



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 431-3 05-045-24473
S:3 T:6S R:94W Garfield CO

CallSheet #: 81683
Proposal #: 60106



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@americancementing.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	8179	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8179	10903	45
Casing	Inner	4.5	4	11.6	n/a	0	10903	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS(CTS)-438		
Field Storage Silo	FSS(CTS)-470		
AS Cement Trailer Float	CTF-019		
AS Cement Trailer Float	CTF-7145		
AS Cement Trailer Float	CTF-138		
Cement Trailer Float	CTF-340	TRC(TRB)-180	Richey, Steven
Light Duty Vehicles	LDV-063		Castillo, Francisco
Cement Pump Float	CPF-053	TRH-1140	Woronovitch, Collin

Timing

Event	Date/Time
Call Out	6/1/2022 07:00
Depart Facility	6/1/2022 09:15
On Location	6/1/2022 11:00
Rig Up Iron	6/1/2022 11:15
Job Started	6/1/2022 15:51
Job Completed	6/1/2022 17:38
Rig Down Iron	6/1/2022 18:00
Depart Location	6/1/2022 19:00

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	990 bbls
Rig Circulation Time	1.5 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	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	5640
2	Mud Flush	Flush	8.45			40.86		20.00	5766
3	Water	Flush	8.34			42.00		10.00	6018
4	12.7 Lead	Lead	12.70	2.00	10.99		453.00	161.55	6144
5	14.2 Tail	Tail	14.20	1.72	8.09		722.00	221.35	8179
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	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	StrengthRetrogression	27.00	%BWOB

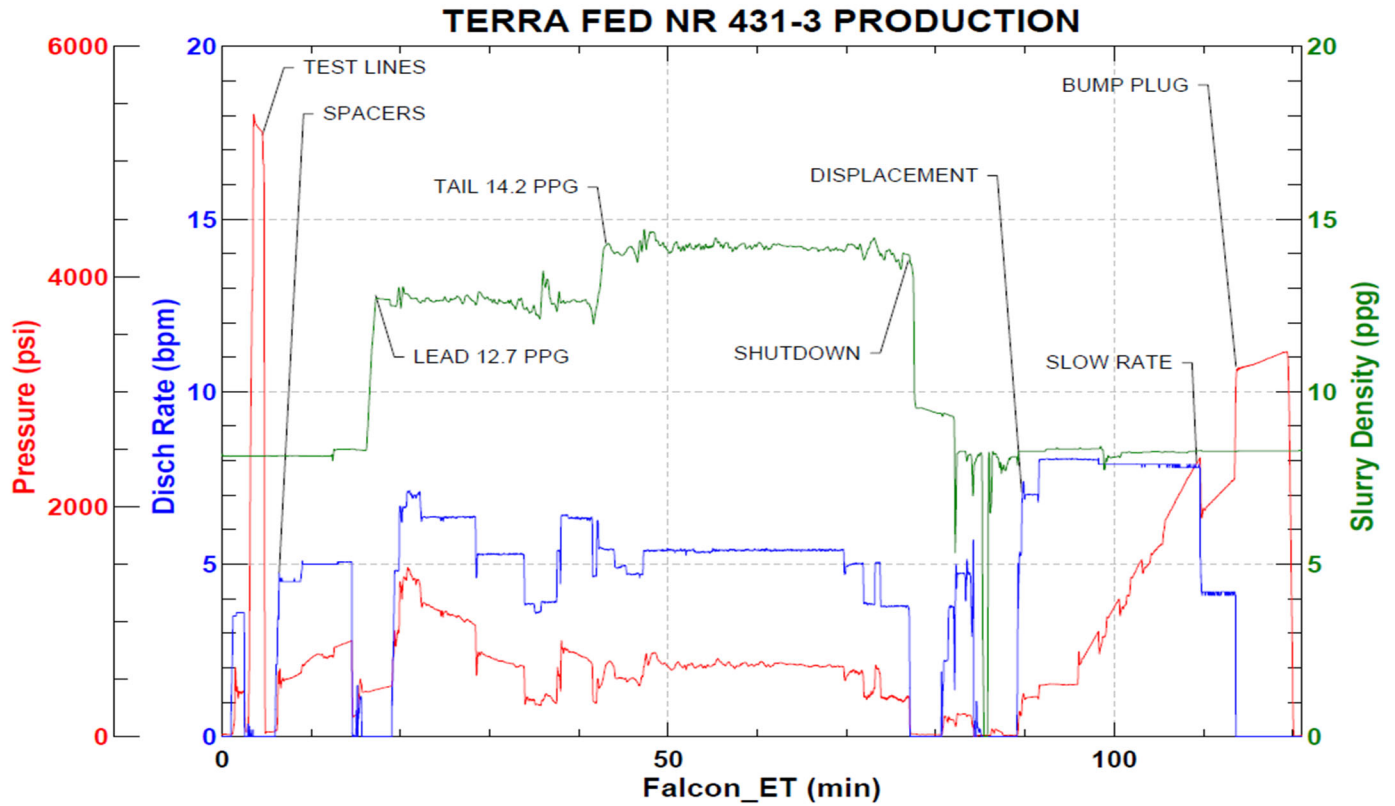
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	6/1/2022	07:00					ON LOCATION AT 11:30 HRS
2	LEAVE YARD	6/1/2022	09:15					CREW LEAVE THE YARD
3	ON LOCATION	6/1/2022	11:00					CREW ON LOCATION
4	RIG UP	6/1/2022	11:15					RIG UP MEETING, RIG UP
5	SAFETY MEETING	6/1/2022	15:00					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	6/1/2022	15:47				5400	PRESSURE TEST LINES
7	PUMP SPACER	6/1/2022	15:51	8.34	4.5	10	523	WATER SPACER
8	PUMP SPACER	6/1/2022	15:53	9	5	20	715	MUD FLUSH SPACER
9	PUMP SPACER	6/1/2022	15:57	8.34	5	10	837	WATER SPACER
10	LEAD CEMENT	6/1/2022	16:04	12.7	6.5	50	997	LEAD 453 SKS/161 BBLS AT 12.7
11	LEAD CEMENT	6/1/2022	16:12	12.7	5	50	615	100 BBLS LEAD CEMENT PUMPED
12	LEAD CEMENT	6/1/2022	16:21	12.7	6	61	675	161 BBLS LEAD CEMENT PUMPED
13	TAIL CEMENT	6/1/2022	16:26	14.2	5	50	613	TAIL 722 SKS/221 BBLS AT 14.2 PPG
14	TAIL CEMENT	6/1/2022	16:37	14.2	5.5	50	637	100 BBLS TAIL CEMENT PUMPED
15	TAIL CEMENT	6/1/2022	16:46	14.2	5	50	541	150 BBLS TAIL CEMENT PUMPED
16	TAIL CEMENT	6/1/2022	16:56	14.2	4	71	357	221 BBLS TAIL CEMENT PUMPED
17	SHUTDOWN	6/1/2022	17:03					WASH PUMP AND LINES, DROP PLUG
18	DISPLACEMENT	6/1/2022	17:13	8.4	8	50	741	DISPLACEMENT KCL WATER
19	DISPLACEMENT	6/1/2022	17:20	8.4	8	50	1477	100 BBLS DISPLACEMENT PUMPED
20	DISPLACEMENT	6/1/2022	17:27	8.4	8	58	2417	158 BBLS DISPLACEMENT PUMPED
21	SLOW RAE	6/1/2022	17:34	8.4	4	10	2271	SLOW RATE
22	LAND PLUG	6/1/2022	17:38				3205	LAND PLUG, FULL RETURNS
23	CHECK FLOATS	6/1/2022	17:44					FLOATS HELD, 1.5 BBLS FLOW BACK
24	RIG DOWN	6/1/2022	18:00					RIG DOWN MEETING, RIG DOWN
25	LEAVE LOCATION	6/1/2022	19:00					CREW LEAVE LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 81683
Customer: TERRA
Well Name: FED NR 431-3



Job Start: Wednesday, June 01, 2022