



# **Great Western Operating Company LLC LONG STRING POST JOB REPORT**

**SELTZER LD 09-378HN 05-001-10196  
S:4 T:1S R:67W Adams CO**

CallSheet #: 77454  
Proposal #: 53706



## LONG STRING Post Job Report

**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,

**Scott Pollard**

Sr. Account Manager | (303) 249-6761 | [scott.pollard@americacementing.com](mailto:scott.pollard@americacementing.com)

**Field Office**      1716 E Allison Rd, Cheyenne, WY 82007  
Phone: (307) 414-0049

## Job Details & Summary

### Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36	0	2039	0
Open Hole	Outer	n/a	8.5	n/a	2039	1067.85	0
Open Hole	Outer	n/a	8.5	n/a	1067.85	18404	10
Casing	Inner	5.5	4.778	20	0	18404	0

### Equipment / People

Unit Type	Unit
AS Cement Trailer Float	CTF-7145
AS Cement Trailer Float	CTF-9054
AS Cement Trailer Float	CTF-9309
AS Cement Trailer Float	CTF-018
AS Cement Trailer Float	CTF(FTF)-031
Cement Trailer Float	CTF-341
Cement Trailer Float	CTF-278
Cement Trailer Float	CTF-202
Field Storage Silo	FSS(CTS)-440
Field Storage Silo	FSS(CTS)-442
Field Storage Silo	FSS(CTS)-436
Field Storage Silo	FSS(CTS)-458
Cement Pump Float	CPF-183
Cement Pump Float	CPF-182
Cement Utility Float	CUF(FIF)-161
Cement Utility Float	CUF(FIF)-159
Acid Trailer Float	ATF-067
Cement Trailer Float	CTF-003
Acid Trailer Float	ATF-091

### Timing

Event	Date/Time
Call Out	7/8/2021 06:30
Depart Facility	7/8/2021 10:00
On Location	7/8/2021 12:00
Rig Up Iron	7/8/2021 15:00
Job Started	7/8/2021 20:42
Job Completed	7/8/2021 22:59
Rig Down Iron	7/8/2021 23:00
Depart Location	7/9/2021 01:00

### General Job Information

Metrics	Value
Well Fluid Density	11 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	1800 bbls
Rig Circulation Time	2 hours
Calculated Displacement	408.45 bbls
Actual Displacement	408 bbls
Total Spacer to Surface	138 bbls
Total CMT to Surface	0 bbls

### Casing Equipment

Type	Description	Qty	MD	TVD
Centralizers		153		
Landing/Float Collar	5.5"		18,399	7,784
Float Shoe	5.5"		18,404	7,784

- Casing Equipment-Centralizer Depths**

Production Centralizer Depths:, 2043.4, 2088.64, 2133.9, 2179.15, 2224.41, 2269.68, 2314.95, 2360.22, 2405.49, 2450.76, 2496.03, 2541.28, 2586.52, 2631.75, 2676.98, 2722.23, 2767.47, 2812.7, 2857.56, 2902.79, 2948.1, 2993.32, 3038.54, 3083.78, 3129.02, 3174.26, 3219.23, 3264.49, 3309.74, 3354.96, 3400.14, 3445.38, 3490.63, 3535.86, 3581.09, 3626.32, 3671.55, 3716.78, 3762.03, 3807.32, 3852.57, 3897.8, 3943.01, 3988.26, 4033.5, 4078.79, 4124.04, 4169.29, 4214.58, 4259.86, 4305.11, 4350.36, 4395.59, 4440.44, 4485.68, 4530.7, 4575.94, 4621.19, 4666.4, 4711.69, 4756.93, 4802.18, 4847.39, 4892.66, 4937.92, 4983.13, 5028.42, 5073.69, 5118.95, 5164.24, 5209.5, 5254.75, 5300.04, 5344.99, 5390.29, 5435.54, 5480.84, 5526.09, 5571.38, 5616.64, 5661.87, 5707.13, 5752.16, 5797.36, 5842.63, 5887.93, 5933.19, 5978.46, 6023.69, 6068.96, 6114.21, 6159.46, 6204.75, 6250.02, 6295.29, 6338.78, 6384.09, 6429.35, 6474.56, 6519.8, 6565.1, 6610.38, 6655.7, 6700.99, 6746.29, 6791.59, 6836.62, 6881.9, 6927.2, 6972.49, 7017.72, 7062.96, 7108.17, 7153.48, 7198.79, 7244.09, 7289.36, 7334.66, 7379.97, 7425.23, 7470.49, 7515.78, 7572.34, 7617.58, 7662.83, 7708.08, 7753.36, 7798.64, 7843.91, 7888.79, 7934.05, 7979.29, 8024.55, 8069.81, 8115.08, 8160.31, 8205.56, 8250.85, 8296.12, 8341.36, 8386.62, 8431.87, 8477.13, 8522.36, 8567.6, 8624.15, 8669.39, 8714.62, 8759.93, 8805.18, 8850.42, 8895.67, 8971.19

### Job Details

Metrics	Value
Flare Prior to Job	Yes
Flare Prior to Job	3400 units
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	11 lb/gal
Well Fluid Density Out of Well	11 lb/gal

### Job Details (cont.)

Metrics	Value
BHCT	190 °F
BHST	210 °F
Ambient Temperature	95 °F

### Circulation

Lost Circulation Experienced
No

### Job Execution Information

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 (cuft)	Designed Top (ft)
1	WBM Spacer	Spacer	12.00			41.20		120.00		0
2	Fresh Water	Spacer	8.34			42.00		40.00		233
3	ACem P50.6.02C	Tail	14.50	1.48	6.66		2710.00	714.83	4010.80	1068
4	Retarded Water	Displacement	8.34			41.90		20.00		17498
5	3% KCL with Chems	DisplacementFinal	8.34			42.00		388.00		0

### Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	Flush	WBM Spacer	Surfactant, S-801c	Surfactant	0.80	gal/bbl
3	Tail	ACem P50.6.02C	CLASS G	Cement	50.00	%
3	Tail	ACem P50.6.02C	FLY ASH (ROCKIES)	Extender	50.00	%
3	Tail	ACem P50.6.02C	EC-2	BondEnhancer	3.00	%BWOB
3	Tail	ACem P50.6.02C	FL-24	FluidLoss	0.30	%BWOB
3	Tail	ACem P50.6.02C	FL-66	FluidLoss	0.30	%BWOB
3	Tail	ACem P50.6.02C	FP-24	Defoamer	0.30	%BWOB
3	Tail	ACem P50.6.02C	GW-86	Viscosifier	0.05	%BWOB
3	Tail	ACem P50.6.02C	S-8	StrengthRetgression	20.00	%BWOB
3	Tail	ACem P50.6.02C	SR-20	Retarder	0.05	%BWOB
3	Tail	ACem P50.6.02C	STATIC FREE	Other	0.01	lb/sk
4	Displacement	Retarded Water	SR-61L	Retarder	0.10	gal/bbl

## Job Logs

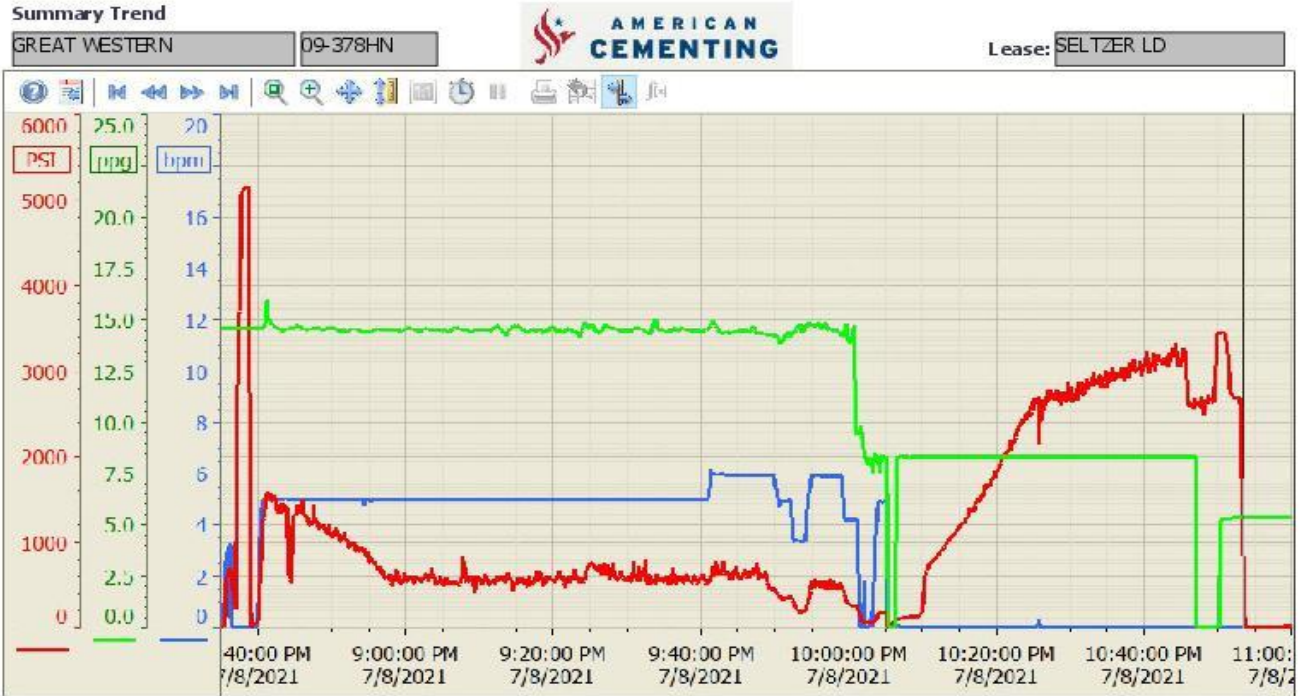
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Cumulative Pump Volume (bbls)	Pipe Pressure (psi)	Annular Pressure (psi)	Comment
1	Call Out	7/8/2021	06:30						ACC gets called out requested time on location was 1300 hrs
2	Arrive To Location	7/8/2021	12:00						ACC arrives to location rig is currently running casing and have 3000' left to run +/- , cant spot equipment due to casing crew is blocking silos and cant spot units till done running casing
3	Waiting	7/8/2021	13:30						Waiting on rig to finish running casing
4	Spot Equipment	7/8/2021	14:30						ACC got the ok to spot in units
5	Rig Up	7/8/2021	15:00						ACC starts rigging up equipment and iron
6	Safety Meeting	7/8/2021	19:30						ACC had a pre job safety meeting with OSR and rig hands went over job procedure
7	Pump WBM Spacer	7/8/2021	20:00	12	8	120	763		Rig starts pumping WBM Spacer at 8 bpm w/ 763 psi , pumped 120 bbls
8	Pump FW Spacer	7/8/2021	20:18	8.33	8	40	842		Rig starts pumping FW Spacer at 8 bpm w/ 842 psi , pumped 40 bbls
9	Shut Down	7/8/2021	20:34						Rig Shuts down pumping
10	Drop Bottom Plug	7/8/2021	20:39						Tool hand drops Bottom plug
11	Pressure Test	7/8/2021	20:42				5100		Fill lines 5 bbls and pressure test pumps and lines to 5100 psi
12	Pump Cement	7/8/2021	20:46	14.5	10		1100		Start mixing and pumping cement at 14.5 ppg pumping at 10 bpm w/ 1100 psi
13	Pumping Cement	7/8/2021	21:21	14.5	10	350	900		CPF-183 swap silos at (170 bbls silo 436 ) 350 bbls away at 10 bpm w/ 900 psi
14	Pumping Cement	7/8/2021	21:29	14.5	10	443	800		CPF-182 swap silos at (218 bbls silo 458) 443 bbls gone at 10 bpm w/800 psi
15	1st Pump Shut Down	7/8/2021	21:55	14.5		680			CPF-183 shuts down at (320 bbls ) 680 bbls gone total , pumps starts washing up to 3 sided tank .
16	2nd Pump Shut Down	7/8/2021	22:06	14.5		714.83			CPF-182 Shut down at 714.83 bbls pumped total , pump starts washing up
17	Drop Top Plug	7/8/2021	22:09						Tool Hand Drops Top Plug
18	Pump Disp	7/8/2021	22:12	8.33	10		800		Start Pumping KCL disp at 10 bpm w/ 800 psi , 1st 20 bbls fw w/sr61 retarder
19	Other	7/8/2021	22:30	8.5	10	190	3000		At 190 bbls away had to swapp from boost cent. To re circ cent due to hydroic issue at 10 bpm w/ 3000 psi



Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Cumulative Pump Volume (bbls)	Pipe Pressure (psi)	Annular Pressure (psi)	Comment
20	Spacer To Surface	7/8/2021	22:39	8.5	10	270	3200		At 270 bbls away into disp. Got spacer back to surface at 10 bpm w/ 3200 psi ( Note started dumping return to open top tank).
21	Slow Down Rate	7/8/2021	22:51	8.5	5	385	2800		At 385 bbls gone into KCL disp to 5 bpm w/ 2800 psi
22	Land Plug	7/8/2021	22:55	8.33	5	408	2800	3300	Land Plug at 408 bbls gone Final circ. Pressure was - 2800 ps , bumped plug to - 3300 psi
23	Bleed Back	7/8/2021	22:57						Bleed 500 psi back to pump truck got 1 bbl back
24	Check Floats	7/8/2021	22:59						Check floats got 3.5 bbls back on rig trip tanks
25	Rig Down	7/8/2021	23:00						ACC starts getting equipment rigged down and iron
26	Depart Location	7/9/2021	01:00						ACC departs location
27	Other	7/9/2021	01:01						Total Spacer Back To Surface - 138 bbls

# Pump Diagrams

Pump 182



7/8/2021 11:56:34 PM

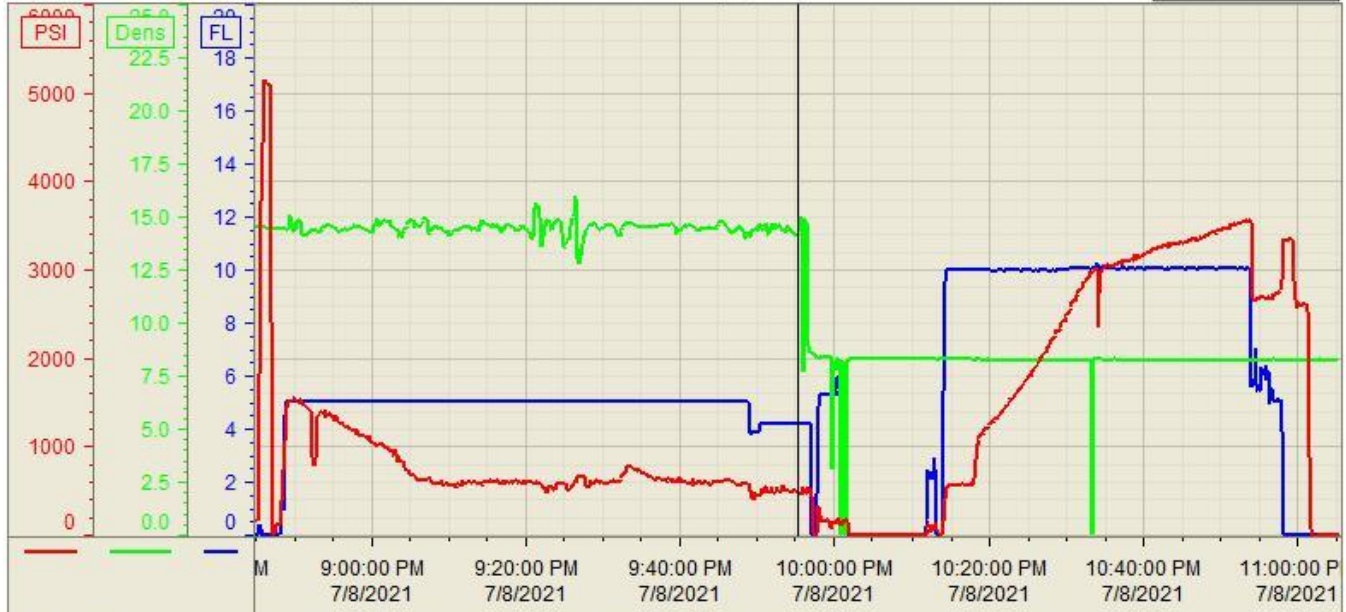
Pump 183

Customer: Great western  
Well Number: 09-378HN  
Lease Info: Seltzer LD

Stage	Sacks (sacks)	Water (gal/sack)	Slurry (cu.ft/sack)	Density (ppg)	Total (bbls)
1	0.0	0.0	0.0	0.0	4000.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0

Stage	Sacks (sacks)	Water (gal/sack)	Slurry	Density (ppg)	Total (bbls)
6	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

Print Date/Time  
7/8/2021 11:56:02 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	493.1	7/8/2021 9:55:15 PM	CementerDS_DISCHARGE_PRESS_DIAL
2	Den - Density (PPG)	14.15	7/8/2021 9:55:15 PM	CementerDENSITY_ACTUAL_RATE
3	Pump Rate	4.17	7/8/2021 9:55:21 PM	CementerFlow_Combined
4				
5				

Source: Control1 11:56:02 PM

