



Great Western Operating Company, LLC

SURFACE POST JOB REPORT

JOB PURPOSE: PRIMARY

Brant LE 08-242HN 05-001-10338
S:11 T:1S R:67W Adams CO

CallSheet #: 75219
Proposal #: 50411



Attention: Great Western Operating Company LLC,
Great Western Operating Company, LLC
1001 17TH STREET, SUITE 2000 | DENVER, CO 80202

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	2038	30
Casing	Inner	9.625	8.921	36	0	2038	0

1.2 Equipment / People

Unit Type	Unit
Bulk Trailer	CTF-566
Field Bin	CTF-014
Pneumatic Trailer	FUF-308

1.3 Timing

Event	Date/Time
Call Out	10/17/2020 11:00
Depart Facility	10/17/2020 12:00
On Location	10/17/2020 14:00
Rig Up Iron	10/17/2020 14:30
Job Started	10/17/2020 18:40
Job Completed	10/17/2020 20:49
Rig Down Iron	10/17/2020 21:00
Depart Location	10/17/2020 22:00

1.4 Casing Equipment

Type	Description	Qty	MD	TVD
Bow Spring Centralizers	9.625"	19		
Landing/Float Collar			1992	1992
Float Shoe			2038	2038

- 1.4.1 Casing Equipment - Centralizer Depths

Surface Centralizers, 40.13, 81.7, 164.82, 289.53, 414.22, 538.92, 663.63, 787.57, 912.25, 1036.94, 1161.62, 1285.94, 1410.63, 1535.33, 1659.65, 1784.37, 1909.08, 1950.64, 2021.8

1.5 General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	540 bbls
Rig Circulation Time	45 hours
Calculated Displacement	154.1 bbls
Actual Displacement	154.1 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	37 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	65 °F

1.8 Circulation

Lost Circulation Experienced
No

1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /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		154.10		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	Callout	10/17/2020	11:00					Crew called out, requested on location at 17:00
2	Safety Meeting	10/17/2020	11:45					Talked about the hazards of driving to location.
3	Depart For Location	10/17/2020	12:00					Crew departed for location
4	Arrive On Location	10/17/2020	14:00					Crew arrived on location and talked about the hazards of spotting in equipment.
5	Safety Meeting	10/17/2020	14:15					Talked with crew about the hazards of rigging up water bulk and iron lines.
6	Rig Up Iron	10/17/2020	14:30					Crew rigged up
7	Waiting	10/17/2020	15:00					Waited for rig to finish Running casing and to circulating the well.
8	Safety Meeting	10/17/2020	17:30					Talked with American Cementing Crew and rig Crews about the hazards of pumping the job.
9	Fill Lines	10/17/2020	18:40	8.33	5	5	113	Pump 5 bbls water ahead to fill lines for the pressure test.
10	Shutdown	10/17/2020	18:42	8.33				Shutdown to line out valves for pressure test
11	Pressure Test Lines	10/17/2020	18:43	8.33			3380	Pressure Test AC lines to 2500 PSI.
12	Pump Spacer	10/17/2020	18:44	8.33	5	20	143	Pump 20 bbls water spacer with blue dye
13	Pump Cement	10/17/2020	18:48	14.5	4.2	0	127	Mix and Pump 930 sacks of ACem Cement at 14.5 lb/gal, 1.39 cuft/sk and 6.81 gals/sk from Pods 3 and 4 on CTF-013 and pod 1 and 2 on CTF-014.
14	Pump Cement	10/17/2020	18:57	14.5	5	30	225	Switch to pod 4 on CTF-013 with 30 bbls away.
15	Pump Cement	10/17/2020	19:00	14.5	5.5	100	215	Switch to pod 1 to on CTF-014 with 100 bbls away and bring rate up to 5.5 bpm.
16	Pump Cement	10/17/2020	19:11	14.5	5.7	187	227	Switch to pod 2 to on CTF-014 with 187 bbls away and bring rate up to 5.7 bpm.
17	Shutdown	10/17/2020	19:36	14.5	0	230	230	Shutdown to drop top plug and line out valves for displacement.
18	Pump Displacement	10/17/2020	19:40	8.33	6.5	0	100	Pump 154.1 bbls water displacement with Biocide and O2 scavenger.
19	Pump Displacement	10/17/2020	19:50	8.33	6.5	50	270	50bbls away.
20	Pump Displacement	10/17/2020	19:56	8.33	6.5	80	523	Blue dye to surface
21	Pump Displacement	10/17/2020	20:00	8.33	6.5	114	746	Cement to Surface
22	Slow Pump Rate	10/17/2020	20:03	8.33	2.8	135	704	Slow rate to land the plug.
23	Land Plug	10/17/2020	20:09	8.33	0	154.1	1541	Land plug, bring pressure up to 1541 psi for 30 min casing test. FCP was 800 psi
24	Test Casing	10/17/2020	20:19	8.33	0	154.1	1506	10 min into casing test.
25	Test Casing	10/17/2020	20:29	8.33	0	154.1		20 min into casing test.
26	Test Casing	10/17/2020	20:39	8.33	0	154.1		30 min into casing test.
27	Check Floats	10/17/2020	20:49					Floats held with 1 bbls back
28	Safety Meeting	10/17/2020	21:00					Talked with AC Crew about the hazards of rigging down.
29	Rig Down Iron	10/17/2020	21:15					Rig Down



Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
30	Safety Meeting	10/17/2020	21:20					Talked with AC Crew about the hazards of driving back to the yard.
31	Depart Location	10/17/2020	22:00					Crew Departed Location.

3 Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	72 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	25 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	0 mg/L	0-1500 mg/L
Potassium	0 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

Well Name: Brant LE 08-242HN

