



Great Western Operating Company, LLC

SURFACE POST JOB REPORT

JOB PURPOSE: PRIMARY

Brant LE 08-282HNX 05-001-10324
S:11 T:1S R:67W Adams CO

CallSheet #: 75221
Proposal #: 50412



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

Table of Contents

1 Job Details & Summary	3
1.1 Geometry	3
1.2 Equipment / People	3
1.3 Timing	3
1.4 Casing Equipment	3
• 1.4.1 Casing Equipment - Centralizer Depths	3
1.5 General Job Information	3
1.6 Job Details	4
1.7 Job Details (cont.)	4
1.8 Circulation	4
1.9 Job Execution Information	4
1.10 Job Fluid Details	4
2 Job Logs	5
3 Water Analysis	6
4 Pump Diagrams	7

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	2014	30
Casing	Inner	9.625	8.921	36	0	2014	0

1.2 Equipment / People

Unit Type	Unit
Field Bin	CTF-014
Cement Pump	CPF-074
Light Duty Pickups	LDV-5223
Silo	1232164
Pneumatic Trailer	FUF-308

1.3 Timing

Event	Date/Time
Call Out	10/18/2020 09:00
Depart Facility	10/18/2020 10:00
On Location	10/18/2020 12:00
Rig Up Iron	10/18/2020 12:30
Job Started	10/18/2020 16:08
Job Completed	10/18/2020 18:01
Rig Down Iron	10/18/2020 18:20
Depart Location	10/18/2020 19:00

1.4 Casing Equipment

Type	Description	Qty	MD	TVD
Bow Spring Centralizers	9.625"	19		
Landing/Float Collar			1970	1969
Float Shoe			2014	2013

- 1.4.1 Casing Equipment - Centralizer Depths

Surface Centralizers, 41.24, 83.35, 125.44, 251.69, 378.03, 504.28, 630.57, 756.85, 883.11, 1008.19, 1133.96, 1260.24, 1385.31, 1511.67, 1637.44, 1762.07, 1886.67, 1928.21, 1997.8

1.5 General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	285 bbls
Rig Circulation Time	30 hours
Calculated Displacement	152.4 bbls
Actual Displacement	152.4 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	38 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	39 °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	Flush	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	DisplacementFinal	8.34			42.00		152.40		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	10/18/2020	09:00					Crew called out, requested on location at 14:00
2	Safety Meeting	10/18/2020	09:45					Talked with the American Cementing Crew about the hazards of driving to location.
3	Depart For Location	10/18/2020	10:00					Crew departed for location
4	Arrive On Location	10/18/2020	12:00					Crew arrived on location and talked about the hazards of spotting in equipment.
5	Safety Meeting	10/18/2020	12:15					Talked with crew about the hazards of rigging up water bulk and iron lines.
6	Rig Up Iron	10/18/2020	12:30					Crew rigged up
7	Waiting	10/18/2020	13:00					Waited for rig to finish Running casing and to circulating the well.
8	Safety Meeting	10/18/2020	15:45					Talked with American Cementing Crew and rig Crews about the hazards of pumping the job.
9	Fill Lines	10/18/2020	16:08	8.33	5	5	113	Pump 5 bbls water ahead to fill lines for the pressure test.
10	Shutdown	10/18/2020	16:10	8.33			50	Shutdown to line out valves for pressure test
11	Pressure Test Lines	10/18/2020	16:11	8.33			3380	Pressure Test AC lines to 2500 PSI.
12	Pump Spacer	10/18/2020	16:12	8.33	5.7	20	166	Pump 20 bbls water spacer with blue dye
13	Pump Cement	10/18/2020	16:17	14.5	5.7	0	162	Mix and Pump 930 sacks of ACem Cement at 14.5 lb/gal, 1.39 cuft/sk and 6.81 gals/sk from Pods 1, 2 and 3 on CTF-013. Slow to 4.2 bpm for the first 10 bbls to bring tub up to weight. Then pump at 5.7 bpm.
14	Pump Cement	10/18/2020	16:30	14.5	5.7	77	168	Switch to pod 2 on CTF-013 with 77 bbls away.
15	Pump Cement	10/18/2020	16:44	14.5	5.7	150	169	Switch to pod 3 on CTF-014 with 150 bbls away.
16	Shutdown	10/18/2020	16:59	14.5	0	230	0	Shutdown to drop top plug and line out valves for displacement.
17	Pump Displacement	10/18/2020	17:03	8.33	6.6	0	73	Pump 152.4 bbls water displacement with Biocide and O2 scavenger.
18	Pump Displacement	10/18/2020	17:10	8.33	6.6	50	203	50bbls away.
19	Pump Displacement	10/18/2020	17:17	8.33	6.6	88	472	Blue dye to surface
20	Pump Displacement	10/18/2020	17:20	8.33	6.6	114	640	Cement to Surface
21	Slow Pump Rate	10/18/2020	17:22	8.33	2.8	132	638	Slow rate to land the plug.
22	Land Plug	10/18/2020	17:30	8.33	0	152.4	1551	Land plug, bring pressure up to 1551 psi for 30 min casing test. FCP was 728 psi
23	Test Casing	10/18/2020	17:40	8.33	0	152.4	1559	10 min into casing test.
24	Test Casing	10/18/2020	17:50	8.33	0	152.4	1553	20 min into casing test.
25	Test Casing	10/18/2020	18:00	8.33	0	152.4	1533	30 min into casing test.
26	Check Floats	10/18/2020	18:01					Floats held with 1 bbl back
27	Safety Meeting	10/18/2020	18:10					Talked with AC Crew about the hazards of rigging down.
28	Rig Down Iron	10/18/2020	18:20					Rig Down
29	Safety Meeting	10/18/2020	18:50					Talked with AC Crew about the hazards of driving back to the yard.
30	Depart Location	10/18/2020	19:00					Crew Departed Location.

3 Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	62 °F	50-80 °F
pH Level	6	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	<200 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 08-282HNX

