



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FED RG 321-24-298 05-103-12577
S:13 T:2S R:98W Rio Blanco CO

CallSheet #: 91963
Proposal #: 77106



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,

Addison Kneale

Field Engineer I | (904) 228-9560 | addison.kneale@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1187

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	3196	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3196	7919	45
Open Hole	Outer	n/a	8.75	n/a	n/a	7919	11710	45
Casing	Inner	4.5	4	11.6	n/a	0	11700	0

Timing

Event	Date/Time
ERTS	06/30/2024 16:00
Call Out	6/30/2024 12:00
Depart Facility	6/30/2024 12:45
On Location	6/30/2024 14:00
Rig Up Iron	6/30/2024 14:15
Job Started	6/30/2024 18:00
Job Completed	7/1/2024 01:42
Rig Down Iron	7/1/2024 02:00
Depart Location	7/1/2024 03:30

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-470		
Field Storage Silo	FSS-438		
Cement Trailer Float	CTF-522	TRC-425	Duewayne Jackson
Light Duty Vehicles	LDV-145		Collin Woronovitch
Cement Pump Float	CPF-053	TRH-1140	James Lujan

General Job Information

Metrics	Value
Well Fluid Density	9.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	650/2000 bbls
Rig Circulation Time	1/3.5 hours
Calculated Displacement	181 bbls
Actual Displacement	181 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	No

Job Details

Metrics	Value
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.8 lb/gal
Well Fluid Density Out of Well	9.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	198 °F
BHST	262 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	72 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	60 mg/L	0-3000 mg/L
Total Alkalinity	80	0-1000
Total Hardness	60 mg/L	0-500 mg/L
Carbonates	N/A mg/L	0-100 mg/L
Sulfates	100 mg/L	0-1500 mg/L
Potassium	<200 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		10.00	6230
2	Lead	Lead	12.70	2.13	11.42		727.00	275.63	6356
3	Tail	Tail	13.50	2.01	9.72		884.00	316.45	7919
4	Displacement	DisplacementFinal	8.34			42.00		181.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead	ASTM TYPE IL	Cement	100.00	%
2	Lead	Lead	A-2	Accelerator	0.10	%BWOB
2	Lead	Lead	FL-66	FluidLoss	0.20	%BWOB
2	Lead	Lead	GW-86	Viscosifier	0.05	%BWOB
2	Lead	Lead	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead	R-3	Retarder	0.70	%BWOB
2	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
2	Lead	Lead	XCem-1009	Extender	10.00	lb/sk
2	Lead	Lead	XCem-311	Defoamer	0.30	%BWOB
3	Tail	Tail	CLASS G	Cement	70.00	%
3	Tail	Tail	FLY ASH (POZZOLAN)	Extender	30.00	%
3	Tail	Tail	BENTONITE	Viscosifier	8.00	%BWOB
3	Tail	Tail	FL-24	FluidLoss	0.40	%BWOB
3	Tail	Tail	GW-86	Viscosifier	0.10	%BWOB
3	Tail	Tail	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Tail	Tail	R-3	Retarder	0.30	%BWOB
3	Tail	Tail	S-8	StrengthRetrogression	26.00	%BWOB
3	Tail	Tail	XCem-311	Defoamer	0.30	%BWOB

Job Logs

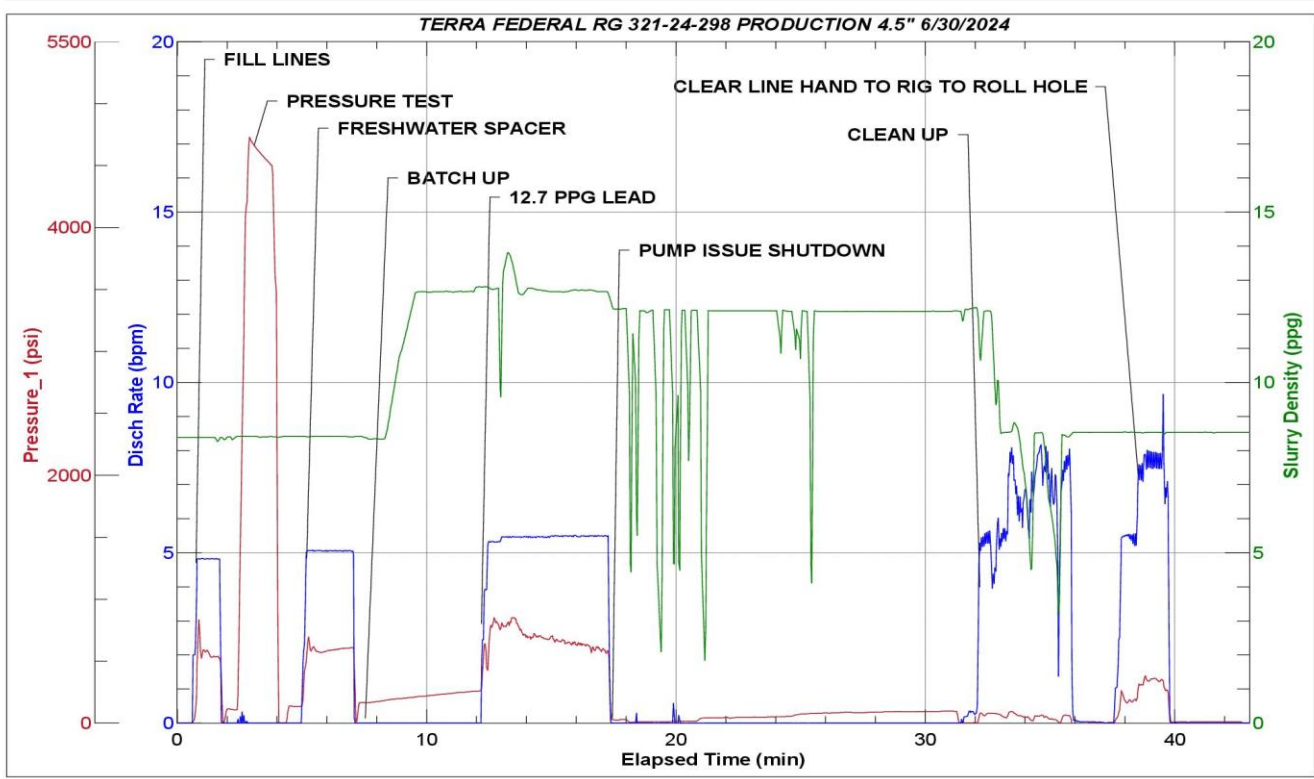
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	6/30/2024	12:00					CREW CALLED OUT FOR ON LOCATION OF 16:00 ON 6/30/24
2	Depart Location	6/30/2024	12:45					DEPART RCO YARD FOR LOCATION
3	Arrive On Location	6/30/2024	14:00					ARRIVE ON LOCATION. RIG STILL RUNNING CASING.
4	Safety Meeting	6/30/2024	14:05					PRE RIG UP JSA. SPOT EQUIPMENT
5	Rig Up Iron	6/30/2024	14:15					RIG UP ALL IRON, HOSES, AND EQUIPMENT
6	Standby	6/30/2024	16:00					RIG LANDED CASING @ 16:30 . RIG CIRCULATED FOR 1 HOUR. TOTAL VOLUME 650 BBLs.
7	Safety Meeting	6/30/2024	18:00					PRE JOB SAFETY MEETING WITH RIG CREW AND COMPANY MAN. RIG UP FLOOR AFTER MEETING.
8	Fill Lines	6/30/2024	18:22	8.34	5	5	834	FILL LINES WITH 5 BBLs OF FRESHWATER.
9	Pressure Test Lines	6/30/2024	18:24	8.34	1	1	4754	PRESSURE TEST PUMP AND IRON TO HEAD.
10	Pump Spacer	6/30/2024	18:26	8.45	5	10	701	BEGIN PUMPING 10 BBL FRESHWATER SPACER.
11	Pump Lead Cement	6/30/2024	18:34	12.7	5.5	0	782	BATCH UP AND BEGIN PUMPING. (12.7#, 2.13Y, 11.4MW) LEAD CEMENT. WEIGHT VERIFIED BY MUD SCALE
12	Pump Lead Cement	6/30/2024	18:42	12.7	5.5	27	612	27 BBLs OF LEAD PUMPED. LOST MCM 2000 ON PUMP CPF-052. HAD TO GO TO BATCH. TRIED TO REBOOT. LOST HYDRAULICS. MADE CALL TO OFFICE. DECISION WAS MADE TO ROLL HOLE @ 19:00
13	Other	6/30/2024	19:00					WASH UP PUMP TO PIT, THEN CLEARED THE IRON TO CEMENT HEAD.
14	Circulate Well	6/30/2024	19:20					WELL HANDED OVER TO RIG SO THEY CAN CIRCULATE SPACER AND CEMENT OUT OF THE WELL. REPLACEMENT PUMP ON THE ROAD. CEMENT BEING BATCHED AT YARD.
15	Cement Back to Surface	6/30/2024	20:30					CEMENT TO SURFACE @ 20:30. HOLE CLEANED AND ROLLED OUT @ 20:45 30 BBLs CEMENT TO SURFACE. RIG CONTINUES CIRCULATION UNTIL WE ARE READY.
16	Rig Up Pump	6/30/2024	20:50					REPLACEMENT PUMP ARRIVED ON LOCATION @ 20:50. RIG IN PUMP AND GET READY TO CEMENT ONCE LAB TEST IS PASSED. REPLACEMENT CEMENT ON THE ROAD @ 20:45
17	Waiting	6/30/2024	21:20					PUMP RIGGED IN. PRIMED UP AND READY TO GO ONCE CEMENT IS HERE AND LAB RESULTS ARE GOOD.
18	Arrive On Location	6/30/2024	22:00					BULK TRUCK WITH REPLACEMENT CEMENT (80 SKS) ARRIVED ON LOCATION. RIGGED IN. WAITING ON LABS @ 22:10
19	Start Job	6/30/2024	22:40					LAB RESULTS ARE APPROVED @ 22:40. RIG CIRCULATED FOR 3.5 HOURS 2000 BBLs. RIG BACK UP TO CEMENT HEAD AND BEGIN JOB.
20	Fill Lines	6/30/2024	22:54	8.34	4	5	1290	FILL LINES WITH 5 BBLs OF FRESHWATER.
21	Pressure Test Lines	6/30/2024	23:01	8.34	1	1	4750	PRESSURE TEST PUMP AND IRON TO HEAD.

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
22	Pump Spacer	6/30/2024	23:06	8.45	5	10	1250	BEGIN PUMPING 10 BBL FRESHWATER SPACER.
23	Pump Lead Cement	6/30/2024	23:11	12.7	5	0	1207	BATCH UP AND BEGIN PUMPING. (12.7#, 2.13Y, 11.4MW) LEAD CEMENT. WEIGHT VERIFIED BY MUD SCALE
24	Pump Lead Cement	6/30/2024	23:19	12.7	5.5	50	1007	50 BBLS LEAD CEMENT PUMPED
25	Pump Lead Cement	6/30/2024	23:28	12.7	5.5	50	525	100 BBLS LEAD CEMENT PUMPED
26	Pump Lead Cement	6/30/2024	23:37	12.7	5.5	50	402	150 BBLS LEAD CEMENT PUMPED
27	Pump Lead Cement	6/30/2024	23:46	12.7	5.5	50	424	200 BBLS LEAD CEMENT PUMPED
28	Pump Lead Cement	6/30/2024	23:56	12.7	5.5	50	426	250 BBLS LEAD CEMENT PUMPED
29	Pump Lead Cement	7/1/2024	00:00	12.7	5.5	26	411	276 BBLS (727 SKS) TOTAL LEAD CEMENT PUMPED SWAP TO TAIL.
30	Pump Tail Cement	7/1/2024	00:00	13.5	5.5	0	410	BEGIN PUMPING. (13.5#, 2.01Y, 9.7MW) TAIL CEMENT. WEIGHT VERIFIED BY MUD SCALE
31	Pump Tail Cement	7/1/2024	00:09	13.5	6.5	50	627	50 BBLS TAIL CEMENT PUMPED
32	Pump Tail Cement	7/1/2024	00:18	13.5	5.5	50	522	100 BBLS TAIL CEMENT PUMPED
33	Pump Tail Cement	7/1/2024	00:39	13.5	5.5	100	545	200 BBLS TAIL CEMENT PUMPED
34	Pump Tail Cement	7/1/2024	00:49	13.5	5.5	50	550	250 BBLS TAIL CEMENT PUMPED
35	Pump Tail Cement	7/1/2024	01:04	13.5	5.5	66	582	316 BBLS (884 SKS) TOTAL TAIL CEMENT PUMPED
36	Shutdown	7/1/2024	01:04					
37	Clean Pumps and Lines	7/1/2024	01:05					BLOW RIG AIR TO CLEAR LINES, VALVE MANIFOLD TO WASH UP PUMP AND LINES TO PIT.
38	Drop Top Plug	7/1/2024	01:13	8.34	5	0	150	DROP PLUG, WITNESSED BY DRILLER AND COMPANY MAN BEGIN KCL DISPLACEMENT.
39	Pump Displacement	7/1/2024	01:20	8.34	8	50	1350	50 BBLS DISPLACEMENT PUMPED. CAUGHT PRESSURE @ 15 BBLS DISPLACED.
40	Pump Displacement	7/1/2024	01:26	8.34	8	50	1735	100 BBLS DISPLACEMENT PUMPED.
41	Pump Displacement	7/1/2024	01:33	8.34	8	50	2485	150 BBLS DISPLACEMENT PUMPED. MAX LIFT- 2752 PSI @ 8 BPM BEFORE SLOW DOWN @ 170 BBLS DISPLACED
42	Pump Displacement	7/1/2024	01:39	8.34	4	31	2405	181 BBLS (CALCULATED) DISPLACEMENT PUMPED
43	Land Plug	7/1/2024	01:39				3170	PLUG LANDED FCP-2405 PSI BUMPED TO 3170 PSI
44	Check Floats	7/1/2024	01:42			2		BLEED PRESSURE OFF AND CHECK FLOATS, FLOATS HELD 2 BBLS BACK
45	Rig Down Iron	7/1/2024	02:00					PRE RIG DOWN SAFETY MEETING. RIG DOWN EQUIPMENT, IRON AND HOSES
46	Depart Location	7/1/2024	03:30					CREW DEPARTS LOCATION

Pump Diagrams



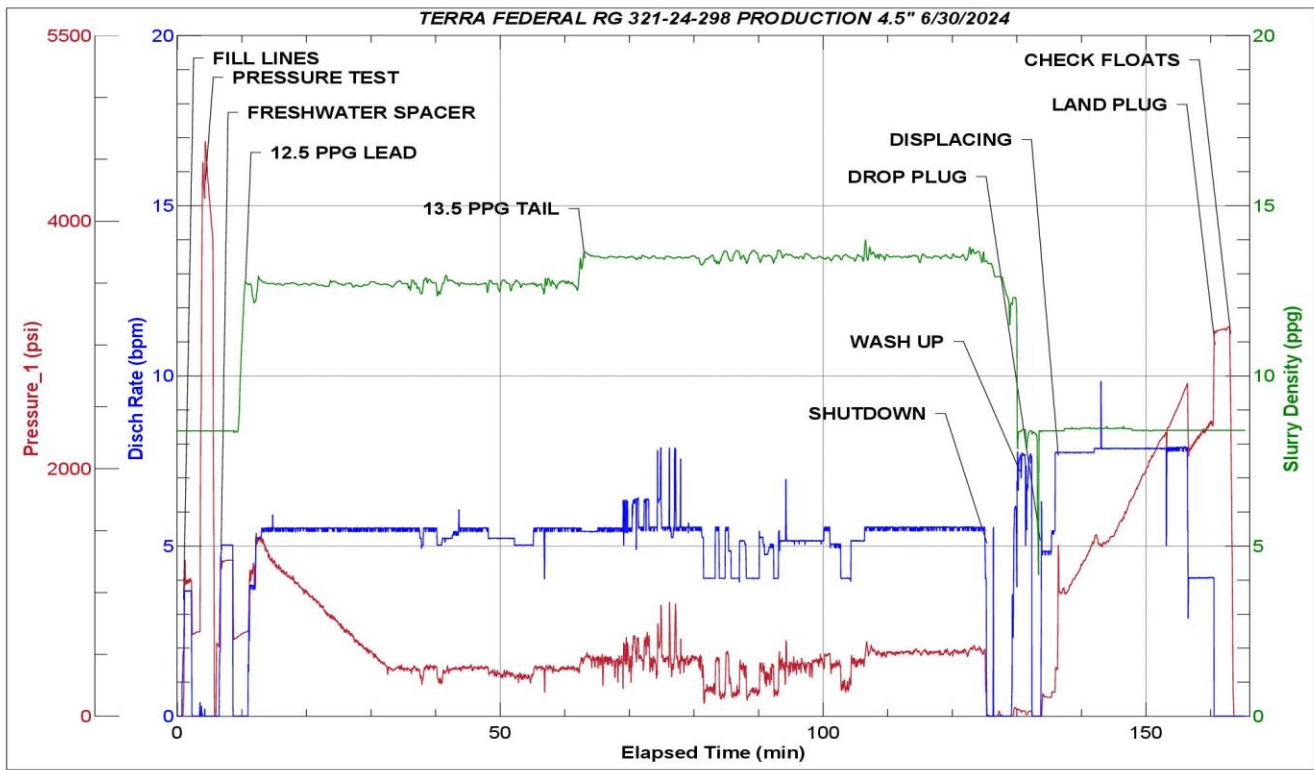
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Customer: TERRA
Well Name: FEDERAL RG 321-24-298



Job Start: Sunday, June 30, 2024



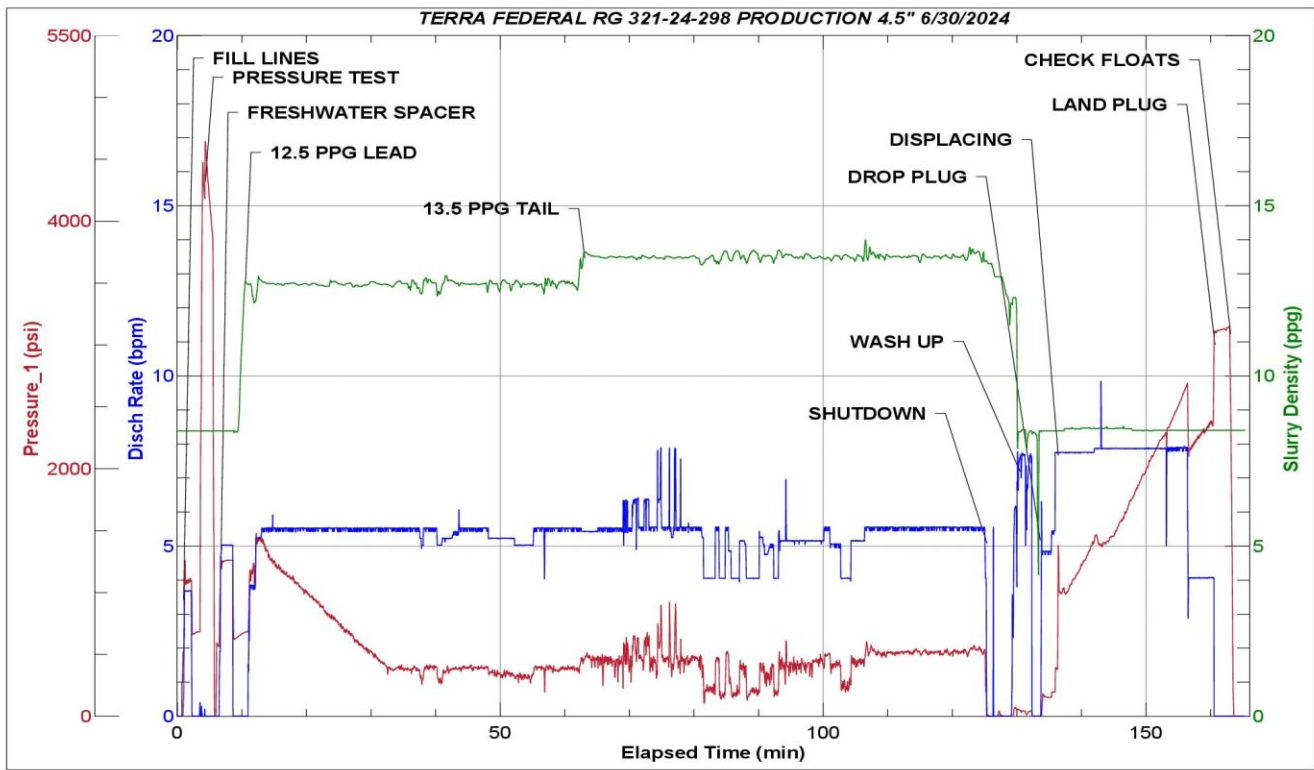
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