



# **Great Western Operating Company, LLC**

## **SURFACE POST JOB REPORT**

### **JOB PURPOSE: PRIMARY**

**Brant LE 08-362HC 05-001-10331**  
**S:11 T:1S R:67W Adams CO**

CallSheet #: 75273  
Proposal #: 50417



**Attention:** Great Western Operating Company LLC,  
Great Western Operating Company, LLC  
1001 17TH STREET, SUITE 2000 | 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. American Cementing strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact American Cementing at any time.

Sincerely,

**Jason Creel**

Field Engineer | (307) 256-0306 | Jason.creel@americacementing.com

**Field Office**      1716 E Allison Rd, Cheyenne, WY 82007  
Phone: (307) 638-5585

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# 1 Job Details & Summary

## 1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer	n/a	13.5	n/a	0	2018	30
Casing	Inner	9.625	8.921	36	0	2018	0

## 1.2 Equipment / People

Unit Type	Unit
Cement Pump	CPF-136
Light Duty Pickups	LDV-5223
Field Bin	CTF-014
Pneumatic Trailer	FUF-308

## 1.3 Timing

Event	Date/Time
Call Out	10/23/2020 00:00
Depart Facility	10/23/2020 01:00
On Location	10/23/2020 02:30
Rig Up Iron	10/23/2020 03:00
Job Started	10/23/2020 09:03
Job Completed	10/23/2020 11:27
Rig Down Iron	10/23/2020 11:40
Depart Location	10/23/2020 13:00

## 1.4 Casing Equipment

Type	Description	Qty	MD	TVD
Bow Spring Centralizers	9.625"	20		
Landing/Float Collar			1974	1973
Float Shoe			2018	2017

- 1.4.1 Casing Equipment - Centralizer Depths

Surface Centralizers, 41.71, 83.27, 125.37, 250.1, 376.41, 502.2, 627.18, 753.48, 879.75, 1006.01, 1132.32, 1258.64, 1384.91, 1511.19, 1637.46, 1763.77, 1890.09, 1932.16, 2001.8

## 1.5 General Job Information

Metrics	Value
Well Fluid Density	8.34 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	240 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	152.7 bbls
Actual Displacement	152 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	32 bbls
Well Topped Out	No
Top Out Volume	0 bbls

### 1.6 Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	8.4 lb/gal
Well Fluid Density Out of Well	8.4 lb/gal

### 1.7 Job Details (cont.)

Metrics	Value
BHCT	86 °F
BHST	110 °F
Ambient Temperature	28 °F

### 1.8 Circulation

Lost Circulation Experienced
No

### 1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Volume (cu.ft)	Top (ft)
1	1	Fresh Water	Spacer	8.34			42.00		20.00		0
1	2	ACem S100.3.XC	Primary	14.50	1.39	6.81		930.00	230.29	1292.70	0
1	3	Fresh Water	Displacement Final	8.34			42.00		152.00		0

### 1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Primary	ACem S100.3.XC	ASTM TYPE III	Cement	100.00	%

## 2 Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Call out	10/23/2020	00:00					Crew called out to location
2	On location	10/23/2020	02:30					Crew on location, spot equipment
3	Rig up	10/23/2020	03:00					Rig up equipment
4	Safety meeting	10/23/2020	08:30					Safety meeting with company man and rig crew
5	Pressure test	10/23/2020	09:03	8.34	0.2	0.2	3300	Pressure test pumping lines to 3300 psi
6	Spacer	10/23/2020	09:05	8.34	5.6	20	90	20 bbl of water spacer with blue dye
7	Slurry	10/23/2020	09:16	14.5				Could not get product to start mixing, using purge lines to push product, we hook up a second compressor to the line to keep up with it, lost 15 min.
8	Slurry	10/23/2020	09:30	14.5	4.5	230.3	80	Mixing cement, and back online with 930 sk / 230.3 bbl / @ 14.5 # / yield 1.39 / mix water 6.81 / wet and dry samples taken, and weight verified
9	Slurry	10/23/2020	09:40	14.5				Stop pumping to batch up and keep density, get back online after
10	Slurry	10/23/2020	10:14	14.5				At 210 bbl on slurry had to stop again to batch up and keep density, went back online
11	Drop plug	10/23/2020	10:25					Release pre-loaded plug and wash on top
12	Displacement	10/23/2020	10:30	8.34	6	10	100	Start displacement at 6 bpm, 100 psi, walking it up to 8 bpm, adding chemicals
13	Displacement	10/23/2020	10:38	8.34	8	50	270	50 bbl on displacement, 270 psi, 8 bpm
14	Displacement	10/23/2020	10:45	8.34	8	100	620	100 bbl on displacement, 620 psi, 8 bpm
15	Displacement	10/23/2020	10:49	8.34	3	130	690	130 bbl away, slow down to 3 bpm to land plug, and have cement back to surface
16	Land plug	10/23/2020	10:56	8.34	3	152	750	Bump plug from 750 psi to 1320 psi, hold for a minute and walk it up to 1500 psi to pressure test casing for 30 min
17	Pressure test	10/23/2020	10:57					1508 psi start pressure test, isolating pump
18	Check floats	10/23/2020	11:27					End of pressure test, 1484 psi and check floats, holding and 1 bbl back,

### 3 Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	80 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	500 mg/L	0-3000 mg/L
Total Alkalinity	200	0-1000
Total Hardness	100 mg/L	0-500 mg/L
Carbonates	20 mg/L	0-100 mg/L
Sulfates	300 mg/L	0-1500 mg/L
Potassium	300 mg/L	0-3000 mg/L
Iron	100 mg/L	0-300 mg/L

## 4 Pump Diagrams

Well Name: BRANT LE 08-362HC

