



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 543-4 05-045-24469
S:3 T:6S R:94W Garfield CO

CallSheet #: 80559
Proposal #: 58200



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	1127	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1127	8131	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8131	10976	45
Casing	Inner	4.5	4	11.6	n/a	0	10976	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	CTF-019	TRC(TRB)-112	
AS Cement Trailer	CTF-138	TRB-421	
AS Cement Trailer	CTF-9898	TRC(TRB)-424	
Cement Trailer	CTF-522	TRC(TRB)-202	Kirchenwitz, Jacob
Cement Pump	CPF-012	TRH-964	Gonzales, Ivan
Light Duty Vehicles	LDV-083		Putnam, Gage

Timing

Event	Date/Time
Call Out	3/17/2022 16:30
Depart Facility	3/17/2022 19:45
On Location	3/17/2022 20:45
Rig Up Iron	3/17/2022 22:30
Job Started	3/18/2022 04:27
Job Completed	3/18/2022 06:31
Rig Down Iron	3/18/2022 06:45
Depart Location	3/18/2022 08:00

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	900 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	169.4 bbls
Actual Displacement	169.4 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	68 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	72 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	80 mg/L	0-500 mg/L
Carbonates	NA mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	350 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	5798
2	Mud Flush	Flush	8.45			40.86		20.00	5924
3	Water	Flush	8.34			42.00		10.00	6176
4	12.7 ppg Lead	Lead	12.70	2.00	10.99		407.00	145.15	6302
5	Tail	Tail	14.20	1.72	8.09		745.00	228.40	8131
6	Displacement	DisplacementFinal	8.34			42.00		169.00	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 ppg Lead	ASTM TYPE I/II	Cement	100.00	%
4	Lead	12.7 ppg Lead	BA-90	BondEnhancer	3.00	lb/sk
4	Lead	12.7 ppg Lead	FL-66	FluidLoss	0.50	%BWOB
4	Lead	12.7 ppg Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	12.7 ppg Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	12.7 ppg Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	12.7 ppg Lead	R-3	Retarder	0.45	%BWOB
4	Lead	12.7 ppg Lead	STATIC FREE	Other	0.01	lb/sk
5	Tail	Tail	CLASS G	Cement	80.00	%
5	Tail	Tail	FLY ASH (POZZOLAN)	Extender	20.00	%
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 POLI	LostCirculation	0.25	lb/sk
5	Tail	Tail	R-3	Retarder	0.15	%BWOB
5	Tail	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	3/17/2022	16:30					CREW CALLED OUT FOR ON LOCATION TIME OF 22:30 3/17/22
2	Depart Location	3/17/2022	19:45					DEPART RCO YARD FOR LOCATION
3	Arrive On Location	3/17/2022	20:45					ARRIVE ON TERRA STAGING LOCATION
4	Rig Up Iron	3/17/2022	22:30					RIG UP IRON AND HOSES
5	Safety Meeting	3/18/2022	03:45					JSA SAFETY MEETING WITH AC CREW, RIG HANDS, AND CUSTOMER REP
6	Fill Lines	3/18/2022	04:27	8.34	4	10	401	FILL LINES WITH FRESH WATER
7	Pressure Test Lines	3/18/2022	04:32	8.34			5380	PRESSURE TEST PUMP AND LINES TO 5000 PSI
8	Other	3/18/2022	04:35	8.45	5	20	673	PUMP MUD FLUSH + SURFACTANT
9	Other	3/18/2022	04:39	8.34	5	10	889	PUMP FRESH WATER FLUSH
10	Pump Lead Cement	3/18/2022	04:42	12.7	5	0	1015	BEGIN PUMPING LEAD CEMENT. DENSITY VERIFIED WITH MUD SCALE
11	Pump Lead Cement	3/18/2022	04:49	12.7	6.5	50	1098	50 BBLS LEAD CEMENT PUMPED
12	Pump Lead Cement	3/18/2022	05:00	12.7	6.5	50	968	100 BBLS LEAD CEMENT PUMPED
13	Pump Lead Cement	3/18/2022	05:05	12.7	5	45.2	952	145.2 BBLS LEAD CEMENT PUMPED
14	Pump Tail Cement	3/18/2022	05:05	14.2	4.5	0	551	BEGIN PUMPING TAIL CEMENT. DENSITY VERIFIED WITH MUD SCALE
15	Pump Tail Cement	3/18/2022	05:15	14.2	6.5	50	887	50 BBLS TAIL CEMENT PUMPED
16	Pump Tail Cement	3/18/2022	05:22	14.2	6.5	50	904	100 BBLS TAIL CEMENT PUMPED
17	Pump Tail Cement	3/18/2022	05:32	14.2	5	50	635	150 BBLS TAIL CEMENT PUMPED
18	Pump Tail Cement	3/18/2022	05:42	14.2	5	50	637	200 BBLS TAIL CEMENT PUMPED
19	Pump Tail Cement	3/18/2022	05:47	14.2	3	28.4	630	228.4 BBLS TAIL CEMENT PUMPED
20	Clean Pumps and Lines	3/18/2022	05:47					SHUT DOWN, BLOW DOWN LINE, WASH UP PUMP AND LINES
21	Drop Top Plug	3/18/2022	06:05	8.34	4	0	588	DROP PLUG, VERIFIED BY CUSTOMER REP. BEGIN KCL DISPLACEMENT
22	Pump Displacement	3/18/2022	06:14	8.34	8.5	50	1245	50 BBLS KCL DISPLACEMENT PUMPED
23	Pump Displacement	3/18/2022	06:20	8.34	8.5	50	1982	100 BBLS KCL DISPLACEMENT PUMPED
24	Pump Displacement	3/18/2022	06:26	8.34	8.5	50	2950	150 BBLS KCL DISPLACEMENT PUMPED
25	Pump Displacement	3/18/2022	06:31	8.34	3.5	19.4	2488	169.4 BBLS KCL DISPLACEMENT PUMPED, SLOWED RATE LAST 10 BBLS TO 3.5 BPM
26	Land Plug	3/18/2022	06:31				3564	LAND PLUG. FCP - 2488 PSI, BUMPED TO 3564 PSI
27	Check Floats	3/18/2022	06:34					CHECK FLOATS. FLOATS HELD, 2 BBLS BACK
28	Rig Down Iron	3/18/2022	06:45					RIG DOWN IRON AND HOSES
29	Depart Location	3/18/2022	08:00					DEPART LOCATION FOR RCO YARD

Pump Diagrams

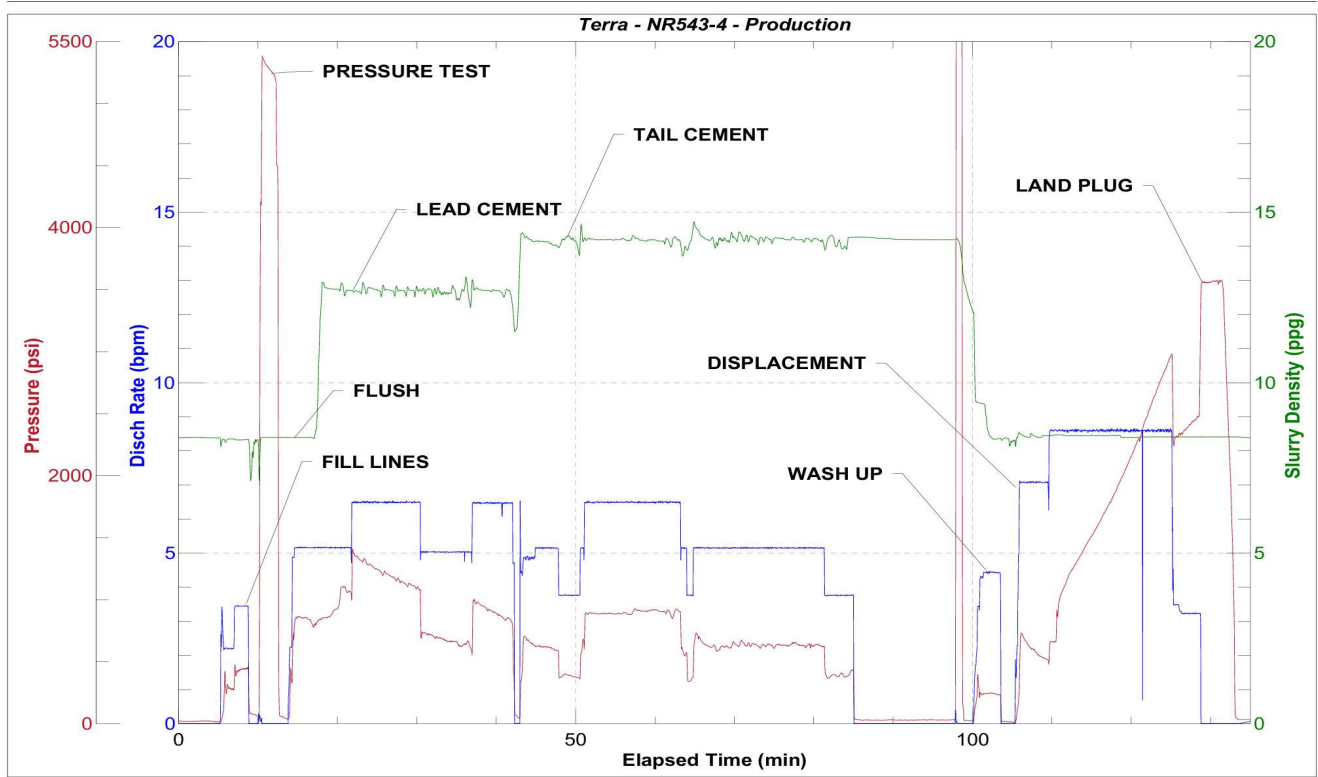


JobMaster Program Version 5.01C1

Job Number: 80559

Customer: Terra

Well Name: FEDERAL NR 543-4



BJ Services

Job Start: Friday, March 18, 2022