


**PIONEER**  
Pioneer Energy Services

**DUAL COMP POROSITY  
LOG**

|         |                      |
|---------|----------------------|
| Company | MIKE KELSO OIL, INC. |
| Well    | SCHROEDER B NO.3     |
| Field   | STOLTENBERG          |
| County  | ELLSWORTH            |
| State   | KANSAS               |

|                        |                             |                |
|------------------------|-----------------------------|----------------|
| Location:              | API # : 15-053-21,335-00-00 | Other Services |
| 1720' FNL & 330' FWL   |                             |                |
| SEC 29 TWP 17S RGE 9W  |                             |                |
| Permanent Datum        | GROUND LEVEL                | Elevation 1751 |
| Log Measured From      | KELLY BUSHING               | K.B. 1756      |
| Drilling Measured From | KELLY BUSHING               | D.F. N/A       |
|                        |                             | G.L. 1751      |

|                        |                |
|------------------------|----------------|
| Date                   | 8/6/2015       |
| Run Number             | ONE            |
| Type Log               | CNL/CDL/ML/DIL |
| Depth Driller          | 3295           |
| Depth Logger           | 3293           |
| Bottom Logged Interval | 3264           |
| Top Logged Interval    | 2400           |
| Type Fluid In Hole     | CHEMICAL       |
| Salinity, PPM CL       | 7,600          |
| Density                | 9.2            |
| Level                  | FULL           |
| Max. Rec. Temp. F      | 109            |
| Operating Rig Time     | 2 1/2 HOURS    |
| Equipment -- Location  | 91 Hays        |
| Recorded By            | C. DESAIRE     |
| Witnessed By           | MIKE KELSO     |

|  |             |
|--|-------------|
|  | D. SCHMIDT  |
|  | JERRY GREEN |

| Borehole Record |       |      | Casing Record |       |      |
|-----------------|-------|------|---------------|-------|------|
| Run No.         | Bit   | From | To            | Size  | Wgt. |
| ONE             | 12.25 | 00   | 448           | 8.625 | 23#  |
| TWO             | 7.875 | 448  | TD            |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |
|                 |       |      |               |       |      |

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.  
  
HWY 4 AND CHASE BLKTOP,  
2 N, E INTO

Log Measured From: KELLY BUSHING

5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES

www.pioneerenergy.com 785-625-3858

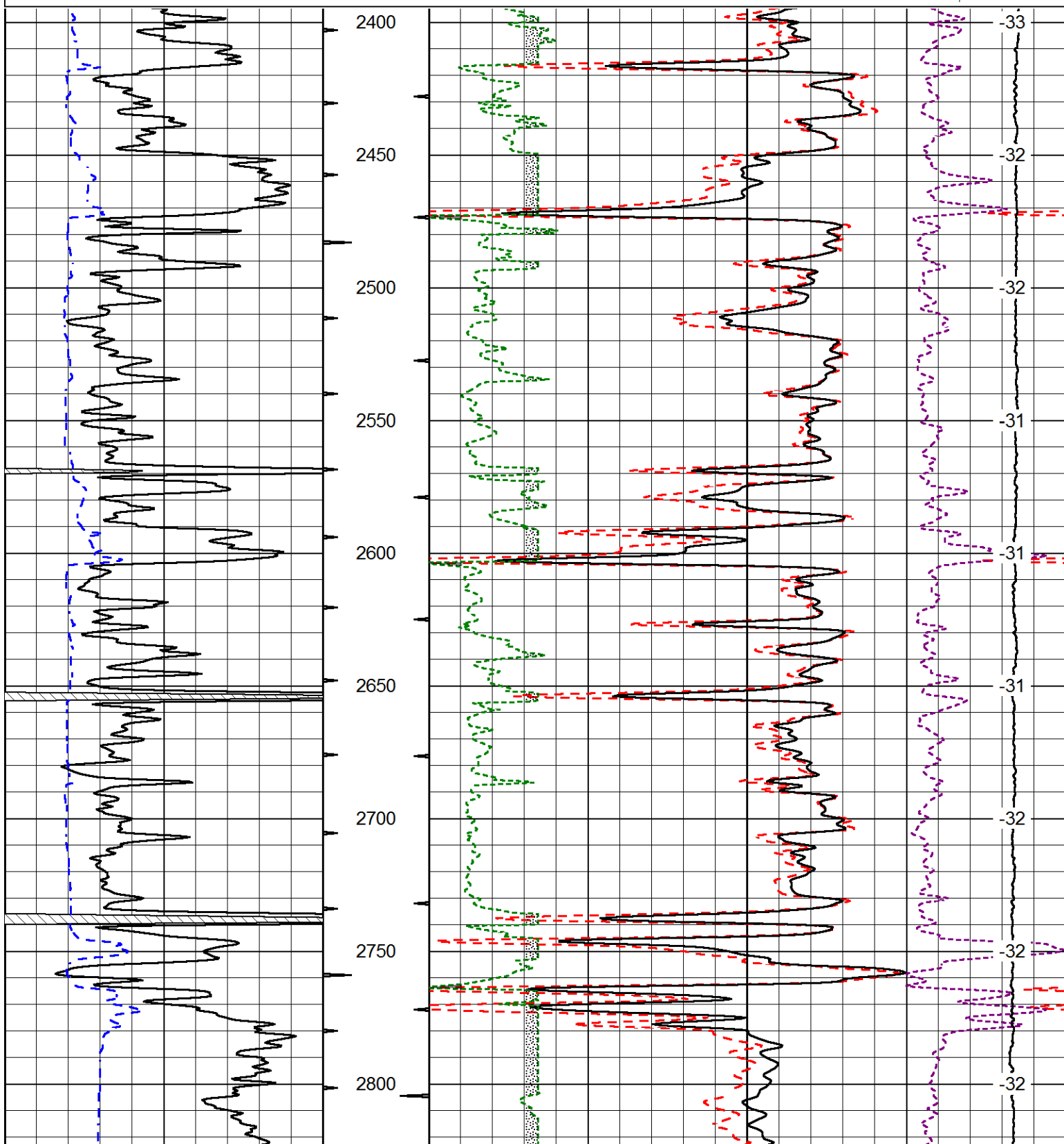
|                                                                                                             |                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Your Pioneer Energy Services Crew<br>Engineer: C. DESAIRE<br>Operator: D. SCHMIDT<br>Operator:<br>Operator: | This Log Record Was Witnessed By<br>Primary Witness: MIKE KELSO<br>Secondary Witness: JERRY GREEN<br>Secondary Witness:<br>Secondary Witness: |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|

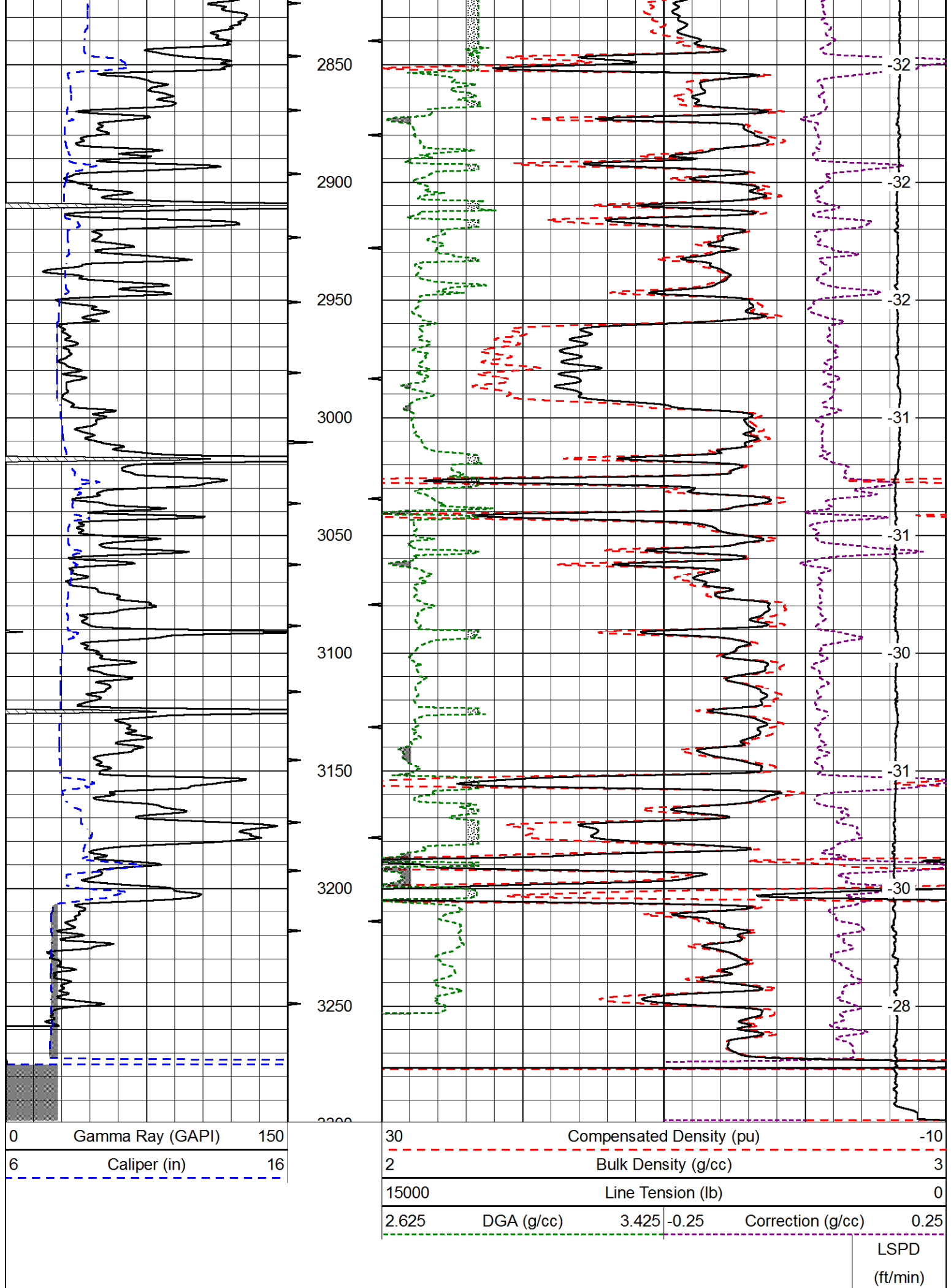
Database File mkhd.db  
Dataset Pathname DIL/mkstk  
Presentation Format cdl  
Dataset Creation Thu Aug 06 03:16:26 2015  
Charted by Depth in Feet scaled 1:600

|   |                  |     |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in)     | 16  |

|                   |                          |       |       |
|-------------------|--------------------------|-------|-------|
| 30                | Compensated Density (pu) |       | -10   |
| 2                 | Bulk Density (g/cc)      |       | 3     |
| 15000             | Line Tension (lb)        |       | 0     |
| 2.625             | DGA (g/cc)               | 3.425 | -0.25 |
| Correction (g/cc) |                          | 0.25  |       |

LSPD  
(ft/min)





Database File mkhd.db  
Dataset Pathname DIL/mkstk  
Presentation Format cndlspec  
Dataset Creation Thu Aug 06 03:16:26 2015  
Charted by Depth in Feet scaled 1:240

|   |                  |     |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in)     | 16  |

|       |                                    |                   |                  |
|-------|------------------------------------|-------------------|------------------|
| 30    | CNLS (pu)                          |                   | -10              |
| 30    | Compensated Density (2.71 ma) (pu) |                   | -10              |
| 10000 | Line Tension (lb)                  |                   | 0                |
| 2.625 | DGA (g/cc)                         | 3.425             | -0.25            |
|       |                                    | Correction (g/cc) | 0.25             |
|       |                                    |                   | LSPD<br>(ft/min) |

