



POCO LLC

Lab Report

Test/Iteration 1144-1
ACem P100.3.01C

12/9/2020

**Lab Report**

POCO LLC

PO Box 70183 | Houston, TX 77270

12/9/2020

Dear POCO LLC,

Thank you for the opportunity to submit a lab report for cementing services on the attached wellbore. American Cementing's priority is providing premium customer service while operating in a safe, efficient manner. If you have any questions regarding the proposal or services offered, please contact American Cementing at any time. Sincerely,

Jason Creel

Field Engineer | (307) 256-0306 | jason.creel@americancementing.com

Field Office

1716 E Allison Rd, Cheyenne, WY 82007

Phone: (307) 638-5585

General Lab Test Information

Date:	12/9/2020
Well Name:	Brighton Lakes 20-17-2CDH
Well API #:	05-001-10084
Fluid Type:	Lead
Job Type:	Long String
Test Type	Bulk
TMD:	18370 ft
TVD:	7000 ft
BHCT:	230 °F
BHST:	230 °F
Temperature Gradient:	2.00 °F/100ft
Surface Temperature:	80 °F
Density:	12.50 lb/gal
Yield:	2.21 ft ³ /sk
Water Requirement:	12.54 gal/sk
Sack Weight:	94.00 lbs
Fluid SG:	1.50
Service District:	Cheyenne

Material Weigh-up Information

No	Material	Function	Type	Form	Concen.	Uom	SG	Weight (g)	Volume (mL)
1	ASTM TYPE III	Cement	Base	Dry	100.00	%	3.14	443.19	141.14
2	GW-86	Viscosifier	Additive	Dry	0.20	%BWOB	1.40	0.89	0.63
3	FL-24	FluidLoss	Additive	Dry	0.30	%BWOB	1.22	1.33	1.09
4	IntegraSeal POLI	LostCirculation	Additive	Dry	0.13	lb/sk	1.40	0.61	0.44
5	FP-24	Defoamer	Additive	Dry	0.30	%BWOB	1.72	1.33	0.77
6	BENTONITE	Viscosifier	Additive	Dry	4.00	%BWOB	2.65	17.73	6.69
7	SR-20	Retarder	Additive	Dry	0.60	%BWOB	1.42	2.66	1.87
8	EC-2	BondEnhancer	Additive	Dry	3.00	%BWOB	3.19	13.30	4.17
	Water	-	-	-	-	-	1.00	493.19	493.19
								974.22	650.00

Density: 12.50 lb/gal Yield: 2.21 ft³/sk SG: 1.50 Water Req.: 12.54 gal/sk Water Src: Tap Water SG: 1.00

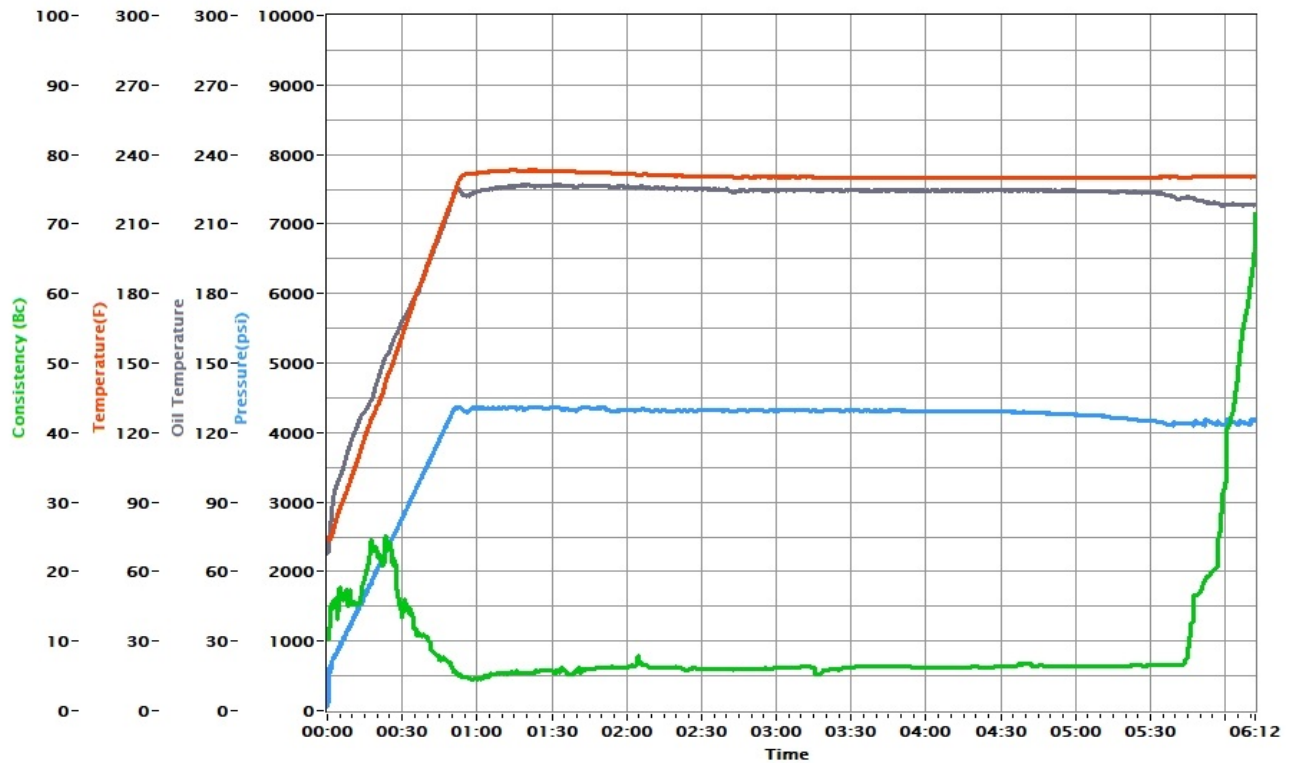
Test Analysis/Results

Mixability Analysis

	#1
Vortex:	Nickle Size @ 12,000 RPM

Thickening Time Analysis

	#1
Initial Consistency:	11 bc
30 bc:	05:59 (HH:MM)
50 bc:	06:05 (HH:MM)
70 bc:	06:12 (HH:MM)
Termination Time:	06:12 (HH:MM)
Termination Consistency:	70 bc



Conditioning Schedules

Thickening Time #1

No	Time (min)	Temp (°F)	Pressure (psi)	Conditioning	Static
1	0	80	535	Yes	No
2	51	230	4200	Yes	No
3	999	230	4200	Yes	No