



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

RG 442-18-297 05-103-12468
S:18 T:2S R:97W Rio Blanco CO

CallSheet #: 76595
Proposal #: 52391



LONG STRING Post Job Report

Attention: Mr. Lynn Cass | (970) 263-2716 | lcass@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Lynn Cass,

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,

Zen Keith

Field Engineer | (307) 757-7178 | zen.keith@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	3279	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3265	11950	45
Casing	Inner	4.5	4	11.6	LTC	0	11942.97	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Silo	Silo #25		
Silo	CTS-471		
Bulk Trailer	CTF-182	TRB-188	Doyle, Sheldon
Bulk Trailer	CTF-263	TRB-190	Richey, Steven
Bulk Trailer	CTF-340		
Light Duty Pickups	LDV-063		Castillo, Francisco
Cement Pump	CPF-012	TRH-677	Mcneal, Lawrence

Timing

Event	Date/Time
Call Out	4/9/2021 12:30
Depart Facility	4/9/2021 14:00
On Location	4/9/2021 15:30
Rig Up Iron	4/9/2021 16:15
Job Started	4/9/2021 20:09
Job Completed	4/10/2021 00:00
Rig Down Iron	4/10/2021 00:15
Depart Location	4/10/2021 01:30

General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1050 bbls
Rig Circulation Time	1.75 hours
Calculated Displacement	185 bbls
Actual Displacement	185 bbls
Total Spacer to Surface	100 bbls
Total CMT to Surface	15 bbls
Well Topped Out	No

Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10 lb/gal
Well Fluid Density Out of Well	10 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	191 °F
BHST	249 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Rig Tank	
Temperature	60 °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		100.00	1247
2	Scav Cement	Scavenger	11.00	3.07	18.83		540.00	295.00	2982
3	Lead Cement	Lead	12.70	2.00	10.97		247.00	87.95	6786
4	Tail Cement	Tail	13.50	1.85	8.97		1036.00	341.00	7892
5	Displacement	DisplacementFinal	8.34			42.00		185.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Scavenger	Scav Cement	ASTM TYPE III	Cement	65.00	%
2	Scavenger	Scav Cement	FLY ASH (POZZOLAN)	Extender	35.00	%
2	Scavenger	Scav Cement	BENTONITE	Viscosifier	6.00	%BWOB
2	Scavenger	Scav Cement	FP-24	Defoamer	0.30	%BWOB
2	Scavenger	Scav Cement	GW-86	Viscosifier	0.10	%BWOB
2	Scavenger	Scav Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Scavenger	Scav Cement	R-3	Retarder	0.30	%BWOB
3	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
3	Lead	Lead Cement	CD-31	Dispersant	0.10	%BWOB
3	Lead	Lead Cement	FL-66	FluidLoss	0.50	%BWOB
3	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
3	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
3	Lead	Lead Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Lead	Lead Cement	R-3	Retarder	0.50	%BWOB
4	Tail	Tail Cement	BA-90	BondEnhancer	10.00	%
4	Tail	Tail Cement	CLASS G	Cement	70.00	%
4	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	20.00	%
4	Tail	Tail Cement	BENTONITE	Viscosifier	6.00	%BWOB
4	Tail	Tail Cement	FL-24	FluidLoss	0.40	%BWOB
4	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
4	Tail	Tail Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
4	Tail	Tail Cement	R-3	Retarder	0.30	%BWOB
4	Tail	Tail Cement	S-8	StrengthRetrogression	25.00	%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	4/9/2021	12:30					ON LOCATION 20:30 HRS, CREW TEMPS, JAVI-98.7, LONNY-98.1, STEVE-98.5, SHELDON-98.3
2	LEAVE YARD	4/9/2021	14:00					CREW LEAVE THE YARD
3	ON LOCATION	4/9/2021	15:30					ON LOCATION
4	RIG UP	4/9/2021	16:15					RIG UP MEETING, RIG UP
5	SAFETY MEETING	4/9/2021	19:30					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	4/9/2021	20:06				5181	PRESSURE TEST LINES
7	PUMP SPACER	4/9/2021	20:09	8.34	7.8	50	1209	WATER SPACER
8	PUMP SPACER	4/9/2021	20:15	8.34	7.8	50	1443	100 BBLS WATER SPACER
9	SCAVENGER	4/9/2021	20:24	11	7.5	50	1367	SCAVENGER 540 SKS/295 BBLS AT 11PPG
10	SCAVENGER	4/9/2021	20:30	11	7	50	921	100 BBLS SCAVENGER PUMPED
11	SCAVENGER	4/9/2021	20:37	11	7	50	757	150 BBLS SCAVENGER PUMPED
12	SCAVENGER	4/9/2021	20:45	11	7	50	529	200 BBLS SCAVENGER PUMPED
13	SCAVENGER	4/9/2021	20:52	11	7	50	533	250 BBLS SCAVENGER PUMPED
14	SCAVENGER	4/9/2021	20:59	11	7	45	521	295 BBLS SCAVENGER PUMPED
15	LEAD CEMENT	4/9/2021	21:15	12.7	7	88	673	LEAD 247 SKS / 88 BBLS AT 12.7 PPG
16	TAIL CEMENT	4/9/2021	21:29	13.5	7	50	775	TAIL 1036 SKS/ 341 BBLS AT 13.5 PPG
17	TAIL CEMENT	4/9/2021	21:37	13.5	7	50	787	100 BBLS TAIL CEMENT PUMPED
18	TAIL CEMENT	4/9/2021	21:44	13.5	7	50	799	150 BBLS TAIL CEMENT PUMPED
19	TAIL CEMENT	4/9/2021	21:51	13.5	7	50	803	200 BBLS TAIL CEMENT PUMPED
20	TAIL CEMENT	4/9/2021	21:57	13.5	7	50	787	250 BBLS TAIL CEMENT PUMPED
21	TAIL CEMENT	4/9/2021	22:04	13.5	7	91	763	341 BBLS TAIL CEMENT PUMPED
22	SHUTDOWN	4/9/2021	22:24					SHUTDOWN, WASH LINES, DROP PLUG
23	DISPLACEMENT	4/9/2021	22:36	8.4	10	50	1331	DISPLACEMENT KCL WATER
24	DISPLACEMENT	4/9/2021	22:42	8.4	9.5	50	1824	100 BBLS DISPLACEMENT PUMPED
25	DISPLACEMENT	4/9/2021	22:47	8.4	9.5	75	2735	175 BBLS DISPLACEMENT PUMPED
26	DISPLACEMENT	4/9/2021	22:55	8.4	3.5	10	2137	SLOW RATE
27	LAND PLUG	4/9/2021	22:58				3277	LAND PLUG, 15 BBLS SCAVENGER TO SURFACE, FULL RETURNS ON JOB
28	CHECK FLOATS	4/9/2021	23:03					FLOATS DID NOT HOLD
29	RE-BUMP	4/9/2021	23:08	8.4	2	2	3200	PRESSURE UP ON FLOATS
30	CHECK FLOATS	4/9/2021	23:27					FLOATS DID NOT HOLD
31	RE-BUMP	4/9/2021	08:45	8.4	2	2	3200	PRESSURE UP ON FLOATS
32	CHECK FLOATS	4/10/2021	00:00					FLOATS HELD, 2 BBLS FLOW BACK
33	RIG DOWN	4/10/2021	00:15					RIG DOWN MEETING, RIG DOWN
34	LEAVE LOCATION	4/10/2021	01:30					CREW LEAVE LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1

Job Number: 76595

Customer: TERRA

Well Name: RG 442-18

