



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 343-4 05-045-24480
S:3 T:6S R:94W Garfield CO

CallSheet #: 81026
Proposal #: 59031



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,

Michael Harold

Field Engineer II | (970) 773-3636 | michael.harold@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	1114	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1114	8163	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8163	10998	45
Casing	Inner	4.5	4	11.6	n/a	0	10998	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	CTF-048			
AS Cement Trailer	CTF(FTF)-148			
Cement Trailer	CTF-246	TRC(TRB)-202	Kirchenwitz, Jacob	Morales, Adrian
AS Cement Trailer	CTF-901	TRB-421	Hutchinson, Michael	McNeal, Lawrence
Light Duty Vehicles	LDV-083		Aden, Mark	
Cement Pump	CPF-012	TRH-964	Gonzales, Ivan	

Timing

Event	Date/Time
Call Out	4/15/2022 14:20
Depart Facility	4/15/2022 18:30
On Location	4/15/2022 20:15
Rig Up Iron	4/15/2022 20:45
Job Started	4/16/2022 01:56
Job Completed	4/16/2022 03:59
Rig Down Iron	4/16/2022 04:08
Depart Location	4/16/2022 04:45

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1071 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	171 bbls
Actual Displacement	171 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	Upright Rig Tank	
Temperature	64.7 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	425 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	0 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
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	5830
2	Mud Flush	Flush	8.45			40.86		20.00	5956
3	Water	Flush	8.34			42.00		10.00	6208
4	12.7 Lead	Lead	12.70	2.00	10.99		407.00	145.15	6334
5	14.2 Tail	Tail	14.20	1.72	8.09		748.00	229.32	8163
6	Displacement	DisplacementFinal	8.34			42.00		171.00	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	4/15/2022	14:20					Yard call 17:00 on location 23:00.
2	Depart For Location	4/15/2022	18:30					Leave Rifle yard for location
3	Arrive On Location	4/15/2022	20:15					Arrive on location rig running casing
4	Spot Equipment	4/15/2022	20:35					Spot in all Equipment
5	Rig Up Iron	4/15/2022	20:45					Pre rig up safety meeting, rig in all equipment and lines to stand pipes
6	Safety Meeting	4/16/2021	01:45					Pre job safety meeting with company man and rig crew
7	End Circulation	4/16/2021	01:45					Rig ended circulation, Circulated for 1.5 Hour, total of 1071 BBLS
8	Rig Up Iron	4/16/2021	01:54					Rig up Cement head and lines on the floor
9	Pump Spacer	4/16/2021	01:57	8.34	3.5	10	476	Pumping fresh water spacer to load lines, returns
10	Pressure Test Lines	4/16/2021	02:01				5000	Pressure test
11	Pump Spacer	4/16/2021	02:04	8.45	5	20	681	Pumping mud flush spacer
12	Pump Spacer	4/16/2021	02:09	8.34	5	10	794	Pumping fresh water spacer, returns
13	Pump Lead Cement	4/16/2021	02:20	12.7	7	0	1450	Pumping lead cement, returns
14	Pump Lead Cement	4/16/2021	02:27	12.7	7	50	1161	Pumping lead cement
15	Pump Lead Cement	4/16/2021	02:35	12.7	5	100	668	Pumping lead cement
16	Pump Lead Cement	4/16/2021	02:43	12.7	5	145	333	Pumping lead cement
17	Pump Tail Cement	4/16/2021	02:43	14.2	4.5	0	455	Pumping tail cement, returns
18	Pump Tail Cement	4/16/2021	02:53	14.2	5.5	50	727	Pumping tail cement
19	Pump Tail Cement	4/16/2021	03:02	14.2	6	100	813	Pumping tail cement
20	Pump Tail Cement	4/16/2021	03:11	14.2	6	150	801	Pumping tail cement
21	Pump Tail Cement	4/16/2021	03:19	14.2	4.5	200	532	Pumping tail cement
22	Pump Tail Cement	4/16/2021	03:25	14.2	3.5	229	343	Pumping tail cement
23	Clean Pumps and Lines	4/16/2021	03:29					Clean pump and lines to pit
24	Drop Top Plug	4/16/2021	03:35					Drop top plug verified by company man
25	Pump Displacement	4/16/2021	03:38		7	0	459	Pumping KCL displacement, returns
26	Pump Displacement	4/16/2021	03:44		8	50	1246	Pumping KCL displacement
27	Pump Displacement	4/16/2021	03:49		8	100	1927	Pumping KCL displacement
28	Pump Displacement	4/16/2021	03:56		8	150	2770	Pumping KCL displacement
29	Pump Displacement	4/16/2021	03:59		4	171	2430	Pumping KCL displacement
30	Land Plug	4/16/2021	03:59				3574	Land plug. FCP 2430 PSI bumped to 3574 PSI
31	Check Floats	4/16/2021	04:03					Bled pressure, floats held. 2 BBL bled back.
32	Rig Down Iron	4/16/2021	04:08					Pre rig down safety meeting, rig down cement head and lines on the floor.
33	Depart Location	4/16/2021	04:45					Leave location for Rifle shop

Pump Diagrams

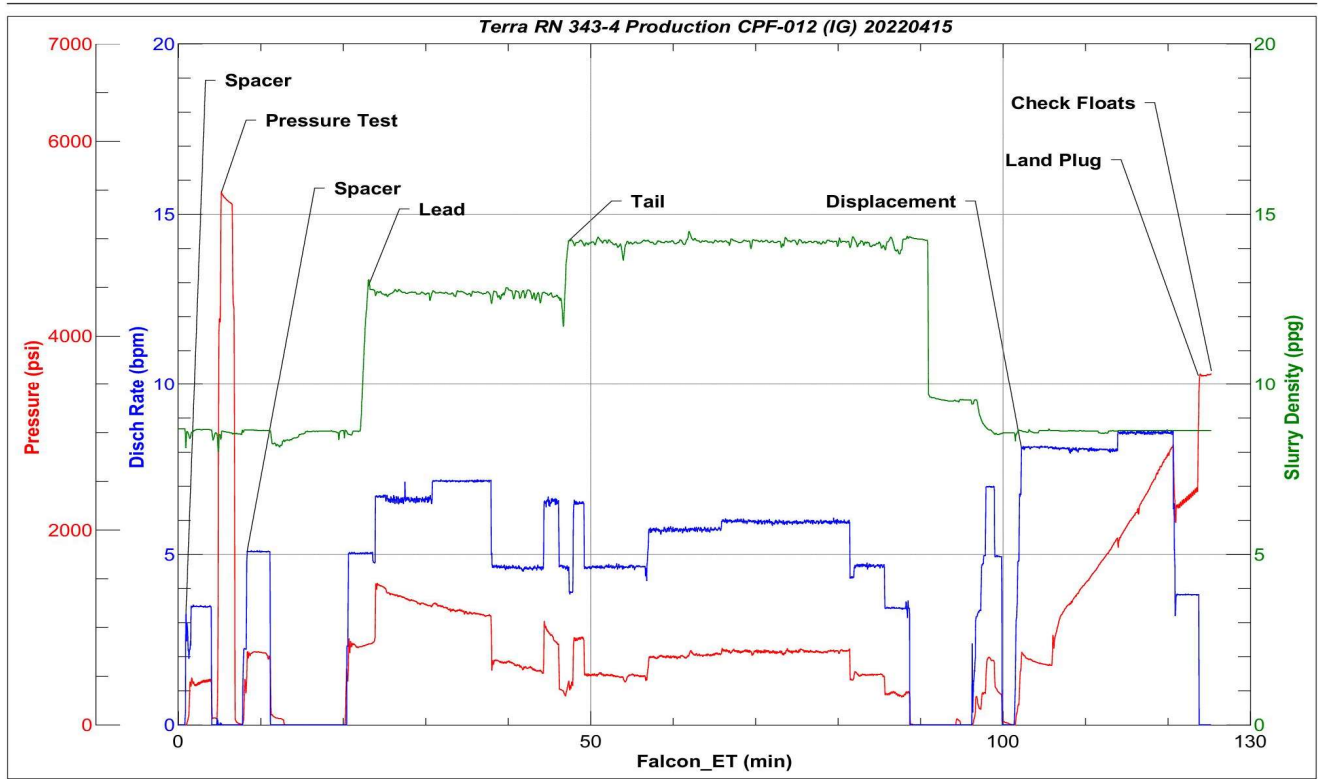


JobMaster Program Version 5.01C1

Job Number: 81026

Customer: Terra

Well Name: RN 343-4



BJ Services

Job Start: Saturday, April 16, 2022