



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

WMC 33-19-793 05-045-24546
S:19 T:7S R:93W Garfield CO

CallSheet #: 86630
Proposal #: 68330



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	1140	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1140	7871	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7871	11100	50
Casing	Inner	4.5	4	11.6	n/a	0	11100	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer Float	CTF-286	TRC-053	Baker, Zachary	Balint, Daniel
Field Storage Silo	FSS-438			
Cement Pump Float	CPF-012	TRH-964	Gonzales, Ivan	
Light Duty Vehicles	LDV-045		McClure, Gerron	

Timing

Event	Date/Time
ERTS	00/24/2023 00:00
Call Out	4/24/2023 10:00
Depart Facility	4/24/2023 12:00
On Location	4/24/2023 14:00
Rig Up Iron	4/24/2023 15:00
Job Started	4/24/2023 20:55
Job Completed	4/24/2023 22:53
Rig Down Iron	4/24/2023 23:30
Depart Location	4/25/2023 01:00

General Job Information

Metrics	Value
Well Fluid Density	9.1 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	800 bbls
Rig Circulation Time	2 hours
Calculated Displacement	171.44 bbls
Actual Displacement	171 bbls
Total Spacer to Surface	N/A bbls
Total CMT to Surface	N/A bbls
Well Topped Out	N/A
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	9.1 lb/gal
Well Fluid Density Out of Well	9.1 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	178 °F
BHST	236 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	64 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	500 mg/L	0-3000 mg/L
Total Alkalinity	200	0-1000
Total Hardness	N/A mg/L	0-500 mg/L
Carbonates	N/A mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	N/A mg/L	0-3000 mg/L
Iron	N/A 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	6194
2	Mud Flush	Flush	8.45			40.86		20.00	6293
3	Water	Flush	8.34			42.00		10.00	6491
4	Lead	Lead	12.50	2.26	12.59		323.00	129.82	6590
5	Tail	Tail	13.00	2.05	10.26		784.00	285.96	7871
6	Displacement	DisplacementFinal	8.34			42.00		171.44	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 I/II	Cement	100.00	%
4	Lead	Lead	ATHX-1102	Thixotropic	0.10	%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	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
4	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
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
4	Lead	Lead	XCem-916	Retarder	0.45	%BWOB
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	ARRIVED ON LOCATION	4/24/2023	14:00					ARRIVED ON LOCATION/ CUSTOMER REQUESTED 16:00
2	HAZARD ASSESMENT	4/24/2023	14:05					
3	PRE RIG UP SAFTEY MEETING	4/24/2023	14:30					
4	RIGGED UP	4/24/2023	15:15					
5	PRE JOB SFTY MTG	4/24/2023	19:45					PRE JOB SAFETY MEETING
6	STAB HEAD	4/24/2023	20:00					
7	START JOB	4/24/2023	20:55					START JOB
8	PRESSURE TEST 5000	4/24/2023	20:57	8.34	1	1	5000	PRESSURE TEST LINES 5000
9	BREAK CIRCULATION	4/24/2023	20:58	8.34	5	10	242	BREAK CIRCULATION
10	20 BBL MUD FLUSH	4/24/2023	21:00	8.4	5	20	320	20 BBL MUD FLUSH II SPACER
11	10 BBL FW SPACER	4/24/2023	21:05	8.34	5	10	402	10 BBL FW SPACER
12	START LEAD @ 12.5	4/24/2023	21:06	12.5	5	1	441	LEAD CEMENT @ 12.5 (2.26,12.59) 323 SACKS 130 BBL
13	50 BBL GONE	4/24/2023	21:11	12.5	5	50	281	
14	100 BBL GONE	4/24/2023	21:19	12.5	5	100	370	
15	END OF LEAD CEMENT	4/24/2023	21:27	12.5	5	130	430	END OF LEAD SLURRY
16	START TAIL CEMENT @ 13	4/24/2023	21:28	13	3	1	410	START TAIL CEMENT @13.0 (2.05,10.26) 784 SACKS 286 BBLs
17	50 BBL GONE	4/24/2023	21:35	13	5	50	447	
18	100 BBL GONE	4/24/2023	21:42	13	5	100	543	
19	150 BBL GONE	4/24/2023	21:54	13	5	150	640	
20	200 BBL GONE	4/24/2023	22:03	13	5	200	443	
21	250 BBL GONE	4/24/2023	22:13	13	5	250	465	
22	END OF TAIL CEMENT	4/24/2023	22:19	13	3	286	134	END OF TAIL CEMENT
23	SHUTDOWN/WASH LINES	4/24/2023	22:20	8.34				SHUTDOWN/ WASH LINES/ DROP TOP PLUG
24	DROP PLUG	4/24/2023	22:32					
25	START 176 BBL DISP	4/24/2023	22:33	8.34	5	1	320	START BBL FW DISPLACEMENT
26	50 BBL GONE ON DISP	4/24/2023	22:37	8.34	8	37	472	
27	50 BBL GONE ON DISP	4/24/2023	22:37	8.34	8	50	943	CAUGHT CEMENT @ 54 BBL GONE
28	100 BBL GONE ON DISP	4/24/2023	22:43	8.34	8	100	1573	
29	150 BBL GONE ON DISP	4/24/2023	22:50	8.34	8	150	2167	
30	PRESSURE BEFORE SLOW	4/24/2023	22:51	8.34	8	160	2360	PRESSURE BEFORE SLOW RATE - 2360
31	SLOW RATE	4/24/2023	22:51	8.34	4	161	1535	SLOW RATE PRESSURE - 1535
32	PRESSURE BEFORE LAND	4/24/2023	22:53	8.34	4	171	1645	FINAL LIFT PRESSURE BEFORE LANDING PLUG - 1645
33	LAND PLUG	4/24/2023	22:53	8.34	4	171	2690	LAND PLUG -2690
34	CHECK FLOAT	4/24/2023	22:58					CHECKED FLOAT AND RECEIVED BBLs BACK
35	POST JOB/ PRE RIG DOWN	4/24/2023	23:00					
36	RIGGED DOWN	4/24/2023	23:45					
37	PRE CONVOY SFTY MTG	4/24/2023	00:30					
38	DEPART LOCATION	4/24/2023	01:00					
39	END OF JOB	4/24/2023	01:00					END OF JOB

Pump Diagrams

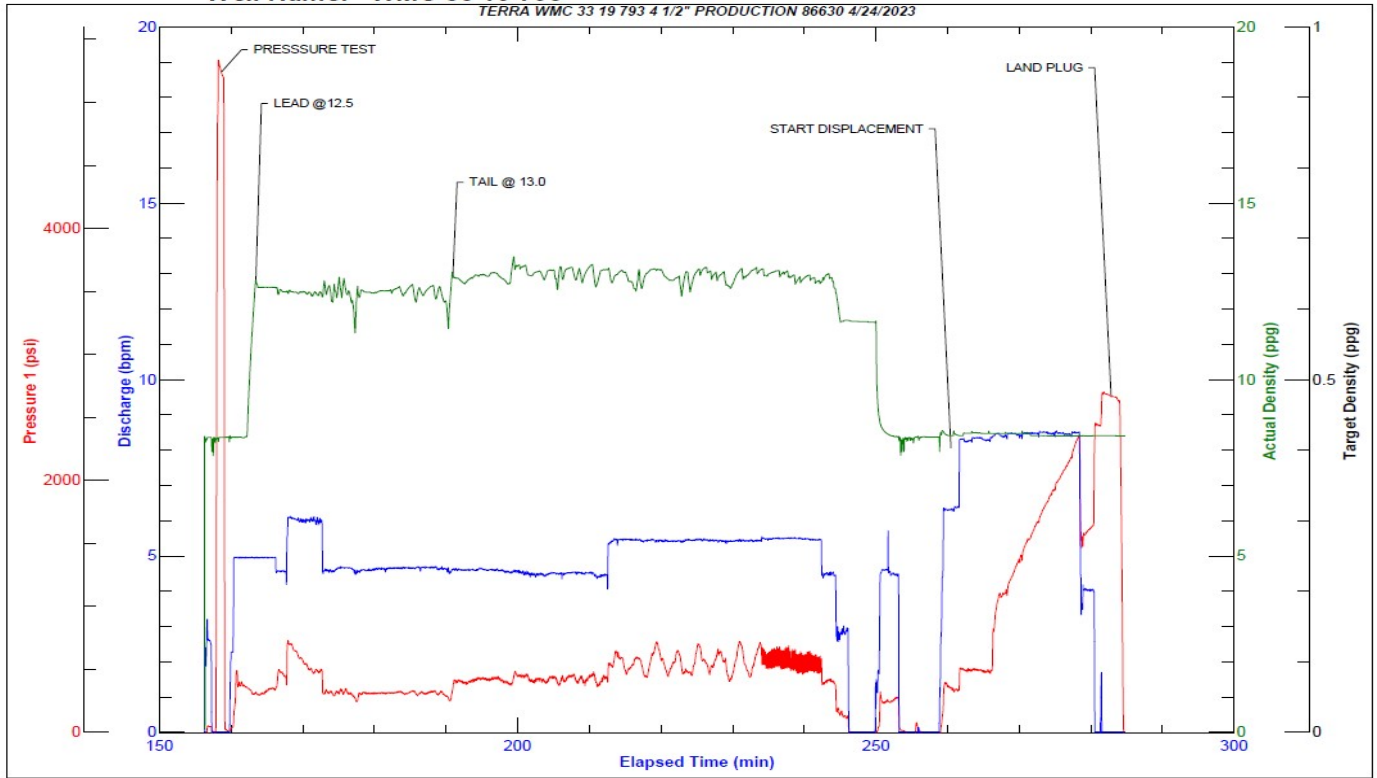


JobMaster Program Version 5.01C1

Job Number: 86630

Customer: TERRA

Well Name: WMC 33 19 793



Job Start: Monday, April 24, 2023