



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

Leverich WMC 523-18-793 05-045-24557
S:13 T:7S R:94W Garfield CO

CallSheet #: 88593
Proposal #: 71476



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,

Lyndon Chandarjit

Field Engineer II | (281) 690-3840 | lyndon.chandarjit@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	1134	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1134	7353	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7353	10600	50
Casing	Inner	4.5	4	11.6	n/a	0	10600	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-280	TRC-202	Myles Contreras
Field Storage Silo	FSS-438		
Light Duty Vehicles	LDV-092		Collin Woronovitch
Cement Pump Float	CPF-058	TRH-1140	Jeremy Bradbrook
Light Duty Vehicles	LDV-082		Jose Carcamo Benitez

Timing

Event	Date/Time
ERTS	09/30/2023 16:00
Call Out	9/30/2023 08:30
Depart Facility	9/30/2023 14:00
On Location	9/30/2023 15:00
Rig Up Iron	9/30/2023 15:30
Job Started	9/30/2023 18:50
Job Completed	9/30/2023 21:17
Rig Down Iron	9/30/2023 21:45
Depart Location	9/30/2023 23:00

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	164 bbls
Actual Displacement	164 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	No

Job Details

Metrics	Value
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9 lb/gal
Well Fluid Density Out of Well	9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	173 °F
BHST	230 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	60 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	300 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	120 mg/L	0-500 mg/L
Carbonates	NA mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	180 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	0	0	0

Circulation Details

NO RETURNS THROUGHOUT THE JOB . FLOATS HELD 1 BBL BACK .

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /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	5656
2	Mud Flush	Flush	8.45			40.86		20.00	5755
3	Water	Flush	8.34			42.00		10.00	5953
4	Lead	Lead	12.50	2.21	12.30		335.00	131.74	6052
5	Tail	Tail	13.00	2.05	10.26		791.00	288.51	7353
6	Displacement	DisplacementFinal	8.34			42.00		164.00	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	StrengthRetgression	20.00	%BWOB
5	Tail	Tail	XCem-1009	Extender	6.00	lb/sk
5	Tail	Tail	XCem-916	Retarder	0.40	%BWOB

Job Logs

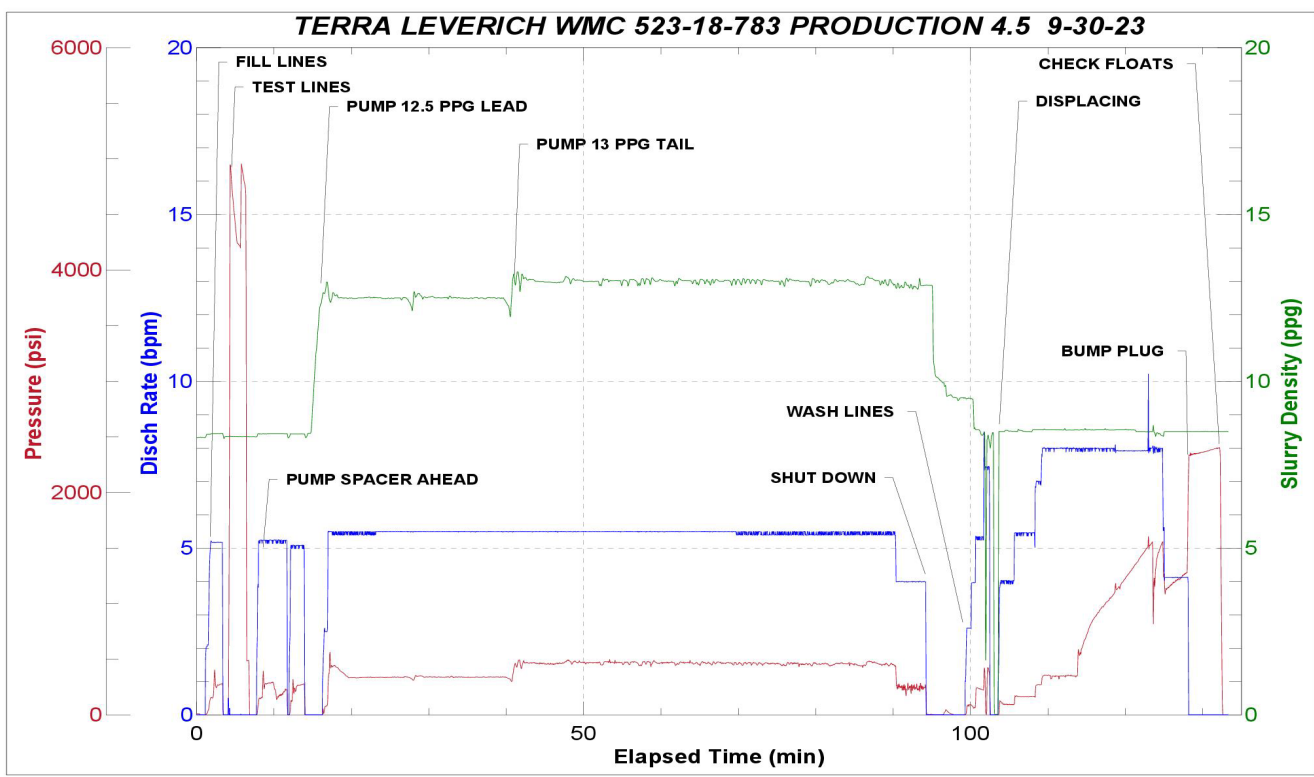
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	9/30/2023	08:30					CREW CALLED OUT FOR ON LOCATION OF 16:00 9-30-23
2	Depart Location	9/30/2023	14:00					DEPART RCO YARD FOR LOCATION
3	Arrive On Location	9/30/2023	15:00					ARRIVE ON LOCATION. RIG RUNNING CASING.
4	Safety Meeting	9/30/2023	15:15					PRE RIG UP JSA. SPOT EQUIPMENT
5	Rig Up Iron	9/30/2023	15:30					RIG UP ALL IRON, HOSES, AND EQUIPMENT
6	Other	9/30/2023	18:30					RIG LANDED CASING @ 18:30 RIG CIRCULATED FOR .5 HOURS. TOTAL VOLUME 300 BBLS.
7	Safety Meeting	9/30/2023	18:50					PRE JOB SAFETY MEETING WITH RIG CREW AND COMPANY MAN.
8	Fill Lines	9/30/2023	19:05	8.34	5	10	163	FILL LINES WITH 10 BBLS OF FRESHWATER. NO RETURNS
9	Pressure Test Lines	9/30/2023	19:07	8.34	1	1	5043	PRESSURE TEST PUMP AND IRON TO HEAD.
10	Pump Spacer	9/30/2023	19:10	8.45	5.25	10	143	BEGIN PUMPING FRESHWATER SPACER
11	Pump Spacer	9/30/2023	19:12	8.45	5.25	0	303	BEGIN PUMPING MUD FLUSH + SURFACTANT PUMPED. NO RETURNS
12	Pump Spacer	9/30/2023	19:16	8.34	5.25	20	310	PUMP 20 BBLS MUD FLUSH + SURFACTANT PUMPED. NO RETURNS
13	Pump Spacer	9/30/2023	19:18	8.34	5.4	10	310	10 BBLS FRESHWATER AWAY SWAP TO LEAD
14	Pump Lead Cement	9/30/2023	19:21	12.5	5.5	0	338	BEGIN PUMPING 12.5 PPG LEAD CEMENT, WEIGHT VERIFIED BY MUD SCALE
15	Pump Lead Cement	9/30/2023	19:30	12.5	5	50	359	50 BBLS LEAD CEMENT PUMPED
16	Pump Lead Cement	9/30/2023	19:39	12.5	5.5	50	356	100 BBLS LEAD CEMENT PUMPED. NO RETURNS.
17	Pump Lead Cement	9/30/2023	19:44	12.5	5.5	31	350	131 BBLS (336 SKS) TOTAL LEAD CEMENT PUMPED.
18	Pump Tail Cement	9/30/2023	19:45	13	5.5	0	350	BEGIN PUMPING 13.0 PPG TAIL CEMENT. WEIGHT VERIFIED BY MUD SCALE.
19	Pump Tail Cement	9/30/2023	19:55	13	5.5	50	419	50 BBLS TAIL CEMENT PUMPED
20	Pump Tail Cement	9/30/2023	20:02	13	5.5	50	471	100 BBLS TAIL CEMENT PUMPED
21	Pump Tail Cement	9/30/2023	20:12	13	5.5	50	489	150 BBLS TAIL CEMENT PUMPED. NO RETURNS
22	Pump Tail Cement	9/30/2023	20:21	13	5.5	50	488	200 BBLS TAIL CEMENT PUMPED
23	Pump Tail Cement	9/30/2023	20:30	13	5.5	50	463	250 BBLS TAIL CEMENT PUMPED
24	Pump Tail Cement	9/30/2023	20:39	13	4	38	281	288 BBLS (791 SKS) TOTAL TAIL CEMENT PUMPED.
25	Clean Pumps and Lines	9/30/2023	20:42					BLOW RIG AIR TO CLEAR LINES, VALVE MANIFOLD TO WASH UP PUMP AND LINES TO PIT.
26	Drop Top Plug	9/30/2023	20:47	8.34	5	0	201	DROP PLUG, WITNESSED BY DRILLER AND COMPANY MAN BEGIN KCL DISPLACEMENT.
27	Pump Displacement	9/30/2023	20:56	8.34	8	50	388	50 BBLS DISPLACEMENT PUMPED. CAUGHT PRESSURE @ 65BBLS DISPLACED. NO RETURNS.



28	Pump Displacement	9/30/2023	21:03	8.34	8	50	1147	100 BBLS DISPLACEMENT PUMPED. NO RETURNS.
29	Pump Displacement	9/30/2023	21:10	8.34	4	50	1186	150 BBLS DISPLACEMENT PUMPED. MAX LIFT-1612 PSI @ 8 BPM BEFORE SLOW DOWN @ 148 BBLS DISPLACED
30	Pump Displacement	9/30/2023	21:12	8.34	4	14	1341	164 BBLS (CALCULATED) DISPLACEMENT PUMPED
31	Land Plug	9/30/2023	21:12				2390	PLUG LANDED FCP-1341 PSI BUMPED TO 2390 PSI
32	Check Floats	9/30/2023	21:17					BLEED PRESSURE OFF AND CHECK FLOATS, FLOATS HELD 1 BBLS BACK
33	Rig Down Iron	9/30/2023	21:45					PRE RIG DOWN SAFETY MEETING. RIG DOWN EQUIPMENT, IRON AND HOSES
34	Depart Location	9/30/2023	23:00					CREW DEPARTS LOCATION

Pump Diagrams

JobMaster Program Version 5.01C1
Job Number: 88593
Customer: TERRA
Well Name: LEVERICH WMC 523-18-793



Job Start: Saturday, September 30, 2023