



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1230994  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

|                                   |                 |   |
|-----------------------------------|-----------------|---|
| Spud Date or<br>Recompletion Date | Date Reached TD | Completion Date or<br>Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1230994

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

|   |  |                              |                                  |                                 |
|---|--|------------------------------|----------------------------------|---------------------------------|
| Drill Stem Tests Taken<br><i>(Attach Additional Sheets)</i> | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Log | Formation (Top), Depth and Datum | <input type="checkbox"/> Sample |
| Samples Sent to Geological Survey                           | <input type="checkbox"/> Yes <input type="checkbox"/> No | Name                         | Top                              | Datum                           |
| Cores Taken   | <input type="checkbox"/> Yes <input type="checkbox"/> No |                              |                                  |                                 |
| Electric Log Run  | <input type="checkbox"/> Yes <input type="checkbox"/> No |                              |                                  |                                 |
| List All E. Logs Run:                                       |  |                              |                                  |                                 |

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used  |                   |                           |                   |               |                |              |                            |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. |                   |                           |                   |               |                |              |                            |
| Purpose of String   | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |

| ADDITIONAL CEMENTING / SQUEEZE RECORD   |                  |                |              |                            |
|---|------------------|----------------|--------------|----------------------------|
| Purpose:                                | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate      |                  |                |              |                            |
| <input type="checkbox"/> Protect Casing |                  |                |              |                            |
| <input type="checkbox"/> Plug Back TD   |                  |                |              |                            |
| <input type="checkbox"/> Plug Off Zone  |                  |                |              |                            |

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
|                                   |           |         |             |               |         |

|  |  |   |
|--|--|---|
| <b>DISPOSITION OF GAS:</b><br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | <b>METHOD OF COMPLETION:</b><br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|--|---|

|           |                               |
|-----------|-------------------------------|
| Form      | ACO1 - Well Completion        |
| Operator  | Stelbar Oil Corporation, Inc. |
| Well Name | Graham 1-30X                  |
| Doc ID    | 1230994                       |

All Electric Logs Run

|  |
|--|
|  |
| Compact Photo Density Comp. Neutron Microresistivity Log |
| Comp. Sonic w/Integrated Transit Time Log                |
| Array Induction Shallow Focused Electric Log             |
| Comp. Neutron Sonic Porosity Overlay                     |
| Microresistivity Log                                     |







# Cement Report

|                            |                  |                             |                   |                     |  |
|----------------------------|------------------|-----------------------------|-------------------|---------------------|--|
| Customer <i>Stelbar</i>    |                  | Lease No.                   |                   | Date <i>9/16/14</i> |  |
| Lease <i>Graham</i>        |                  | Well # <i>1-30x</i>         |                   | Service Receipt     |  |
| Casing                     | Depth <i>664</i> | County <i>Stanton</i>       |                   | State <i>KS</i>     |  |
| Job Type <i>Whip Stock</i> |                  | Formation                   |                   | Legal Description   |  |
| Pipe Data                  |                  |                             | Perforating Data  |                     | Cement Data  |
| Casing size                |                  | Tubing Size <i>4 1/2 DP</i> |                   | Shots/Ft            |  |
| Depth                      |                  | Depth <i>664</i>            |                   | From                | To   |
| Volume                     |                  | Volume <i>9.44</i>          |                   | From                | To   |
| Max Press                  |                  | Max Press                   |                   | From                | To   |
| Well Connection            |                  | Annulus Vol.                |                   | From                | To   |
| Plug Depth                 |                  | Packer Depth                |                   | From                | To   |
| Time                       | Casing Pressure  | Tubing Pressure             | Bbls. Pumped      | Rate                | Service Log  |
| <i>06:30</i>               |                  |                             |                   |                     | <i>On loc, satisfactory, R.O. Couldn't run csg due to deviation Change of Plans for Whipstock Plug</i> |
| <i>20:30</i>               |                  | <i>30#</i>                  | <i>15</i>         | <i>4.3</i>          | <i>Pump gel</i>  |
| <i>20:36</i>               |                  | <i>70#</i>                  | <i>0</i>          | <i>5</i>            | <i>Start Mixing @ 17#</i>  |
| <i>21:18</i>               |                  | <i>0</i>                    | <i>112</i>        | <i>4</i>            | <i>Finished Mixing</i>   |
| <i>21:18</i>               |                  | <i>0</i>                    | <i>4</i>          | <i>4</i>            | <i>Start Disp.</i>   |
| <i>21:20</i>               |                  |                             |                   |                     | <i>Shot Down, TOOTH</i>  |
| <i>21:20</i>               |                  |                             |                   |                     | <i>Job Complete</i>  |
| Service Units              | <i>174939</i>    | <i>372337926</i>            | <i>3302114284</i> | <i>1302534548</i>   |  |
| Driver Names               | <i>Chavez</i>    | <i>Epke E.</i>              | <i>Vi Vasquez</i> | <i>S. Chavez</i>    |  |

*Duval*  
Customer Representative

*Jerry Bennett*  
Station Manager

*Chad Hinz*  
Cementer



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.  
Liberal, Kansas 67905  
Phone 620-624-2277

FIELD SERVICE TICKET  
1717 06160 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

|                            |                              |  |                                   |                               |                              |                              |                     |
|----------------------------|------------------------------|--|-----------------------------------|-------------------------------|------------------------------|------------------------------|---------------------|
| DATE OF JOB <i>9/28/14</i> | DISTRICT <i>1717</i>         | NEW WELL <input checked="" type="checkbox"/> | OLD WELL <input type="checkbox"/> | PROD <input type="checkbox"/> | INJ <input type="checkbox"/> | WDW <input type="checkbox"/> | CUSTOMER ORDER NO.: |
| CUSTOMER <i>Slubar</i>     | LEASE <i>Graham 1-30x</i>    | WELL NO.                                     |                                   |                               |                              |                              |                     |
| ADDRESS                    | COUNTY <i>Stanton</i>        | STATE <i>Ks</i>                              |                                   |                               |                              |                              |                     |
| CITY                       | STATE                        | SERVICE CREW <i>Gabe E., R. Martin</i>       |                                   |                               |                              |                              |                     |
| AUTHORIZED BY <i>Tyce</i>  | JOB TYPE: <i>242 SW Sale</i> |  |                                   |                               |                              |                              |                     |
| EQUIPMENT#                 | HRS                          | EQUIPMENT#                                   | HRS                               | EQUIPMENT#                    | HRS                          | TRUCK CALLED                 | DATE <i>9:00 AM</i> |
| <i>178939</i>              | <i>15</i>                    |  |                                   |                               |                              | ARRIVED AT JOB               | <i>1:00 AM</i>      |
| <i>372233992015-</i>       | <i>15</i>                    |  |                                   |                               |                              | START OPERATION              | <i>3:23 AM</i>      |
| <i>143537547</i>           | <i>15</i>                    |  |                                   |                               |                              | FINISH OPERATION             | <i>5:11 AM</i>      |
|                            |                              |  |                                   |                               |                              | RELEASED                     | <i>6:00 AM</i>      |
|                            |                              |  |                                   |                               |                              | MILES FROM STATION TO WELL   | <i>100</i>          |

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

| ITEM/PRICE REF. NO. | MATERIAL, EQUIPMENT AND SERVICES USED | UNIT | QUANTITY | UNIT PRICE | \$ AMOUNT |
|---------------------|---------------------------------------|------|----------|------------|-----------|
| CL101               | A-Con Blend                           | SK   | 155      |            | 2883 00   |
| CL110               | Premium Plus                          | SK   | 200      |            | 3260 00   |
| CC109               | Calcium Chloride                      | Lb   | 814      |            | 854 70    |
| CC102               | Colloflake                            | Lb   | 59       |            | 329 30    |
| CC130               | C-51                                  | Lb   | 80       |            | 750 00    |
| CF256               | Guide shoe                            | EA   | 1        |            | 700 00    |
| CF1457              | Flapper Float Valve                   | EA   | 1        |            | 490 00    |
| CF4408              | Centralizers                          | EA   | 3        |            | 600 00    |
| CF109               | TOP PLUS                              | EA   | 1        |            | 470 00    |
| E101                | Heavy Equip Mileage                   | MI   | 200      |            | 1400 00   |
| CE240               | Blending & Mixing Charge              | SK   | 305      |            | 497 00    |
| E113                | Bulk Delivery                         | TM   | 1,670    |            | 3674 00   |
| CE201               | Depth Charge 50' to 1000'             | 4hr  | 1        |            | 1200 00   |
| CE504               | Plg Container                         | JOB  | 1        |            | 250 00    |
| E100                | Pickup Mileage                        | MI   | 100      |            | 425 00    |
| 5003                | Service SUPER1801                     | EA   | 1        |            | 175 00    |
| T105                | Cement Data                           | EA   | 1        |            | 550 00    |
| CE403               | add hrs                               | EA   | 6        |            | 300 00    |

| CHEMICAL / ACID DATA: |  |  |  |
|-----------------------|--|--|--|
|                       |  |  |  |
|                       |  |  |  |
|                       |  |  |  |

|                     |            |           |                 |
|---------------------|------------|-----------|-----------------|
|                     |            | SUB TOTAL | <i>14093.20</i> |
| SERVICE & EQUIPMENT | %TAX ON \$ |           |                 |
| MATERIALS           | %TAX ON \$ |           |                 |
| TOTAL               |            |           |                 |

|   |  |
|---|--|
| SERVICE REPRESENTATIVE <i>Chad Hinz</i> | THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i> |
|---|--|

FIELD SERVICE ORDER NO.

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)



**BASIC**<sup>™</sup>  
ENERGY SERVICES  
Liberal, Kansas

**Cement Report**

|                         |                     |                       |
|-------------------------|---------------------|-----------------------|
| Customer <i>Stebbar</i> | Lease No.           | Date <i>9/20/14</i>   |
| Lease <i>Graham</i>     | Well # <i>1-30x</i> | Service Receipt       |
| Casing <i>13 3/8</i>    | Depth <i>663</i>    | County <i>Stanton</i> |
| Job Type <i>Surface</i> | Formation           | Legal Description     |

| Pipe Data                   |              | Perforating Data |    | Cement Data                  |
|-----------------------------|--------------|------------------|----|------------------------------|
| Casing size <i>13 3/8</i>   | Tubing Size  | Shots/Ft         |    | Lead <i>155 SK A - 60</i>    |
| Depth <i>657</i>            | Depth        | From             | To | <i>@ 11.4 #</i>              |
| Volume <i>96.5</i>          | Volume       | From             | To | <i>2.95 18.10</i>            |
| Max Press <i>1000</i>       | Max Press    | From             | To | Tail in <i>200 SK A - 70</i> |
| Well Connection <i>P.C.</i> | Annulus Vol. | From             | To | <i>@ 14.8 #</i>              |
| Plug Depth                  | Packer Depth | From             | To | <i>1.34 6.33</i>             |

*1/19  
9/20*

| Time         | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate       | Service Log                           |
|--------------|-----------------|-----------------|--------------|------------|---------------------------------------|
| <i>13:00</i> |                 |                 |              |            | <i>on loc, spot, safety mtg, R.O.</i> |
| <i>03:23</i> | <i>1500</i>     |                 |              |            | <i>Test Lines</i>                     |
| <i>03:26</i> | <i>30#</i>      |                 | <i>0</i>     | <i>4</i>   | <i>Start mixing @ 11.4 #</i>          |
| <i>04:20</i> | <i>20#</i>      |                 | <i>82</i>    | <i>4</i>   | <i>on tail @ 14.8 #</i>               |
| <i>04:39</i> | <i>0</i>        |                 | <i>48</i>    | <i>0</i>   | <i>Finished mixing, Drop Plug</i>     |
| <i>04:41</i> | <i>0</i>        |                 | <i>0</i>     | <i>5</i>   | <i>Start disp, Washup on Plug</i>     |
| <i>05:03</i> | <i>140</i>      |                 | <i>86</i>    | <i>1.8</i> | <i>slow Rate</i>                      |
| <i>05:11</i> | <i>200-750</i>  |                 | <i>96.5</i>  | <i>0</i>   | <i>Plugdown</i>                       |
| <i>05:13</i> | <i>0</i>        |                 |              |            | <i>Release Psi, Float held</i>        |
|              |                 |                 |              |            | <i>Job Complete</i>                   |

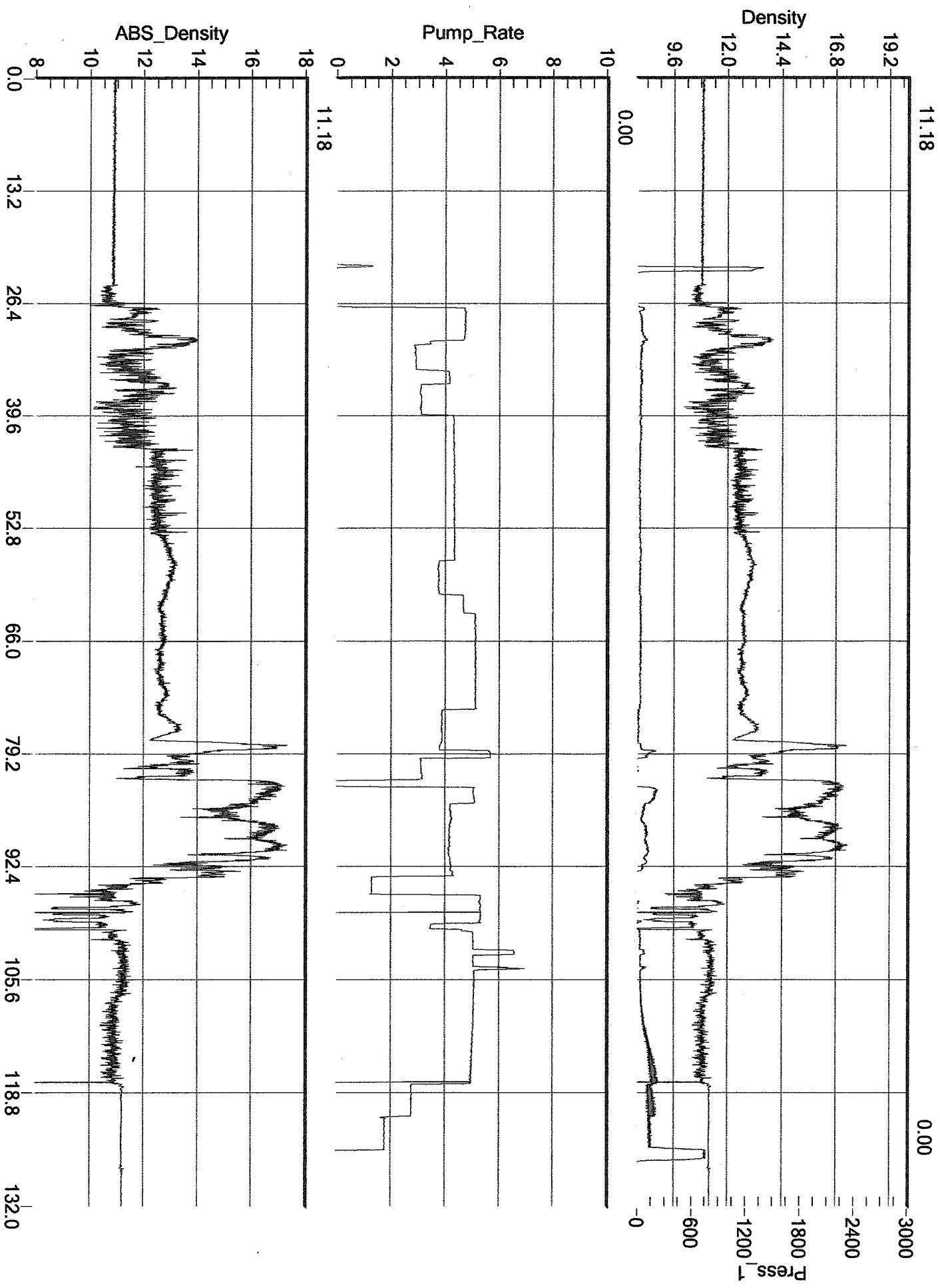
|               |                |                   |                   |
|---------------|----------------|-------------------|-------------------|
| Service Units | <i>78939</i>   | <i>3722337726</i> | <i>1435537547</i> |
| Driver Names  | <i>C. King</i> | <i>Gabe E.</i>    | <i>R. Martin</i>  |

*Duvaldo*  
Customer Representative

*Jerry Bennett*  
Station Manager

*Charles King*  
Cementer





Job Started On: 09/20/2014 @ 2:52:27 AM



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.  
Liberal, Kansas 67905  
Phone 620-624-2277

FIELD SERVICE TICKET  
1717 04846 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

|   |          |  |     |   |     |  |
|---|----------|--|-----|---|-----|--|
| DATE OF JOB <u>09-22-14</u> DISTRICT <u>1717 Liberal/KS</u> |          | NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.: |     |   |     |  |
| CUSTOMER <u>Stelbar</u>                                     |          | LEASE <u>GRAHAM</u>  |     | 1-30X WELL NO.                            |     |  |
| ADDRESS   |          | COUNTY <u>Stanton</u>  |     | STATE <u>KS</u>                           |     |  |
| CITY  |          | STATE  |     | SERVICE CREW <u>Roger - Eddie - Ricky</u> |     |  |
| AUTHORIZED BY <u>Jerry Beardsall</u>                        |          | JOB TYPE: <u>Z42 8 5/8" Intermediate</u>   |     |   |     |  |
| EQUIPMENT#  | HRS      | EQUIPMENT#   | HRS | EQUIPMENT#                                | HRS | TRUCK CALLED <u>09-21-14</u> <u>AM</u> <u>2200</u>     |
| <u>21755</u>  | <u>6</u> |  |     |   |     | ARRIVED AT JOB <u>09-22-14</u> <u>AM</u> <u>0000</u>   |
| <u>274627</u>   | <u>6</u> |  |     |   |     | START OPERATION <u>09-22-14</u> <u>PM</u> <u>0500</u>  |
| <u>14354-14578</u>  | <u>6</u> |  |     |   |     | FINISH OPERATION <u>09-22-14</u> <u>PM</u> <u>0600</u> |
|   |          |  |     |   |     | RELEASED <u>09-22-14</u> <u>PM</u> <u>0630</u>         |
|   |          |  |     |   |     | MILES FROM STATION TO WELL <u>100</u>                  |

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

| ITEM/PRICE REF. NO. | MATERIAL, EQUIPMENT AND SERVICES USED           | UNIT          | QUANTITY     | UNIT PRICE | \$ AMOUNT |
|---------------------|---|---------------|--------------|------------|-----------|
| CL110               | Premium Plus Cement                             | sk            | 200          |            | 3260 00   |
| CC109               | Calcium Chloride                                | lb            | 376          |            | 394 80    |
| CC102               | Celloflake                                      | lb            | 51           |            | 188 70    |
| CF253               | Guide Shoe - Regular - 8 5/8"                   | ea            | 1            |            | 380 00    |
| CF1453              | Flapper type Insult Float Valve 8 5/8"          | ea            | 1            |            | 280 00    |
| <del>CF4405</del>   | <del>Economizer Attached, Welded Standard</del> | <del>ea</del> | <del>4</del> |            |           |
| <del>CF4556</del>   | <del>Cement Basket, Cans 8 5/8"</del>           | <del>ea</del> | <del>1</del> |            |           |
| CF105               | Top Rubber Cement Plug, 8 5/8"                  | ea            | 1            |            | 225 00    |
| E101                | Heavy Equipment Mileage                         | mi            | 200          |            | 1400 00   |
| CE240               | Blending and Mixing Service Charges             | sk            | 200          |            | 280 00    |
| E113                | Proppant and Bulk Delivery Charges              | cu yd         | 940          |            | 2068 00   |
| LE202               | Depth Charge - 1001'-2000'                      | 4 hrs         | 1            |            | 1500 00   |
| CE504               | Plug Utilization Charge                         | job           | 1            |            | 250 00    |
| E100                | Unit Mileage Charge - Pickup                    | mi            | 100          |            | 425 00    |
| 5003                | Service Supervisor, First 8 Hrs on location     | ea            | 1            |            | 175 00    |
| T105                | Cement Data Acquisition Monitor                 | ea            | 1            |            | 550 00    |

| CHEMICAL / ACID DATA: |  |  |  |
|-----------------------|--|--|--|
|                       |  |  |  |
|                       |  |  |  |
|                       |  |  |  |

|                     |            |             |           |
|---------------------|------------|-------------|-----------|
| SUB TOTAL           |            | <u>7438</u> | <u>98</u> |
| SERVICE & EQUIPMENT | %TAX ON \$ |             |           |
| MATERIALS           | %TAX ON \$ |             |           |
| TOTAL               |            |             |           |

SERVICE REPRESENTATIVE Roger Brown THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: \_\_\_\_\_  
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO. \_\_\_\_\_

### Cement Report

|                              |                         |                                       |
|------------------------------|-------------------------|---------------------------------------|
| Customer <i>Stelban</i>      | Lease No. <i>GRAHAM</i> | Date <i>09-22-14</i>                  |
| Lease <i>GRAHAM</i>          | Well # <i>1-30X</i>     | Service Receipt <i>1111 04846A</i>    |
| Casing <i>8 5/8"</i>         | Depth <i>1628'</i>      | County <i>STANTON</i> State <i>KS</i> |
| Job Type <i>8 5/8" Inter</i> | Formation               | Legal Description <i>30-29-41</i>     |

| Pipe Data       |              | Perforating Data |    | Cement Data  |
|-----------------|--------------|------------------|----|--|
| Casing size     | Tubing Size  | Shots/Ft         |    | Lead   |
| <i>8 5/8"</i>   |              | From             | To | Tail in <i>200 SKS</i><br><i>270 CALK 2</i><br><i>1/4" Polyflake</i> |
| Depth           | Depth        | From             | To |  |
| Volume          | Volume       | From             | To |  |
| Max Press       | Max Press    | From             | To |  |
| Well Connection | Annulus Vol. | From             | To |  |
| Plug Depth      | Packer Depth | From             | To |  |

| Time        | Casing Pressure | Tubing Pressure | Ebbs. Pumped | Rate     | Service Log  |
|-------------|-----------------|-----------------|--------------|----------|--|
| <i>2000</i> |                 |                 |              |          | <i>09-21-14</i>  |
| <i>0010</i> |                 |                 |              |          | <i>09-22-14</i>  |
| <i>0020</i> |                 |                 |              |          | <i>Safety Meeting</i>                                  |
| <i>0025</i> |                 |                 |              |          | <i>Set up</i>  |
| <i>0430</i> |                 |                 |              |          | <i>Hookup Plug Container &amp; Manifold &amp; Leak</i> |
| <i>0440</i> |                 |                 |              |          | <i>Safety Meeting with Rig crew Basic</i>              |
| <i>0450</i> |                 |                 |              |          | <i>Test lines 1500psi</i>                              |
| <i>0500</i> |                 |                 |              |          | <i>Pump Water ahead</i>                                |
| <i>0505</i> | <i>100</i>      |                 | <i>48</i>    | <i>4</i> | <i>Mix. Pump Cement</i>                                |
|             |                 |                 |              |          | <i>14,800g - 48 Bbls Slurry</i>                        |
| <i>0540</i> |                 |                 |              |          | <i>Finished mixing Cement</i>                          |
|             |                 |                 |              |          | <i>Drop top plug</i>                                   |
|             |                 |                 | <i>103.7</i> |          | <i>Displace</i>  |
| <i>0600</i> |                 |                 |              |          | <i>Land Plug</i>                                       |
|             |                 |                 |              |          | <i>Float Head</i>                                      |
|             |                 |                 |              |          | <i>Released</i>  |

|               |              |              |                    |  |  |
|---------------|--------------|--------------|--------------------|--|--|
| Service Units | <i>21755</i> | <i>27462</i> | <i>14354-19578</i> |  |  |
| Driver Names  | <i>Roger</i> | <i>Eddie</i> | <i>Rickey</i>      |  |  |

*Waldo*  
Customer Representative

*Jenny Bennett*  
Station Manager

*Roger Brown*  
Cementer





# Cement Report

|                          |                 |                     |              |                       |                                   |
|--------------------------|-----------------|---------------------|--------------|-----------------------|-----------------------------------|
| Customer <u>Stelbar</u>  |                 | Lease No.           |              | Date <u>9-28-14</u>   |                                   |
| Lease <u>Graham</u>      |                 | Well # <u>1-30x</u> |              | Service Receipt       |                                   |
| Casing                   |                 | Depth               |              | County <u>Stanton</u> |                                   |
| Job Type <u>2-42 PTA</u> |                 | Formation           |              | State <u>KS</u>       |                                   |
| Pipe Data                |                 | Perforating Data    |              | Cement Data           |                                   |
| Casing size              |                 | Tubing Size         |              | Shots/Ft              |                                   |
| Depth                    |                 | Depth               |              | From                  |                                   |
| Volume                   |                 | Volume              |              | To                    |                                   |
| Max Press                |                 | Max Press           |              | From                  |                                   |
| Well Connection          |                 | Annulus Vol.        |              | To                    |                                   |
| Plug Depth               |                 | Packer Depth        |              | From                  |                                   |
|                          |                 |                     |              | To                    |                                   |
| Time                     | Casing Pressure | Tubing Pressure     | Bbbs. Pumped | Rate                  | Service Log                       |
| 2400                     |                 |                     |              |                       | On Location - Rig up              |
| 0430                     |                 |                     |              |                       | Safety Meeting                    |
| 0503                     | 1000            |                     |              |                       | Pressure Test                     |
| 0509                     | 100             |                     | 13           | 4                     | Ⓐ Plug @ 1680' - 50.5x @ 13.5 ppg |
| 0509                     | 100             |                     | 13           | 4                     | Pump 50.5x @ 13.5 ppg             |
| 0516                     | 100             |                     | 20           | 4                     | Pump Displacement                 |
| 0523                     | 0               |                     |              |                       | Shut Down - HOC=223' - TOC 1457'  |
|                          |                 |                     |              |                       | Ⓑ Plug @ 660' - 50.5x @ 13.5 ppg  |
| 0621                     | 100             |                     | 13           | 4                     | Pump 50.5x @ 13.5 ppg             |
| 0625                     | 100             |                     | 6            | 4                     | Pump Displacement                 |
| 0627                     | 0               |                     |              |                       | Shut Down - HOC=223' - TOC 437'   |
| 0656                     | 100             |                     | 13           | 4                     | Ⓒ Plug @ 60' - 20.5x @ 13.5 ppg   |
| 0700                     | 100             |                     |              |                       | Pump 20.5x @ 13.5 ppg             |
| 0700                     | 0               |                     |              |                       | Circulate Cement To Surface       |
|                          |                 |                     |              |                       | Shut Down                         |
| 0720                     | 100             |                     | 5            | 4                     | Plug Mouse Hole 20.5x @ 13.5 ppg  |
| 0730                     |                 |                     | 8            | 4                     | Plug Rat Hole 30.5x @ 13.5 ppg    |
| 0800                     |                 |                     |              |                       | Shut Down - Rig Down              |
| Service Units            |                 | 78940               |              | 27462                 |                                   |
| Driver Names             |                 | Ruben               |              | Ed-M                  |                                   |
|                          |                 |                     |              | 14354                 |                                   |
|                          |                 |                     |              | 19528                 |                                   |
|                          |                 |                     |              | Victor                |                                   |

Evaldo  
Customer Representative

Jerry Bennett  
Station Manager

Ruben Martinez  
Cementer  
Taylor Printing, Inc.

# Covey

## The Well Watchers

Scale 1:240 (5"=100') Imperial

Well Name: GRAHAM #1- 30 X  
Location: Section 30 - Township 29 South - Range 41 West  
Licence Number: 15-187-21,298 -00-00 Region: Stanton County, KS.  
Spud Date: 15 September 2014 Drilling Completed: 27 September 2014  
Surface Coordinates: 1,520' FNL & 2,300' FEL  
(Approximately NE NW SW NE)

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 3,414' K.B. Elevation (ft): 3,425'  
Logged Interval (ft): 3,800' To: 5,640' Total Depth (ft): 5,640'  
Formation: Morrow Shale -----> Mississippi  
Type of Drilling Fluid: Chemical Low Solids Non-dispersed (Vertical)

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

### OPERATOR

Company: STELBAR OIL CORPORATION, INC.  
Address: 1625 North Waterford Parkway, #200 POC:  
Wichita, Kansas 67206-6602 Kent Scribner  
(316) 264-8378

### GEOLOGIST

Name: Curtis E. Covey  
Company: COVEY - The Well Watchers  
Address: 6548 Bedford Circle  
Derby, Kansas 67037  
Office: (316) 776 - 0367 Cell: (316) 217-4679

KB: 3,425'

### FORMATION TOPS

GL: 3,414'

| Formation                          | Rotary Sample Depth (Datum) | E-log Depth (Datum) |
|------------------------------------|-----------------------------|---------------------|
| Heebner Shale .....                | 3,596' (-171') .....        | 3,596' (-171')      |
| Lansing Group .....                | 3,707' (-282') .....        | 3,708' (-283')      |
| Marmaton .....                     | 4,253' (-828') .....        | 4,251' (-826')      |
| Cherokee Shale .....               | 4,437' (-1,012') .....      | 4,437' (-1,012')    |
| Atoka .....                        | 4,873' (-1,448') .....      | 4,874' (-1,449')    |
| Morrow Shale .....                 | 4,970' (-1,545') .....      | 4,970' (-1,545')    |
| Lower Morrow Marker .....          | 5,277' (-1,852') .....      | 5,278' (-1,853')    |
| Keyes Sandstone .....              | 5,400' (-1,975') .....      | 5,403' (-1,978')    |
| Mississippi - Chester .....        | 5,416' (-1,991') .....      | 5,416' (-1,991')    |
| Mississippi - Ste. Genevieve ..... | 5,456' (-2,031') .....      | 5,442' (-2,017')    |
| Mississippi - St. Louis .....      | 5,550' (-2,125') .....      | 5,552' (-2,127')    |

RTD: 5,640'

LTD: 5,641'

ATD: 5,642'

Float:

E-log is 0' - 2' low - 0' - 1' high to rotary sample depth.

E-Loggers:

Weatherford -- Liberal, Kansas

## Graham #1 - 30

12-1/4" Hole (Vertical)

8 Sept --- Spud @ 1:30am.  
9 --- 7am @ 591'. Drilled to 1,285'.  
Lost Circ @ 1,285' (250 Bbls).

10 --- On bank mixing mud @ 1,285'.  
Mix up 400 Bbl (22# LCM).  
TIH to 1,200'. Pump 400 Bbls in  
hole/100 Bbls on backside.  
Mix up 400 Bbls (28 # LCM).  
Cement plug @ 1,210'.  
300 sks Thixotropic (+ misc).  
[Basic Energies]

11 --- Pump 400 Bbls (28# LCM)  
from top.  
TIH reportedly hit bridge  
@ 1,052'.  
Wait on cementers. TIH/OE. TO.  
TIH w/Bit.  
Refigured bit depth - 1,285'. TO.

12-1/4" Hole (Vertical)

12 Sept --- TIH/OE. P/U to 1,210'.  
Cement. WOC (24 hrs).  
TIH/OE. Cement done by 6pm.  
WOC. TIH & pumped 250 Bbls  
water. No returns. TO.

13 --- Set 100 sx plug @ 1,019'. WOC.  
Mix 400 Bbls (30#LCM/ Vis: 70).  
100 sk cement @ 670'.  
Add 330 Bbls pill @ 640'. Mud  
to cellar/No circ. TI to 670' and  
cemented 50 sk Class C. WOC.  
TIH / no hard cement to 700'.  
100 sk Class C @ 670'. WOC.  
TIH/ hard cement @ 708'.

PLUG HOLE --  
1st Plug @ 670' - 100 sk +  
2nd Plug @ 240' - 100 sk +  
top plug - 60 sk. Total 260 sk  
60/40 POZ (4% Gel). P/D @  
10:15am on 14 Sept 2014.  
Rathole (30 sk). Mouse hole  
(20 sk). [Basic Energy Services]

15 Sept --- Skidded off Graham #1-30 ... 50' North to ... Graham #1-30 X.

## Graham #1 - 30 X

15 Sept --- Skidded off Graham #1-30 ... 50' North to ... Graham #1-30 X.

17-1/2" Hole (Vertical)

15 Sept --- Spud @ 7pm  
16 --- 7am @ 664'.  
Surveys (1-1/4 to 7 degrees).  
Cement 664' --> 334' with Class  
H (630 sx) with 15% excess.

17 --- WOC.

18 --- Redrill surface hole with 12-1/4".  
Cement @ 172'. Open hole 190'  
- 270'.  
7am @ 353'. Drill to 664'.  
Surveys (1/2 --> 1-1/4 degrees).

19 --- Start reaming 12-1/4" pilot  
hole to 17-1/2" at 5:30am.  
Drilled to 682'.  
Ran 13-3/8" @ 647' (Bottom 3  
jts strapped). 155 sx A-Con  
Blend (etc) + 200 sx Prem Plus.

20 --- Plug down @ 5:15am.  
[Basic Energy Servies]

12-1/4" Hole (Pilot Hole) to  
17-1/2" Hole (Ream)

21 --- Under surface casing @ 5am.  
7am @ 997'.  
Lost full returns @ 1,155', 50%  
returns at 1,330, drilled to  
1,672' wtih 95% returns.  
(Severe lost circ 1,289'-1,450'.)

22 --- Run 8-5/8" (24#) casing. Set @  
1,667' with 200 sx Prem Plus.  
[Basic Energy Services]  
Plug down @ 6am. WOC.  
7am @ 1,672'. WOC.

7-7/8" Hole (Vertical)

23 Sept --- Under surface casing @ 4am.  
7am @ 2,026'.  
24 --- 7am @ 3,492'.  
25 --- 7am @ 4,540'.  
Resurveyed: GL - 3,414',  
DF - 3,421', KB - 3,425'.

26 --- 7am @ 5,398'.  
Lost Circ after CFS @ 5,410'.  
Pulled up 10 stands.  
Mixed Mud (16# LCM).  
Regained Circ.  
300 Bbls Total Lost.  
Resumed Drilling @ 8:32pm.

27 --- 7am @ 5,627'.  
RTD (5,640') @ 8am.  
E-LOG. [Weatherford]

**HOLE DEVIATION (309' - 5,640' MD)**

**GRAHAM # 1 - 30X**

**17-1/2" Initial Surface Hole**

| DEPTH / TVD | INCLINATION | AZIMUTH | NORTH | SOUTH | EAST | WEST | DOGLEG deg/100' |
|-------------|-------------|---------|-------|-------|------|------|-----------------|
| 309' /      | 1.25        |         |       |       |      |      |                 |
| 370' /      | 1.50        |         |       |       |      |      |                 |
| 424' /      | 3.00        |         |       |       |      |      |                 |
| 549' /      | 5.00        |         |       |       |      |      |                 |
| 664' /      | 7.00        |         |       |       |      |      |                 |
| 664' /      | 7.00        |         |       |       |      |      |                 |

Initial Surface Hole cemented.

**12-1/4" Surface Hole (Pilot Hole after initial surface hole.)**

|        |      |
|--------|------|
| 192' / | 0.50 |
| 282' / | 1.00 |
| 343' / | 0.75 |
| 402' / | 1.00 |
| 462' / | 1.25 |
| 524' / | 0.75 |
| 586' / | 1.25 |
| 682' / | 1.25 |

12-1/4" Pilot Hole ream with 17-1/2" Bit.  
No Surveys taken.

**7-7/8" Vertical Hole**

|          |      |       |
|----------|------|-------|
| 5,640' / | 1.25 | (RTD) |
|----------|------|-------|

**BIT RECORD**

**GRAHAM # 1 - 30 X**

| DATE                                       | SIZE    | TYPE                | JET SIZE          | DEPTH IN / OUT  | CUM. FT. | HOURS | ROP (ft/hr) |
|--|---------|---------------------|-------------------|-----------------|----------|-------|-------------|
| <b>INITIAL SURFACE ---</b>                 |         |                     |                   |                 |          |       |             |
| 16 Sept 2014                               | 17-1/2" | MD-1PGL             | 16 - 16 - 16 - 14 | 0' / 664'       | 664'     | 8.00  | 83.0        |
| <b>PILOT HOLE on SURFACE (Redrill) ---</b> |         |                     |                   |                 |          |       |             |
| 18 Sept 2014                               | 12-1/4" | HAPC                | 15 - 15 - 15 - 15 | 0' / 682'       | 682'     | 26.00 | 26.2        |
| <b>REAM PILOT HOLE ---</b>                 |         |                     |                   |                 |          |       |             |
| 19 Sept 2014                               | 17-1/2" | RR                  | 15 - 15 - 15 - 15 | 0' / 683'       | 683'     | 9.75  | 70.1        |
| <b>SURFACE ---</b>                         |         |                     |                   |                 |          |       |             |
| 21 Sept 2014                               | 12-1/4" | HA00TC              | 18 - 18 - 18      | 663' / 1,672'   | 1,009'   | 15.00 | 67.3        |
| <b>VERTICAL ---</b>                        |         |                     |                   |                 |          |       |             |
| 23 Sept 2014                               | 7-7/8"  | HAIP                | 15 - 15 - 15      | 1,672' / 1,733' | 61'      | 1.00  | 61.0        |
| 23 Sept 2014                               | 7-7/8"  | Uiterra U616M (PDC) | 18 - 18 - 18      | 1,733' / 5,640' | 3,907'   | 66.00 | 59.2        |



## ROCK TYPES

### POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

### LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Granite wash
- Congl
- Dol lmst
- Silty dol

- Calc dol
- Dol 2
- Dol
- Gyp
- Igne
- Lmst 2
- Lmst
- Meta
- Mrlst
- Salt
- Shale 3
- Shale 3
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Ss 2

### MINERAL

- Mica
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl

- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Copper
- Ooliticastic
- Ooloid
- Oolite
- Sucrosic
- Dark specks

### STRINGER

- Calc dol
- Silty dol
- Anhy

- Arg
  - Bent
  - Coal
  - Dol
  - Gyp
  - Ls
  - Mrst
  - Calc dol
  - Sltstrg
  - Ssstrg
  - Chalk
  - New symbol
- SHOW**
- Oil
  - Spotted
  - Ques
  - Dead
  - Gas
  - Oil/gas
  - Bed contact

## ACCESSORIES

### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Spore
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro

- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

### MINERAL

- Mica
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag

- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos

- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Copper
- Ooliticastic
- Ooloid
- Oolite
- Sucrosic
- Dark specks

### STRINGER

- Calc dol

- Silty dol
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Calc dol
- Sltstrg
- Ssstrg
- Chalk
- New symbol

## OTHER SYMBOLS

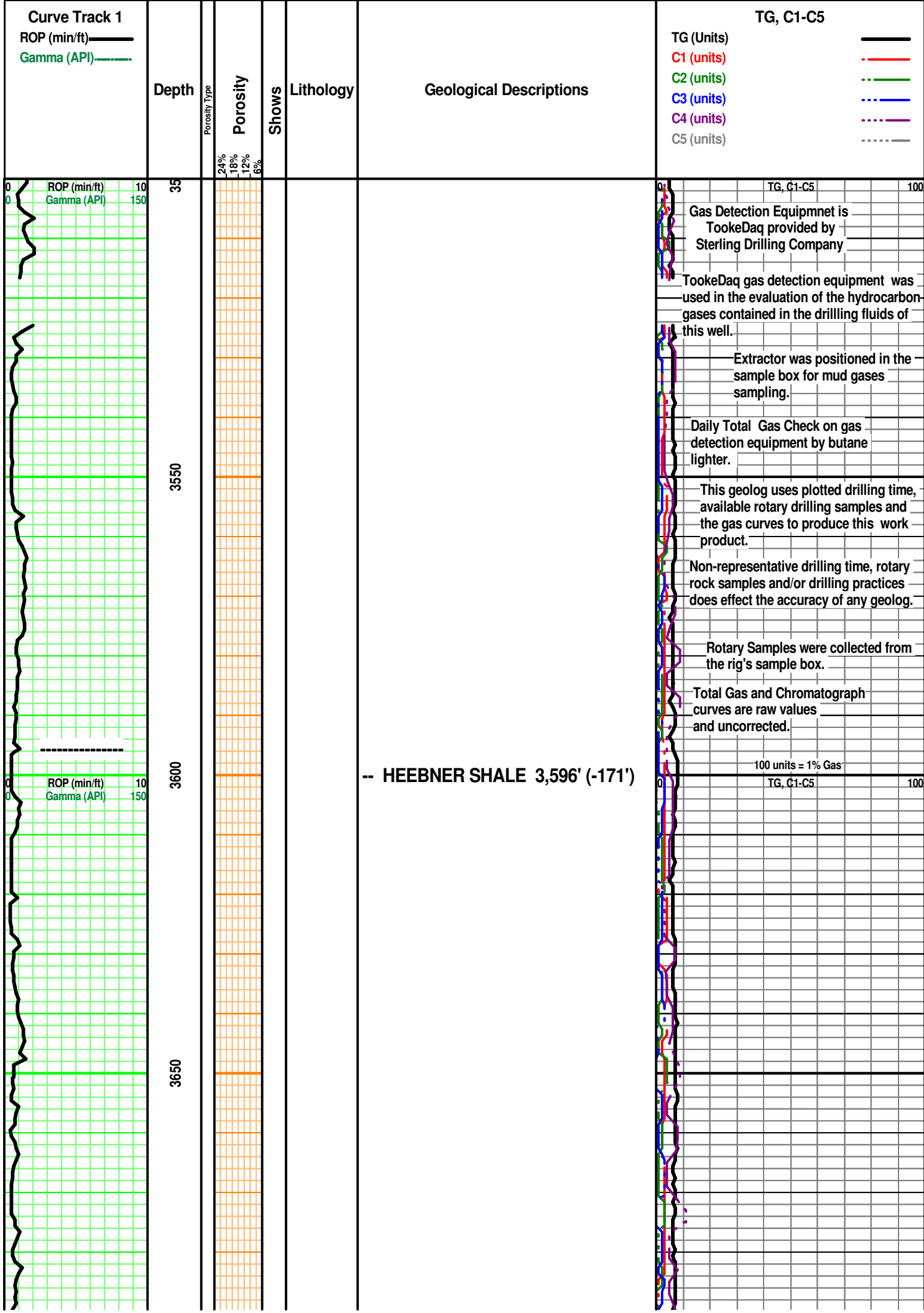
### ACTIVITY

- Lost circluation
- Circulate for same

- Circulate for same
- Rtd
- Trip

- Connection
- Rft

- Sidewall



Gas Detection Equipmnet is TookeDaq provided by Sterling Drilling Company

TookeDaq gas detection equipment was used in the evaluation of the hydrocarbon-gases contained in the drilling fluids of this well.

Extractor was positioned in the sample box for mud gases sampling.

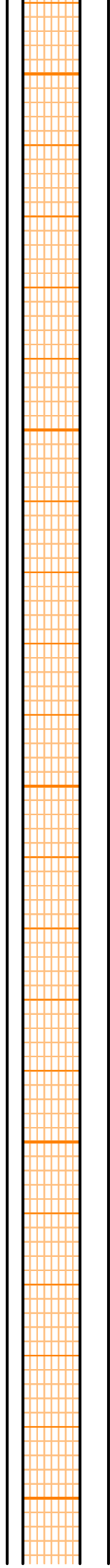
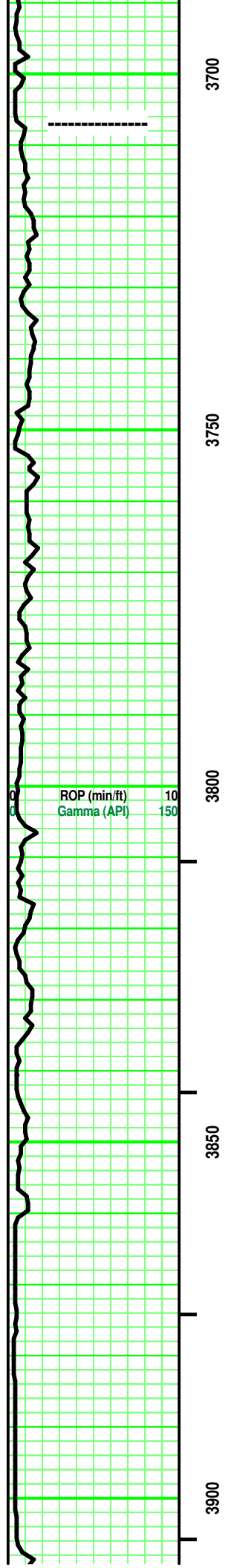
Daily Total Gas Check on gas detection equipment by butane lighter.

This geolog uses plotted drilling time, available rotary drilling samples and the gas curves to produce this work product.

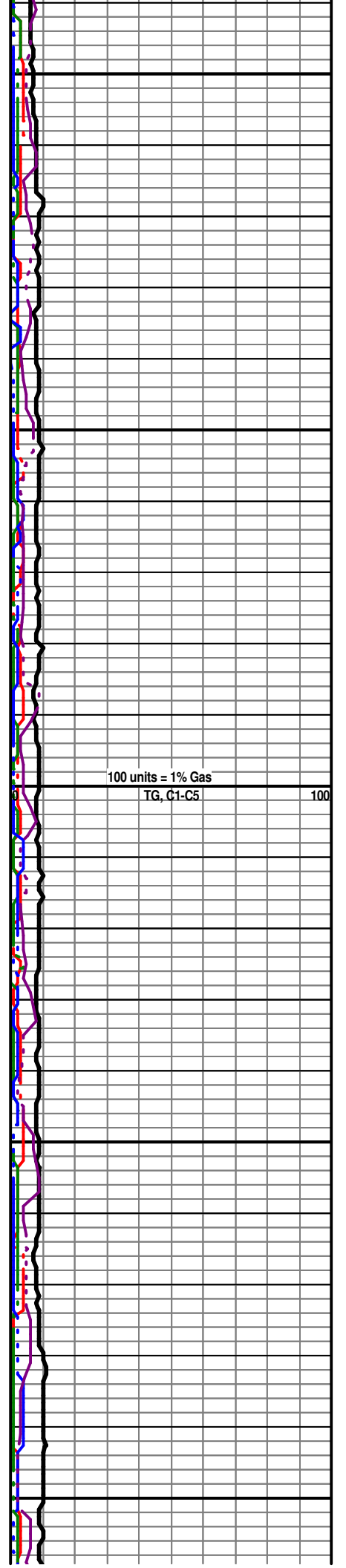
Non-representative drilling time, rotary rock samples and/or drilling practices does effect the accuracy of any geolog.

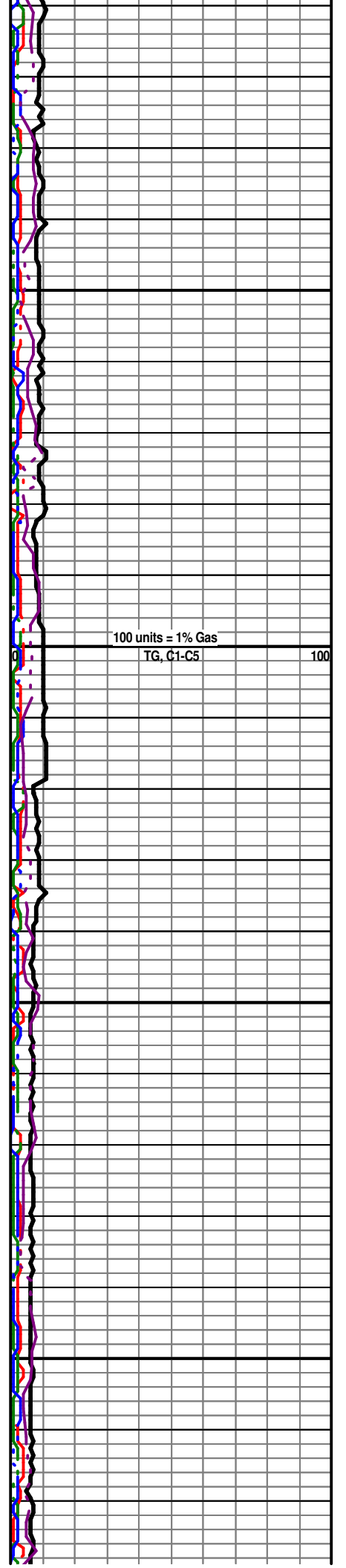
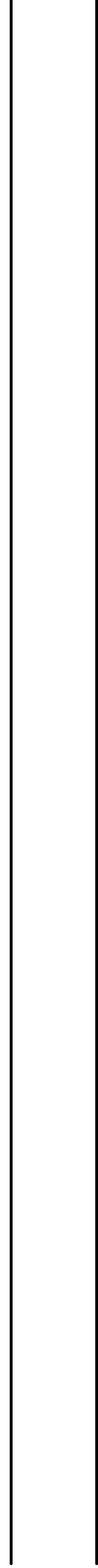
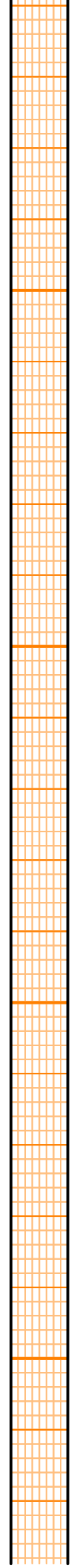
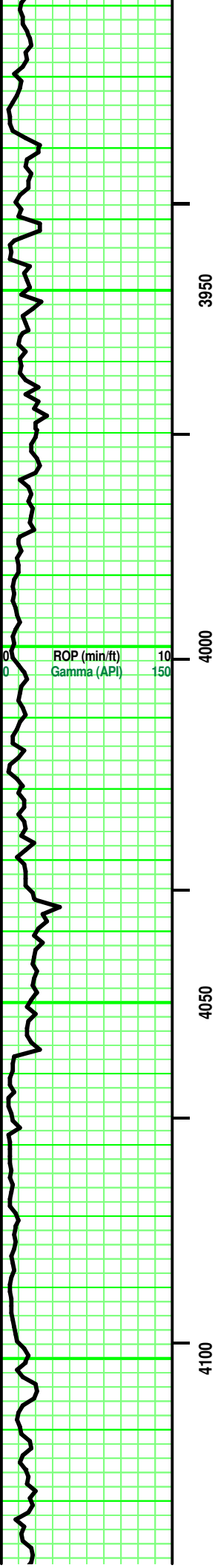
Rotary Samples were collected from the rig's sample box.

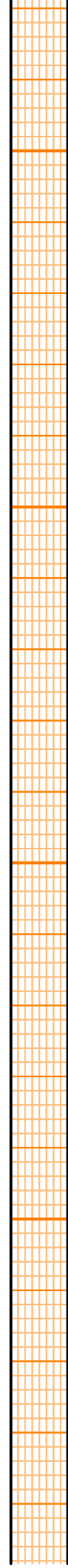
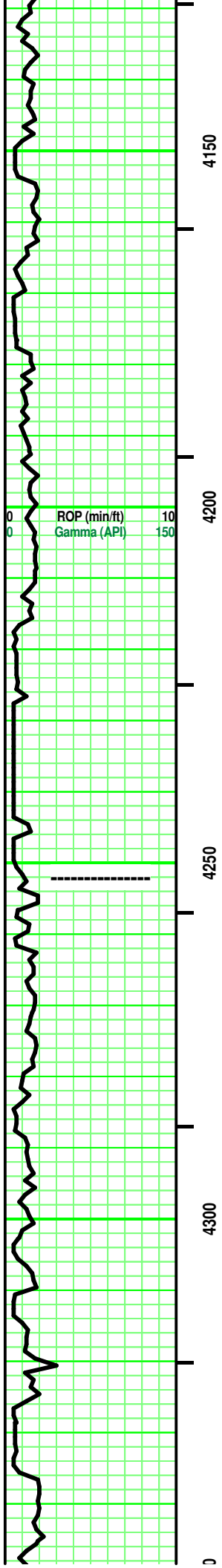
Total Gas and Chromatograph curves are raw values and uncorrected.



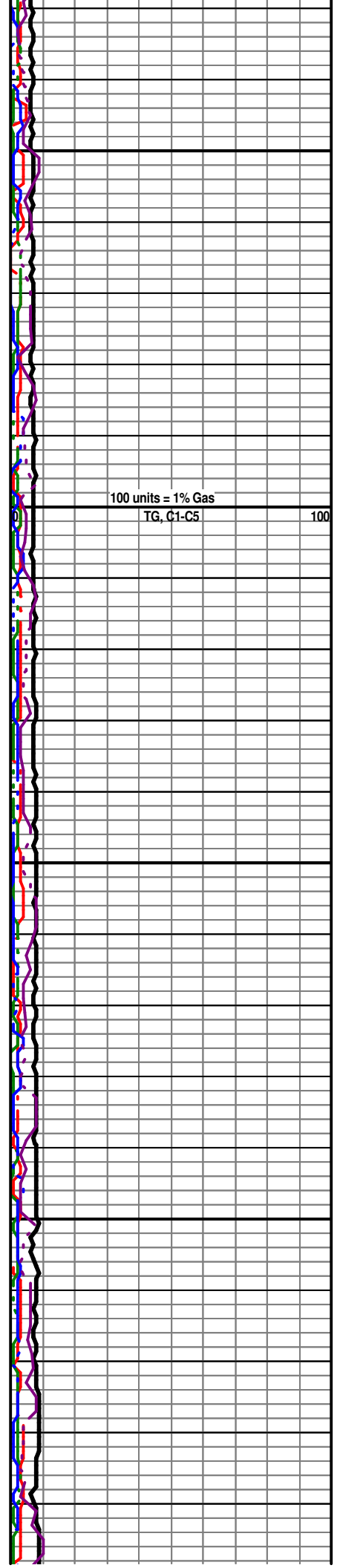
----- LANSING 3,707' (-282')

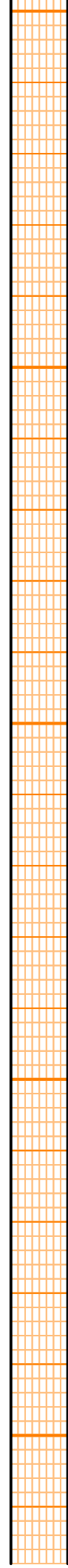
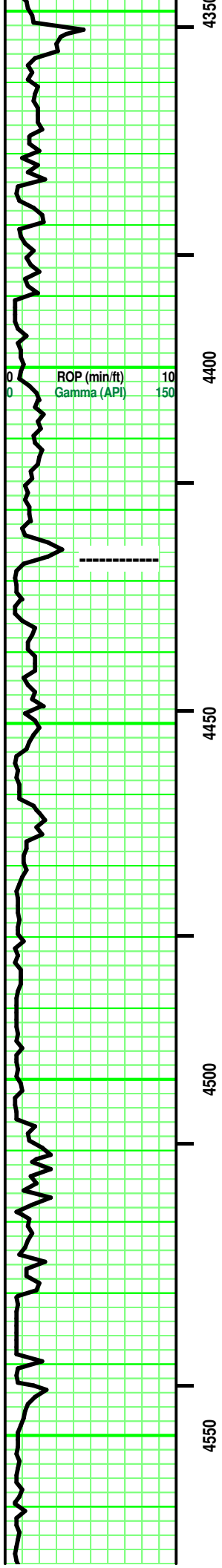




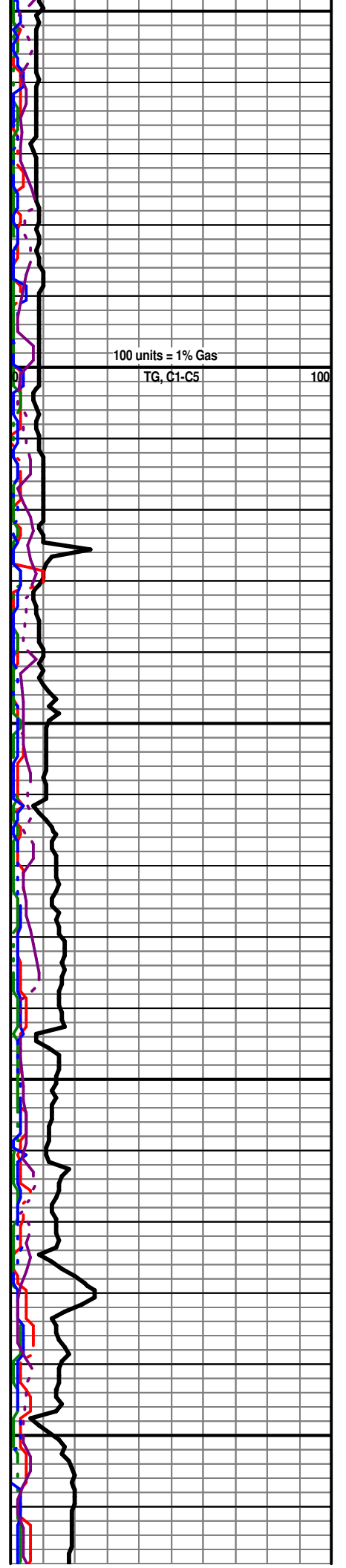


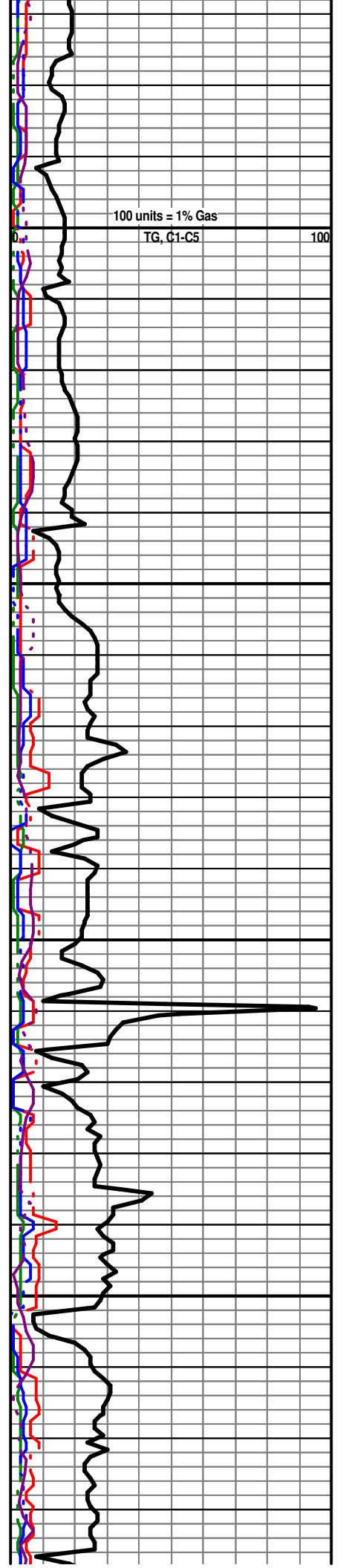
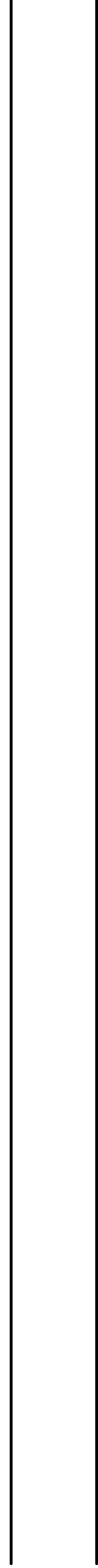
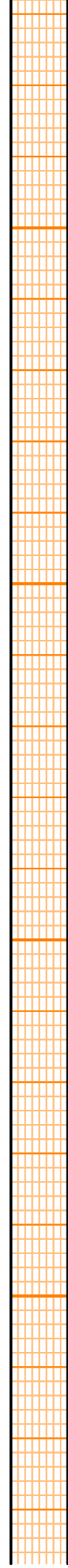
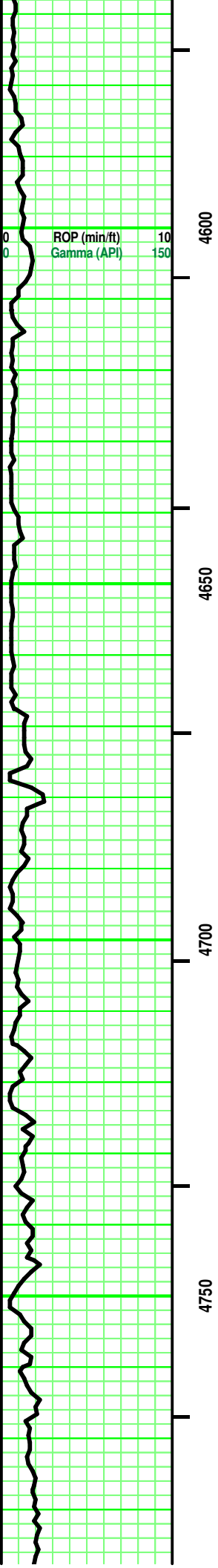
----- MARMATON 4,252' (- 827')

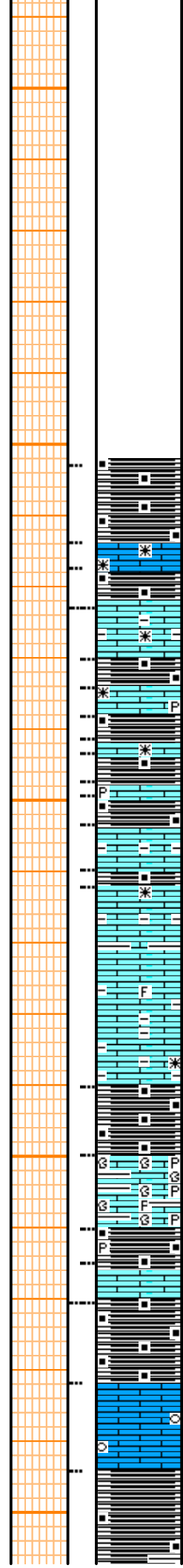
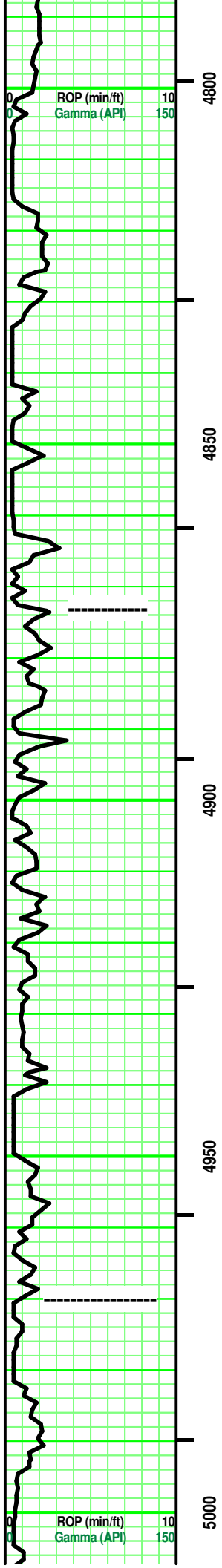




--- CHEROKEE SH 4,427' (-1,002')







SH (1) - Dark/ v Dark Gray. Sing. Black, carb, soft.

LS - Off White/ Lt Gray. Sing/ Mot. XF-/ Micro-xln. xln por. some argil/ shaly in part. partly Firm. No/ tr vis por.

SH - similar to (1) above.

**----- ATOKA 4,873' (-1,448')**  
Interbedded SH and LS

SH - Black. Sing. carb. soft. rare v Dark Grayish Black. rare minute pyritic flecks.

LS - Off Whitish Tan/ Off Whitish v Pale Lt Gray/ some Lt and Med Gray. some Sing/ some Mot or Mixed. XF- / Micro-xln. xln and part por. No/ tr Re-xln in part. No/ some Med/ Dark Gray argil and shaly SR, VF frags. mostly No/ v rare fossil frag. mostly No/ rare pyritic xtal.. No/ tr vis por.

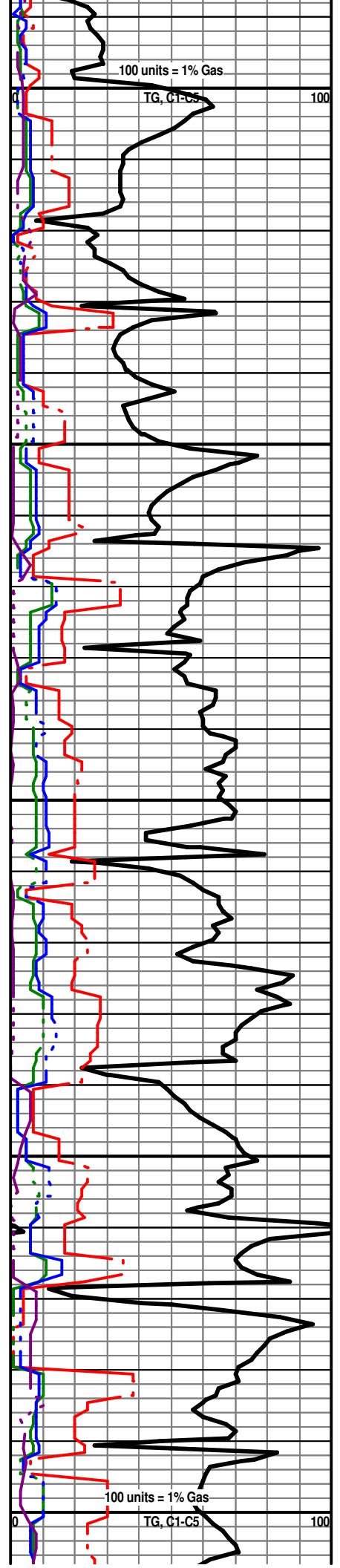
Add: SH (Brec) (2) - Grays/ Black shale mixed with SR, VF calc frags. Glauc grains (SR, VF). v minute pyritic flecks (some uniform/ some random). Firm.

SH (Brec) - similar to (2) above.

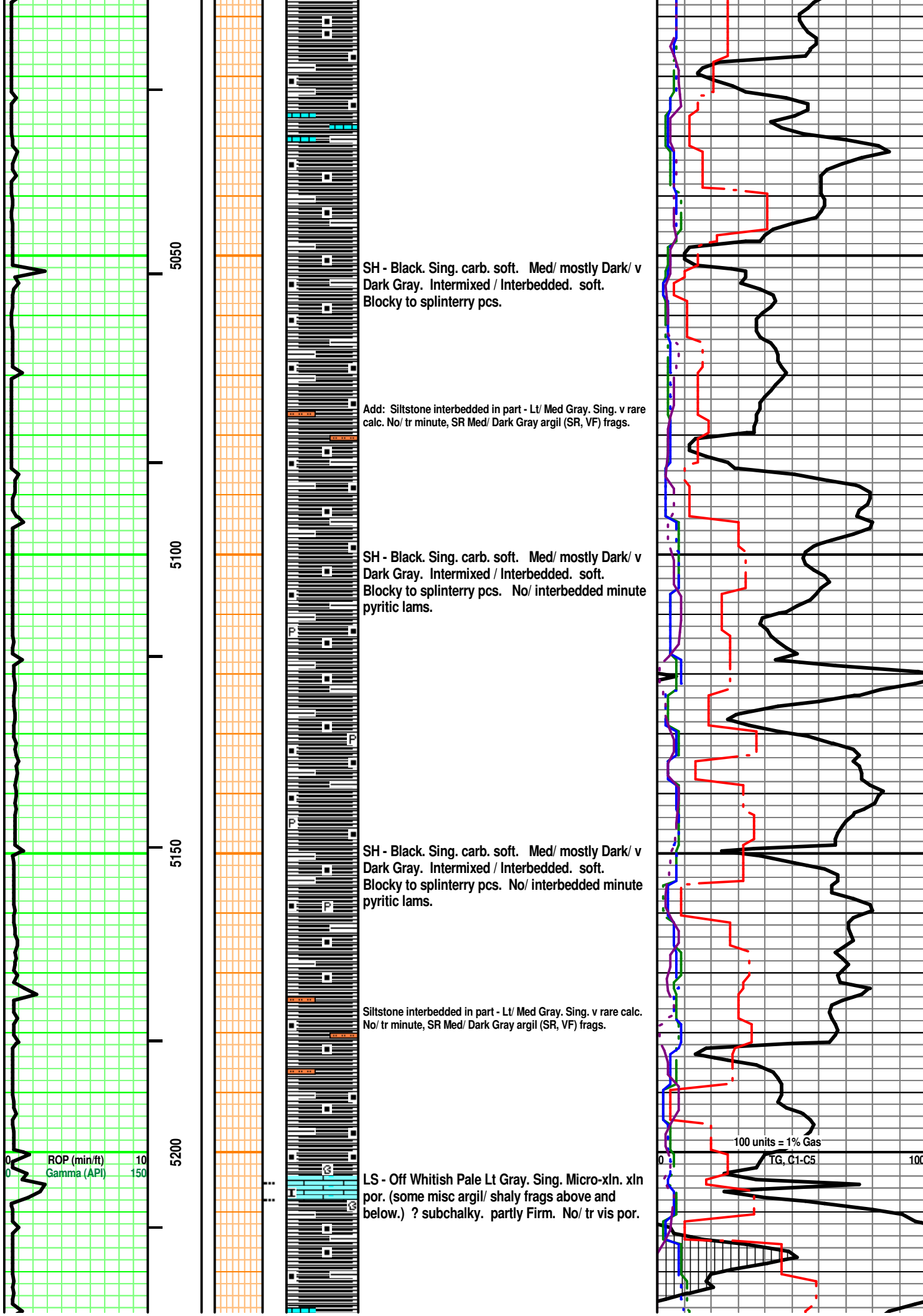
**----- MORROW SH 4,970' (-1,545')**  
SH - Black. Sing. carb. soft.

LS - Off White / Grays with depth. Sing/ tr Mixed. mostly Micro-/ tr XF-xln. xln por. No/ tr Re-xln. argil/shaly with depth. [couple pcs: LS - Off Whitish Tan VF Oolitic frags with semi-transparent/ opaque Matrix. Fair/ Good vis por.] Overall Firm. No/ tr vis por.

SH - Black. Sing. carb. soft. rare Med/ mostly Dark/ v Dark Gray. Intermixed / Interbedded. soft.







5050

5100

5150

5200

SH - Black. Sing. carb. soft. Med/ mostly Dark/ v Dark Gray. Intermixed / Interbedded. soft. Blocky to splinterry pcs.

Add: Siltstone interbedded in part - Lt/ Med Gray. Sing. v rare calc. No/ tr minute, SR Med/ Dark Gray argil (SR, VF) frags.

SH - Black. Sing. carb. soft. Med/ mostly Dark/ v Dark Gray. Intermixed / Interbedded. soft. Blocky to splinterry pcs. No/ interbedded minute pyritic lams.

SH - Black. Sing. carb. soft. Med/ mostly Dark/ v Dark Gray. Intermixed / Interbedded. soft. Blocky to splinterry pcs. No/ interbedded minute pyritic lams.

Siltstone interbedded in part - Lt/ Med Gray. Sing. v rare calc. No/ tr minute, SR Med/ Dark Gray argil (SR, VF) frags.

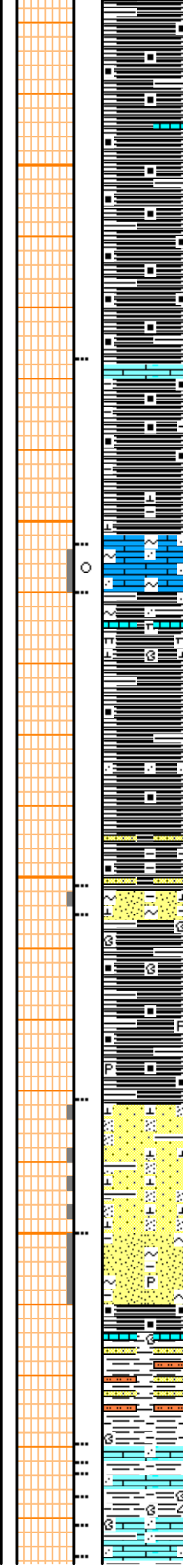
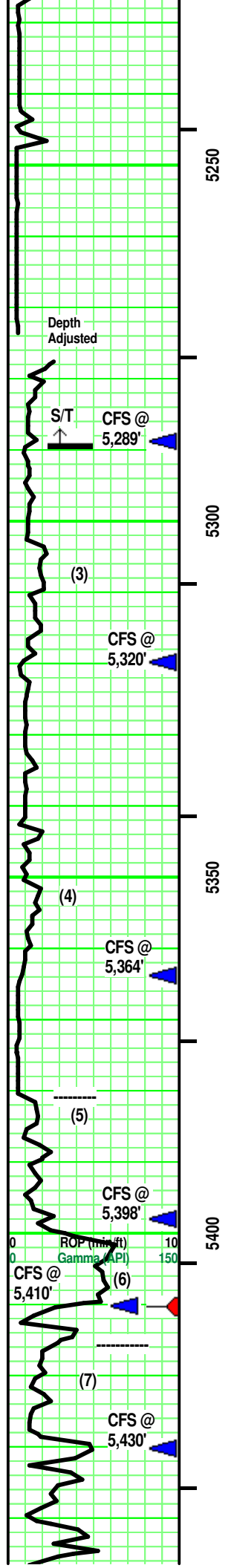
LS - Off Whitish Pale Lt Gray. Sing. Micro-xln. xln por. (some misc argil/ shaly frags above and below.) ? subchalky. partly Firm. No/ tr vis por.

100 units = 1% Gas

TG, C1-C5

ROP (min/ft) 10  
Gamma (API) 150

100



SH - Black. Sing. carb. soft. Med/ mostly Dark/ v Dark Gray. Intermixed. soft. Blocky to splintery pcs. No/ tr interbed- ded Gray LS (XF).

--- LOWER MORROW MARKER 5,277' (-1,852')  
 LS - Off Whitish Pale Lt Gray/ Lt Gray. Sing. Micro-xln. xln por. No/ tr subchalky in part. argil in part. partly Firm. No/ tr vis por.

SH - some Black. Sing. carb. soft - mixed with - Med/ mostly Dark/ v Dark Gray. Intermixed. No/ v rare calc with depth. Blocky pcs.

LS (3) - Off Whitish Lt Gray / Off Whitish v Pale Lt Brown/ Off White Mot. XF-/ tr Micro-xln. xln & part por. tr to some (XF, SA/SR to R) Green Glauc grains. tr (SA/SR, VF, vitrious) Qtz grains 'floating' in LS matrix. tr to some Re-xln and White Calc infill. partly Firm. argil to marly in part with depth. No/ tr vis por.

No odor. No/ rare ?, v dull yellow flourescence on chip. No free oil or gas. mostly No/ rare v Lt Brown stain. No cut/ residual. No acid/ residual

SH - Black. Sing. carb. soft. Med/ mostly Dark/ v Dark Gray. Intermixed. soft. Blocky. No/ tr interbedded SS similar to below (4). misc 'rubble' (SA, LS frags/

SS (4) - Off White/ Off Whitish Lt Gray Mot. XF/ tr silt Qtz grains. SA/SR. Mod sort. Mod sphericity. Point/ tr to some sutured/ rare 'floating' grain contact. tr vitreous/ tr frosted luster. Cacl infill. Glauc grains (XF, SR). No/ tr pyritic in part. tr/ some argil in part. Hi limy in part. partly Firm. No/ tr vis por.

5,380' Sample -- Mixture of (4) above with misc LS frags. LS - Pale Tan. Sing. Micro-xln. xln por. partly Friable. No vis por. LS - Off White/ Pale Lt. Gray. Sing/ Mot/ Mixed. XF-/ Micro-xln. xln & part por. tr/ lots Qtz grains (F/VF, SA, vitreous luster, sutured clusters/ some dissem grains). No/ tr heavily pyritic. Firm. No/ tr vis por.

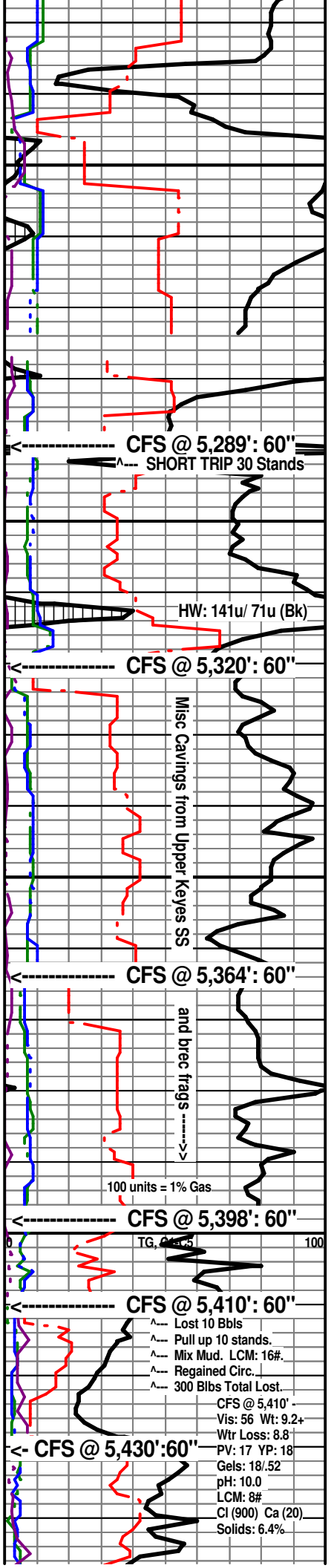
SS (5) - Clear/ Lt Blue to Blue Green. Mot/Mixed. Silt/ tr VF Quartz grains. SA/SR. highly sorted. Med sphericity, mostly vitreous luster/ some frosted. sutured / rare point/ some 'floating' grain contact. tr/ some v minute dark specks. Calc infill/ tr matrix. partly Firm. No/ tr vis por.

----- LOWER KEYS SS 5,400' (-1,975')  
 SS (6) - Off White/ Off Whitish Lt Gray Mot/ v rare Pale Lt Brown. Mot/Mixed. tr F/ XF/ tr silt Qtz grains. mostly SA/SR. Mod sort. Mod sphericity. sutured grain contact. tr vitreous/ tr frosted luster. Cacl infill. Glauc grains (XF, SR). No/ tr pyritic in part. tr/ some argil in part. Hi limy in part. partly Firm. No/ tr vis por.

Interbedded / Intermixed SS, SH & LS  
 SS (7) - Reddish Orange/ tr Tan, Off Whitish Gray. Sing/ some Mixed. Silt sized Quartz grains. SR/ SA. Hi sort. Mod sphericity, Vitreous Luster. Point/ some 'floating' grains contact. Highly Silty to highly calcareous (Tan). some interbedded SH - Black/ some Med and Dark Gray. misc inclusions.

LS pcs - Tans. Sing. tr XF-/ mostly Micro-xln. xln & part por. lots dissem mostly Silt/ rare VF sized quartz grains (SA/ some SR, vitreous luster) 'floating'/ tr to some point grain contact. No/ tr subchalky in part. partly Friable. No/ tr vis por.

SH - tr Black. Sing. carb. soft. Med/ mostly Dark Gray.



CFS @ 5,289': 60"  
 SHORT TRIP 30 Stands

HW: 141u/ 71u (Bk)

CFS @ 5,320': 60"

Misc Cavings from Upper Keyes SS

CFS @ 5,364': 60"

and brecc frags

100 units = 1% Gas

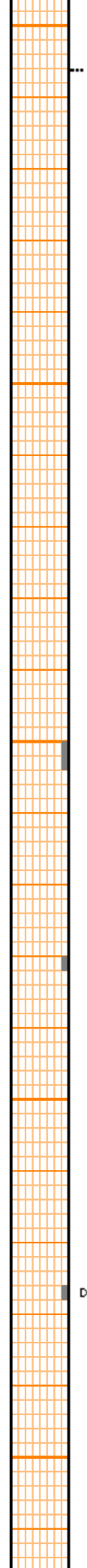
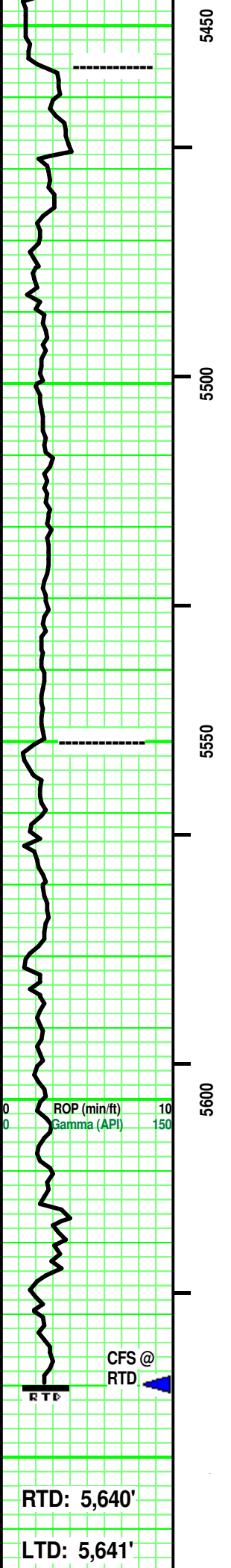
CFS @ 5,398': 60"

CFS @ 5,410': 60"

Lost 10 Bbls  
 Pull up 10 stands.  
 Mix Mud. LCM: 16#  
 Regained Circ.  
 300 Bbls Total Lost.

CFS @ 5,410' -  
 Vis: 56 Wt: 9.2+  
 Wtr Loss: 8.8  
 PV: 17 YP: 18  
 Gels: 18/52  
 pH: 10.0  
 LCM: 8#  
 Cl (900) Ca (20)  
 Solids: 6.4%

CFS @ 5,430': 60"



Intermixed. sandy, rare silty or limy in part.  
 couple pcs: CHERT - Clear/ Off White. SR. semi-transparent. frosted luster. No trip.

**- STE. GENEVIEVE 5,456' (-2,031')**  
 LS - Off White/ Tans. Sing. rare XF-/ mostly Micro-xln. xln & part por. lots dissem mostly Silt/ rare VF sized quartz grains (SA/ some SR, vitreous luster) 'floating'/ tr to some point grain contact. No/ tr subchalky in part. rare minute, gluac grains (SR) near top. tr/ some minute dark specks with intermittent. partly Friable. No/ tr vis por.

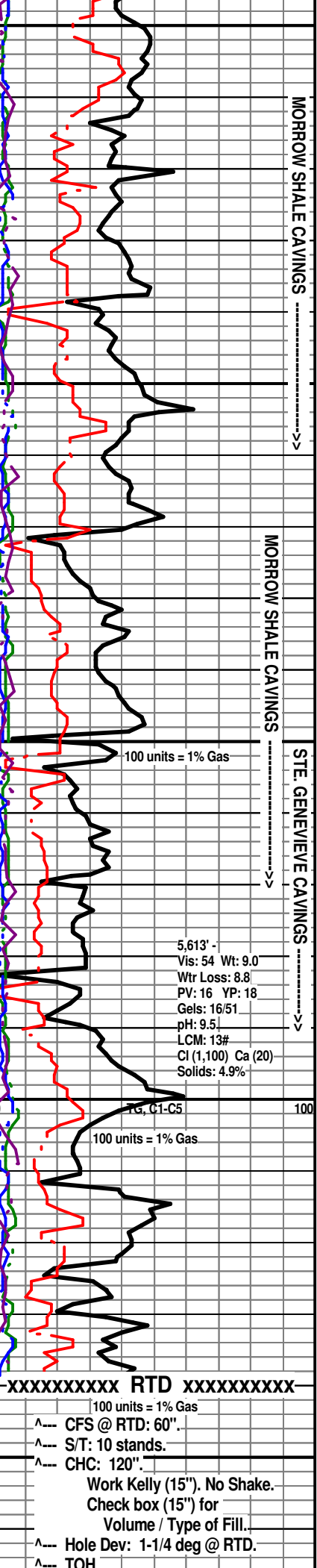
LS - Off White/ Tans. Sing. rare XF-/ mostly Micro-xln. xln & part por. lots dissem mostly Silt/ rare VF sized quartz grains (SA/ some SR, vitreous luster) 'floating'/ tr to some point grain contact. No/ tr subchalky in part. tr/ some minute dark specks with intermittent. Intermixed Med/ Dark Tan nodules with depth. No/ tr Re-xln. partly Friable. No/ tr vis por.

**----- ST. LOUIS 5,550' (-2,125')**  
 LS - Lt & Med Tan/ some Off White. Sing/ tr Mot. tr VF/ mostly XF/ some Micro-xln. xln & part por. No/ some Re-xln in part. Med Tan, calc nodules (SR, mod sphericity to oblate, opaque). No/ subchalky in part. No/ [few pcs: CHERT - Clear/ Lt Tan. Sing. Transparent. No tripolitic. No inclusions.] partly Firm. No/ tr vis por.

Add: LS - Off White Micro-Oolites ('ghost') in Off White Matrix. subchalky. partly Friable. tr vis por.

LS - Lt & Med Tan/ some Off White. Sing/ tr Mot. tr VF/ mostly XF/ some Micro-xln. xln & part por. No/ some Re-xln in part. Med Tan, calc nodules (SR, mod sphericity to oblate, opaque). No/ subchalky in part. No/ [few pcs: CHERT - Clear/ Lt Tan. Sing. Transparent. No tripolitic. No inclusions.] partly Firm. No/ tr vis por.

Add: CHERT - Off White. Sing. Opaque. minute Dark Tan, oblate inclusions. No/ tr Black, asphaltic / carb flecks (A, SA). No tripolitic.



RTD: 5,640'  
 LTD: 5,641'

5,613' -  
 Vis: 54 Wt: 9.0  
 Wtr Loss: 8.8  
 PV: 16 YP: 18  
 Gels: 16/51  
 pH: 9.5  
 LCM: 13#  
 Cl (1,100) Ca (20)  
 Solids: 4.9%  
 100 units = 1% Gas

XXXXXXXXXX RTD XXXXXXXXXXXX  
 100 units = 1% Gas  
 ^--- CFS @ RTD: 60".  
 ^--- S/T: 10 stands.  
 ^--- CHC: 120".  
 Work Kelly (15"). No Shake.  
 Check box (15") for  
 Volume / Type of Fill.  
 ^--- Hole Dev: 1-1/4 deg @ RTD.  
 ^--- TOH.

ATD: 5,642'

**GRAHAM # 1 - 30 X**

1,520' FNL & 2,300' FEL 30 - T29S - R41 W  
Stanton County, Kansas

**STELBAR OIL CORPORATION**  
Wichita, Kansas

E-LOG. [Weatherford]

Geologist:  
Curtis Covey  
COVEY - The Well Watchers

Well Number: 1,164