



# **Terra Energy Partners, LLC**

## **LONG STRING POST JOB REPORT**

**RG 541-18-297 05-103-12472**  
**S:18 T:2S R:97W Rio Blanco CO**

CallSheet #: 76997  
Proposal #: 52910



**LONG STRING Post Job Report**

**Attention:** Mr. Lynn Cass | (970) 263-2716 | [lcass@terraep.com](mailto:lcass@terraep.com)  
Terra Energy Partners, LLC  
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

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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](mailto: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	3235	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3235	12055	45
Casing	Inner	4.5	4	11.6	LTC	0	12047.94	0

### Timing

Event	Date/Time
Call Out	5/20/2021 15:00
Depart Facility	5/20/2021 16:30
On Location	5/20/2021 18:00
Rig Up Iron	5/20/2021 19:00
Job Started	5/20/2021 23:05
Job Completed	5/21/2021 01:22
Rig Down Iron	5/21/2021 01:30
Depart Location	5/21/2021 03:00

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Silo	CTS-470		
Silo	CTS-438		
Bulk Trailer	CTF-242	TRB-112	Woronovitch, Collin
Bulk Trailer	CTF-246	TRB-424	Sampson, James
Bulk Trailer	CTF-286		
Cement Pump	CPF-058	TRH-1140	Garza, Ricardo
Light Duty Pickups	LDV-065		Aden, Mark
Light Duty Trailers	FUF-285		

### General Job Information

Metrics	Value
Well Fluid Density	9.95 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	750 bbls
Rig Circulation Time	1 hours
Calculated Displacement	186.23 bbls
Actual Displacement	186 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	9.95 lb/gal
Well Fluid Density Out of Well	9.95 lb/gal

### Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

### Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	65 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	55 mg/L	0-500 mg/L
Carbonates	. mg/L	0-100 mg/L
Sulfates	>250 mg/L	0-1500 mg/L
Potassium	. mg/L	0-3000 mg/L
Iron	. mg/L	0-300 mg/L

### Circulation

Lost Circulation Experienced
No

### Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /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	2769
2	Scav Cement	Scavenger	11.00	3.07	18.83		366.00	200.36	4157
3	Lead Cement	Lead	12.70	2.00	10.97		246.00	87.59	6678
4	Tail Cement	Tail	13.50	1.85	8.97		1035.00	340.16	7780
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	StrengthRetgression	25.00	%BWOB

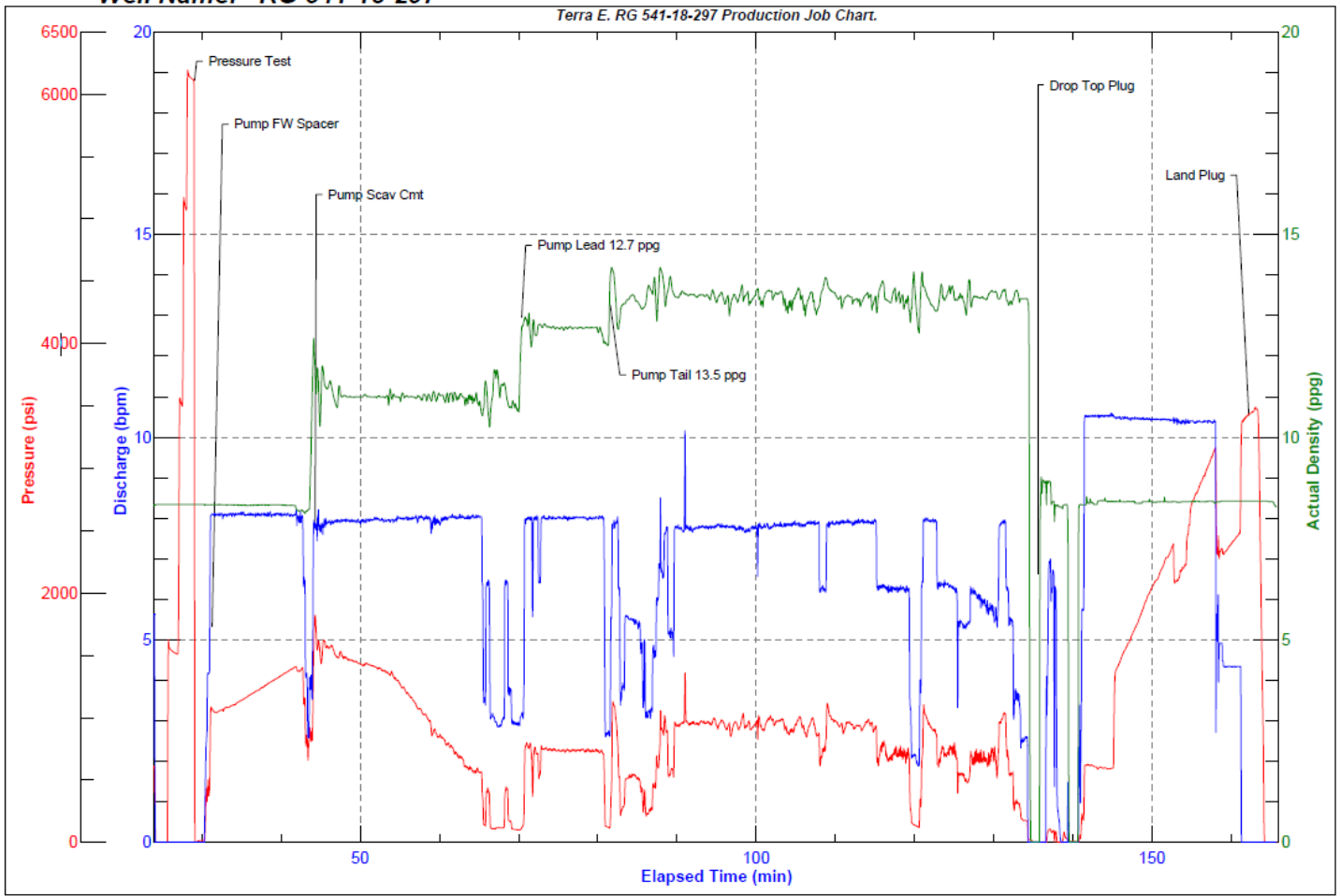
## Job Logs

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	5/20/2021	15:00					ACC gets called , Requested time on location was 1900 hrs 5/20/21
2	Depart Facility	5/20/2021	16:30					ACC departs facility
3	Arrive To Location	5/20/2021	18:00					ACC arrives to location, rig is currently running casing have 3000' left to run
4	Rig Up	5/20/2021	19:00					ACC spots in units and rigs up pump and iron
5	Waiting	5/20/2021	20:00					Waiting on rig to finish running casing and circ well
6	Safety Meeting	5/20/2021	22:30					ACC had a pre job safety meeting with rig hands and OSR went over job procedure
7	Pressure Test	5/20/2021	23:05				6000	Pressure test pump and iron to 6000 psi
8	Pump FW Spacer	5/20/2021	23:08	8.33	8	100	1062	Pumped 100 bbls of FW spacer at 8 bpm w/1062 psi
9	Pump Scav Cmt	5/20/2021	23:20	11	8	200.11	1568	Pumped 200.11 bbls of 11 PPG Scavenger cement ( 366 sks 3.07 yld 18.8g/sk) at 8 bpm w/ 1568 psi NOTE density was verified by mud scales every 100 bbls gone
10	Pump Lead Cmt	5/20/2021	23:49	12.7	8	87.62	755	Pumped 87.62 bbls of 12.7 PPG lead cement ( 246 sks 2.00 yld 11.0 g/sk ) at 8 bpm w/ 755 psi NOTE density was verified by mud scales
11	Pump Tail Cmt	5/21/2021	00:00	13.5	8	341.01	950	Pumped 341.01 bbls of 13.5 PPG Tail Cement (1035 sks 1.85 yld 9.0 g/sk ) at 8 bpm w/ 950 psi NOTE density was verified with mud scales every 100 bbls away
12	Shut Down	5/21/2021	00:42					Shut Down Pumping Cement
13	Wash Pump/Lines	5/21/2021	00:44					Wash pump and lines to earth pit
14	Drop Top Plug	5/21/2021	00:46					ACC drop top plug w/ OSR
15	Start Pumping Disp.	5/21/2021	00:49	8.33	10		112	Start pumping h2o disp w/ 5 lbs KCL per/bbl gone at 10 bpm w/ 112 psi
16	Slow Down Rate	5/21/2021	01:15	8.33	4	170	2217	At 170 bbls gone into h2o disp slow down rate to 4 bpm w/ 2217 psi
17	Land Plug	5/21/2021	01:20	8.33	4	186	2397	Land Plug at 186 bbls gone Final Circ. Press was 2397 psi , Bumped plug to 3384 psi
18	Check Floats	5/21/2021	01:22			2.5		Check floats got 2.5 bbls back

# Pump Diagrams



JobMaster Program Version 5.01C1  
Job Number: 76997  
Customer: Terra Energy  
Well Name: RG 541-18-297



BJ Services

Job Start: Thursday, May 20, 2021