



Great Western Operating Company, LLC

Wilson IC 03-262HN

API # 05-123-45442

Surface

02/04/2019

Quote #: 26591

Execution #: 15399



Great Western Operating Company, LLC

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

Dear Great Western Operating Company, LLC,

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 | (307) 638-5585

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

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Travis Tolman	RIG	Ikon 12
DISTRICT	Cheyenne, WY	COUNTY	WELD
SERVICE	Cementing	STATE / PROVINCE	CO

WELL GEOMETRY

TYPE	OD (in)	ID (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Open Hole	0.00	13.50	0.00	1,569.00	1,569.00	30.00		
Casing	9.63	8.92	36.00	1,569.00	1,569.00		J-55	LTC

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,524.54
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3520.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	15.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	LTC
Landing Collar Depth (ft)	1,524.54	Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	8.40
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Circulation Time (min)	30.00	Flare Prior to / during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	42.00	Mix Water Temperature (°F)	50.00
--------------------------	-------	----------------------------	-------

FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ O REQ (gals/sk)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	water	8.3300					20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	725	1007.0000	179.4000
Displacement 1	Water	8.3300				0.0000	116.6000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	BJCem S100.3.XC	CEMENT, ASTM TYPE III	100.0000	PCT

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	36.00
Calculated Displacement Vol (bbls)	116.60	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	116.60	Amt of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	0.50
Bump Plug Pressure (psi)	1288.00	Total Volume Pumped (bbls)	315.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Yes	Lost Circulation During Cement Job	No



BJ Cementing Event Log

Surface - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	02/03/2019 15:00	Callout					Crew called out for on location of 2100
2	02/03/2019 17:00	Depart for Location					Crew depart for location
3	02/03/2019 19:00	Arrive on Location					Arrived on location, met with company man to get numbers and discuss safety
4	02/03/2019 19:10	Spot Units					Spot equipment
5	02/03/2019 19:20	STEACS Briefing					Held safety meeting with crew to discuss rig up, job tasks and safety
6	02/03/2019 19:30	Rig Up					Rigged up from equipment to rig floor
7	02/03/2019 21:30	STEACS Briefing					Held safety meeting with company man, rig hands and crew to discuss job and safety
8	02/03/2019 21:57	Pump Spacer	8.3000	2.00	3.00	18.00	Load pump and lines with fresh water
9	02/03/2019 22:01	Pressure Test	8.3000			3116.00	Pressure test pump and lines
10	02/03/2019 22:03	Pump Spacer	8.3000	2.50	17.00	120.00	Pump fresh water spacer with dye
11	02/03/2019 22:10	Pump Lead Cement	14.5000	5.00	179.00	221.00	Pump 725sks/179.4bbls of lead cement at 14.5#=1.39Y-6.81gps
12	02/03/2019 22:50	End Pumping					Shut down, wash up pump
13	02/03/2019 22:52	Drop Top Plug					Drop top plug witnessed by company man and BJ rep
14	02/03/2019 22:56	Pump Displacement	8.3000	6.40	100.00	754.00	Pump displacement with fresh water, calculated displacement 116.6bbls
15	02/03/2019 23:14	Other (See comment)	8.3000	3.00	16.00	704.00	Slowed rate to land plug
16	02/03/2019 23:19	Land Plug				1288.00	Land plug, actual displacement 116.6, got 36bbls of cement to surface
17	02/03/2019 23:19	Other (See comment)				1288.00	15 min csg test: start 1288psi, end 1288psi - good.
18	02/03/2019 23:34	Check Floats				1288.00	Check float got .5bbl back
19	02/03/2019 23:35	STEACS Briefing					Held safety meeting with crew to discuss rig down and safety
20	02/03/2019 23:40	Rig Down					Rigged down from rig floor to equipment
21	02/04/2019 01:00	Leave Location					Crew ready to depart location



JobMaster Program Version 4.02C1

Job Number: 13204

Customer: Great Western

Well Name: Wilson IC 03-262HN

