



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

Leverich SR 521-24 05-045-24568
S:13 T:7S R:94W Garfield CO

CallSheet #: 88162
Proposal #: 70700



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,

Zen Keith

SME North | (307) 757-7178 | zen.keith@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 | 1176 | 0 |
| Open Hole | Outer | n/a | 8.75 | n/a | n/a | 1176 | 7930 | 85 |
| Open Hole | Outer | n/a | 8.75 | n/a | n/a | 7930 | 10868 | 50 |
| Casing | Inner | 4.5 | 4 | 11.6 | n/a | 0 | 10868 | 0 |

Equipment / People

| Unit Type | Unit | Power Unit | Employee #1 |
|----------------------|---------|------------|--------------------|
| Cement Trailer Float | CTF-249 | TRC-112 | Danny Ridgeway |
| Field Storage Silo | FSS-470 | | |
| Field Storage Silo | FSS-438 | | |
| Cement Pump Float | CPF-052 | TRH-1137 | Hector Balderas II |
| Light Duty Vehicles | LDV-083 | | Stephen Lancaster |

Timing

| Event | Date/Time |
|-----------------|-----------------|
| Call Out | 8/10/2023 19:17 |
| Depart Facility | 8/10/2023 22:30 |
| On Location | 8/10/2023 23:31 |
| Rig Up Iron | 8/10/2023 23:38 |
| Job Started | 8/11/2023 04:11 |
| Job Completed | 8/11/2023 07:34 |
| Rig Down Iron | 8/11/2023 07:37 |
| Depart Location | 8/11/2023 08:41 |

General Job Information

| Metrics | Value |
|-------------------------|------------|
| Well Fluid Density | 9.4 lb/gal |
| Well Fluid Type | WBM |
| Rig Circulation Vol | 324 bbls |
| Rig Circulation Time | 1 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 | 9.4 lb/gal |
| Well Fluid Density Out of Well | 9.4 lb/gal |

Job Details (cont.)

| Metrics | Value |
|---------|--------|
| BHCT | 172 °F |
| BHST | 227 °F |

Water Analysis

| Metrics | Value | Recommended |
|------------------|-----------|-------------|
| Water Source | Flat Tank | |
| Temperature | 68 °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 | 400 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 |
|------------------------------|
| 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 | 6150 |
| 2 | Mud Flush | Flush | 8.45 | | | 40.86 | | 20.00 | 6249 |
| 3 | Water | Flush | 8.34 | | | 42.00 | | 10.00 | 6447 |
| 4 | Lead | Lead | 12.50 | 2.21 | 12.30 | | 357.00 | 140.39 | 6546 |
| 5 | Tail | Tail | 13.00 | 2.05 | 10.26 | | 772.00 | 281.58 | 7930 |
| 6 | Displacement | DisplacementFinal | 8.34 | | | 42.00 | | 176.00 | 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 | Lead | ASTM TYPE IL | Cement | 100.00 | % |
| 4 | Lead | Lead | A-2 | Accelerator | 0.20 | %BWOB |
| 4 | Lead | Lead | FL-66 | FluidLoss | 0.30 | %BWOB |
| 4 | Lead | Lead | FP-24 | Defoamer | 0.30 | %BWOB |
| 4 | Lead | Lead | GW-86 | Viscosifier | 0.10 | %BWOB |
| 4 | Lead | Lead | R-3 | Retarder | 0.50 | %BWOB |
| 4 | Lead | Lead | R-7C | Retarder | 0.10 | %BWOB |
| 4 | Lead | Lead | STATIC FREE | Other | 0.01 | lb/sk |
| 4 | Lead | Lead | XCem-1009 | Extender | 10.00 | lb/sk |
| 5 | Tail | Tail | CLASS G | Cement | 50.00 | % |
| 5 | Tail | Tail | FLY ASH (POZZOLAN) | Extender | 50.00 | % |
| 5 | Tail | Tail | BENTONITE | Viscosifier | 6.00 | %BWOB |
| 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 PHENO | LostCirculation | 0.50 | lb/sk |
| 5 | Tail | Tail | IntegraSeal POLI | LostCirculation | 0.25 | lb/sk |
| 5 | Tail | Tail | S-8 | StrengthRetgression | 20.00 | %BWOB |
| 5 | Tail | Tail | XCem-1009 | Extender | 6.00 | lb/sk |
| 5 | Tail | Tail | XCem-916 | Retarder | 0.40 | %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 | 8/10/2023 | 19:17 | | | | | CREW CALLED OUT FOR ON LOCATION OF 8/11/2023 2:00 AM |
| 2 | Depart Location | 8/10/2023 | 22:30 | | | | | DEPART RCO YARD FOR LOCATION |
| 3 | Arrive On Location | 8/10/2023 | 23:31 | | | | | ARRIVE ON LOCATION. RIG ALMOST OUT OF HOLE WITH DRILL PIPE. |
| 4 | Safety Meeting | 8/10/2023 | 23:33 | | | | | PRE RIG UP JSA. SPOT EQUIPMENT |
| 5 | Rig Up Iron | 8/10/2023 | 23:38 | | | | | RIG UP ALL IRON, HOSES, AND EQUIPMENT |
| 6 | Standby | 8/11/2023 | 01:31 | | | | | WAITING ON RIG TO FINISH RUNNING CASING AND CIRCULATE. RIG LANDED CASING, WE GOT WASH UP LINE RIGGED IN, RIG CIRCULATED FOR HOUR. |
| 7 | Safety Meeting | 8/11/2023 | 04:11 | | | | | PRE JOB SAFETY MEETING WITH RIG CREW AND COMPANY MAN. FINISH RIGGING UP HEAD AND LINES ON RIG FLOOR |
| 8 | Fill Lines | 8/11/2023 | 05:12 | 8.34 | 5 | 10 | 326 | FILL LINES WITH 10 BBLS OF FRESHWATER. |
| 9 | Pressure Test Lines | 8/11/2023 | 05:16 | 8.34 | 1 | 1 | 5000 | PRESSURE TEST PUMP AND IRON TO 5000 PSI |
| 10 | Pump Spacer | 8/11/2023 | 05:27 | 8.45 | 5.6 | 5 | 637 | BEGIN PUMPING MUD FLUSH + SURFACTANT. |
| 11 | Pump Spacer | 8/11/2023 | 05:28 | 8.45 | 5.6 | 20 | 621 | PUMP 20 BBLS MUD FLUSH + SURFACTANT PUMPED. |
| 12 | Pump water | 8/11/2023 | 05:30 | 8.34 | 6 | 5 | 578 | PUMP 10 BBLS FRESHWATER FLUSH |
| 13 | Pump water | 8/11/2023 | 05:32 | 8.34 | 4 | 10 | 317 | 10 BBLS FRESHWATER AWAY SWAP TO LEAD |
| 14 | Pump Lead Cement | 8/11/2023 | 05:35 | 12.5 | 6 | 5 | 672 | BEGIN PUMPING 12.5 PPG LEAD CEMENT, WEIGHT VERIFIED BY MUD SCALE |
| 15 | Pump Lead Cement | 8/11/2023 | 05:43 | 12.5 | 7 | 50 | 795 | 50 BBLS LEAD CEMENT PUMPED |
| 16 | Pump Lead Cement | 8/11/2023 | 05:49 | 12.5 | 3.6 | 100 | 215 | 100 BBLS LEAD CEMENT PUMPED. FULL RETURNS |
| 17 | Pump Lead Cement | 8/11/2023 | 05:57 | 12.5 | 3.6 | 140 | 231 | 140 BBLS (357 SKS) TOTAL LEAD CEMENT PUMPED. |
| 18 | Pump Tail Cement | 8/11/2023 | 05:58 | 13 | 4 | 5 | 350 | BEGIN PUMPING 13 PPG TAIL CEMENT. WEIGHT VERIFIED BY MUD SCALE. |
| 19 | Pump Tail Cement | 8/11/2023 | 06:10 | 13 | 4 | 50 | 313 | 50 BBLS TAIL CEMENT PUMPED FULL RETURNS |
| 20 | Pump Tail Cement | 8/11/2023 | 06:21 | 13 | 7 | 100 | 1015 | 100 BBLS TAIL CEMENT PUMPED |
| 21 | Pump Tail Cement | 8/11/2023 | 06:28 | 13 | 7 | 150 | 916 | 150 BBLS TAIL CEMENT PUMPED. |
| 22 | Pump Tail Cement | 8/11/2023 | 06:43 | 13 | 7 | 200 | 1567 | 200 BBLS TAIL CEMENT PUMPED |
| 23 | Pump Tail Cement | 8/11/2023 | 06:50 | 13 | 4 | 250 | 378 | 250 BBLS TAIL CEMENT PUMPED |
| 24 | Pump Tail Cement | 8/11/2023 | 06:56 | 13 | 3 | 282 | 220 | 282 BBLS (772 SKS) TOTAL TAIL CEMENT PUMPED. |
| 25 | Clean Pumps and Lines | 8/11/2023 | 07:01 | | | | | BLOW RIG AIR TO CLEAR LINES, VALVE MANIFOLD TO WASH UP PUMP AND LINES TO PIT. |
| 26 | Drop Top Plug | 8/11/2023 | 07:08 | 8.34 | 4 | 5 | | DROP PLUG, WITNESSED BY DRILLER AND COMPANY MAN BEGIN KCL DISPLACEMENT. |
| 27 | Pump Displacement | 8/11/2023 | 07:14 | 8.34 | 7 | 50 | 820 | 50 BBLS DISPLACEMENT PUMPED. CAUGHT PRESSURE @ 26 BBLS DISPLACED. FULL RETURNS |

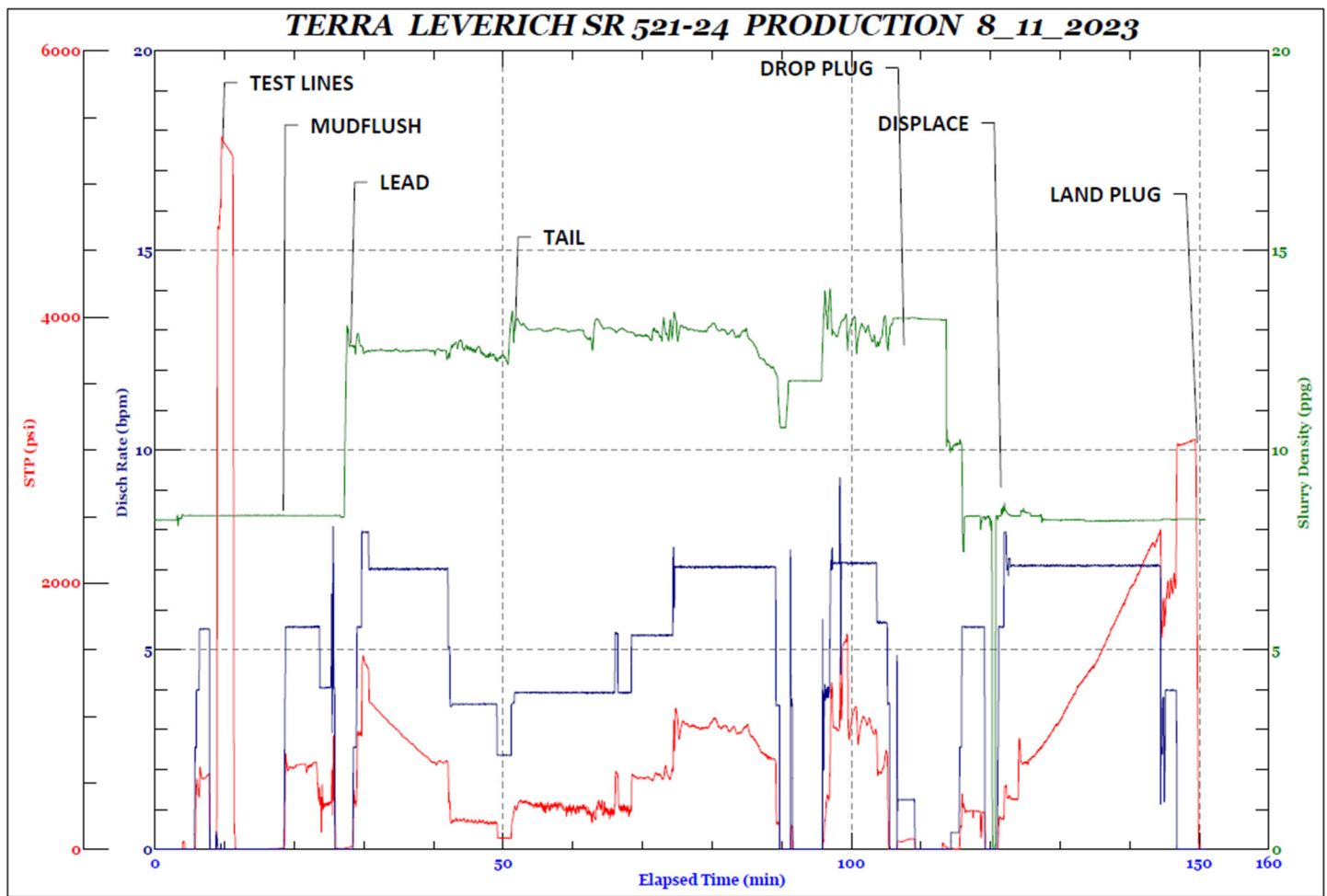


| Line | Event | Date (MM/DD/YY) | Time (HH:MM) | Density (lb/gal) | Pump Rate (bpm) | Pump Volume (bbls) | Pipe Pressure (psi) | Comment |
|------|-------------------|-----------------|--------------|------------------|-----------------|--------------------|---------------------|---|
| 28 | Pump Displacement | 8/11/2023 | 07:21 | 8.34 | 7 | 100 | 1418 | 100 BBLS DISPLACEMENT PUMPED |
| 29 | Pump Displacement | 8/11/2023 | 07:29 | 8.34 | 7 | 150 | 2146 | 150 BBLS DISPLACEMENT PUMPED. MAX LIFT-2146 PSI @ 7 BPM BEFORE SLOW DOWN @ 150 BBLS DISPLACED SLOW TO 4 BPM |
| 30 | Pump Displacement | 8/11/2023 | 07:34 | 8.34 | 4 | 171 | 2021 | 171 BBLS (CALCULATED) DISPLACEMENT PUMPED |
| 31 | Land Plug | 8/11/2023 | 07:34 | 8.34 | 4 | 171 | 3050 | PLUG LANDED FCP-2021 PSI BUMPED TO 3050 PSI |
| 32 | Check Floats | 8/11/2023 | 07:36 | | | | | BLEED PRESSURE OFF AND CHECK FLOATS, FLOATS HELD 2 BBLS BACK |
| 33 | Rig Down Iron | 8/11/2023 | 07:37 | | | | | PRE RIG DOWN SAFETY MEETING. RIG DOWN EQUIPMENT, IRON AND HOSES |
| 34 | Depart Location | 8/11/2023 | 08:41 | | | | | CREW DEPARTS LOCATION |

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 88162
Customer: TERRA
Well Name: LEVERICH SR 521-24



Job Start: Friday, August 11, 2023