



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 441-3 05-045-24479
S:3 T:6S R:94W Garfield CO

CallSheet #: 81579
Proposal #: 59405



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,

Holly Mbugua

Field Engineer II | (720) 505-1300 | holly.mbugua@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	9.625	8.921	36	n/a	0	1119	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1100	8447	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8447	11208	45
Casing	Inner	4.5	4	11.6	n/a	0	11208	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Field Storage Silo	FSS(CTS)-470			
Field Storage Silo	FSS(CTS)-438			
AS Cement Trailer Float	CTF-9299	TRC(TRB)-195		
AS Cement Trailer Float	CTF-019	TRC(TRB)-202		
AS Cement Trailer Float	CTF(FTF)-148	TRC(TRB)-090		
Cement Trailer Float	CTF-555	TRC(TRB)-425	Richey, Steven	Jackson, Duewayne
Cement Pump Float	CPF-136		McConnen, Devin	
Light Duty Vehicle	LDV-063		Castillo, Francisco	

Timing

Event	Date/Time
Call Out	5/23/2022 09:00
Depart Facility	5/23/2022 10:31
On Location	5/23/2022 11:30
Rig Up Iron	5/23/2022 12:00
Job Started	5/23/2022 14:47
Job Completed	5/23/2022 16:40
Rig Down Iron	5/23/2022 17:00
Depart Location	5/23/2022 18:00

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	173 bbls
Actual Displacement	173 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	10.8 lb/gal
Well Fluid Density Out of Well	10.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	192 °F
BHST	253 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	67 °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 (sks)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			42.00		10.00	5897
2	Mud Flush	Flush	8.45			40.86		20.00	6023
3	Water	Flush	8.34			42.00		10.00	6275
4	12.7 Lead	Lead	12.70	2.00	10.99		456.00	162.62	6401
5	14.2 Tail	Tail	14.20	1.72	8.09		722.00	221.35	8447
6	Displacement	DisplacementFinal	8.34			42.00		173.00	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	12.7 Lead	ASTM TYPE I/II	Cement	100.00	%
4	Lead	12.7 Lead	BA-90	BondEnhancer	3.00	lb/sk
4	Lead	12.7 Lead	FL-66	FluidLoss	0.50	%BWOB
4	Lead	12.7 Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	12.7 Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	12.7 Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	12.7 Lead	R-3	Retarder	0.45	%BWOB
4	Lead	12.7 Lead	STATIC FREE	Other	0.01	lb/sk
5	Tail	14.2 Tail	CLASS G	Cement	80.00	%
5	Tail	14.2 Tail	FLY ASH (POZZOLAN)	Extender	20.00	%
5	Tail	14.2 Tail	FL-66	FluidLoss	0.40	%BWOB
5	Tail	14.2 Tail	FP-24	Defoamer	0.30	%BWOB
5	Tail	14.2 Tail	GW-86	Viscosifier	0.10	%BWOB
5	Tail	14.2 Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
5	Tail	14.2 Tail	R-3	Retarder	0.15	%BWOB
5	Tail	14.2 Tail	S-8	StrengthRetgression	27.00	%BWOB

Job Logs

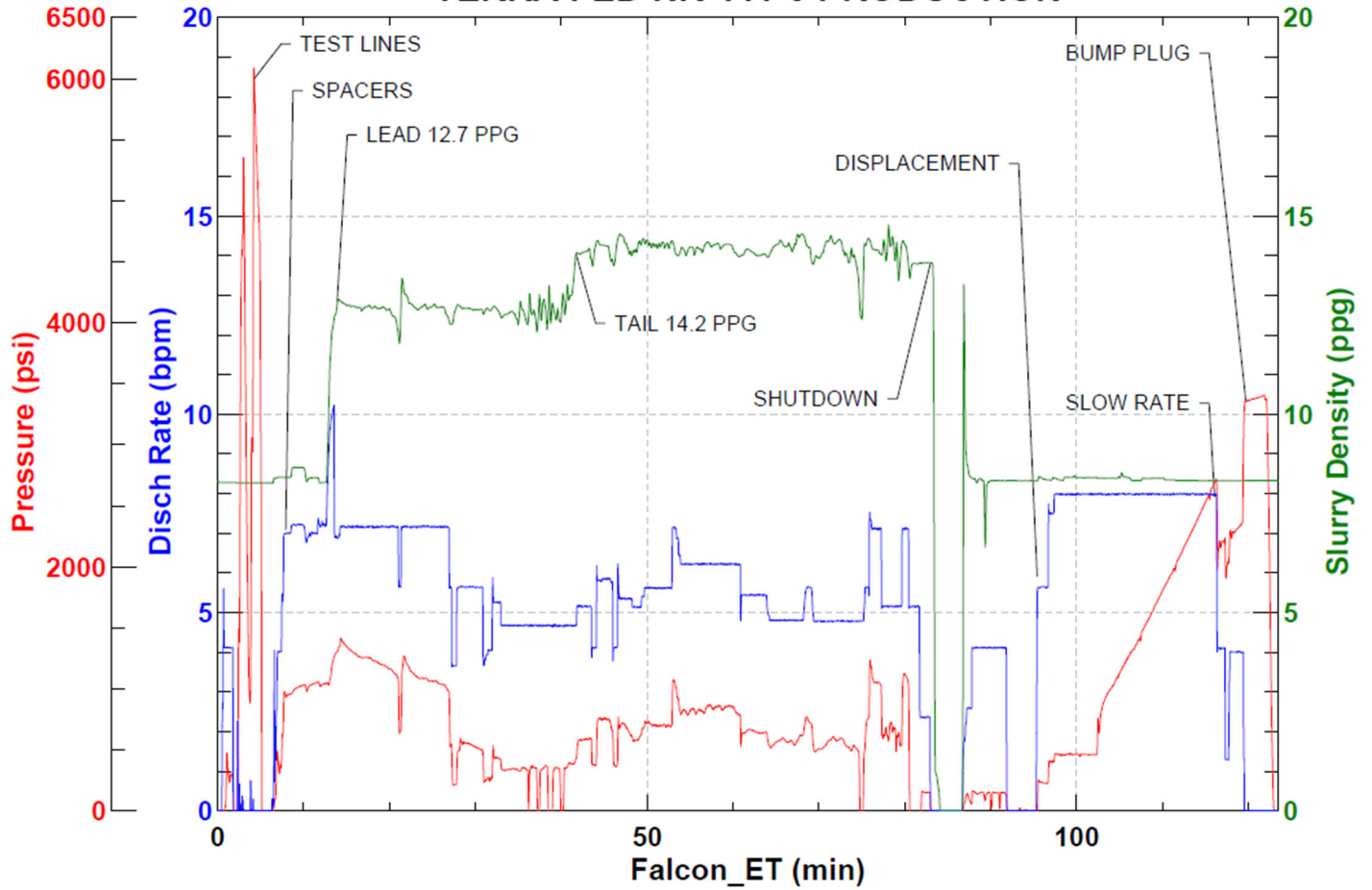
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	5/23/2022	09:00					ON LOCATION AT 13:00 HRS
2	LEAVE YARD	5/23/2022	10:31					CREW LEAVE THE YARD
3	ON LOCATION	5/23/2022	11:30					CREW ON LOCATION
4	RIG UP	5/23/2022	12:00					RIG UP MEETING, RIG UP
5	SAFETY MEETING	5/23/2022	14:15					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	5/23/2022	14:42				6100	PRESSURE TEST LINES
7	PUMP SPACER	5/23/2022	14:47	8.34	7	10	961	WATER SPACER
8	PUMP SPACER	5/23/2022	14:49	9	7	20	1051	MUD FLUSH SPACER
9	PUMP SPACER	5/23/2022	14:52	8.34	7	10	1053	WATER SPACER
10	LEAD CEMENT	5/23/2022	14:53	12.7	7	50	1167	LEAD 456 SKS/163 BBLs AT 12.7 PPG
11	LEAD CEMENT	5/23/2022	15:00	12.7	7	50	1037	100 BBLs LEAD CEMENT PUMPED
12	LEAD CEMENT	5/23/2022	15:07	12.7	4.7	63	373	163 BBLs LEAD CEMENT PUMPED
13	TAIL CEMENT	5/23/2022	15:21	14.2	5.7	50	711	TAIL 722 SKS/221 BBLs AT 14.2 PPG,
14	TAIL CEMENT	5/23/2022	15:31	14.2	6	50	857	100 BBLs TAIL CEMENT PUMPED
15	TAIL CEMENT	5/23/2022	15:39	14.2	5	50	651	150 BBLs TAIL CEMENT PUMPED
16	TAIL CEMENT	5/23/2022	15:49	14.2	7	71	1047	221 BBLs TAIL CEMENT PUMPED
17	SHUTDOWN	5/23/2022	16:04					WASH PUMP AND LINES, DROP PLUG
18	DISPLACEMENT	5/23/2022	16:16	8.4	8	50	465	DISPLACEMENT KCL WATER
19	DISPLACEMENT	5/23/2022	16:23	8.4	8	50	1585	100 BBLs DISPLACEMENT PUMPED
20	DISPLACEMENT	5/23/2022	16:29	8.4	8	63	2721	163 BBLs DISPLACEMENT PUMPED
21	SLOW RATE	5/23/2022	16:37	8.4	4	10	2367	SLOW RATE
22	BUMP PLUG	5/23/2022	16:40				3411	LAND PLUG, FULL RETURNS
23	CHECK FLOATS	5/23/2022	16:44					FLOATS HELD, 2 BBLs FLOW BACK
24	RIG DOWN	5/23/2022	17:00					RIG DOWN MEETING, RIG DOWN
25	LEAVE LOCATION	5/23/2022	18:00					CREW LEAVE LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
 Job Number: 81579
 Customer: TERRA
 Well Name: FED NR 441-3

TERRA FED NR 441-3 PRODUCTION



Job Start: Monday, May 23, 2022