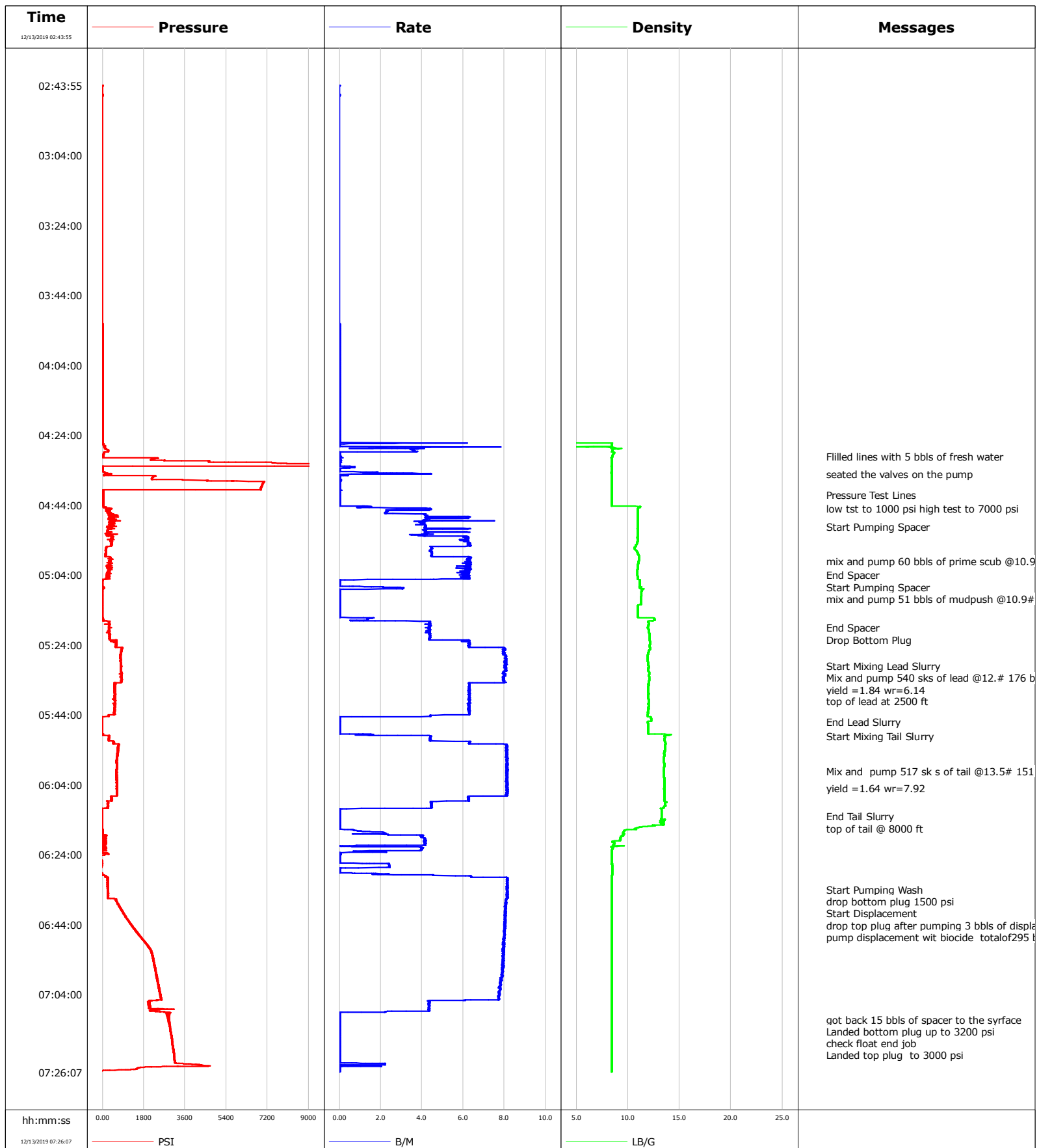


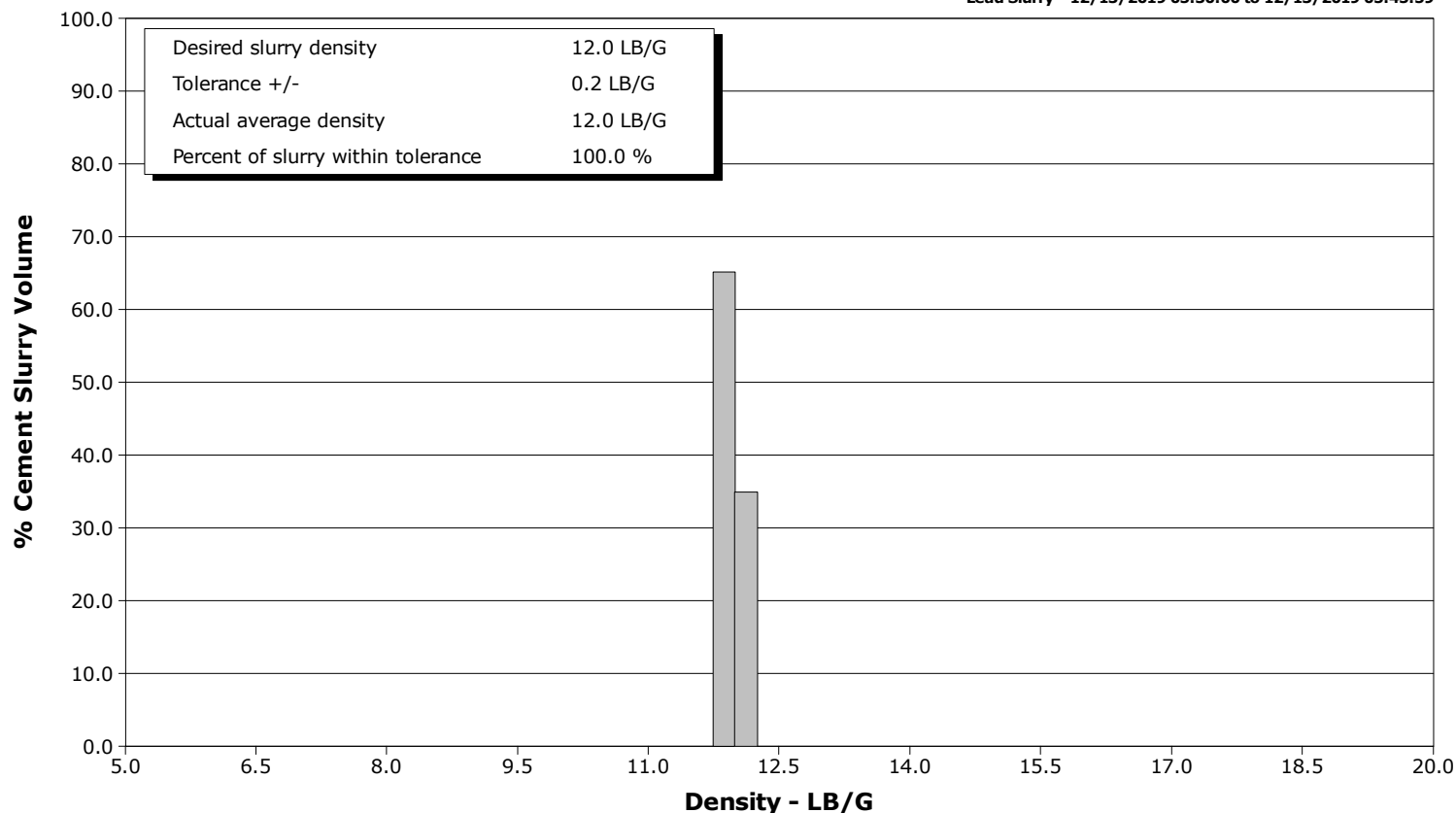
<b>Well</b>	JODSTER NORTH	<b>Client</b>	ANADARKO
<b>Field</b>	DJ	<b>SIR No.</b>	3100712
<b>Engineer</b>	ALBERT SNYDER	<b>Job Type</b>	PRODUCTION
<b>Country</b>	United States	<b>Job Date</b>	12-13-2019



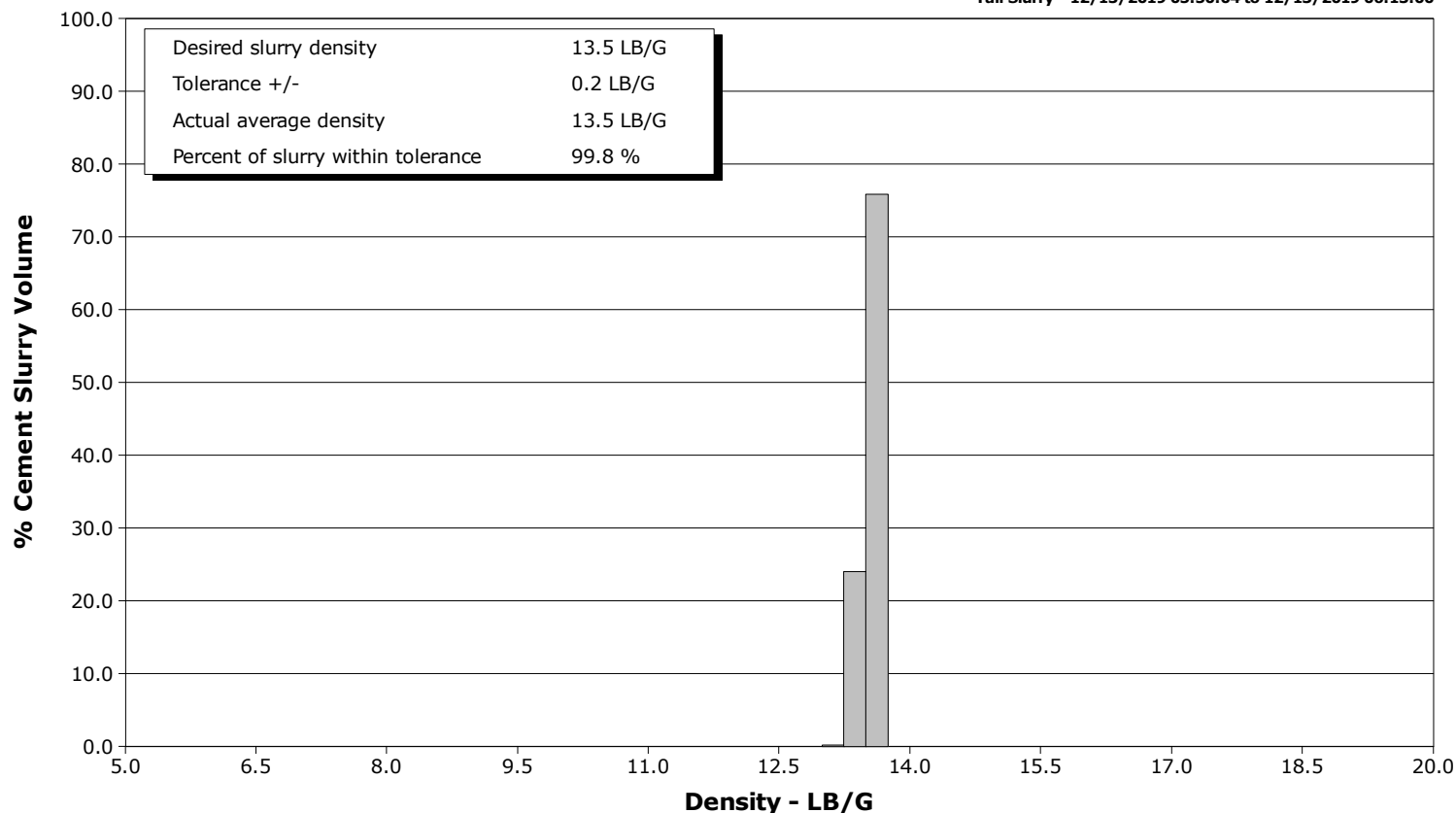
**Well** JODSTER NORTH  
**Field** DJ  
**Engineer** ALBERT SNYDER  
**Country** United States

**Client** ANADARKO  
**SIR No.** 3100712  
**Job Type** PRODUCTION  
**Job Date** 12-13-2019

**Lead Slurry - 12/13/2019 05:30:00 to 12/13/2019 05:45:59**



**Tail Slurry - 12/13/2019 05:50:04 to 12/13/2019 06:13:00**



# Cementing Service Report

				Customer ANADARKO			Job Number 3100712	
Well JODSTER NORTH 25-10HZ			Location (legal) 15-10HZ		Schlumberger Location CWY		Job Start Dec/13/2019	
Field DJ		Formation Name/Type		Deviation deg	Bit Size in	Well MD 12707.0 ft		Well TVD 7041.0 ft
County WELD		State/Province Colorado		BHP psi	BHST 230 degF	BHCT 230 degF	Pore Press. Gradient lb/gal	
Well Master 06558456		API/UWI 05-069-06515						
Rig Name PRECISION 564	Drilled For Oil and 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	1924.0	9.6	36.0	110	8RD
				12707.0	5.5	17.0	110	8RD
Drilling Fluid Type LT OBM		Max. Density 9.10 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade
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 295.0 bbl		Packer Type		Packer Depth ft		
	Tubing Vol. bbl	Casing Vol. 295.7 bbl		Annular Vol. 92.0 bbl		Openhole Vol. 332.0 bbl		
Casing/Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input type="checkbox"/>		Casing Tools			Squeeze Job	
Lift Pressure 9087 psi				Shoe Type Guide			Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 12707.0 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/13/2019 12:00		Arrived on Location Dec/12/2019 11:30		Leave Location Dec/13/2019 07:30		Collar Type Float		Tail Pipe Depth ft
						Collar Depth 12691.0 ft		Sqz. Total Vol. bbl
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
12/13/2019	02:43:55	2	0.0	-0.00	0.0	Started Acquisition		
12/13/2019	03:53:55	3	0.0	-0.00	0.0			
12/13/2019	03:55:55	3	0.0	0.00	0.0			
12/13/2019	03:57:55	3	0.0	0.00	0.0			
12/13/2019	03:59:55	3	0.0	-0.00	0.0			
12/13/2019	04:01:55	4	0.0	-0.00	0.0			
12/13/2019	04:03:55	4	0.0	-0.00	0.0			
12/13/2019	04:05:55	4	0.0	-0.00	0.0			
12/13/2019	04:07:55	4	0.0	0.00	0.0			
12/13/2019	04:09:55	4	0.0	-0.00	0.0			
12/13/2019	04:11:55	4	0.0	-0.00	0.0			
12/13/2019	04:13:55	4	0.0	0.00	0.0			
12/13/2019	04:15:55	4	0.0	-0.00	0.0			
12/13/2019	04:17:55	4	0.0	-0.00	0.0			
12/13/2019	04:19:55	4	0.0	-0.00	0.0			
12/13/2019	04:21:55	4	0.0	-0.00	0.0			
12/13/2019	04:23:55	3	0.0	-0.00	0.0			
12/13/2019	04:25:55	2	0.0	-0.00	0.0			
12/13/2019	04:27:55	112	3.5	8.82	2.5			
12/13/2019	04:29:55	38	0.0	8.49	5.6			
12/13/2019	04:30:00	37	0.0	8.48	5.6	Filled lines with 5 bbls of fresh water		

Well			Field		Job Start		Customer		Job Number	
JODSTER NORTH 25-10HZ			DJ		Dec/13/2019		ANADARKO		3100712	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL	Message		
12/13/2019	04:33:55	10		0.0	8.41		6.0			
12/13/2019	04:35:00	400		4.4	8.41		7.2	seated the valves on the pump		
12/13/2019	04:35:55	2203		0.0	8.41		7.9			
12/13/2019	04:37:55	6982		0.0	8.41		7.9			
12/13/2019	04:39:55	25		0.0	8.41		7.9			
12/13/2019	04:41:00	23		0.0	8.41		0.0	Pressure Test Lines		
12/13/2019	04:41:55	22		0.0	8.41		0.0			
12/13/2019	04:43:55	23		0.0	8.40		0.0			
12/13/2019	04:45:00	376		4.4	10.98		1.5	low tst to 1000 psi high test to 7000 psi		
12/13/2019	04:45:55	291		2.3	10.94		4.4			
12/13/2019	04:47:55	312		4.2	10.96		12.2			
12/13/2019	04:49:55	505		4.2	10.96		20.8			
12/13/2019	04:50:00	326		4.2	10.95		21.1	Start Pumping Spacer		
12/13/2019	04:51:55	219		4.2	10.95		29.7			
12/13/2019	04:53:55	405		6.2	10.95		40.1			
12/13/2019	04:55:55	176		4.5	10.73		52.3			
12/13/2019	04:57:55	142		4.5	10.97		61.2			
12/13/2019	04:59:55	367		6.2	11.04		72.3			
12/13/2019	05:00:00	329		6.3	11.03		72.8	mix and pump 60 bbls of prime scub @10.9 with surfactant		
12/13/2019	05:03:55	235		6.1	10.92		97.2			
12/13/2019	05:04:00	200		6.0	10.92		97.7	End Spacer		
12/13/2019	05:05:00	161		6.1	10.94		103.9	Start Pumping Spacer		
12/13/2019	05:05:55	-9		0.0	11.15		105.4			
12/13/2019	05:07:55	42		3.0	11.35		107.1			
12/13/2019	05:09:55	-16		0.0	11.27		0.0			
12/13/2019	05:10:00	-16		0.0	11.27		0.0	mix and pump 51 bbls of mudpush @10.9#		
12/13/2019	05:11:55	-17		0.0	11.24		0.0			
12/13/2019	05:13:55	-17		0.0	10.98		0.0			
12/13/2019	05:15:55	-17		0.0	10.98		0.0			
12/13/2019	05:17:55	294		4.4	12.01		4.7			
12/13/2019	05:19:00	275		4.4	11.93		9.5	End Spacer		
12/13/2019	05:19:55	295		4.4	12.00		13.5			
12/13/2019	05:20:00	309		4.4	12.00		13.8	Drop Bottom Plug		
12/13/2019	05:21:55	321		4.4	12.10		22.2			
12/13/2019	05:23:55	575		6.3	12.12		33.6			
12/13/2019	05:25:55	813		8.0	12.01		48.3			
12/13/2019	05:27:55	795		8.1	11.92		64.3			
12/13/2019	05:29:55	809		8.1	11.99		80.4			
12/13/2019	05:30:00	807		8.0	11.99		81.1	Start Mixing Lead Slurry		
12/13/2019	05:31:55	822		7.9	12.06		96.5			
12/13/2019	05:32:00	825		8.0	12.07		97.2	Mix and pump 540 sks of lead @12.# 176 bbls		
12/13/2019	05:33:55	842		7.9	12.06		112.4			
12/13/2019	05:35:00	553		6.3	11.99		120.7	yield =1.84 wr=6.14		
12/13/2019	05:35:55	520		6.3	11.97		126.5			
12/13/2019	05:37:55	556		6.3	11.99		139.1			
12/13/2019	05:39:55	562		6.3	12.01		151.6			
12/13/2019	05:40:00	524		6.3	12.01		152.2	top of lead at 2500 ft		
12/13/2019	05:41:55	539		6.3	11.98		164.2			
12/13/2019	05:43:55	488		6.3	11.94		176.8			
12/13/2019	05:45:55	-34		0.0	11.93		0.0			
12/13/2019	05:45:59	-33		0.0	11.93		0.0	End Lead Slurry		
12/13/2019	05:47:55	-33		0.0	11.96		0.0			
12/13/2019	05:49:55	282		4.3	13.55		0.8			
12/13/2019	05:50:04	288		4.4	13.55		1.5	Start Mixing Tail Slurry		

Well			Field		Job Start	Customer	Job Number
JODSTER NORTH 25-10HZ			DJ		Dec/13/2019	ANADARKO	3100712
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
12/13/2019	05:53:55	664	8.1	13.59	25.9		
12/13/2019	05:55:55	638	8.1	13.50	42.1		
12/13/2019	05:57:55	610	8.1	13.54	58.3		
12/13/2019	05:59:55	589	8.1	13.47	74.6		
12/13/2019	06:00:00	618	8.1	13.46	75.3	Mix and pump 517 sk s of tail @13.5# 151 bbls	
12/13/2019	06:01:55	623	8.1	13.52	90.8		
12/13/2019	06:03:55	639	8.2	13.55	107.1		
12/13/2019	06:05:00	614	8.1	13.52	115.9	yield =1.64 wr=7.92	
12/13/2019	06:05:55	621	8.1	13.55	123.3		
12/13/2019	06:07:55	402	6.3	13.54	138.3		
12/13/2019	06:09:55	236	4.5	13.63	148.6		
12/13/2019	06:13:00	-32	0.0	13.25	152.3	End Tail Slurry	
12/13/2019	06:13:55	-32	0.0	13.46	0.0		
12/13/2019	06:15:00	-33	0.0	13.20	0.0	top of tail @ 8000 ft	
12/13/2019	06:15:55	-33	0.0	11.67	0.0		
12/13/2019	06:17:55	8	2.3	9.54	1.7		
12/13/2019	06:19:55	77	4.2	9.24	9.0		
12/13/2019	06:21:55	91	4.1	8.52	15.7		
12/13/2019	06:23:55	88	0.0	8.42	20.3		
12/13/2019	06:25:55	-42	0.0	8.42	0.0		
12/13/2019	06:27:55	-63	0.0	8.45	3.0		
12/13/2019	06:29:55	110	4.5	8.44	4.9		
12/13/2019	06:31:55	216	8.1	8.42	20.2		
12/13/2019	06:33:53	238	8.1	8.41	36.2	Start Pumping Wash	
12/13/2019	06:33:55	229	8.1	8.41	36.5		
12/13/2019	06:33:58	221	8.1	8.41	36.9	drop bottom plug 1500 psi	
12/13/2019	06:34:03	233	8.1	8.41	37.6	Start Displacement	
12/13/2019	06:34:05	226	8.1	8.41	37.8	drop top plug after pumping 3 bbls of displacement	
12/13/2019	06:35:06	227	8.1	8.41	46.1	pump displacement wit biocide totalof295 bbls	
12/13/2019	06:35:55	228	8.1	8.41	52.8		
12/13/2019	06:37:55	668	8.1	8.41	68.9		
12/13/2019	06:39:55	846	8.0	8.41	85.1		
12/13/2019	06:41:55	1030	8.0	8.41	101.1		
12/13/2019	06:43:55	1242	8.0	8.41	117.2		
12/13/2019	06:45:55	1478	8.0	8.41	133.2		
12/13/2019	06:47:55	1721	8.0	8.41	149.2		
12/13/2019	06:49:55	1958	8.0	8.40	165.1		
12/13/2019	06:51:55	2136	8.0	8.40	181.1		
12/13/2019	06:53:55	2224	7.9	8.40	196.9		
12/13/2019	06:55:55	2284	8.0	8.40	212.8		
12/13/2019	06:57:55	2343	7.9	8.40	228.6		
12/13/2019	06:59:55	2398	7.9	8.40	244.3		
12/13/2019	07:01:55	2440	7.8	8.40	259.9		
12/13/2019	07:03:55	2522	7.8	8.40	275.5		
12/13/2019	07:05:55	2039	4.3	8.40	289.9		
12/13/2019	07:07:55	2021	4.3	8.40	298.6		
12/13/2019	07:09:55	2843	0.0	8.41	0.0		
12/13/2019	07:11:05	2858	0.0	8.41	0.0	got back 15 bbls of spacer to the syrface	
12/13/2019	07:11:55	2911	0.0	8.41	0.0		
12/13/2019	07:13:00	2939	0.0	8.41	0.0	Landed bottom plug up to 3200 psi	
12/13/2019	07:13:05	2940	0.0	8.41	0.0	check float end job	
12/13/2019	07:13:55	2955	0.0	8.41	0.0		
12/13/2019	07:15:00	2979	0.0	8.41	0.0	Landed top plug to 3000 psi	
12/13/2019	07:15:55	3002	0.0	8.41	0.0		

Well JODSTER NORTH 25-10HZ			Field DJ		Job Start Dec/13/2019	Customer ANADARKO		Job Number 3100712	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/13/2019	07:19:55	3087	0.0	8.42	0.0				
12/13/2019	07:23:55	4030	2.2	8.41	0.7				

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 8.0	N2	Mud	Maximum Rate 8.0	Total Slurry 328.0	Mud 0.0	Spacer 110.0	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 4300	Final 3000	Average 721	Bump Plug to 3000	Breakdown	Type FreshWater	Volume bbl	Density 8.34 lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 295.0 bbl	Displacement 295.0 bbl	Mix Water Temp 50 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative LEVI KILLUGH			Schlumberger Supervisor ALBERT SNYDER			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					