



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

Leverich SR 523-13 05-045-24560
S:13 T:7S R:94W Garfield CO

CallSheet #: 87497
Proposal #: 69813



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	1176	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1135	7364	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7364	10551	50
Casing	Inner	4.5	4	11.6	n/a	0	10551	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-470		
Field Storage Silo	FSS-438		
Cement Trailer Float	CTF-280	TRC-424	Hansen, James
Cement Pump Float	CPF-053	TRH-959	Brady, Shawn
Light Duty Vehicles	LDV-088		Bonin, Ryan
Light Duty Vehicles	LDV-082		Kelsey, John

Timing

Event	Date/Time
ERTS	00/05/2023 21:00
Call Out	7/4/2023 09:00
Depart Facility	7/4/2023 14:00
On Location	7/4/2023 15:30
Rig Up Iron	7/4/2023 16:00
Job Started	7/5/2023 12:54
Job Completed	7/5/2023 15:00
Rig Down Iron	7/5/2023 15:30
Depart Location	7/5/2023 16:30

General Job Information

Metrics	Value
Well Fluid Density	9.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	800 bbls
Rig Circulation Time	1 hours
Calculated Displacement	163 bbls
Actual Displacement	163 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	- units
Flare During Job	No
Flare During Job	- units
Flare at End of Job	No
Flare at End of Job	- units
Well Full Prior to Job	yes
Well Fluid Density Into Well	9.4 lb/gal
Well Fluid Density Out of Well	9.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	172 °F
BHST	229 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	65 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	400 mg/L	0-500 mg/L
Carbonates	0 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 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	5604
2	Mud Flush	Flush	8.46			40.79		20.00	5703
3	Water	Flush	8.34			42.00		10.00	5901
4	Lead	Lead	12.50	2.21	12.30		352.00	138.42	6000
5	Tail	Tail	13.00	2.05	10.26		776.00	283.04	7364
6	Displacement	DisplacementFinal	8.34			42.00		168.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Flush	Mud Flush	SAPP	Surfactant	11.00	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

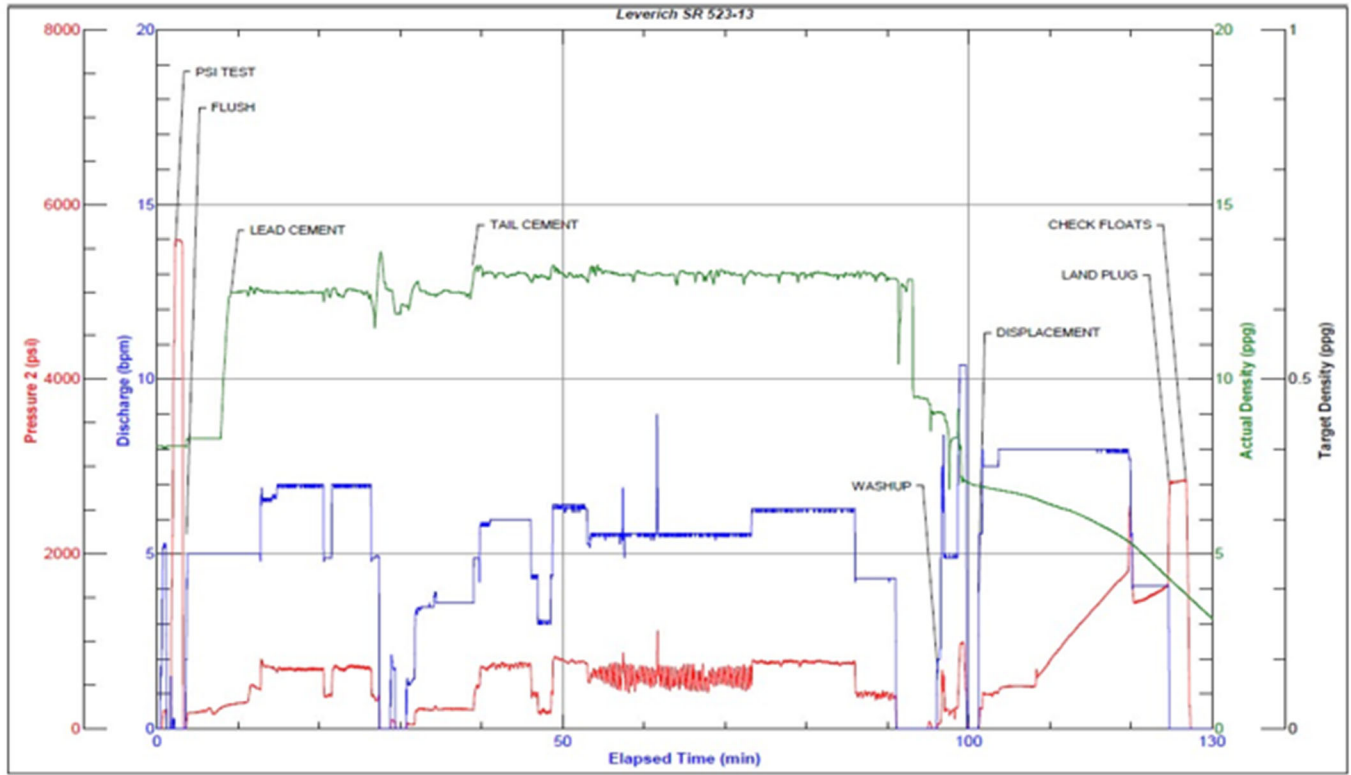
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	7/4/2023	09:00					CREW CALLED TO PREPARE FOR A PRODUCTION CEMENT JOB RTS IS 16:00
2	SAFETY MEETING	7/4/2023	13:45					JOURNEY MANAGEMENT MEETING
3	DEPART YARD	7/4/2023	14:00					CREW DEPARTS RIFLE YARD FOR LOCATION
4	ARRIVE ON LOCATION	7/4/2023	15:30					ARRIVE ON LOCATION, VERIFY JOB PROCEDURES WITH CUSTOMER
5	SAFETY MEETING	7/4/2023	15:40					RIG UP MEETING
6	SPOT UNITS	7/4/2023	15:50					SPOT ALL EQUIPMENT
7	RIG UP	7/4/2023	16:00					RIG UP ALL EQUIPMENT
8	STANDBY	7/4/2023	17:00					CREW ON STANDBY WHILE RIG RUNS CASING
9	SAFETY MEETING	7/5/2023	12:00					PRE JOB MEETING WITH ALL CREWS
10	LOAD LINES	7/5/2023	12:54	8.34	5	3	263	LOAD LINES FOR PSI TEST
11	PSI TEST	7/5/2023	12:55	8.34	1	1	5590	PSI TEST PUMP AND LINES TO CEMENT HEAD
12	FRESH FLUSH	7/5/2023	12:57	8.34	5	10	198	10 BBLS FRESH FLUSH
13	MUD FLUSH	7/5/2023	13:00	8.34	5	20	195	20 BBLS MUD FLUSH
14	FRESH FLUSH	7/5/2023	13:03	8.34	5	10	200	10 BBLS FRESH FLUSH
15	LEAD CEMENT	7/5/2023	13:05	12.5	6.5	10	227	138 BBLS Lead CMT – 12.5 # 2.21 Y 12.3 MW 352 sks (104 H20) 10 BBLS AWAY
16	LEAD CEMENT	7/5/2023	13:12	12.5	7	40	675	50 BBLS AWAY
17	LEAD CEMENT	7/5/2023	13:22	12.5	7	50	689	100 BBLS AWAY
18	LEAD CEMENT	7/5/2023	13:32	12.5	3.4	38	234	138 BBLS AWAY SWAP TO TAIL CEMENT
19	TAIL CEMENT	7/5/2023	13:33	13	6	10	690	283 BBLS Tail CMT – 13 # 2.05 Y 10.3 MW 776 sks (191 H20) 10 BBLS AWAY
20	TAIL CEMENT	7/5/2023	13:45	13	6.5	60	760	70 BBLS AWAY
21	TAIL CEMENT	7/5/2023	13:51	13	5.6	30	727	100 BBLS AWAY
22	TAIL CEMENT	7/5/2023	14:00	13	5.6	50	730	150 BBLS AWAY
23	TAIL CEMENT	7/5/2023	14:08	13	6.3	50	780	200 BBLS AWAY
24	TAIL CEMENT	7/5/2023	14:16	13	6.3	50	761	250 BBLS AWAY
25	TAIL CEMENT	7/5/2023	14:24	13	4	33	550	283 BBLS AWAY SHUT DOWN FOR WASHUP
26	WASHUP	7/5/2023	14:25					BLOW OUT LINES TO PIT FROM RIG FLOOR, WASHUP PUMP AND LINES TO PIT, DROP PLUG
27	DISPLACEMENT	7/5/2023	14:35	8.34	7.5	10	409	SEND PLUG AND BEGIN DISPLACEMENT 10 BBLS AWAY
28	DISPLACEMENT	7/5/2023	14:42	8.34	8	40	675	50 BBLS AWAY
29	DISPLACEMENT	7/5/2023	14:47	8.34	8	50	1250	100 BBLS AWAY
30	DISPLACEMENT	7/5/2023	14:55	8.34	4	4	1499	150 BBLS AWAY, SLOWED RATE AT 145 BBLS AWAY DUE TO PRESSURE SPIKE
31	LAND PLUG	7/5/2023	14:58	8.34	4	4	1700	163 BBLS AWAY LAND PLUG TO 2830 PSI
32	CHECK FLOATS	7/5/2023	15:00					CHECK FLOATS, FLOATS HELD WITH 2.25 BBLS BACK
33	SAFETY MEETING	7/5/2023	15:10					RIG DOWN MEETING
34	RIG DOWN	7/5/2023	15:30					RIG DOWN ALL EQUIPMENT
35	SAFETY MEETING	7/5/2023	16:20					JOURNEY MANAGEMENT MEETING
36	DEPART LOCATION	7/5/2023	16:30					CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 87497
Customer: Terra
Well Name: Leverich SR 523-13



Job Start: Wednesday, July 05, 2023