



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 341-18-297 05-103-12470
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 77141
Proposal #: 53143



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) 657-1157

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	3676	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3261	12127	45
Casing	Inner	4.5	4	11.6	LTC	0	12117	0

Timing

Event	Date/Time
Call Out	6/4/2021 13:00
Depart Facility	6/4/2021 15:20
On Location	6/4/2021 16:48
Rig Up Iron	6/4/2021 17:00
Job Started	6/4/2021 21:32
Job Completed	6/5/2021 00:20
Rig Down Iron	6/5/2021 00:20
Depart Location	6/5/2021 01:50

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS(CTS)-438		
Field Storage Silo	FSS(CTS)-470		
Cement Trailer Float	CTF-263	TRC(TRB)-112	Andrew Chambers
Cement Trailer Float	CTF-280	TRC(TRB)-421	Hampton, John
Light Duty Vehicles	LDV-061		Diaz, Douglas
Cement Pump Float	CPF-136	TRH-677	Aden, Mark

General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	660 bbls
Rig Circulation Time	1 hours
Calculated Displacement	187 bbls
Actual Displacement	187 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 During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10 lb/gal
Well Fluid Density Out of Well	10 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Frac Tanks	
Temperature	72 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	240	0-1000
Total Hardness	425 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	0 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	Water	Flush	8.34			42.00		100.00	0
2	Scav Cement	Scavenger	11.00	3.07	18.83		366.00	200.36	742
3	Lead Cement	Lead	12.70	2.00	10.97		246.00	87.59	4266
4	Tail Cement	Tail	13.50	1.85	8.97		1035.00	340.16	5875
5	Displacement	DisplacementFinal	8.34			42.00		187.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Scavenger	Scav Cement	ASTM TYPE III	Cement	65.00	%
2	Scavenger	Scav Cement	FLY ASH (POZZOLAN)	Extender	35.00	%
2	Scavenger	Scav Cement	BENTONITE	Viscosifier	6.00	%BWOB
2	Scavenger	Scav Cement	FP-24	Defoamer	0.30	%BWOB
2	Scavenger	Scav Cement	GW-86	Viscosifier	0.10	%BWOB
2	Scavenger	Scav Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Scavenger	Scav Cement	R-3	Retarder	0.30	%BWOB
3	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
3	Lead	Lead Cement	CD-31	Dispersant	0.10	%BWOB
3	Lead	Lead Cement	FL-66	FluidLoss	0.50	%BWOB
3	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
3	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
3	Lead	Lead Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Lead	Lead Cement	R-3	Retarder	0.50	%BWOB
4	Tail	Tail Cement	BA-90	BondEnhancer	10.00	%
4	Tail	Tail Cement	CLASS G	Cement	70.00	%
4	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	20.00	%
4	Tail	Tail Cement	BENTONITE	Viscosifier	6.00	%BWOB
4	Tail	Tail Cement	FL-24	FluidLoss	0.40	%BWOB
4	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
4	Tail	Tail Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
4	Tail	Tail Cement	R-3	Retarder	0.30	%BWOB
4	Tail	Tail Cement	S-8	StrengthRetrogression	25.00	%BWOB

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	6/4/2021	13:00					Yard call 1300 on location 1800
2	Depart For Location	6/4/2021	15:20					Leave Rifle yard for location
3	Arrive On Location	6/4/2021	16:48					Arrive on location, rig running casing
4	Spot Equipment	6/4/2021	16:48					Spot in all equipment
5	Rig Up Iron	6/4/2021	17:00					Rig in all lines and equipment to stand pipe
6	Waiting	6/4/2021	17:50					Waiting on rig to finish casing and circulate
7	Safety Meeting	6/4/2021	20:00					Pre job safety meeting with company man and rig crew
8	End Circulation	6/4/2021	20:10					Rig ended circulation, circulated 1 hr @ 11 BPM total of 660 BBLS
9	Rig Up Iron	6/4/2021	20:10					Rig up cement head and lines on the floor, crossover had teeth marks on threads, filed down but head would not tighten down on it, rigged up circulating swedge and low torque
10	Fill Lines	6/4/2021	21:32	8.34	5	10	480	Pumping fresh water, returns
11	Pressure Test Lines	6/4/2021	21:36				5000	Pressure test lines
12	Pump Spacer	6/4/2021	21:40	8.34	8	10	1066	Pumping fresh water spacer
13	Pump Spacer	6/4/2021	21:55	8.34	5.5	100	1114	Pumping fresh water spacer
14	Pump Scavenger	6/4/2021	21:55	11	5.5	0	1114	Pumping scavenger
15	Pump Scavenger	6/4/2021	22:02	11	8	50	1240	Pumping scavenger
16	Pump Scavenger	6/4/2021	22:08	11	8	100	1206	Pumping scavenger
17	Pump Scavenger	6/4/2021	22:14	11	8	150	781	Pumping scavenger
18	Pump Scavenger	6/4/2021	22:21	11	6.5	200	596	Pumping scavenger
19	Pump Lead Cement	6/4/2021	22:21	12.7	6.5	0	596	Pumping lead cement
20	Pump Lead Cement	6/4/2021	22:34	12.7	6.5	50	460	Pumping lead cement
21	Pump Lead Cement	6/4/2021	22:37	12.7	3	88	254	Pumping lead cement
22	Pump Tail Cement	6/4/2021	22:37	13.5	3	0	254	Pumping tail cement
23	Pump Tail Cement	6/4/2021	22:48	13.5	5	50	573	Pumping tail cement
24	Pump Tail Cement	6/4/2021	22:58	13.5	5	100	551	Pumping tail cement
25	Pump Tail Cement	6/4/2021	23:07	13.5	5	150	585	Pumping tail cement
26	Pump Tail Cement	6/4/2021	23:17	13.5	5	200	570	Pumping tail cement
27	Pump Tail Cement	6/4/2021	23:27	13.5	5	250	541	Pumping tail cement
28	Pump Tail Cement	6/4/2021	23:36	13.5	5	300	513	Pumping tail cement
29	Pump Tail Cement	6/4/2021	23:41	13.5	3	340	249	Pumping tail cement
30	Clean Pumps and Lines	6/4/2021	23:41					Wash pump and lines to pit
31	Drop Top Plug	6/4/2021	23:51					Drop top plug verified by company man

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
32	Pump Displacement	6/4/2021	23:52	8.34	10	0	646	Pumping KCL displacement
33	Pump Displacement	6/4/2021	23:56	8.34	10	50	1397	Pumping KCL displacement
34	Pump Displacement	6/5/2021	00:01	8.34	10	100	2063	Pumping KCL displacement
35	Pump Displacement	6/5/2021	00:06	8.34	10	150	2684	Pumping KCL displacement
36	Pump Displacement	6/5/2021	00:13	8.34	3	187	2178	Pumping KCL displacement
37	Land Plug	6/5/2021	00:13				3146	Land plug, FCP 2178 PSI bumped to 3146 PSI
38	Check Floats	6/5/2021	00:20					Bled pressure, floats held. 3 BBLs bled back
39	Rig Down Iron	6/5/2021	00:20					Rig down all lines and equipment
40	Depart Location	6/5/2021	01:50					Leave location for Rifle shop

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 77141
Customer: Terra
Well Name: RG 341-18

