



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 43-7-297 05-103-12475
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 77443
Proposal #: 53664



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	3474	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3474	12903	45
Casing	Inner	4.5	4	11.6	LTC	0	12901	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Silo	FSS(CTS)-470		
Silo	FSS(CTS)-438		
Cement Trailer Float	CTF-555	TRC(TRB)-424	Kirchenwitz, Jacob
Cement Trailer	CTF-263		
Cement Pump	CPF-120	TRH-1140	Brown, Jason
Light Duty Vehicles	LDV-063		Dewit, Eric

Timing

Event	Date/Time
Call Out	7/11/2021 09:30
Depart Facility	7/11/2021 16:00
On Location	7/11/2021 17:15
Rig Up Iron	7/11/2021 17:50
Job Started	7/11/2021 21:34
Job Completed	7/12/2021 06:54
Rig Down Iron	7/12/2021 07:00
Depart Location	7/12/2021 08:15

General Job Information

Metrics	Value
Well Fluid Density	10.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	720 bbls
Rig Circulation Time	1 hours
Calculated Displacement	200 bbls
Actual Displacement	200 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	10.5 lb/gal
Well Fluid Density Out of Well	10.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	63 °F	50-80 °F
pH Level	6.5	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	200 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<250 mg/L	0-1500 mg/L
Potassium	300 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	3684
2	Scav Cement	Scavenger	11.00	3.07	18.83		366.00	200.36	4945
3	Lead Cement	Lead	12.70	2.00	10.97		258.00	91.86	7466
4	Tail Cement	Tail	13.50	1.85	8.97		1036.00	340.49	8620
5	Displacement	DisplacementFinal	8.34			42.00		200.00	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	7/11/2021	09:30					Customer calls with an O/L time of 16:30 on 7/11/21
2	Depart Yard	7/11/2021	16:00					Leave yard to travel to location
3	Arrive On Location	7/11/2021	17:15					Arrive on location (rig is still RIH with casing)
4	Spot Trucks	7/11/2021	17:20					Spot trucks on location
5	Safety Meeting	7/11/2021	17:25					Pre-rig up safety meeting
6	Rig Up	7/11/2021	17:50					Rig up water, bulk, and treating line
7	Waiting	7/11/2021	19:00					Waiting for rig to finish circulating
8	Safety Meeting	7/11/2021	20:50					Pre-job safety meeting with AC crew, rig crew, and company man
9	Rig Up	7/11/2021	21:17					Rig up cement head
10	Fill Lines	7/11/2021	21:34	8.34	5	5	523	Fill pumps and lines
11	Pressure Test	7/11/2021	21:37	8.34	0	0	6490	Pressure test pumps and lines
12	Pump Spacer	7/11/2021	21:40	8.34		100	1208	Pump fresh water ahead
13	Pump Scav Cement	7/11/2021	22:00	11		8	556	Pump 366 sks of Scav cement From Silo CTS-470 @11ppg (Yield: 3.07 Mix Water: 18.83)
14	Other	7/11/2021	22:05					Had to shut down to due to density issue, and hydraulic issue.
15	Other	7/11/2021	23:03					Called for a new pump
16	Other	7/12/2021	03:35					New pump arrives on location
17	Rig Up	7/12/2021	03:40					Rig in new pump
18	Fill Lines	7/12/2021	04:09	8.34	4	5	378	Fill pumps and lines
19	Pressure Test	7/12/2021	04:11	8.34	0	0	6200	Test pumps and lines
20	Pump Spacer	7/12/2021	04:16	8.34	7.9	100	1123	Pump 100 bbls of fresh water ahead
21	Pump Scav Cement	7/12/2021	04:27	11	6.6	190	1276	Pump Scavenger slurry
22	Pump Lead	7/12/2021	04:59	12.7	7	91	629	Pump Lead slurry
23	Pump Tail	7/12/2021	05:13	13.5	7.5	340	707	Pump Tail slurry
24	Shut Down	7/12/2021	06:09					Shut down wash pumps and lines
25	Drop Plug	7/12/2021	06:15					Drop plug
26	Pump Displacement	7/12/2021	06:17	8.4	4.6	0	117	Send plug start KCL displacement, Shut down after 2 bbls pumped to verify plug left the head
27	Pump Displacement	7/12/2021	06:29	8.4	7.8	50	329	KCL Displacement
28	Pump Displacement	7/12/2021	06:36	8.34	7	100	1318	Swap to fresh water displacement
29	Pump Displacement	7/12/2021	06:44	8.34	7	150	2089	Fresh water displacement
30	Drop Rate	7/12/2021	06:49	8.34	4	185	2365	Drop rate to land the plug
31	Land Plug	7/12/2021	06:51	8.34	4	200	3585	Land plug FCP 2480, Bumped up to 3585
32	Check Floats	7/12/2021	06:44	8.34	0	0	0	Floats held (3 bbls back)
33	Rig Down	7/12/2021	07:00					Rig down head, water, and bulk
34	Leave Location	7/12/2021	08:15					

Pump Diagrams

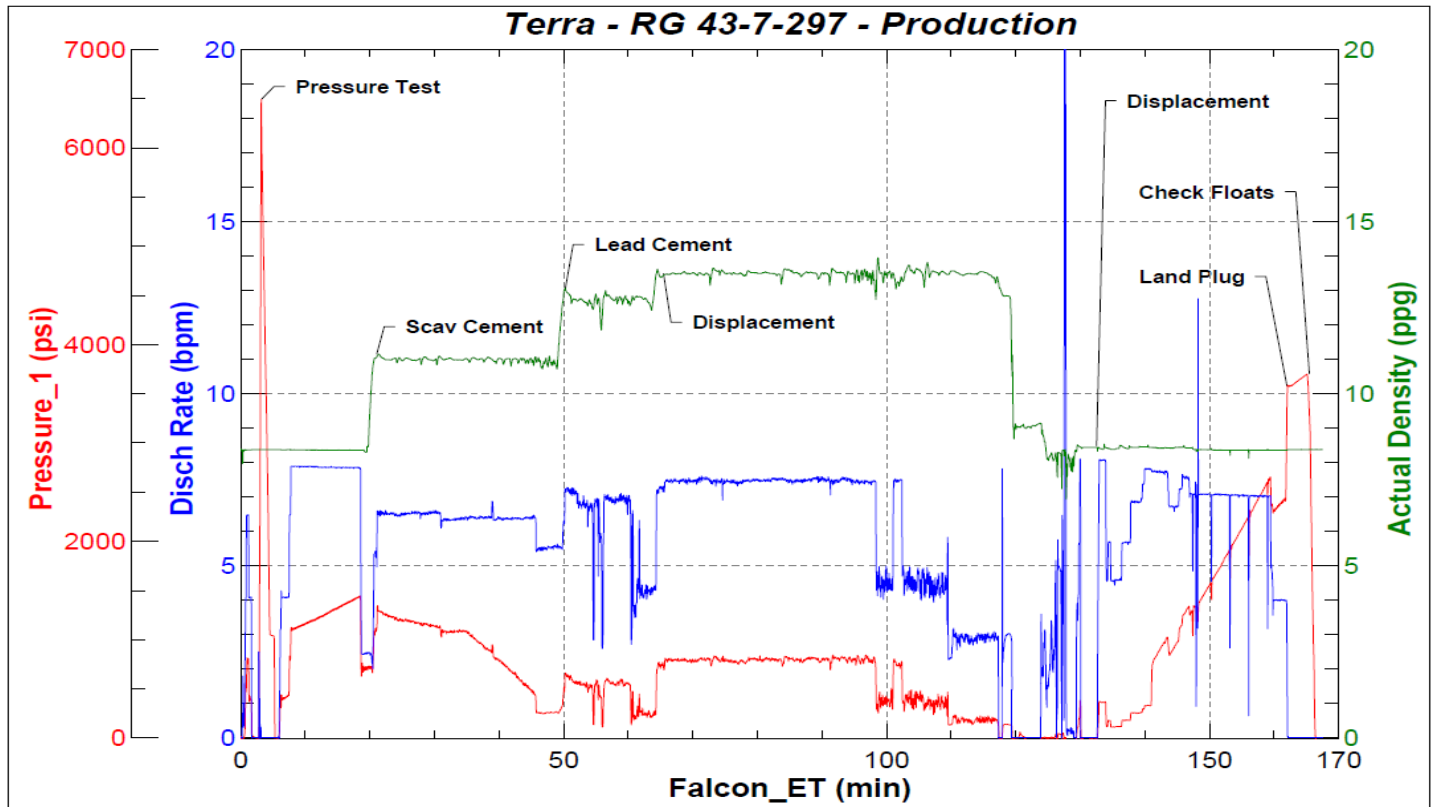


JobMaster Program Version 5.01C1

Job Number: 77536

Customer: Terra

Well Name: RG 43-7-297



BJ Services

Job Start: Monday, July 12, 2021