



# **Terra Energy Partners, LLC**

## **LONG STRING POST JOB REPORT**

**FED RG 21-24-298 05-103-12575**  
**S:13 T:2S R:98W Rio Blanco CO**

CallSheet #: 91960  
Proposal #: 77067



**LONG STRING Post Job Report**

**Attention:** Mr. Dustin Childers | (936) 524-8828 | dchilders@terraep.com  
Terra Energy Partners, LLC  
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

---

Dear Mr. Dustin Childers,

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,

**Krystal Schell**

Field Engineer I | (719) 992-1830 | krystal.schell@americacementing.com

**Field Office**      28730 US-6, Rifle, CO 81650  
Phone: (970) 657-1187

## 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	3150	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3150	7870	45
Open Hole	Outer	n/a	8.75	n/a	n/a	7870	11850	45
Casing	Inner	4.5	4	11.6	n/a	0	11850	0

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-438		
Field Storage Silo	FSS-470		
Cement Trailer Float	CTF-286	TRC-249	Devin Burton
Light Duty Vehicles	LDV-147		Eric Brown
Cement Pump Float	CPF-053	TRH-1140	Jacob Kirchenwitz

### Timing

Event	Date/Time
ERTS	06/23/2024 01:00
Call Out	6/22/2024 15:30
Depart Facility	6/22/2024 23:00
On Location	6/23/2024 01:00
Rig Up Iron	6/23/2024 01:45
Job Started	6/23/2024 06:16
Job Completed	6/23/2024 08:41
Rig Down Iron	6/23/2024 09:45
Depart Location	6/23/2024 10:30

### General Job Information

Metrics	Value
Well Fluid Density	9.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	840 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	180 bbls
Actual Displacement	180 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	No
Top Out Volume	n/a bbls

### Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	N/A units
Flare During Job	No
Flare During Job	N/A units
Flare at End of Job	No
Flare at End of Job	N/A units
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	198 °F
BHST	262 °F

### Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	69 °F	50-80 °F
pH Level	8	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	10 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 <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		10.00	6181
2	Lead	Lead	12.70	2.13	11.42		716.00	271.46	6307
3	Tail	Tail	13.50	2.01	9.72		884.00	316.45	7870
4	Displacement	DisplacementFinal	8.34			42.00		180.00	0

### Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead	ASTM TYPE IL	Cement	100.00	%
2	Lead	Lead	A-2	Accelerator	0.10	%BWOB
2	Lead	Lead	FL-66	FluidLoss	0.20	%BWOB
2	Lead	Lead	GW-86	Viscosifier	0.05	%BWOB
2	Lead	Lead	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead	R-3	Retarder	0.70	%BWOB
2	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
2	Lead	Lead	XCem-1009	Extender	10.00	lb/sk
2	Lead	Lead	XCem-311	Defoamer	0.30	%BWOB
3	Tail	Tail	CLASS G	Cement	70.00	%
3	Tail	Tail	FLY ASH (POZZOLAN)	Extender	30.00	%
3	Tail	Tail	BENTONITE	Viscosifier	8.00	%BWOB
3	Tail	Tail	FL-24	FluidLoss	0.40	%BWOB
3	Tail	Tail	GW-86	Viscosifier	0.10	%BWOB
3	Tail	Tail	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Tail	Tail	R-3	Retarder	0.30	%BWOB
3	Tail	Tail	S-8	StrengthRetgression	26.00	%BWOB
3	Tail	Tail	XCem-311	Defoamer	0.30	%BWOB

## Job Logs

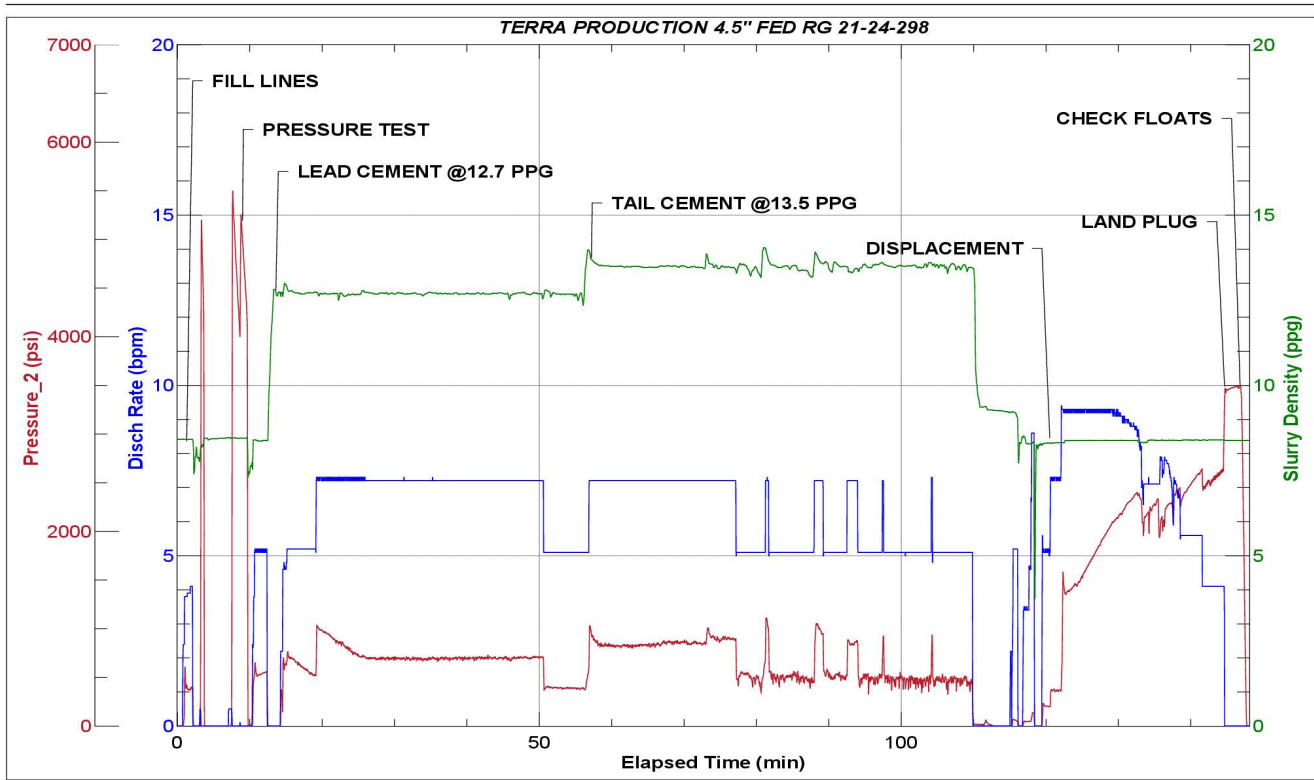
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	6/22/2024	15:30					CREW CALLED IN TO INSPECT AND PRE-TRIP EQUIPMENT
2	Safety Meeting	6/22/2024	21:30					PRE-CONVOY SAFETY MEETING
3	Depart Location	6/22/2024	23:00					DEPART RCO YARD FOR CUSTOMER LOCATION
4	Arrive On Location	6/23/2024	01:00					ARRIVE ON CUSTOMER LOCATION PRE-REQUEST
5	Safety Meeting	6/23/2024	01:05					PRE-RIG UP SAFETY MEETING
6	Rig Up Iron	6/23/2024	01:45					RIG UP IRON AND HOSES
7	Safety Meeting	6/23/2024	06:00					PRE JOB-SAFETY MEETING
8	Start Job	6/23/2024	06:16					START JOB
9	Fill Lines	6/23/2024	06:16	8.34	4	5	613	FILL LINES WITH 5 BBLs OF FRESH WATER
10	Pressure Test Lines	6/23/2024	06:24	8.34	1	1	5328	PRESSURE TEST LINES TO 5328 PSI
11	Pump Spacer	6/23/2024	06:26	8.34	5	10	628	PUMP 10 BBL FRESH WATER SPACER
12	Pump Lead Cement	6/23/2024	06:39	12.7	7	50	748	START MIXING AND PUMPING 271 BBLs LEAD CEMENT @12.7 PPG (2.13 YLD, 11.42 GPS) 50 BBLs LEAD PUMPED
13	Pump Lead Cement	6/23/2024	06:45	12.7	7	50	716	100 BBLs LEAD CEMENT PUMPED
14	Pump Lead Cement	6/23/2024	06:53	12.7	7	50	707	150 BBLs LEAD CEMENT PUMPED
15	Pump Lead Cement	6/23/2024	06:59	12.7	7	50	698	200 BBLs LEAD CEMENT PUMPED
16	Pump Lead Cement	6/23/2024	07:12	12.7	7	71	711	271 BBLs LEAD CEMENT PUMPED
17	Pump Tail Cement	6/23/2024	07:21	13.5	7	50	835	START MIXING AND PUMPING 316 BBLs TAIL CEMENT @13.5 PPG (2.01 YLD, 9.72 GPS) 50 BBLs TAIL CEMENT PUMPED
18	Pump Tail Cement	6/23/2024	07:26	13.5	7	50	862	100 BBLs TAIL CEMENT PUMPED
19	Pump Tail Cement	6/23/2024	07:33	13.5	5	50	513	150 BBLs TAIL CEMENT PUMPED. SLOWED RATE. COULD KEEP DENSITY DUE TO DELIVERY ISSUES.
20	Pump Tail Cement	6/23/2024	07:42	13.5	5	50	481	200 BBLs TAIL CEMENT PUMPED
21	Pump Tail Cement	6/23/2024	07:50	13.5	5	50	486	250 BBLs TAIL CEMENT PUMPED
22	Pump Tail Cement	6/23/2024	08:04	13.5	5	66	499	316 BBLs TAIL CEMENT PUMPED
23	Shutdown	6/23/2024	08:05					SHUT DOWN
24	Clean Pumps and Lines	6/23/2024	08:09					BLOW LINES BACK TO 3-SIDED PIT AND WASH UP PUMP TO 3-SIDED PIT
25	Drop Top Plug	6/23/2024	08:14					DROP PLUG. VERIFIED BY COMPANY MAN AND DRILLER
26	Pump Displacement	6/23/2024	08:20	8.34	9	50	1648	START PUMPING 180 BBL FRESH WATER DISPLACEMENT MIXED WITH KCL. 50 BBLs FRESH WATER DISPLACEMENT PUMPED
27	Pump Displacement	6/23/2024	08:26	8.34	9	50	2305	100 BBLs FRESH WATER DISPLACEMENT PUMPED
28	Pump Displacement	6/23/2024	08:36	8.34	7	70	2458	170 BBLs FRESH WATER DISPLACEMENT PUMPED.

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
29	Slow Pump Rate	6/23/2024	08:36	8.34	4	10	2620	SLOW PUMP RATE AND PREPARE TO LAND PLUG
30	Land Plug	6/23/2024	08:39				3460	LANDED PLUG. FCP 2620 PSI. LAND PRESSURE 3460 PSI.
31	Check Floats	6/23/2024	08:41					2 BBLs BACK UPON FLOAT CHECK. FLOATS HOLD
32	Safety Meeting	6/23/2024	08:45					PRE-RIG DOWN SAFETY MEETING
33	Rig Down Iron	6/23/2024	09:45					RIG DOWN IRON AND HOSES
34	Safety Meeting	6/23/2024	10:00					PRE-CONVOY SAFETY MEETING
35	Depart Location	6/23/2024	10:30					DEPART CUSTOMER LOCATION FOR RCO YARD
36	End Job	6/23/2024	10:30					END JOB

## Pump Diagrams



JobMaster Program Version 5.01C1  
Job Number: 91960  
Customer: TERRA  
Well Name: FED RG 21-24-298



Job Start: Sunday, June 23, 2024