



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 544-7-297 05-103-12466
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 77642
Proposal #: 53539



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@americancementing.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	3316	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3306	12273	45
Casing	Inner	4.5	4	11.6	LTC	0	12270	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Silo	FSS(CTS)-470		
Silo	FSS(CTS)-438		
Cement Trailer	CTF-263	TRB-421	Russell, Jerry
Cement Trailer	CTF-340	TRB-764	Richey, Steven
Light Duty Vehicles	LDV-061		Chambers, Andrew
Cement Pump	CPF-011	TRH-1137	Aden, Mark

Timing

Event	Date/Time
Call Out	7/28/2021 02:00
Depart Facility	7/28/2021 03:30
On Location	7/28/2021 05:00
Rig Up Iron	7/28/2021 06:00
Job Started	7/28/2021 10:30
Job Completed	7/28/2021 13:13
Rig Down Iron	7/28/2021 13:45
Depart Location	7/28/2021 15:20

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	1 hours
Calculated Displacement	189.65 bbls
Actual Displacement	189.65 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 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	10.8 lb/gal
Well Fluid Density Out of Well	10.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	72 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	73 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	3039
2	Scav Cement	Scavenger	11.00	3.07	18.83		366.00	200.36	1268
3	Lead Cement	Lead	12.70	2.00	10.97		247.00	87.95	4825
4	Tail Cement	Tail	13.50	1.85	8.97		1035.00	340.16	6415
5	Displacement	DisplacementFinal	8.34			42.00		191.00	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	Call out	7/28/2021	02:00					Crew called out on location at 7:00
2	Pre convoy	7/28/2021	02:45					Discussed route and travel routes
3	Depart for location	7/28/2021	03:00					Crew leaves for location
4	Arrive on location	7/28/2021	05:15					Met with customer rep
5	Spot equipment	7/28/2021	05:30					Spotted equipment for job
6	Pre rig up Jsa	7/28/2021	05:50					Discussed hazards of rig up
7	Rig up location	7/28/2021	06:00					Crew rigs up
8	Wait on casing	7/28/2021	06:45					Waiting on rig to finish casing
9	Pre job	7/28/2021	10:22					Went over job details with all involved
10	Fill lines	7/28/2021	10:30	8.33	3.5	10	379	Filled lines
11	Pressure test	7/28/2021	10:35	8.33	1	1	5000	Tested lines to 5000
12	Water spacer	7/28/2021	10:38	8.33	7	90	916	Pumped 90 bbl fresh water spacer
13	Scavenger cement	7/28/2021	10:55	11	7	200	1502	Pumped 366 sks
14	Lead cement	7/28/2021	11:26	12.7	7	87.95	528	Pumped 247 sks
15	Tail cement	7/28/2021	11:49	13.5	6	50	462	Pumped 1035 sks
16	Tail cement	7/28/2021	11:57	13.5	6	100	551	Pumped tail
17	Tail cement	7/28/2021	12:06	13.5	7	150	791	Pumped tail
18	Tail cement	7/28/2021	12:11	13.5	7	200	772	Pumped tail
19	Tail cement	7/28/2021	12:19	13.5	7	250	762	Pumped tail
20	Tail cement	7/28/2021	12:26	13.5	7	300	746	Pumped tail
21	Shutdown	7/28/2021	12:35					Cement pumping complete
22	Wash pump/lines	7/28/2021	12:37					Washed pumps and lines with water/air
23	Drop plug	7/28/2021	12:46					Latch down plug left cement head
24	Displacement	7/28/2021	12:47	8.33	9	189.65	2100	Displaced with KCL water
25	Slow rate to land	7/28/2021	13:11	8.33	4	170	2297	Slowed rate to land plug
26	Bump plug	7/28/2021	13:13		4	189	2570-3568	Landed plug at calculated
27	Check floats	7/28/2021	13:18					Floats held 2.5 bbl back
28	Pre rig down Jsa	7/28/2021	13:25					Discussed hazards of rig down
29	Rig down location	7/28/2021	13:45					Crew rigs down
30	Rig down complete	7/28/2021	15:00					All iron rigged down
31	Pre convoy	7/28/2021	15:15					Discussed trip home
32	Crew departs for yard	7/28/2021	15:20					Crew departs for yard

Pump Diagrams

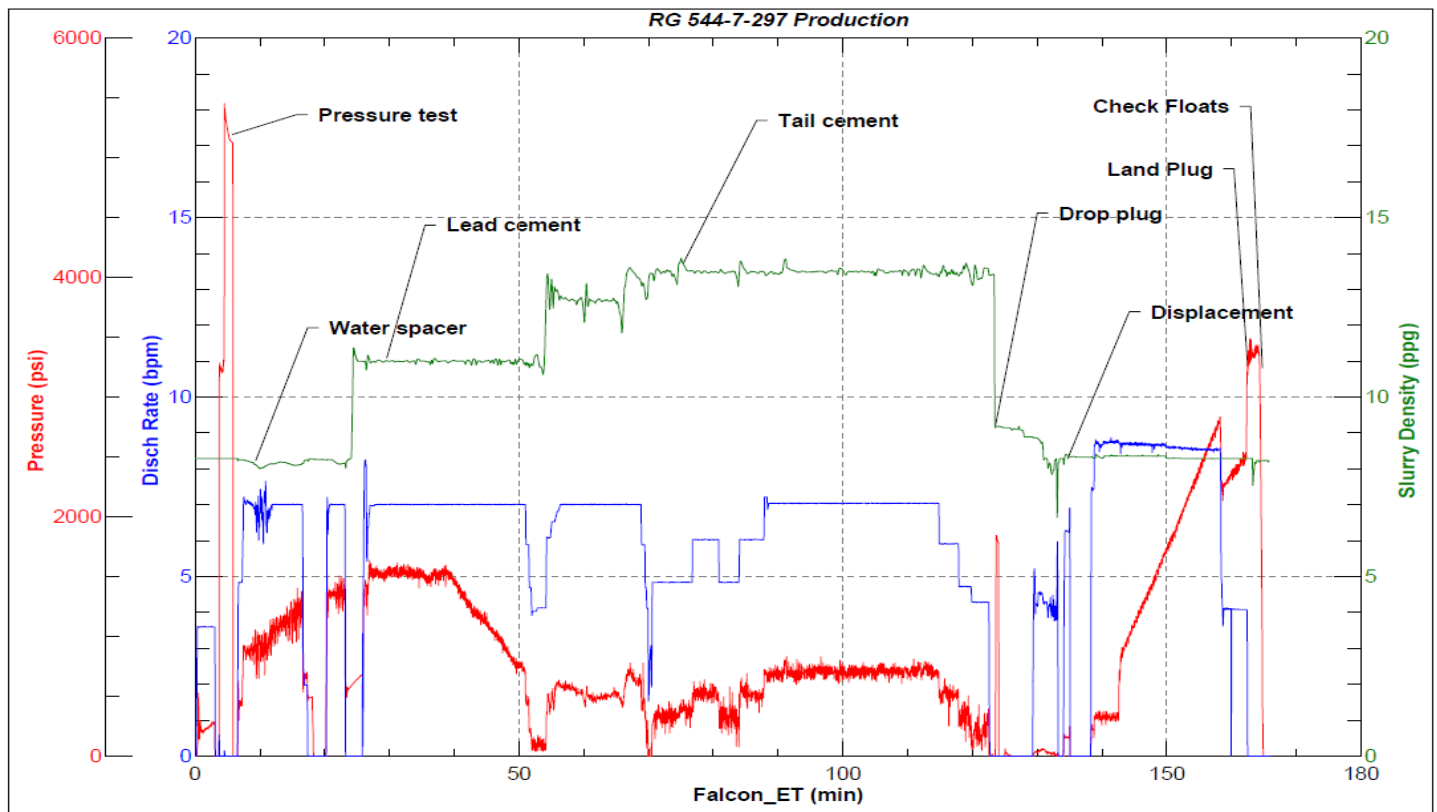


JobMaster Program Version 5.01C1

Job Number: 77642

Customer: Terra

Well Name: RG 544-7-297



BJ Services

Job Start: Wednesday, July 28, 2021