



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 444-7-297 05-103-12469
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 77536
Proposal #: 53763



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

District Manager | (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	3337	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3337	12373	45
Casing	Inner	4.5	4	11.6	LTC	0	12376	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer	CTF-555	TRC(TRB)-090	Russell, Jerry	
Cement Trailer	CTF-407	TRB-421	Haga, Jeremiah	
Silo	FSS(CTS)-470			
Silo	FSS(CTS)-438			
Cement Pump Float	CPF-074	TRH-1745	Bryson-Floyd, Maurice	
Light Duty Vehicles	LDV-062		Linn, Paul	Hensley, Daniel

Timing

Event	Date/Time
Call Out	7/19/2021 00:52
Depart Facility	7/19/2021 03:54
On Location	7/19/2021 05:26
Rig Up Iron	7/19/2021 05:41
Job Started	7/19/2021 09:47
Job Completed	7/19/2021 12:21
Rig Down Iron	7/19/2021 12:44
Depart Location	7/19/2021 13:48

General Job Information

Metrics	Value
Well Fluid Density	9.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	450 bbls
Rig Circulation Time	1 hours
Calculated Displacement	191.27 bbls
Actual Displacement	191 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	586 units
Flare During Job	No
Flare During Job	280 units
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.9 lb/gal
Well Fluid Density Out of Well	9.9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	68.8 °F	50-80 °F
pH Level	8	5.5-8.5
Chlorides	480 mg/L	0-3000 mg/L
Total Alkalinity	285	0-1000
Total Hardness	156 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	300 mg/L	0-1500 mg/L
Potassium	400 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	3165
2	Scav Cement	Scavenger	11.00	3.07	18.83		366.00	200.36	4473
3	Lead Cement	Lead	12.70	2.00	10.97		247.00	87.95	6994
4	Tail Cement	Tail	13.50	1.85	8.97		1035.00	340.16	8100
5	Displacement	DisplacementFinal	8.34			42.00		192.00	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	7/19/2021	00:52					Callout, on location of 6:00 7/19/21
2	Safety Meeting	7/19/2021	03:30					Pre-Convoy safety meeting
3	Depart Location	7/19/2021	03:54					Depart Rifle yard for H&P 329
4	Arrive On Location	7/19/2021	05:26					Arrive on location, rig was running casing
5	Safety Meeting	7/19/2021	05:33					Pre-Rig up safety meeting
6	Rig Up Iron	7/19/2021	05:41					Rig up all ground equipment
7	Safety Meeting	7/19/2021	09:22					Pre-Job safety meeting with rig crew, compay man, and American Cementing crew
8	Rig Up Iron	7/19/2021	09:36					Load plug in plug container (verified by company man), stab plug container, hook up lines
9	Fill Lines	7/19/2021	09:47	8.4	2	5	256	Fill lines
10	Pressure Test Lines	7/19/2021	09:50				5763	Pressure test to 5763 psi
11	Pump Spacer	7/19/2021	09:53	8.4	7	6	755	Pump water spacer
12	Pump Spacer	7/19/2021	09:59	8.4	9	50	1325	Pump water spacer
13	Pump Spacer	7/19/2021	10:04	8.4	5	100	860	Pump water spacer
14	Pump Scavenger	7/19/2021	10:07	11	8	5	1558	Pump Scavenger Cement @ 11 ppg
15	Pump Scavenger	7/19/2021	10:11	11	7.5	50	1366	Pump Scavenger Cement
16	Pump Scavenger	7/19/2021	10:19	11	7.5	100	1217	Pump Scavenger Cement
17	Pump Scavenger	7/19/2021	10:25	11	7.5	150	893	Pump Scavenger Cement
18	Pump Scavenger	7/19/2021	10:32	11	5	199	227	Pump Scavenger Cement
19	Pump Lead Cement	7/19/2021	10:33	12.7	7	5	443	Pump Lead Cement @ 12.7 ppg
20	Pump Lead Cement	7/19/2021	10:40	12.7	7	50	552	Pump Lead Cement
21	Pump Lead Cement	7/19/2021	10:47	12.7	5	88	284	Pump Lead Cement
22	Pump Tail Cement	7/19/2021	10:48	13.5	7	5	689	Pump Tail Cement @ 13.5 ppg
23	Pump Tail Cement	7/19/2021	10:53	13.5	7	50	773	Pump Tail Cement
24	Pump Tail Cement	7/19/2021	11:02	13.5	7	100	757	Pump Tail Cement
25	Pump Tail Cement	7/19/2021	11:11	13.5	7	150	802	Pump Tail Cement
26	Pump Tail Cement	7/19/2021	11:18	13.5	7	200	777	Pump Tail Cement
27	Pump Tail Cement	7/19/2021	11:26	13.5	6	250	589	Pump Tail Cement
28	Pump Tail Cement	7/19/2021	11:34	13.5	6	300	563	Pump Tail Cement
29	Pump Tail Cement	7/19/2021	11:46	13.5	3.5	348	206	Pump Tail Cement
30	Shutdown	7/19/2021	11:47					Shutdown with 348 bbls away
31	Clean Pumps and Lines	7/19/2021	11:48					Wash pumps & lines to pit
32	Drop Top Plug	7/19/2021	11:54					Drop plug, verified by company man
33	Pump Displacement	7/19/2021	11:56	8.4	10	10	538	Pump KCL water displacement
34	Pump Displacement	7/19/2021	12:00	8.4	10	50	1341	Pump KCL water displacement
35	Pump Displacement	7/19/2021	12:08	8.4	10	100	2053	Pump KCL water displacement
36	Pump Displacement	7/19/2021	12:14	8.4	10	150	2509	Pump KCL water displacement
37	Pump Displacement	7/19/2021	12:17	8.4	10	180	2843	Pump KCL water displacement
38	Pump Displacement	7/19/2021	12:19	8.4	4	191	2460	Pump KCL water displacement
39	Land Plug	7/19/2021	12:19				3430	Land plug @ 2460 psi took to 3430 psi

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
40	Check Floats	7/19/2021	12:21					Check floats, floats held 2 1/2 bbls back
41	Safety Meeting	7/19/2021	12:33					Pre-Rig down safety meeting
42	Rig Down Iron	7/19/2021	12:44					Rig down all equipment
43	Safety Meeting	7/19/2021	13:36					Pre-Convoy safety meeting
44	Depart Location	7/19/2021	13:48					Depart from location for Rifle yard. Thank you for using American Cementing, Andrew Linn, and crew

Pump Diagrams



JobMaster Program Version 5.01C1

Job Number: 77536

Customer: Terra

Well Name: RG 444-7-297

