

Analysis Request for:	**Sample ID: B033518-01**	Sampled: 12/19/18 09:10	Matrix: Drinking Water	**Laboratory ID >>** 1945462
Chloride - EPA 300.0	SO4 DW - EPA 300.0			
Analysis Request for:	**Sample ID: B033518-02**	Sampled: 12/19/18 09:20	Matrix: Drinking Water	**Laboratory ID >>** 464
Chloride - EPA 300.0	SO4 DW - EPA 300.0			

CONTAINERS SUPPLIED: (ATL indicates cooler number in parentheses for each container - only required if more than one cooler listed below.)

( ) B033518-01 [D] - Cl SO4 0.5LP

( ) B033518-02 [D] - Cl SO4 0.5LP

Relinquished by: (print & sign)	ATL-Austin / ATL-Bryan / Sampler	Date	Time	Iced / Custody Sealed / Not Chilled
Kelly Kukowski	X	12/20/18	1710	
Carrier & Tracking Number: Lone Star	Cooler 1: AQU5 - ZY00BFYP			Sample Info "X" all that apply
Received by: (print & sign) Ashtyn Parker	Received in Lab: Ana-Lab	Date 12/21/18	Time 0920	Received Iced / CTU / Condition Good / Not Rec'd Iced

Abbreviations: DW - Drinking Water; NP - Non-Potable Water; S - Solid; CTU - Custody Transfer Unbroken; StP - Sterile Plastic; LP - Liter Plastic; LG - Liter Glass

Aqua-Tech Comments and Special Instructions

5 DAY TAT

See Attached for Tracking # and Temp

BRET

Line below documents condition at receipt in lab (shipped to) listed above.

Cooler Temperature (°C)	Temp. Read (TR)	Corrected Temp. (CT)	Thermometer ID
Cooler 1			
N/A	N/A	N/A	

Please email reports to: corp@aqua-techlabs.com

Please return cooler(s) to: Austin Facility

856531 CoC Print Group 001 of 001

290098

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY PARAMETER MONITORING FORM 20679

Completed by PWS (or Agent)

PWS Name:	Frac Sand Terminal
PWS ID#:	TX 1420017
PWS Address:	5577 N IH35 Cotulla TX
PWS Contact:	Chandler Adkins
PWS Contact Phone #:	512 797-1360

Completed by Laboratory

Laboratory Name:	
TCEQ Lab ID #:	
Laboratory Address:	Aqua-Tech Laboratories, Inc. 635 Phil Gramm Blvd Bryan, TX 77807 TX 239
Laboratory Contact:	Marianne Guzman 979-778-3707
Laboratory Contact Phone #:	

Inhibitor or Stabilizer Used (√): [ ] Phosphate [ ] Silica [ ] Calcium carbonate

TREATMENT: Alkalinity Dosage Rate: ___ Inhibitor Dosage Rate: ___

Sample Information

Sample Type (√): X Compliance [ ] Non-compliance

Sample Collector (√): X Public Water System [ ] Accredited Lab [ ] 3rd Party Contractor - LAB ID: AL

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? N 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	EP001-wellhouse	121918	9:10 AM	8.24	20.8				B033518 -01A,B,C	√	√	√	√	√	√	√	√	√	√		
DS01	DSTWQP	Breakroom Sink	121918	9:20 AM	7.83	20.9				-02A,B,C	√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		
											√	√	√	√	√	√	√	√	√	√		

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
Chandler Adkins	[signature]	Hydro Resources	12-20-18

Chain of Custody

Relinquished By (Signature): Chandler Adkins	Date/Time: 12-20-18 15:47	Relinquished By Courier (Signature): [signature]	Date/Time:
Received By Courier (Signature):	Date/Time:	Received By Lab (Signature): Kelly Kukowski [signature]	Date/Time: 12/20/18 1547

Sample Conditions Upon Receipt (√)

√ Samples received unpreserved? √ Iced [ ] Ambient

Rejection Code (if applicable): ___ Actual / Corrected sample temperature: 5.3/5.3 CT

Date & Time of Sample Preservation (Acidified): 122018 1704

Thermometer ID #: 0715570

Laboratory Comments:

TCEQ 20679 (Rev 01/2018)