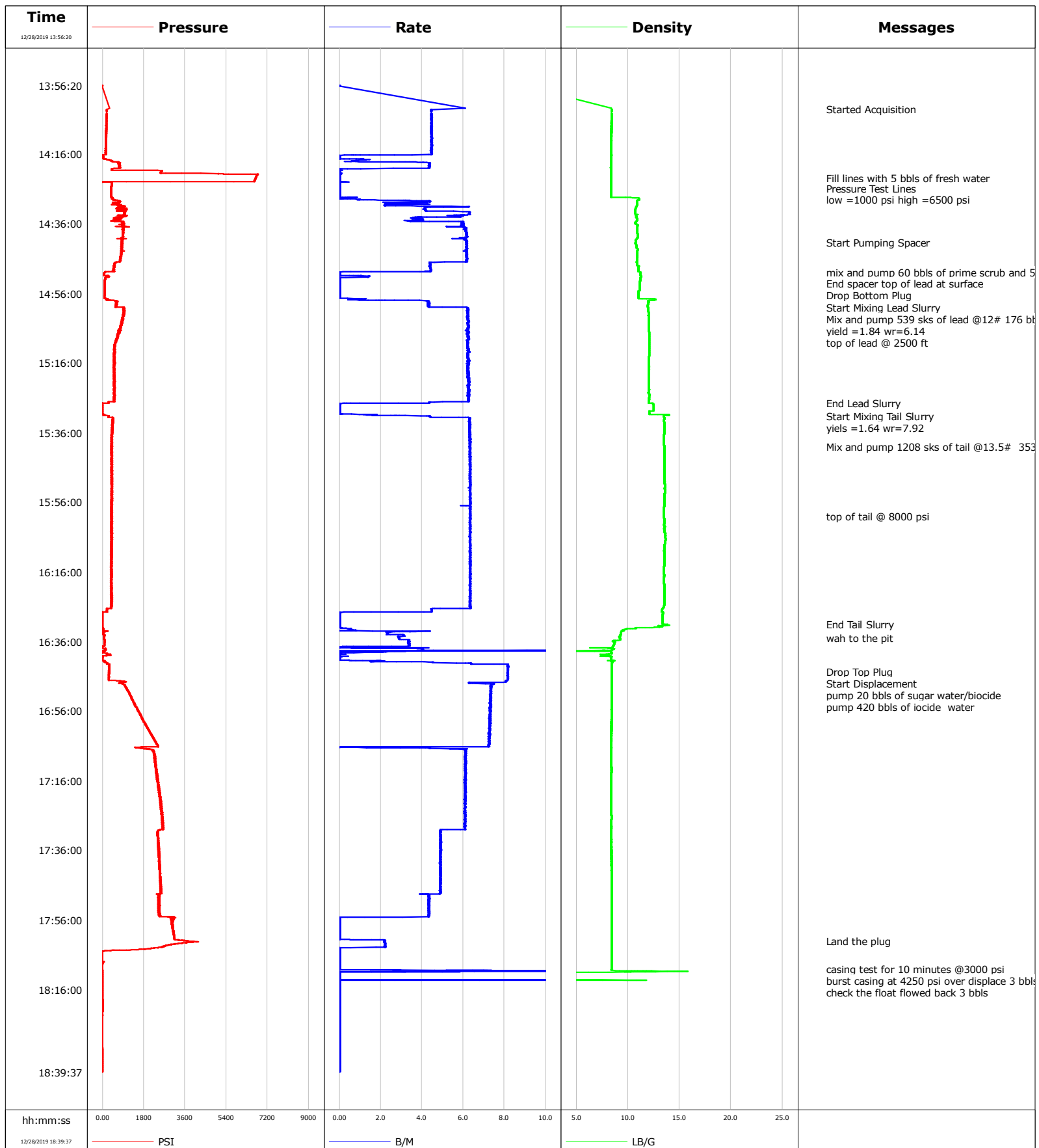


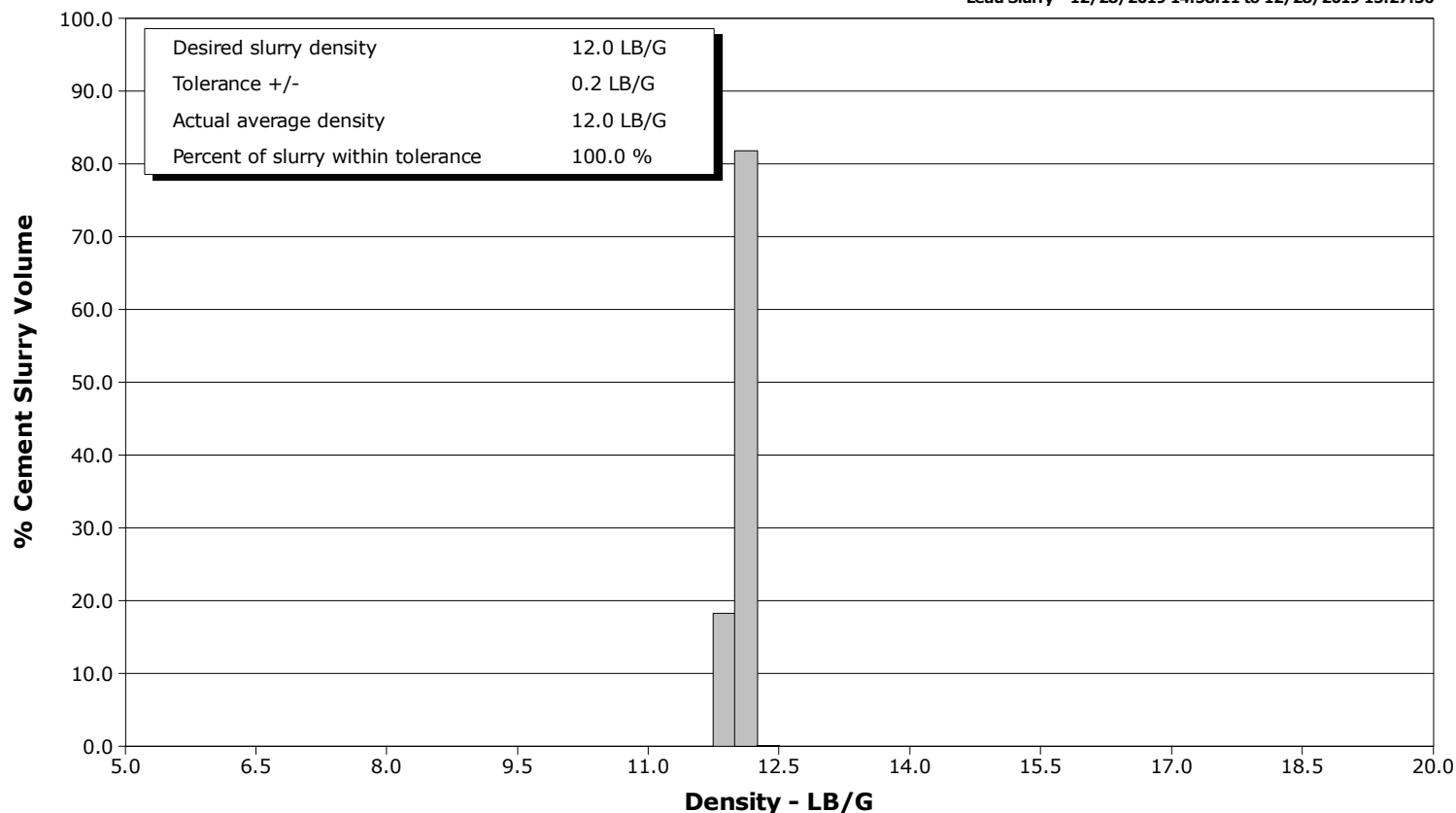
Well	CLELAND	Client	ANADARKO
Field	DJ	SIR No.	3104486
Engineer	ALBERT SNYDER	Job Type	PRODUCTION
Country	United States	Job Date	12-28-2019



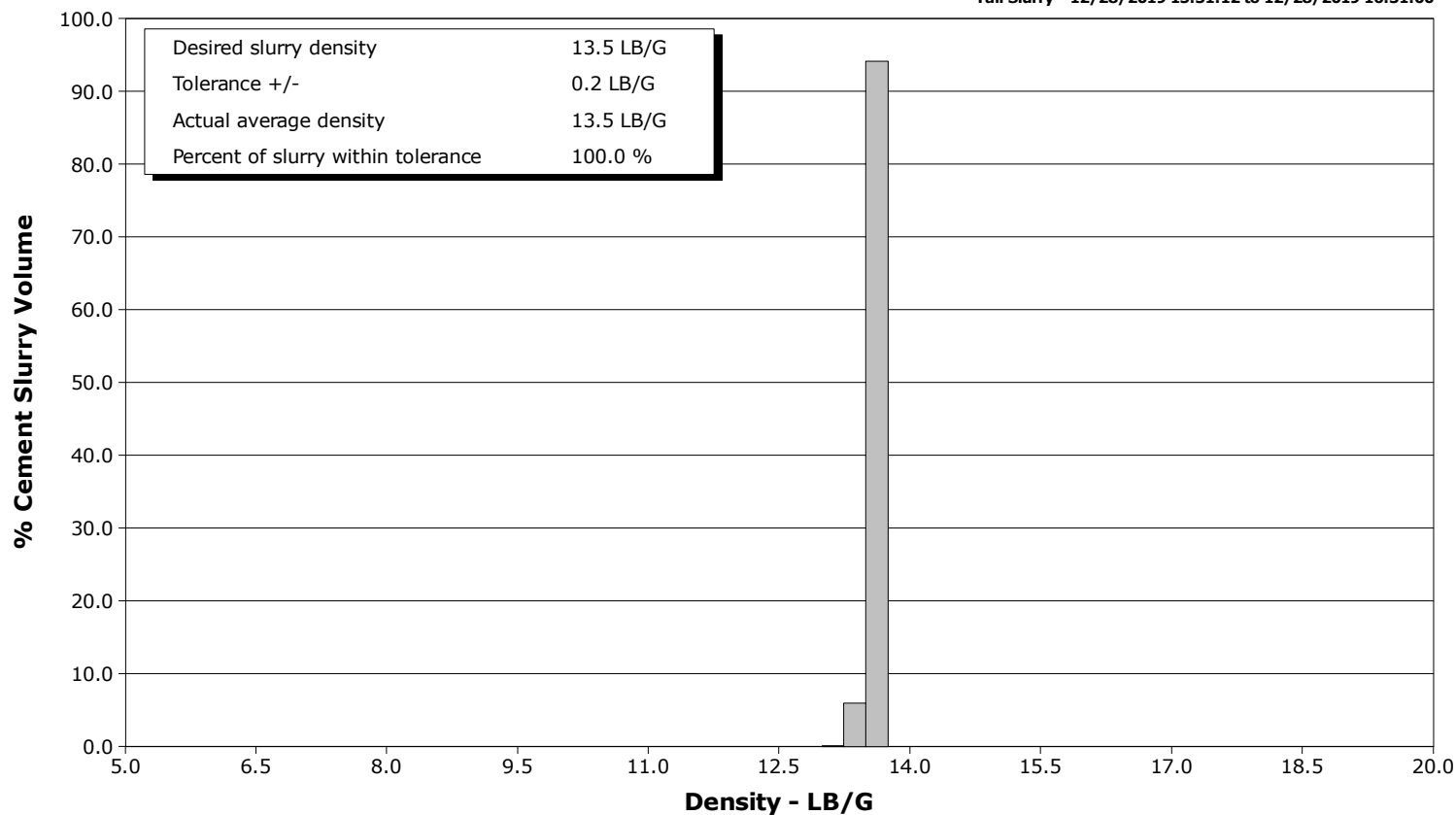
Well CLELAND
Field DJ
Engineer ALBERT SNYDER
Country United States

Client ANADARKO
SIR No. 3104486
Job Type PRODUCTION
Job Date 12-28-2019

Lead Slurry - 12/28/2019 14:58:11 to 12/28/2019 15:27:36



Tail Slurry - 12/28/2019 15:31:12 to 12/28/2019 16:31:00



Cementing Service Report

				Customer ANADARKO				Job Number 3104486							
Well CLELAND 15-5HZ			Location (legal) 15-5HZ			Schlumberger Location CWY			Job Start Dec/28/2019						
Field DJ		Formation Name/Type			Deviation deg		Bit Size in		Well MD 18941.0 ft		Well TVD 7797.0 ft				
County WELD		State/Province Colorado			BHP psi		BHST 230 degF		BHCT 230 degF		Pore Press. Gradient lb/gal				
Well Master 05-123-50492		API/UWI 05-123-50492													
Rig Name P461		Drilled For Oil & Gas		Service Via Land		Casing/ Liner									
						Depth, ft		Size, in		Weight, lb/ft		Grade	Thread		
Offshore Zone N/A		Well Class New		Well Type Development		1911.0		9.6		36.0		110	8RD		
						18941.0		5.5		17.0		110	8RD		
Drilling Fluid Type LT OBM		Max. Density 9.60 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe									
						T/D		Depth, ft		Size, in		Weight, lb/ft		Grade	Thread
Service Line Cementing		Job Type PRODUCTION													
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection		Perforations/Open Hole									
						Top, ft		Bottom, ft		shot/ft		No. of Shots		Total Interval	
Service Instructions						ft		ft						ft	
						ft		ft						Diameter	
						ft		ft						in	
		Treat Down Casing		Displacement 441.0 bbl		Packer Type		Packer Depth ft							
		Tubing Vol. bbl		Casing Vol. 441.0 bbl		Annular Vol. 120.0 bbl		Openhole Vol. 440.0 bbl							
Casing/Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools				Squeeze Job							
Lift Pressure 13553 psi		Shoe Type Guide				Squeeze Type									
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 18941.0 ft				Tool Type							
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type				Tool Depth ft					
Cement Head Type Double		Stage Tool Depth ft				Tail Pipe Size in									
Job Scheduled For Dec/28/2019 10:30		Arrived on Location Dec/28/2019 10:00		Leave Location Dec/28/2019 20:00		Collar Type Float				Tail Pipe Depth ft					
		Collar Depth 18936.0 ft				Sqz. Total Vol. bbl									
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
12/28/2019	13:56:20	-3	0.0	0.00	0.0	Stopped Acquisition									
12/28/2019	14:06:20	171	4.4	8.40	0.0										
12/28/2019	14:08:20	158	4.5	8.40	0.0										
12/28/2019	14:10:20	148	4.5	8.40	0.0										
12/28/2019	14:12:20	134	4.5	8.39	0.0										
12/28/2019	14:14:20	136	4.4	8.39	0.0										
12/28/2019	14:16:20	14	1.0	8.40	0.0										
12/28/2019	14:18:20	633	3.2	8.39	0.8										
12/28/2019	14:22:20	6718	0.0	8.39	9.1										
12/28/2019	14:23:00	6673	0.0	8.39	9.1	Fill lines with 5 bbls of fresh water									
12/28/2019	14:24:20	400	0.0	8.39	9.1										
12/28/2019	14:26:00	387	0.0	8.39	0.0	Pressure Test Lines									
12/28/2019	14:26:20	387	0.0	8.39	0.0										
12/28/2019	14:28:20	385	0.0	8.39	0.0										
12/28/2019	14:29:00	484	0.8	11.05	0.2	low =1000 psi high =6500 psi									
12/28/2019	14:30:20	588	2.2	10.88	4.0										
12/28/2019	14:32:20	983	4.2	10.71	11.6										
12/28/2019	14:34:20	729	3.7	10.84	23.0										
12/28/2019	14:36:20	892	6.0	10.92	32.5										
12/28/2019	14:38:20	919	6.2	10.92	44.6										
12/28/2019	14:40:20	859	6.0	10.87	56.9										

Well			Field	Job Start		Customer	Job Number
CLELAND 15-5HZ			DJ	Dec/28/2019		ANADARKO	3104486
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
12/28/2019	14:42:20	856	6.2	10.81	69.1		
12/28/2019	14:44:20	799	6.2	10.91	81.5		
12/28/2019	14:46:20	763	6.2	10.88	93.8		
12/28/2019	14:48:20	506	4.4	11.03	103.9		
12/28/2019	14:50:00	103	0.0	11.21	110.8	mix and pump 60 bbls of prime scrub and 51 bbls mud push	
12/28/2019	14:50:20	59	0.0	11.21	110.8		
12/28/2019	14:52:20	105	0.0	11.18	0.0		
12/28/2019	14:53:15	100	0.0	11.16	0.0	End spacer top of lead at surface	
12/28/2019	14:53:17	99	0.0	11.16	0.0	Drop Bottom Plug	
12/28/2019	14:54:20	95	0.0	11.15	0.0		
12/28/2019	14:56:20	88	0.0	11.03	0.0		
12/28/2019	14:58:11	637	4.3	11.98	1.0	Start Mixing Lead Slurry	
12/28/2019	14:58:14	587	4.3	11.98	1.2	Mix and pump 539 sks of lead @12# 176 bbl	
12/28/2019	14:58:15	644	4.3	11.98	1.3	yield =1.84 wr=6.14	
12/28/2019	14:58:16	618	4.3	11.98	1.4	top of lead @ 2500 ft	
12/28/2019	14:58:20	650	4.3	11.98	1.7		
12/28/2019	15:00:20	900	6.2	11.94	10.9		
12/28/2019	15:02:20	928	6.2	11.99	23.3		
12/28/2019	15:04:20	858	6.2	12.01	35.8		
12/28/2019	15:06:20	781	6.3	12.02	48.2		
12/28/2019	15:08:20	692	6.2	12.07	60.7		
12/28/2019	15:10:20	593	6.2	12.06	73.2		
12/28/2019	15:12:20	507	6.3	12.04	85.6		
12/28/2019	15:14:20	513	6.2	12.03	98.1		
12/28/2019	15:16:20	533	6.2	12.02	110.6		
12/28/2019	15:18:20	519	6.3	12.03	123.0		
12/28/2019	15:20:20	495	6.3	12.00	135.5		
12/28/2019	15:22:20	506	6.3	12.02	148.0		
12/28/2019	15:24:20	498	6.3	12.03	160.6		
12/28/2019	15:26:20	510	6.2	12.04	173.1		
12/28/2019	15:27:36	-9	0.6	12.30	0.0	End Lead Slurry	
12/28/2019	15:28:20	-18	0.0	12.49	0.0		
12/28/2019	15:31:12	260	3.9	13.50	0.8	Start Mixing Tail Slurry	
12/28/2019	15:31:20	259	4.4	13.47	1.4	yields =1.64 wr=7.92	
12/28/2019	15:32:20	438	6.3	13.51	7.0		
12/28/2019	15:34:20	417	6.3	13.55	19.6		
12/28/2019	15:36:20	426	6.3	13.52	32.3		
12/28/2019	15:38:20	397	6.3	13.51	44.9		
12/28/2019	15:40:00	386	6.3	13.52	55.4	Mix and pump 1208 sks of tail @13.5# 353 bbls	
12/28/2019	15:40:20	390	6.3	13.53	57.6		
12/28/2019	15:42:20	409	6.3	13.53	70.2		
12/28/2019	15:44:20	410	6.3	13.54	82.9		
12/28/2019	15:46:20	403	6.3	13.52	95.6		
12/28/2019	15:48:20	386	6.3	13.56	108.2		
12/28/2019	15:50:20	422	6.3	13.55	120.9		
12/28/2019	15:52:20	390	6.3	13.57	133.6		
12/28/2019	15:54:20	385	6.3	13.53	146.3		
12/28/2019	15:56:20	393	6.3	13.55	158.9		
12/28/2019	15:58:20	400	6.3	13.50	171.6		
12/28/2019	16:00:00	385	6.3	13.50	182.2	top of tail @ 8000 psi	
12/28/2019	16:00:20	391	6.3	13.50	184.3		
12/28/2019	16:02:20	411	6.3	13.52	196.9		
12/28/2019	16:04:20	373	6.3	13.53	209.6		
12/28/2019	16:06:20	391	6.3	13.62	222.3		

Well			Field	Job Start		Customer	Job Number
CLELAND 15-5HZ			DJ	Dec/28/2019		ANADARKO	3104486
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
12/28/2019	16:10:20	392	6.3	13.52	247.6		
12/28/2019	16:12:20	369	6.3	13.53	260.3		
12/28/2019	16:14:20	377	6.3	13.52	273.0		
12/28/2019	16:16:20	415	6.3	13.51	285.7		
12/28/2019	16:18:20	370	6.3	13.51	298.3		
12/28/2019	16:20:20	366	6.3	13.53	311.0		
12/28/2019	16:22:20	415	6.4	13.55	323.7		
12/28/2019	16:24:20	385	6.3	13.56	336.4		
12/28/2019	16:26:20	352	6.4	13.40	349.0		
12/28/2019	16:28:20	-17	0.0	13.37	0.0		
12/28/2019	16:30:20	-16	0.0	13.36	0.0		
12/28/2019	16:31:00	-15	0.0	13.35	0.0	End Tail Slurry	
12/28/2019	16:32:20	24	0.5	10.15	0.1		
12/28/2019	16:34:20	78	3.2	9.25	4.1		
12/28/2019	16:35:00	57	2.9	9.21	6.1	wah to the pit	
12/28/2019	16:36:20	72	3.4	8.69	10.4		
12/28/2019	16:38:20	124	4.0	8.49	15.7		
12/28/2019	16:42:20	204	6.4	8.44	3.2		
12/28/2019	16:44:20	287	8.2	8.43	19.2		
12/28/2019	16:44:38	285	8.2	8.41	21.7	Drop Top Plug	
12/28/2019	16:44:41	289	8.1	8.41	22.1	Start Displacement	
12/28/2019	16:45:12	282	8.1	8.41	26.3	pump 20 bbls of sugar water/biocide	
12/28/2019	16:45:41	281	8.2	8.40	30.2	pump 420 bbls of iocide water	
12/28/2019	16:46:20	274	8.2	8.41	35.5		
12/28/2019	16:48:20	940	7.4	8.40	50.9		
12/28/2019	16:50:20	1117	7.3	8.40	65.6		
12/28/2019	16:52:20	1284	7.3	8.40	80.2		
12/28/2019	16:54:20	1423	7.3	8.40	94.9		
12/28/2019	16:56:20	1590	7.3	8.40	109.5		
12/28/2019	16:58:20	1755	7.3	8.40	124.1		
12/28/2019	17:00:20	1916	7.3	8.40	138.7		
12/28/2019	17:02:20	2098	7.2	8.40	153.3		
12/28/2019	17:04:20	2274	7.2	8.40	167.8		
12/28/2019	17:06:20	1672	0.0	8.40	181.8		
12/28/2019	17:08:20	2259	6.1	8.39	192.6		
12/28/2019	17:10:20	2301	6.1	8.40	204.8		
12/28/2019	17:12:20	2307	6.1	8.40	217.0		
12/28/2019	17:14:20	2352	6.1	8.39	229.2		
12/28/2019	17:16:20	2385	6.1	8.39	241.4		
12/28/2019	17:18:20	2466	6.1	8.40	253.6		
12/28/2019	17:20:20	2513	6.1	8.40	265.8		
12/28/2019	17:22:20	2525	6.1	8.40	278.0		
12/28/2019	17:24:20	2581	6.1	8.40	290.1		
12/28/2019	17:26:20	2630	6.1	8.41	302.3		
12/28/2019	17:28:20	2605	6.1	8.40	314.5		
12/28/2019	17:30:20	2416	4.9	8.40	326.3		
12/28/2019	17:32:20	2440	4.9	8.40	336.1		
12/28/2019	17:34:20	2440	4.9	8.40	345.9		
12/28/2019	17:36:20	2477	4.9	8.40	355.7		
12/28/2019	17:38:20	2490	4.9	8.40	365.5		
12/28/2019	17:40:20	2470	4.9	8.40	375.3		
12/28/2019	17:42:20	2509	4.9	8.40	385.1		
12/28/2019	17:44:20	2530	4.9	8.40	394.9		
12/28/2019	17:46:20	2533	4.9	8.40	404.6		

Well			Field		Job Start	Customer		Job Number	
CLELAND 15-5HZ			DJ		Dec/28/2019	ANADARKO		3104486	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/28/2019	17:50:20	2467	4.3	8.40	423.2				
12/28/2019	17:52:20	2505	4.3	8.40	431.8				
12/28/2019	17:54:20	2477	4.3	8.40	440.5				
12/28/2019	17:56:20	3006	0.0	8.40	0.0				
12/28/2019	17:58:20	3045	0.0	8.40	0.0				
12/28/2019	18:00:20	3104	0.0	8.40	0.0				
12/28/2019	18:02:00	3732	2.2	8.40	0.8	Land the plug			
12/28/2019	18:02:20	3923	2.2	8.40	1.5				
12/28/2019	18:04:20	1835	0.0	8.40	3.0				
12/28/2019	18:06:20	-30	0.0	8.40	3.0				
12/28/2019	18:08:20	0	0.0	8.40	3.0				
12/28/2019	18:10:00	-33	0.0	8.40	3.0	casing test for 10 minutes @3000 psi			
12/28/2019	18:10:20	-1	1.5	8.39	3.1				
12/28/2019	18:11:00	-2	0.0	1.22	7.1	burst casing at 4250 psi over displace 3 bbls			
12/28/2019	18:12:00	-2	0.0	0.02	7.1	check the float flowed back 3 bbls			
12/28/2019	18:12:20	-2	0.0	0.11	7.1				
12/28/2019	18:14:20	-1	0.0	0.01	8.3				
12/28/2019	18:16:20	-1	0.0	0.00	8.3				
12/28/2019	18:18:20	-0	0.0	0.00	8.3				
12/28/2019	18:20:20	1	0.0	0.00	8.3				
12/28/2019	18:22:20	-20	0.0	-0.00	8.3				
12/28/2019	18:24:20	-27	0.0	0.00	8.3				
12/28/2019	18:26:20	-26	0.0	0.00	8.3				
12/28/2019	18:28:20	-25	0.0	0.00	8.3				
12/28/2019	18:30:20	-23	0.0	0.00	8.3				
12/28/2019	18:32:20	-22	0.0	0.00	8.3				
12/28/2019	18:34:20	-20	0.0	0.00	8.3				
12/28/2019	18:36:20	-19	0.0	0.00	8.3				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 7.0	N2	Mud	Maximum Rate 8.0		Total Slurry 529.0	Mud 0.0	Spacer 111.0	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 4250	Final 3000	Average 1120	Bump Plug to 3000	Breakdown	Type FreshWater	Volume bbl	Density 8.34 lb/gal				
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl		Displacement 441.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl				
					Washed Thru Perfs <input type="checkbox"/>		To ft				
Customer or Authorized Representative TERRY HACKFORD			Schlumberger Supervisor ALBERT SNYDER			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>				
						-	-				