



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 443-7-297 05-103-12464
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 77391
Proposal #: 53453



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) 657-1157

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	3442	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3432	12750	45
Casing	Inner	4.5	4	11.6	LTC	0	12740	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Silo	FSS(CTS)-470		
Silo	FSS(CTS)-438		
Cement Trailer	CTF-182	TRH(TRB)-769	Jacob Kirchenwitz
Cement Trailer	CTF-407	TRC(TRB)-112	Eric Dewit
Light Duty Vehicles	LDV-061		Diaz, Douglas
Cement Pump	CPF-012	TRH-887	Lawrence Mcneal

Timing

Event	Date/Time
Call Out	7/1/2021 00:00
Depart Facility	7/1/2021 01:20
On Location	7/1/2021 02:34
Rig Up Iron	7/1/2021 02:45
Job Started	7/1/2021 20:32
Job Completed	7/1/2021 23:45
Rig Down Iron	7/1/2021 23:45
Depart Location	7/2/2021 00:45

General Job Information

Metrics	Value
Well Fluid Density	10.1 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	825 bbls
Rig Circulation Time	1.25 hours
Calculated Displacement	197 bbls
Actual Displacement	197 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	10.1 lb/gal
Well Fluid Density Out of Well	10.1 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Frac Tank	
Temperature	65 °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 (sk)	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	1289
3	Lead Cement	Lead	12.70	2.00	10.97		257.00	91.51	4833
4	Tail Cement	Tail	13.50	1.85	8.97		1035.00	341.00	6515
5	Displacement	DisplacementFinal	8.34			42.00		197.00	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	7/1/2021	00:00					Yard call 0000 on location 0300
2	Depart For Location	7/1/2021	01:20					Leave Rifle yard for location
3	Arrive On Location	7/1/2021	02:34					Arrive on location, rig broke down
4	Spot Equipment	7/1/2021	02:34					Spot in all equipment
5	Rig Up Iron	7/1/2021	02:45					Rig in all lines and equipment to stand pipe
6	Waiting	7/1/2021	03:40					Waiting on rig to be repaired, finish casing and circulate
7	Safety Meeting	7/1/2021	20:15					Pre job safety meeting with company man and rig crew
8	End Circulation	7/1/2021	20:24					Rig ended circulation, circulated 1.25 hr @ 11 BPM total of 825 BBLS
9	Waiting	7/1/2021	20:24					Waiting on rig to lay down CRT
10	Rig Up Iron	7/1/2021	20:28					Rig up cement head and lines on the floor
11	Fill Lines	7/1/2021	20:32	8.34	5.5	5	452	Pumping fresh water, returns
12	Pressure Test Lines	7/1/2021	20:34				5000	Pressure test lines
13	Pump Spacer	7/1/2021	20:40	8.34	7	5	895	Pumping fresh water spacer
14	Pump Spacer	7/1/2021	20:58	8.34	6	100	1317	Pumping fresh water spacer
15	Pump Scavenger	7/1/2021	20:58	11	6	0	1317	Pumping scavenger, Mix water temp 65 F. Slurry temp 75 F
16	Pump Scavenger	7/1/2021	21:10	11	6	50	1221	Pumping scavenger
17	Pump Scavenger	7/1/2021	21:17	11	6	100	1022	Pumping scavenger
18	Pump Scavenger	7/1/2021	21:25	11	6	150	522	Pumping scavenger
19	Pump Scavenger	7/1/2021	21:31	11	7	200	583	Pumping scavenger
20	Pump Lead Cement	7/1/2021	21:31	12.7	7	0	583	Pumping lead cement, Slurry temp 75 F
21	Pump Lead Cement	7/1/2021	21:38	12.7	7	50	554	Pumping lead cement
22	Pump Lead Cement	7/1/2021	21:44	12.7	7	92	730	Pumping lead cement
23	Pump Tail Cement	7/1/2021	21:44	13.5	7	0	730	Pumping tail cement, slurry temp 75 F
24	Pump Tail Cement	7/1/2021	21:55	13.5	5	50	490	Pumping tail cement
25	Pump Tail Cement	7/1/2021	22:03	13.5	5	100	351	Pumping tail cement
26	Pump Tail Cement	7/1/2021	22:14	13.5	4.5	150	305	Pumping tail cement
27	Pump Tail Cement	7/1/2021	22:26	13.5	4.5	200	392	Pumping tail cement
28	Pump Tail Cement	7/1/2021	22:38	13.5	4.5	250	433	Pumping tail cement
29	Pump Tail Cement	7/1/2021	22:48	13.5	4.5	300	414	Pumping tail cement
30	Pump Tail Cement	7/1/2021	22:58	13.5	2.5	341	117	Pumping tail cement
31	Clean Pumps and Lines	7/1/2021	22:58					Wash pump and lines to pit
32	Drop Top Plug	7/1/2021	23:07					Drop top plug verified by company man
33	Pump Displacement	7/1/2021	23:07	8.34	5	0	130	Pumping KCL displacement
34	Pump Displacement	7/1/2021	23:15	8.34	7	50	220	Pumping KCL displacement
35	Pump Displacement	7/1/2021	22:22	8.34	7	100	1205	Pumping KCL displacement
36	Pump Displacement	7/1/2021	22:30	8.34	7	150	2082	Pumping KCL displacement
37	Pump Displacement	7/1/2021	23:39	8.34	4	197	2544	Pumping KCL displacement
38	Land Plug	7/1/2021	23:39				3360	Land plug, FCP 2544 PSI bumped to 3360 PSI
39	Check Floats	7/1/2021	23:45					Bled pressure, floats held. 2.5 BBLs bled back
40	Rig Down Iron	7/1/2021	23:45					Rig down all lines and equipment
41	Depart Location	7/2/2021	00:45					Leave location for Rifle shop

Pump Diagrams

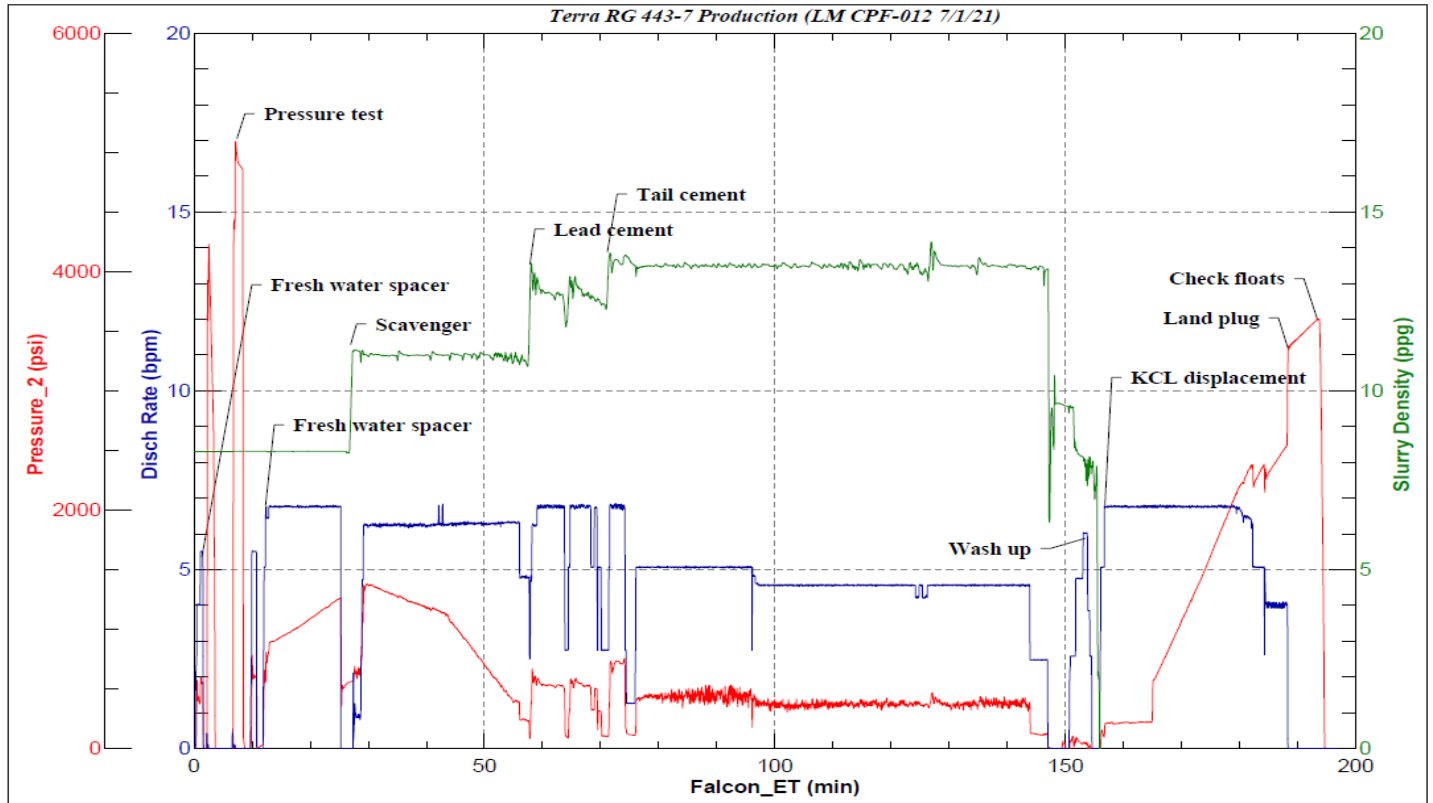


JobMaster Program Version 5.01C1

Job Number: 77391

Customer: Terra

Well Name: RG 443-7



BJ Services

Job Start: Thursday, July 01, 2021