



# Great Western Operating Company, LLC

POSTLE IC 09-102HNX

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API # 05-123-47373

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## Surface

February 04, 2020

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Quote #: QUO-41610-V8P3M9

Execution #: EXC-24315-L1N4R602



# 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](mailto: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
Open Hole	13.50	0.00	0.00	1,549.00	30.00		
Casing	8.92	9.63	36.00	1,549.00		J-55	LTC

## HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,507.96
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3012.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2020.00
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)	1,507.96	Top Connection Size	9.625

## 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)	240.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

## TEMPERATURE

Ambient Temperature (°F)	20.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	70.00		

## FLUID DETAILS

Client: Great Western Operating Company, LLC

Well: POSTLE IC 09-102HNX

Well API: 05-123-47373

Start Date: 2/2/2020

End Date: 2/4/2020



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

<b>Displaced By</b>	Rig	<b>Amt of Cement Returned / Reversed</b>	39.00
<b>Calculated Displacement Vol (bbls)</b>	115.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	115.00	<b>Amt of Spacer to Surface</b>	20.00
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0.00
<b>Bump Plug</b>	Yes	<b>Amt Bled Back After Job</b>	0.50
<b>Bump Plug Pressure (psi)</b>	1200.00	<b>Total Volume Pumped (bbls)</b>	312.00
<b>Were Returns Planned at Surface</b>	Yes	<b>Top Out Cement Spotted</b>	No
<b>Cement Returns During Job</b>	Yes	<b>Lost Circulation During Cement Job</b>	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	02/03/2020 20:30	Callout					Crew called out with a RTS of 0230
2	02/03/2020 20:30	Arrive on Location					Arrived on location.
3	02/04/2020 00:30	STEACS Briefing					Rig up safety meeting and procedure.
4	02/04/2020 00:35	Rig Up					Rigged up.
5	02/04/2020 01:30	Rig					Waited on rig to finish running casing and circulating.
6	02/04/2020 04:15	STEACS Briefing					Pre job safety meeting and job procedure with crew, rig crew and company man.
7	02/04/2020 04:26	Prime Up	8.3400	2.80	5.00	100.00	Primed treating iron.
8	02/04/2020 04:30	Pressure Test	8.3400				Pressure tested.
9	02/04/2020 04:32	Pump Spacer	8.3400	2.00	20.00	25.00	Pumped water spacer with red dye.
10	02/04/2020 04:38	Pump Tail Cement	14.5000	3.00	175.00	150.00	Pumped 710 sks;Yield:1.39: GPS:6.81.With good returns.
11	02/04/2020 05:31	Drop Top Plug					Dropped top plug.
12	02/04/2020 05:37	Pump Displacement	8.3400	3.50	20.00	250.00	washed up on plug and displaced.
13	02/04/2020 05:40	Pump Displacement	8.3400	7.00	80.00	650.00	Pumped displacement with water.
14	02/04/2020 05:52	Spacer Back-to-Surface					20 bbls of spacer to surface.
15	02/04/2020 05:52	Cement Back-to-Surface					39 bbls of cement to surface.
16	02/04/2020 05:52	Pump Displacement	8.3400	2.70	15.00	600.00	Slowed rate to land plug.
17	02/04/2020 05:58	Land Plug					Plug landed with 115 bbls pumped. final circulation psi was 700 took to 1200 psi.
18	02/04/2020 05:58	Pressure Test					15 min csg test: start 1237 psi, end 1219 psi.
19	02/04/2020 06:13	Check Floats					Floats held with .5 bbls back.
20	02/04/2020 06:13	STEACS Briefing					Rig down safety meeting.
21	02/04/2020 06:20	Rig Down					Rigged down.
22	02/04/2020 06:30	STEACS Briefing					Return journey meeting.
23	02/04/2020 06:35	Leave Location					Left location.

Client: Great Western Operating Company, LLC

Well Name / API: POSTLE IC 09-102HNX / 05-123-47373



Quote #: QUO-41610-V8P3M9

Plan #: ORD-24315-L1N4R6

Execution #: EXC-24315-L1N4R602



JobMaster Program Version 5.00C1

Job Number:

Customer: Great Western

Well Name: POSTLE IC 09-102HNX

