



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

CHEVRON GM 43-19 05-045-24357
S:20 T:6S R:96W Garfield CO

CallSheet #: 75892
Proposal #: 50957



LONG STRING 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 (%)
Casing	Outer	9.625	8.921	36	n/a	0	1000	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1000	7385	45
Casing	Inner	4.5	4	11.6	n/a	0	7385	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Silo	Silo #25			53
Pneumatic Trailer	CTF-019			53
Bulk Trailer	CTF-273	TRB-421	Kirchenwitz, Jacob	53
Cement Pump	CPF-011	TRH-957	Aden, Mark	53
Light Duty Pickups	LDV-3104		Linn, Paul	53

Timing

Event	Date/Time
Call Out	1/19/2021 05:30
Depart Facility	1/19/2021 08:50
On Location	1/19/2021 09:36
Rig Up Iron	1/19/2021 09:51
Job Started	1/19/2021 12:19
Job Completed	1/19/2021 13:47
Rig Down Iron	1/19/2021 14:18
Depart Location	1/19/2021 15:36

General Job Information

Metrics	Value
Well Fluid Density	10.6 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	114.06 bbls
Actual Displacement	114 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	N/A

Job Details

Metrics	Value
Flare Prior to Job	Yes
Flare Prior to Job	562 units
Flare During Job	Yes
Flare During Job	102 units
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10.6 lb/gal
Well Fluid Density Out of Well	10.6 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	170 °F
BHST	230 °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		10.00	3613
1	2	Mud Flush	Flush	8.45			40.86		20.00	3739
1	3	Water	Flush	8.34			42.00		10.00	3991
1	4	Lead Cement	Lead	12.50	2.16	12.18		228.00	87.75	4117
1	5	Tail Cement	Tail	13.00	1.99	10.08		485.00	172.25	5223
1	6	Displacement	DisplacementFinal	8.34			42.00		115.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
1	2	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
1	4	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	4	Lead	Lead Cement	BA-90	BondEnhancer	5.00	lb/sk
1	4	Lead	Lead Cement	FL-66	FluidLoss	0.30	%BWOB
1	4	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	4	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
1	4	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	4	Lead	Lead Cement	R-3	Retarder	0.60	%BWOB
1	5	Tail	Tail Cement	CLASS G	Cement	50.00	%
1	5	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	50.00	%
1	5	Tail	Tail Cement	BA-90	BondEnhancer	3.00	lb/sk
1	5	Tail	Tail Cement	BENTONITE	Viscosifier	6.00	%BWOB
1	5	Tail	Tail Cement	FL-66	FluidLoss	0.40	%BWOB
1	5	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	5	Tail	Tail Cement	GW-86	Viscosifier	0.10	%BWOB
1	5	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	5	Tail	Tail Cement	R-3	Retarder	0.10	%BWOB
1	5	Tail	Tail Cement	S-8	StrengthRetrogression	20.00	%BWOB

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	1/19/2021	05:30					Callout, on location time of 10:30 on 01/19/2021
2	Safety Meeting	1/19/2021	08:30					Pre-convoy Safety meeting
3	Depart Location	1/19/2021	08:50					Depart from Rifle yard for H&P 318
4	Arrive On Location	1/19/2021	09:36					Arrive on location, rig was running casing
5	Safety Meeting	1/19/2021	09:40					Pre-Rig up safety meeting
6	Rig Up Iron	1/19/2021	09:51					Rig up all equipment
7	Safety Meeting	1/19/2021	11:50					Pre-Job Safety meeting with rig crew, company man, and American Cementing
8	Rig Up Iron	1/19/2021	12:08					Load plug in plug container (verified by compnay man), stab plug container, and hook up lines
9	Fill Lines	1/19/2021	12:19	8.4	2	5	604	Fill lines with fresh water
10	Pressure Test Lines	1/19/2021	12:22				5555	Pressure test to 5555 psi
11	Pump Spacer	1/19/2021	12:25	8.4	5	10	698	Pump water spacer
12	Pump Spacer	1/19/2021	12:28	8.5	5	20	896	Pump mud flush
13	Pump Spacer	1/19/2021	12:32	8.4	5	10	910	Pump water spacer
14	Pump Lead Cement	1/19/2021	12:35	12.5	6	5	1190	Pump Lead Cement @ 12.5 ppg
15	Pump Lead Cement	1/19/2021	12:42	12.5	6	50	1262	Pump Lead Cement
16	Pump Lead Cement	1/19/2021	12:48	12.5	6	86	775	Pump Lead Cement
17	Pump Tail Cement	1/19/2021	12:49	13	6	5	1063	Pump Tail Cement @ 13 ppg
18	Pump Tail Cement	1/19/2021	12:55	13	5	44	551	Pump Tail Cement
19	Pump Tail Cement	1/19/2021	13:06	13	5	100	708	Pump Tail Cement
20	Pump Tail Cement	1/19/2021	13:18	13	3.5	145	477	Pump Tail Cement
21	Pump Tail Cement	1/19/2021	13:22	13	3.5	168	496	Pump Tail Cement
22	Shutdown	1/19/2021	13:22					Shutdown with 168 bbls of Tail cement away
23	Clean Pumps and Lines	1/19/2021	13:24					Clean pumps & lines to 3-sided tank
24	Drop Top Plug	1/19/2021	13:30					Drop plug verified by company man
25	Pump Displacement	1/19/2021	13:32	8.5	10	10	820	KCL Displacement
26	Pump Displacement	1/19/2021	13:36	8.5	10	50	1720	KCL Displacement
27	Pump Displacement	1/19/2021	14:42	8.5	10	104	2762	KCL Displacement
28	Pump Displacement	1/19/2021	13:45	8.5	4	114	2088	KCL Displacement
29	Land Plug	1/19/2021	13:45				3000	Land plug @ 2088 psi took to 3000 psi
30	Check Floats	1/19/2021	13:47					Check floats, floats held 1 bbl back
31	Safety Meeting	1/19/2021	13:55					Pre-Rig down safety meeting with rig crew
32	Rig Down Iron	1/19/2021	14:01					Rig down rig floor
33	Safety Meeting	1/19/2021	14:10					Pre-Rig down safety meeting with American Cementing crew
34	Rig Down Iron	1/19/2021	14:18					Rig down all equipment
35	Safety Meeting	1/19/2021	15:22					
36	Depart Location	1/19/2021	15:36					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	78.6 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	420 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	>350 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

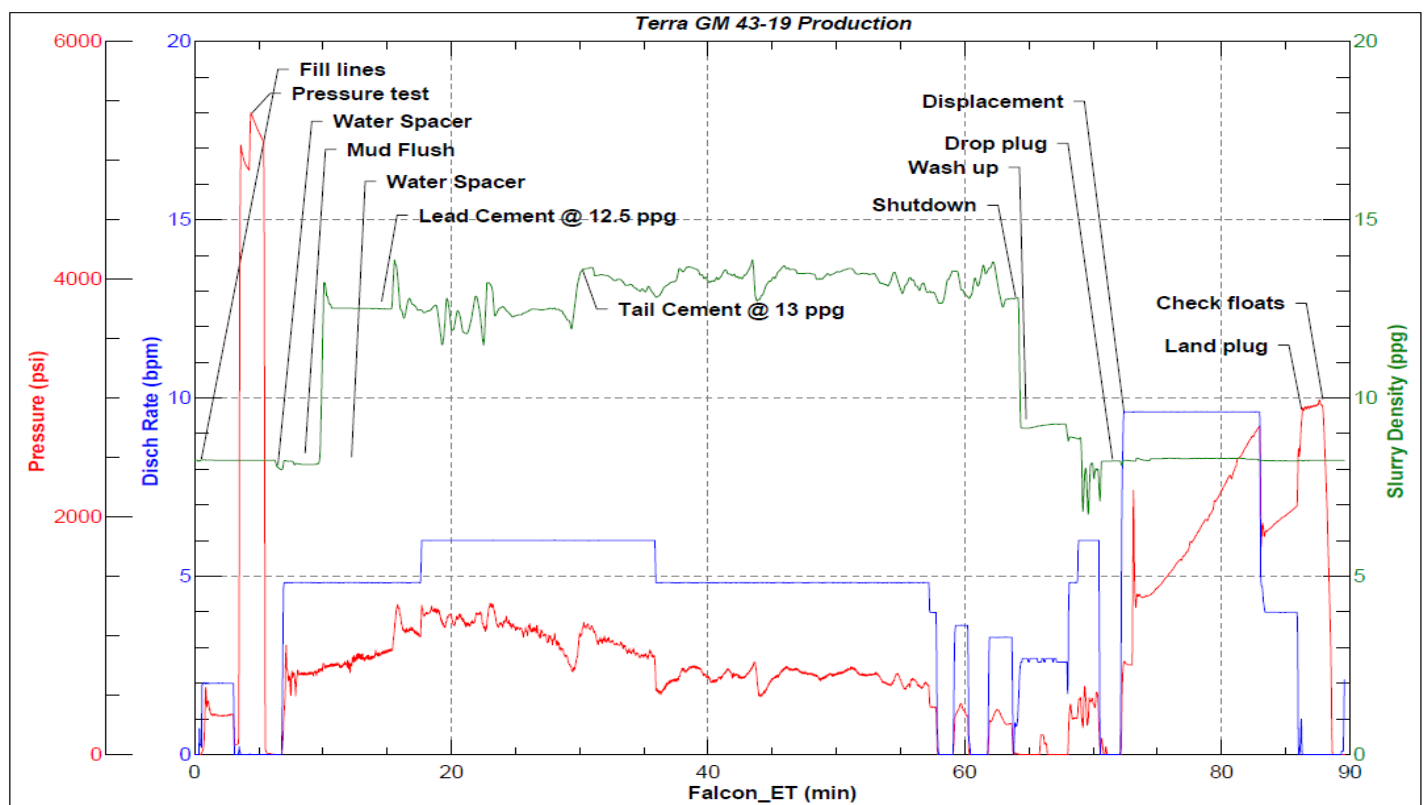


JobMaster Program Version 5.01C1

Job Number:

Customer:

Well Name:



BJ Services

Job Start: Tuesday, January 19, 2021