



Great Western Operating Company, LLC

Surface Post Job Report

Sharp 2635-1-15HC (05-001-10132)

S:24 T:1S R:67W Weld CO



Great Western Operating Company, LLC

Great Western Operating Company, LLC | 1801 Broadway, Suite 500 | Denver, CO 80202

Dear Great Western Operating Company,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,
Jason Creel
Field Engineer I | (307) 256-0306 | jason.creel@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
Phone: (307) 638-5585

Sales Office 999 18th St. Suite 1200 Denver, CO 80202
Phone: (281) 408-2361

Cementing Treatment



Start Date	7/29/2018	Well	Sharp 2635-1-15HC
End Date	7/29/2018	API#	05-001-10132
Client	GREAT WESTERN OPERATING COMPANY, LLC	County	ADAMS
Service Sup.	Chad Johnson	State/Province	CO
District	Cheyenne, WY	Project ID	PRJ1009104
Type of Job	Surface	Execution ID	EXC-09278-G4H2R302

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Open Hole	13.50	0.00	0.00	1,740.00	1,740.00	25.00		
Casing	8.92	9.63	36.00	1,740.00	1,740.00		J-55	LTC

Shoe Length (ft): 45.00

HARDWARE

Top Plug Used?	Yes	Centralizers Quantity	17.00
Top Plug Provided By	Rig	Centralizers Type	Bow
Top Plug Size	9.625	Landing Collar Depth (ft)	1,695
Centralizers Used	Yes		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	8.50
Circulation Prior to Job	Yes	Mud Density Out (ppg)	8.50
Circulation Time (min)	30.00	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	75.00	Mix Water Temperature (°F)	65.00
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BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	Water	8.3300						20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3901	6.78	1700	760	1,056.0000	188.0000
Displacement Final	Water	8.3300					0.0000	128.2000

Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Tail Slurry	BJCem S100.3.XC	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.3.XC	FOAM PREVENTER, FP-13L	0.0300	GALS/SK

TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
Water	6.00	20.00
BJCem S100.3.XC	6.00	188.00
Water	6.00	128.20

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	3.00
Calculated Displacement Volume (bbls)	130.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	130.00	Amount of Spacer to Surface	20.00
Did Float Hold?	Yes	Amount Bled Back After Job	0.50
Bump Plug	Yes	Total Volume Pumped (bbls)	336.2
Bump Plug Pressure (psi)	500.00	Top Out Cement Spotted	No
Were Returns Planned at Surface	Yes	Lost Circulation During Cement Job	No
Cement returns During Job	Full		

EVENT LOG



Customer Name: GREAT WESTERN OPERATING COMPANY, LLC

Well Name: Sharp 2635-1-15HC

Job Type: Surface

Quote ID: QUO-16331-V1Z1N5

Plan ID: ORD-09278-G4H2R3

Execution ID: EXC-09278-G4H2R302

District: Cheyenne, WY

BJ Supervisor: Chad Johnson

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	07/29/2018 01:30	Callout					Crew called out requested on location for 0730
2	07/29/2018 06:30	Arrive on Location					Crew arrived on location
3	07/29/2018 06:45	Safety Meeting					Safety meeting
4	07/29/2018 07:00	Spot Units					Spotted all units
5	07/29/2018 07:15	Rig Up					Rigged up all equipment
6	07/29/2018 08:00	Customer					Waiting on rig to run casing
7	07/29/2018 13:45	Safety Meeting					Safety meeting
8	07/29/2018 14:12	Prime Up	8.3450	3.00	5.00	150.00	Fill lines with 5 bbls water with dye
9	07/29/2018 14:14	Pressure Test					Pressure test lines to 3000 psi
10	07/29/2018 14:16	Pump Spacer	8.3400	6.00	20.00	200.00	Pump 20 bbls water spacer
11	07/29/2018 14:27	Pump Tail Cement	14.5000	6.00	188.00	200.00	Pump 188 bbls cement at 14.5 ppg (760 sks, 1.39 Y, 6.81 gal/sk)
12	07/29/2018 15:08	Other (See comment)					Shutdown
13	07/29/2018 15:09	Drop Top Plug					Drop top plug
14	07/29/2018 15:10	Pump Displacement	8.3400	6.00	110.00	300.00	Pump 130 bbls water displacement
15	07/29/2018 15:32	Other (See comment)	8.3400	2.00	20.00	500.00	Slow pump rate to 2 bpm at 110 bbls away
16	07/29/2018 15:37	Cement Back to Surface					Cement to surface at 127 bbls away, 3 bbls cement to surface
17	07/29/2018 15:38	Land Plug					Land plug at 500 psi took to 1000 psi, after 15 min = 950 psi

EVENT LOG

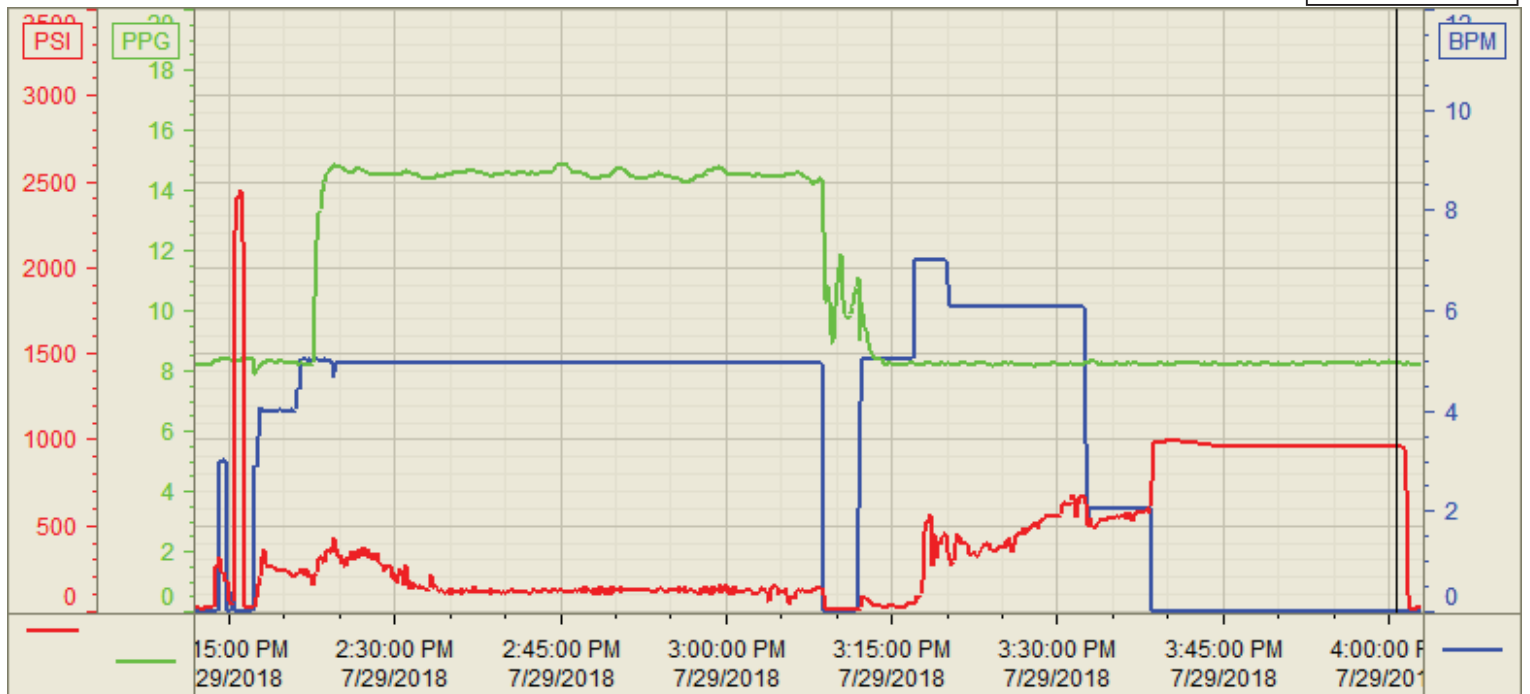


18	07/29/2018 16:00	Check Floats					Check floats, floats holding, 0.5 bbls back
19	07/29/2018 16:15	Safety Meeting					Safety meeting
20	07/29/2018 16:30	Rig Down					Rigged down all equipment
21	07/29/2018 17:30	Leave Location					Crew departed location

Customer: GREAT WESTERN
 Well Number: 2635-1-15HC
 Lease Info: SHARP



Print Date/Time
 7/29/2018 4:23:20 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	963.5 i. u.	7/29/2018 4:00:44 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.29 i.	7/29/2018 4:00:44 PM i.	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00 i.	7/29/2018 4:00:44 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 4:23:15 PM