



Petro Operating Company SURFACE POST JOB REPORT

**L.E. Gerkin #11H 05-123-44073
S:13 T:2N R:64W Weld CO**

CallSheet #: 76630
Proposal #: 52425



SURFACE Post Job Report

Attention: Johnny Musso | (303) 249-6615 | johnny.musso@iptenergyservices.com
Petro Operating Company
9033 E. Easter Place Suite 112 | Centennial, CO 80112

Dear Johnny Musso,

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) 414-0049

Job Details & Summary

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	1465	35
Casing	Inner	9.625	8.921	36	0	1455	0

Equipment / People

Unit Type	Unit
Bulk Trailer	CTF-193
Light Duty Trailers	FIF-159
Cement Pump	CPF-074
Field Storage Silo	CTS-436

Timing

Event	Date/Time
Call Out	4/7/2021 10:15
Depart Facility	4/7/2021 11:15
On Location	4/7/2021 14:00
Rig Up Iron	4/7/2021 14:30
Job Started	4/7/2021 15:24
Job Completed	4/7/2021 16:20
Rig Down Iron	4/7/2021 16:45
Depart Location	4/7/2021 18:30

General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	240 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	109.2 bbls
Actual Displacement	109.2 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	26 bbls
Well Topped Out	No

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

Job Details (cont.)

Metrics	Value
BHCT	86 °F
BHST	110 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	68 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	200 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<250 mg/L	0-1500 mg/L
Potassium	300 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced
No

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Designed Top (ft)
1	Fresh Water	Flush	8.34			42.00		20.00	0
2	ACem S100.3.1C	Lead	12.00	2.53	14.86		235.00	105.85	0
3	ACem S100.3.1C	Tail	12.50	2.23	12.58		157.00	62.22	900
4	Fresh Water	DisplacementFinal	8.36			41.61		109.20	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	ACem S100.3.1C	ASTM TYPE III	Cement	100.00	%
2	Lead	ACem S100.3.1C	A-10	Accelerator	5.00	%BWOB
2	Lead	ACem S100.3.1C	A-2	Accelerator	2.00	lb/sk
2	Lead	ACem S100.3.1C	A-7P	Accelerator	2.00	lb/sk
2	Lead	ACem S100.3.1C	FP-24	Defoamer	0.30	%BWOB
2	Lead	ACem S100.3.1C	IntegraSeal POLI	LostCirculation	0.13	lb/sk
3	Tail	ACem S100.3.1C	ASTM TYPE III	Cement	100.00	%
3	Tail	ACem S100.3.1C	A-10	Accelerator	5.00	%BWOB
3	Tail	ACem S100.3.1C	A-2	Accelerator	2.00	lb/sk
3	Tail	ACem S100.3.1C	A-7P	Accelerator	2.00	lb/sk
3	Tail	ACem S100.3.1C	FP-24	Defoamer	0.30	%BWOB
3	Tail	ACem S100.3.1C	IntegraSeal POLI	LostCirculation	0.13	lb/sk
4	DisplacementFinal	Fresh Water	BIOCIDE,BIOC11139W	Biocide	0.01	gal/bbl
4	DisplacementFinal	Fresh Water	CI-27	Other	0.21	gal/bbl
4	DisplacementFinal	Fresh Water	OXYGEN SCAVENGER, OS-30	Other	0.17	gal/bbl

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	Call Out	4/7/2021	10:15					Crew called out
2	Crew departs Yard	4/7/2021	11:15					Crew Departs Yard
3	Crew Arrives On Location	4/7/2021	14:00					Crew Arrives To Location
4	Safety Meeting	4/7/2021	14:15					Rig up Safety Meeting
5	Rig Up	4/7/2021	14:30					Spot in equipment and rig up iron
6	Safety Meeting	4/7/2021	15:10					Safety Meeting with Rig
7	Fill Lines	4/7/2021	15:24	8.34	4.5	5	71	Fill lines with 5 bbls.
8	Pressure Test	4/7/2021	15:26	8.34	0	0	2469	Pressure Test
9	Pump Spacer	4/7/2021	15:29	8.34	5.7	20	45	Pump first 20 bbls. Of water with blue dye
10	Pump Lead CMT	4/7/2021	15:34	12	8	105.9	297	Pump Lead CMT @ 12 ppg (235 sks, 2.53 Y, 14.86 W) for a total of 105.9 bbls.
12	Pump Tail CMT	4/7/2021	15:47	12.5	8	62.4	278	Pump Tail CMT @ 12.5 ppg (157 sks, 2.23 Y, 12.58 W) for a total of 62.4 bbls.
13	Shutdown	4/7/2021	15:55					Shutdown
14	Drop Plug	4/7/2021	15:57					Drop Plug
15	Displacement	4/7/2021	15:59	8.34	8	0	143	Displacement
16	Displacement	4/7/2021	16:06	8.34	8	50	260	50 bbls. Away
17	Cement to Surface	4/7/2021	16:10	8.34	8	85	270	Start getting good cement to surface (26 bbls of cement to surface)
18	Drop Rate	4/7/2021	16:12	8.34	2.8	95	274	Drop rate to land the plug
19	Land Plug	4/7/2021	16:17	8.34	2.8	109.2	1019	Land Plug @ 109.2 bbls, final circulating pressure 371 and took to 1019
20	Check floats	4/7/2021	16:20					Floats held, got .5 bbls. Back
21	Safety Meeting	4/7/2021	16:30					Safety Meeting before Rigging Down Iron and Equipment
22	Rig Down	4/7/2021	16:45					Rig Down Iron and Equipment
23	Crew Departs Location	4/7/2021	18:30					Crew Departs Location

Pump Diagrams

