



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

WMC 533-19-793 05-045-24551
S:19 T:7S R:93W Garfield CO

CallSheet #: 85839
Proposal #: 67043



SURFACE 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,

Zen Keith

SME North | (307) 757-7178 | zen.keith@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1157

Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	20	19.5	53	n/a	0	110	0
Open Hole	Outer	n/a	13.5	n/a	n/a	110	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1142	16
Casing	Inner	9.625	8.921	36	n/a	0	1142	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-246	TRC-202	Balint, Daniel
Cement Pump Float	CPF-053	TRH-1140	Kirchenwitz, Jacob
Light Duty Vehicles	LDV-063		Castillo, Francisco

Timing

Event	Date/Time
ERTS	00/17/2023 00:00
Call Out	2/17/2023 15:00
Depart Facility	2/17/2023 16:00
On Location	2/17/2023 17:00
Rig Up Iron	2/17/2023 17:30
Job Started	2/17/2023 23:13
Job Completed	2/18/2023 00:00
Rig Down Iron	2/18/2023 00:30
Depart Location	2/18/2023 01:30

General Job Information

Metrics	Value
Well Fluid Density	9.1 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	85 bbls
Actual Displacement	85 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	40 bbls
Well Topped Out	No

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	Yes
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	81 °F
BHST	99 °F
Initial ISIP	psi
Final ISIP	psi
Skis in Formation	sks
Injection #1	bpm
Injection #1	psi
Injection #2	bpm
Injection #2	psi

Water Analysis

Metrics	Value	Recommended
Water Source	None	
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
No

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sk)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			42.00		20.00	0
2	Lead	Lead	12.30	2.21	12.72		165.00	65.04	0
3	Tail	Tail	12.80	1.97	10.87		193.00	67.55	500
4	Water	DisplacementFinal	8.34			42.00		85.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
2	Lead	Lead	A-7P	Accelerator	2.00	lb/sk
2	Lead	Lead	ATHX-1102	Thixotropic	1.00	lb/sk
2	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
2	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
3	Tail	Tail	ASTM TYPE I/II	Cement	100.00	%
3	Tail	Tail	A-7P	Accelerator	2.00	lb/sk
3	Tail	Tail	ATHX-1102	Thixotropic	1.00	lb/sk
3	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
3	Tail	Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Tail	STATIC FREE	Other	0.01	lb/sk

Job Logs

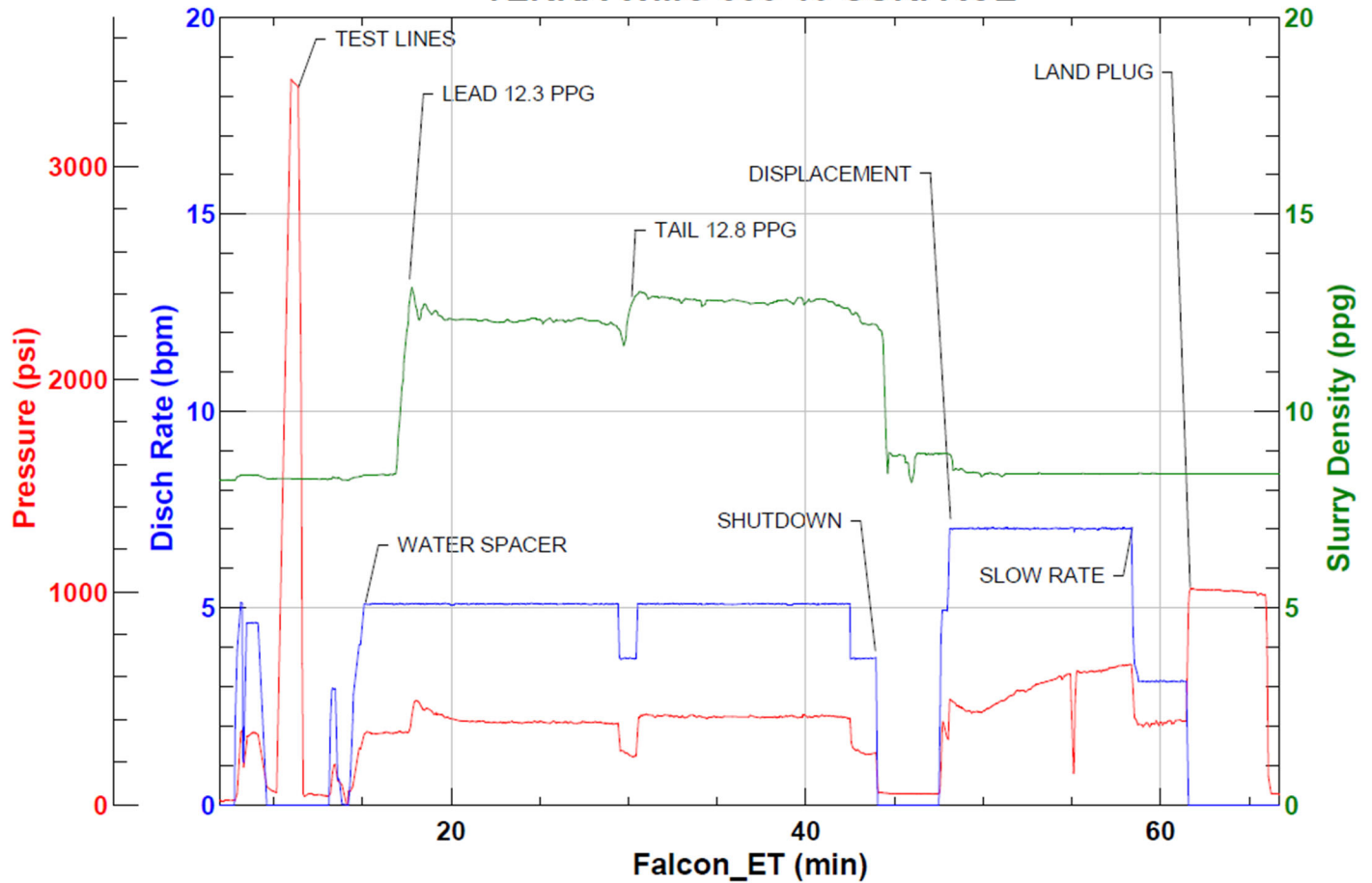
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	2/17/2023	15:00					ON LOCATION AT 19:00 HRS
2	LEAVE THE YARD	2/17/2023	16:00					CREW LEAVE THE YARD
3	ON LOCATION	2/17/2023	17:00					CREW ON LOCATION
4	RIG UP	2/17/2023	17:30					RIG UP MEETING, RIG UP
5	SAFETY MEETING	2/17/2023	22:35					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	2/17/2023	23:09				3671	PRESSURE TEST LINES
7	WATER SPACER	2/17/2023	23:13	8.34	5	20	341	WATER SPACER
8	LEAD CEMENT	2/17/2023	23:16	12.3	5	65	387	LEAD 165 SKS/65 BBL AT 12.3 PPG
9	TAIL CEMENT	2/17/2023	23:28	12.8	5	68	415	TAIL 193 SKS/68 BBL AT 12.8 PPG
10	SHUTDOWN	2/17/2023	23:43					SHUTDOWN, DROP PLUG
11	DISPLACEMENT	2/17/2023	23:47	8.34	7	75	655	DISPLACEMENT WATER
12	SLOW RATE	2/17/2023	23:57	8.34	3	10	391	SLOW RATE
13	LAND PLUG	2/18/2023	00:00				1015	LAND PLUG, 40 BBL CMT TO SURFACE
14	CHECK FLOATS	2/18/2023	00:15					FLOATS HELD, 0.5 BBL FLOW BACK
15	RIG DOWN	2/18/2023	00:30					RIG DOWN MEETING, RIG DOWN
16	LEAVE LOCATION	2/18/2023	01:30					CREW LEAVE LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 85839
Customer: TERRA
Well Name: WMC 533-19

TERRA WMC 533-19 SURFACE



Job Start: Friday, February 17, 2023