



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING

Job Log

| | | | | | | | | |
|--|---------------------------|---|--------------------|---------------------------|---------------------|-----------------------|--|--------------------|
| Customer: | Obrien Energy | | Cement Pump No.: | 38117, 19919 3Hrs. | | Operator TRK No.: | 78938 | |
| Address: | 18 Congress St. Suite 207 | | Ticket #: | 1718 13188 L | | Bulk TRK No.: | 30463, 37547 Daniel | 30464, 37724 Marc |
| City, State, Zip: | Portsmouth NH 03801 | | Job Type: | Z41 Cement Surface Casing | | | | |
| Service District: | 1718 - Liberal, Ks. | | Well Type: | OIL | | | | |
| Well Name and No.: | Keystone 2-4 | | Well Location: | 4,33,29 | County: | Meade | State: | Ks |
| Type of Cmt | Sacks | Additives | | | Truck Loaded On | | | |
| A-Con' Blend | 340 | 3% Calcium Chloride, 1/4# Polyflake, .2% WCA1 | | | 30463, 37547 Daniel | | Front | Back |
| Premium Plus Cement | 150 | 2% Calcium Chloride, 1/4# Polyflake | | | 30464, 37724 Marc | | Front | Back |
| | | | | | | | Front | Back |
| Lead/Tail: | Weight #1 Gal. | Cu/Ft/sk | Water Requirements | | CU. FT. | Man Hours / Personnel | | |
| Lead: | 11.4 | 2.95 | 18 | | 1003 | Man Hours: | 4 | |
| Tail: | 14.8 | 1.34 | 6.33 | | 201 | # of Men on Job: | 3 | |
| Time (am/pm) | (BPM) | Volume (BBLs) | Pumps | | Pressure(PSI) | | Description of Operation and Materials | |
| | | | T | C | Tubing | Casing | | |
| 16:15 | | | | | | | ON LOCATION | |
| 16:20 | | | | | | | SAFETY MEETING | |
| 4:30 PM | | | | | | | RIG UP | |
| 5:05 PM | | | | | | | CIRCULATE HOLE | |
| 5:30 PM | | | | | | | RIG TO P.T. | |
| 17:40 | | | | | | | PRESSURE TEST TO 2400PSI | |
| 17:46 | 5.5 | 178.6 slurry | | | | 180 | PUMP 340SX LEAD @ 11.5# | |
| 6:20 PM | 5.5 | 35.7 slurry | | | | 190 | PUMP 150SX TAIL @ 14.8# | |
| 18:30 | | | | | | | SHUTDOWN / DROP PLUG | |
| 18:31 | 5.5 | 10 | | | | 30 | DISPLACE | |
| | 5.5 | 20 | | | | 80 | | |
| | 5.4 | 30 | | | | 100 | | |
| | 5.2 | 40 | | | | 120 | | |
| | 5.2 | 50 | | | | 200 | | |
| | 5.1 | 60 | | | | 220 | 64bbl in cement returns | |
| | 5 | 70 | | | | 280 | | |
| | 4.9 | 80 | | | | 350 | | |
| | 2.4 | 82 | | | | 320 | SLOW RATE | |
| | 2.3 | 90 | | | | 380 | | |
| 18:57 | 2.3 | 92.2 | | | | 390 | LAND PLUG PRESSURE UP TO 1100PSI | |
| 18:59 | | | | | | | RELEASE BACK --- FLOAT HELD | |
| | | | | | | | JOB COM,PLETE | |
| Size Hole | 12 1/4" | Depth | | | | TYPE | Plug Container | |
| Size & Wt. Csg. | 8 5/8" 24# | Depth | 1493.14' | New / Used | | Packer | Depth | |
| tbg. | | Depth | | | | Retainer | Depth | |
| Top Plugs | | Type | | | | Perfs | CIBP | |
| Customer Signature: <i>[Signature]</i> | | | | | | Basic Representative: | | Daniel Beck |
| | | | | | | Basic Signature: | | <i>Daniel Beck</i> |
| | | | | | | Date of Service: | | 11/4/2016 |



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|--|---------------------------|--|--------------------|------------------------------|-----------------------|-----------------------|--|------|--|
| Customer: | Obrien Energy | | Cement Pump No.: | 38117, 19919 5.5Hrs. | | Operator TRK No.: | 78938 | | |
| Address: | 18 Congress St. Suite 207 | | Ticket #: | 1718 13190 L | | Bulk TRK No.: | 14354,19578 Luis | | |
| City, State, Zip: | Portsmouth NH 03801 | | Job Type: | Z41 Cement Production Casing | | | | | |
| Service District: | 1718 - Liberal, Ks. | | Well Type: | OIL | | | | | |
| Well Name and No.: | Keystone 2-4 | | Well Location: | 4,33,29 | County: | Meade | State: | Ks | |
| Type of Cmt | Sacks | Additives | | | Truck Loaded On | | | | |
| AA2 | 175 | 5% W-60, 10% SALT, .6% C-15, 1/4# DEFOAMER, 5# GILSONITE | | | 14354,19578 Luis | | Front | Back | |
| PREMIUM / COMMON | 50 | NEAT / RAT & MOUSE | | | 14354, 19578 | | Front | Back | |
| | | | | | | | Front | Back | |
| Lead/Tail: | Weight #1 Gal. | Cu/Ft/sk | Water Requirements | | CU. FT. | Man Hours / Personnel | | | |
| Lead: | 14.8 | 1.51 | 6.64 | | 264.25 | Man Hours: | 5.5 | | |
| Tail: | 15.6 | 1.18 | 5.22 | | 59 | # of Men on Job: | 3 | | |
| Time (am/pm) | (BPM) | Volume (BBLS) | Pumps | | Pressure(PSI) | | Description of Operation and Materials | | |
| | | | T | C | Tubing | Casing | | | |
| 16:30 | | | | | | | ON LOCATION | | |
| 16:35 | | | | | | | SAFETY MEETING | | |
| 4:45 PM | | | | | | | RIG UP | | |
| 5:05 PM | | | | | | | WAIT ON RIG | | |
| 6:25 PM | | | | | | | RIG UP TO CIRC / CIRCULATE HOLE | | |
| 19:00 | | | | | | | RIG TO P.T. | | |
| 19:06 | | | | | | | PRESSURE TEST TO 2800PSI | | |
| 7:07 PM | 5 | 11.9 | | | | 270 | PUMP 500 GALLONS MUD FLUSH | | |
| 19:15 | 5.3 | 47.0 slurry | | | | 280 | PUMP 175SX @ 14.8# | | |
| 19:25 | | | | | | | SHUTDOWN / DROP PLUG / W.P. | | |
| 19:34 | 7 | 20 | | | | 150 | DISPLACE | | |
| | 7 | 30 | | | | 150 | | | |
| | 7 | 40 | | | | 160 | | | |
| | 7.1 | 50 | | | | 150 | | | |
| | 7.1 | 60 | | | | 150 | | | |
| | 7.1 | 70 | | | | 140 | | | |
| | 6.8 | 80 | | | | 420 | | | |
| | 6.6 | 89 | | | | 680 | | | |
| | 2 | 90 | | | | 560 | SLOW RATE TO 2.0B.P.M. @ 420PSI | | |
| 19:54 | 2 | 99.8 | | | | 640 | LAND PLUG PRESSURE UP TO 1580PSI | | |
| 19:56 | | | | | | | RELEASE BACK --- FLOAT HELD | | |
| 20:00 | | 10.5 slurry | | | | | PLUG RAT & MOUSE W/ 50SX / W.P. | | |
| 20:21 | | | | | | | JOB COMPLETE | | |
| Size Hole | 7 7/8" | Depth | | | TYPE | Plug Container | | | |
| Size & Wt. Csg. | 4 1/2" 10.5# | Depth | 6321' | New / Used | Packer | Depth | | | |
| tbg. | | Depth | | | Retainer | Depth | | | |
| Top Plugs | | Type | | | Perfs | CIBP | | | |
| Customer Signature: <i>[Signature]</i> | | | | | Basic Representative: | | Daniel Beck | | |
| | | | | | Basic Signature: | | <i>[Signature]</i> | | |
| | | | | | Date of Service: | | 11/11/2016 | | |