



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

Leverich WMC 512-18-793 05-045-24570
S:13 T:7S R:94W Garfield CO

CallSheet #: 88500
Proposal #: 71361



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	1177	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1177	7503	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7503	10740	50
Casing	Inner	4.5	4	11.6	BTC	0	10740	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-470		
Cement Trailer Float	CTF-280	TRC-180	Zachary Baker
Cement Pump Float	CPF-052	TRH-957	Ryan Bonin
Light Duty Vehicles	LDV-022		Gerron McClure

Timing

Event	Date/Time
ERTS	09/19/2023 04:00
Call Out	9/18/2023 20:00
Depart Facility	9/19/2023 03:00
On Location	9/19/2023 04:00
Rig Up Iron	9/19/2023 05:00
Job Started	9/19/2023 05:35
Job Completed	9/19/2023 08:00
Rig Down Iron	9/19/2023 09:00
Depart Location	9/19/2023 09:15

General Job Information

Metrics	Value
Well Fluid Density	10.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	800 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	165.8 bbls
Actual Displacement	165 bbls
Total Spacer to Surface	N/A bbls
Total CMT to Surface	N/A bbls
Well Topped Out	No
Top Out Volume	N/A bbls

Job Details

Metrics	Value
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10.5 lb/gal
Well Fluid Density Out of Well	10.2 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	173 °F
BHST	230 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	68 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	200 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	50 mg/L	0-500 mg/L
Carbonates	10 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	300 mg/L	0-3000 mg/L
Iron	10 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
No			

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	5833
2	Mud Flush	Flush	8.45			40.86		20.00	5932
3	Water	Flush	8.34			42.00		10.00	6130
4	Lead	Lead	12.50	2.21	12.30		334.00	131.34	6229
5	Tail	Tail	13.00	2.05	10.26		784.00	285.96	7530
6	Displacement	DisplacementFinal	8.34			42.00		165.80	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

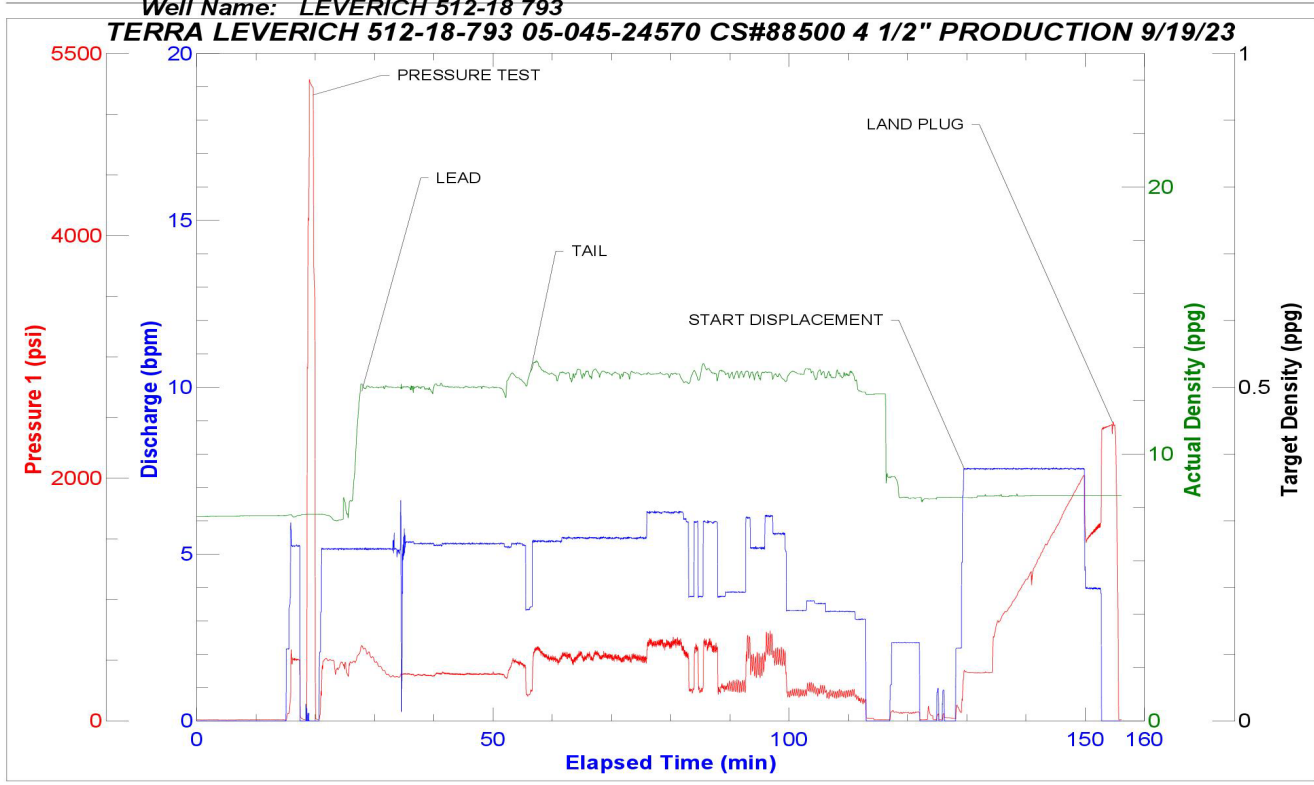
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	ARRIVED ON LOCATION	9/19/2023	04:00					ARRIVED ON LOCATION PER CUSTOMER REQUEST 04:00
2	HAZARD ASSESMENT	9/19/2023	04:05					
3	SPOT EQUIPEMENT	9/19/2023	04:10					
4	PRE RIG UP SAFETY MEETING	9/19/2023	04:15					
5	RIGGED UP	9/19/2023	05:00					
6	STAB HEAD	9/19/2023	05:10					
7	PRE JOB SAFETY MEETING	9/19/2023	05:15					
8	START JOB	9/19/2023	05:35					START JOB
9	PRESSURE TEST LINES	9/19/2023	05:40	8.34	1	1	5000	PRESSURE TEST LINES 5000 PSI
10	10 BBL FW SPACER	9/19/2023	05:43	8.34	5	10	494	10 BBL FRESH WATER SPACER
11	20 BBL MUD FLUSH SPACER	9/19/2023	05:45	8.45	5	20	505	20 BBL MUD FLUSH II SPACER
12	10 BBL FW SPACER	9/19/2023	05:51	8.34	5	10	538	10 BBL FRESH WATER SPACER
13	START 131.4 BBL LEAD	9/19/2023	05:53	12.5	6	1	552	START 131.4 BBL LEAD SLURRY @ 12.5 (2.21,12.30) 334 SACKS
14	50 BBL GONE ON LEAD	9/19/2023	06:03	12.5	6	50	376	
15	100 BBL GONE ON LEAD	9/19/2023	06:13	12.5	6	100	386	
16	END OF LEAD SLURRY	9/19/2023	06:18	12.5	5	131	379	END OF LEAD SLURRY
17	START 286.2 BBL TAIL SLURRY	9/19/2023	06:18	13	5	1	360	START 286.2 BBL TAIL SLURRY @ 13.0 (2.05,10.26) 784 SACKS
18	50 BBL GONE ON TAIL SLURRY	9/19/2023	06:28	13	6	50	519	
19	100 BBL GONE ON TAIL SLURRY	9/19/2023	06:37	13	6	100	512	
20	150 BBL GONE ON TAIL SLURRY	9/19/2023	06:45	13	6	150	662	
21	200 BBL GONE ON TAIL SLURRY	9/19/2023	06:56	13	4	200	241	
22	250 BBL GONE ON TAIL SLURRY	9/19/2023	07:06	13	6	250	506	
23	END OF TAIL SLURRY	9/19/2023	07:18	13	4	286	90	END OF TAIL SLURRY
24	SHUTDOWN/ WASH LINES DROP PLUG	9/19/2023	07:21	8.34				SHUTDOWN/ WASH LINES/ DROP TOP PLUG
25	START BBL FW DISPLACEMENT	9/19/2023	07:35	8.34	4	1	320	START 165.8 BBL FRESH WATER DISPLACEMENT
26	CAUGHT CEMENT @ 47 BBL GONE	9/19/2023	07:40	8.34	8	50	430	CAUGHT CEMENT @ 47 BBL GONE ON DISPLACEMENT
27	50 BBL GONE ON DISPLACEMENT	9/19/2023	07:41	8.34	8	88	798	
28	100 BBL GONE ON DISPLACEMENT	9/19/2023	07:48	8.34	8	100	832	
29	150 BBL GONE ON DISPLACEMENT	9/19/2023	07:54	8.34	8	150	1348	
30	PRESSURE BEFORE SLOWING RATE	9/19/2023	07:55	8.34	8	156	1956	PRESSURE BEFORE SLOWING RATE - 1956
31	SLOW RATE PRESSURE	9/19/2023	07:55	8.34	3	156	1543	SLOW RATE PRESSURE AT 3 BPM/ 1543PSI
32	PRESSURE BEFORE LANDING PLUG	9/19/2023	07:59	8.34	3	166	1614	PRESSURE BEFORE LANDING PLUG - 1614
33	LAND PLUG	9/19/2023	08:00	8.34	3	166	2412	LANDED PLUG TO -2412



34	CHECK FLOAT	9/19/2023	08:05					CHECKED FLOAT RETURNED 1.5 BBLS BACK
35	END OF SERVICES	9/19/2023	08:05					END OF CEMENTING SERVICES
36	POST JOB SAFETY MEETING	9/19/2023	08:15					
37	RIGGED DOWN	9/19/2023	09:00					
38	PRE CONVOY SAFETY MEETING	9/19/2023	09:05					
39	LOCATION DEPARTURE	9/19/2023	09:15					
40	END OF JOB	9/19/2023	09:15					END OF JOB

Pump Diagrams

JobMaster Program Version 5.01C1
Job Number: 88500
Customer: TERRA
Well Name: LEVERICH 512-18 793



Job Start: Tuesday, September 19, 2023