



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1195967  
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: \_\_\_\_\_

1195967

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> _____<br><input type="checkbox"/> Other <i>(Specify)</i> _____ | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|---|---|

|           |                        |
|-----------|------------------------|
| Form      | ACO1 - Well Completion |
| Operator  | BEREXCO LLC            |
| Well Name | Rosalie 3-20           |
| Doc ID    | 1195967                |

All Electric Logs Run

|  |
|--|
|  |
| Borehole Compensated Sonic Array Log     |
| Array Compensated True Resistivity Log   |
| Spectral Density Dual Spaced Neutron Log |
| Microlog                                 |

|           |                        |
|-----------|------------------------|
| Form      | ACO1 - Well Completion |
| Operator  | BEREXCO LLC            |
| Well Name | Rosalie 3-20           |
| Doc ID    | 1195967                |

Tops

| Name               | Top  | Datum |
|--------------------|------|-------|
| Heebner (base)     | 3808 | -899  |
| Toronto            | 3830 | -921  |
| Lansing A          | 3753 | -943  |
| Lansing C          | 3914 | -1005 |
| Lansing G          | 4054 | -1145 |
| Kansas City        | 4200 | -1291 |
| Kansas City (base) | 4322 | -1413 |
| Marmaton           | 4338 | -1429 |
| Marmaton B         | 4368 | -1459 |
| Pawnee             | 4430 | -1521 |
| Ft. Scott          | 4456 | -1547 |
| Cherokee           | 4474 | -1565 |
| Morrow             | 4662 | -1753 |
| St. Louis          | 4736 | -1827 |
| RTD                | 4945 |       |
| LTD                | 4953 | -2044 |



# ALLIED OIL & GAS SERVICES, LLC 053057 ✓

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Liberal (21)

|                                |                |                    |                   |   |             |                       |                        |
|--------------------------------|----------------|--------------------|-------------------|---|-------------|-----------------------|------------------------|
| DATE <u>1-14-14</u>            | SEC. <u>27</u> | TWP. <u>22S</u>    | RANGE <u>33 W</u> | CALLED OUT                                  | ON LOCATION | JOB START <u>5:00</u> | JOB FINISH <u>7:00</u> |
| LEASE <u>Rosalie</u>           |                | WELL # <u>3-20</u> |                   | LOCATION <u>8mi North of Garden City-KS</u> |             | COUNTY <u>Finney</u>  | STATE <u>KS</u>        |
| OLD OR <u>NEW</u> (Circle one) |                |                    |                   |   |             |                       |                        |

CONTRACTOR Burdick #1  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D.  
 CASING SIZE 8 5/8 23" DEPTH 1784.56  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT 42.45  
 CEMENT LEFT IN CSG. \_\_\_\_\_  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 111.5 bbl

EQUIPMENT  
 PUMP TRUCK CEMENTER Alda E.  
 # 531-541 HELPER Cesar Pavia  
 BULK TRUCK  
 # 705-2642 DRIVER Alex Ayala  
 BULK TRUCK  
 # 457-251 DRIVER Ruben Perez

REMARKS:

OWNER:  
 CEMENT  
 AMOUNT ORDERED 600sk class A 65/35 bigel  
32cc 1/4 flo-seal 150sk class A  
bigel 32cc  
 COMMON Class A 1520 @ 17.90 2,685.00  
 POZMIX \_\_\_\_\_ @ \_\_\_\_\_  
 GEL \_\_\_\_\_ @ \_\_\_\_\_  
 CHLORIDE 26sk @ 64.00 1,664.00  
~~FLU~~ Flu-seal 150lb @ 2.97 445.50  
Alum. class A 600 sk @ 16.50 9,900.00  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 HANDLING 851.59 cur @ 2.48 2,111.94  
 MILEAGE 1789.28 Jan mile @ 2.60 4,652.13  
 TOTAL 21,458.57

SERVICE

DEPTH OF JOB 1784.56  
 PUMP TRUCK CHARGE \_\_\_\_\_ 2,213.75  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE Heavy 50mi @ 7.70 385.00  
 MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL 2,598.75

PLUG & FLOAT EQUIPMENT

Guide Shoe 1 @ 254.00 254.00  
AFV Float Valve 1 @ 175.00 175.00  
Tap Rubber Plug 1 @ 84.00 84.00  
Centralizer 3 @ 50.00 150.00  
Basket 1 @ 559.26 559.26  
 TOTAL 1,222.26

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 25,279.58  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

NET = 18,201.30

CHARGE TO: Petrexco LLC  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To: Allied Oil & Gas Services, 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.

PRINTED NAME Gilbert Davila JR  
 SIGNATURE Gilbert Davila JR

Date 1-14-14 District 21 Ticket No. 53057  
 Company Berexco LLC Rig Berexco #1  
 Lease Rosalie # Well No. 3-20  
 County Finnay State KS  
 Location \_\_\_\_\_ Field \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: 5 bbl H2O  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 8.56 Type CSA Weight 23 Collar \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type Class A 65/35  
6.8 gal 3 1/2 CC 1/4 Flo-seal Excess 100%  
 Amt. 600 Sks Yield 1.97 ft<sup>3</sup>/sk Density 12.5 PPG  
 TAIL: Pump Time \_\_\_\_\_ hrs. Type Class A  
6.8 gal 3 1/2 CC Excess \_\_\_\_\_  
 Amt. 150 Sks Yield 1.35 ft<sup>3</sup>/sk Density 14.8 PPG  
 WATER: Lead 10.7 gals/sk Tail 6.3 gals/sk Total 175.3 Bbls.

Casing Depths: Top \_\_\_\_\_ Bottom 1784.56

Pump Trucks Used 531-541  
 Bulk Equip. 705-8642  
457-251

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size \_\_\_\_\_ T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. 0.0640 Lin. ft./Bbl. \_\_\_\_\_  
 Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. ft. 0.2735 Lin. ft./Bbl. 13.6037  
 Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

Float Equip: Manufacturer Jind. Rubber  
 Shoe: Type Guide shoe Depth 1784.56  
 Float: Type AFU Float Valve Depth 1742.11  
 Centralizers: Quantity 3 Plugs Top 1 Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. 1 Basket at 10.50'  
 Disp. Fluid Type H2O Amt. 111.5 Bbls. Weight 8.34 PPG  
 Mud Type NONE Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE [Signature]

CEMENTER Aldo E

| TIME<br>(AM/PM) | PRESSURES PSI     |         | FLUID PUMPED DATA |                        |                | REMARKS                                |
|-----------------|-------------------|---------|-------------------|------------------------|----------------|--|
|                 | DRILL PIPE CASING | ANNULUS | TOTAL FLUID       | Pumped Per Time Period | RATE Bbls Min. |  |
| 11:00           |                   |         |                   |                        |                | Get to location - spot equipment.      |
| 1:00 pm         |                   |         |                   |                        |                | Run float equipment.                   |
| 5:00            |                   |         |                   |                        |                | meeting                                |
| 5:13            |                   |         |                   |                        |                | Pressure Test at 2000 psi              |
| 5:18            | 70                |         | 5                 |                        | 4              | Start Pumping spacer                   |
| 5:20            | 110               |         | 215.5             |                        | 5              | Pump Leak Cement                       |
| 5:42            | 130               |         | 251.5             |                        | 5              | Pump Tail Cement                       |
| 6:09            | 0                 |         |                   |                        |                | Release Plug                           |
| 6:11            | 110               |         | 251.5             |                        | 4              | Start Displacement                     |
| 6:14            | 150               |         | 271.5             |                        | 5              | 20 bbl genc                            |
| 6:18            | 250               |         | 291.5             |                        | 5              | 40 bbl                                 |
| 6:21            | 430               |         | 311.5             |                        | 5              | 60 bbl                                 |
| 6:25            | 550               |         | 331.5             |                        | 5              | 80 bbl                                 |
| 6:29            | 600               |         | 351.5             |                        | 3.5            | 100 bbl slow down to 3.5 bpm           |
| 6:31            | 630               |         | 361.5             |                        | 3.5            | 110 bbl                                |
| 6:32            | 6:50              |         | 363               |                        | 3.5            | Land Plug 6:50psi to 1200psi           |
| 6:35            |                   |         |                   |                        |                | Release Pressure - check Floats (good) |
|                 |                   |         |                   |                        |                | 20 bbl Back of Cement                  |

FINAL DISP. PRESS: 6.50 PSI BUMP PLUG TO 1200 PSI BLEEDBACK 1 BBLs. THANK YOU

# ALLIED OIL & GAS SERVICES, LLC 062146

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT:

*Darkley, Ky*

|                         |                    |  |                 |                      |                 |                          |                          |
|-------------------------|--------------------|--|-----------------|----------------------|-----------------|--------------------------|--------------------------|
| DATE <i>1/24/14</i>     | SEC. <i>20</i>     | TWP. <i>22</i>                         | RANGE <i>33</i> | CALLED OUT           | ON LOCATION     | JOB START <i>11:30am</i> | JOB FINISH <i>12:30p</i> |
| LEASE <i>Rosalia</i>    | WELL # <i>3-20</i> | LOCATION <i>Greene City N70 Barlow</i> |                 | COUNTY <i>Finney</i> | STATE <i>Ky</i> |                          |                          |
| OLD OR NEW (Circle one) |                    | <i>4 W 1/2 S W 1/4</i>                 |                 |                      |                 |                          |                          |

CONTRACTOR *Basco 10* OWNER \_\_\_\_\_

TYPE OF JOB *Prod.*  
 HOLE SIZE *7 7/8* T.D. *4955 LTD*  
 CASING SIZE *5 1/2* DEPTH *4955*  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL *Port Collar* DEPTH *3189'*  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT *42.0*  
 CEMENT LEFT IN CSG. *42.0*  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_

CEMENT  
 AMOUNT ORDERED *253k Alk 11/416 Pro Seal, 110 170 160 140*  
*11/416 Pro Seal, 110 170 160 140*  
 COMMON *78* @ *16.50* *1237.50*  
 POZMIX \_\_\_\_\_ @ \_\_\_\_\_  
 GEL \_\_\_\_\_ @ \_\_\_\_\_  
 CHLORIDE \_\_\_\_\_ @ \_\_\_\_\_  
 ASC *180* @ *20.22* *2508.00*  
 @ *92* \_\_\_\_\_  
*Flashed* *49* *16* @ *2.92* *145.28*  
*Salt* *13* *52k* @ *26.35* *342.55*  
*Filled* *34* *10* @ *18.25* *620.50*  
*Water* *17* *16* @ *9.80* *166.60*  
*Colcrete* *1095* *16* @ *.98* *1073.10*  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 HANDLING *249.88 CE* @ *2.48* *619.70*  
 MILEAGE *26.2* @ *10.46* *274.05*  
 TOTAL *8023.28*

**EQUIPMENT**

PUMP TRUCK CEMENTER *Alan Ryan*  
 # *428-281* HELPER *Kevin Ryan*  
 BULK TRUCK  
 # *380-310* DRIVER *Gary Holmgren*  
 BULK TRUCK  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

**REMARKS:**

*Prod 30 Bbl 15 m H. Prod 305k Alk 11/416 Pro Seal  
 5' Cement Plug 5 1/2" T&L w/ 100 ASC. Wash T&L's  
 Displace w/ 317' H. GEL H<sub>2</sub>O. Stand down to 300'  
 1500' Lost 45 BBL, 800' OSE-13 FT. and  
 Plug @ 1600*

*FW at Hold.*

*Darkley*  
*Allegany, Ky*

CHARGE TO: *Basco 10*  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**SERVICE**

DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE \_\_\_\_\_ *2765.25*  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE *50* @ *7.30* *365.00*  
 MANIFOLD \_\_\_\_\_ @ *27.50* *nc*  
 4" Wellhead *50* @ *7.90* *nc*  
 @ \_\_\_\_\_

TOTAL *3,150.25*

**PLUG & FLOAT EQUIPMENT**

*Port Collar* *3590.00*  
*APU Float Shoe* @ *232.00*  
*Latch Lower Assembly* @ *184.00*  
*14 Centralizers* @ *37.00* *518.00*  
*3 Bumpers* @ *178.00* *534.00*  
 @ \_\_\_\_\_

TOTAL *5058.00*

To: Allied Oil & Gas Services, 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 *16,282.03*  
 DISCOUNT *3,142.72* IF PAID IN 30 DAYS  
*13,139.30 Net.*

PRINTED NAME *Cribben, David, Jr*

SIGNATURE *[Signature]*



Date: Feb/14 District: Daddy Ticket No. 262146  
 Company: Bureau Rig: Good 1  
 Lease: Rossie Well No. 3-70  
 County: Franklin State: KS  
 Location: \_\_\_\_\_ Field: \_\_\_\_\_

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size: 5 1/2 Type: New Weight: 15 1/2 Collar: \_\_\_\_\_

Casing Depths: Top KB Bottom 4955'  
Port Collar @ 3189 - KB

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 7 1/8 T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. 0.238 Lin. ft./Bbl. \_\_\_\_\_  
 Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

LEAD: Pump Time \_\_\_\_\_ hrs. Type PLW Type/Class  
5' Silicate 14 PLO Excess \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

TAIL: Pump Time \_\_\_\_\_ hrs. Type PLW Type/Class  
6' Silicate 14 PLO, 14 lb defamer 14 PLO  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

WATER: Lead \_\_\_\_\_ gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls.

Pump Trucks Used 425-291  
 Bulk Equip. 386

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Float: Type APU Depth \_\_\_\_\_  
 Centralizers: Quantity 14 Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_  
 Stage Collars Port Collar  
 Special Equip. 3 Buckets - lat ab Down Assembly  
 Disp. Fluid Type W20 Amt. \_\_\_\_\_ Bbls. Weight 8.34 PPG  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE Wayne Gerstner

CEMENTER JA

| TIME | PRESSURES PSI |                   | FLUID PUMPED DATA |             |                        | REMARKS  |
|------|---------------|-------------------|-------------------|-------------|------------------------|--|
|      | AM/PM         | DRILL PIPE CASING | ANNULUS           | TOTAL FLUID | Pumped Per Time Period |  |
|      |               |                   |                   |             |                        | Operation SFTy mfg set up                      |
|      |               |                   |                   |             |                        | Run Log  |
|      |               |                   |                   |             |                        | Con. 1/2 hr 1/2 mfg in                         |
|      |               |                   |                   |             |                        | Run Log  |
|      |               |                   |                   |             |                        | Circulate                                      |
|      |               |                   |                   |             |                        | mfg 20 SK RH 15 SK MH                          |
|      |               |                   |                   |             |                        | mfg 30 SK PLW type 1 class 14 PLO 5 1/2 12 1/2 |
|      |               |                   |                   |             |                        | Down 5 1/2                                     |
|      |               |                   |                   |             |                        | mfg 100 Bbl down 5 1/2                         |
|      |               |                   |                   |             |                        | Work up  |
|      |               |                   |                   |             |                        | Displace Plug                                  |
|      |               |                   |                   |             |                        |  |
|      |               |                   |                   |             |                        | Card Plug                                      |
|      |               |                   |                   |             |                        | Job Completed                                  |



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: Rosalie 3-20 dst1

TIME ON: 08:39 am  
TIME OFF: 08:43 pm

Company Berexco LLC Lease & Well No. Rosalie 3-20  
Contractor Beredco #2 Charge to Berexco LLC  
Elevation 2897 Formation Marmaton Effective Pay -- Ft. Ticket No. S0437  
Date 01/20/2014 Sec. 22 Twp. 22 S Range 33 W County Finney State KANSAS  
Test Approved By Evan Mayhew Diamond Representative Jacob McCallie

Formation Test No. 1 Interval Tested from 4369 ft. to 4392 ft. Total Depth 4392 ft.

Packer Depth 4363 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4369 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4349 ft. Recorder Number 5155 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4370 ft. Recorder Number 5586 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 54 Drill Collar Length 628 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 7.2 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in.

Chlorides 3000 P.P.M. Drill Pipe Length 3707 ft. I.D. 3 1/2 in.

Jars: Make STERLING Serial Number 4 Test Tool Length 34 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 23 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB Built to 1/4" in 30 mins NOBB

2nd Open: No Blow No Build NOBB

Recovered 10 ft. of SLOSM 100% M (few oil specks)

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Diesel in bucket

Tool Sample: 1% O 99% M

Time Set Packer(s) 12:01 PM <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 4:31 pm <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 108

Initial Hydrostatic Pressure..... (A) 2102 P.S.I.

Initial Flow Period..... Minutes 30 (B) 10 P.S.I. to (C) 16 P.S.I.

Initial Closed In Period..... Minutes 60 (D) 577 P.S.I.

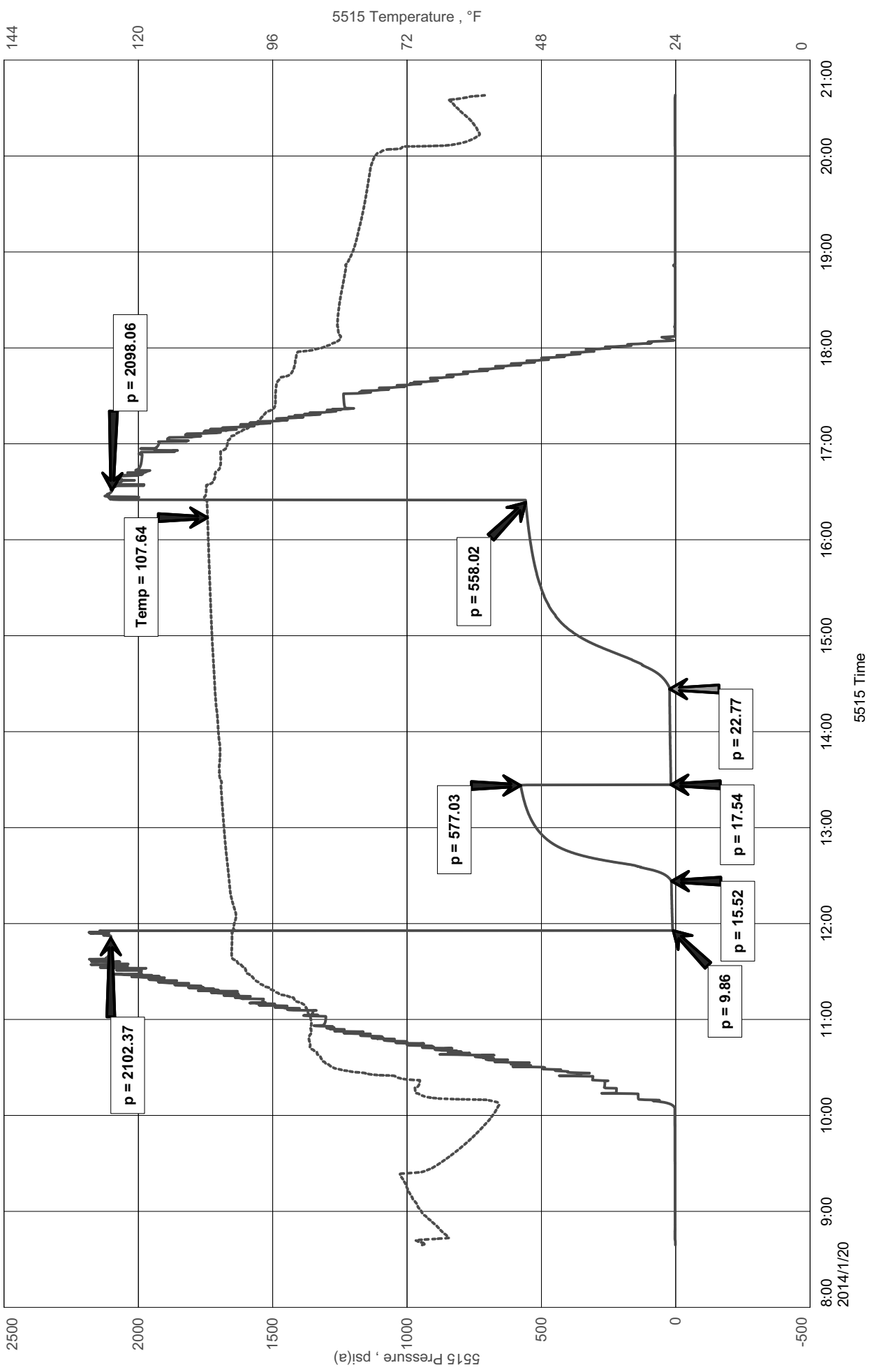
Final Flow Period..... Minutes 60 (E) 18 P.S.I. to (F) 23 P.S.I.

Final Closed In Period..... Minutes 120 (G) 558 P.S.I.

Final Hydrostatic Pressure..... (H) 2098 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

# Rosalie 3-20



# Diamond Testing

## General information Report

### General Information

Company Name Berexco LLC

|                     |                              |                |                |
|---------------------|------------------------------|----------------|----------------|
| Contact             | Evan Mayhew                  | Job Number     | SO437          |
| Well Name           | Rosalie 3-20                 | Representative | Jacob McCallie |
| Unique Well ID      | DST #1 Marmaton 4369-4392    | Well Operator  | Berexco LLC    |
| Surface Location    | Sec 22-22s-33w Finney County | Report Date    | 2014/01/20     |
| Well License Number |                              | Prepared By    | Ricky Ray      |
| Field               | Damme                        |                |                |
| Well Type           | Vertical                     |                |                |

|                     |                           |                 |          |
|---------------------|---------------------------|-----------------|----------|
| Test Type           | Drill Stem Test           |                 |          |
| Formation           | DST #1 Marmaton 4369-4392 |                 |          |
| Well Fluid Type     | 01 Oil                    | Start Test Time | 08:39:00 |
|                     |                           | Final Test Time | 08:43:00 |
| Start Test Date     | 2014/01/20                |                 |          |
| Final Test Date     | 2014/01/20                |                 |          |
| Gauge Name          | 5515                      |                 |          |
| Gauge Serial Number |                           |                 |          |

### Test Results

RECOVERED:  
10' SLOSM 100% M (few oil specks)

TOOL SAMPLE:  
1% O 99% M



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: Rosalie 3-20 dst2

TIME ON: 02:48  
TIME OFF: 13:00

Company Berexco LLC Lease & Well No. Rosalie 3-20  
Contractor Beredco #2 Charge to Berexco LLC  
Elevation 2897 Formation Marrow Effective Pay -- Ft. Ticket No. S0438  
Date 01/23/2014 Sec. 20 Twp. 22 S Range 33 W County Finney State KANSAS  
Test Approved By Evan Mayhew Diamond Representative Jacob McCallie

Formation Test No. 2 Interval Tested from 4695 ft. to 4716 ft. Total Depth 4716 ft.  
Packer Depth 4690 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.  
Packer Depth 4695 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4676 ft. Recorder Number 5155 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4698 ft. Recorder Number 5586 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth          ft. Recorder Number          Cap.          P.S.I.

Mud Type Chem Viscosity 53 Drill Collar Length 628 ft. I.D. 2 1/4 in.  
Weight 9.0 Water Loss 7.1 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in.  
Chlorides 3,500 P.P.M. Drill Pipe Length 4033 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number 4 Test Tool Length 34 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 21 ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Packer failed to seat **MISS RUN**  
2nd Open:         

|  |               |
|--|---------------|
| Recovered <u>330</u> ft. of <u>MUD</u> <u>100% M</u> |               |
| Recovered <u>        </u> ft. of <u>        </u>     |               |
| Recovered <u>        </u> ft. of <u>        </u>     |               |
| Recovered <u>        </u> ft. of <u>        </u>     |               |
| Recovered <u>        </u> ft. of <u>        </u>     | Price Job     |
| Recovered <u>        </u> ft. of <u>        </u>     | Other Charges |
| Remarks: <u>Diesel in bucket</u>                     | Insurance     |
| Tool Sample: <u>        </u>                         | Total         |

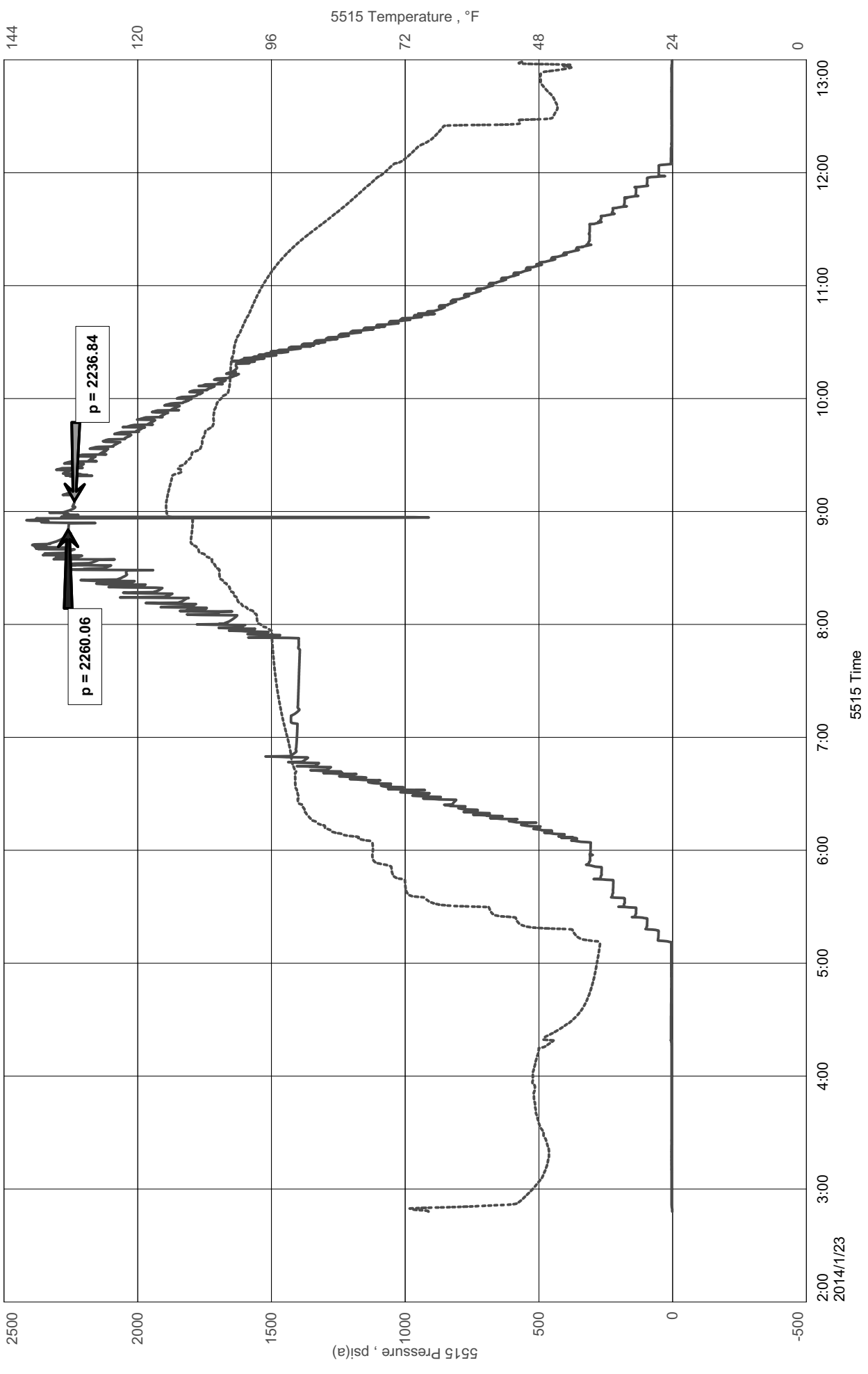
Time Set Packer(s) 9:49 AM          A.M.          P.M. Time Started Off Bottom          A.M.          P.M. Maximum Temperature           
Initial Hydrostatic Pressure..... (A) 2260 P.S.I.  
Initial Flow Period..... Minutes (B)          P.S.I. to (C)          P.S.I.  
Initial Closed In Period..... Minutes (D)          P.S.I.  
Final Flow Period..... Minutes (E)          P.S.I. to (F)          P.S.I.  
Final Closed In Period..... Minutes (G)          P.S.I.  
Final Hydrostatic Pressure..... (H) 2237 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Berexco LLC  
DST #2 Marrow 4695-4716'  
Start Test Date: 2014/01/23  
Final Test Date: 2014/01/23

Rosalie #3-20  
Formation: DST #2 Marrow 4695-4716'  
Pool: Infield  
Job Number: S0438

# Rosalie #3-20



# Diamond Testing

## General information Report

### General Information

Company Name Berexco LLC

|                     |                             |                |                |
|---------------------|-----------------------------|----------------|----------------|
| Contact             | Evan Mayhew                 | Job Number     | S0438          |
| Well Name           | Rosalie #3-20               | Representative | Jacob McCallie |
| Unique Well ID      | DST #2 Marrow 4695-4716'    | Well Operator  | Berexco LLC    |
| Surface Location    | SEC 20-22S-33W Finny County | Report Date    | 2014/01/23     |
| Well License Number |                             | Prepared By    | Jacob McCallie |
| Field               | Damme                       |                |                |
| Well Type           | Vertical                    |                |                |

|                     |                          |                 |          |
|---------------------|--------------------------|-----------------|----------|
| Test Type           | Drill Stem Test          |                 |          |
| Formation           | DST #2 Marrow 4695-4716' |                 |          |
| Well Fluid Type     | 01 Oil                   | Start Test Time | 02:48:00 |
|                     |                          | Final Test Time | 13:00:00 |
| Start Test Date     | 2014/01/23               |                 |          |
| Final Test Date     | 2014/01/23               |                 |          |
| Gauge Name          | 5515                     |                 |          |
| Gauge Serial Number |                          |                 |          |

### Test Results

MISS RUN

RECOVERED:  
330' MUD

# EARTH TECH OGL, INC

PO BOX 683

HOOKERT, OK 73945

(888)543-8378

TIM AND PARISH HEDRICK OWNER OPERATORS

**COMPANY:** Berexco, LLC  
**WELL:** Rosalie #3-20  
**FIELD:** DAMME      **COUNTY:** Finney      **STATE:** KS  
**LOCATION:** SW NE NE SE, Sec. 20, 22S, 33W  
2299' FSL 550' FWL  
**Interval Logged:** 3700'      **To:** 4945      **G.L.:** 2897'      **K.B.:** 2909'  
**Date Logged:** 1/18/14      **To:** 1/26/14      **Spud Date:** 1/12/14  
**Rig:** Beredo Rig #1      **Unit No.:**       
**Loggers:** Ian Bosmeijer - Earthtech  
**Api No.:** 15-055-22271-00-00  
**Filename:** rosalie-3-20.mlw  
**Geologist:** Pete Wilson

**Abbreviations:**

NB...New Bit      DST...Drill Stem Test  
 CO...Circ Out      DS...Directional Survey  
 NR...No Returns      CG...Connection gas  
 TG...Trip Gas      LAT...Logged After Trip  
 WOB...Wt on Bit      PP...Pump Pressure  
 RPM...Rev/Min      SPM...Strokes/Min  
 SG...Survey Gas      DTG...Down Time Gas

**Mud Data**

WT...Weight      V...Viscosity  
 PH...Acidity      F...Filtrate  
 CHL...Chlorides      SC...Solids Content

**Lithology Symbols:**

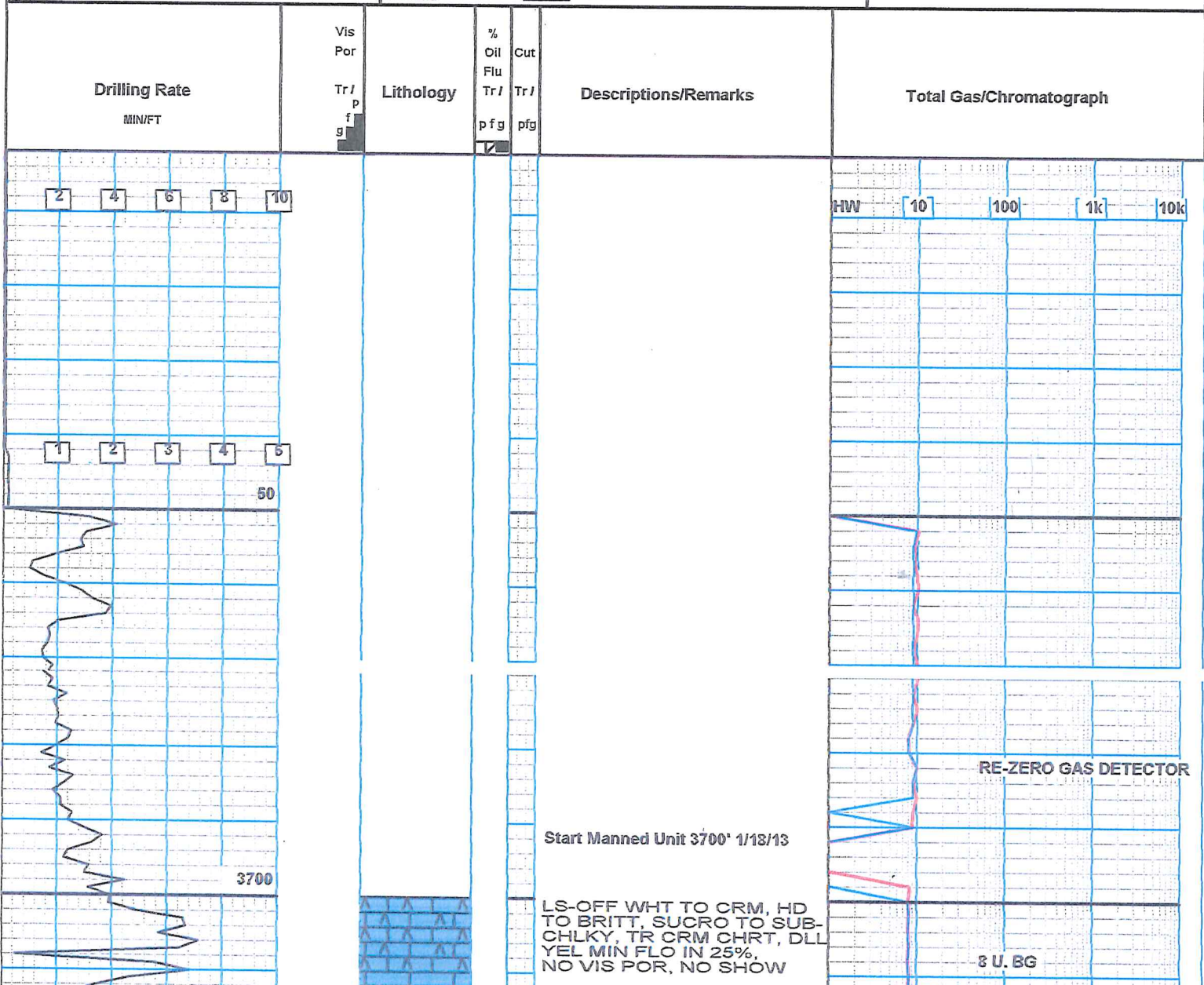
|            |              |             |
|------------|--------------|-------------|
| Anhydrite  | Salt         | Granite     |
| Siltstone  | Chert        | Sandstone   |
| Dolomite   | Conglomerate | Limestone   |
| Coal       | Shale        | Bentonite   |
| Carb Shale | Granite Wash | Quartz Wash |
| Red Sh     | Org Sh       | Green Sh    |
| Cust Sh1   | Cust Sh2     | Cust Sh3    |
| Cust Sh4   | Cust Sh5     | Cust Sh6    |

**Gas Chromatograph Analysis:**

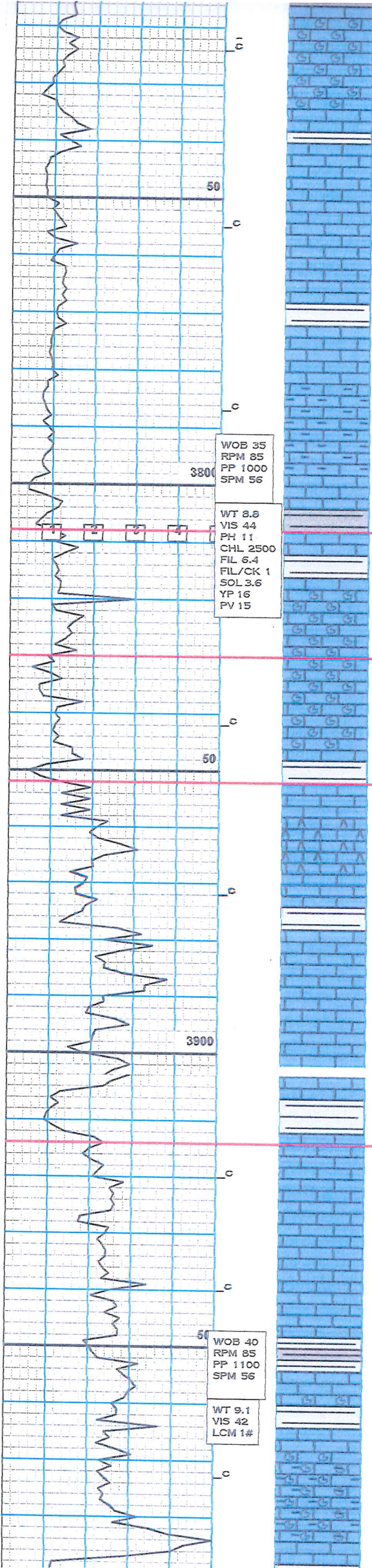
HW HW  
 C1 C1  
 C2 C2  
 C3 C3  
 IC4 IC4  
 NC4 NC4  
 IC5 IC5

**Accessories**

Glauconite      Pyrite      Fossils      Oolites  
 Fractures      Cement







WOB 35  
RPM 85  
PP 1000  
SPM 56

WT 8.8  
VIS 44  
PH 11  
CHL 2500  
FIL 6.4  
FIL/CK 1  
SOL 3.6  
YP 16  
PV 15

3900

WOB 40  
RPM 85  
PP 1100  
SPM 56

WT 9.1  
VIS 42  
LCM 1#

LS- WHT TO CRM, HD DNS TO SFT, F-XLN TO SUB-CHLKY, RE-XLN IP, TR WHT CHRT IP, SCAT FOSS FRAG THRU, TR IMBD SH IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

LS-WHT TO OFF WHT, HD TO BRITT, F-XLN TO RE-XLN TR SUB-CHLKY, SFT WHT CHLK IP, IMBD BRN SH IP, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

LS- WHT TO CRM, HD TO BRITT IP, TT SUCRO TO SUB CHLKY IP, IMBD SH IP, MD CALC XLS IP,IMBD LT GY TO CRM CHRT IP, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

SH-BLK SFT CARB

SH-MD GY TO BLK, FRM BLKY TO SPLNTY, SMTH TXI

LS-WHT OFF WHT TO CRM, HD DNS TO BRITT, F-XLN TO RE-XLN, SUB CHLKY IP, SCAT FOSS FRAG, TR GY CHRT IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

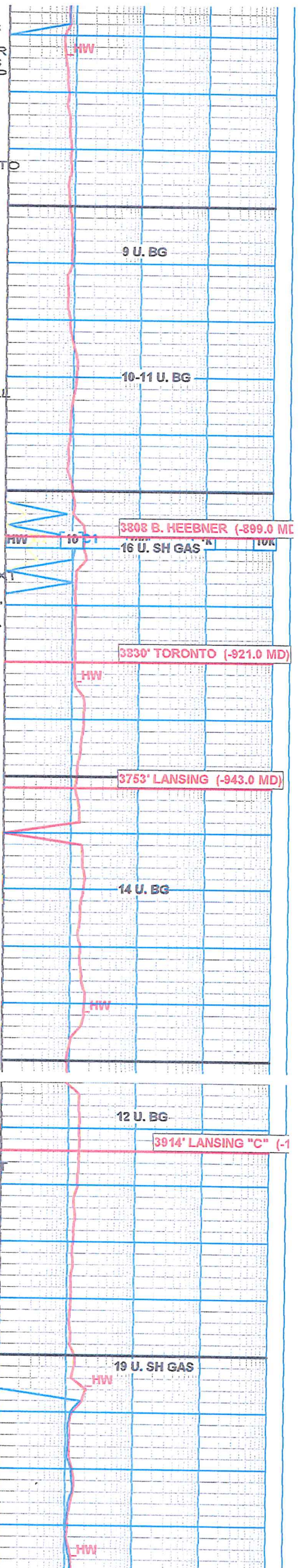
LS-WHT TO CRM, HD DNS, F-V/F XLN, SFT WHT CHLK IP, TR WHT TO GY CHRT, TR IMBD SH IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

LS- WHT TO OFF WHT, HD DNS, F-XLN TO RE-XLN, TR SFT WHT CHLK, DLL YEL FLO IN 25%, NO VIS POR, NO SHOW

LS- WHT, HD TO BRITT IP, F-XLN TO TT SUCRO, TR SFT WHT CHLK IP, DLL YEL MIN FLO IN 60%, NO VIS POR, NO SHOW

SH- LT GY TO BLK, FRM BLKY TO SFT, CARB IP,

LS- OFF WHT TO CRM, HD DNS TO BRITT, F-XLN TO MD-XLN, RE-XLN MTRX IP, TR IMBD FOSS FRAG, TR IMBD SH IP, DLL YEL MIN FLO IN 50%, TR V/PR INTER-XLN POR IN 2%, NO CUT OR SHOW



9 U. BG

10-11 U. BG

3808 B. HEEBNER (-899.0 MD)  
16 U. SH GAS

3330' TORONTO (-921.0 MD)

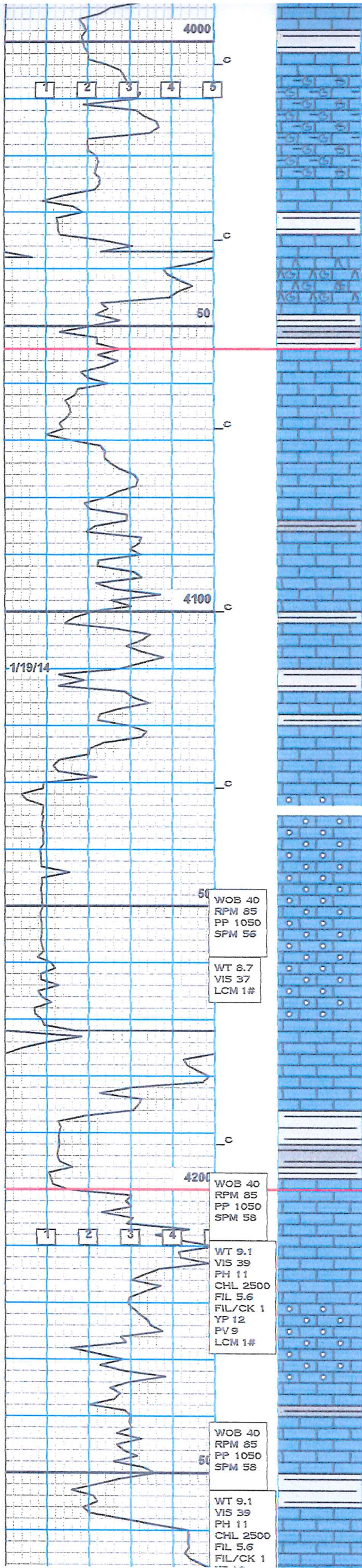
3753' LANSING (-943.0 MD)

14 U. BG

12 U. BG

3914' LANSING "C" (-1

19 U. SH GAS



LS- WHT OFF WHT TO LT GY, HD DNS, F-XLN TO RE-XLN IP, IMB FOSS FRAG IP, TR DISS SH, TR PYR CLSTR, SLI SUB-CHLKY IP, DLL YEL MIN FLO TO BRIT YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LS- WHT TO OFF WHT, HD DNS, F-XLN TO CRYPTO-XLN IP, IMBD WHT CHRT IP, IMBD SM CALC XLS, TR FOSS FRAG IP, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

SH- MD GY TO BLK, FRM BLKY TO TR SFT, CARB IP, SLI SLTY IP

LS- WHT TO OFF WHT, HD TO BRITT, MD-XLN, RE-XLN MTRX IP, SFT WHT CHLK IP, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

SH- BLK SFT CARB

LS- OFF WHT TO CRM, HD TO BRITT IP, F-XLN TO RE-XLN IP, TR FREE OOLIDS, SCAT SFT WHT CHLK THRU, DLL YEL MIN FLO IN 50%, NO VIS POR TO PROBABLE OOLITIC POR IP, NO VIS SHOW

SH- LT TO MD GY, FRM BLKY, SMTH TXT

LS- OFF WHT TO LT TN, HD TO V/BRITT SFT IP, F-XLN, TR TT SUCRO, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

LS- OFF WHT TO WHT, HD TO V/BRITT, V/OOLITIC TO OOMOLDIC W/ F-XLN MTRX, DLL YEL MIN FLO IN 80%, EXCEL OOCASSTIC POR, NO VIS CUT OR SHOW

LS- WHT TO CRM, HD DNS, F-XLN TO V/F-XLN, DLL YEL FLO IN 40%, NO VIS POR, NO SHOW

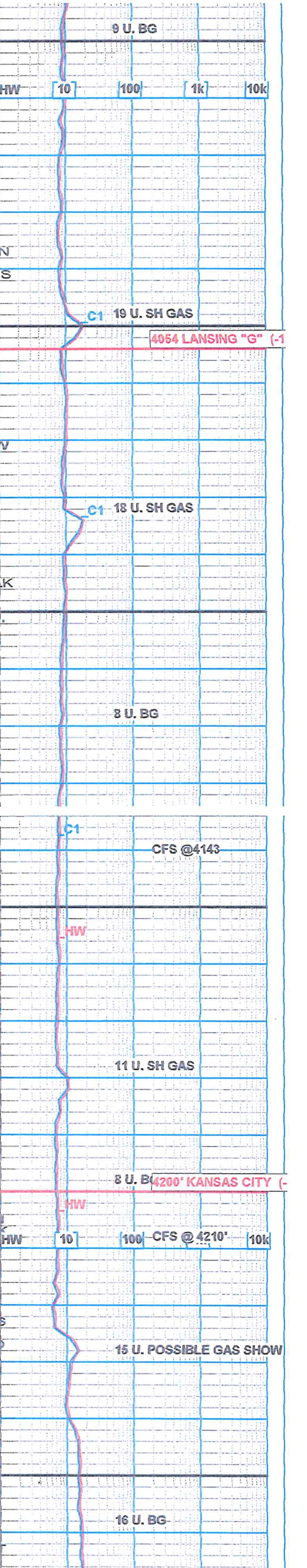
SH- DK GY TO BLK, FRM BLKY TO SFT IP, CARB IP, SMTH TXT

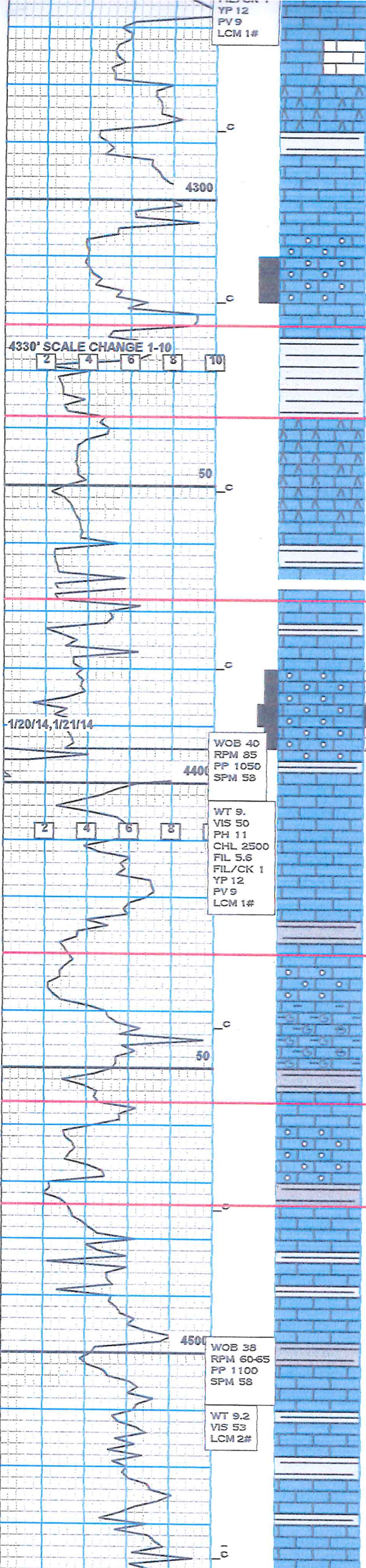
LS- WHT TO OFF WHT, HD TO BRITT, F-XLN TO CRYPTO-XLN IP, TR RE-XLN MTRX, SCAT SFT WHT CHLK IP, TR FOSS FRAG, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

LS- OFF WHT TO CRM, HD DNS, OOLITIC W/ F-XLN MTRX, SCAT FREE OOLITES IP, TR IMBD FOSS FRAG, TR SM CALC XLS, SPOTTED DLL YEL FLO IN 50%, TR PR INTER OOLCST IP, NO SHOW

SH-LT GY TO LT GN, FRM BLKY TO SFT IP, SMTH TXT

LS- LT CRM TO LT GY, HD DNS, V/F TO F-XLN, TR RE-XLN MTRX IP, SCAT LT TN CHRT IN TRAY, SFT WHT CHLK IP, V/ DLL YEL MIN





CHLK IP, V/DLL TEL MIN FLO IN 40%, NO VIS POR, NO SHOW

LS- WHT, HD TO SFT, V/SUB CHLKY, IMBD OOLITES IN CHLK MTRX, DLL MIN FLO IN 80%, NO VIS POR, NO SHOW

LS- OFF WHT TO WHT, HD DNS, F-XLN TO V/F-XLN, IMBD OOLITES IP, TR PYR CLSTR IP, DLL YEL MIN FLO IN 60%, GD TO EXCEL OOLICST POR IN 20%, NO VIS CUT OR SHOW

LS-OFF WHT TO CRM, HD DNS TO BRITT, F-XLN TO RE-XLN IP, SCAT IMBD OOLITES IP, TR WHT TO GY CHRT IN TRAY, TR IMBD FOSS FRAG IP, DLL YEL MIN FLO IN 40%, FR TO GD OOLICST POR IP, NO VIS CUT OR SHOW

SH- GY TO LT GRN, FRM TO SFT GMMY, SLY CHLKY, SM TO SLI MICA TXT

LS- WHT OFF WHT TO LT TN, HD DNS, F-XLN TO CRYPTO-XLN, TR RE-XLN MTRX IP, SFT TO GMMY CHLK IP, SCAT LT GY TO LT TN CHRT IP, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

LS- WHT TO OFF WHT, F-XLN TO TT SUCRO, TR RE-XLN MTRX IP, SCAT IMBD OOLITES IP, TR FOSS FRAG, SFT GMMY CHLK IP,

DLL YEL FLO IN 40%, NO VIS POR, NO SHOW

LS-OFF WHT TO LT TN, HD TO V/BRITT, MD-XLN TO TT SUCRO, SUB CHLKY IP, IMBD OOLITES, TR SCAT FOSS, DLL YEL MIN IN 60%, SPOTTED GLD FLO IN 40%, FR TO GD INTER-XLN POR, TR FR OOLICAST & OOMOLDIC POR IP, GD FL SH CUT GD SLOW STRM IN 10%

LS- OFF WHT TO LT GY, HD DNS, F-XLN TO CRYPTO-XLN, IMBD OOLITES IP, SFT WHT CHLK IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

SH-DK GY TO BLK, FRM TO SFT CARB

LS- WHT, LT TN TO LT GY, HD TO V/SFT, SUB-CHLKY TO F-XLN IP, ABD SFT WHT CHLK, SCAT FOSS FRAG, TR OOLITES, TR LT BRN TO GY CHRT IN TRY, IMBD SH IP, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LS- CRM TO LT TN, HD DNS, F-XLN TO TR TT SUCRO, IMBD FOSS FRAG IP, SFT WHT CHLK IP, NO FLO, NO VIS POR, NO SHOW

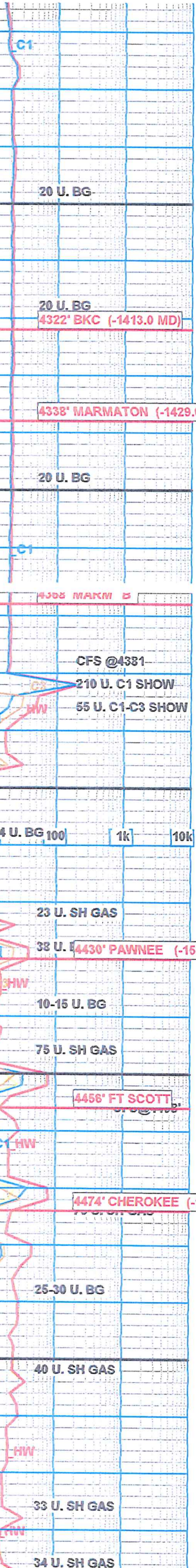
LS-OFF WHT TO CRM LT TN, HD TO SLI BRITT IP, F-V/F XLN, TR RE-XLN MTRX IP, IMBD OOLITES, ABDT SFT WHT CHLK IP, TR IMBD FOSS FRAG, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

LS- OFF WHT TO LT GY, HD DNS, F-XLN TO RE-XLN IP, TR FOSS FRAG, IMBD GMMY SH IP, V/DLL YEL FLO IN 20%, NO VIS POR, NO SHOW

SH-BLK SFT CARB IP

LS- OFF WHT TO WHT, HD TO BRITT, F-XLN TO TR RE-XLN, FOSS FRAG IP, MD-XLN CALC IP, SFT WHT CHLK IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

SH-LT GY TO LT GRN, FRM BLKY, SMTH TO SLI SLTY TXT



20 U. BG

20 U. BG  
4322' BKC (-1413.0 MD)

4338' MARMATON (-1429.0 MD)

20 U. BG

4358' MAXIM B

CFS @4381

210 U. C1 SHOW  
55 U. C1-C3 SHOW

10' 4 U. BG 100 1k 10k

23 U. SH GAS

38 U. 4430' PAWNEE (-1521)

10-15 U. BG

75 U. SH GAS

4456' FT SCOTT

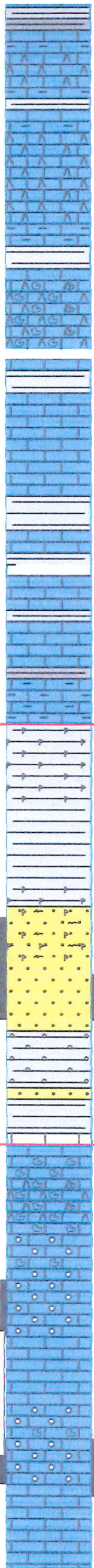
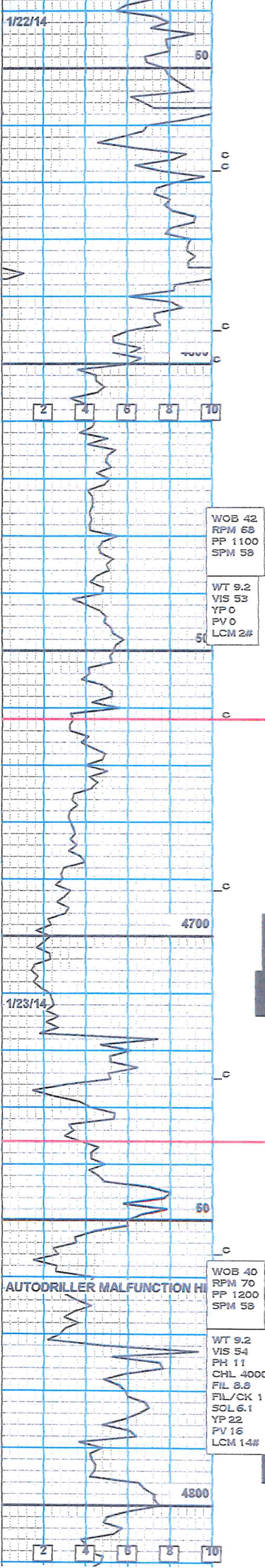
4474' CHEROKEE (-15)

25-30 U. BG

40 U. SH GAS

33 U. SH GAS

34 U. SH GAS



SH-DK GY TO BLK, FRM TO SFT, CARB IP, SMTH TXT  
 LS-OFF WHT TO LT CRM, V/HD DNS, F-XLN TO CRYTO-XLN, ABDT CRM TO TN CHRT IP, SHLY IP, DLL YEL FLO IN 10%, NO VIS POR, NO SHOW

LS- LT TN TO BRN, V/ HD DNS, F-XLN, TR RE-XLN IP, IMBD CHRT IP, SCAT FOSS FRAG, TR IMBD SH IP, NO FLO, NO VIS POR, NO SHOW

LS- OFF WHT TO LT TN, HD DNS, V/F TO F-XLN, TR RE-XLN MTRX, ABDT FOSS FRAG IP, ABDT WHT TO BRN CHRT, V/DLL YEL FLO IN 10%, NO VIS POR, NO SHOW

LS-CRM TO LT TN, HD DNS, F-XLN TO CRYTO XLN, TR RE-XLN MTRX IP, IMBD FOSS FRAG IP, ARG TO SHLY IP, NO FLO, NO VIS POR, NO SHOW

SH-LT GY TO LT GRN, FRM TO SFT GMMY, SMTH TXT

LS- OFF WHT TO LT GY, HD TO BRITT IP, F-XLN, IMBD BLK SH IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW,

LS- CRM TN TO GY, HD DNS TO SLI BRITT IP, F-XLN TO CRYTO-XLN, SCAT WHT CHLK IP, TR FOSS FRAG, IMBD SH IP, NO FLO, NO VIS POR, NO SHOW

SH- LT GY TO LT GRN, SFT GMMY TO TR FRM, SMTH TO SLI SLTY TXT

3994'-4705' SS- FRSTY, WHT TO LT GY, QRTZ GRNS, HD TT SLI FRI IP, S-ANG TO S-RND GRNS, V/WLL SRT, CAL CMNT IP, IMBD PYR, TR IMBD LT GY SH, NO FLO, PR INER-GRN POR, NO CUT OR SHOW

4705'-4716'SS-FRSTY TO LT TN(DUE TO OIL STN IN 45%), QRTZ GRNS, HD TT FRI IP, FN-GRN S-ANG TO S-RND, WLL SRT, SIL CMNT IP, YEL GLD FLO IN 80%,FR TO GD INTER-GRN POR,EXCEL FLSH CUT, GD SLOW STRM IN 80%,GD ODOR

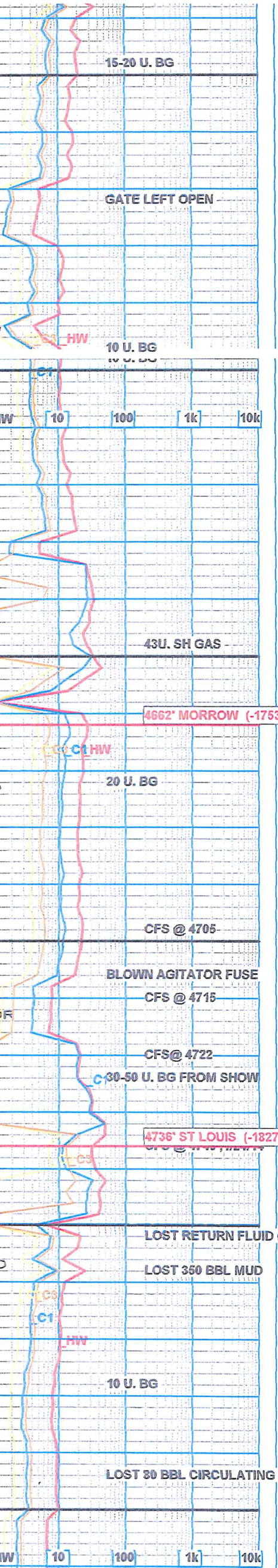
SLTSTN- LT GY TO GY, FRM BLKY, ABDT IMBD F-GRN QRTZ IP, SCAT DISS PYR IP, TR GLAUC IP, NO FLO, TR V/PR INTER-GRN POR IP, NO VIS CUT OR SHOW

LS- OFF WHT CRM TO LT TN, HD DNS TO BRITT, F-XLN TO SLI SUCRO IP, SFT WHT CHLK IP, SCAT FOSS IP, TR MICRO OOLITES IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

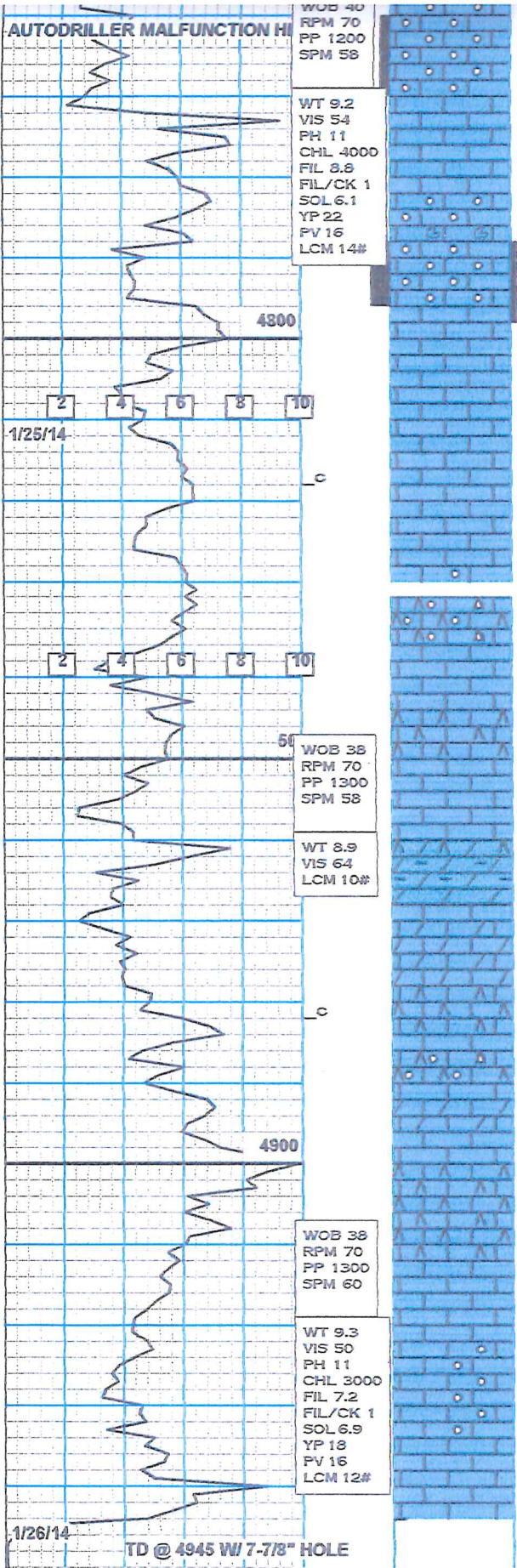
4760'-70'LS- OFF WHT CRM TO LT TN, BRITT TO HD IP, F-XLN TO RE-XLN, ABDT IMBD FOSS FRAG, ABD IMBD OOLITES, LRG CALC XLS IP, SCAT LT GY CHRT IN TRY, DLL YEL MIN FLO IN 30%,PR INTER-XLN POR IN 5%, PR MICRO PP POR IN 3%, PROBABLE FRACTURE,NO VIS CUT OR SHOW

LS-WHT, HD DNS, F-XLN TO TT SUCRO, SFT WHT CHLK IP, DLL YEL FLO IN 60%,NO VIS POR, NO SHOW

4788-4795' LS- OFF WHT TO LT TN (DUE TO OIL STN IN 25%) F-XLN TO SLI SUCRO, ABDT IMBD OOLITES, TR PYR GRNS, TR SFT WHT CHLK, DLL YEL FLO IN 60%, TR SPOTTED GLD FLO, FR TO GD INTER-XLN POR IN 10%, FR TO GD PP POR IN 5%, GD FLSH CUT, EXCEL SLOW STRM IN 40%



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IMBD OOLITES, LRG CALC XLS IP, SCAT LT GY CHRT IN TRY, DLL YEL MIN FLO IN 30%, PR INTER-XLN POR IN 5%, PR MICRO PP POR IN 3%, PROBABLE FRACTURE, NO VIS CUT OR SHOW

LS-WHT, HD DNS, F-XLN TO TT SUCRO, SFT WHT CHLK IP, DLL YEL FLO IN 60%, NO VIS POR, NO SHOW

4788-4795' LS- OFF WHT TO LT TN (DUE TO OIL STN IN 25%) F-XLN TO SLI SUCRO, ABDT IMBD OOLITES, TR PYR GRNS, TR SFT WHT CHLK, DLL YEL FLO IN 60%, TR SPOTTED GLD FLO, FR TO GD INTER-XLN POR IN 10%, FR TO GD PP POR IN 5%, GD FLSH CUT, EXCEL SLOW STRM IN 40%

LS- OFF WHT TO LT CRM, HD DNS TO BRITT, F-XLN TO SUB-CHLKY IP, SFT WHT CHLK IP, SM CALC XLS IP, V/DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

LS- OFF WHT TO LT CRM, HD DNS TO BRITT, F-XLN TO CRYTO-XLN IP, TR IMBD OOLITES IP, SCAT WHT TO GY CHRT IN TRY, TR SFT WHT CHLK, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

DOLO- LT TN TO LT GY, HD DNS, F-XLN TO CRYTPO-XLN, IMBD SMLL DOLO GRNS IP, TR IMBD SH IP, SCAT LT GY CHRT IN TRY, V/DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

LS- TN TO BRN TR OFF WHT, HD DNS, V/F-XLN, TR IMBD FOSS, TR IMBD OOLITES, SCAT WHT TO GY CHRT IP, SLI DOLO IP, NO FLO, NO VIS POR, NO SHOW

LS- OFF WHT CRM TO LT TN, HD DNS, F-XLN TO TT SUCRO IP, RE-XLN MTRX IP, SCAT WHT TO GY CHRT IN TRY, SCAT SFT WHT CHLK IP, V/ DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

LS- OFF WHT TO CRM LT TN, HD TO BRITT IP, F-XLN, RE-XLN MTRX, TR IMBD MICRO OOLITES, SFT WHT CHLK IP, V/DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

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