



Great Western Operating Company

Wilson IC 03-259HN

API # 05-123-45453

Surface

02/03/2019

Quote #: 26592

Execution #: 15363



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 (lbs/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Open Hole	0.00	13.50	0.00	1,567.00	1,567.00	30.00		
Casing	9.63	8.92	36.00	1,567.00	1,567.00		J-55	LTC

HARDWARE

Bottom Plug Used?	No
Top Plug Used?	Yes
Top Plug Provided By	Non BJ
Top Plug Size	9.625
Centralizers Used	Yes
Centralizers Quantity	15.00
Centralizers Type	Bow
Landing Collar Depth (ft)	1,523

Tool Type	Float Collar
Tool Depth (ft)	1,522.54
Max Casing Pressure - Rated (psi)	3,520.00
Max Casing Pressure - Operated (psi)	2,000.00
Pipe Movement	None
Job Pumped Through	Manifold
Top Connection Thread	LTC
Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig
Circulation Prior to Job	Yes
Lost Circulation Prior to Cement Job	No
Mud Density In (ppg)	8.40

Solids Present at End of Circulation	No
Flare Prior to / during the Cement Job	No
Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	37.00
--------------------------	-------

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 (bbbls)
Spacer / Pre Flush / Flush	water	8.3300					20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	727	1,010.4000	180.0000
Displacement 1	Water	8.3300				0.0000	116.5000

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
Calculated Displacement Vol (bbls)	116.50
Actual Displacement Vol (bbls)	116.50
Did Float Hold?	Yes
Bump Plug	Yes
Bump Plug Pressure (psi)	1,313.00
Were Returns Planned at Surface	Yes
Cement Returns During Job	Yes

Amt of Cement Returned / Reversed	40.00
Method Used to Verify Returns	Visual
Amt of Spacer to Surface	20.00
Pressure Left on Casing (psi)	0.00
Amt Bled Back After Job	0.50
Total Volume Pumped (bbls)	315.00
Top Out Cement Spotted	No
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	02/02/2019 21:00	Callout	0.0000	0.00	0.00	0.00	Crew called out for on location of 0300
2	02/02/2019 23:00	Depart for Location	0.0000	0.00	0.00	0.00	Crew ready to depart to location
3	02/03/2019 01:00	Arrive on Location	0.0000	0.00	0.00	0.00	Arrived on location, met with company man to get numbers, discuss job and safety
4	02/03/2019 01:00	Spot Units	0.0000	0.00	0.00	0.00	Spot equipment
5	02/03/2019 01:10	STEACS Briefing	0.0000	0.00	0.00	0.00	Held safety meeting with crew to discuss rig up, job tasks and safety
6	02/03/2019 01:15	Rig Up	0.0000	0.00	0.00	0.00	Rigged up from equipment to rig floor
7	02/03/2019 04:20	STEACS Briefing	0.0000	0.00	0.00	0.00	Held safety meeting with company man, rig hands and crew to discuss job and safety
8	02/03/2019 04:39	Pump Spacer	8.3000	2.00	3.00	18.00	Load pump and lines with fresh water
9	02/03/2019 04:42	Pressure Test	8.3000	0.00	0.00	4182.00	Pressure test pump and lines with fresh water
10	02/03/2019 04:44	Pump Spacer	8.3000	2.50	17.00	43.00	Pump fresh water spacer with dye
11	02/03/2019 04:51	Pump Lead Cement	14.5000	5.00	179.00	196.00	Pump 727sks/180.0bbls of lead cement at 14.5#-1.39Y-6.81gps
12	02/03/2019 05:34	End Pumping	0.0000	0.00	0.00	0.00	Shut down, wash up pump
13	02/03/2019 05:40	Drop Top Plug	0.0000	0.00	0.00	0.00	Drop top plug, witnessed by company man and BJ rep
14	02/03/2019 05:44	Pump Displacement	8.3000	6.40	100.00	754.00	Pump displacement with fresh water, calculated displacement 116.5bbls
15	02/03/2019 06:02	Other (See comment)	8.3000	3.00	16.50	678.00	Slowed rate to land plug
16	02/03/2019 06:07	Land Plug	0.0000	0.00	0.00	1313.00	Land plug, actual displacement 116.5bbls, got 40bbls cement to surface
17	02/03/2019 06:07	Other (See comment)	0.0000	0.00	0.00	0.00	15min csg test: start 1288psi, end 1211psi - good.
18	02/03/2019 06:22	Check Floats	0.0000	0.00	0.00	0.00	Check floats got .5bbl back
19	02/03/2019 06:25	STEACS Briefing	0.0000	0.00	0.00	0.00	Held safety meeting with crew to discuss rig down
20	02/03/2019 06:30	Rig Down	0.0000	0.00	0.00	0.00	Rigged down from rig floor to equipment
21	02/03/2019 08:00	Leave Location	0.0000	0.00	0.00	0.00	Crew ready to depart location





JobMaster Program Version 4.02C1

Job Number: 13177

Customer: Great Western

Well Name: Wilson IC 03-259HN

