



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 Distribution
- ALT I II III Approved by: _____ Date: _____



1055900

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 <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample 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 _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone | | | | |
| | | | | |

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|---|---|

| | |
|-----------|--------------------------|
| Form | ACO1 - Well Completion |
| Operator | Falcon Exploration, Inc. |
| Well Name | KENNETH DIRKS 1-8(SE) |
| Doc ID | 1055900 |

All Electric Logs Run

| |
|---------|
| |
| DIL |
| MEL |
| BHCS |
| CDL/CNL |

| | |
|-----------|--------------------------|
| Form | ACO1 - Well Completion |
| Operator | Falcon Exploration, Inc. |
| Well Name | KENNETH DIRKS 1-8(SE) |
| Doc ID | 1055900 |

Tops

| Name | Top | Datum |
|-------------|------|-------|
| STOTLER | 3530 | -711 |
| TARKIO | 3601 | -782 |
| HEEBNER | 4146 | -1327 |
| LANSING | 4250 | -1431 |
| STARK | 4600 | -1781 |
| PAWNEE | 4840 | -2021 |
| MORROW | 5092 | -2273 |
| MISS ST GEN | 5216 | -2397 |
| ST LOUIS | 5315 | -2496 |

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/>

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Corporation Commission

Sam Brownback, Governor

May 16, 2011

MICHEAL S MITCHELL
Falcon Exploration, Inc.
125 N MARKET STE 1252
WICHITA, KS 67202-1719

Re: ACO1
API 15-069-20337-00-00
KENNETH DIRKS 1-8(SE)
SE/4 Sec.08-28S-30W
Gray 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,
MICHEAL S MITCHELL

ALLIED CEMENTING CO., LLC. 035552

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Dallas, Ks

| | | | | | | | |
|--------------------------|-----------------|--|-----------------|---------------------|-----------------|-----------|------------|
| DATE <u>1/20/11</u> | SEC. <u>8</u> | TWP. <u>28</u> | RANGE <u>30</u> | CALLED OUT | ON LOCATION | JOB START | JOB FINISH |
| LEASE <u>Remeth Dick</u> | WELL# <u>18</u> | LOCATION <u>Copland 5 1/2^{AD3} into</u> | | COUNTY <u>Ellis</u> | STATE <u>Ks</u> | | |
| OLD OR NEW (Circle one) | | | | | | | |

CONTRACTOR Walter King

TYPE OF JOB 1" cement to surface

HOLE SIZE 1 1/4" I.D.

CASING SIZE 8" ID DEPTH 1845

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT

OWNER Eme

CEMENT AMOUNT ORDERED 300 con

10 CC on side

COMMON 100 @ 15.45 1545.00

POZMIX @

GEL @

CHLORIDE 5 @ 58.00 290.00

ASC @

EQUIPMENT

PUMP TRUCK CEMENTER Alan

422 HELPER Wayne

BULK TRUCK

DRIVER David - M. Lopez

BULK TRUCK DRIVER

HANDLING 310 1/4" @ 2.45 760.00

MILEAGE 100 SK/mile 150.00

TOTAL 4130.00

REMARKS:

1" to 85 FT mix 100 SKs
con w/ 300 CC in hole

Circulate cement to surface

Frank Ya
Alan, Wayne, David

CHARGE TO: Falcon

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE 760.00

EXTRA FOOTAGE @

MILEAGE 50 @ 7.00 350.00

MANIFOLD @

TOTAL 810.00

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.

PRINTED NAME Walter King

SIGNATURE [Signature]

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS



BASIC™
ENERGY SERVICES
Liberal, Kansas

Cement Report

| | | | | | | | | | |
|----------|-------------------|-------|-----------|-----|--------|-------------------|---------|-------|----|
| Customer | Falcon Evaluation | | Lease No. | | | Date | 2-3-11 | | |
| Lease | Kenneth Dirks | | Well # | 1-8 | | Service Receipt | | | |
| Casing | 5 1/2 | Depth | 5525 RTD | | County | Gray | | State | Ks |
| Job Type | 5 1/2 I.S. | | Formation | | | Legal Description | 4-28-30 | | |

| Pipe Data | | | | Perforating Data | | | | Cement Data | |
|-----------------|-------|--|--|------------------|-------|--|--|----------------------------|--|
| Casing size | 5 1/2 | | | Tubing Size | 5 1/2 | | | Shots/Ft | |
| Depth | 5520' | | | Depth | 5520' | | | Lead 170 ⁵ AA-2 | |
| Volume | 131.1 | | | Volume | 131.1 | | | 5% W-CC, 10% SS-14 | |
| Max Press | | | | Max Press | | | | 5% B. Bentonite, 6% C-15 | |
| Well Connection | P.C. | | | Annulus Vol. | | | | 1/4" D. Cement @ 14.5 # | |
| Plug Depth | | | | Packer Depth | | | | Tail in 1.540-414K, 6.444K | |
| | | | | | | | | 50% A. Cement | |
| | | | | | | | | 1.15 w/ 14K 5.20 5.11/4K | |
| | | | | | | | | For RTM | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|-------|-----------------|-----------------|--------------|------|---|
| 08:00 | | | | | on loc, spot trucks, rig up, sett. mts. |
| 14:30 | | | | | Break Circ. |
| 15:30 | | | | | Hook up P.C. |
| 16:12 | 2500# | | | | Psi. test |
| 16:14 | 2000# | | 0 | 3.5 | Pump 1120 spacer |
| 16:15 | 2000# | | 5 | 3.9 | Pump Superflush |
| 16:19 | 2000# | | 12 | 3.5 | Pump 1120 spacer |
| 16:21 | 2000# | | 5 | 4.0 | Start mixing AA-2 @ 14.5 # |
| 16:37 | 0 | | 47 | - | Shot down Drip Plug, Wash up |
| 16:50 | 0 | | 0 | 3-8 | Start Disp |
| 17:22 | 200 | | 111 | 2 | Slow Rate |
| 17:32 | 900-1500 | | 131 | | Plug Down |
| 17:33 | 1500+ | | | | Release Psi. Float hold |
| 17:44 | | | | | Plug RTM |
| 18:03 | | | | | Wash up PFL |
| 18:13 | | | | | Job Complete |
| | | | | | Thank you |
| | | | | | Chad Hinz |

| | | | | | |
|---------------|--------|------------|--------------|--|--|
| Service Units | 194568 | 3046319445 | 19905-199056 | | |
| Driver Names | CHITZ | R Olds | D. Conard | | |

Leon Kuhn
Customer Representative

Jeremy Bennett
Station Manager

Chad Hinz
Cementer

Company **Falcon Exploration, Inc.**
 Address **125 North Market, Suite 1252**
 CSZ **Wichita, KS 67202**
 Attn. **Keith Reavis**

Lease Name **Kenneth Dirks**
 Lease # **1-8**
 Legal Desc **SW NE NE SE**
 Section **8**
 Township **28S**
 County **Gray**
 Drilling Cont **Val Drilling #1**

Job Ticket **3413**
 Range **30W**
 State **KS**

Comments **Field: Wildcat**

GENERAL INFORMATION

Test # **1** Test Date **1/28/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**

of Packers **2.0** Packer Size **6 3/4**

Mud Type **Gel Chem**
 Mud Weight **9.4** Viscosity **56.0**
 Filtrate **11.2** Chlorides **1700**

Drill Collar Len **0**
 Wght Pipe Len **0**

Formation **Morrow**
 Interval Top **5085.0** Bottom **5135.0**
 Anchor Len Below **50.0** Between **0**
 Total Depth **5135.0**

Blow Type **Weak blow building to 7 inches initial flow period. Strong blow throughout final flow period. 2 inch blow back during final shut-in period. Times: 5, 90, 60, 122.**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **13767**
 Mid Recorder #
 Bott Recorder # **w1023**

Mileage **236** Approved By
 Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **4:30 PM**
 Tool Picked Up **8:00 PM**
 Tool Layed Dwn **6:30 AM**

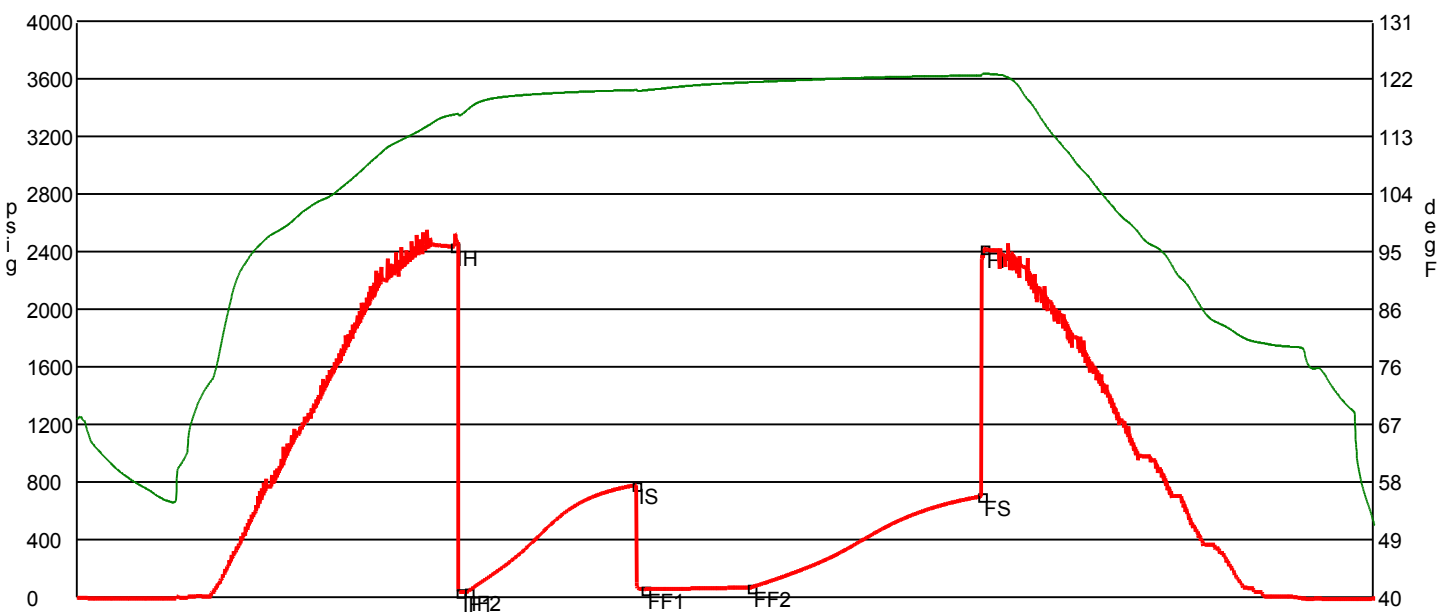
Elevation **2809.00** Kelley Bushings **2819.00**

Start Date/Time **1/28/2011 7:27 PM**
 End Date/Time **1/29/2011 6:54 AM**

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------|--------------------------|------------|------------|--------|------------|
| 430 | Slight gas smell in pipe | 100% 430ft | 0% 0ft | 0% 0ft | 0% 0ft |
| 135 | Gassy heavy oil cut mud | 14% 18.9ft | 35% 47.2ft | 0% 0ft | 51% 68.9ft |

DST Fluids **0**



| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/28/2011 10:45:50 PM | 3.313889 | 2438.185 | 116.306 | Initial Hydro-static |
| IF1 | 1/28/2011 10:49:00 PM | 3.366667 | 36.942 | 116.155 | Initial Flow (1) |
| IF2 | 1/28/2011 10:53:10 PM | 3.436111 | 40.399 | 117.114 | Initial Flow (2) |
| IS | 1/29/2011 12:22:10 AM | 4.919444 | 780.739 | 120.181 | Initial Shut-In |
| FF1 | 1/29/2011 12:26:50 AM | 4.997222 | 57.611 | 120.122 | Final Flow (1) |
| FF2 | 1/29/2011 1:23:10 AM | 5.936111 | 68.898 | 121.401 | Final Flow (2) |
| FS | 1/29/2011 3:25:40 AM | 7.977778 | 703.039 | 122.463 | Final Shut-In |
| FH | 1/29/2011 3:26:50 AM | 7.997222 | 2422.499 | 122.757 | Final Hydro-static |

GAS FLOWS

Min Into IFP Min Into FFP Gas Flows Pressure Choke

Company **Falcon Exploration, Inc.**
 Address **125 North Market, Suite 1252**
 CSZ **Wichita, KS 67202**
 Attn. **Keith Reavis**

Lease Name **Kenneth Dirks**
 Lease # **1-8**
 Legal Desc **SW NE NE SE**
 Section **8**
 Township **28S**
 County **Gray**
 Drilling Cont **Val Drilling #1**

Job Ticket **3413**
 Range **30W**
 State **KS**

Comments **Field: Wildcat**

GENERAL INFORMATION

Test # **2** Test Date **1/29/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **13767**
 Mid Recorder #
 Bott Recorder # **w1023**

of Packers **2.0** Packer Size **6 3/4**

Mileage **0** Approved By

Mud Type **Gel Chem**
 Mud Weight **9.1** Viscosity **59.0**
 Filtrate **8.0** Chlorides **1300**

Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **4:30 PM**
 Tool Picked Up **6:40 PM**
 Tool Layed Dwn **6:00 AM**

Drill Collar Len **0**
 Wght Pipe Len **0**

Elevation **2809.00** Kelley Bushings **2819.00**

Formation **Morrow**
 Interval Top **5083.0** Bottom **5171.0**
 Anchor Len Below **88.0** Between **0**
 Total Depth **5171.0**

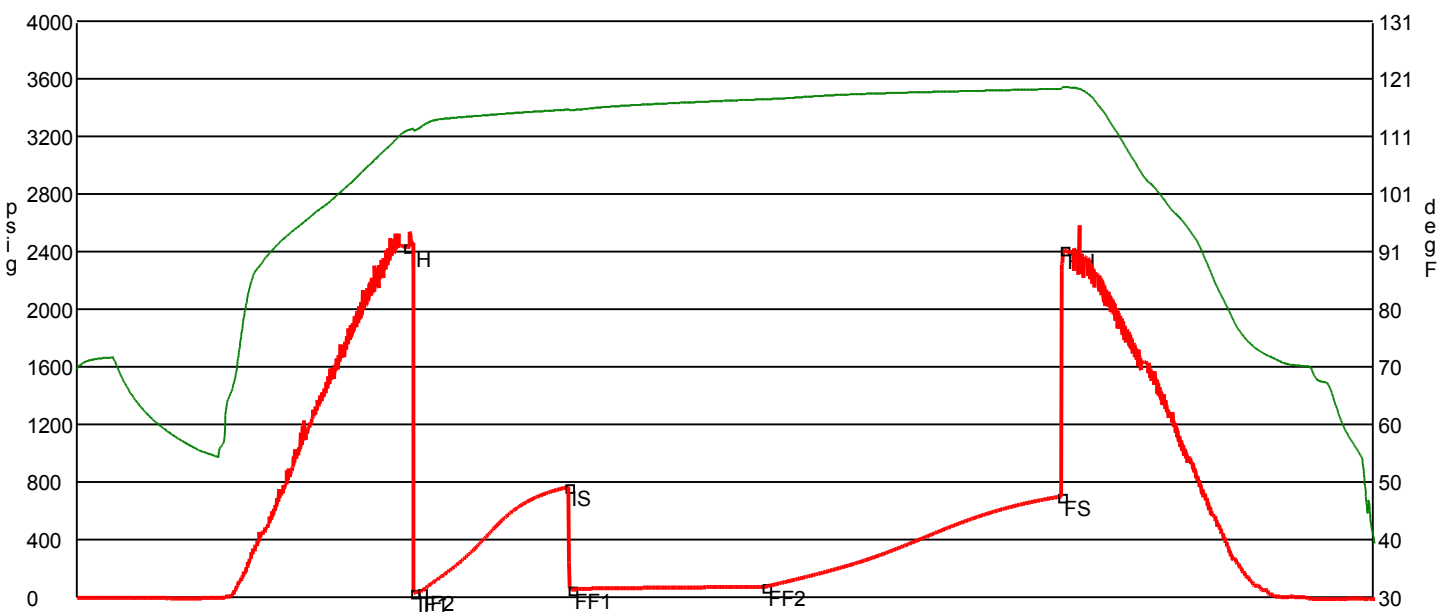
Start Date/Time **1/29/2011 5:35 PM**
 End Date/Time **1/30/2011 6:44 AM**

Blow Type **Weak blow building to 5 inches initial flow period. Strong blow throughout final flow period. Times: 5, 90, 120, 180.**

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------|-------------------------------|------------|----------|--------|------------|
| 590 | Very slight gas smell in pipe | 100% 590ft | 0% 0ft | 0% 0ft | 0% 0ft |
| 150 | Gassy heavy oil cut mud | 13% 19.5ft | 26% 39ft | 0% 0ft | 61% 91.5ft |

DST Fluids **0**



| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/29/2011 8:54:15 PM | 3.320833 | 2433.226 | 111.896 | Initial Hydro-static |
| IF1 | 1/29/2011 8:58:45 PM | 3.395833 | 34.821 | 111.884 | Initial Flow (1) |
| IF2 | 1/29/2011 9:02:45 PM | 3.4625 | 39.709 | 112.525 | Initial Flow (2) |
| IS | 1/29/2011 10:32:45 PM | 4.9625 | 767.646 | 115.551 | Initial Shut-In |
| FF1 | 1/29/2011 10:34:45 PM | 4.995833 | 56.9 | 115.46 | Final Flow (1) |
| FF2 | 1/30/2011 12:32:45 AM | 6.9625 | 75.211 | 117.376 | Final Flow (2) |
| FS | 1/30/2011 3:33:15 AM | 9.970833 | 702.082 | 119.194 | Final Shut-In |
| FH | 1/30/2011 3:35:00 AM | 10 | 2416.217 | 119.517 | Final Hydro-static |

GAS FLOWS

Min Into IFP Min Into FFP Gas Flows Pressure Choke

Company **Falcon Exploration, Inc.**
 Address **125 North Market, Suite 1252**
 CSZ **Wichita, KS 67202**
 Attn. **Keith Reavis**

Lease Name **Kenneth Dirks**
 Lease # **1-8**
 Legal Desc **SW NE NE SE**
 Section **8**
 Township **28S**
 County **Gray**
 Drilling Cont **Val Drilling #1**

Job Ticket **3413**
 Range **30W**
 State **KS**

Comments **Field: Wildcat**

GENERAL INFORMATION

Test # **3** Test Date **1/31/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **13767**
 Mid Recorder #
 Bott Recorder # **w1023**

of Packers **2.0** Packer Size **6 3/4**

Mileage **0** Approved By

Mud Type **Gel Chem**
 Mud Weight **9.1** Viscosity **47.0**
 Filtrate **7.2** Chlorides **900**

Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **5:00 AM**
 Tool Picked Up **8:20 AM**
 Tool Layed Dwn **6:00 PM**

Drill Collar Len **0**
 Wght Pipe Len **0**

Elevation **2809.00** Kelley Bushings **2819.00**

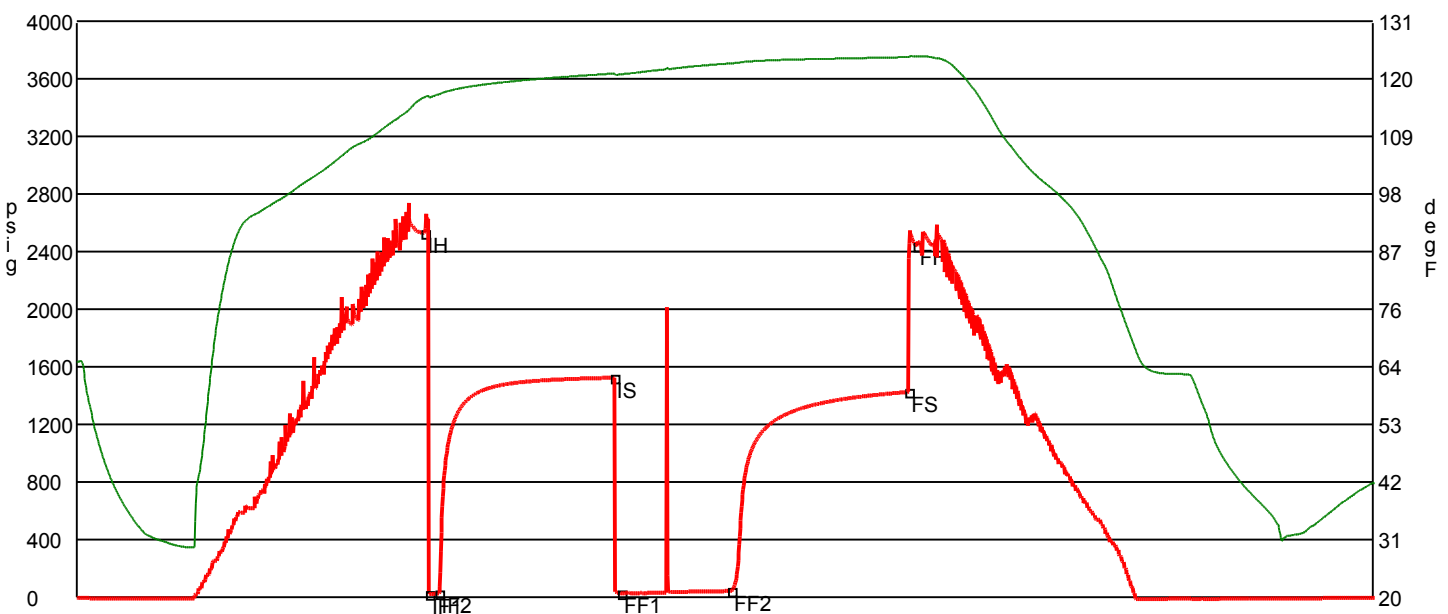
Formation **Saint Louis**
 Interval Top **5320.0** Bottom **5376.0**
 Anchor Len Below **56.0** Between **0**
 Total Depth **5376.0**

Start Date/Time **1/31/2011 7:51 AM**
 End Date/Time **1/31/2011 7:04 PM**

Blow Type **Weak blow building to 1/2 inch initial flow period. Surface blow, flushed tool 30 minutes into final flow period causing a 1/2 inch blow. Times: 5, 91, 60, 92.**

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------------|-------------------|----------|-------|--------|----------|
| 65 | Trace oil cut mud | 0% 0ft | trace | 0% 0ft | 100%65ft |
| DST Fluids | | 0 | | | |



| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/31/2011 10:49:30 AM | 2.975 | 2528.936 | 116.379 | Initial Hydro-static |
| IF1 | 1/31/2011 10:52:00 AM | 3.016667 | 23.265 | 116.402 | Initial Flow (1) |
| IF2 | 1/31/2011 10:57:00 AM | 3.1 | 30.19 | 116.955 | Initial Flow (2) |
| IS | 1/31/2011 12:28:15 PM | 4.620833 | 1526.301 | 120.971 | Initial Shut-In |
| FF1 | 1/31/2011 12:31:45 PM | 4.679167 | 29.583 | 120.822 | Final Flow (1) |
| FF2 | 1/31/2011 1:29:15 PM | 5.6375 | 45.263 | 122.929 | Final Flow (2) |
| FS | 1/31/2011 3:01:30 PM | 7.175 | 1427.108 | 124.132 | Final Shut-In |
| FH | 1/31/2011 3:05:45 PM | 7.245833 | 2443.481 | 124.302 | Final Hydro-static |

GAS FLOWS

Min Into IFP Min Into FFP Gas Flows Pressure Choke

OPERATOR

Company: Falcon Exploration, Inc.
 Address: 125 N. Market
 Suite 1252
 Wichita, KS 67202
 Contact Geologist: Brian Fisher
 Contact Phone Nbr: 316-262-1378
 Well Name: Kenneth Dirks #1-8
 Location: Sec 8, T28s, R30W
 Pool:
 State: Kansas
 API: 15-069-20337-0000
 Field: Wildcat
 Country: USA

Scale 1:240 Imperial

Well Name: Kenneth Dirks #1-8
 Surface Location: Sec 8, T28s, R30W
 Bottom Location:
 API: 15-069-20337-0000
 License Number: 5822
 Spud Date: 1/20/2011 Time: 15:34
 Region: Gray County
 Drilling Completed: 2/2/2011 Time: 17:50
 Surface Coordinates: 2090' FSL & 440' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 2809.00ft
 K.B. Elevation: 2819.00ft
 Logged Interval: 3300.00ft To: 5500.00ft
 Total Depth: 5525.00ft
 Formation: Mississippian
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 2090' FSL
 E/W Co-ord: 440' FEL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: KLG #136
 Address: 3420 22nd Street
 Great Bend, KS 67530
 Phone Nbr: 620-617-4091
 Logged By: Geologist Name: Keith Reavis

CONTRACTOR

Contractor: Val Energy, Inc.
 Rig #: 1
 Rig Type: mud rotary
 Spud Date: 1/20/2011 Time: 15:34
 TD Date: 2/2/2011 Time: 17:50
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 2819.00ft Ground Elevation: 2809.00ft
 K.B. to Ground: 10.00ft

NOTES

Based on engineering analyses of DST #1 and DST #2 it was determined and agreed upon by all parties that 5 1/2" production casing be set and cemented and that the K. Dirks #1-8 be further tested through perforations in the Morrow Sand.

The samples were saved from this well and will be available for further review at the Kansas Geological Survey Well

Respectfully submitted,
Keith Reavis

Falcon Exploration, Inc.

Daily Drilling Report

| DATE | 7:00 AM DEPTH | REMARKS |
|-----------|---------------|--|
| 1/24/2011 | | Geologist Keith Reavis on location @ 2000 hrs, 3400 ft., drilling ahead set up and check Bloodhound and communications |
| 1/25/2011 | 3707 | drilling ahead, Stotler, Tarkio, Topeka, Lecompton, Heebner |
| 1/26/2011 | 4312 | drilling ahead, Douglas, Lansing, lower LKC |
| 1/27/2011 | 4748 | drilling ahead, lower LKC, Marmaton, Pawnee, Cherokee |
| 1/28/2011 | 5050 | drilling Cherokee, stop and short trip in lower Cherokee at 5050' resume drilling, cut Morrow sand, show and gas kick warrants DST, TOH for DST #1, conducting DST #1 |
| 1/29/2011 | 5135 | complete DST #1, successful test, resume drilling Morrow, drill out of Morrow into Miss, cfs 5171, TOH for DST #2, conducting DST #2 |
| 1/30/2011 | 5171 | complete DST #2, successful test, TIH w/bit, resume drilling |
| 1/31/2011 | 5376 | drilling ahead, Mississippian, St. Louis, show and gas activity warrant test, TOH for DST #3, conducting DST #3, complete DST, successful test, TIH w/bit, rig freezing up |
| 2/1/2011 | 5414 | drilling ahead, RTD @ 5525 ft, 1750 hrs, set to circ rig on bottom until weather warms for logs |
| 2/2/2011 | 5525 | circulating on bottom, waiting on weather for logs, TOH for logs conduct and complete logging operations, geo off loc @ 1830 hrs |

Well Comparison Sheet

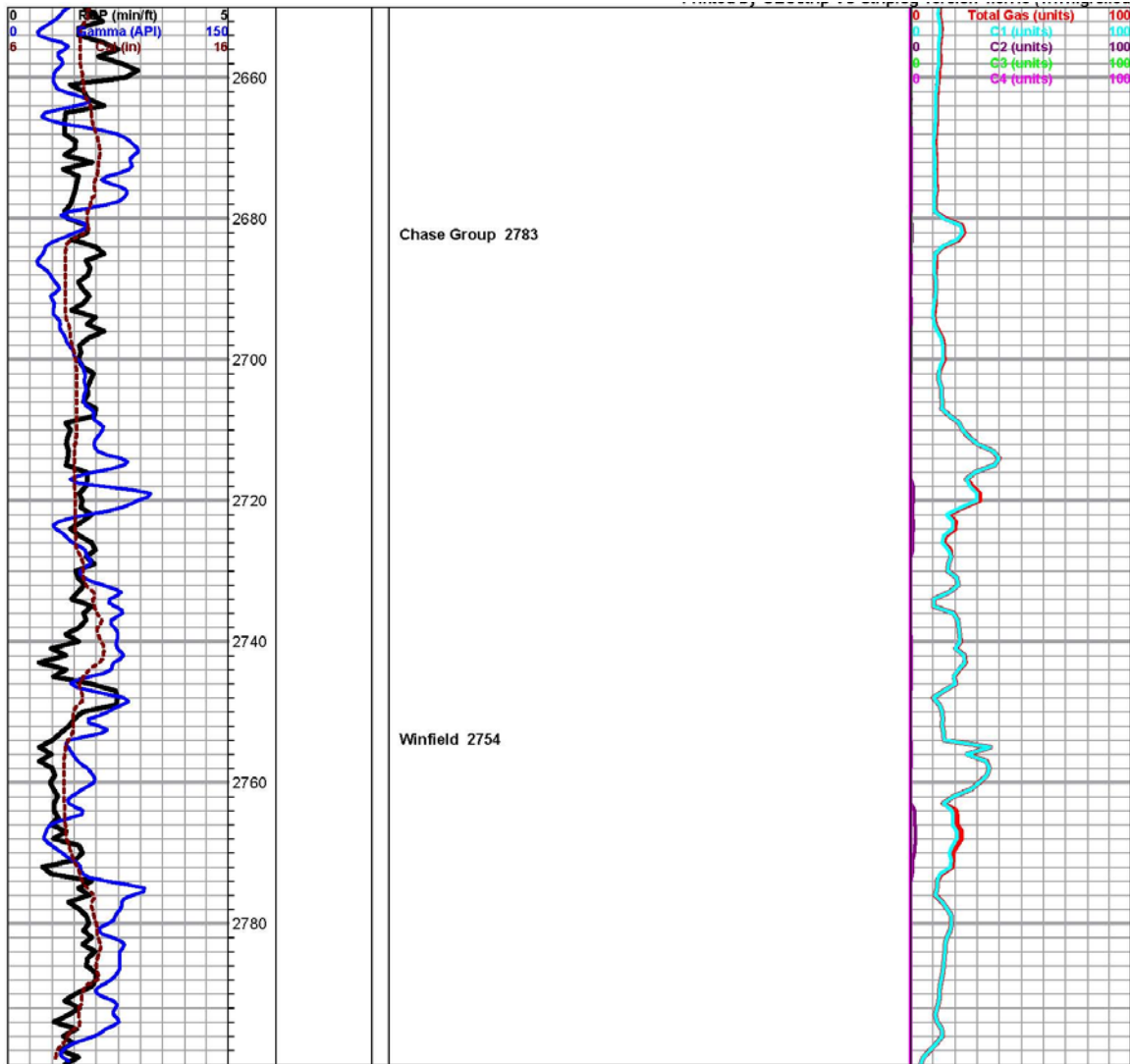
DRILLING WELL
K. Dirks #1-8
2090' FSL & 440' FEL
Sec. 8 T28S R30W
2819 KB

COMPARISON WELL
Lanterman #1-8
2030' FNL & 370' FEL
Sec. 8 T28S R30W
2821 KB

| Formation | sample | sub-sea | log | sub-sea | log | sub-sea | sample | log |
|--------------|--------|---------|------|---------|------|---------|--------|-----|
| Stotler | 3531 | -712 | 3530 | -711 | 3532 | -711 | -1 | 0 |
| Tarkio | 3604 | -785 | 3602 | -783 | 3603 | -782 | -3 | -1 |
| Topeka | 3804 | -985 | 3800 | -981 | 3804 | -983 | -2 | 2 |
| Lecompton | 3965 | -1146 | 3965 | -1146 | 3967 | -1146 | 0 | 0 |
| Heebner | 4146 | -1327 | 4146 | -1327 | 4146 | -1325 | -2 | -2 |
| Lansing | 4251 | -1432 | 4251 | -1432 | 4249 | -1428 | -4 | -4 |
| Stark | 4612 | -1793 | 4610 | -1791 | 4606 | -1785 | -8 | -6 |
| Marmaton | 4750 | -1931 | 4741 | -1922 | 4743 | -1922 | -9 | 0 |
| Pawnee | 4841 | -2022 | 4841 | -2022 | 4837 | -2016 | -6 | -6 |
| Cherokee | 4886 | -2067 | 4885 | -2066 | 4881 | -2060 | -7 | -6 |
| Morrow | 5093 | -2274 | 5093 | -2274 | 5089 | -2268 | -6 | -6 |
| Miss Chester | 5144 | -2325 | 5144 | -2325 | 5151 | -2330 | 5 | 5 |
| Miss St. Gen | 5224 | -2402 | 5216 | -2397 | 5214 | -2422 | 24 | 26 |

| | | | | | | | | |
|-----------------|-------|-------|------|-------|------|-------|------|------|
| Miss St. Gen. | 53221 | -2402 | 5216 | -2397 | 5244 | -2423 | 21 | 26 |
| St. Louis B por | 5342 | -2523 | 5342 | -2523 | 5345 | -2524 | 1 | 1 |
| Salem | 5498 | -2679 | 5497 | -2678 | | | | |
| Total Depth | 5525 | -2706 | 5528 | -2709 | 5406 | -2585 | -121 | -124 |

Chase Group Gas Chart



Drill Stem Test #1

RICKETTS TESTING

(620) 326-5830

Page 1

Company **Falcon Exploration, Inc.**
 Address **125 North Market, Suite 1252**
 CSZ **Wichita, KS 67202**
 Attn. **Keith Reavis**

Lease Name **Kenneth Dirks**
 Lease # **1-8**
 Legal Desc **SW NE NE SE**
 Section **8**
 Township **28S**
 County **Gray**
 Drilling Cont **Val Drilling #1**

Job Ticket **3413**
 Range **30W**
 State **KS**

Comments **Field: Wildcat**

GENERAL INFORMATION

Test # **1** Test Date **1/28/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**
 # of Packers **2.0** Packer Size **6 3/4**
 Mud Type **Gel Chem**
 Mud Weight **9.4** Viscosity **56.0**
 Filtrate **11.2** Chlorides **1700**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **13767**
 Mid Recorder #
 Bott Recorder # **w1023**
 Mileage **236** Approved By
 Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **4:30 PM**
 Tool Picked Up **8:00 PM**
 Tool Layed Dwn **6:30 AM**

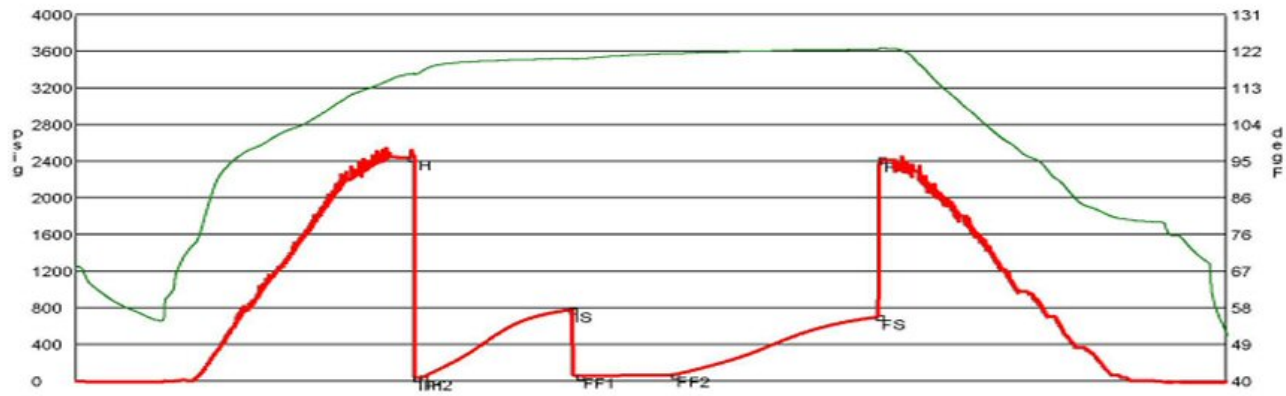
Drill Collar Len **0**
 Wght Pipe Len **0**
 Formation **Morrow**
 Interval Top **5085.0** Bottom **5135.0**
 Anchor Len Below **50.0** Between **0**
 Total Depth **5135.0**
 Blow Type **Weak blow building to 7 inches initial flow period. Strong blow throughout final flow period. 2 inch blow back during final shut-in period.**

Elevation **2809.00** Kelley Bushings **2819.00**
 Start Date/Time **1/28/2011 7:27 PM**
 End Date/Time **1/29/2011 6:54 AM**

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------|--------------------------|------------|------------|--------|------------|
| 430 | Slight gas smell in pipe | 100% 430ft | 0% 0ft | 0% 0ft | 0% 0ft |
| 135 | Gassy heavy oil cut mud | 14% 18.9ft | 35% 47.2ft | 0% 0ft | 51% 68.9ft |

DST Fluids 0



| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/28/2011 10:45:50 PM | 3.313889 | 2438.185 | 116.306 | Initial Hydro-static |
| IF1 | 1/28/2011 10:49:00 PM | 3.366667 | 36.942 | 116.155 | Initial Flow (1) |
| IF2 | 1/28/2011 10:53:10 PM | 3.436111 | 40.399 | 117.114 | Initial Flow (2) |
| IS | 1/29/2011 12:22:10 AM | 4.919444 | 780.739 | 120.181 | Initial Shut-in |
| FF1 | 1/29/2011 12:26:50 AM | 4.997222 | 57.611 | 120.122 | Final Flow (1) |
| FF2 | 1/29/2011 1:23:10 AM | 5.936111 | 68.898 | 121.401 | Final Flow (2) |
| FS | 1/29/2011 3:25:40 AM | 7.977778 | 703.039 | 122.463 | Final Shut-in |
| FH | 1/29/2011 3:26:50 AM | 7.997222 | 2422.499 | 122.757 | Final Hydro-static |

Drill Stem Test #2

RICKETTS TESTING

(620) 326-5830

Page 1

Company **Falcon Exploration, Inc.**
 Address **125 North Market, Suite 1252**
 CSZ **Wichita, KS 67202**
 Attn. **Keith Reavis**

Lease Name **Kenneth Dirks**
 Lease # **1-8**
 Legal Desc **SW NE NE SE**
 Section **8**
 Township **28S**
 County **Gray**
 Drilling Cont **Val Drilling #1**

Job Ticket **3413**
 Range **30W**
 State **KS**

Comments **Field: Wildcat**

GENERAL INFORMATION

Test # **2** Test Date **1/29/2011**
 Tester **Jimmy Ricketts**
 Test Type **Conventional Bottom Hole Successful Test**
 # of Packers **2.0** Packer Size **6 3/4**

Chokes **3/4** Hole Size **7 7/8**
 Top Recorder # **13767**
 Mid Recorder #
 Bott Recorder # **w1023**

Mud Type **Gel Chem**
 Mud Weight **9.1** Viscosity **59.0**
 Filtrate **8.0** Chlorides **1300**

Mileage **0** Approved By
 Standby Time **0**
 Extra Equipmnt **Jars & Safety Joint**
 Time on Site **4:30 PM**
 Tool Picked Up **6:40 PM**
 Tool Layed Dwn **6:00 AM**

Drill Collar Len **0**
 Wght Pipe Len **0**

Elevation **2809.00** Kelley Bushings **2819.00**

Formation **Morrow**
 Interval Top **5083.0** Bottom **5171.0**
 Anchor Len Below **88.0** Between **0**

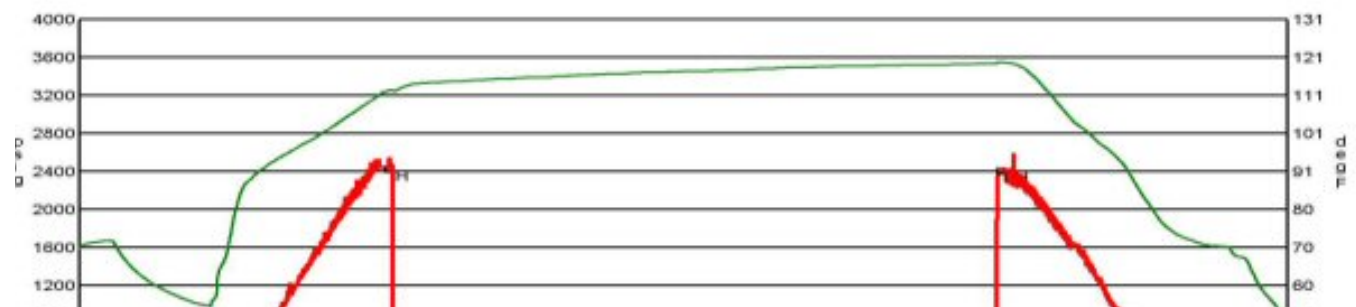
Start Date/Time **1/29/2011 5:35 PM**
 End Date/Time **1/30/2011 6:44 AM**

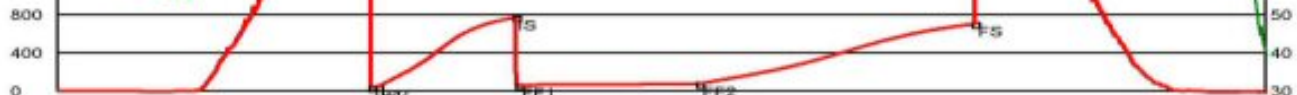
Blow Type **Weak blow building to 5 inches initial flow period. Strong blow throughout final flow period. Times: 5, 90, 120, 180.**

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------|-------------------------------|------------|----------|--------|------------|
| 590 | Very slight gas smell in pipe | 100% 590ft | 0% 0ft | 0% 0ft | 0% 0ft |
| 150 | Gassy heavy oil cut mud | 13% 19.5ft | 26% 39ft | 0% 0ft | 61% 91.5ft |

DST Fluids 0





| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/29/2011 8:54:15 PM | 3.320833 | 2433.226 | 111.896 | Initial Hydro-static |
| IF1 | 1/29/2011 8:58:45 PM | 3.395833 | 34.821 | 111.884 | Initial Flow (1) |
| IF2 | 1/29/2011 9:02:45 PM | 3.4625 | 39.709 | 112.525 | Initial Flow (2) |
| IS | 1/29/2011 10:32:45 PM | 4.9625 | 767.646 | 115.551 | Initial Shut-in |
| FF1 | 1/29/2011 10:34:45 PM | 4.995833 | 56.9 | 115.46 | Final Flow (1) |
| FF2 | 1/30/2011 12:32:45 AM | 6.9625 | 75.211 | 117.376 | Final Flow (2) |
| FS | 1/30/2011 3:33:15 AM | 9.970833 | 702.082 | 119.194 | Final Shut-in |
| FH | 1/30/2011 3:35:00 AM | 10 | 2416.217 | 119.517 | Final Hydro-static |

Drill Stem Test #3

RICKETTS TESTING

(620) 326-5830

Page 1

| | | | |
|---------|-------------------------------------|---------------|------------------------|
| Company | Falcon Exploration, Inc. | Lease Name | Kenneth Dirks |
| Address | 125 North Market, Suite 1252 | Lease # | 1-8 |
| CSZ | Wichita, KS 67202 | Legal Desc | SW NE NE SE |
| Attn. | Keith Reavis | Section | 8 |
| | | Township | 28S |
| | | County | Gray |
| | | Drilling Cont | Val Drilling #1 |
| | | Job Ticket | 3413 |
| | | Range | 30W |
| | | State | KS |

Comments **Field: Wildcat**

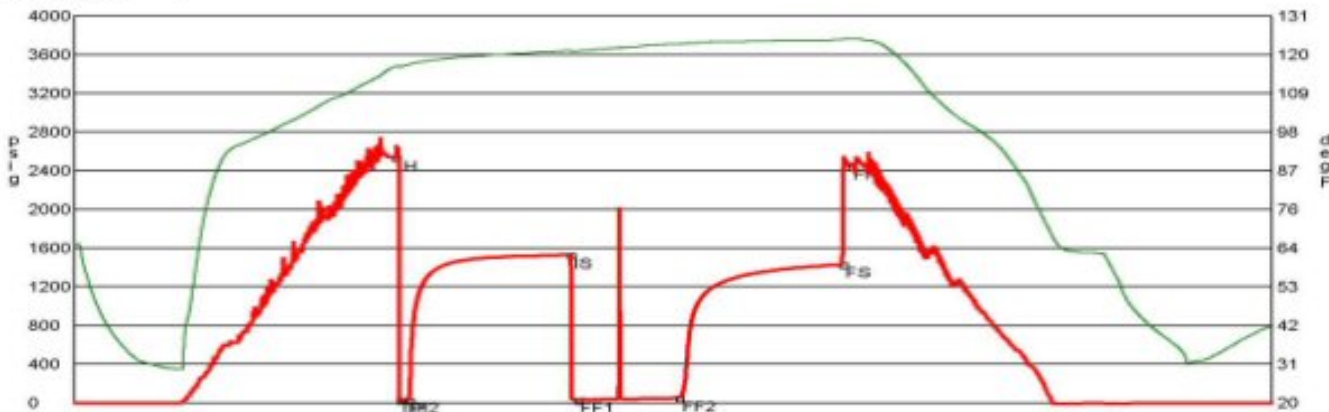
GENERAL INFORMATION

| | | | | | | |
|------------------|--|-------------|-----------------|-----------------|--------------------------------|-----------------|
| Test # 3 | Test Date | 1/31/2011 | Chokes | 3/4 | Hole Size | 7 7/8 |
| Tester | Jimmy Ricketts | | Top Recorder # | 13767 | | |
| Test Type | Conventional Bottom Hole | | Mid Recorder # | | | |
| | Successful Test | | Bott Recorder # | w1023 | | |
| # of Packers | 2.0 | Packer Size | 6 3/4 | Mileage | 0 | Approved By |
| | | | | Standby Time | 0 | |
| Mud Type | Gel Chem | | | Extra Equipmnt | Jars & Safety Joint | |
| Mud Weight | 9.1 | Viscosity | 47.0 | Time on Site | 5:00 AM | |
| Filtrate | 7.2 | Chlorides | 900 | Tool Picked Up | 8:20 AM | |
| | | | | Tool Layed Dwn | 6:00 PM | |
| Drill Collar Len | 0 | | | Elevation | 2809.00 | Kelley Bushings |
| Wght Pipe Len | 0 | | | | | 2819.00 |
| Formation | Saint Louis | | | Start Date/Time | 1/31/2011 7:51 AM | |
| Interval Top | 5320.0 | Bottom | 5376.0 | End Date/Time | 1/31/2011 7:04 PM | |
| Anchor Len Below | 56.0 | Between | 0 | | | |
| Total Depth | 5376.0 | | | | | |
| Blow Type | Weak blow building to 1/2 inch initial flow period. Surface blow, flushed tool 30 minutes into final flow period causing a 1/2 inch blow. Times: 5, 91, 60, 92. | | | | | |

RECOVERY

| Feet | Description | Gas | Oil | Water | Mud |
|------|-------------------|--------|-------|--------|-----------|
| 65 | Trace oil cut mud | 0% Off | trace | 0% Off | 100% 65ft |

DST Fluids **0**



| | Date | Time | Pressure | Temp | |
|-----|-----------------------|----------|----------|---------|----------------------|
| IH | 1/31/2011 10:49:30 AM | 2.975 | 2528.936 | 116.379 | Initial Hydro-static |
| IF1 | 1/31/2011 10:52:00 AM | 3.016667 | 23.265 | 116.402 | Initial Flow (1) |
| IF2 | 1/31/2011 10:57:00 AM | 3.1 | 30.19 | 116.955 | Initial Flow (2) |
| IS | 1/31/2011 12:28:15 PM | 4.620833 | 1526.301 | 120.971 | Initial Shut-in |
| FF1 | 1/31/2011 12:31:45 PM | 4.679167 | 29.583 | 120.822 | Final Flow (1) |
| FF2 | 1/31/2011 1:29:15 PM | 5.6375 | 45.263 | 122.929 | Final Flow (2) |
| FS | 1/31/2011 3:01:30 PM | 7.175 | 1427.108 | 124.132 | Final Shut-in |
| FH | 1/31/2011 3:05:45 PM | 7.245833 | 2443.481 | 124.302 | Final Hydro-static |

ROCK TYPES

| | | | | | | | |
|--|----------|--|------------|--|------------|--|-----------|
| | Cht vari | | Lmst fw<7 | | shale, gry | | Ss |
| | Chtcong | | Lmst fw>7 | | Carbon Sh | | No Sample |
| | Dolprim | | shale, grn | | shale, red | | |

ACCESSORIES

- MINERAL**
- ⊥ Calcareous
 - ▲ Chert, dark
 - ∠ Dolomitic
 - ∩ Glauconite
 - ✕ Mineral Crystals
 - P Pyrite
 - Sandy
 - Silty
 - △ Chert White
 - Argillaceous/Shale

- FOSSIL**
- ∩ Bioclastic or Fragmental
 - F Fossils < 20%
 - ⊙ Oolite
 - ⊗ Pellets
 - 🌿 Plant Remains
 - ⊕ Oomoldic

- STRINGER**
- ▨ Dolomite
 - ▨ Limestone
 - ▨ Sandstone
 - ▨ Shale
 - ▨ green shale
 - ▨ red shale

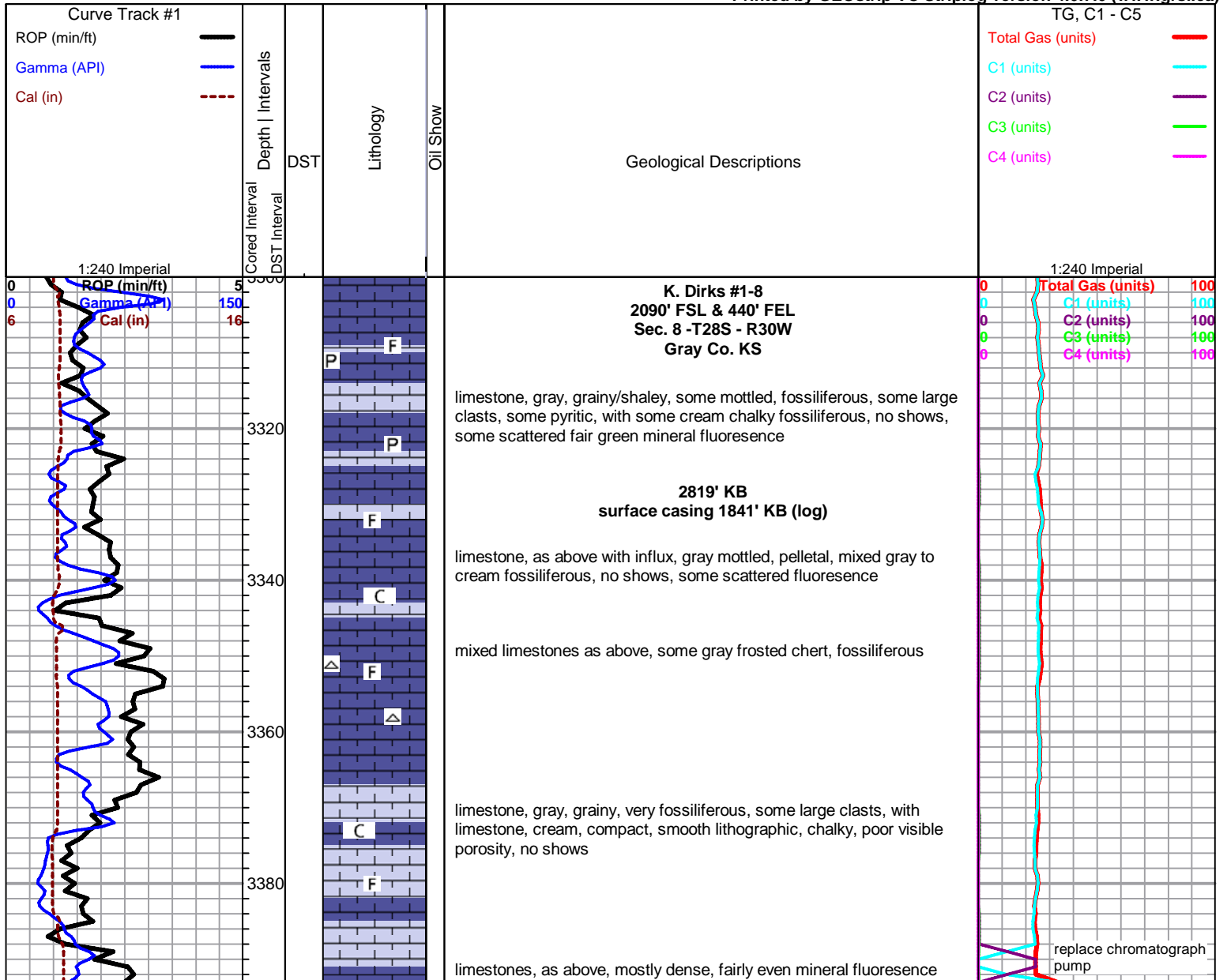
- TEXTURE**
- C Chalky
 - L Lithogr

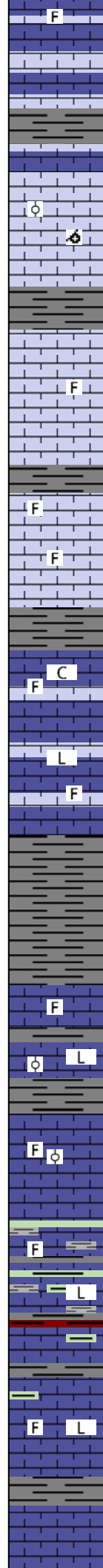
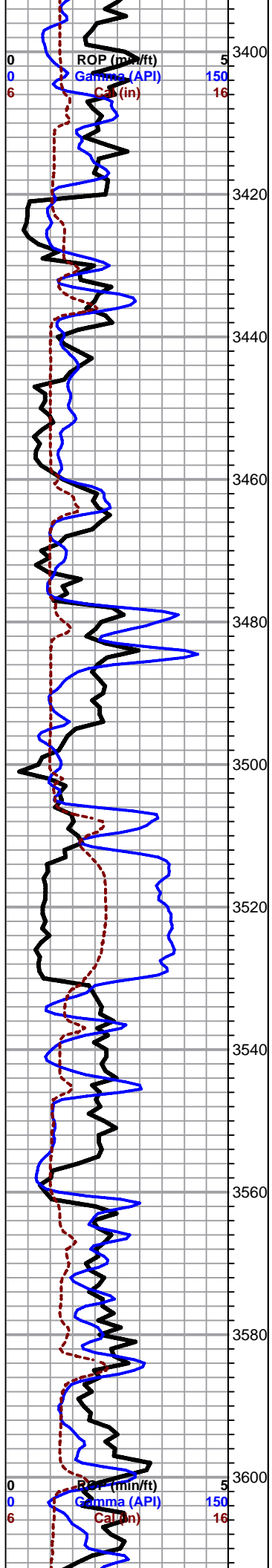
OTHER SYMBOLS

- MISC**
- 📄 Daily Report
 - 📷 Digital Photo
 - 📄 Document
 - 📁 Folder
 - 🔗 Link
 - 📊 Vertical Log File
 - 📊 Horizontal Log File
 - 📊 Core Log File
 - 📊 Drill Cuttings Rpt

- DST**
- DST Int
 - DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





limestone, cream, fine oolitic to oomoldic, some fair oomold porosity, fair mineral fluorescence

limestones, mixed gray, very fossiliferous, poor visible porosity, no shows

limestone, as above

limestone, mixed gray to cream, mottled, fossiliferous, with limestone, cream to white, fossiliferous, some grainy, some smooth compact lithographic, no shows

Stotler 3531 -712

limestone, light gray to white, fossiliferous, trace oolitic, grainy in part, with: limestone, light gray to pale green, dense, lithographic, fairly even pale fluorescence, some scattered bright, no shows

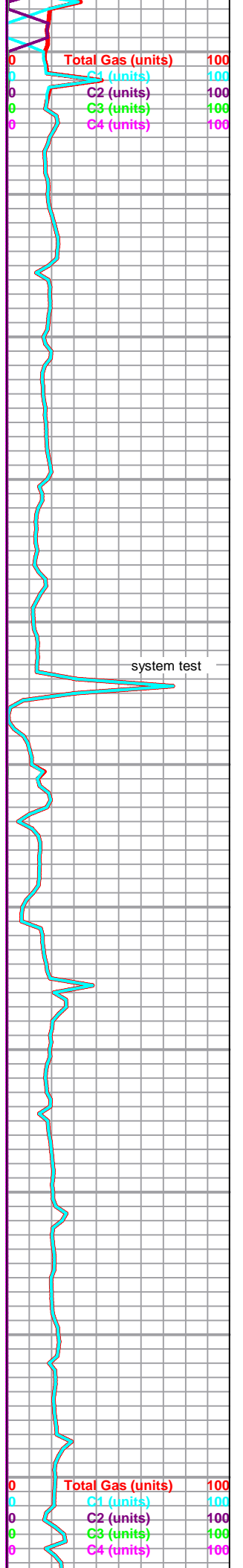
as above

limestone, mixed non descript, fossiliferous to lithographic, dense, no shows, some mixed shales

as above

Tarkio 3604 -785

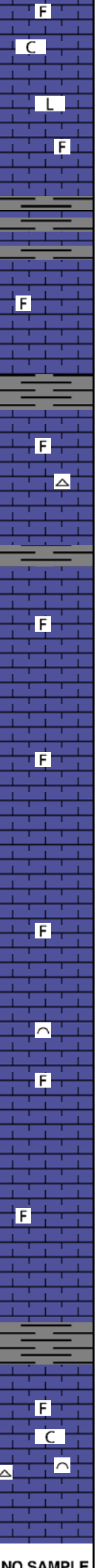
limestone, light gray to light green, microcrystalline, arenaceous to fossiliferous to lithographic, chalky in part, poor visible porosity, some



system test

fossiliferous to lithographic, chalky in part, poor visible porosity, some scattered fair fluorescence, no shows

3620
3640
3660
3680
3700
3720
3740
3760
3780
3800
3820



limestones, mixed gray to cream, microcrystalline, fossiliferous, dense, no shows

as above, some scattered cherts

Bern

limestone, mixed non-descript fossiliferous, some with large clasts, some scattered white bioclastic, grainy, poor visible porosity, some bright bluish white fluorescence, no shows

limestone, white to light gray, some green tint, microcrystalline, arenaceous to grainy bioclastic, some darker gray fossiliferous, no shows, some scattered fluorescence

limestones as above

Topeka 3804 -985

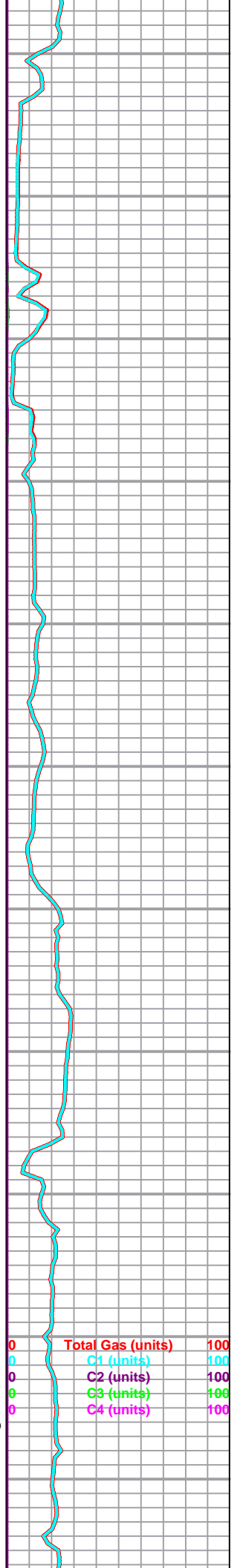
limestone, white to cream, microcrystalline, bioclastic to fossiliferous, chalky in part, poor visible porosity, some scattered white fresh chert, no shows, some scattered fair fluorescence

ROP (m/ft) 5
Gamma (API) 150
Cal (in) 16

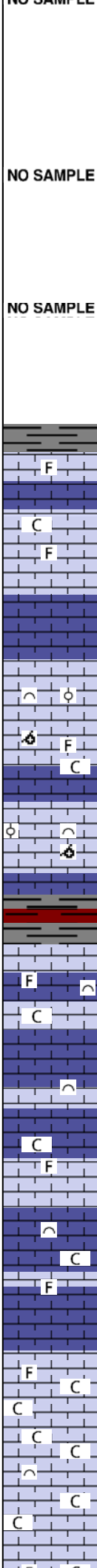
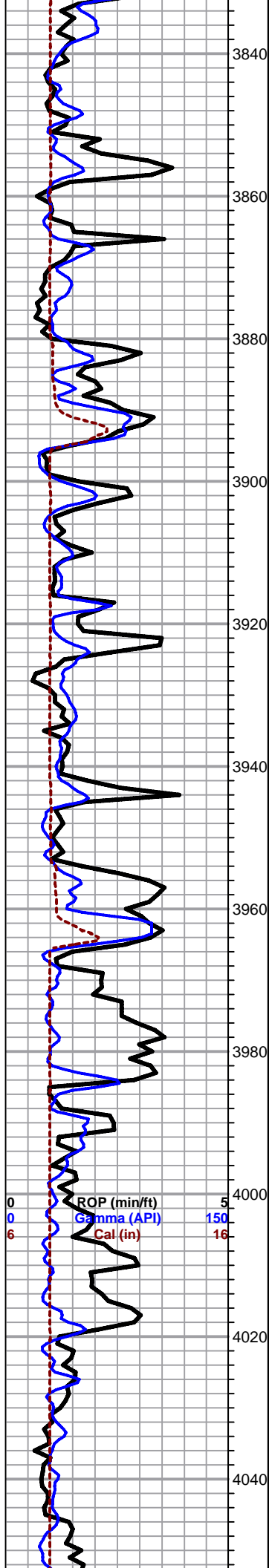
NO SAMPLE

3860 - 3900 samples not caught

Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100



3860 - 3900 samples not caught



limestone, light gray to white, microcrystalline, fossiliferous, chalky, poor visible porosity, no shows

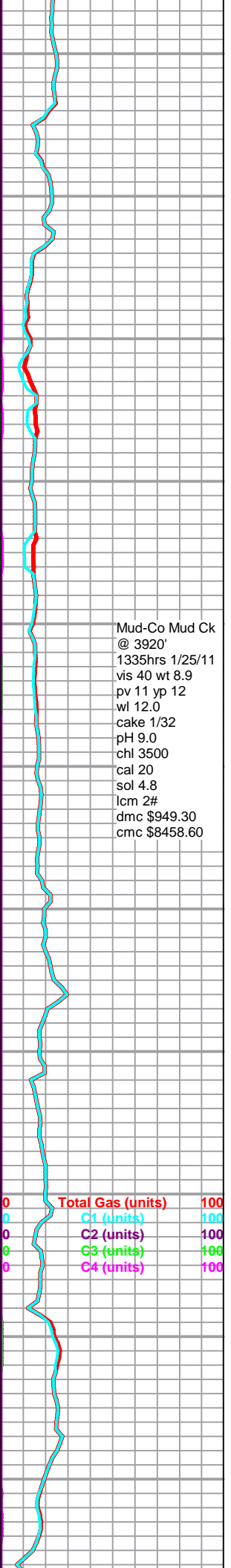
limestone, white to cream and light gray, fossiliferous to bioclastic, grainy, with oolitic to oomoldic, some fair oomold porosity, no shows, fairly even green mineral fluorescence

Lecompton 3965 -1146

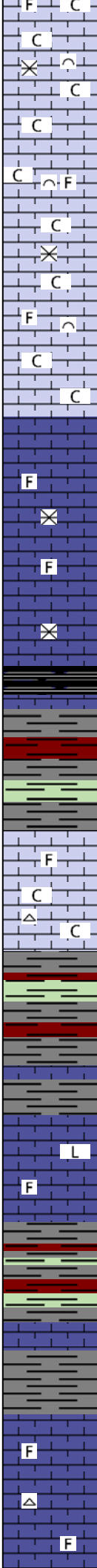
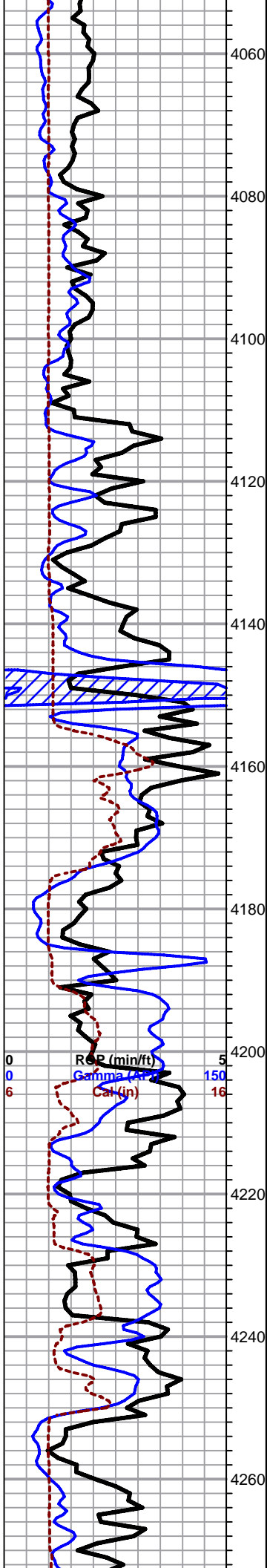
limestone, light gray to cream, microcrystalline, grainy fossiliferous to bioclastic, some scattered interclast porosity, chalky, flood gray and red shales, no shows, fairly even light green mineral fluorescence

limestones as above

limestone, cream to light gray, very fossiliferous to bioclastic, chalky, weathered in part, poor visible porosity, abundant chalk, 20-30%



Mud-Co Mud Ck
@ 3920'
1335hrs 1/25/11
vis 40 wt 8.9
pv 11 yp 12
wl 12.0
cake 1/32
pH 9.0
chl 3500
cal 20
sol 4.8
lcm 2#
dmc \$949.30
cmc \$8458.60



as above, limestones have abundant secondary calcite crystals

limestone, cream to tan and brown, micro to cryptocrystalline, dense, fossiliferous, some secondary calcite, no shows

Heebner 4146 -1327

black carbonaceous shale
mixed gray, soft gray, red and green shales

Toronto

limestone, white to light gray, microcrystalline, fossiliferous, grainy/chalky to compact and dense, poor visible porosity, abundant chalk, some scattered white cherts, no shows, fairly even blue/white, green/white fluorescence

Douglas

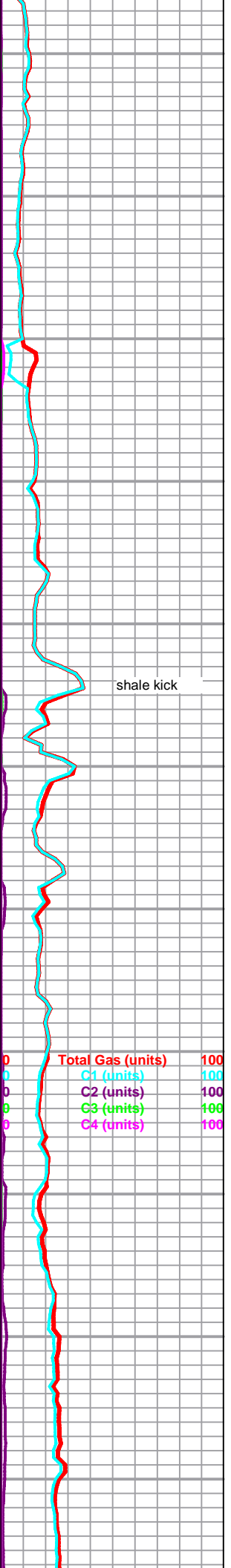
mixed shale

limestone, gray to gray/green, microcrystalline, arenaceous to lithographic, some gray to tan, fossiliferous, tan, poor visible porosity, no shows, fairly even blue/white to green/white fluorescence, some chalk

mixed shales

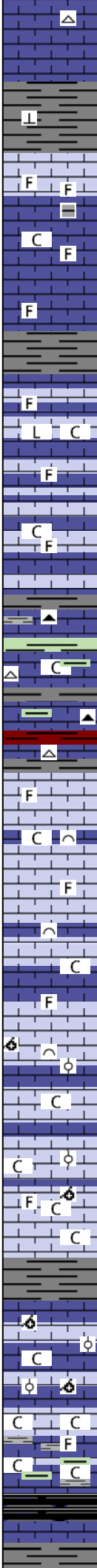
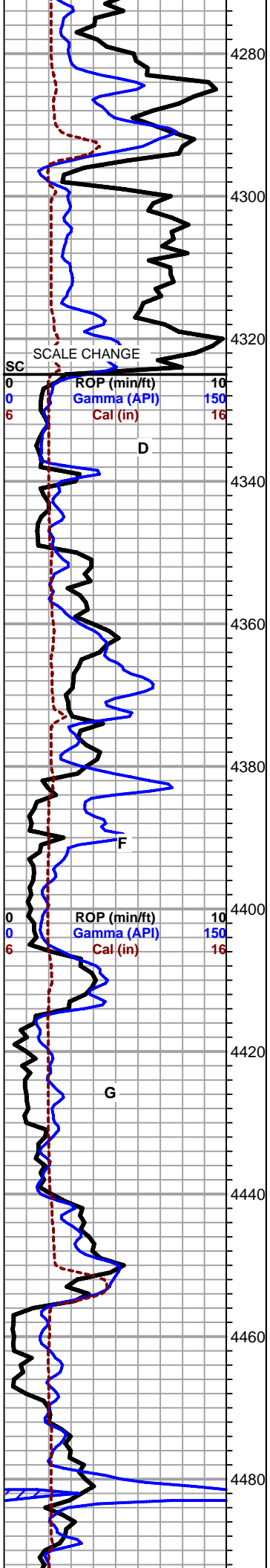
Lansing 4251 -1432

limestone, white to cream, micro to cryptocrystalline, fossiliferous, smooth compact to grainy, with: chert, white to gray and tan, fossiliferous, sharp, fresh, no shows, fairly even bright bluish/white fluorescence, some scattered fair green



shale kick

0 Total Gas (units) 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100



gray earthy limey shale to shaley limes

limestone, cream, microcrystalline, very fossiliferous, grainy, some shale inclusions, poor visible porosity, no shows, grading to: limestone, tan to gray, dense fossiliferous with white to light gray, slightly fossiliferous, fairly chalky, no shows

limestone, mixed fossiliferous, grainy to earthy, some interclast porosity, some compact cryptocrystalline lithographic with fair solution vugs, moderate chalk in samples, some scattered tan cherts, no shows

limestone, gray to brown mottled, chalky, earthy, with mixed shales, black, gray and brown cherts

limestone, mixed fossiliferous to bioclastic, poor visible overall porosity, chalky in part, abundant dark gray, cherty, dense limestones, no shows

limestone, mixed fossiliferous to bioclastic, chalky, some scattered oolitic and oomoldic, no shows

increasing oomoldic

limestones, fossiliferous, chalky to dense, flood chalk and white fresh chert, some cherty inclusions in limestones

limestone, tan to cream, oolitic to oomoldic, good oomold porosity, barren, abundant chalk, barren, yellow fluorescence

weathered chalky limestones, fossiliferous, flood chalk, mixed shales

MUNCIE CREEK SHALE - black carbonaceous

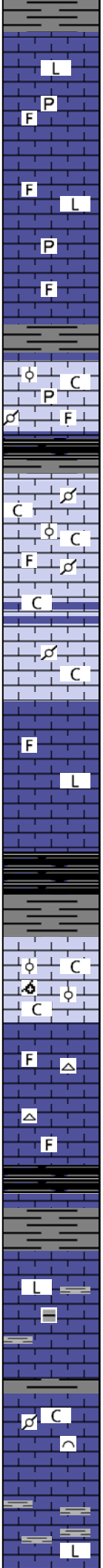
Mud-Co Mud Ck
 @ 4329'
 0810 hrs 1/26/11
 vis 52 wt 9.4
 pv 14 yp 15
 wl 11.2
 cake 1/32
 pH 9.0
 chl 4100
 cal 60
 sol 7.6
 lcm 2#
 dmc \$1451.60
 cmc \$9910.20

| | | |
|---|-------------------|-----|
| 0 | Total Gas (units) | 100 |
| 0 | C1 (units) | 100 |
| 0 | C2 (units) | 100 |
| 0 | C3 (units) | 100 |
| 0 | C4 (units) | 100 |

shale kick

cfs @ 4500 ft
1550 hrs 1/26/11

4500
4520
4540
4560
4580
4600
4620
4640
4660
4680
4700



limestone, cream to gray, micro-cryptocrystalline, fossiliferous to lithographic, trace pyritic, no visible porosity, some fair mineral fluorescence, no shows

as above

limestone, white to light gray, microcrystalline, chalky, grainy, with limestone, fossiliferous in part, some weathered, with limestone, gray mottled, pelletal, oolitic, very chalky, abundant chalk in samples, some pyrite nodules

as above

limestone, gray to tan, cryptocrystalline, dense, fossiliferous to lithographic, no shows

Stark Shale 4612 -1793

gassy black carbonaceous shale

limestone, white to cream, oolitic to oomoldic, some fair oomold porosity, barren, no fluorescence, some oolitic with brown crystalline replacement around oolites, some completely replaced, light fluorescence, no show, abundant chalk in samples

limestone, cream to gray, dense to chalky fossiliferous, with chert, gray, frosted fossiliferous, sharp, fresh, no shows or fluorescence, still carrying abundant black carbonaceous shale in samples

black carbonaceous shale

limestone, dark gray, dense, lithographic, some shaley, with dark gray limey shale

limestone, light gray to cream, mottled, bioclastic, some pelletal to oolitic, chalky, abundant chalk in samples, no shows

limestone, dark gray, cryptocrystalline, lithographic, dense, some dark to lighter gray mottled, slightly brittle/weathered, abundant dark gray to black shale, some scattered chert

fresh air rezero

Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100

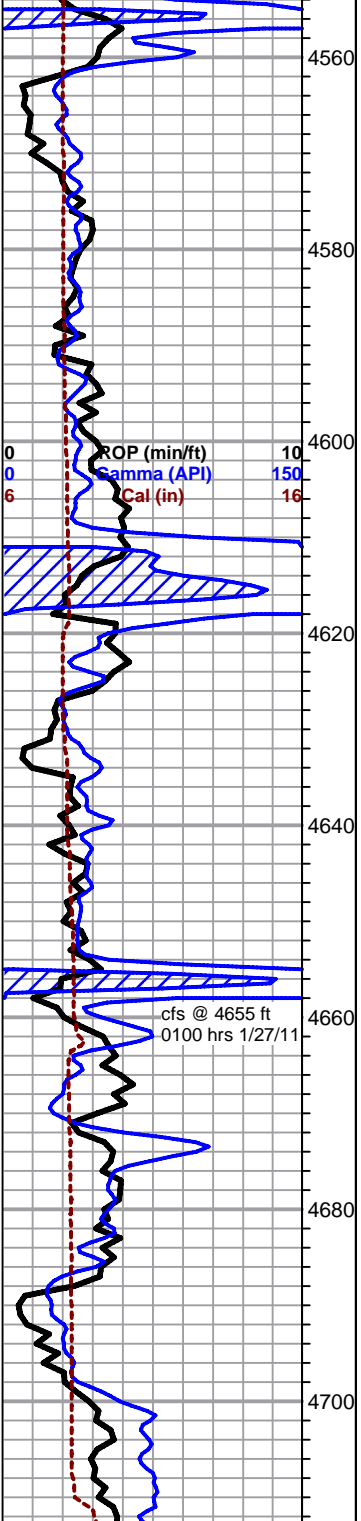
shale gas

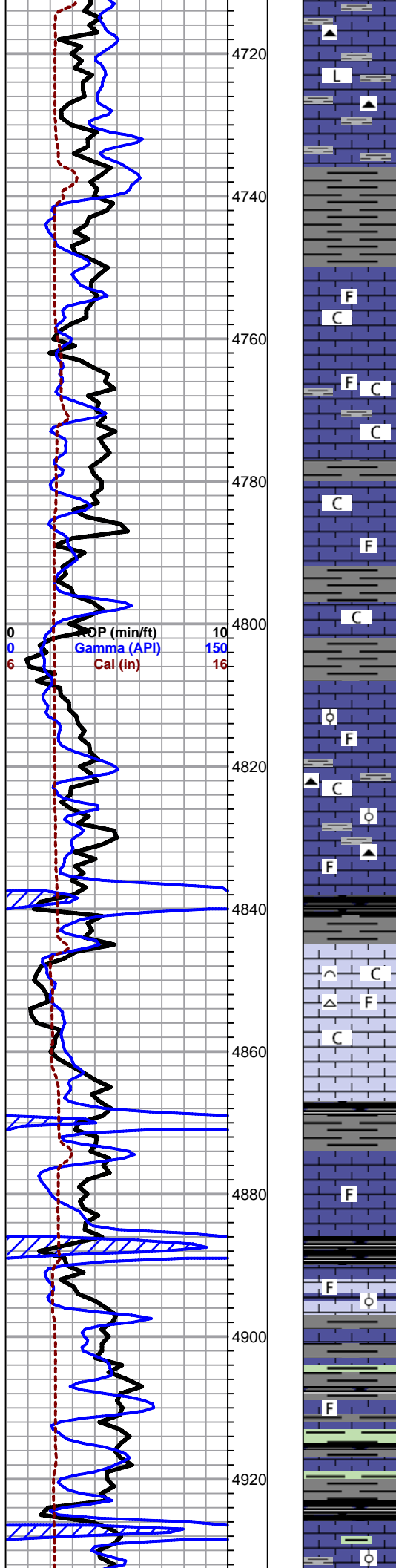
gas lagging thru here, 22 min rig check during connection @ 4633'

shale gas recycles

ROP (min/ft) 10
Gamma (API) 150
Cal (in) 16

cfs @ 4655 ft
0100 hrs 1/27/11





dark gray to black shale
Marmaton log top 4741 -1922

Marmaton 4750 -1931

limestone, cream, micro to cryptocrystalline, fossiliferous to smooth lithographic, chalky in part, mostly dense, some scattered mineral fluorescence, no shows

as above, increasing chalk in samples

as above

limestone, cream to light gray and white, microcrystalline, fossiliferous to oolitic, slightly cherty to chalky, poor visible porosity, no shows, some chalk, scattered shales and gray chert

Pawnee 4841 -2022

limestone, white to cream, cryptocrystalline, chalky fossiliferous to bioclastic, some white microcrystalline, grainy, poor visible porosity, abundant chalk in samples, some scattered gray cherts, fossiliferous, some scattered fluorescence, no shows

limestone, gray to cream, microcrystalline, fossiliferous, dense, no shows

Cherokee 4886 -2067

black carbonaceous shale

limestone, cream to gray, micro-cryptocrystalline, fossiliferous to oolitic, chalky in part, no visible porosity, no shows, with oolitic cherts, some scattered faint fluorescence

grades to black, green and gray shales, some argillaceous, with stringers of dark gray cherty limestone, dense fossiliferous, and limestones as above

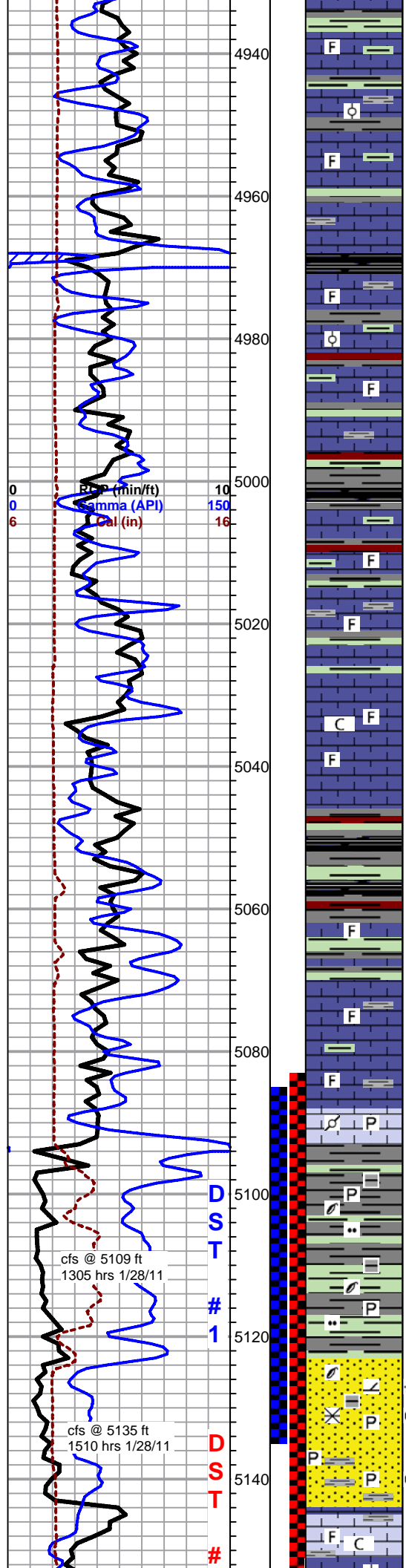
limestone, mixed gray to tan and brown, some mottled, crypto to microcrystalline, fossiliferous to oolitic, mostly dense, no shows, scattered shales, scattered faint fluorescence

fresh air re-zero

Mud-Co Mud Ck
 @ 4774'
 0855 hrs 1/27/11
 vis 52 wt 9.3
 pv 16 yp 17
 wl 8.8
 cake 1/32
 pH 9.5
 chl 2800
 cal 20
 sol 7.0
 lcm 1#
 dmc \$3051.35
 Total Gas @ cmc \$12961.55
 C1 (units) 100
 C2 (units) 100
 C3 (units) 100
 C4 (units) 100

shale gas kick

scattered shales, scattered faint fluorescent



mix non descript fossiliferous limestones, dense, with dark to light arenaceous to cherty limestone, mixed shales, no shows

flood mixed shales

limestone, cream to gray, tan to brown, mixed fossiliferous to cherty lithographic, no visible porosity, no shows, abundant shale

as above

limestone, cream to light gray, cryptocrystalline, fossiliferous, chalky to grainy, poor visible porosity, no fluorescence

mixed black, brown and gray shales

flood dark gray to black limestone, dense, cherty, fossiliferous, with shale as above

DST # 1, 5-90-60-120, rec. 430' GIP, 135' GHOCM, FP's 36-40# & 57-68#, SIP's 780-703#, HSH's 2438-2422#, BHT 122 deg F

limestone, gray to light brown, slightly mottled, dense, microcrystalline fossiliferous, some slightly pyritic, no shows grading to: (5108 30 min sample) flood of soft brittle limestone, gray to brown mottled, pelletal, very pyritic, no show or fluorescence

Morrow 5093 -2274

shale soft gray, silty, abundant carbon plant matter and imprints, some pyritic, some light green, soft, silty

- 📄 Kenneth Dirks 1-8 DST #1.pdf
- 📄 Kenneth Dirks 1-8 DST #2.pdf

DST #2, 5-90-120-180, rec. 590' GIP, 150' GHOCM, FP's 34-39# & 56-75#, SIP's 767-702#, HSH's 2433-2416#, BHT 119 deg F

sandstone, fine grained quartz, sub round to sub angular, well cemented, dolomitic, much interstitial shale/plant frag. fill, dolomite and abundant pyrite inclusions, fair scattered porosity, fairly even saturated stain, good show of gas and free oil, strong odor, no min. fluor., good milky white cut fluorescence

dark shales with much pyrite, some sand clusters, more angular and coarse, some very pyritic, barren to saturated tarry stain, slight show free oil, no odor in cup, some pyrite has sand grains and molds, obviously part of sand body

Mississippian (Chester) 5144 -2325

limestone, white chalky to white and gray mottled, some weathered, oolitic, some dense gray fossiliferous, moderate chalk in sample, still carrying mostly shale from above

SCALE CHANGE

| | |
|-------------------|-----|
| Total Gas (units) | 200 |
| C1 (units) | 200 |
| C2 (units) | 200 |
| C3 (units) | 200 |
| C4 (units) | 200 |

short trip at 5050 ft, resume drilling 0915 hrs 1/28/11

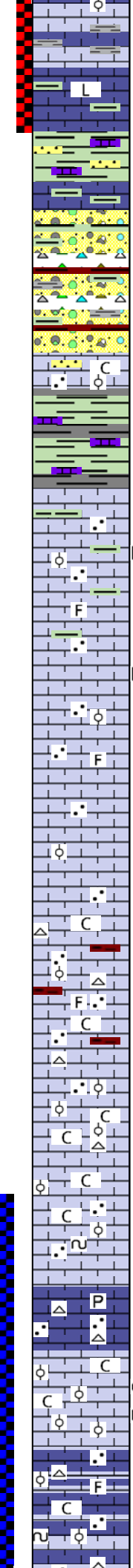
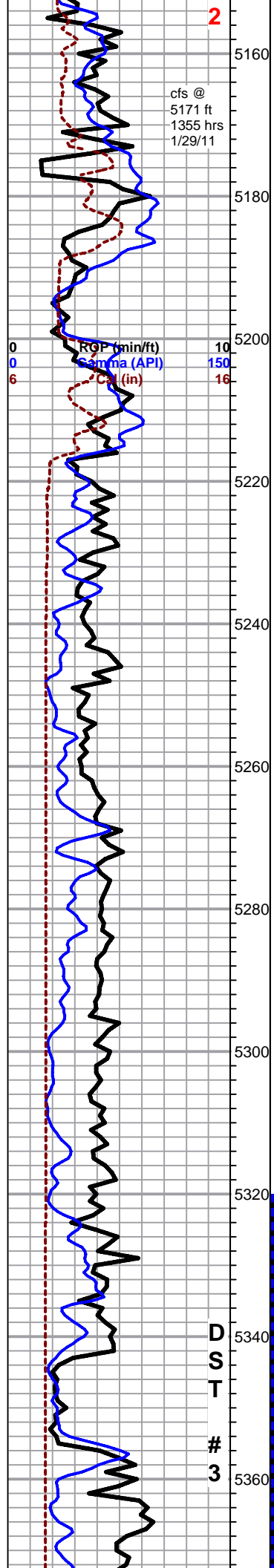
Mud-Co Mud Ck @ 5050'
0720 hrs 1/28/11
vis 56 wt 9.3
pv 15 yp 15
wl 11.2
cake 1/32
pH 9.0
chl 1700
cal 20
sol 7.0
lcm 2#
dmc \$1725.65
cmc \$14687.20

pipe strap 2.3 ft long to board deviation survey 3/4 deg

141 total units

this high gas background from DST's

Mud-Co Mud Ck @ 5135'
0655 hrs 1/29/11



shale from above

5171 60 min sample, limestone, light gray to pale green, cryptocrystalline, compact dense, lithographic, still carrying abundant shales, influx some light green argillaceous shale

limestone a.a. flood variable green and olive shales, some olive chert, black to maroon mottled sdy/slty shale, carrying some sandstone as above

shaley conglomerate, mostly greens, but samples wash red, mixed limestone and chert, abundant dark green sandstone, very fine grained, well sorted and rounded, fair cemented, dolomitic, poor visible porosity, no show- found 1 large black dense sand cluster, bleeds profusely, no odor or fluors, only piece in whole cup

limestone, cream to white, oolitic and sandy, dense, with increasing green sandstone as above, with appx. 20% chalk in samples, no shows

mostly mixed shale with lithographic pale green limestone, @ 5330 sample decreasing shale and lithographic lime, grading back to sandy fossiliferous and oolitic limestone

Miss St. Gen. 5221 -2402

sandy limestone, white to cream and light green, fossiliferous to oolitic, with black to brown, spotty to saturated stain, no show free oil or gas, no odor, no fluorescence, still carrying abundat shale

sandy limestone as above, marked decrease in staining, some non sandy white fossiliferous to oolitic, no other show, no fluorescence

as above, staining has dropped completely out of samples

limestones as above; beginning in 5290 sample, flood of orange to red opaque to translucent chert, fossiliferous, sharp, fresh, abundant red shales, scattered chalk, no show

5320 sample, as above picking up abundant limestone, white to light gray, mature oolitic, chalky, friable, some sandy, still carrying some chert as above

St. Louis 5318

limestone, mix of sandy gray to white and oolitic, mature to flattened, some sandy, trace glauconitic, chalky, abundant chalk in samples

5350 sample, oolitic facies above drop out, influx limestone, light gray, cryptocrystalline, dense, sandy, some pyritic, with chert, frosted gray, opaque, fossiliferous, sharp, fresh, some scattered sandy oolitic, no shows, very pale even fluorescence

limestone, white to cream, mature to slightly flattened oolitic, very chalky, poor visible porosity, some very friable, some sandy, poor visible porosity, no stain, fair show free oil in tray, no odor, some light green min. fluor., light cut with bright halo, abundant chalk, some chert as above

limestone, mixed light gray to white, sandy fossiliferous to oolitic and microcrystalline sandy, slighty glauconitic, no shows, some faint fluorescence, some scattered chert as above

Kenneth Dirks 1-8 DST #3.pdf

as above, increasing chalky mature and flattened oolitic, some sandy and glauconitic

