

Cementing Treatment



Start Date	3-30-18	Well	G & D HANKS S-27-28HN
End Date	3-30-18	County	WELD
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	State/Province	CO
Client Field Rep	MARSH	API	05-123-46036
Service Supervisor	ALBERT SNYDER		
District	Cheyenne, WY	Type of Job	Surface

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Open Hole	13.50			1,556.00	1,556.00	30.00
Casing	8.92	9.63	36.00	1,556.00	1,556.00	

Shoe Length (ft): 44

HARDWARE

Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	3520
Top Plug Provided By	Bayswater	Max Casing Pressure - Operated (psi)	1180
Top Plug Size	9 5/8	Pipe Movement	None
Landing Collar Depth (ft)	1,507	Job Pumped Through	Cement head
Tool Type	Float Collar	Top Connection Thread	8RD
Tool Depth (ft)	1507	Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud In	3
Circulation Prior to Job	Yes	PV Mud Out	3
Circulation Time (min)	30	YP Mud In	1
Circulation Rate (bpm)	6	YP Mud Out	1
Circulation Volume (bbls)	200	10 sec SGS	1
Mud Density In (ppg)	9	10 min SGS	1
Mud Density Out (ppg)	9	30 min SGS	1

TEMPERATURE

Ambient Temperature (°F)	30	Slurry Cement Temperature (°F)	70
Mix Water Temperature (°F)	70	Flow Line Temperature (°F)	94

Cementing Treatment



BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	Water	8.3337			0.00				20.0000
Lead Slurry	BJCem S100.03.1C	12.0000	2.5298	14.86	0.00	1,050.00	265	667.0000	118.7000
Tail Slurry	BJCem S100.03.1C	12.5000	2.2256	12.59	1,050.00	500.00	150	336.0000	59.8000
Displacement Final	Water	8.3337			0.00			0.0000	116.6000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Water	Fresh Water	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	Foam Preventer, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Displacement Final	Water	Fresh Water	100.0000	PCT

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ Services	Amount of Cement Returned/Reversed	36
Calculated Displacement Volume (bbls)	116	Method Used to Verify Returns	visual
Actual Displacement Volume (bbls)	116	Amount of Spacer to Surface	20
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	Yes	Amount Bled Back After Job	1 bbl
Bump Plug Pressure (psi)	1180	Total Volume Pumped (bbls)	315
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Yes	Lost Circulation During Cement Job	No



Customer Name BAYSWATER
 Well Name G@D HANKS S27-28HN
 Job Type Surface

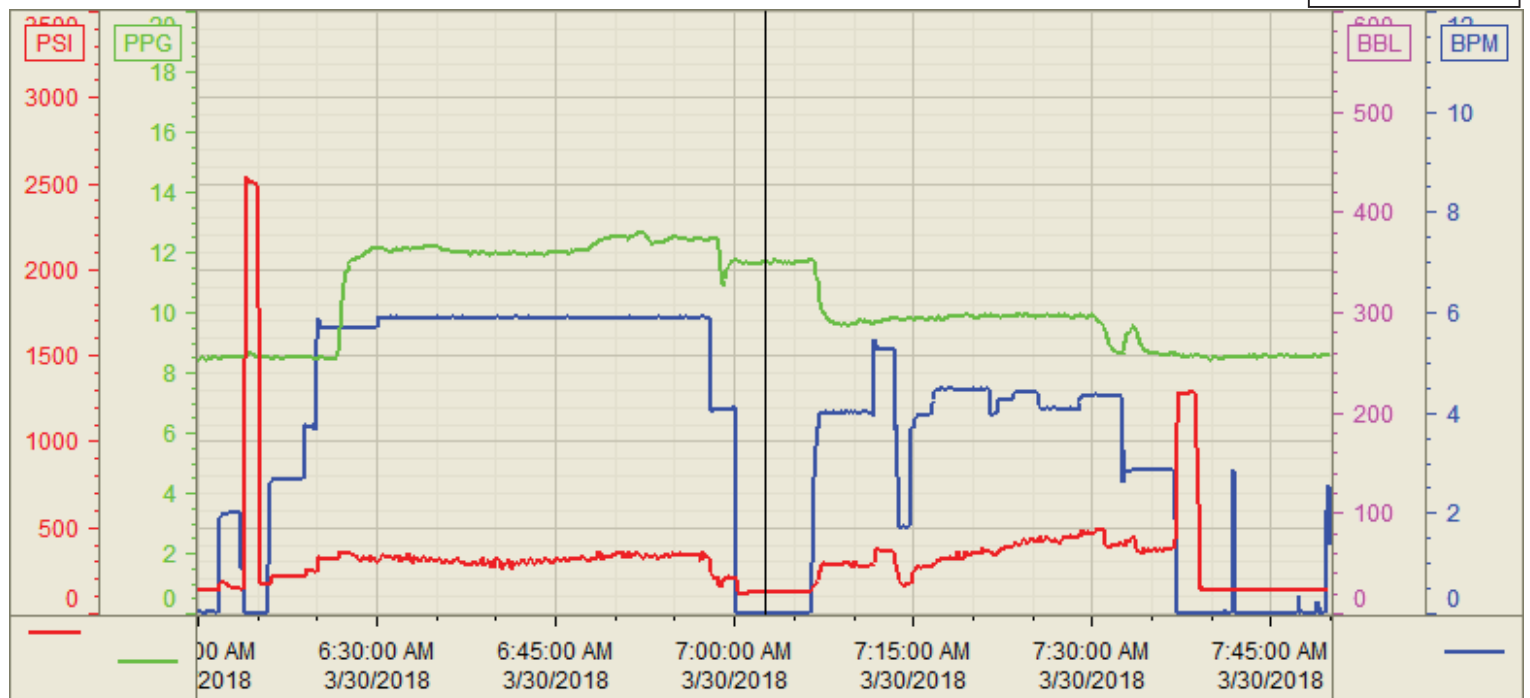
District Cheyenne
 Supervisor ALBERT SNYDER
 Engineer _____

Seq No.	Start Date/Time	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	3/29/2018 21:00	Called out						Called out at 21:00
2	3/29/2018 21:00	Waiting on location						Waiting on location from the last surface job
3	3/30/2018 3:30	Requested on location						Requested ready to pump 3:30 3-30
4	3/29/2018 21:00	Arrived on location						Wait on location from last job
5	3/30/2018 5:30	Steacs Briefing						Discussed rigging up with obm
6	3/30/2018 5:25	Rig up						worked with rig crew to get obm to us
7	3/30/2018 6:00	Safety meeting						Discussed with rig crew the job procedure
8	3/30/2018 6:15	Fill Lines		8.33	2	3	180	Using fresh water
9	3/30/2018 6:33	Test lines		8.33	1	1	2400	Lines tested to 2000 psi all good
10	3/30/2018 6:35	Pump water spacer		8.33	4	20	180	Pump dyed spacer
11	3/30/2018 6:41	Pump lead cement	58	12	6	119	350	Mix and pump 265 sks of p100 at 12# with 2.52 yield and 14.86 wr
12	3/30/2018 7:02	Pump Tail cement	60	12.5	6	59.3	350	Mix and pump 150 sks of p100 at 12# with 2.22 yields and 12.59 wr
13	3/30/2018 7:19	drop plug wash up						Used their plug wash on top of plug
14	3/30/2018 7:32	Displace well		10	4	40	260	Oil based mud 10 #
15	3/30/2018 7:36	Displace well		10	4	57	350	Oil based mud 10 # spacer to the surface 20 bbls
16	3/30/2018 7:41	Displace well		10	4	77	380	Cement to the surface 37 bbls
17	3/30/2018 7:46	slow rate		10	3	100	330	Slowed rate to land plug oil based mud 10#
18	3/30/2018 7:51	Land the plug		8.33	3	117	380/1180	Land the plug pumping fresh water
19	3/30/2018 7:55	Check the float						Float is holding flowed back 1 bbl
20	3/30/2018 8:30	Sreacs Briefing						Discussed how to rig down and keep in safe zones
21	3/30/2018 8:40	rig Down	73					Used teamwork wait to lower head until rig is ready
22	3/30/2018 9:00	After action review						Discussed how to make job go easier
23	3/30/2018 10:00	Steacs journey						Discussed journey back to cheyenne
24	3/30/2018 10:15	Depart location						Travel in convoy
25	3/30/2018 12:00	Arrive back at yard						Post trip truck and wash

Customer: BAYSWATER
Well Number: S27-28HN
Lease Info: G&D Hanks



Print Date/Time
3/30/2018 8:00:34 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	125.7	3/30/2018 7:02:34 AM	Cementar\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	11.67	3/30/2018 7:02:32 AM	Cementar\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00 i.	3/30/2018 7:02:32 AM i.	Cementar\Flow_Combined
4				
5				

Source: Control1 8:00:29 AM