



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

CHEVRON GM 343-19 05-045-24353
S:20 T:6S R:96W Garfield CO

CallSheet #: 75920
Proposal #: 50956



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@americacementing.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		0	1000	0
Open Hole	Outer		8.75			1000	7397	45
Casing	Inner	4.5	4	11.6		0	7397	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Field Storage Silo	CTS-471			53
Bulk Trailer	CTF-242	TRB-769	Doyle, Sheldon	53
Cement Pump	CPF-012	TRH-1140	Gonzales, Ivan	53
Light Duty Pickups	LDV-3104		Linn, Paul	53

Timing

Event	Date/Time
Call Out	1/21/2021 22:20
Depart Facility	1/22/2021 02:12
On Location	1/22/2021 02:54
Rig Up Iron	1/22/2021 03:12
Job Started	1/22/2021 05:25
Job Completed	1/22/2021 07:02
Rig Down Iron	1/22/2021 07:38
Depart Location	1/22/2021 08:22

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	115.33 bbls
Actual Displacement	115 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	No
Flare Prior to Job	436 units
Flare During Job	No
Flare During Job	103 units
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10.8 lb/gal
Well Fluid Density Out of Well	10.8 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 (sk)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		10.00	3620
1	2	Mud Flush	Flush	8.45			40.86		20.00	3746
1	3	Water	Flush	8.34			42.00		10.00	3998
1	4	Lead Cement	Lead	12.50	2.16	12.18		229.00	88.14	4124
1	5	Tail Cement	Tail	13.00	1.99	10.08		486.00	172.60	5231
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	1/21/2021	22:20					Callout, on location time of 3:30 1/22/2021
2	Safety Meeting	1/22/2021	01:55					Pre-Convoy Safety meeting
3	Depart Location	1/22/2021	02:12					Depart from Rifle yard for H&P 318
4	Arrive On Location	1/22/2021	02:54					Arrive on location, rig was running casing
5	Safety Meeting	1/22/2021	03:01					Pre-Rig up safety meeting
6	Rig Up Iron	1/22/2021	03:12					Rig up all ground equipment
7	Safety Meeting	1/22/2021	05:00					Pre-Job Safety meeting with rig crew, company man, and American Cementing crew
8	Rig Up Iron	1/22/2021	05:17					Load plug in plug container (verified by company man), stab plug container, hook up lines
9	Fill Lines	1/22/2021	05:25	8.4	2	5	497	Fill lines with 5 bbls fresh water
10	Pressure Test Lines	1/22/2021	05:29				5098	Pressure test to 5098 psi
11	Pump Spacer	1/22/2021	05:33	8.4	5	10	747	Pump Water spacer
12	Pump Spacer	1/22/2021	05:35	8.6	7	20	1048	Pump Mud flush spacer
13	Pump Spacer	1/22/2021	05:39	8.4	7	10	1121	Pump Water spacer
14	Pump Lead Cement	1/22/2021	05:41	12.5	7	5	1445	Pump Lead Cement @ 12.5 ppg
15	Pump Lead Cement	1/22/2021	05:50	12.5	5	50	807	Pump Lead Cement
16	Pump Lead Cement	1/22/2021	05:55	12.5	5	80	575	Pump Lead Cement
17	Pump Tail Cement	1/22/2021	05:57	13	7	5	1117	Pump Tail Cement @ 13 ppg
18	Pump Tail Cement	1/22/2021	06:04	13	5.5	50	484	Pump Tail Cement
19	Pump Tail Cement	1/22/2021	06:15	13	4.5	100	559	Pump Tail Cement
20	Pump Tail Cement	1/22/2021	06:29	13	2	150	208	Pump Tail Cement
21	Pump Tail Cement	1/22/2021	06:36	13	2	166	211	Pump Tail Cement
22	Shutdown	1/22/2021	06:36					Shutdown with 166 bbls of Tail Cement away
23	Clean Pumps and Lines	1/22/2021	06:37					Clean pumps and lines to 3-sided tank
24	Drop Top Plug	1/22/2021	06:43					Drop Plug verified by company man
25	Pump Displacement	1/22/2021	06:45	8.5	8.5	10	850	Pump KCL Water Displacement
26	Pump Displacement	1/22/2021	06:50	8.5	8.5	50	1425	Pump KCL Water Displacement
27	Pump Displacement	1/22/2021	06:56	8.5	8.5	105	2197	Pump KCL Water Displacement
28	Pump Displacement	1/22/2021	06:58	8.5	4	115	1695	Pump KCL Water Displacement
29	Land Plug	1/22/2021	06:58				2600	Land the plug @ 1695 psi took to 2600 psi
30	Check Floats	1/22/2021	07:02					Check floats, floats held 1 bbl back
31	Safety Meeting	1/22/2021	07:11					Pre-Rig down safety meeting with rig crew
32	Rig Down Iron	1/22/2021	07:18					Rig down rig floor
33	Safety Meeting	1/22/2021	07:26					Pre-Rig down safety meeting with American Cementing crew
34	Rig Down Iron	1/22/2021	07:38					Rig down all equipment
35	Safety Meeting	1/22/2021	08:16					Pre-Convoy Safety meeting
36	Depart Location	1/22/2021	08:22					Depart from location for Rifle yard. Thank you for using American Cementing, Andrew linn, And crew

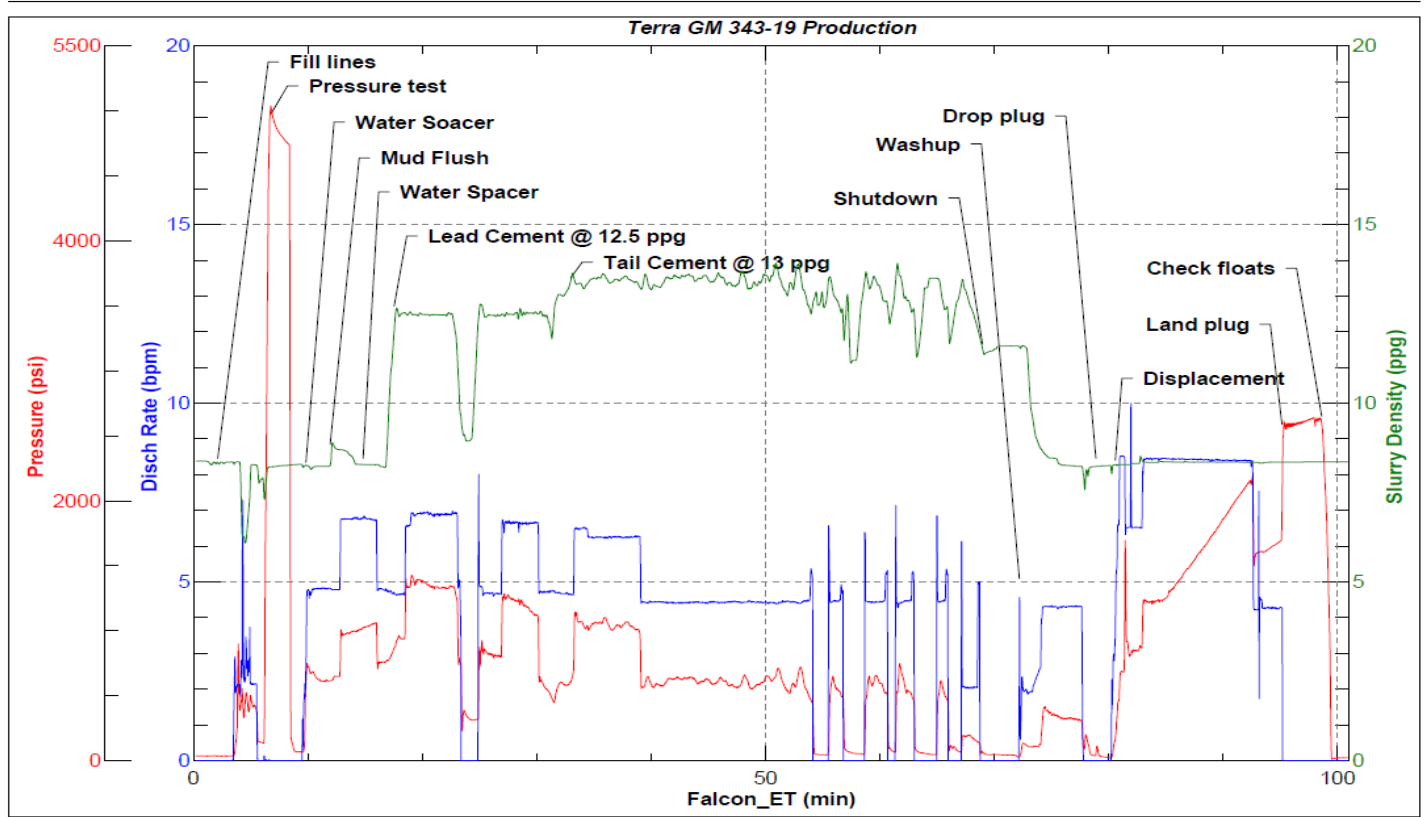
3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	76.6 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	420 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	>250 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: Friday, January 22, 2021