



Great Western Operating Company, LLC

Ottesen LE 09-362HN

API # 05-123-49306

Top Out

April 08, 2020

Quote #: QUO-44516-S2N7S9

Execution #: EXC-25633-N3J7S802



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	Eric Dewit	RIG	WM 454
CLIENT FIELD REPRESENTATIVE	Shane	COUNTY	WELD
DISTRICT	Cheyenne, WY	STATE / PROVINCE	CO
SERVICE	Cementing		

WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lbs/ft)	MD (ft)	TVD (ft)	GRADE	THREAD
Open Hole	13.50	0.00	0.00	370.00	370.00		
Drill Pipe	0.74	1.05	1.50	370.00	370.00	J-55	LTC

HARDWARE

Bottom Plug Used?	No	Pipe Movement	None
Top Plug Used?	No	Job Pumped Through	No Manifold
Centralizers Used	No	Top Connection Thread	LTC
Cement top in annulus (ft)	370	Top Connection Size	1

CIRCULATION PRIOR TO JOB

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

FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ O REQ. (gals/sk)	PLN TOP FLD (ft)	LENGTH (ft)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	0.00	200.00	100	140.0000	24.8000



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

Client: Great Western Operating Company, LLC

Well: OTTESEN LE #09-362HN

Well API: 05-123-49306

Start Date: 4/8/2020

End Date: 4/8/2020

Field Ticket #: FT-25633-N3J7S80201-1009583874



DISPLACEMENT AND END OF JOB SUMMARY

Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Were Returns Planned at Surface	Yes	Amt Bled Back After Job	0.00
Cement Returns During Job	Yes	Top Out Cement Spotted	No
Method Used to Verify Returns	Visual	Lost Circulation During Cement Job	No
		Amt of Cement Returned / Reversed (bbls)	17.5
		Amt of Spacer to Surface	5.00

Comments

TREATMENT REPORT

Cement 10' from ground level after completion of the job.

JOB SUMMARY

CBL run after the primary cement job showed good cement at 370'. Rig used drill pipe to wash down 13.5" x 9-5/8" annulus to cement top at 370', tagged solid cement Cemented through drillpipe. Had good cement returns to well cellar. Cellar depth was 15' below GL and final top of cement was 10' below GL - 17.5 bbl cement returns to surface.

BJ Cementing Event Log

Top Out - Cheyenne, WY - Eric Dewit

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	04/07/2020 16:30	Rig					Finished with the Ottesen LE 09-379HN Surface, waiting on rig to move and run in the hole on the Ottesen LE 09-362HN so we can top out
2	04/07/2020 19:30	Spot Units					Pre-rig up safety meeting, and spot trucks
3	04/07/2020 19:45	Rig Up					Rig up everything
4	04/07/2020 20:15	Rig					Waiting on rig to RIH with drill pipe
5	04/07/2020 23:00	Rig					Customer decides not to cement through the drill pipe. They decide to pull the drill pipe, and cement using the 1" tubing. Rig was unable to get below 260' with 1" so they went back in with drill pipe to 370'.
6	04/08/2020 04:00	STEACS Briefing					Pre-job safety meeting with, BJ crew, Rig crew, and Company man
7	04/08/2020 04:27	Other (See comment)	8.3400	3.40	5.00	91.00	Pump fresh water ahead
8	04/08/2020 04:30	Pressure Test	8.3400	0.00	0.00	2081.00	Test pumps and lines
9	04/08/2020 04:35	Pumping Cement	14.5000	3.00	76.00	107.00	Pump 300 sks of cement @14.5 ppg, Shutdown a few times at the end to make sure we got all the cement out of the bulk trucks
10	04/08/2020 05:10	End Pumping	14.5000	0.00	0.00	0.00	Vac truck sucked the water out of the cellar and had good cement 10' from ground level - 17.5 bbl cmt returns.
11	04/08/2020 05:20	STEACS Briefing					Pre-rig down safety meeting
12	04/08/2020 05:25	Rig Down					Rig everything down
13	04/08/2020 05:45	Leave Location					leave location to head back to the yard



JobMaster Program Version 5.00C1

Job Number: 22102

Customer: Great Western

Well Name: Ottesen LC 09-362HN

