



Great Western Operating Company, LLC

SURFACE POST JOB REPORT

Schneider HD 11-382HNX 05-123-44685
S:7 T:4N R:66W Weld CO

CallSheet #: 779
Proposal #: 13230



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
Phone: (307) 638-5585

Sales Office 475 17th St. Suite 460 Denver Co., 80202
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Table of Contents

1 Job Details & Summary 3

 1.1 Geometry 3

 1.2 Equipment / People 3

 1.3 Timing 3

 1.4 General Job Information 3

 1.5 Job Details 3

 1.6 Job Details (cont.) 3

 1.7 Circulation 4

 1.8 Job Execution Information 4

 1.9 Job Fluid Details 4

2 Job Logs 5

3 Water Analysis 6

4 Pump Diagrams 6

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	1575	25
Casing	Inner	9.625	8.921	36	n/a	0	1575	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Bulk Trailer	502	Henderson, Ethan	140
Bulk Trailer	509	Martinez, Michael	140
Cement Pump	103	Hyde, Zack	140
Light Duty Pickups	6	Bell, Wesley	140

1.3 Timing

Event	Date/Time
Call Out	5/9/2017 19:30
Depart Facility	5/9/2017 21:20
On Location	5/9/2017 23:00
Rig Up Iron	5/10/2017 01:00
Job Started	5/10/2017 03:05
Job Completed	5/10/2017 04:59
Rig Down Iron	5/10/2017 05:05
Depart Location	5/10/2017 06:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	8.5 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	N/A
Rig Circulation Time	0.5 hours
Calculated Displacement	117 bbls
Actual Displacement	117 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	10 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	8.5 lb/gal
Well Fluid Density Out of Well	8.5 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 (sk)	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		673.00	166.41	0
1	3	Water	DisplacementFinal	8.33			42.00		117.00	0

1.9 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom	Start (gal)	End (gal)	Used (gal)
1	2	Primary	ALTCem S100-22	AC3-10	Cement	100.00	%			
1	2	Primary	ALTCem S100-22	ADF-20	Defoamer	0.03	gal/sk	5	5	0

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	Arrive on location	5/9/2017	23:00					all units arrive on location
2	Rig In	5/10/2017	01:00					spot and rig in all bulk, water, iron
3	Waiting	5/10/2017	01:40					wait on rig to finish running casing
4	Safety Meeting	5/10/2017	02:45					review job procedure and hazards. Discuss controls and muster point
5	Pressure Test Lines	5/10/2017	03:07	8.34			3200	Test lines with fresh water
6	Pump	5/10/2017	03:09	8.34	5	20	100	Pump 20bbls fresh water ahead, red dye in last 10bbls
7	Shut Down	5/10/2017	03:15					Bulk line packed off, couldn't mix, found blockage and purged line clean
8	Mix Tail Cement	5/10/2017	03:41	14.5	6	166.6	350	Mix and pump 166.6bbls of cement at 14.5ppg, Y: 1.39, WR: 6.76, 673sks, 108bbls mix water
9	Shut Down/Drop Plug	5/10/2017	04:15	8.34				Drop 9 5/8" top rubber plug, begins displacement with fresh water
10	Pump	5/10/2017	04:24	8.34	6	50	600	50bbls of displacement away
11	Pump	5/10/2017	04:33	8.34	6	50	600	100bbls of displacement away, spacer to surface beginning at 90bbls away and cement was to surface was at 106 bbls away
12	Land Plug	5/10/2017	04:40	8.34	3	17	900	Land top rubber plug, slowed rate to 3pbm at 103bbls away, final circulating pressure 900psi, bumped up to 1480psi
13	Check Floats	5/10/2017	04:43	8.34				Floats held, 1bbl back
14	Casing Test	5/10/2017	04:44	8.34			2400	15min casing test at 2400psi, pressure held, no bleed off
15	Rig out	5/10/2017	05:05					
16	Job complete	5/10/2017	05:30					
17	Leave location	5/10/2017	06:00					

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	65 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	100 mg/L	0-3000 mg/L
Total Alkalinity	250	0-1000
Total Hardness	70 mg/L	0-500 mg/L
Carbonates	80 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	200 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

