



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

WMC 11-19-793 05-045-24550
S:19 T:7S R:93W Garfield CO

CallSheet #: 86351
Proposal #: 67841



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	1134	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1134	7664	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7664	10883	50
Casing	Inner	4.5	4	11.6	n/a	0	10883	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Field Storage Silo	FSS-438			
Cement Trailer Float	CTF-286	TRC-054	Hutchinson, Michael	Dragon, Shane
Cement Pump Float	CPF-136	TRH-855	Bradbrook, Jeremy	
Light Duty Vehicles	LDV-062		Castillo, Francisco	

Timing

Event	Date/Time
ERTS	00/28/2023 00:00
Call Out	3/28/2023 02:00
Depart Facility	3/28/2023 04:00
On Location	3/28/2023 05:30
Rig Up Iron	3/28/2023 06:00
Job Started	3/28/2023 11:55
Job Completed	3/28/2023 13:50
Rig Down Iron	3/28/2023 14:07
Depart Location	3/28/2023 15:15

General Job Information

Metrics	Value
Well Fluid Density	9.1 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	168 bbls
Actual Displacement	168 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	9.1 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	65 °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 JOB

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	5987
2	Mud Flush	Flush	8.45			40.86		20.00	6086
3	Water	Flush	8.34			42.00		10.00	6284
4	Lead	Lead	12.50	2.26	12.59		323.00	129.82	6383
5	Tail	Tail	13.00	2.05	10.26		784.00	285.96	7664
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	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	CALLOUT	3/28/2023	02:00					ON LOCATION AT 06:00 HRS
2	LEAVE THE YARD	3/28/2023	04:00					CREW LEAVE THE YARD
3	ON LOCATION	3/28/2023	05:30					ON LOCATION
4	RIG UP	3/28/2023	06:00					RIG UP MEEING, RIG UP
5	SAFETY MEETING	3/28/2023	11:11					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	3/28/2023	11:52				5179	PRESSURE TEST LINES
7	WATER SPACER	3/28/2023	11:55	8.34	5	10	415	WATER SPACER
8	MUD FLUSH	3/28/2023	11:57	9	5	20	489	MUD FLUSH SPACER
9	WATER SPACER	3/28/2023	12:01	8.34	5	10	525	WATER SPACER
10	LEAD CEMENT	3/28/2023	12:04	12.5	5.7	65	473	LEAD 323 SKS/130 BBLS AT 12.5 PPG
11	LEAD CEMENT	3/28/2023	12:16	12.5	6.5	65	531	130 BBLS LEAD CEMENT PUMPED
12	TAIL CEMENT	3/28/2023	12:27	13	6.5	50	747	TAIL 784 SKS/286 BBLS AT 13 PPG
13	TAIL CEMENT	3/28/2023	12:35	13	6.5	50	761	100 BBLS TAIL CEMENT PUMPED
14	TAIL CEMENT	3/28/2023	12:43	13	6.5	50	751	150 BBLS TAIL CEMENT PUMPED
15	TAIL CEMENT	3/28/2023	12:50	13	6.5	50	763	200 BBLS TAIL CEMENT PUMPED
16	TAIL CEMENT	3/28/2023	12:58	13	6.5	86	765	286 BBLS TAIL CEMENT PUMPED
17	SHUTDOWN	3/28/2023	13:15					WASH PUMP AND LINES
18	DISPLACEMENT	3/28/2023	13:28	8.4	9	50	611	DISPLACEMENT KCL WATER
19	DISPLACEMENT	3/28/2023	13:35	8.4	9	50	1671	100 BBLS DISPLACEMENT PUMPED
20	DISPLACEMENT	3/28/2023	13:40	8.4	9	58	2415	158 BBLS DISPLACEMENT PUMPED
21	SLOW RATE	3/28/2023	13:47	8.4	4	10	1811	SLOW RATE
22	LAND PLUG	3/28/2023	13:50				3005	LAND PLUG, NO RETURNS
23	CHECK FLOATS	3/28/2023	13:54					FLOATS HELD, 1.5 BBLS FLOW BACK
24	RIG DOWN	3/28/2023	14:07					RIG DOWN MEETING, RIG DOWN
25	LEAVE LOCATION	3/28/2023	15:15					CREW LEAVE LOCATION

Pump Diagrams

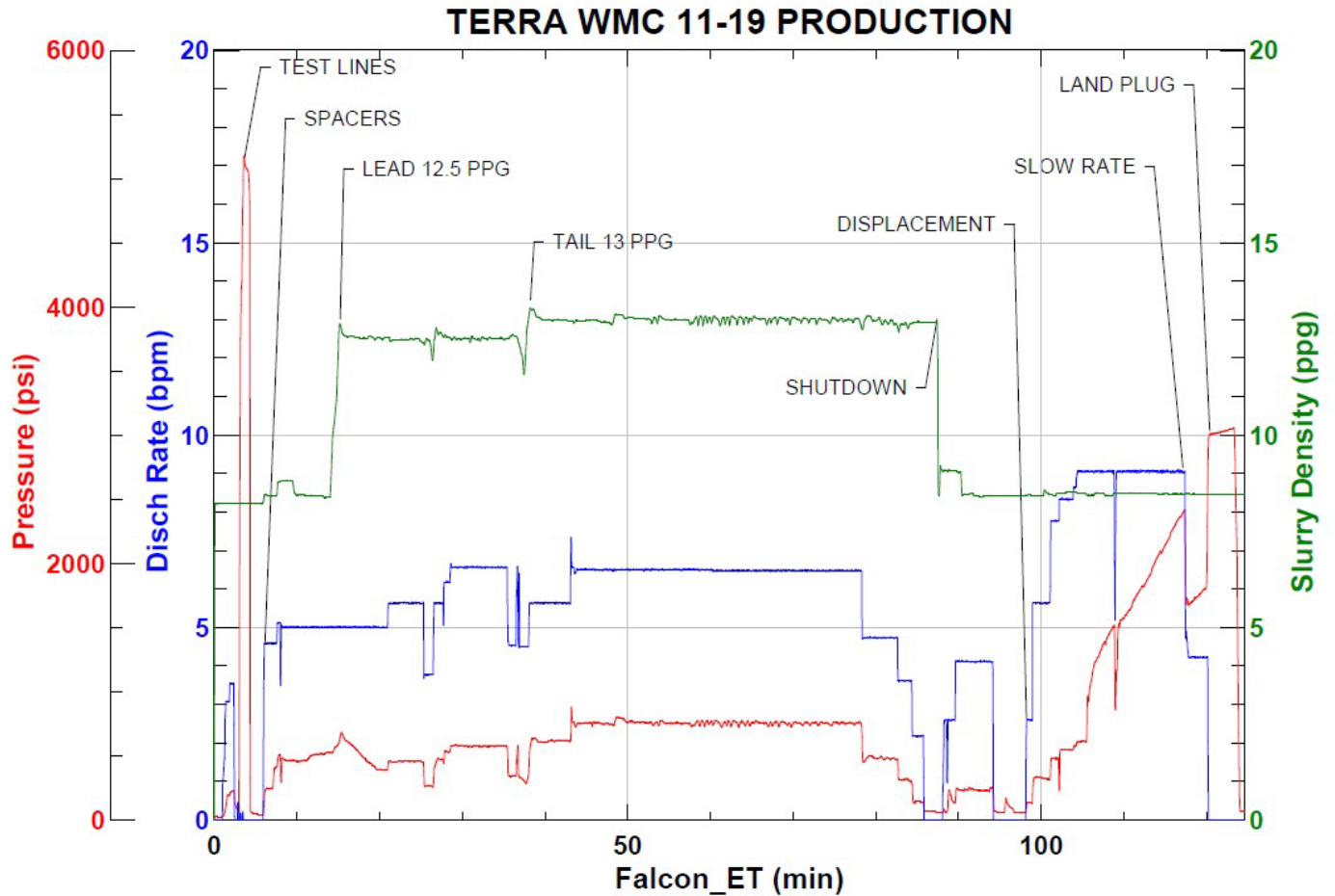


JobMaster Program Version 5.01C1

Job Number: 86351

Customer: TERRA

Well Name: WMC 11-19



Job Start: Tuesday, March 28, 2023