

Franklin County, KS  
Well:McCoy 14W  
Lease Owner: TDR

TDR Construction, Inc.  
(913) 710-5400

Commenced Spudding:  
09/18/2019

# WELL LOG

| Thickness of Strata | Formation | Total Depth                             |
|---------------------|-----------|-----------------------------------------|
| 0-37                | soil-clay | 37                                      |
| 41                  | shale     | 78                                      |
| 6                   | lime      | 84                                      |
| 2                   | shale     | 86                                      |
| 17                  | lime      | 103                                     |
| 7                   | shale     | 110                                     |
| 12                  | lime      | 122                                     |
| 3                   | shale     | 125                                     |
| 20                  | lime      | 145                                     |
| 38                  | shale     | 183                                     |
| 21                  | lime      | 204                                     |
| 73                  | shale     | 277                                     |
| 23                  | lime      | 300                                     |
| 25                  | shale     | 325                                     |
| 5                   | lime      | 330                                     |
| 60                  | shale     | 390                                     |
| 8                   | lime      | 398                                     |
| 2                   | shale     | 400                                     |
| 13                  | lime      | 413                                     |
| 12                  | shale     | 425                                     |
| 20                  | lime      | 445                                     |
| 4                   | shale     | 449                                     |
| 3                   | lime      | 452                                     |
| 5                   | shale     | 457                                     |
| 5                   | lime      | 462 hertha                              |
| 178                 | shale     | 640                                     |
| 7                   | lime      | 647                                     |
| 22                  | shale     | 669                                     |
| 5                   | lime      | 674                                     |
| 12                  | shale     | 686                                     |
| 3                   | lime      | 689                                     |
| 15                  | shale     | 704                                     |
| 6                   | lime      | 710                                     |
| 19                  | shale     | 729                                     |
| 1                   | lime      | 730                                     |
| 1                   | shale     | 731                                     |
| 1                   | lime      | 732                                     |
| 4                   | shale     | 736                                     |
| 2                   | sand      | 738 no oil                              |
| 4                   | sand      | 742 broken-not much oil                 |
| 11                  | sand      | 753 broken-mostly solid-good saturation |

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[illegible]

# Short Cuts

## TANK CAPACITY

BBLs. (42 gal.) equals  $D^2 \times .14 \times h$

D equals diameter in feet.

h equals height in feet.

## BARRELS PER DAY

Multiply gals. per minute x 34.2

HP equals BPH x PSI x .0004

BPH - barrels per hour

PSI - pounds square inch

## TO FIGURE PUMP DRIVES

\* D - Diameter of Pump Sheave

\* d - Diameter of Engine Sheave

SPM - Strokes per minute

RPM - Engine Speed

R - Gear Box Ratio

\*C - Shaft Center Distance

D - RPMxd over SPMxR

d - SPMxRx D over RPM

SPM - RPMXD over Rx D

R - RPMXD over SPMxD

BELT LENGTH -  $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

\* Need these to figure belt length

TO FIGURE AMPS:  $\frac{\text{WATTS}}{\text{VOLTS}} = \text{AMPS}$

746 WATTS equal 1 HP

# Log Book

Well No. ~~14W~~ 14W

Farm McLoy

KS Franklin  
(State) (County)

32 15 21  
(Section) (Township) (Range)

For TDR construction  
(Well Owner)

15-059-27224

TDR CONSTRUCTION, INC.

PO Box 339

Louisburg, KS 66053

913-710-5400

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| Thickness of Strata | Formation | Total Depth | Remarks |
|---------------------|-----------|-------------|---------|
| 0-37                | soil-clay | 37          |         |
| 41                  | shale     | 78          |         |
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| 2                   | shale     | 86          |         |
| 17                  | lime      | 103         |         |
| 7                   | shale     | 110         |         |
| 12                  | lime      | 122         |         |
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| 3                   | lime      | 452         |         |
| 5                   | shale     | 457         |         |
| 5                   | lime      | 462         | Heatha  |
| 178                 | shale     | 640         |         |
| 7                   | lime      | 647         |         |

[illegible]

Field Ticket & Treatment Report  
Cement

| Date     | Customer# | Well Name & Number  | Section | Township | Range | County |
|----------|-----------|---------------------|---------|----------|-------|--------|
| 9-19-19  |           | McCoy 14W           | 32      | 15       | 21    | FR     |
| Customer |           | Mailing Address     |         |          |       |        |
|          |           | City State Zip Code |         |          |       |        |

Job Type long string Hole Size 5 5/8 Hole Depth 820 Casing Size & Weight 2 7/8  
Casing Depth 812 Drill Pipe \_\_\_\_\_ Tubing \_\_\_\_\_ Other \_\_\_\_\_  
Displacement \_\_\_\_\_ Displacement PSI \_\_\_\_\_ Mix PSI \_\_\_\_\_ Rate \_\_\_\_\_

Remarks Rig-up, Circulate well, pump class A cement to  
top & pump plug.

| Account Code | Quantity or Units | Description of Services or Product | Unit Price      | Total |
|--------------|-------------------|------------------------------------|-----------------|-------|
|              |                   | Pump Charge                        |                 | 1000  |
|              |                   | Cement Truck                       |                 | 500   |
|              |                   | Water Truck                        |                 | 500   |
|              | 137               | Cement                             | 16              | 2192  |
|              |                   | Gel                                |                 |       |
|              |                   | Plug                               |                 | 45    |
|              |                   |                                    |                 |       |
|              |                   |                                    |                 |       |
|              |                   |                                    | Sales Tax       |       |
|              |                   |                                    | Estimated Total | 4237  |

Authorization  Title \_\_\_\_\_ Date \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.