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# **Terra Energy Partners, LLC**

## **LONG STRING POST JOB REPORT**

Leverich SR 324-13 05-045-24569  
S:13 T:7S R:94W Garfield CO

CallSheet #: 87260  
Proposal #: 68614



**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

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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	1176	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1140	7360	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7360	10524	50
Casing	Inner	4.5	4	11.6	n/a	0	10524	0

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-263	TRC-202	Balint, Daniel
Field Storage Silo	FSS-470		
Field Storage Silo	FSS-438		
Light Duty Vehicles	LDV-063		Castillo, Francisco
Cement Pump Float	CPF-058	TRH-855	Carrasco, Joel

### Timing

Event	Date/Time
ERTS	00/01/2023 00:00
Call Out	6/1/2023 18:00
Depart Facility	6/1/2023 20:10
On Location	6/1/2023 20:55
Rig Up Iron	6/1/2023 21:30
Job Started	6/2/2023 03:49
Job Completed	6/2/2023 05:49
Rig Down Iron	6/2/2023 06:15
Depart Location	6/2/2023 07:15

### General Job Information

Metrics	Value
Well Fluid Density	9.2 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	162 bbls
Actual Displacement	162 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 Prior to Job	0 units
Flare During Job	No
Flare During Job	0 units
Flare at End of Job	No
Flare at End of Job	0 units
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.2 lb/gal
Well Fluid Density Out of Well	9.2 lb/gal

### Job Details (cont.)

Metrics	Value
BHCT	178 °F
BHST	236 °F

### Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	67 °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	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

## Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
Yes	N/A	N/A	N/A

### Circulation Details

NO RETURNS THROUGH OUT THE ENTIRE JOB

## 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	5580
2	Mud Flush	Flush	8.45			40.86		20.00	5679
3	Water	Flush	8.34			42.00		10.00	5877
4	Lead	Lead	12.50	2.21	12.30		357.00	140.39	5976
5	Tail	Tail	13.00	2.05	10.26		772.00	281.58	7360
6	Displacement	DisplacementFinal	8.34			42.00		162.00	0

## Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
2	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
4	Lead	Lead	ASTM TYPE IL	Cement	100.00	%
4	Lead	Lead	A-2	Accelerator	0.20	%BWOB
4	Lead	Lead	FL-66	FluidLoss	0.30	%BWOB
4	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	Lead	R-3	Retarder	0.50	%BWOB
4	Lead	Lead	R-7C	Retarder	0.10	%BWOB
4	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
4	Lead	Lead	XCem-1009	Extender	10.00	lb/sk
5	Tail	Tail	CLASS G	Cement	50.00	%
5	Tail	Tail	FLY ASH (POZZOLAN)	Extender	50.00	%
5	Tail	Tail	BENTONITE	Viscosifier	6.00	%BWOB
5	Tail	Tail	FL-66	FluidLoss	0.40	%BWOB
5	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
5	Tail	Tail	GW-86	Viscosifier	0.10	%BWOB
5	Tail	Tail	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
5	Tail	Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
5	Tail	Tail	S-8	StrengthRetrogression	20.00	%BWOB
5	Tail	Tail	XCem-1009	Extender	6.00	lb/sk
5	Tail	Tail	XCem-916	Retarder	0.40	%BWOB

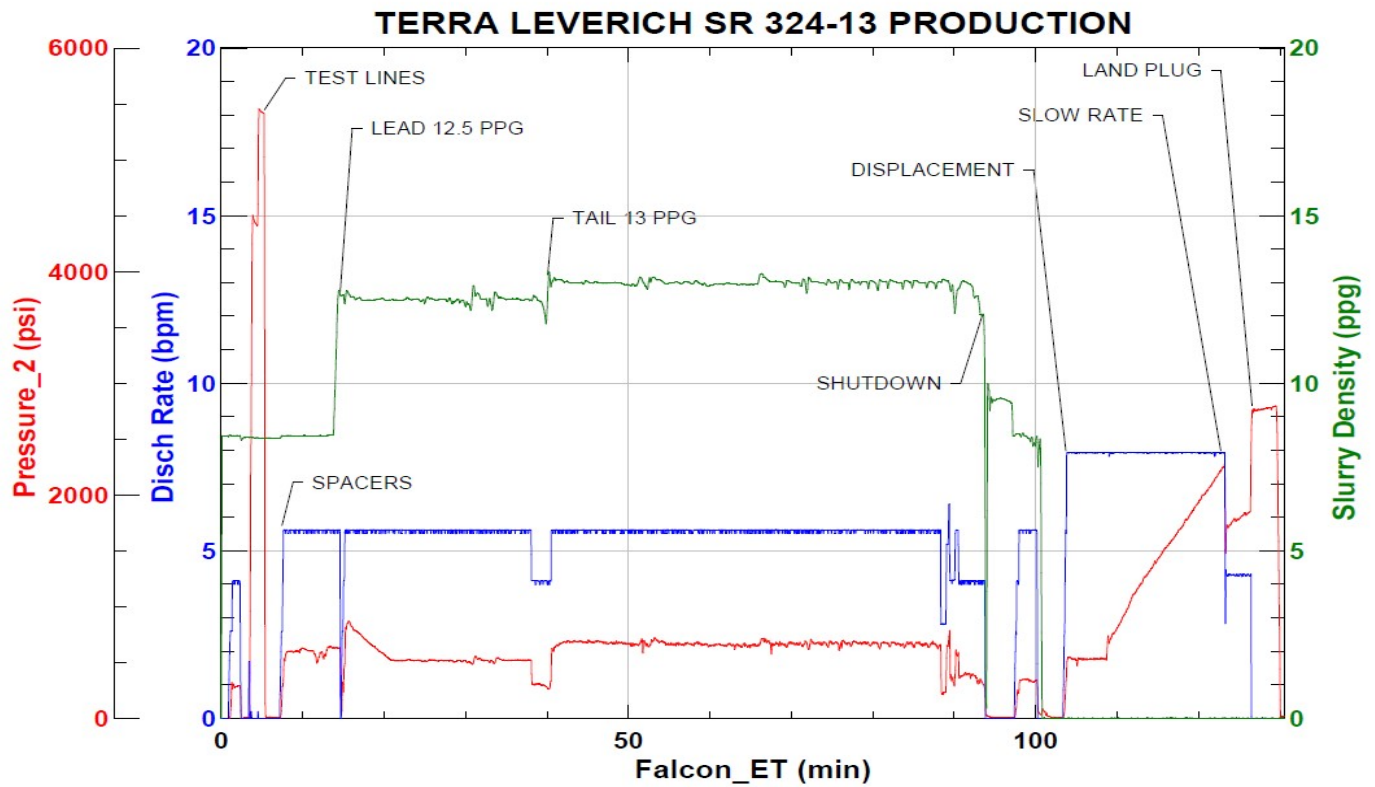
## Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	6/1/2023	18:00					ON LOCATION AT MIDNIGHT
2	LEAVE THE YARD	6/1/2023	20:10					CREW LEAVES THE YARD
3	ON LOCATION	6/1/2023	20:55					ON LOCATION, RIG RUNNING CASING
4	RIG UP	6/1/2023	21:30					RIG UP MEETING, RIG UP
5	SAFETY MEETING	6/2/2023	03:15					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	6/2/2023	03:45				5451	PRESSURE TEST LINES
7	WATER SPACER	6/2/2023	03:49	8.34	5.5	10	631	WATER SPACER
8	MUD FLUSH	6/2/2023	03:52	9	5.5	20	597	MUD FLUSH SPACER
9	WATER SPACER	6/2/2023	03:55	8.34	5.5	10	621	WATER SPACER
10	LEAD CEMENT	6/2/2023	03:57	12.5	5.5	70	519	LEAD 357 SKS/140 BBLS AT 12.5 PPG
11	LEAD CEMENT	6/2/2023	04:09	12.5	5.5	70	525	140 BBLS LEAD CEMENT PUMPED
12	TAIL CEMENT	6/2/2023	04:22	13	5.5	50	671	TAIL 772 SKS/282 BBLS AT 13.0 PPG
13	TAIL CEMENT	6/2/2023	04:32	13	5.5	50	669	100 BBLS TAIL CEMENT PUMPED
14	TAIL CEMENT	6/2/2023	04:40	13	5.5	50	661	150 BBLS TAIL CEMENT PUMPED
15	TAIL CEMENT	6/2/2023	04:50	13	5.5	50	657	200 BBLS TAIL CEMENT PUMPED
16	TAIL CEMENT	6/2/2023	04:58	13	5.5	82	667	282 BBLS TAIL CEMENT PUMPED
17	SHUTDOWN	6/2/2023	05:16					WASH PUMP AND LINES, DROP PLUG
18	DISPLACEMENT	6/2/2023	05:26	8.4	8	50	851	DISPLACEMENT WITH KCL WATER
19	DISPLACEMENT	6/2/2023	05:33	8.4	8	50	1613	100 BBLS DISPLACEMENT PUMPED
20	DISPLACEMENT	6/2/2023	05:39	8.4	8	52	2269	152 BBLS DISPLACEMENT PUMPED
21	SLOW RATE	6/2/2023	05:46	8.34	4	10	1841	SLOW RATE
22	LAND PLUG	6/2/2023	05:49				2757	LAND PLUG, NO RETURNS
23	CHECK FLOATS	6/2/2023	05:53					FLOATS HELD, 2 BBLS FLOW BACK
24	RIG DOWN	6/2/2023	06:15					RIG DOWN MEETING, RIG DOWN
25	LEAVE LOCATION	6/2/2023	07:15					CREW LEAVE LOCATION

## Pump Diagrams



JobMaster Program Version 5.01C1  
Job Number: 87260  
Customer: TERRA  
Well Name: LEVERICH SR 324-13



Job Start: Friday, June 02, 2023