

## DRILL LOG

Operator License# 32834

API # 15-121-31454-00-00

Operator \_\_\_\_\_ JTC Oil, Inc.

Lease Wingert

Address 35790 Plum Creek Rd. Osaw. KS

Well # I-4

Contractor JTC Oil, Inc.

Spud Date 5/2/18 Cement 5/7/18

Contractor License 32834

Location \_\_\_\_\_ of \_\_\_\_\_

T.D. 720 T.D. of Pipe 705

\_\_\_\_\_ feet from \_\_\_\_\_

Surf. Pipe Size 7" Depth ft. 20 ft.  
w/3sx cement

\_\_\_\_\_ feet from \_\_\_\_\_

Kind of Well Injector

County Miami

| Thickness | Strata | From | To  | Thickness | Strata     | From | To  |
|-----------|--------|------|-----|-----------|------------|------|-----|
| 2         | soil   | 0    | 2   | 11        | shale      | 269  | 280 |
| 4         | clay   | 2    | 6   | 26        | lime       | 280  | 306 |
| 18        | lime   | 6    | 24  | 8         | coal       | 306  | 314 |
| 21        | shale  | 24   | 45  | 21        | lime       | 314  | 335 |
| 17        | lime   | 45   | 62  | 6         | coal       | 335  | 341 |
| 99        | shale  | 62   | 161 | 13        | lime       | 341  | 354 |
| 18        | lime   | 161  | 179 | 144       | shale      | 354  | 498 |
| 32        | shale  | 179  | 211 | 15        | lime/shale | 498  | 513 |
| 4         | lime   | 211  | 215 | 14        | lime       | 513  | 527 |
| 39        | shale  | 215  | 254 | 41        | shale      | 527  | 568 |
| 15        | lime   | 254  | 269 | 6         | coal       | 568  | 574 |

|           |             |            |                 |
|-----------|-------------|------------|-----------------|
| <u>4</u>  | lime        | <u>574</u> | <u>578</u>      |
| <u>17</u> | shale       | <u>578</u> | <u>595</u>      |
| <u>3</u>  | lime        | <u>595</u> | <u>598</u>      |
| <u>14</u> | black/shale | <u>598</u> | <u>612</u>      |
| <u>5</u>  | lime        | <u>612</u> | <u>617</u>      |
| <u>17</u> | shale       | <u>617</u> | <u>634</u>      |
| <u>3</u>  | lime        | <u>634</u> | <u>637</u>      |
| <u>22</u> | shale       | <u>637</u> | <u>659</u>      |
| <u>3</u>  | oil sand    | <u>659</u> | <u>661 ok</u>   |
| <u>3</u>  | oil sand    | <u>661</u> | <u>664 ok</u>   |
| <u>3</u>  | oil sand    | <u>664</u> | <u>667 ok</u>   |
| <u>3</u>  | oil sand    | <u>667</u> | <u>670 good</u> |
| <u>50</u> | shale       | <u>670</u> | <u>720</u>      |