



# Great Western Operating Company, LLC

POSTLE IC 09-099HC

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API # 05-123-47384

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## Surface

February 05, 2020

Quote #: QUO-41611-G4V5P0

Execution #: EXC-24356-P9C0P602



# Great Western Operating Company, LLC

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

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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

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# BJ Cementing Treatment Report

SERVICE SUPERVISOR	Gregory Black	RIG	Ikon 12
CLIENT FIELD REPRESENTATIVE	Kyle Hibbert	COUNTY	WELD
DISTRICT	Cheyenne, WY	STATE / PROVINCE	CO
SERVICE	Cementing		

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	EXCESS (%)	GRADE	THREAD
Casing	8.92	9.63	36.00	1,549.00		J-55	LTC
Open Hole	13.50	0.00	0.00	1,549.00	30.00		

## HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	3012.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	2020.00
Top Plug Size	9.625	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	15.00	Top Connection Thread	LTC
Centralizers Type	Bow	Top Connection Size	9.625
Landing Collar Depth (ft)	1,506.81		

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	8.40
Circulation Prior to Job	Yes	Mud Density Out (ppg)	8.40
Circulation Time (min)	30.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	8.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	290.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

## TEMPERATURE

Ambient Temperature (°F)	12.00	Slurry Cement Temperature (°F)	75.00
Mix Water Temperature (°F)	70.00		

## FLUID DETAILS

Client: Great Western Operating Company, LLC

Well: POSTLE IC 09-099HC

Well API: 05-123-47384

Start Date: 2/4/2020

End Date: 2/5/2020



FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> O REQ (gals/sk)	PLN TOP FLD (ft)	LENGTH (ft)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	Water	8.3300			0.00				20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	0.00	1,525.00	710	987.0000	175.6000
Displacement Final	Water	8.3300			0.00			0.0000	114.7000

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	35.00
Calculated Displacement Vol (bbls)	115.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	115.00	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)	1255.00	Total Volume Pumped (bbls)	312.00
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 - Gregory Black

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	02/04/2020 15:30	Callout					Called out for a RTS of 22:00.
2	02/04/2020 15:30	Arrive on Location					Arrived on location.
3	02/04/2020 20:30	STEACS Briefing					Pre rig up safety meeting.
4	02/04/2020 20:35	Rig Up					Rigged up.
5	02/04/2020 21:00	Rig					Waited on rig to finish running casing and circulating.
6	02/04/2020 23:45	STEACS Briefing					Pre job safety meeting with rig crew, crew, and company man.
7	02/04/2020 23:56	Prime Up	8.3400	2.80	5.00	330.00	Primed up treating iron for pressure test.
8	02/04/2020 23:59	Pressure Test	8.3400				Pressure tested.
9	02/05/2020 00:07	Pump Spacer	8.3400	4.00	20.00	249.00	Pumped water spacer with red dye.
10	02/05/2020 00:13	Pump Tail Cement	14.5000	4.00	175.00	600.00	Pumped 710 sks; 1.39 Yield; GPS: 6.81
11	02/05/2020 01:04	Drop Top Plug					Dropped top plug while pumper preps for washing on top of the plug.
12	02/05/2020 01:16	Pump Displacement	8.3400	4.00	20.00	600.00	Washed on plug and displaced.
13	02/05/2020 01:21	Pump Displacement	8.3400	8.00	80.00	1000.00	Water displacement, with good returns.
14	02/05/2020 01:31	Spacer Back-to-Surface					20 bbls of spacer to surface.
15	02/05/2020 01:31	Cement Back-to-Surface					35 bbls of cement to surface.
16	02/05/2020 01:31	Pump Displacement	8.3400	3.00	15.00	860.00	Slowed rate to land plug.
17	02/05/2020 01:39	Land Plug					Plug landed. 115 bbls pumped. final circulating pressure 860 took to 1250 psi.
18	02/05/2020 01:39	Pressure Test					15 min csg test: start 1255 psi, end 1267 psi.
19	02/05/2020 01:54	Check Floats					.5 bbls back floats held.
20	02/05/2020 01:54	STEACS Briefing					Rig down safety meeting.
21	02/05/2020 02:00	Rig Down					Rigged down.
22	02/05/2020 02:30	STEACS Briefing					Return journey meeting.
23	02/05/2020 02:35	Leave Location					Left location.

Client: Great Western Operating Company, LLC

Well Name / API: POSTLE IC 09-099HC / 05-123-47384



Quote #: QUO-41611-G4V5P0

Plan #: ORD-24356-P9C0P6

Execution #: EXC-24356-P9C0P602



JobMaster Program Version 5.00C1

Job Number:

Customer: Great Western

Well Name: POSTLE IC 09-099HC

