

**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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or  
Recompletion Date

Date Reached TD

Completion Date or  
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

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

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

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

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

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

Total 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** Letter of Confidentiality Received

Date: \_\_\_\_\_

 Confidential Release Date: \_\_\_\_\_ Wireline Log Received Geologist Report Received UIC DistributionALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



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

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

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

| 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 |
| _____ Perforate<br>_____ Protect Casing<br>_____ Plug Back TD<br>_____ Plug Off Zone |                  |                |              |                            |
|                                                                                      |                  |                |              |                            |

| 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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|

|                                                                                                                                                                   |                                                                                                                                                                                                                                                                       |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<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> <i>(Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL:<br>_____<br>_____ |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|

## Summary of Changes

Lease Name and Number: MYERS 1

API/Permit #: 15-007-23651-00-00

Doc ID: 1063298

Correction Number: 1

Approved By: NAOMI JAMES

| Field Name                                         | Previous Value                                                                                                                                                          | New Value                                                                                                                                                               |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approved Date                                      | 06/06/2011                                                                                                                                                              | 10/25/2011                                                                                                                                                              |
| Date of First or Resumed Production or SWD or Enhr |                                                                                                                                                                         | 07/21/2011                                                                                                                                                              |
| Disposition Of Gas - Sold                          | No                                                                                                                                                                      | Yes                                                                                                                                                                     |
| LocationInfoLink                                   | <a href="https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=14&amp;t">https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=14&amp;t</a> | <a href="https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=14&amp;t">https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=14&amp;t</a> |
| Method Of Completion - Perf                        | No                                                                                                                                                                      | Yes                                                                                                                                                                     |
| Producing Method Pumping                           | No                                                                                                                                                                      | Yes                                                                                                                                                                     |
| Production - Barrels Oil                           |                                                                                                                                                                         | 4                                                                                                                                                                       |
| Production - Barrels of Water                      |                                                                                                                                                                         | 330                                                                                                                                                                     |
| Production - Gas-Oil Ratio                         |                                                                                                                                                                         | 3750                                                                                                                                                                    |
| Production - MCF Gas                               |                                                                                                                                                                         | 15                                                                                                                                                                      |

Summary of changes for correction 1 continued

| Field Name  | Previous Value                                              | New Value                                                   |
|-------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Save Link   | ../../../../kcc/detail/operatorEditDetail.cfm?docID=1057179 | ../../../../kcc/detail/operatorEditDetail.cfm?docID=1063298 |
| Total Depth | 1453                                                        | 5700                                                        |
| Well Type   | SIGW                                                        | OG                                                          |



**CONFIDENTIAL**

**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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- 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

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

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

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

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

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

Total 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**

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



1057179

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

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

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

| 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 |
| _____ Perforate<br>_____ Protect Casing<br>_____ Plug Back TD<br>_____ Plug Off Zone |                  |                |              |                            |
|                                                                                      |                  |                |              |                            |

| 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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|

|                                                                                                                                                                   |                                                                                                                                                                                                                                                                       |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<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> <i>(Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL:<br>_____<br>_____ |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

June 05, 2011

DEAN PATTISSON  
Woolsey Operating Company, LLC  
125 N MARKET STE 1000  
WICHITA, KS 67202-1729

Re: ACO1  
API 15-007-23651-00-00  
MYERS 1  
NE/4 Sec.14-35S-13W  
Barber County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
DEAN PATTISSON

# ALLIED CEMENTING CO., LLC. 040693

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Medicine Lodge KS.

|                         |                 |                                    |                   |                            |                            |                          |                           |
|-------------------------|-----------------|------------------------------------|-------------------|----------------------------|----------------------------|--------------------------|---------------------------|
| DATE <u>2-20-2011</u>   | SEC. <u>14</u>  | TWP. <u>35 S</u>                   | RANGE <u>13 W</u> | CALLED OUT <u>12:30 PM</u> | ON LOCATION <u>1:15 PM</u> | JOB START <u>5:10 PM</u> | JOB FINISH <u>6:00 PM</u> |
| LEASE <u>Myers</u>      | WELL # <u>1</u> | LOCATION <u>Hardner, KS. Zwest</u> |                   |                            | COUNTY <u>Barber</u>       | STATE <u>KS.</u>         |                           |
| OLD OR NEW (Circle one) |                 | <u>1/2 south w/s</u>               |                   |                            |                            |                          |                           |

CONTRACTOR H-2 Drilling  
 TYPE OF JOB Production  
 HOLE SIZE 7 7/8 T.D. 5600+  
 CASING SIZE 5 1/2 x 15.8 DEPTH WEEL FILE  
 TUBING SIZE WEEL FILE DEPTH WEEL FILE  
 DRILL PIPE Regulator DEPTH WEEL FILE  
 TOOL Drig & Core DEPTH WEEL FILE  
 PRES. MAX 1500 Tests / Meters WEEL FILE  
 MEAS. LINE WEEL FILE SHOE JOINT 41.27  
 CEMENT LEFT IN CSG. WEEL FILE  
 PERFS. WEEL FILE  
 DISPLACEMENT 127 1/2 Bbls 2% KCL water

OWNER Woolsey Operating

CEMENT

AMOUNT ORDERED 75 sx 60:40:4% GEL  
150 sx Class H + 10% Gypseal 10% salt 6"  
Kolseal - 8% FI-160 + 1/4" floseal 13 Gals Clapro

|          |                |         |         |
|----------|----------------|---------|---------|
| COMMON A | 45 sx          | @ 15.45 | 695.25  |
| POZMIX   | 30 sx          | @ 8.00  | 240.00  |
| GEL      | 3 sx           | @ 20.80 | 62.40   |
| CHLORIDE |                | @       |         |
| ASC      |                | @       |         |
| H        | 150 sx         | @ 16.80 | 2520.00 |
| Gypseal  | 14 sx          | @ 29.20 | 408.80  |
| Salt     | 16 sx          | @ 12.00 | 192.00  |
| Kolseal  | 900 #          | @ .89   | 801.00  |
| FI-160   | 113 #          | @ 13.30 | 1502.90 |
| Floseal  | 37.5 #         | @ 2.50  | 93.75   |
| Clapro   | 13 Gals        | @ 3.25  | 406.25  |
|          |                | @       |         |
| HANDLING | 280            | @ 2.40  | 672.00  |
| MILEAGE  | 280 / .10 / 25 |         | 700.00  |
| TOTAL    |                |         | 8294.35 |

EQUIPMENT

PUMP TRUCK CEMENTER Carl Balding / Matt Thimesch  
 #471-265 HELPER Tason Thimesch  
 BULK TRUCK # 364 DRIVER Raymond Romans  
 BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:

Run 5251' 5 1/2 casing, Drop ball + circulate on bottom for 1 hour, Mix 25 sx 60:40:4% GEL for Rat Hole, mix 50 sx 60:40:4 scavenger slurry mix + pump 150 sx Class H + Additives wash pump + lines + Release plug. Displace with 127 1/2 Bbl 2% KCL water. ~~Release~~ Bump plug, Release pressure + float hold (thank you)

CHARGE TO: Woolsey Operating  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

|                   |       |     |      |
|-------------------|-------|-----|------|
| DEPTH OF JOB      | 5251' |     |      |
| PUMP TRUCK CHARGE | 2185  | @   | 00   |
| EXTRA FOOTAGE     |       | @   |      |
| MILEAGE           | 25    | @ 7 | 175  |
| MANIFOLD          |       | @   |      |
|                   |       | @   |      |
|                   |       | @   |      |
| TOTAL             |       |     | 2360 |

PLUG & FLOAT EQUIPMENT

|                      |         |        |         |
|----------------------|---------|--------|---------|
| 1- AFU float shoe    | @       | 214.20 |         |
| 1- Latch Down plug   | @       | 163.80 |         |
| 10- Turbolizers      | @ 40.60 | 406.00 |         |
| 24- Recip scratchers | @ 23.94 | 574.56 |         |
| 1- Basket            | @       | 161.00 |         |
| TOTAL                |         |        | 1519.56 |

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 8294.35  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME MIKE THARP  
 SIGNATURE Mike Tharp



# ALLIED CEMENTING CO., LLC. 040645

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
*Madeline Lodgett*

|                         |                 |                                             |                  |            |                      |                          |                           |
|-------------------------|-----------------|---------------------------------------------|------------------|------------|----------------------|--------------------------|---------------------------|
| DATE <i>2-8-11</i>      | SEC. <i>14</i>  | TWP. <i>35s</i>                             | RANGE <i>13w</i> | CALLED OUT | ON LOCATION          | JOB START <i>4:00 am</i> | JOB FINISH <i>5:00 am</i> |
| LEASE <i>Myers</i>      | WELL # <i>1</i> | LOCATION <i>2 W of Hardner 1/2 S W intg</i> |                  |            | COUNTY <i>Barber</i> | STATE <i>Ks</i>          |                           |
| OLD OR NEW (Circle one) |                 |                                             |                  |            |                      |                          |                           |

CONTRACTOR *H-2 O-Ming*

TYPE OF JOB *Surface*

HOLE SIZE *14 3/4* T.D. *254'*

CASING SIZE *10 3/4* DEPTH *251'*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX *406 psi* MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. *20'*

PERFS.

DISPLACEMENT *22 1/2 bbls H<sub>2</sub>O*

OWNER *Woolsey operating*

CEMENT

AMOUNT ORDERED *240 sk class A + 3% cost 2% gel*

EQUIPMENT

PUMP TRUCK CEMENTER *Matt Thinesch*

# *471/265* HELPER *Sason Thinesch*

BULK TRUCK

# *356/252* DRIVER *Raymond R.*

BULK TRUCK

# DRIVER

COMMON *A 240 SK @ 15 45 3708<sup>00</sup>*

POZMIX @

GEL *5 SK @ 20<sup>00</sup> 104<sup>00</sup>*

CHLORIDE *9 SK @ 58<sup>00</sup> 523<sup>00</sup>*

ASC **WELL FILE** @

Regulatory Correspondence @

Drilling Comp Workovers @

Tests / Meters Operations @

HANDLING *254 @ 2<sup>40</sup> 609<sup>60</sup>*

MILEAGE *254/-10/20 508<sup>00</sup>*

TOTAL *5453<sup>40</sup>*

REMARKS:

*Back circulation with RTG  
pump 3 bbls H<sub>2</sub>O ahead  
RTG 240 sk cement Displace 22 1/2 bbls H<sub>2</sub>O  
SHUT IN. cement did circulate*

SERVICE

DEPTH OF JOB *251'*

PUMP TRUCK CHARGE *1018<sup>00</sup>*

EXTRA FOOTAGE @

MILEAGE *20 @ 7<sup>00</sup> 140<sup>00</sup>*

MANIFOLD @

TOTAL *1158<sup>00</sup>*

CHARGE TO: *Woolsey operating*

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

To Allied Cementing Co., LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)

TOTAL CHARGES ~~5453~~

DISCOUNT ~~5453~~ IF PAID IN 30 DAYS

PRINTED NAME *MIKE THARP*

SIGNATURE *Mike Tharp*



# DRILL STEM TEST REPORT

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16091

**DST#: 1**

ATTN:

Test Start: 2011.02.14 @ 09:38:00

## GENERAL INFORMATION:

Formation: **CHEROKEE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:24:30

Time Test Ended: 20:15:30

Test Type: Conventional Bottom Hole (Initial)

Tester: JARED SCHECK

Unit No: 3320-GB-

**Interval: 4790.00 ft (KB) To 4852.00 ft (KB) (TVD)**

Reference Elevations: 1459.00 ft (KB)

Total Depth: 4852.00 ft (KB) (TVD)

1447.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

**Serial #: 8419**

**Inside**

Press@RunDepth: 92.17 psia @ 4848.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.02.14

End Date: 2011.02.14

Last Calib.: 2011.02.14

Start Time: 09:38:00

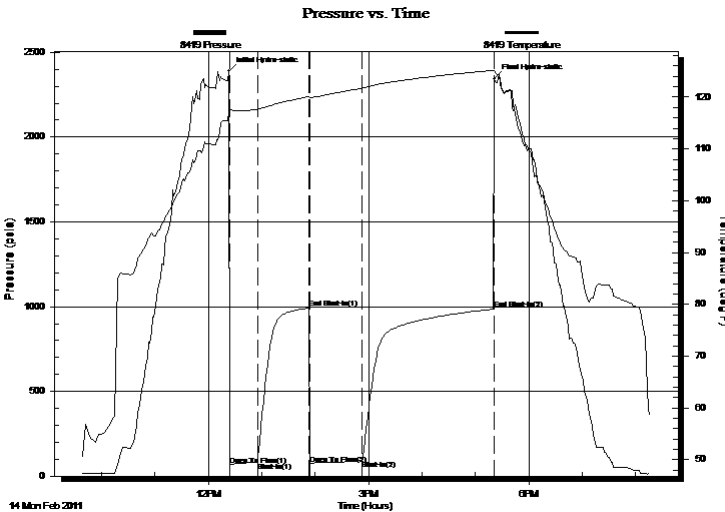
End Time: 20:15:30

Time On Btm: 2011.02.14 @ 12:23:30

Time Off Btm: 2011.02.14 @ 17:21:30

**TEST COMMENT:** 30/INITIAL OPEN:FAIR BLOW BUILT BOTTOM OF BUCKET IN 8 MINUTES  
60/INITIAL SHUT IN:NO BLOW BACK  
60/FINAL OPEN:STRONG BLOW BUILT BOTTOM OF BUCKET IN 1 MINUTE  
120/FINAL SHUT IN:VERY WEAK SURFACE BLOW

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2388.64         | 117.90       | Initial Hydro-static |
| 1           | 64.25           | 117.54       | Open To Flow (1)     |
| 32          | 81.57           | 117.64       | Shut-In(1)           |
| 90          | 991.91          | 120.13       | End Shut-In(1)       |
| 91          | 68.13           | 119.91       | Open To Flow (2)     |
| 150         | 92.17           | 121.71       | Shut-In(2)           |
| 297         | 985.35          | 125.15       | End Shut-In(2)       |
| 298         | 2343.24         | 125.14       | Final Hydro-static   |

## Recovery

## Gas Rates

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 70.00       | MUD         | 0.34         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

|  | Choke (inches) | Pressure (psia) | Gas Rate (Mcf/d) |
|--|----------------|-----------------|------------------|
|  |                |                 |                  |



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16091

**DST#: 1**

ATTN:

Test Start: 2011.02.14 @ 09:38:00

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 4531.00 ft | Diameter: 3.80 inches | Volume: 63.56 bbl              | Tool Weight: 1000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 240.00 ft  | Diameter: 2.25 inches | Volume: 1.18 bbl               | Weight to Pull Loose: lb           |
|                           |                    |                       | <u>Total Volume: 64.74 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 10.00 ft           |                       |                                | String Weight: Initial 62000.00 lb |
| Depth to Top Packer:      | 4790.00 ft         |                       |                                | Final lb                           |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 62.00 ft           |                       |                                |                                    |
| Tool Length:              | 91.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 4762.00    |                               |
| Shut-In Tool     | 5.00        |            |          | 4767.00    |                               |
| Hydraulic Tool   | 5.00        |            |          | 4772.00    |                               |
| Jars             | 6.00        |            |          | 4778.00    |                               |
| Safety Joint     | 2.00        |            |          | 4780.00    |                               |
| Packer           | 5.00        |            |          | 4785.00    | 29.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4790.00    |                               |
| Change Over Sub  | 0.75        |            |          | 4790.75    |                               |
| Drill Pipe       | 32.50       |            |          | 4823.25    |                               |
| Change Over Sub  | 0.75        |            |          | 4824.00    |                               |
| Perforations     | 23.00       |            |          | 4847.00    |                               |
| Recorder         | 1.00        | 8419       | Inside   | 4848.00    |                               |
| Recorder         | 1.00        | 8524       | Outside  | 4849.00    |                               |
| Bullnose         | 3.00        |            |          | 4852.00    | 62.00 Bottom Packers & Anchor |

**Total Tool Length: 91.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

WOOLSEY OPERATING LLC  
 125 N MARKET STE 1000 WICHITA KS  
 67202+1729  
 ATTN:

**MYERS #1**  
**14-35-13 BARBER**  
 Job Ticket: 16091      **DST#: 1**  
 Test Start: 2011.02.14 @ 09:38:00

### Mud and Cushion Information

|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 48.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 8.80 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psia |                 |         |
| Salinity: 4000.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

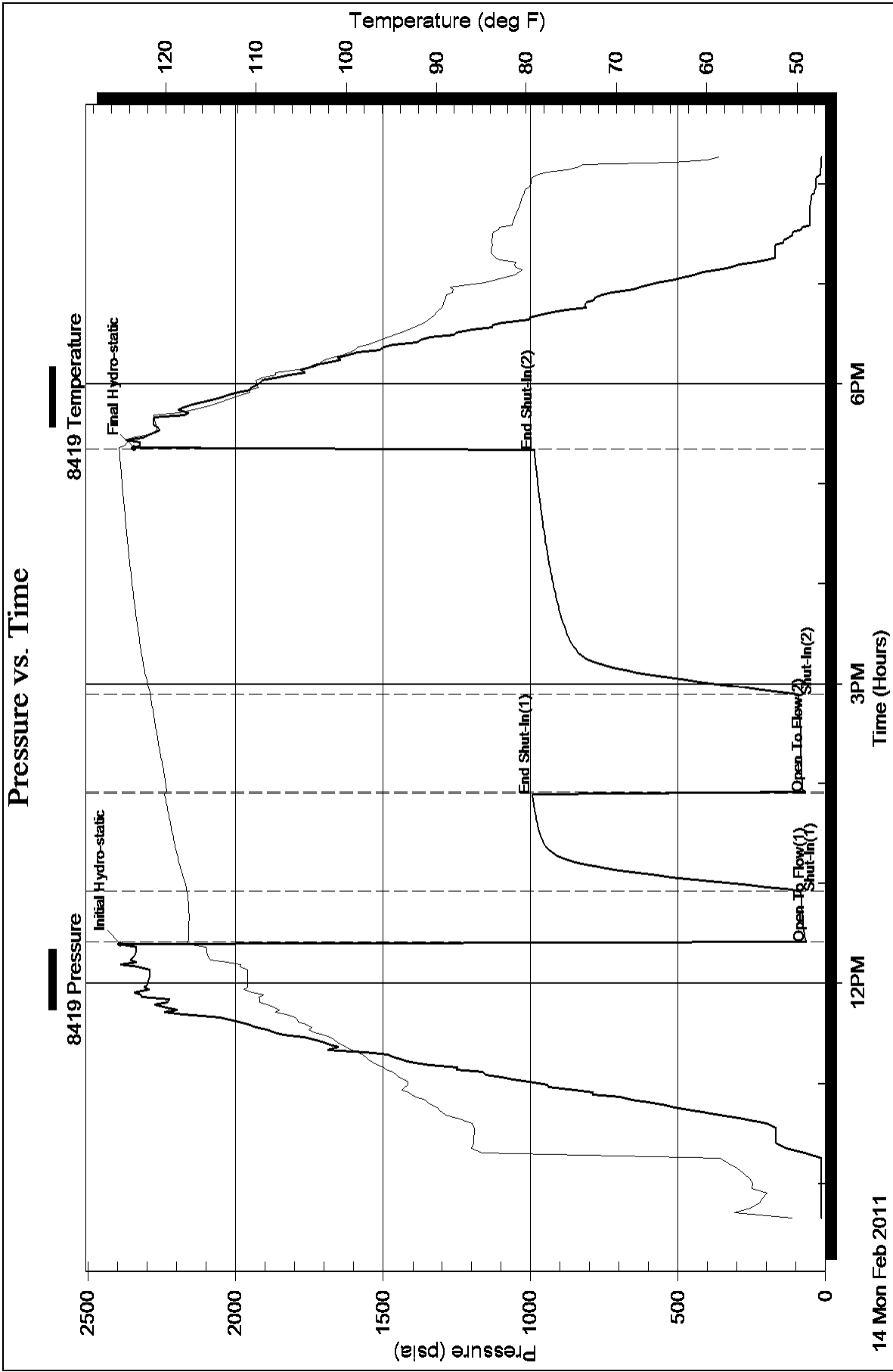
### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 70.00        | MUD         | 0.344         |

Total Length: 70.00 ft      Total Volume: 0.344 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

# Pressure vs. Time





# DRILL STEM TEST REPORT

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16092

**DST#: 2**

ATTN: SCOTT ALBERG

Test Start: 2011.02.15 @ 13:44:00

## GENERAL INFORMATION:

Formation: **MISSISSIPPI**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:41:00

Time Test Ended: 23:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: JARED SCHECK

Unit No: 3320-GB -210

**Interval: 4886.00 ft (KB) To 4910.00 ft (KB) (TVD)**

Reference Elevations: 1459.00 ft (KB)

Total Depth: 4910.00 ft (KB) (TVD)

1447.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 12.00 ft

**Serial #: 8419**

**Inside**

Press@RunDepth: 101.17 psig @ 4906.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.15

End Date: 2011.02.15

Last Calib.: 2011.02.15

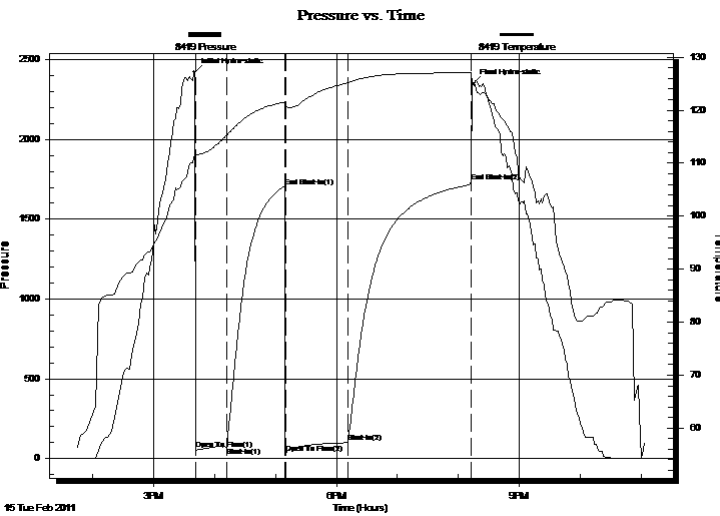
Start Time: 13:45:00

End Time: 23:03:30

Time On Btm: 2011.02.15 @ 15:40:00

Time Off Btm: 2011.02.15 @ 20:14:30

**TEST COMMENT:** 30/INITIAL OPEN:STRONG BLOW BUILT BOTTOM OF BUCKET IN 4 MINUTES  
60/INITIAL SHUT IN:NO BLOW BACK  
60/FINAL OPEN:STRONG BLOW BUILT BOTTOM OF BUCKET IN 1 MIUNTE GAS TO SURFACE IN 6 MINUTE  
120/FINAL SHUT IN :1 INCH BLOW BACK



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2420.03         | 111.61       | Initial Hydro-static |
| 1           | 55.69           | 111.50       | Open To Flow (1)     |
| 32          | 73.84           | 115.21       | Shut-In(1)           |
| 89          | 1704.10         | 121.56       | End Shut-In(1)       |
| 90          | 30.85           | 120.96       | Open To Flow (2)     |
| 151         | 101.17          | 125.15       | Shut-In(2)           |
| 273         | 1734.07         | 127.13       | End Shut-In(2)       |
| 275         | 2349.54         | 125.13       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                 | Volume (bbl) |
|-------------|-----------------------------|--------------|
| 126.00      | GASSY OIL CUT MUD           | 0.62         |
| 0.00        | 10%GAS 10%OIL 80%MUD        | 0.00         |
| 120.00      | OILY MUD CUT WATER          | 0.64         |
| 0.00        | 15%OIL 10%MUD 75%WATER      | 0.00         |
| 0.00        | CHLORIDES 68,000            | 0.00         |
| 0.00        | RESISTIVITY .15 @76 DEGREES | 0.00         |

## Gas Rates

|                | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.13           | 3.72            | 1.39             |
| Last Gas Rate  | 0.13           | 17.50           | 6.55             |
| Max. Gas Rate  | 0.13           | 17.50           | 6.55             |



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16092

**DST#: 2**

ATTN: SCOTT ALBERG

Test Start: 2011.02.15 @ 13:44:00

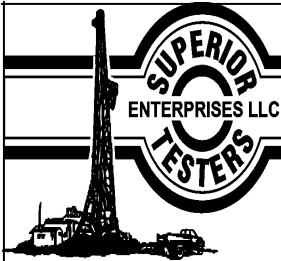
**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 4624.00 ft | Diameter: 3.80 inches | Volume: 64.86 bbl              | Tool Weight: 1000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 240.00 ft  | Diameter: 2.25 inches | Volume: 1.18 bbl               | Weight to Pull Loose: 80000.00 lb  |
|                           |                    |                       | <u>Total Volume: 66.04 bbl</u> | Tool Chased 2.00 ft                |
| Drill Pipe Above KB:      | 7.00 ft            |                       |                                | String Weight: Initial 63000.00 lb |
| Depth to Top Packer:      | 4886.00 ft         |                       |                                | Final 64000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 24.00 ft           |                       |                                |                                    |
| Tool Length:              | 53.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments: TOOL CHASED 2 FEET TO BOTTOM / GAS TO SURFACE ON 2 ND OPEN SEE GAS REPORT

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 4858.00    |                               |
| Shut-In Tool     | 5.00        |            |          | 4863.00    |                               |
| Hydraulic Tool   | 5.00        |            |          | 4868.00    |                               |
| Jars             | 6.00        |            |          | 4874.00    |                               |
| Safety Joint     | 2.00        |            |          | 4876.00    |                               |
| Packer           | 5.00        |            |          | 4881.00    | 29.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4886.00    |                               |
| Perforations     | 19.00       |            |          | 4905.00    |                               |
| Recorder         | 1.00        | 8419       | Inside   | 4906.00    |                               |
| Recorder         | 1.00        | 8524       | Outside  | 4907.00    |                               |
| Bullnose         | 3.00        |            |          | 4910.00    | 24.00 Bottom Packers & Anchor |

**Total Tool Length: 53.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

WOOLSEY OPERATING LLC  
 125 N MARKET STE 1000 WICHITA KS  
 67202+1729  
 ATTN: SCOTT ALBERG

**MYERS #1**  
**14-35-13 BARBER**  
 Job Ticket: 16092      **DST#: 2**  
 Test Start: 2011.02.15 @ 13:44:00

### Mud and Cushion Information

|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 55.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 7.19 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 5000.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

### Recovery Information

Recovery Table

| Length<br>ft | Description                 | Volume<br>bbl |
|--------------|-----------------------------|---------------|
| 126.00       | GASSY OIL CUT MUD           | 0.620         |
| 0.00         | 10%GAS 10%OIL 80%MUD        | 0.000         |
| 120.00       | OILY MUD CUT WATER          | 0.645         |
| 0.00         | 15%OIL 10%MUD 75%WATER      | 0.000         |
| 0.00         | CHLORIDES 68,000            | 0.000         |
| 0.00         | RESISTIVITY .15 @76 DEGREES | 0.000         |

Total Length: 246.00 ft      Total Volume: 1.265 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: TOOL CHASED 2 FEET TO BOTTOM/GAS TO SURFACE ON 2ND OPEN SEE GAS REPORT/





# DRILL STEM TEST REPORT

**GAS RATES**

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16092

**DST#: 2**

ATTN: SCOTT ALBERG

Test Start: 2011.02.15 @ 13:44:00

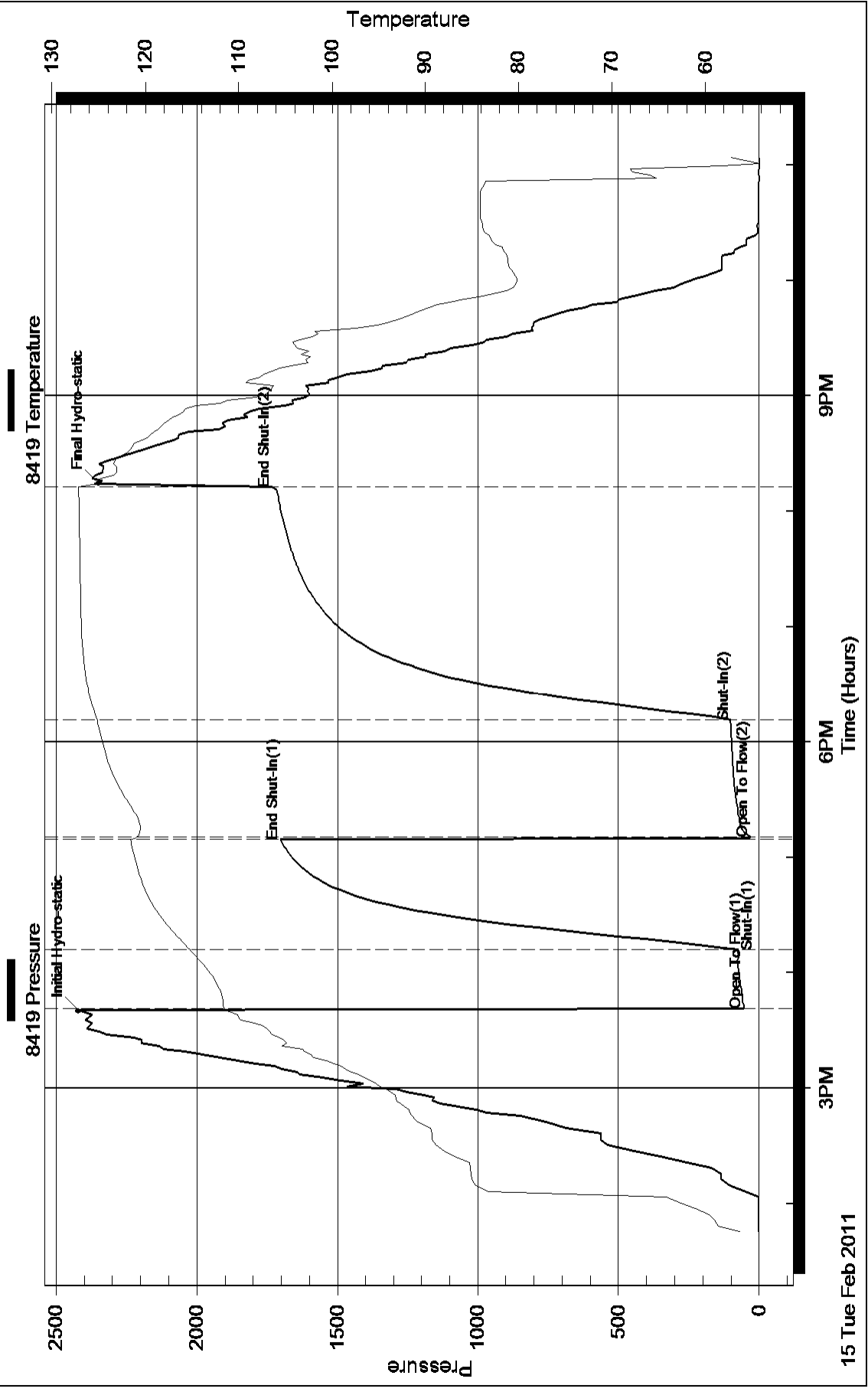
## Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

| Flow Period | Elapsed Time | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|-------------|--------------|----------------|-----------------|------------------|
| 2           | 10           | 0.13           | 3.72            | 1.39             |
| 2           | 20           | 0.13           | 7.20            | 2.69             |
| 2           | 30           | 0.13           | 10.93           | 4.09             |
| 2           | 40           | 0.13           | 12.45           | 4.66             |
| 2           | 50           | 0.13           | 14.23           | 5.33             |
| 2           | 60           | 0.13           | 17.50           | 6.55             |

### Pressure vs. Time





# DRILL STEM TEST REPORT

WOOLSEY OPERATING LLC

**MYERS #1**

125 N MARKET STE 1000 WICHITA KS  
67202+1729

**14-35-13 BARBER**

Job Ticket: 16093

**DST#: 3**

ATTN: SCOTT ALBERG

Test Start: 2011.02.16 @ 07:50:00

## GENERAL INFORMATION:

Formation: **MISSISSIPPI**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:21:00

Time Test Ended: 17:28:00

Test Type: Conventional Bottom Hole (Initial)

Tester: JARED SCHECK

Unit No: 3320-GB-210

**Interval: 4910.00 ft (KB) To 4925.00 ft (KB) (TVD)**

Reference Elevations: 1459.00 ft (KB)

Total Depth: 4925.00 ft (KB) (TVD)

1447.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

**Serial #: 8419**

**Inside**

Press@RunDepth: 135.47 psia @ 4921.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.02.16

End Date: 2011.02.16

Last Calib.: 2011.02.16

Start Time: 07:50:00

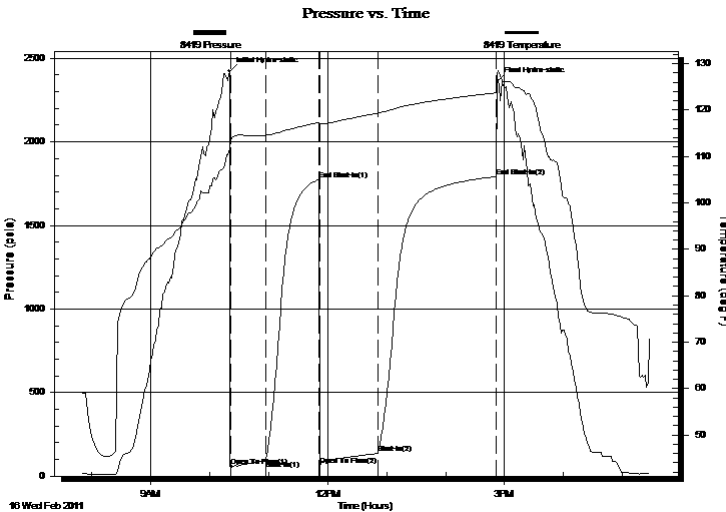
End Time: 17:28:00

Time On Btm: 2011.02.16 @ 10:20:30

Time Off Btm: 2011.02.16 @ 14:52:30

**TEST COMMENT:** INITIAL OPEN:STRONG BLOW BUILT BOTTOM OF BUCKET IN 3 MINUTES  
INITIAL SHUT IN:NO BLOW BACK  
FINAL OPEN:STRONG BLOW BUILT BOTTOM OF BUCKET IN 1 MINUTE  
FINAL SHUT IN:1 1/2 BLOW BACK

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2422.70         | 111.83       | Initial Hydro-static |
| 1           | 59.24           | 112.01       | Open To Flow (1)     |
| 37          | 93.98           | 114.58       | Shut-In(1)           |
| 91          | 1775.42         | 117.31       | End Shut-In(1)       |
| 92          | 65.64           | 116.93       | Open To Flow (2)     |
| 151         | 135.47          | 119.33       | Shut-In(2)           |
| 271         | 1791.64         | 123.69       | End Shut-In(2)       |
| 272         | 2361.78         | 127.94       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                 | Volume (bbl) |
|-------------|-----------------------------|--------------|
| 60.00       | MUDDY WATER 80%MUD 20%WATER | 0.30         |
| 180.00      | WATER 5%MUD 95%WATER        | 0.89         |
| 0.00        | CHLORIDES 110,000           | 0.00         |
| 0.00        | RESISTIVITY .09 @76 DEGREES | 0.00         |
|             |                             |              |
|             |                             |              |

## Gas Rates

|  | Choke (inches) | Pressure (psia) | Gas Rate (Mcf/d) |
|--|----------------|-----------------|------------------|
|  |                |                 |                  |



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

WOOLSEY OPERATING LLC  
 125 N MARKET STE 1000 WICHITA KS  
 67202+1729  
 ATTN: SCOTT ALBERG

**MYERS #1**  
**14-35-13 BARBER**  
 Job Ticket: 16093      **DST#: 3**  
 Test Start: 2011.02.16 @ 07:50:00

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 4656.00 ft | Diameter: 3.80 inches | Volume: 65.31 bbl              | Tool Weight: 1000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 240.00 ft  | Diameter: 2.25 inches | Volume: 1.18 bbl               | Weight to Pull Loose: 78000.00 lb  |
|                           |                    |                       | <u>Total Volume: 66.49 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 15.00 ft           |                       |                                | String Weight: Initial 63000.00 lb |
| Depth to Top Packer:      | 4910.00 ft         |                       |                                | Final 63000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 15.00 ft           |                       |                                |                                    |
| Tool Length:              | 44.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                     |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Change Over Sub  | 1.00        |            |          | 4882.00    |                                    |
| Shut-In Tool     | 5.00        |            |          | 4887.00    |                                    |
| Hydraulic Tool   | 5.00        |            |          | 4892.00    |                                    |
| Jars             | 6.00        |            |          | 4898.00    |                                    |
| Safety Joint     | 2.00        |            |          | 4900.00    |                                    |
| Packer           | 5.00        |            |          | 4905.00    | 29.00      Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4910.00    |                                    |
| Perforations     | 10.00       |            |          | 4920.00    |                                    |
| Recorder         | 1.00        | 8419       | Inside   | 4921.00    |                                    |
| Recorder         | 1.00        | 8524       | Outside  | 4922.00    |                                    |
| Bullnose         | 3.00        |            |          | 4925.00    | 15.00      Bottom Packers & Anchor |

**Total Tool Length: 44.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

WOOLSEY OPERATING LLC  
 125 N MARKET STE 1000 WICHITA KS  
 67202+1729  
 ATTN: SCOTT ALBERG

**MYERS #1**  
**14-35-13 BARBER**  
 Job Ticket: 16093      **DST#: 3**  
 Test Start: 2011.02.16 @ 07:50:00

### Mud and Cushion Information

|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 63.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 9.00 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psia |                 |         |
| Salinity: 5000.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

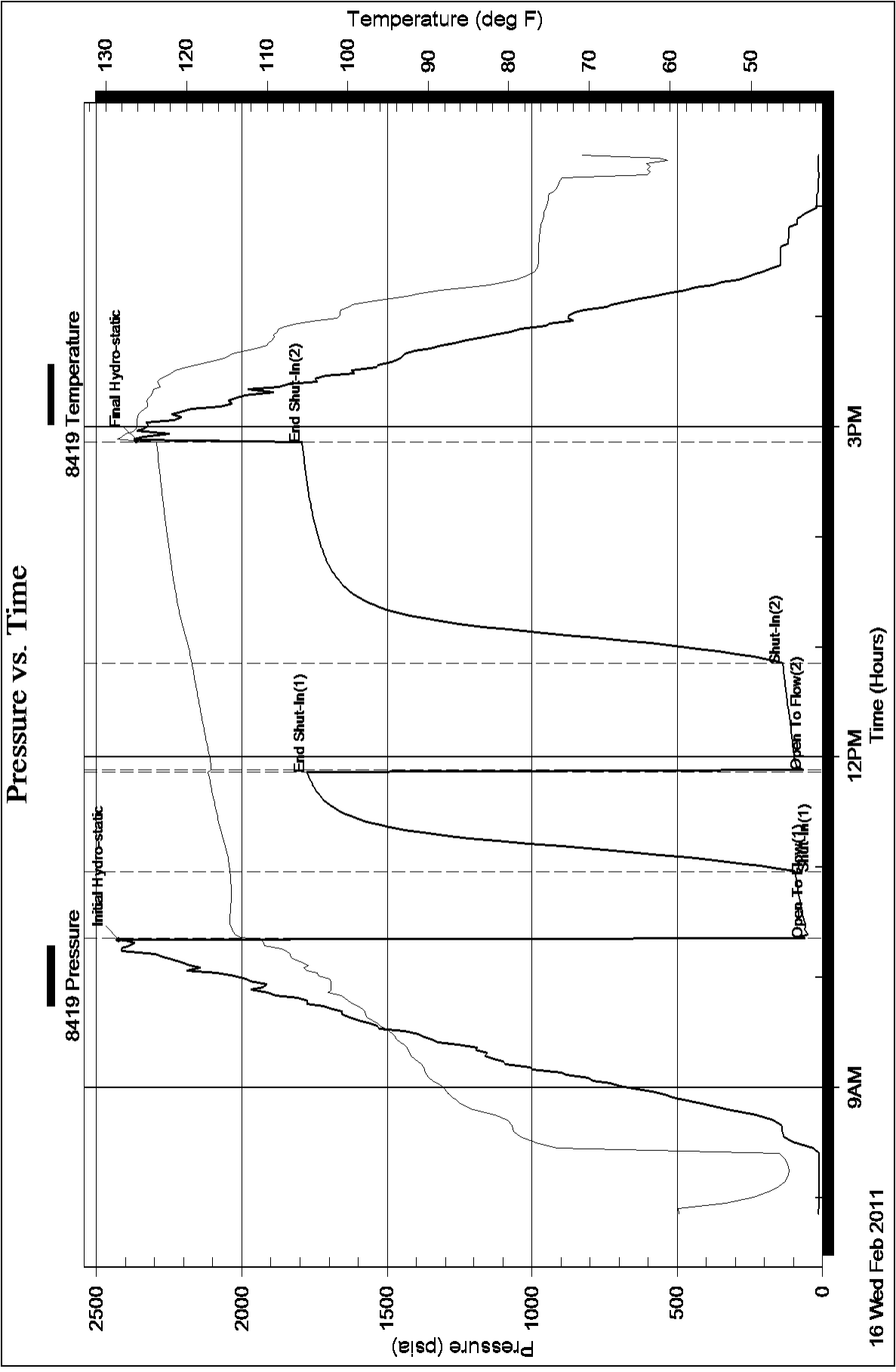
### Recovery Information

Recovery Table

| Length<br>ft | Description                 | Volume<br>bbl |
|--------------|-----------------------------|---------------|
| 60.00        | MUDDY WATER 80%MUD 20%WATER | 0.295         |
| 180.00       | WATER 5%MUD 95%WATER        | 0.885         |
| 0.00         | CHLORIDES 110,000           | 0.000         |
| 0.00         | RESISTIVITY .09 @76 DEGREES | 0.000         |

Total Length: 240.00 ft      Total Volume: 1.180 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: CHLORIDES 110,000

### Pressure vs. Time





**Woolsey Operating Company, LLC**

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

Measured Depth Log

Well Name: Myers #1

Location: NW SW NE NE

License Number: API: 15-007-23651-00-00

Spud Date: February 7, 2011

Region: Barber County, Kansas

Drilling Completed: February 19, 2011

Surface Coordinates: 950' FNL, 1130' FEL Section 14-Twp 35 South - Rge 13 West

Hartner Pool

Bottom Hole Coordinates: Vertical Hole

Ground Elevation (ft): 1453

K.B. Elevation (ft): 1462

Logged Interval (ft): 3000 To: 5700' Total Depth (ft): 5700'

Formation: McLish Sand

Type of Drilling Fluid: Chemical Mud, Displace at 3400'

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

Company: Woolsey Operating Company, LLC

Address: 125 N. Market, Suite 1000

Wichita, KS 67202

**GEOLOGIST**

Name: W. Scott Alberg

Company: Alberg Petroleum, LLC

Address: 609 Meadowlark Lane

Pratt, Kansas 67124

|                   | SAMPLE TOPS | FORMATION TOPS | LOG TOPS    |
|-------------------|-------------|----------------|-------------|
| KANWAKA           | 3695(-2233) |                | 3704(-2242) |
| ELGIN SAND        | 3708(-2246) |                | 3716(-2254) |
| HEEBNER           | 3922(-2460) |                | 3912(-2450) |
| HASKELL           | 4178(-2716) |                | 4185(-2723) |
| QUINDARO          | 4415(-2953) |                | 4422(-2960) |
| HUSHPUCKNEY SHALE | 4630(-3168) |                | 4640(-3178) |
| B/KC              | 4678(-3216) |                | 4687(-3225) |
| PAWNEE            | 4775(-3313) |                | 4782(-3320) |
| CHEROKEE GROUP    | 4826(-3364) |                | 4834(-3372) |
| CHEROKEE SAND     | 4843(-3381) |                | 4850(-3388) |
| MISSISSIPPIAN     | 4884(-3422) |                | 4893(-3431) |
| KINDERHOOK SHALE  | 5248(-3786) |                | 5258(-3796) |
| WOODFORD SHALE    | 5305(-3843) |                | 5318(-3856) |
| MISNER SAND       | 5342(-3850) |                | 5355(-3893) |
| VIOLA             | 5350(-3888) |                | 5362(-3900) |
| SIMPSON GROUP     | 5532(-4070) |                | 5540(-4078) |
| SIMPSON WILCOX    | 5547(-4085) |                | 5560(-4098) |
| MCLISH SHALE      | 5567(-4105) |                | 5577(-4115) |
| MCLISH SAND       | 5651(-4189) |                | 5653(-4191) |
| RTD               | 5700(-4238) |                |             |
| LTD               |             |                | 5712(-4250) |

\*\*\*\* Note LTD was 12' deeper than RTD. Most sample tops 7-12' shallow to Log tops\*\*\*

### COMMENTS

**Surface Casing:** Set 6 joints 10 3/4" at 251' with 240 sxs Class A, 2% gel, 3% cc, plug down at 4:45 am on February 8, 2011. Cement did Circulate.

**Production Casing:**

**Deviation Surveys:** 254' 1/2, 1504' 3/4, 2010' 3/4, 2515' 1, 3022' 1, 3592' 3/4, 4003' 1/2, 4508' 1, 4785' 1, 5700' 3/4.

**Contractor Bit Record:** 1- 14 3/4" out at 254'.

2- 7 7/8" out at 4785'.

3- 7 7/8" out at 5700'.

**Gas Detector:** Woolsey Operating Company, Trailer #2

**Mud System:** Mud Co, Brad Bortz, Engineer

**DSTs:** Superior Testing Services. Inc.

**Logged By** Superior Well Services.

LTD 5712'



## DSTs

**DST #1 4790 to 4852' Cherokee Sand, Times 30-60-60-120**

1st opening Strong Blow BOB in 8 min., no blow back,

2nd opening, Strong Blow BOB 1 min., no blow back

Recovery: 70' Drilling Mud, No GIP.

IHP 2385#      FHP 2343#

IFP 64-82#    FFP 68-92#

ISP 992#      FSIP 985#

**DST #2 4886 to 4910 Mississippian, Times 30-60-60-120**

1st Opening, Strong Blow BOB 4 min, No GTS, no blow back.

2nd Opening, Strong blow BOB 1 min, GTS 6 min, 1 inch blow back

**Gas Gauge**

gauged 4.66 mcf/d at the end of 2nd opening

Recovery: 126' GOCM (5% Gas, 5% Oil, 80% Mud)

120' OCMW(15% Oil 10% Mud, 75% Water)

Chlorides 68,000 ppm

IHP 2434#    FHP 2363#

IFP 70-88#   FFP 45-115#

ISIP 1718#   FSIP 1748#

**DST #3 4910 to 4925' Mississippian, Times 30-60-60-120**

1st Opening, Strong Blow BOB 3 minutes, no blow back.

2nd Opening, Strong Blow BOB 1 minute, 1 1/2" blow back.

Recovery: 60' MW(80% M, 20% W)

180' W (5% M, 95% W) Chlorides, 110,000 ppm

IHP 2422#    FHP 2361#

IFP 59-93#   FFP 65-135#

ISIP 1775#   FSIP 1791#

## CREWS

**H2 Drilling Rig #3**


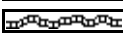
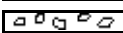



Tool Pusher - Randy Smith







Drillers - Gary Axtell




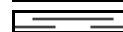


Martin Tinoco






Luis Marquez

## ROCK TYPES

|                                                                                    |       |
|------------------------------------------------------------------------------------|-------|
|  | Anhy  |
|  | Bent  |
|  | Brec  |
|  | Cht   |
|  | Clyst |
|  | Coal  |

|                                                                                     |          |
|-------------------------------------------------------------------------------------|----------|
|  | Congl    |
|  | Sdy dolo |
|  | Shy dolo |
|  | Dol      |
|  | Gyp      |
|  | Sdy lmst |

|                                                                                     |       |
|-------------------------------------------------------------------------------------|-------|
|  | Lmst  |
|  | Mrlst |
|  | Salt  |
|  | Shale |
|  | Sltst |
|  | Ss    |

|                                                                                       |          |
|---------------------------------------------------------------------------------------|----------|
|  | Black sh |
|  | Gry sh   |
|  | Shale    |
|  | Shyslts  |
|  | Sltys    |

### ACCESSORIES

#### MINERAL

- Anhy
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Ferrpel
- Ferr
- Glau
- Gyp
- Marl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt

- Chlorite
- Dol
- Sand
- Slty

#### FOSSIL

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

- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomoldic

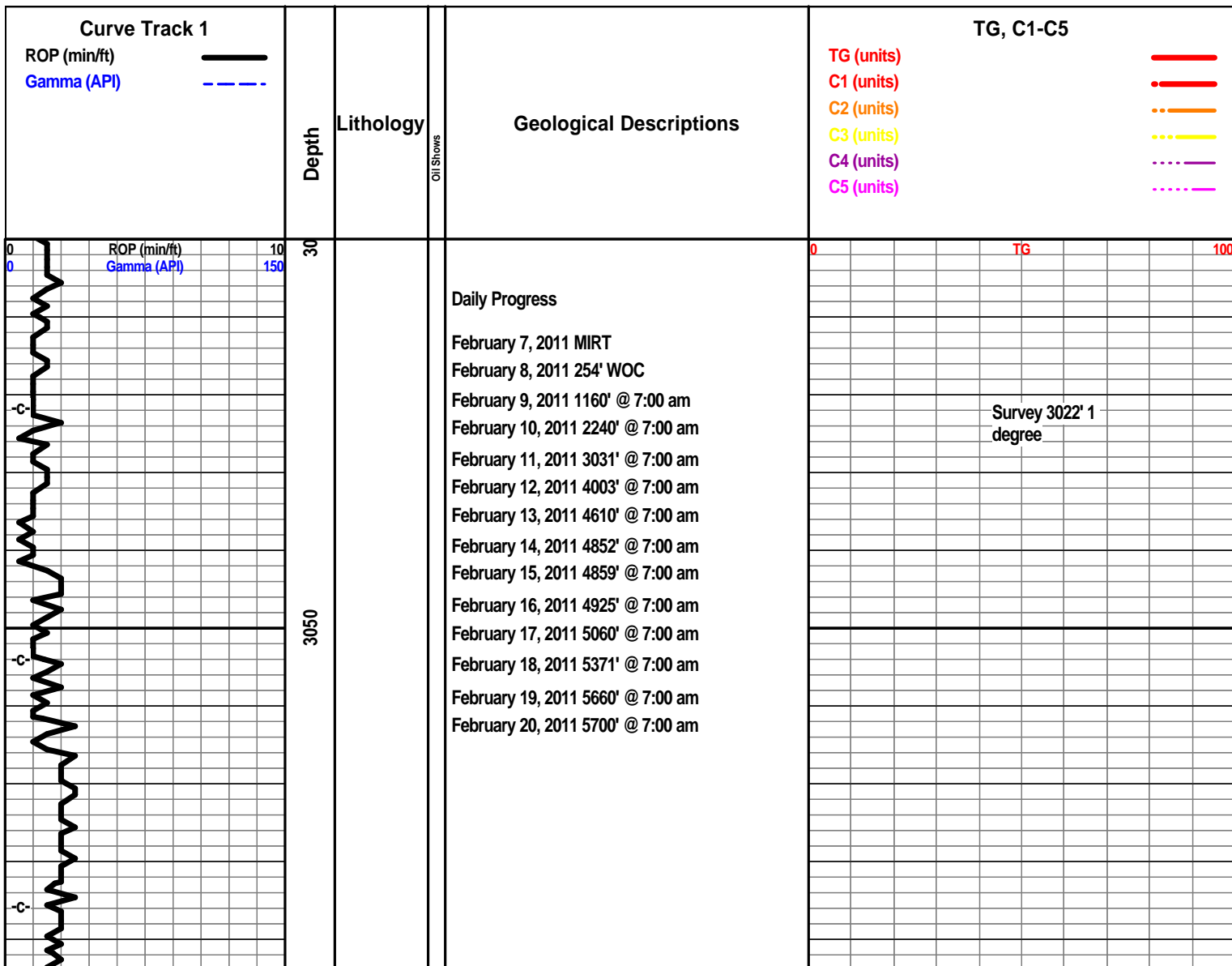
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Slstsn

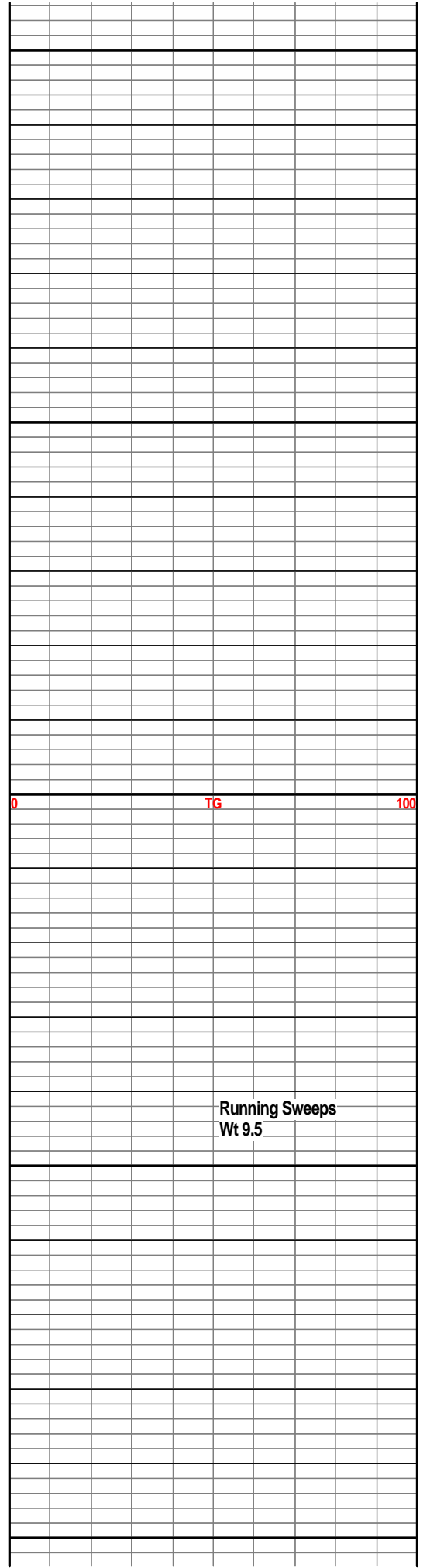
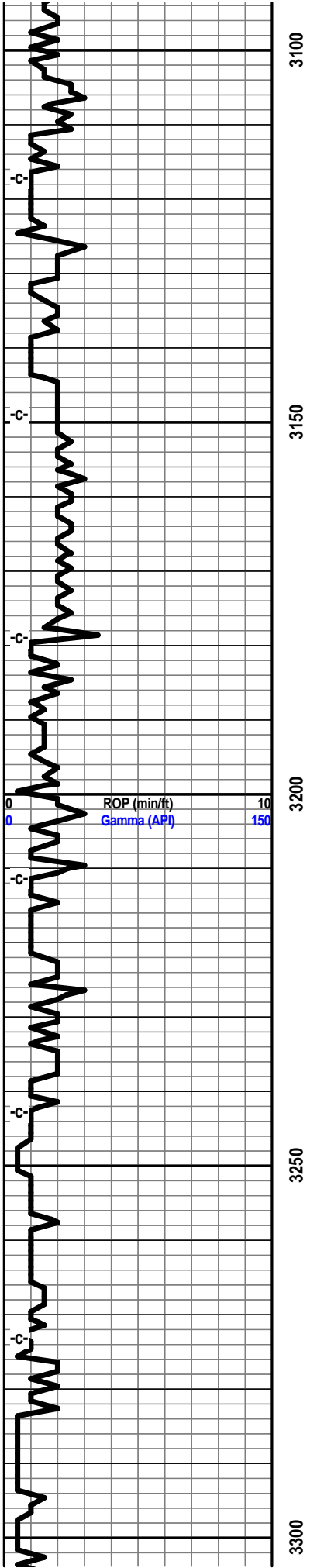
#### STRINGER

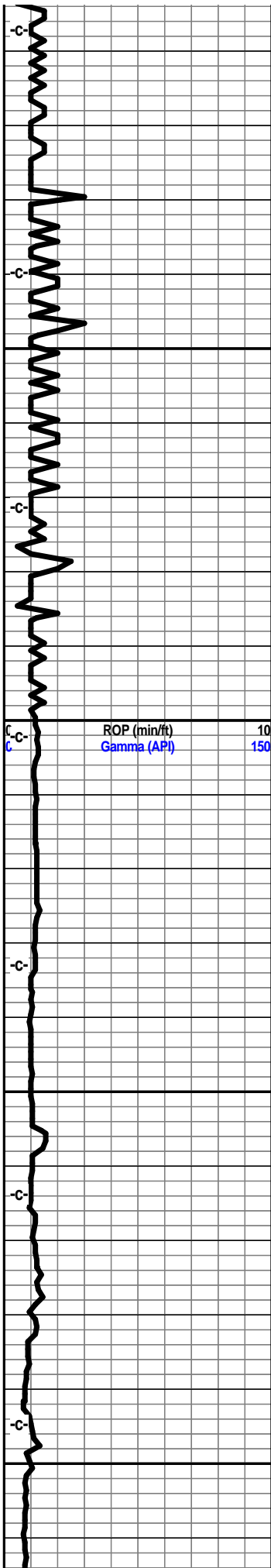
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Slststrg
- Ssstrg
- Carbsh
- Clystn
- Dol

#### TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest







3350

3400

3450

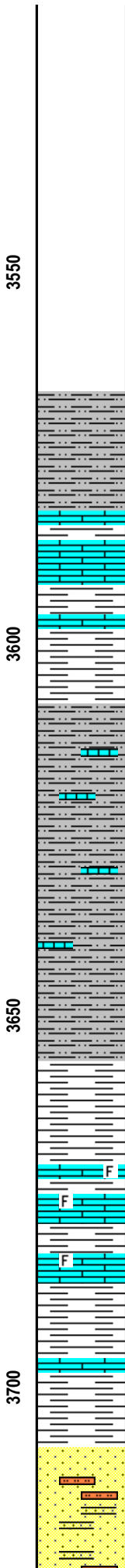
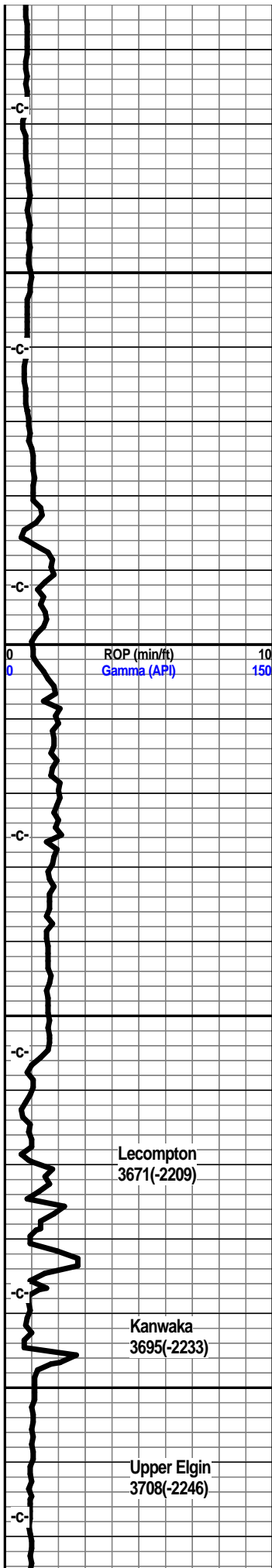
3500

Cut and Slip  
Drilling Line

TG 100

Geologist on  
Location at 3415'  
3:30 pm  
February 11, 2011

Start Gas Detector  
Unit



Shale, Lt grey, silty.

Limestone, grey-tan, vfxln, dense, almost silty in appearance.

Limestone, tan-brown, fxln, dense.

Shale, Lt grey, very silty, calcitic in part.

Shale, Lt grey, silty, calcitic.

Shale, Lt grey.

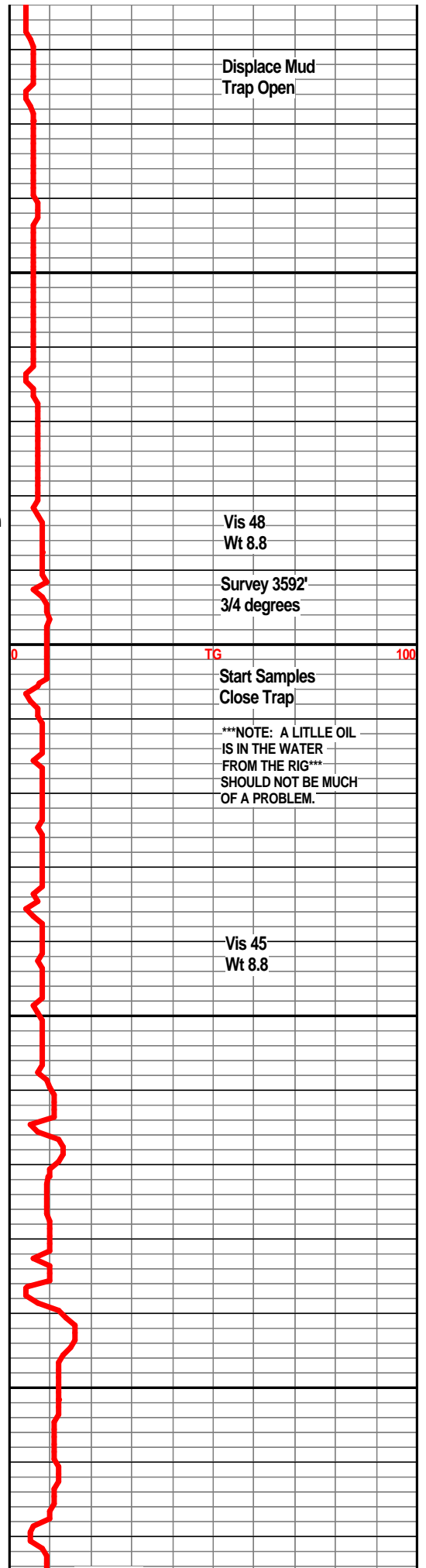
Limestone, tan-brown, fxln, trace of foss.

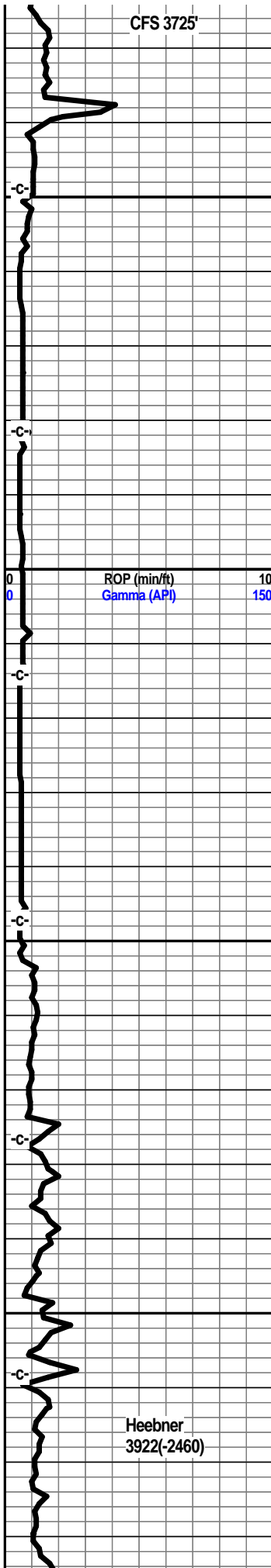
Shale, grey-black, carb?

Limestone, grey-white, fxln, dense.

Shale, Lt grey.

Sandstone, lt grey, very silty, mica, traces of pyrite, no visible shows, no gas indication. Almost a siltone in part.





Shale, Lt grey, silty to sandy.

Limestone, tan-brown, mxln, foss. in part.

Sandstone, v fn grained, silty, mica, traces of pyrite, friable in part, no visible shows.

Sandstone, fn grained, silty, mica, no visible shows.

Sandstone, fn grained, mica, silty, no visible shows.

Sandstone, grey-white, fn grained, silty

Sandstone, v fn grained, grey-white, mica, traces of pyrite.

Sandstone, grey-white, v fn grained, silty, trace pyrite, mica.

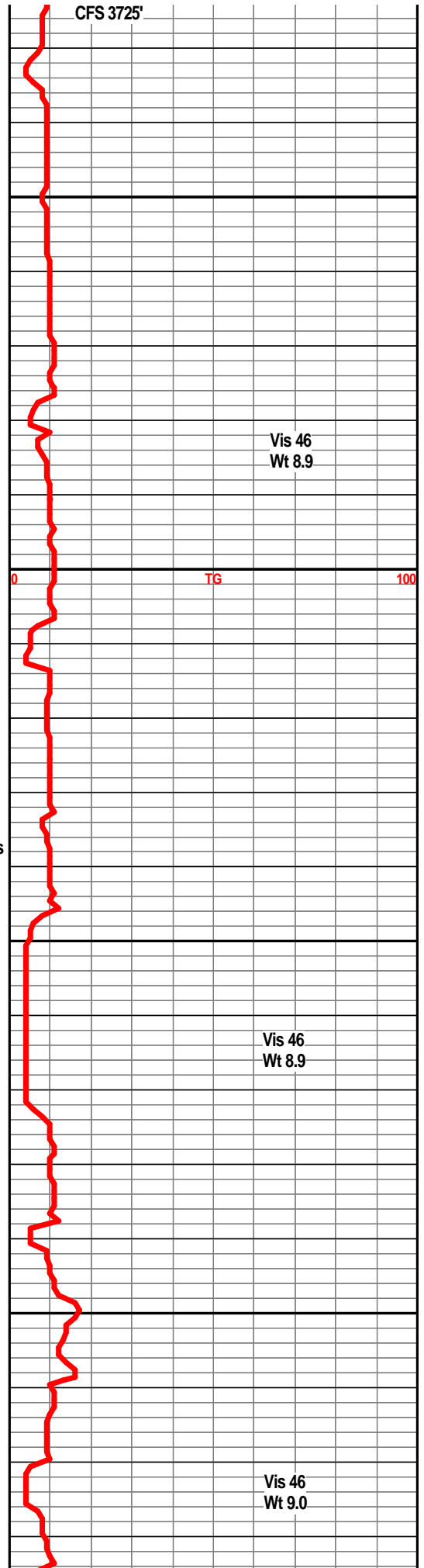
Sandstone, grey-white, fn grained, mica, silty.

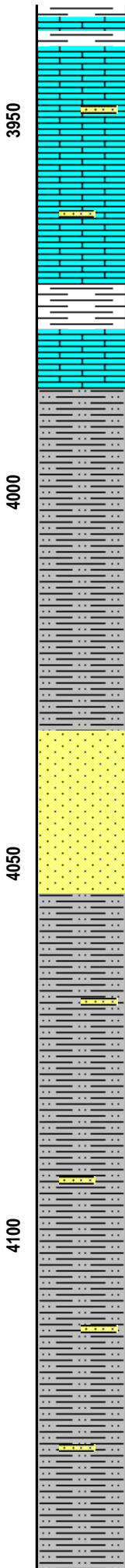
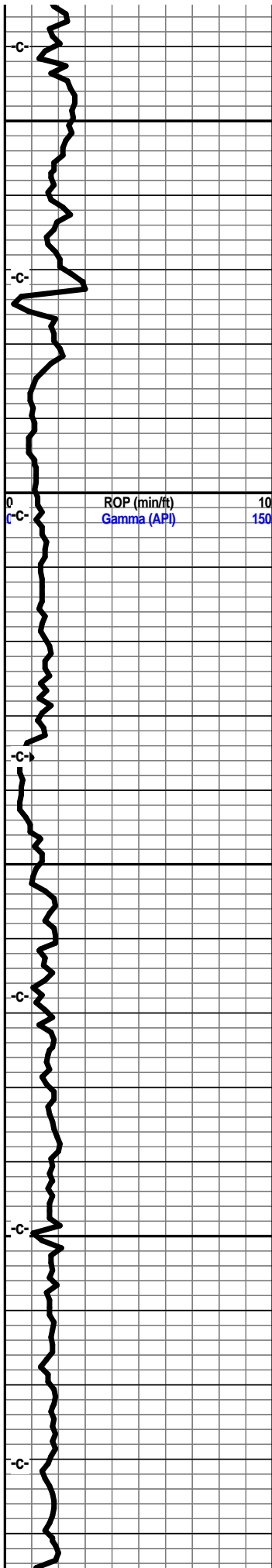
Shale, Lt grey, silty.

Limestone, tan-brown, xln, dense, sl foss.

Shale, grey-black, sl. carb.

Shale, grey, silty.





Limestone, grey-white, fxln, sandy in part, dense.

Limestone, a/a

Shale, grey, lt grey, silty.

Limestone, cream, grey-white, xln, dense.

Shale, grey, very silty to sandy.

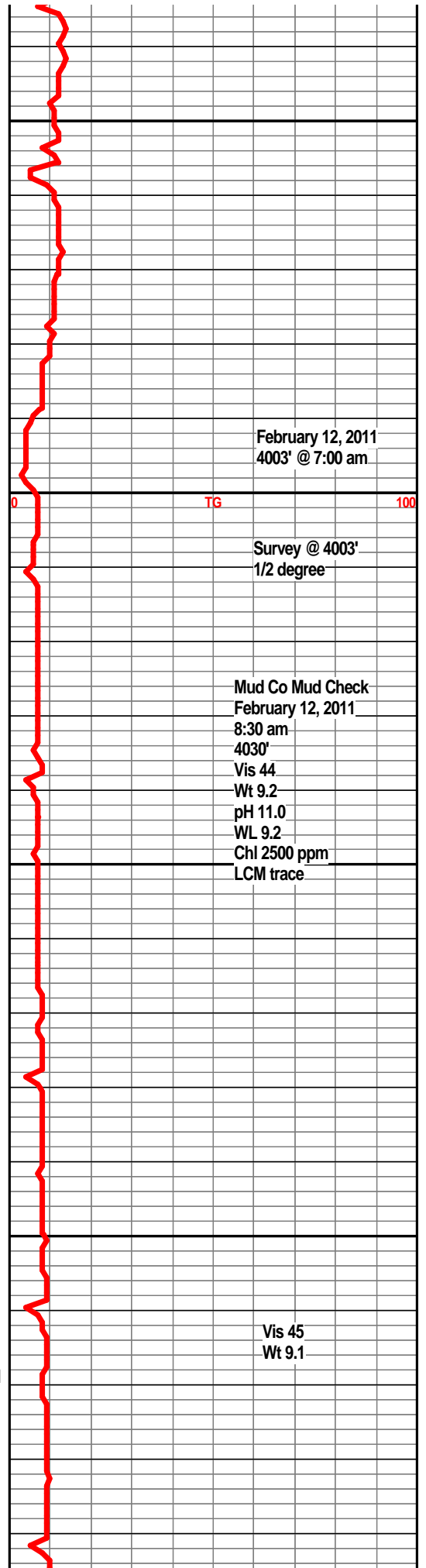
Shale, grey to lt grey, very silty.

Sandstone, clear to white, fn grained, mica, partly friable, silty in part, no visible shows.

Shale, Lt grey to grey, silty to sandy, some sandstone clusters, friable, mica, no visible shows.

Shale, Lt grey to grey, silty to sandy.

Shale, Lt grey to grey, very silty, fn grained sand clusters.



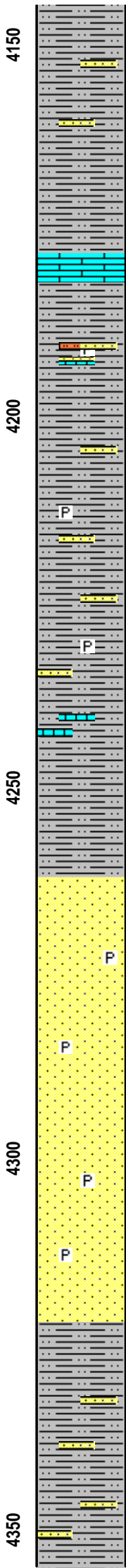
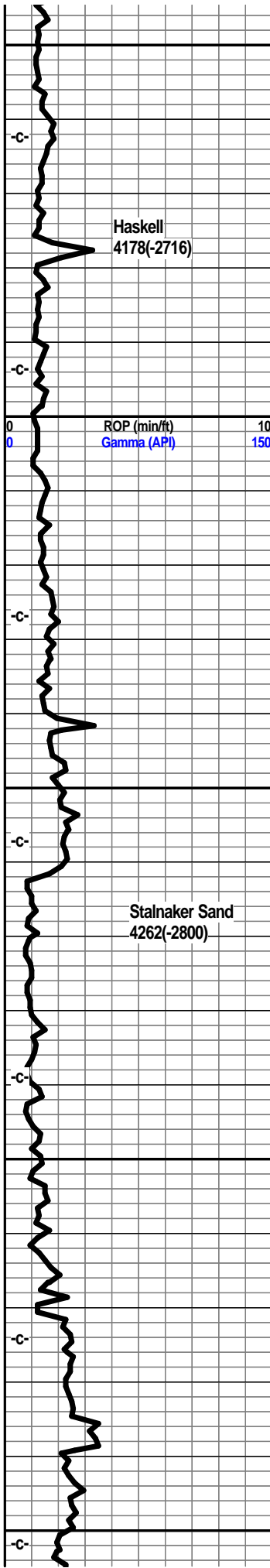
February 12, 2011  
4003' @ 7:00 am

TG

Survey @ 4003'  
1/2 degree

Mud Co Mud Check  
February 12, 2011  
8:30 am  
4030'  
Vis 44  
Wt 9.2  
pH 11.0  
WL 9.2  
Chl 2500 ppm  
LCM trace

Vis 45  
Wt 9.1



Shale, Lt grey, grey, very silty.

Shale, Lt Grey, silty to slightly sandy.

Limestone, tan-brown, fmxln, dense, slightly foss.

Shale, Lt grey, grey, very silty, some dark grey-black shale, traces of pyrite.

Shale, Lt grey, grey, silty to sandy, some sandstone stringers.

Shale, grey, silty, traces of pyrite.

Shale, grey, lt grey, very silty, trace of limestone fragments.

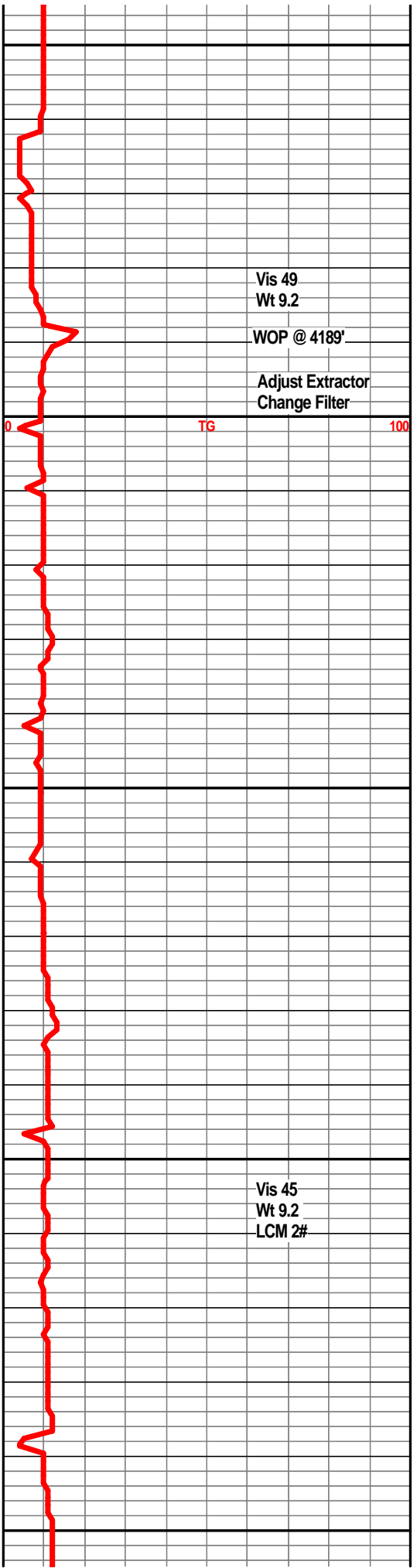
Sandstone, clear to lt grey, fn grained, well sorted, fair cementing, friable in part, trace mica, pyrite present, no visible shows.

Sandstone, clear to lt grey, sa to sr, well sorted, fair cementing, friable, mica, no visible shows.

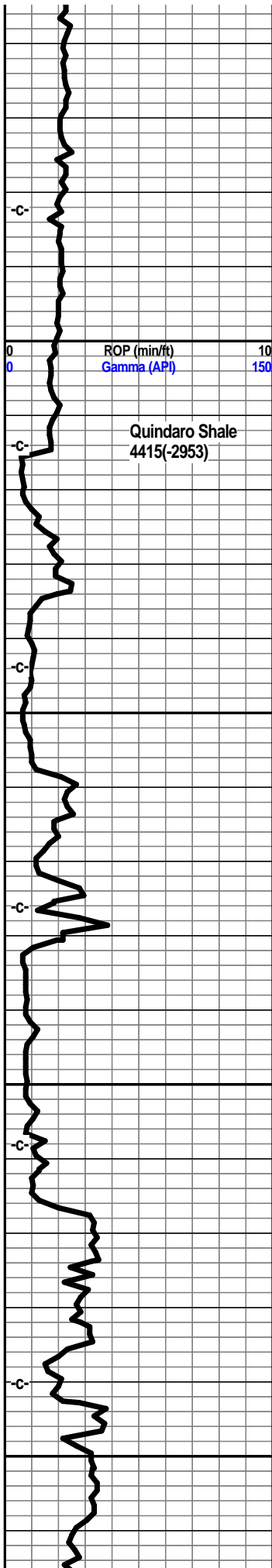
Sandstone, clear, lt grey, well sorted, slightly silty, friable, no visible shows.

Shale, Lt grey, grey, silty to sandy, some sandstone stringers present.

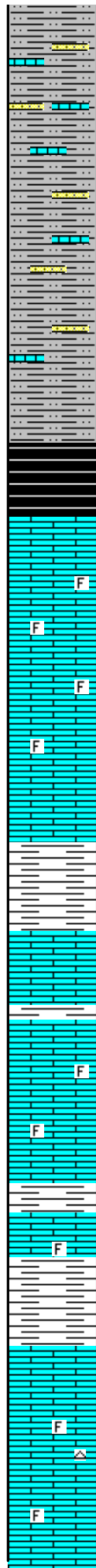
Shale, Lt grey, grey, silty







4400  
4450  
4500  
4550



Shale, Lt grey, some tan-brown limestone stringers.

Shale, Lt grey, calcitic, limestone stringers, tan-brown, foss.

Shale, Lt grey, calcitic, limestone stringers, traces of green shales.

Shale, Grey-black, carb., slight show of gas bubbles.

Limestone, cream, tan-white, fmxln, trace of foss., sub-chalky.

Limestone, cream, tan-white, some grey. fxln, dense, foss., trace xln porosity, no visible shows.

Limestone, cream-white, fxln, foss. foss porosity, trace of xln porosity, sub-chalky.

Shale, grey.

Limestone, Cream-white, fxln, foss. foss porosity, slightly chalky, no visible shows.

Limestone, cream-white, tan, fxln, very foss, foss porosity, trace of xln porosity, slightly chalky, no visible shows.

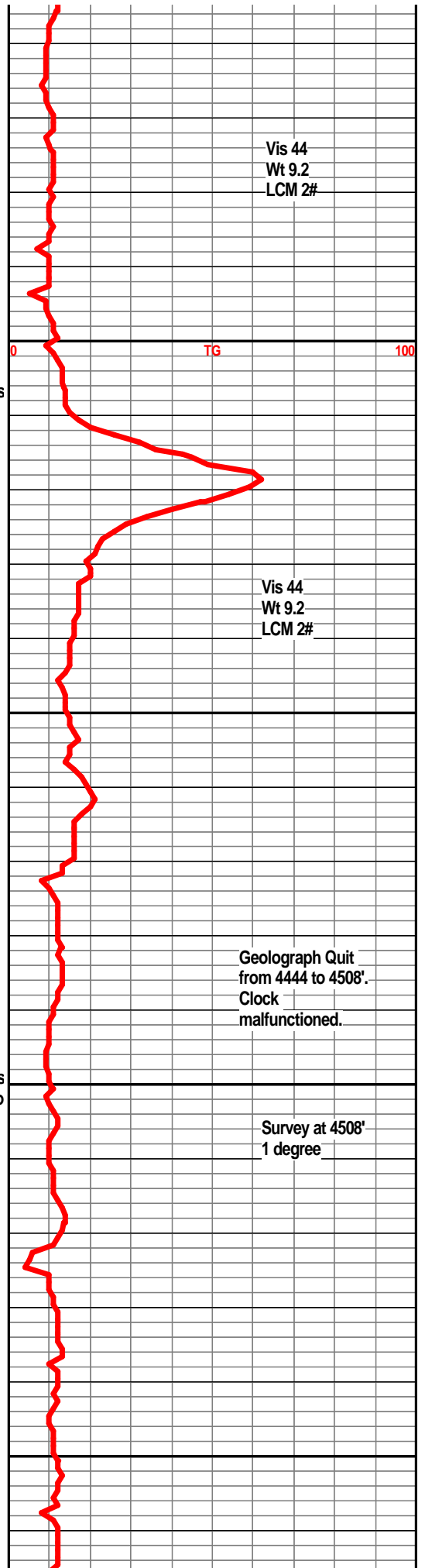
Shale, Lt grey.

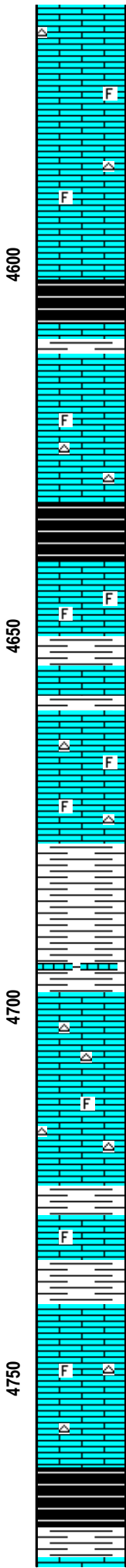
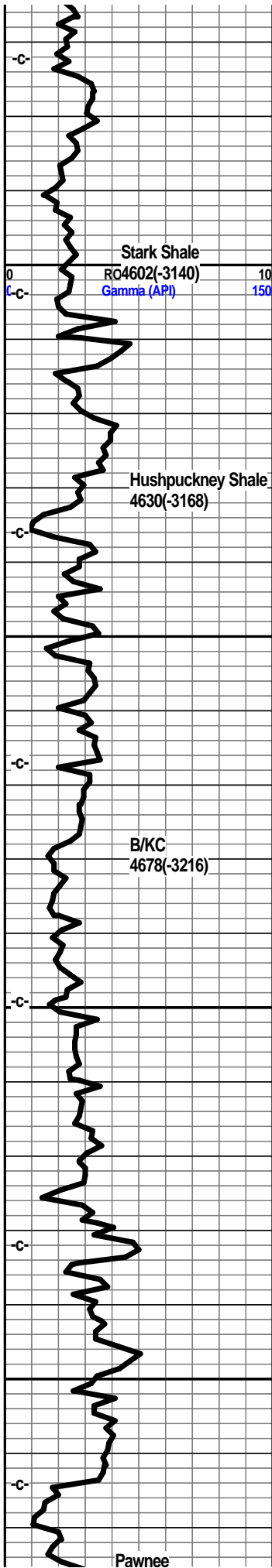
Limestone, tan-white, xln, dense, slightly foss.

Shale, grey, some light green.

Limestone, Cream-white, fxln, partly dense, sub-chalky, slightly foss. in part, no visible shows.

Limestone, cream-white, tan, fmxln, some foss. porosity, traces of tan chert, no visible shows.





Limestone, cream, tan-white, xln, cherty in part, grey-green splintery shales present.

Shale, grey-black, carb

Limestone, tan-white, fxln, trace of xln porosity, slightly foss, some foss porosity, slightly chalky. no visible shows.

Limestone, grey-white, mxln, foss, traces of chert.

Shale, grey-black, traces of gas bubbles.

Limestone, tan, tan-brown, fxln, foss., trace xln porosity, no visible shows.

Shale, grey.

Limestone, tan-brown, some grey-brown, fmxln, foss., trace of foss porosity, trace tan chert., no visible shows.

Shale, Lt grey to grey-green, calcitic in part, few ls stringers towards base.

Limestone, grey-white, fxln dense, trace chert.

Limestone, grey-white, fxln, dense, trace foss.

Shale, grey-green.

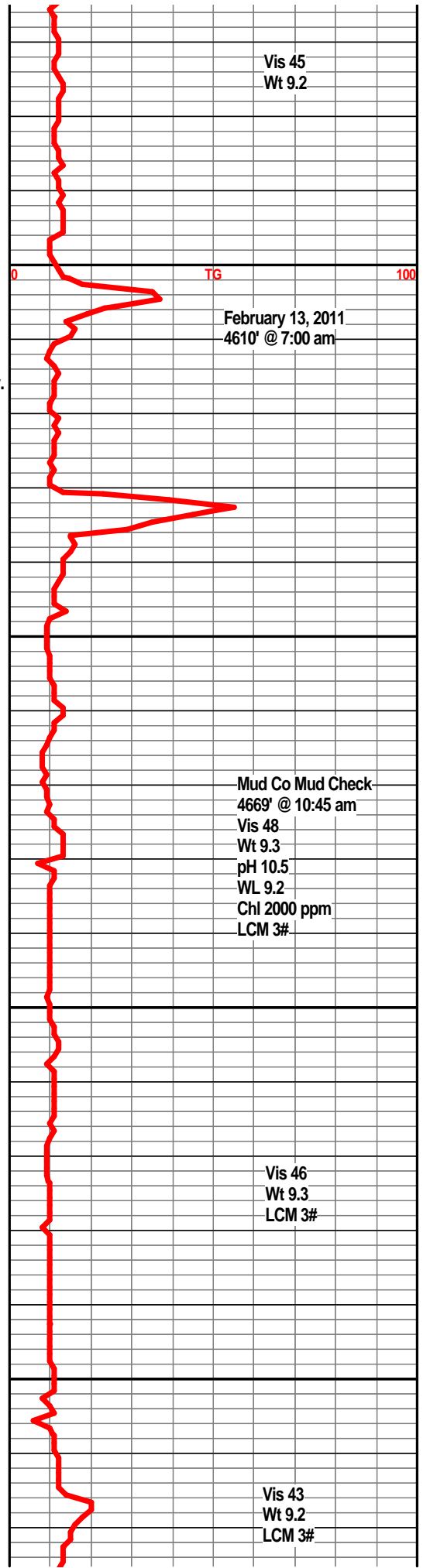
Limestone, grey, lt grey-green, fxln, dense.

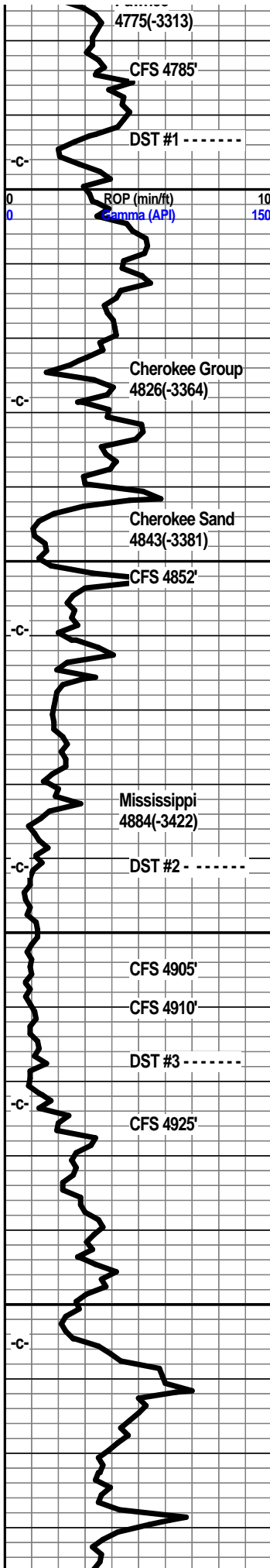
Shale, Lt grey.

Limestone, grey, tan-white, fxln, dense, slightly foss.

Limestone, tan-white, cream, fxln, traces of chert, sub-chalky.

Shale, grey-black, slightly carb.





Limestone, cream-white, tan, fxl, slightly foss., trace of xln porosity, no visible shows.

Shale, Grey-Black.

Limestone, cream-white, tan, fxn, slightly foss., sub-chalky.

Shale, dark grey, grey.

Limestone, cream, tan-white, xln, dense, slightly foss.

Shale, grey, dark grey.

Sandstone, clear to tan-brown, fn grained, friable in part, well cemented in part, good brown staining, good odor, good show of oil, some free oil in tray, no bleeding gas, no fluor.

Shale, grey-green.

Shale, grey, red-grey, some pale yellow, trace of sand, some scattered chert, some tan limestone.

Chert, off-white to tan-white, weathered, some pin point porosity, scattered small vugs, good odor, good show of oil, show of free oil in tray, show of bleeding gas.

Chert, white to off-white, tan, weathered, increasing amounts of fresh, sharp cherts, staining evident along fractures, good show of oil and bleeding gas in weathered chert.

Chert, white, off-white, tan, weathered, fresh sharp cherts a/a, pin point to small scattered vugs, good odor, good show of oil and gas, very dull fluor.

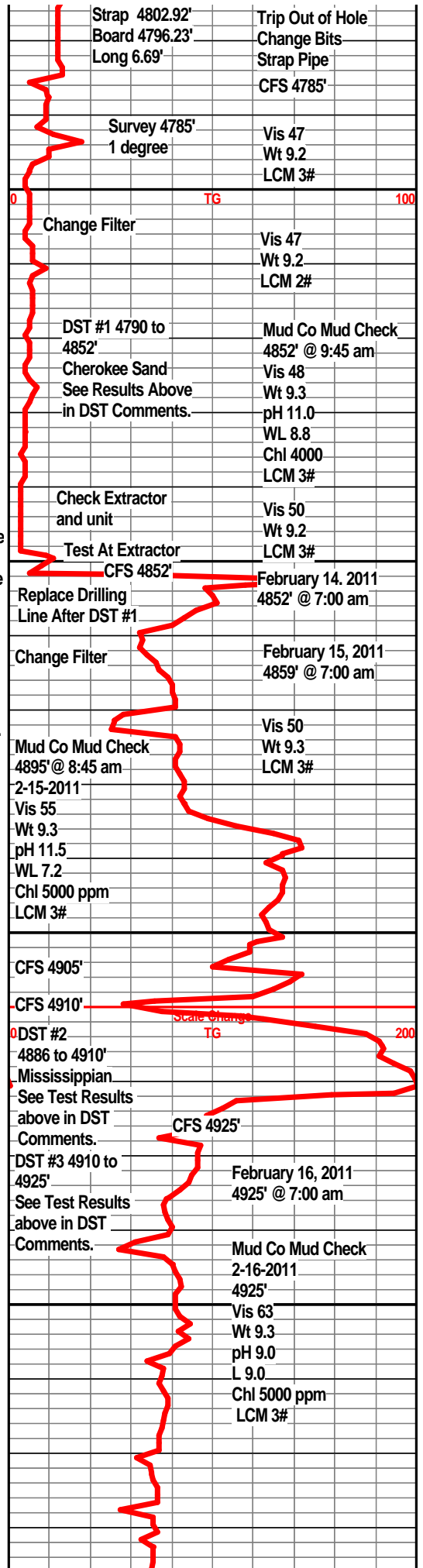
Chert, white to off-white, some tan, weathered, increasing sharp fresh cherts, fair odor, slight show of gas, decreasing shows of oil,

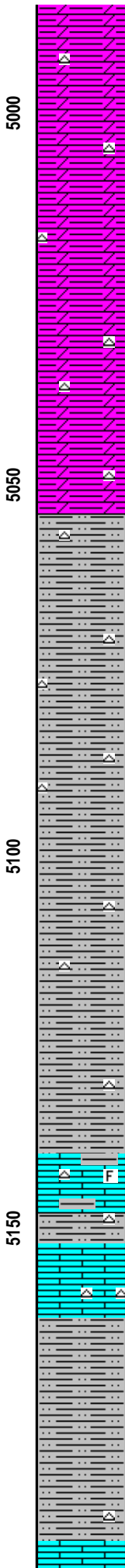
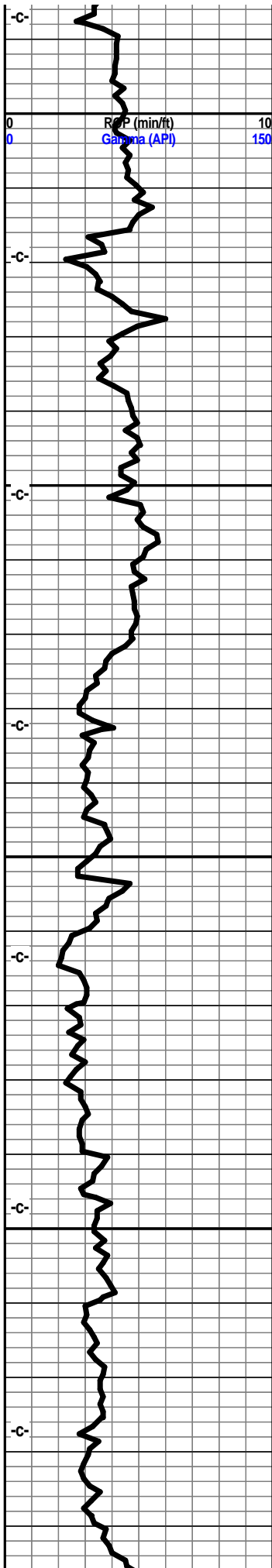
Shale, grey-green.

Dolomite, cream-white, xln, abundant fresh sharp cherts, some dark grey green shales.

Dolomite, cream-white, xln, very cherty, grey-green shales.

Dolomite, cream, cherty, increasing grey-green shales, traces of pyrite.





Dolomite, grey-white, cream, xln, some sharp cherts, grey-green splintery shales.

Dolomite, grey, light grey, xln, abundant grey-green shales.

Dolomite, Light grey, xln, abundant grey-green shales.

Dolo, grey, very shaley, traces of pyrite.

Shale, Lt grey, silty, some dolo streaks, traces of tan-brown limestone, traces of fresh chert.

Shale, grey to a lt grey, very silty, some firm blocky shales, some a dark grey, traces of tan-brown limestone, some lt grey dolo.

Shale, dark grey to a lt grey, some tan-brwn ls, few pieces reddish-brown shale.

Shale, Grey, dark grey, silty, traces of pyrite, some cream-white limestone pieces, traces of fresh chert.

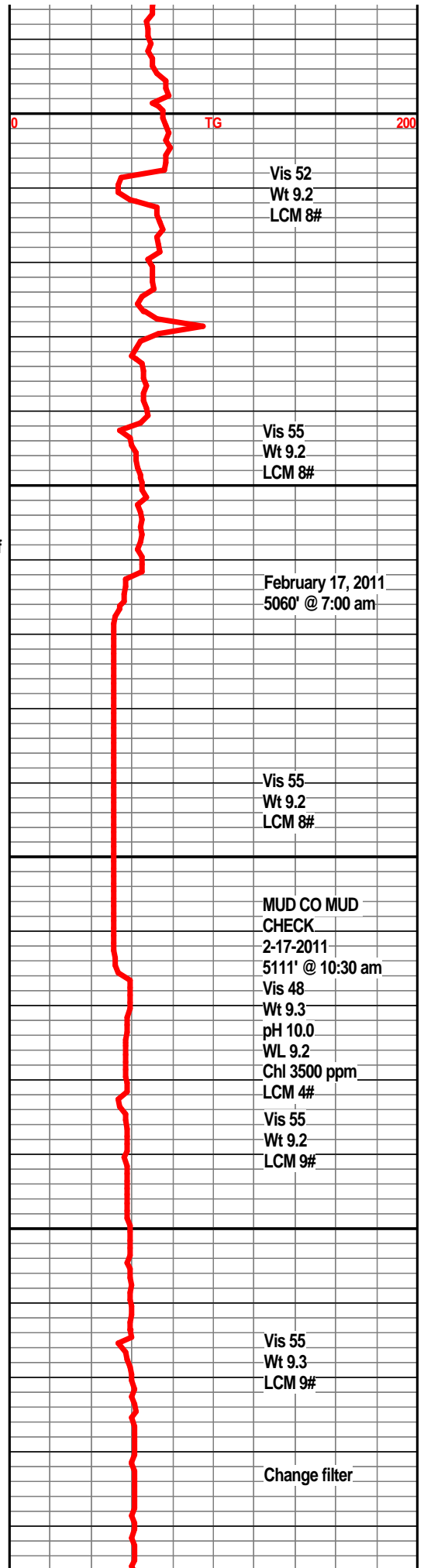
Limestone, cream, buff, tan, xln, partly dense, slightly foss, sub-chalky, abundant grey-green, some almost brick-red, burnt orange calcitic shales.

Limestone, cream-white, lt pale green, xln, foss, sub-chalky, cherty, some grey-green shales, traces of pyrite.

Shale, dark grey green, silty, traces of buff limestone, traces of pyrite.

Shale, dark grey, massive, traces of tan limestone, traces of pyrite.

Limestone. white to off-white. Lt crev-green. xln.



TG 200

Vis 52  
Wt 9.2  
LCM 8#

Vis 55  
Wt 9.2  
LCM 8#

February 17, 2011  
5060' @ 7:00 am

Vis 55  
Wt 9.2  
LCM 8#

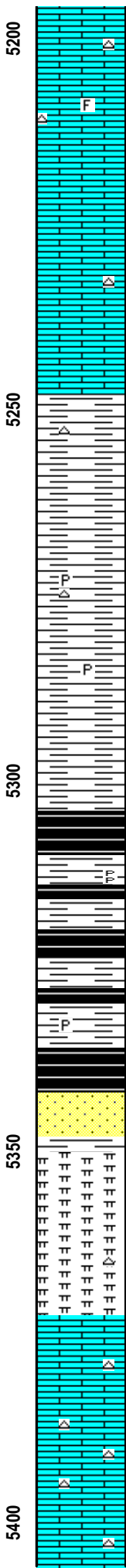
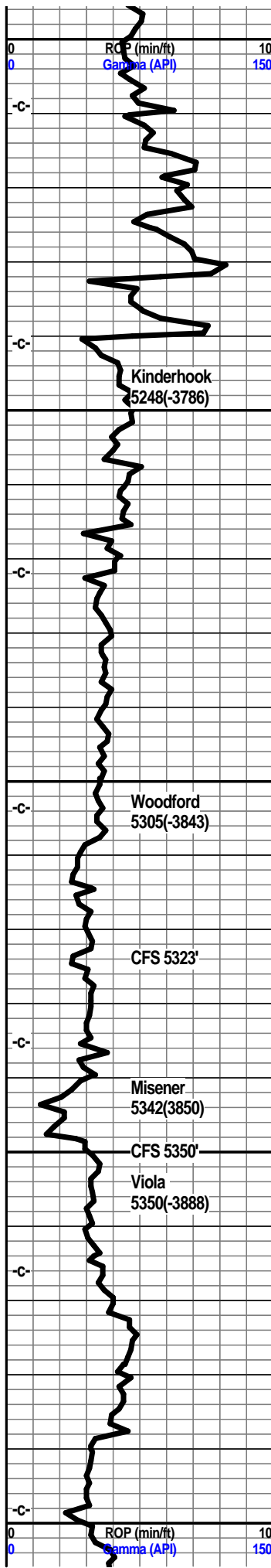
MUD CO MUD  
CHECK  
2-17-2011  
5111' @ 10:30 am

Vis 48  
Wt 9.3  
pH 10.0  
WL 9.2  
Chl 3500 ppm  
LCM 4#

Vis 55  
Wt 9.2  
LCM 9#

Vis 55  
Wt 9.3  
LCM 9#

Change filter



Limestone, white to off white, lt grey green, xln, soft, very chalky.

Limestone, grey, lt pale-green, xln, dense, trace foss., slightly chalky.

Limestone, lt grey, pale grey-green, xln, sub-chalky, slightly foss., mostly dense.

Limestone, grey, lt grey, xln, dense, some sub-chalky, trace of foss., some pale green shales.

Limestone, cream-white, tan, xln, dense, traces of chert, some green firm shale w/ pyrite.

Limestone, buff-white, tan, xln, sub-chalky, traces of chert, increasing green-grey shales.

Shale, dark grey, firm, traces of pyrite.

Shale, dark grey-green, firm, traces of pyrite. Some ls pieces.

Shale, grey-green, firm.

Shale, coffee-brown to grey-black, carb, show of gas bubbles.

Shale, grey-black, coffee brown, show of gas bubbles.

Shale, grey-black, coffee brown, show of gas, trace of pyrite.

Sandstone, grey-white, angular, well cemented, slightly friable, glauc, slight show of gas bubble, dull fluor, poss show scummy oil, no odor.

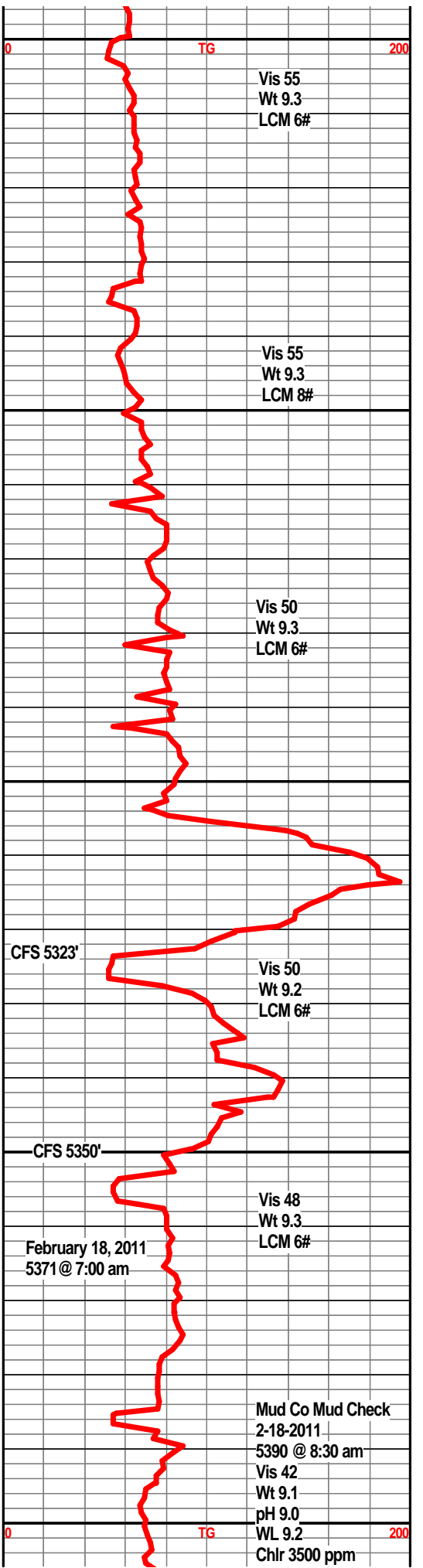
Sandstone, white to clear frosted grains, fair sorting, friable in part, glauc, mica, slight fluor, slight show of oil, odor when sample crushed, traces of pyrite.

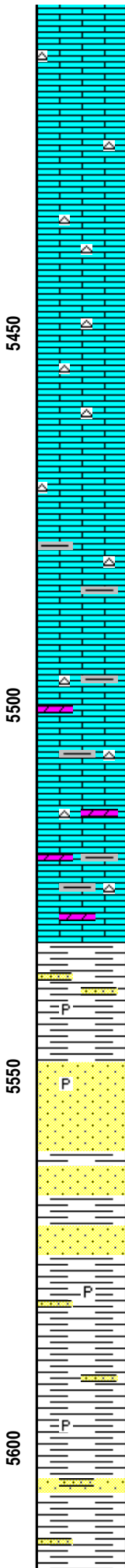
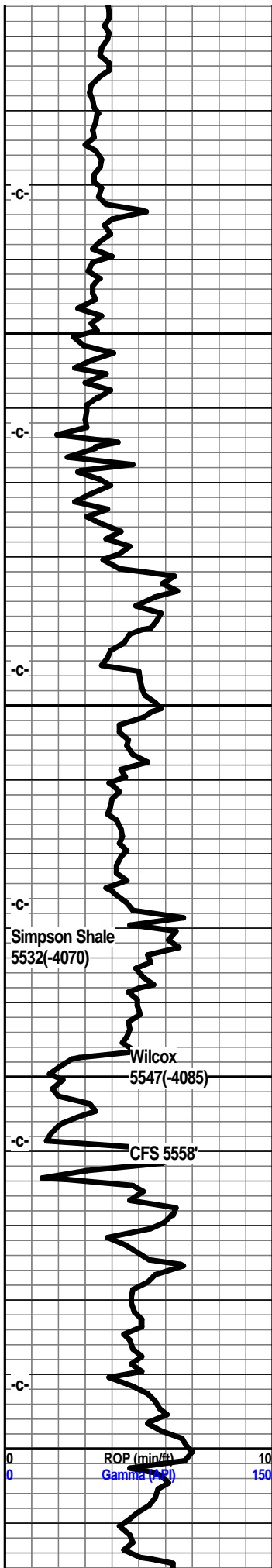
Dolo, light grey-white, soft, slight trace of ls., trace of chert.

Limestone, tan-white, lt grey, xln, traces of grey to tan chert, slightly chaky in part.

Limestone, grey-white, xln, dense, traces of chert, sub-chalky in part.

Limestone, tan-white, xln, dense, some fresh cherts.





Limestone, tan-white, xln, trace foss, cherty in part. Some green shales.

Limestone, grey-white, tan, cherty, green shale.

Limestone, tan-white, xln, tan cherts.

Limestone, tan-white, tan, xln, tan cherts, some grey-green shale.

Shale, grey-green, firm.

Limestone, cream-white, tan, xln, traces of chert, geen shales.

Limestone, grey-white, xln, granular, sandy texture, Slightly dolo., green shale.

Shale, dark green, firm, some grey sand stringers.

Sandstone, clear to white, sa qtz grains, well sorted, partly friable, some well cemented, gil, no visible shows of oil or gas.

Sandstone, clear to white, fn grained, sa, well sorted, friable in part, gil, traces of pyrite, no visible shows.

Shale, dark green to a pale green, some sandstone stringers.

Shale, grey-green, firm, sand stringers imbedded.

