



Great Western Operating Company, LLC

SURFACE POST JOB REPORT

Marcus LD 11-372HC 05-123-44039
S:34 T:1N R:67W Weld CO

CallSheet #: 625
Proposal #: 13043



SURFACE Post Job Report

Attention: Mr. Matt Mount | (303) 398-0373 | mmount@gwogco.com
Great Western Operating Company, LLC
1801 Broadway, Suite 500 | Denver, CO 80202

Dear Mr. Mount,

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,

Oscar Medrano

Technical Specialist-II | (307) 996-6222 | Oscar.Medrano@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
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1 Job Details & Summary

1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer	n/a	13.5	n/a	n/a	0	1701	25
Casing	Inner	9.625	8.921	36	n/a	0	1701	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Bulk Trailer	509	Scott, Matthew	168
Bulk Trailer	506	Acuna, Roger	168
Light Duty Pickups	3	Dewit, Eric	168
Cement Chemical	402	Staples, Anthony	168

1.3 Timing

Event	Date/Time
Call Out	3/12/2017 08:00
Depart Facility	3/12/2017 09:00
On Location	3/12/2017 11:00
Rig Up Iron	3/12/2017 11:30
Job Started	3/12/2017 15:42
Job Completed	3/12/2017 17:30
Rig Down Iron	3/12/2017 17:50
Depart Location	3/12/2017 18:50

1.4 General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	150 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	128 bbls
Actual Displacement	128 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	26 bbls
Well Topped Out	No

1.5 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

1.6 Job Details (cont.)

Metrics	Value
BHCT	88 °F
BHST	109 °F

1.7 Circulation

Lost Circulation Experienced
No

1.8 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)	Top (ft)
1	1	Water	Flush	8.33			42.00		20.00	0
1	2	ALTCem S100-22	Primary	14.50	1.39	6.76		761.00	188.17	0
1	3	Water	DisplacementFinal	8.33			42.00		129.00	0

1.9 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Primary	ALTCem S100-22	AC3-10	Cement	100.00	%
1	2	Primary	ALTCem S100-22	ADF-20	Defoamer	0.03	gal/sk

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	Customer call out	3/12/2017	08:00	0	0	0	0	Customer call with an RTS of 14:00
2	On location	3/12/2017	11:00	0	0	0	0	Pump, pump operator, and cementer on location
3	Safety meeting	3/12/2017	11:20	0	0	0	0	Pre-rig up safety meeting
4	Rig up	3/12/2017	11:30	0	0	0	0	Rig up water, and high pressure line
5	Waiting	3/12/2017	12:30	0	0	0	0	Waiting for rig to finish running casing, and bulk trucks to get to location
6	Bulk trucks arrive	3/12/2017	13:45	0	0	0	0	Bulk trucks arrive on location
7	Rig up	3/12/2017	13:50	0	0	0	0	Rig up bulk lines
8	Waiting	3/12/2017	14:00	0	0	0	0	Waiting on rig to finish running casing
9	Casing on bottom	3/12/2017	15:25	0	0	0	0	Rig done running casing
10	Safety meeting	3/12/2017	15:27	0	0	0	0	Pre-job safety meeting with the company man, and rig crew
11	Rig up	3/12/2017	15:35	0	0	0	0	Rig up head
12	load lines	3/12/2017	15:42	8.34	1.3	2	65	Load pumps and lines
13	Pressure test	3/12/2017	15:45	8.34	0	0	3672	Pressure test pumps and lines
14	Pump spacer	3/12/2017	15:47	8.34	4.2	20	131	20 bbls of fresh water + Dye spacer ahead
15	Pump cement	3/12/2017	15:58	14.5	5	188	198	Batch, and pump 761 sacks of cement @14.5 ppg
16	Shut down	3/12/2017	16:43	14.7	0	0	0	Shut down



17	Drop plug	3/12/2017	16:46					Drop wiper plug
18	Displacement	3/12/2017	16:49	8.34	5.3	0	95	Send plug start Fresh water + Biocide displacement
19	Displacement	3/12/2017	16:58	8.34	6.6	50	496	Fresh water + Biocide displacement
20	Spacer back	3/12/2017	17:02	8.34	6.6	80	649	Start getting spacer back
21	Cement back	3/12/2017	17:06	8.34	6.6	102	807	Start getting cement to surface
22	Drop rate	3/12/2017	17:09	8.34	2.4	120	709	Drop pump rate
23	Land plug	3/12/2017	17:11	8.34	2.4	128	736	Land plug, bump pressure up to 1304
24	Casing test	3/12/2017	17:13	8.34	0	0	2412	Start casing test
25	Check floats	3/12/2017	17:30	8.34	0	0	0	Ending pressure on casing test was 2425, check floats (floats held) 1 bbl back
26	Safety meeting	3/12/2017	17:45	0	0	0	0	Pre-rig down safety meeting
27	Rig down	3/12/2017	17:50	0	0	0	0	Rig down everything
28	Leave location	3/12/2017	18:50	0	0	0	0	Leave location

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	55 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	0	0-1000
Total Hardness	0 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

