



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

CHEVRON GM 632-19 05-045-24361
S:20 T:6S R:96W Garfield CO

CallSheet #: 75668
Proposal #: 50963



SURFACE Post Job Report

Attention: Mr. Lynn Cass | (970) 263-2716 | lcass@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Lynn Cass,

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,

Zen Keith

Field Engineer | (307) 757-7178 | zen.keith@americancementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1187



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1 Job Details & Summary

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	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1028	16
Casing	Inner	9.625	8.921	36	n/a	0	1028	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-340	TRB-421	Rivas, Saul	63
Cement Pump	CPF-012	TRH-1140	Gonzales, Ivan	63
Light Duty Pickups	LDV-3104		Linn, Paul	63

Timing

Event	Date/Time
Call Out	12/16/2020 10:00
Depart Facility	12/16/2020 13:52
On Location	12/16/2020 14:26
Rig Up Iron	12/16/2020 14:44
Job Started	12/16/2020 17:53
Job Completed	12/16/2020 18:35
Rig Down Iron	12/16/2020 18:52
Depart Location	12/16/2020 19:19

General Job Information

Metrics	Value
Well Fluid Density	9.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	100 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	74.57 bbls
Actual Displacement	74 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	14 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	9.5 lb/gal
Well Fluid Density Out of Well	9.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Circulation

Lost Circulation Experienced
No

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	8.34			42.00		20.00	0
1	2	Lead Cement	Lead	12.30	2.34	13.42		122.00	50.82	0
1	3	Tail Cement	Tail	12.80	2.08	11.46		146.00	53.99	500
1	4	Water	DisplacementFinal	8.34			42.00		74.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	2	Lead	Lead Cement	A-10	Accelerator	5.00	%BWOB
1	2	Lead	Lead Cement	A-2	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	A-7P	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	2	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	3	Tail	Tail Cement	ASTM TYPE III	Cement	100.00	%
1	3	Tail	Tail Cement	A-10	Accelerator	5.00	%BWOB
1	3	Tail	Tail Cement	A-2	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	A-7P	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	3	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/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	Callout	12/16/2020	10:00					Callout on location time of 15:00 on 12/16/20
2	Safety Meeting	12/16/2020	13:38					Pre-Convoy Safety meeting
3	Depart Location	12/16/2020	13:52					DepaRifle yard for H&P 318
4	Arrive On Location	12/16/2020	14:26					Arrive on location, rig was pulling drill pipe
5	Safety Meeting	12/16/2020	14:36					Pre-Rig Up Safety meeting
6	Rig Up Iron	12/16/2020	14:44					Rig up all ground equipment
7	Safety Meeting	12/16/2020	17:25					Pre-Job Safety meeting with rig crew, company man, and American Cementing crew
8	Rig Up Iron	12/16/2020	17:40					Stab swedge
9	Fill Lines	12/16/2020	17:53	8.4	3.5	5	386	Fill lines with 5 bbls of fresh water
10	Pressure Test Lines	12/16/2020	17:55				4086	Pressure test to 4086 psi
11	Pump Spacer	12/16/2020	15:59	8.4	5	20	499	Pump Water Spacer
12	Pump Lead Cement	12/16/2020	18:03	12.3	7	5	528	Pump Lead Cement @ 12.3 ppg
13	Pump Lead Cement	12/16/2020	18:07	12.3	7	40	486	Pump Lead Cement
14	Pump Lead Cement	12/16/2020	18:08	12.3	5	47	292	Finished pumping Lead Cement with 47 bbls away
15	Pump Tail Cement	12/16/2020	18:09	12.8	7	5	538	Pump Tail Cement @ 12.8 ppg
16	Pump Tail Cement	12/16/2020	18:14	12.8	7	40	501	Pump Tail Cement
17	Pump Tail Cement	12/16/2020	18:16	12.8	5	53	318	Pump Tail Cement
18	Shutdown	12/16/2020	18:16					Shutdown with 53 bbls of Tail away
19	Drop Top Plug	12/16/2020	00:00					Pull Swedge, drop plug, and stab swedge
20	Pump Displacement	12/16/2020	18:21	8.4	7	10	497	Pump Fresh Water Displacement
21	Pump Displacement	12/16/2020	18:27	8.4	7	50	746	Pump Fresh Water Displacement
22	Pump Displacement	12/16/2020	18:28	8.4	7	64	755	Pump Fresh Water Displacement
23	Cement Back to Surface	12/16/2020	18:28					14 bbls of cement to surface
24	Pump Displacement	12/16/2020	18:32	8.4	3	74	491	Pump Fresh Water Displacement
25	Land Plug	12/16/2020	18:32				1319	Landed the plug @ 491 psi took to 1319 psi
26	Check Floats	12/16/2020	18:35					Check floats, floats held 1/2 bbl back
27	Safety Meeting	12/16/2020	18:40					Pre-Rig Down Safety meeting
28	Rig Down Iron	12/16/2020	18:52					Rig Down all equipment
29	Safety Meeting	12/16/2020	19:10					Pre-Convoy Safety meeting
30	Depart Location	12/16/2020	19:19					Depart from location for Rifle yard. Thank You for using American Cementing, Andrew Linn, and crew

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	68.6 °F	50-80 °F
pH Level	7.5	5.5-8.5
Chlorides	240 mg/L	0-3000 mg/L
Total Alkalinity	0	0-1000
Total Hardness	100 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	220 mg/L	0-1500 mg/L
Potassium	>250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

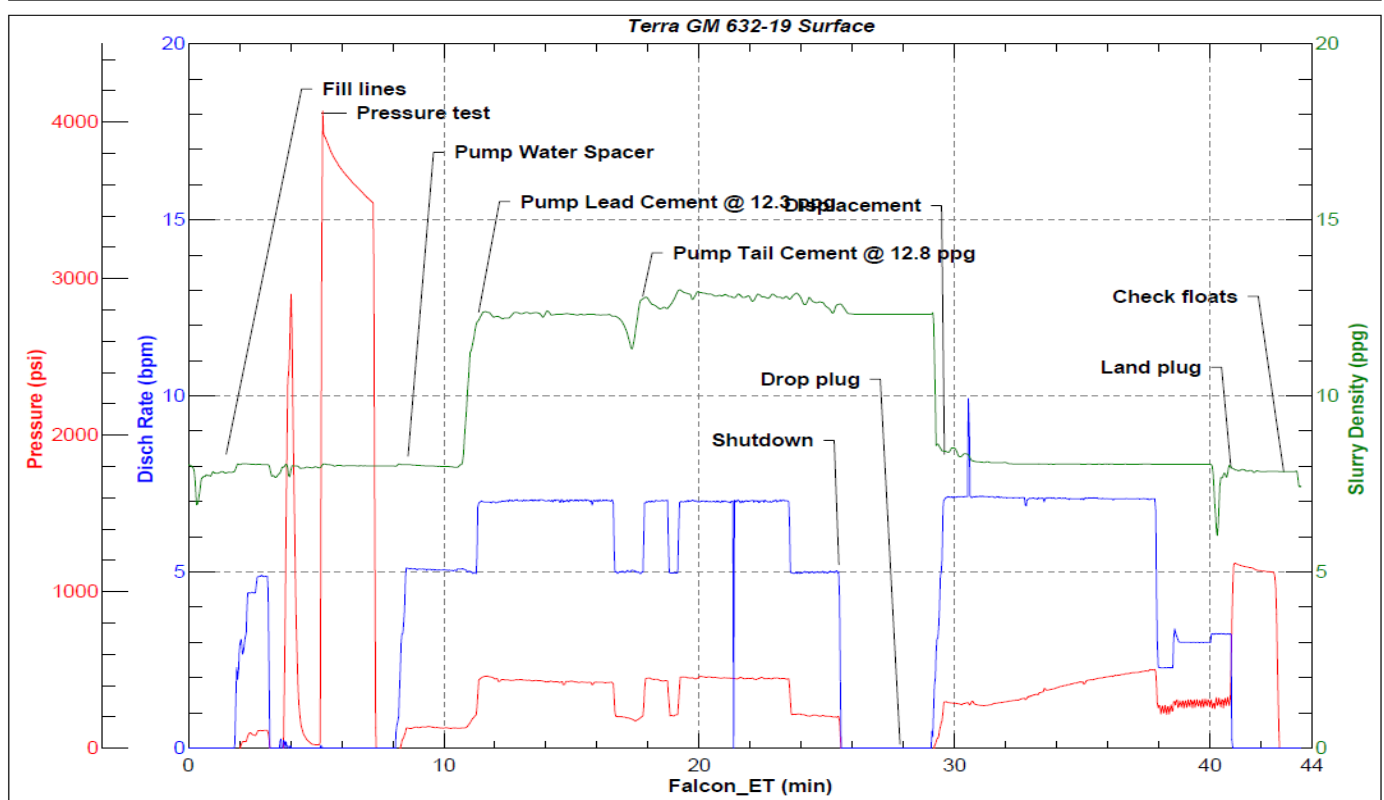


JobMaster Program Version 5.01C1

Job Number:

Customer:

Well Name:



BJ Services

Job Start: Wednesday, December 16, 2020