



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1073468  
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 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

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: \_\_\_\_\_

1073468

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 <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 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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Falcon Exploration, Inc.
Well Name	SMITH 2-5(NW)
Doc ID	1073468

All Electric Logs Run

DIL
MEL
BHCS
CNL/CDL

Form	ACO1 - Well Completion
Operator	Falcon Exploration, Inc.
Well Name	SMITH 2-5(NW)
Doc ID	1073468

Tops

Name	Top	Datum
STOTLER	3579	-753
LANSING	4250	-1424
STARK	4610	-1784
PAWNEE	4830	-2004
CHEROKEE	4880	-2054
MORROW SD	5082	-2256
MISS	5108	-2282
MISS ST GEN	5195	-2369
MISS ST LOUIS	5223	-2397
SALEM	5472	-2646

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



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

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

Sam Brownback, Governor

February 06, 2012

CYNDE WOLF  
Falcon Exploration, Inc.  
125 N MARKET STE 1252  
WICHITA, KS 67202-1719

Re: ACO1  
API 15-069-20349-00-00  
SMITH 2-5(NW)  
NW/4 Sec.05-28S-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,  
CYNDE WOLF

# ALLIED CEMENTING CO., LLC. 036495

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
Liberia, KS.

DATE <u>10-26-11</u>	SEC. <u>5</u>	TWP. <u>28s</u>	RANGE <u>30w</u>	CALLED OUT	ON LOCATION	JOB START <u>10:15Am</u>	JOB FINISH <u>11:30Am</u>
LEASE <u>Smith</u>		WELL# <u>2-5</u>		LOCATION <u>Vex Copeland K.S.</u>		COUNTY <u>Gray</u>	STATE <u>K.S.</u>
OLD OR <del>NEW</del> (Circle one)							

CONTRACTOR Sterling

TYPE OF JOB \_\_\_\_\_

HOLE SIZE 12 1/4 T.D. 1880

CASING SIZE 8 5/8 24# DEPTH 1879

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX 12-00 MINIMUM 500

MEAS. LINE \_\_\_\_\_ SHOE JOINT 40 ft

CEMENT LEFT IN CSG. 40 ft

PERFS. \_\_\_\_\_

DISPLACEMENT 117.1 Bbl H<sub>2</sub>O

EQUIPMENT

PUMP TRUCK CEMENTER Kenny

# 420-484 HELPER Kenny

BULK TRUCK

# 457-239 DRIVER Jose

BULK TRUCK

# 456-751 DRIVER \_\_\_\_\_

REMARKS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

THANK YOU!!!

CHARGE TO: Falcon Exp

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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 Kevin Kuhn

SIGNATURE [Signature]

OWNER \_\_\_\_\_

CEMENT

AMOUNT ORDERED 600 SK 65/35/16%

Gel 3% CC 1/4# Flo Seal

150 SK Class A 3% CC 2% Gel

COMMON	<u>150</u>	@ <u>16.25</u>	<u>2437.50</u>
POZMIX		@	
GEL	<u>3</u>	@ <u>21.25</u>	<u>63.75</u>
CHLORIDE	<u>25</u>	@ <u>58.20</u>	<u>1455.00</u>
ASC		@	
		@	
<u>600 SK Lite</u>	<u>600</u>	@ <u>15.00</u>	<u>9000.00</u>
		@	
<u>Flo Seal</u>	<u>150</u>	@ <u>2.70</u>	<u>405.00</u>
		@	
		@	
		@	
		@	
HANDLING	<u>784</u>	@ <u>2.25</u>	<u>1764.00</u>
MILEAGE			<u>4743.20</u>
			TOTAL <u>19868.45</u>

SERVICE

DEPTH OF JOB		<u>1880 ft</u>	
PUMP TRUCK CHARGE		<u>1925.00</u>	
EXTRA FOOTAGE	@		
MILEAGE	<u>600</u>	@ <u>7.00</u>	<u>700.00</u>
MANIFOLD	<u>1</u>	@ <u>200</u>	<u>200.00</u>
<u>Lght + V Mileage</u>	<u>100</u>	@ <u>4.00</u>	<u>400.00</u>
		@	
			TOTAL <u>3225.00</u>

PLUG & FLOAT EQUIPMENT

<u>Centralizers</u>	<u>3</u>	@ <u>64.00</u>	<u>192.00</u>
<u>Baskets</u>	<u>3</u>	@ <u>478.00</u>	<u>1434.00</u>
<u>Guide Shoes</u>	<u>1</u>	@ <u>394.00</u>	<u>394.00</u>
<u>AFU Tracet</u>	<u>1</u>	@ <u>382.00</u>	<u>382.00</u>
<u>Top Rubber Plug</u>	<u>1</u>	@ <u>112.00</u>	<u>112.00</u>
			TOTAL <u>2514.00</u>

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \$25607.45

DISCOUNT \$20485.96 IF PAID IN 30 DAYS



### Cement Report

Customer	Falcon Exploration		Lease No.			Date	11-6-11		
Lease	Smith		Well #	25		Service Receipt	1717 02099		
Casing	5 1/2	Depth	5550		County	Ozark		State	KS
Job Type	242 L.S.		Formation			Legal Description	5-28-30		

Pipe Data		Perforating Data		Cement Data
Casing size	Tubing Size	Shots/Ft		Lead
Depth	Depth	From	To	SEE Callsheet
Volume	Volume	From	To	
Max Press	Max Press	From	To	
Well Connection	Annulus Vol.	From	To	Tail in
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
15:15					on loc. / Held Safety Meeting
15:20					Spot + Rig up Equip.
					Rig Laying Down Drill String
19:40					Start Csg
22:40					Csg on Bottom Cir. w/ Rig
23:27	3000				Test Pump + Lines
23:29	400		5	3	Start fresh H <sub>2</sub> O
23:31	400		12	3	Start Super flush II
23:36	400		5	3	Start fresh H <sub>2</sub> O
23:39					Shutdown + Hook up to 2"
23:47	100		4	2	Plug Mouse Hole w/ 20sk @ 15.5'
23:51	100		6	2	Plug Rat Hole w/ 30sk @ 15.6'
23:55					Shutdown + Hook up to Pipe
23:58	400		54	4	Start Cmt 200sk @ 14.8'
00:15					Shutdown + Wash up
00:19	100	100	0	6	Start Disp. w/ fresh H <sub>2</sub> O
00:40	800	800	121	3	Slow Rate
00:44	2000	2000	131	3	Bump Plug
00:45	0		181	0	Release / Float Held
					End Job
	1000				Pressure Before Plug landed

Service Units	21755	381119919	304641808		
Driver Names	Cochran	Mendoza	S. Chavez		

Leon  
Customer Representative

J. Bennett  
Station Manager

McCochran  
Cementer

Company	<b>Falcon Exploration, Inc.</b>	Lease Name	<b>Smith (NW)</b>	
Address	<b>125 N. Market, Ste. 1252</b>	Lease #	<b>2-5</b>	
CSZ	<b>Wichita, KS 67202</b>	Legal Desc	<b>NE-SE-SE-NW</b>	Job Ticket <b>2170</b>
Attn.	<b>Keith Reavis</b>	Section	<b>5</b>	Range <b>30W</b>
		Township	<b>28S</b>	
		County	<b>Gray</b>	State <b>KS</b>
		Drilling Cont	<b>Sterling Drilling Co. Rig #5</b>	
Comments	<b>Legal Description Feet: 2170' FNL &amp; 2440' FWL</b>			

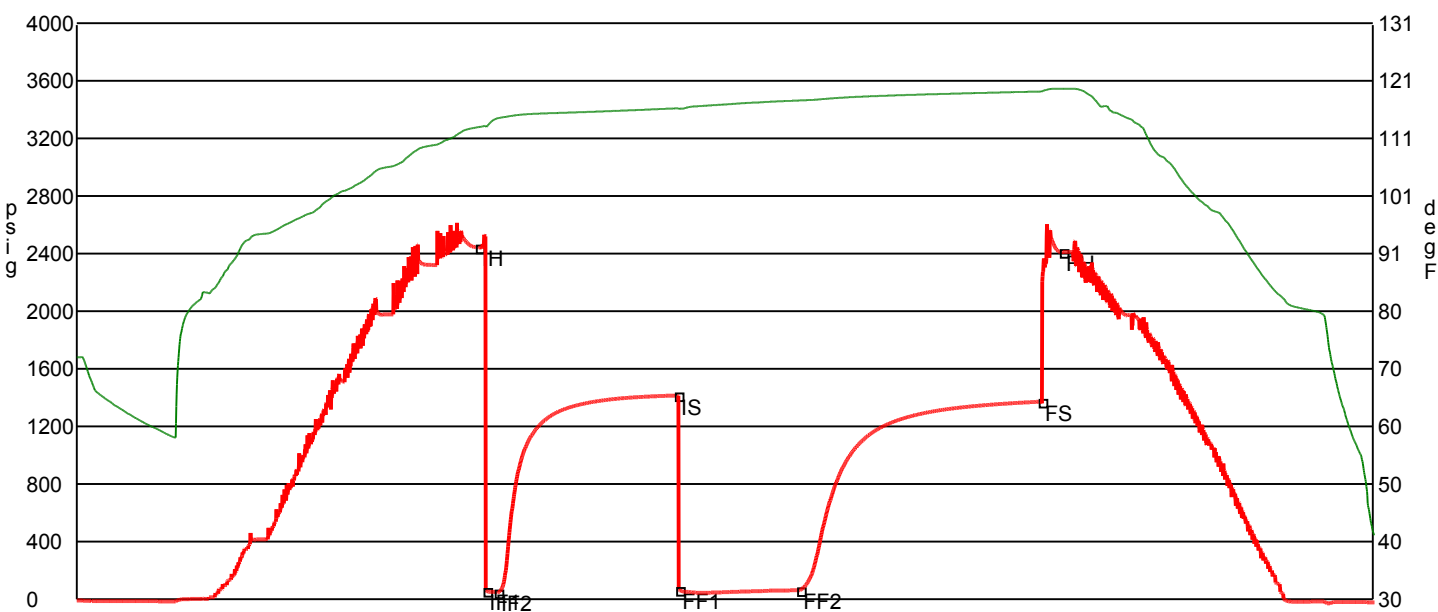
**GENERAL INFORMATION**

Test # 1	Test Date	<b>11/2/2011</b>	Chokes	<b>3/4</b>	Hole Size	<b>7 7/8</b>
Tester	<b>Tim Venters</b>		Top Recorder #	<b>W1119</b>		
Test Type	<b>Conventional Bottom Hole</b>		Mid Recorder #	<b>W1023</b>		
	<b>Successful Test</b>		Bott Recorder #	<b>13310</b>		
# of Packers	<b>2.0</b>	Packer Size	<b>6 3/4</b>	Mileage	<b>244</b>	Approved By
				Standby Time	<b>0</b>	
Mud Type	<b>Gel Chem</b>			Extra Equipmnt	<b>Jars &amp; Safety joint</b>	
Mud Weight	<b>9.2</b>	Viscosity	<b>56.0</b>	Time on Site	<b>9:20 PM</b>	
Filtrate	<b>8.4</b>	Chlorides	<b>2400</b>	Tool Picked Up	<b>11:25 PM</b>	
				Tool Layed Dwn	<b>8:50 AM</b>	
Drill Collar Len	<b>337.0</b>			Elevation	<b>2813.00</b>	Kelley Bushings <b>2826.00</b>
Wght Pipe Len	<b>0</b>					
Formation	<b>Morrow</b>			Start Date/Time	<b>11/2/2011 10:22 PM</b>	
Interval Top	<b>5061.0</b>	Bottom	<b>5125.0</b>	End Date/Time	<b>11/3/2011 9:03 AM</b>	
Anchor Len Below	<b>64.0</b>	Between	<b>0</b>			
Total Depth	<b>5125.0</b>					
Blow Type	<b>Weak 1/4 inch blow at the start of the intitial flow period, building to 3/4 inc hes. Very weak surface blow at the start of the final flow period, building to 1 1/2 inches. Times: 5, 90, 60, 120.</b>					

**RECOVERY**

Feet	Description	Gas	Oil	Water	Mud
30	Mud	0% 0ft	0% 0ft	0% 0ft	100%30ft
90	Mud with specs of oil	0% 0ft	trace	0% 0ft	100%90ft
DST Fluids	<b>0</b>				





	Date	Time	Pressure	Temp	
IH	11/3/2011 1:40:00 AM	3.3	2444.288	112.815	Initial Hydro-static
IF1	11/3/2011 1:43:40 AM	3.361111	57.781	112.871	Initial Flow (1)
IF2	11/3/2011 1:49:20 AM	3.455556	48.601	114.358	Initial Flow (2)
IS	11/3/2011 3:18:30 AM	4.941667	1416.089	116.103	Initial Shut-In
FF1	11/3/2011 3:19:10 AM	4.952778	64.459	115.995	Final Flow (1)
FF2	11/3/2011 4:19:00 AM	5.95	63.773	117.477	Final Flow (2)
FS	11/3/2011 6:18:40 AM	7.944444	1372.835	119.044	Final Shut-In
FH	11/3/2011 6:29:10 AM	8.119444	2412.334	119.514	Final Hydro-static

**GAS FLOWS**

Min Into IFP   Min Into FFP   Gas Flows   Pressure   Choke

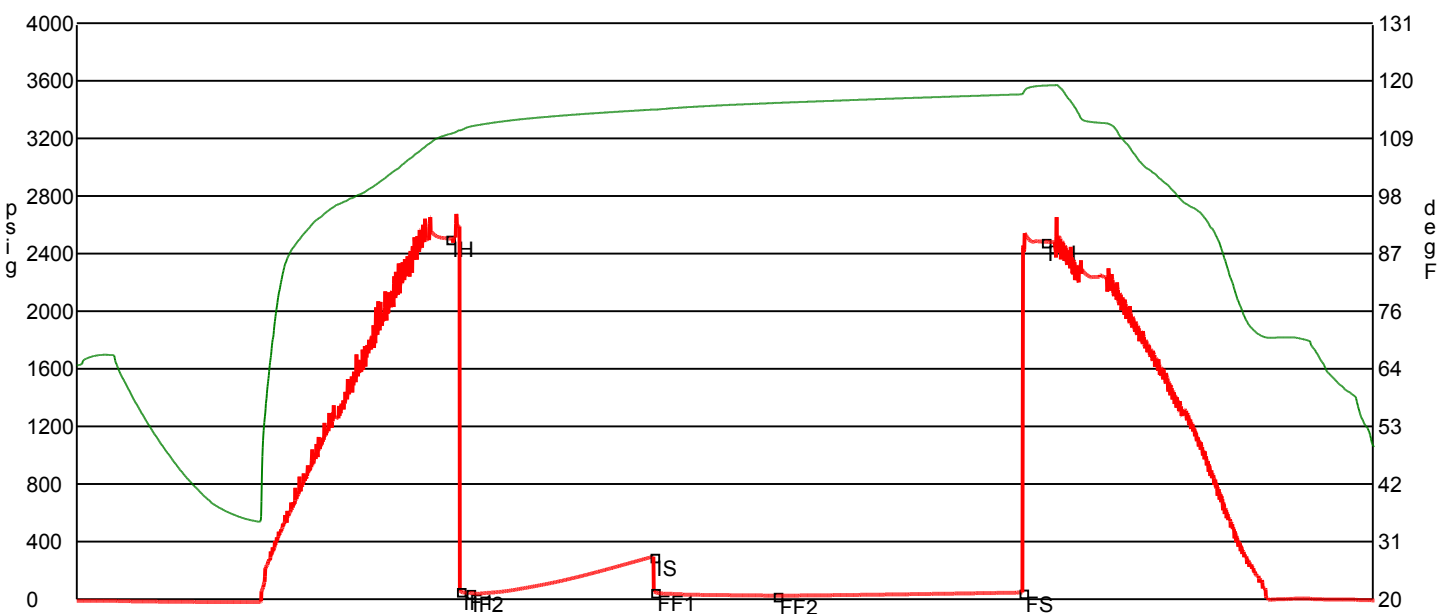
Company	<b>Falcon Exploration, Inc.</b>	Lease Name	<b>Smith (NW)</b>	
Address	<b>125 N. Market, Ste. 1252</b>	Lease #	<b>2-5</b>	
CSZ	<b>Wichita, KS 67202</b>	Legal Desc	<b>NE-SE-SE-NW</b>	Job Ticket <b>2170</b>
Attn.	<b>Keith Reavis</b>	Section	<b>5</b>	Range <b>30W</b>
		Township	<b>28S</b>	
		County	<b>Gray</b>	State <b>KS</b>
		Drilling Cont	<b>Sterling Drilling Co. Rig #5</b>	
Comments	<b>Legal Description Feet: 2170' FNL &amp; 2440' FWL</b>			

**GENERAL INFORMATION**

Test # <b>2</b>	Test Date <b>11/3/2011</b>	Chokes <b>3/4</b>	Hole Size <b>7 7/8</b>
Tester <b>Tim Venters</b>		Top Recorder # <b>W1119</b>	
Test Type <b>Conventional Bottom Hole Successful Test</b>		Mid Recorder # <b>W1023</b>	
		Bott Recorder # <b>13310</b>	
# of Packers <b>2.0</b>	Packer Size <b>6 3/4</b>	Mileage <b>88</b>	Approved By
		Standby Time <b>0</b>	
Mud Type <b>Gel Chem</b>		Extra Equipmnt <b>Jars &amp; Safety joint</b>	
Mud Weight <b>9.3</b>	Viscosity <b>48.0</b>	Time on Site <b>11:45 PM</b>	
Filtrate <b>7.6</b>	Chlorides <b>2500</b>	Tool Picked Up <b>2:45 AM</b>	
		Tool Layed Dwn <b>12:00 PM</b>	
Drill Collar Len <b>337.0</b>		Elevation <b>2813.00</b>	Kelley Bushings <b>2826.00</b>
Wght Pipe Len <b>0</b>			
Formation <b>Mississippian</b>		Start Date/Time <b>11/3/2011 1:35 AM</b>	
Interval Top <b>5148.0</b>	Bottom <b>5226.0</b>	End Date/Time <b>11/3/2011 12:16 PM</b>	
Anchor Len Below <b>78.0</b>	Between <b>0</b>		
Total Depth <b>5226.0</b>			
Blow Type <b>Weak 1/4 inch blow throughout the intial flow period. Very weak surface blow t hroughout the final flow period. Times: 5, 90, 60, 124</b>			

**RECOVERY**

Feet	Description	Gas	Oil	Water	Mud
20	Mud	0% 0ft	0% 0ft	0% 0ft	100%20ft
DST Fluids	<b>0</b>				



	Date	Time	Pressure	Temp	
IH	11/3/2011 4:38:20 AM	3.055556	2506.113	109.641	Initial Hydro-static
IF1	11/3/2011 4:43:40 AM	3.144444	59.814	110.362	Initial Flow (1)
IF2	11/3/2011 4:48:20 AM	3.222222	44.694	111.063	Initial Flow (2)
IS	11/3/2011 6:19:30 AM	4.741667	297.597	114.387	Initial Shut-In
FF1	11/3/2011 6:19:50 AM	4.747222	52.869	114.364	Final Flow (1)
FF2	11/3/2011 7:20:30 AM	5.758333	26.034	115.668	Final Flow (2)
FS	11/3/2011 9:22:20 AM	7.788889	47.046	117.322	Final Shut-In
FH	11/3/2011 9:33:20 AM	7.972222	2483.461	119.008	Final Hydro-static

**GAS FLOWS**

Min Into IFP   Min Into FFP   Gas Flows   Pressure   Choke

Company	<b>Falcon Exploration, Inc.</b>	Lease Name	<b>Smith (NW)</b>	
Address	<b>125 N. Market, Ste. 1252</b>	Lease #	<b>2-5</b>	
CSZ	<b>Wichita, KS 67202</b>	Legal Desc	<b>NE-SE-SE-NW</b>	Job Ticket <b>2170</b>
Attn.	<b>Keith Reavis</b>	Section	<b>5</b>	Range <b>30W</b>
		Township	<b>28S</b>	
		County	<b>Gray</b>	State <b>KS</b>
		Drilling Cont	<b>Sterling Drilling Co. Rig #5</b>	

Comments **Legal Description Feet: 2170' FNL & 2440' FWL**

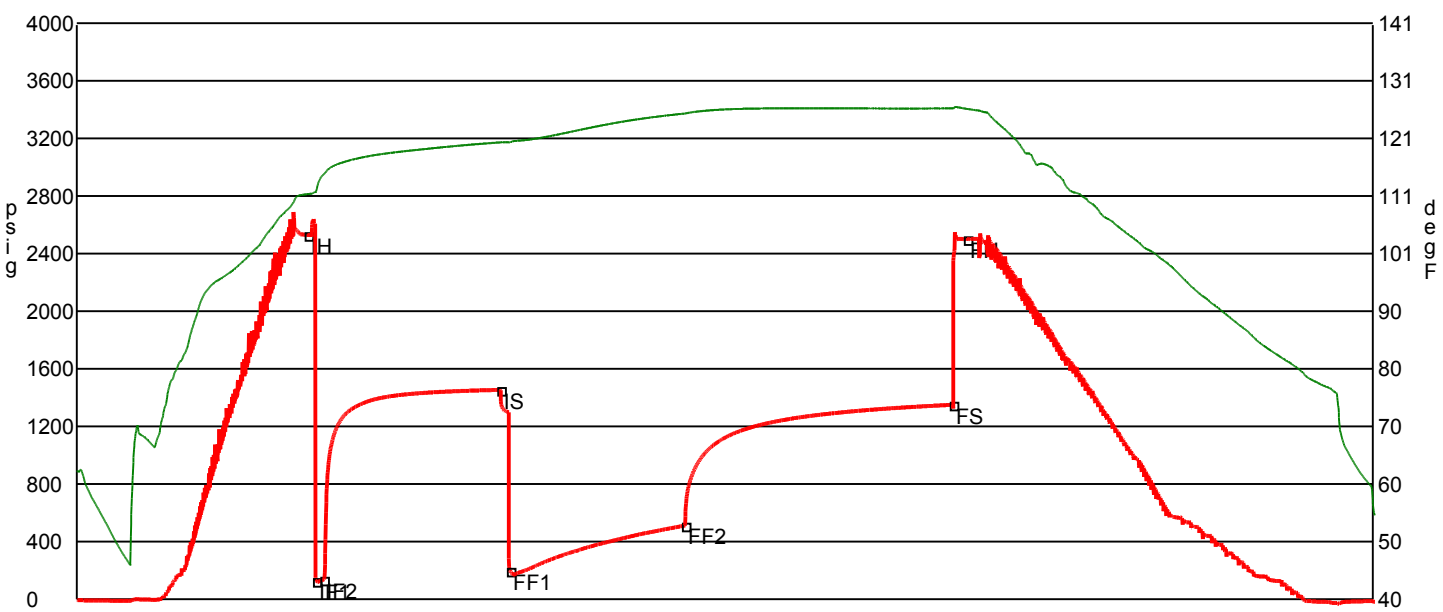
**GENERAL INFORMATION**

Test # <b>3</b>	Test Date <b>11/4/2011</b>	Chokes <b>3/4</b>	Hole Size <b>7 7/8</b>
Tester <b>Tim Venters</b>		Top Recorder # <b>W1119</b>	
Test Type <b>Conventional Bottom Hole Successful Test</b>		Mid Recorder # <b>W1022</b>	
		Bott Recorder # <b>13310</b>	
# of Packers <b>2.0</b>	Packer Size <b>6 3/4</b>	Mileage <b>88</b>	Approved By
		Standby Time <b>0</b>	
Mud Type <b>Gel Chem</b>		Extra Equipmnt <b>Jars &amp; Safety joint</b>	
Mud Weight <b>9.3</b>	Viscosity <b>48.0</b>	Time on Site <b>2:45 AM</b>	
Filtrate <b>7.2</b>	Chlorides <b>2350</b>	Tool Picked Up <b>4:45 AM</b>	
		Tool Layed Dwn <b>6:30 PM</b>	
Drill Collar Len <b>337.0</b>		Elevation <b>2813.00</b>	Kelley Bushings <b>2826.00</b>
Wght Pipe Len <b>0</b>			
Formation <b>Mississippian St. Louis</b>		Start Date/Time <b>11/4/2011 3:52 AM</b>	
Interval Top <b>5270.0</b>	Bottom <b>5323.0</b>	End Date/Time <b>11/4/2011 6:37 PM</b>	
Anchor Len Below <b>53.0</b>	Between <b>0</b>		
Total Depth <b>5323.0</b>			
Blow Type <b>Strong blow throughout the initial flow period, reaching the bottom of the bucket in 1 minute. Gas to surface: 70 minutes, but was too small to measure. Weak 1/4 inch blow back at the start of the initial shut-in period, building to 3 inches. Strong blow throughout the final flow period, reaching the bottom of the bucket in 1 1/2 minutes. Weak surface blow back after we bled line off, building, reaching the bottom of the bucket in 13 minutes. Times: 5, 120, 126, 182. Oil Gravity: 29.</b>			

**RECOVERY**

Feet	Description	Gas	Oil	Water	Mud
3980	Gas in Pipe	100% 3980ft	0% 0ft	0% 0ft	0% 0ft
705	Gassy oil	5% 35.2ft	95% 669.8ft	0% 0ft	0% 0ft
125	Gassy, water and mud cut oil	15% 18.8ft	49% 61.2ft	13% 16.2ft	23% 28.8ft
65	Gassy, mud, slight oil cut water	10% 6.5ft	7% 4.6ft	60% 39ft	23% 15ft
65	Slight oil and mud cut water	0% 0ft	3% 2ft	84% 54.6ft	13% 8.4ft
295	Very slight mud cut water with trace of oil	0% 0ft	trace	97% 286.2ft	3% 8.8ft
10	Mud	0% 0ft	0% 0ft	0% 0ft	100% 10ft

DST Fluids **79000**



	Date	Time	Pressure	Temp	
IH	11/4/2011 6:28:30 AM	2.608333	2530.288	111.053	Initial Hydro-static
IF1	11/4/2011 6:34:10 AM	2.702778	127.024	111.279	Initial Flow (1)
IF2	11/4/2011 6:39:10 AM	2.786111	135.727	114.417	Initial Flow (2)
IS	11/4/2011 8:40:10 AM	4.802778	1454.868	120.122	Initial Shut-In
FF1	11/4/2011 8:46:50 AM	4.913889	198.295	120.148	Final Flow (1)
FF2	11/4/2011 10:46:20 AM	6.905556	512.747	125.188	Final Flow (2)
FS	11/4/2011 1:49:20 PM	9.955556	1351.254	126.089	Final Shut-In
FH	11/4/2011 1:59:00 PM	10.116667	2501.154	125.998	Final Hydro-static

**GAS FLOWS**

Min Into IFP   Min Into FFP   Gas Flows   Pressure   Choke

**OPERATOR**

Company: Falcon Explortation, Inc.  
 Address: 125 N. Market  
 Suite 1252  
 Wichita, KS 67202  
 Contact Geologist: Brian Fisher  
 Contact Phone Nbr: 316-262-1378  
 Well Name: Smith #2-5  
 Location: Sec 5 - T28S - R30W  
 Pool:  
 State: Kansas

API: 15-069-20349-0000  
 Field: Wildcat  
 Country: USA

Scale 1:240 Imperial

Well Name: Smith #2-5  
 Surface Location: Sec 5 - T28S - R30W  
 Bottom Location:  
 API: 15-069-20349-0000  
 License Number: 5316  
 Spud Date: 10/24/2011 Time: 00:00  
 Region: Gray County  
 Drilling Completed: 11/5/2011 Time: 20:30  
 Surface Coordinates: 2170' FNL & 2440' FWL  
 Bottom Hole Coordinates:  
 Ground Elevation: 2813.00ft  
 K.B. Elevation: 2826.00ft  
 Logged Interval: 3400.00ft To: 5550.00ft  
 Total Depth: 5550.00ft  
 Formation: Mississippian  
 Drilling Fluid Type: Chemical/Fresh Water Gel

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: Latitude:  
 N/S Co-ord: 2170' FNL  
 E/W Co-ord: 2440' FWL

**LOGGED BY**

**Keith Reavis**  
*Consulting Geologist*

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

**CONTRACTOR**

Contractor: Sterling Drilling Company  
 Rig #: 5  
 Rig Type: mud rotary Time: 00:00  
 Spud Date: 10/24/2011 Time: 20:30  
 TD Date: 11/5/2011 Time: 00:00  
 Rig Release: 11/6/2011

**ELEVATIONS**

K.B. Elevation: 2826.00ft Ground Elevation: 2813.00ft  
 K.B. to Ground: 13.00ft

**NOTES**

Due to favorable results of DST #3 as well as favorable log calculations, it was determined that 5 1/2" production casing be set and cemented and the Mississippian St. Louis be further tested through perforations and stimulation.

The well samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted,  
 Keith Reavis

**Falcon Exploration, Inc.**  
**daily drilling report**

DATE	7:00 AM DEPTH	REMARKS
10/28/2011		Geologist Keith Reavis on location @ 2220 hrs, 3502 ft., drilling Stotler
10/29/2011	3716	drilling ahead, Tarkio, Bern, Topeka, Heebner
10/30/2011	4287	drilling ahead, Douglas, Lansing
10/31/2011	4727	drilling ahead, Stark, lower KC, Marmaton, Cherokee
11/01/2011	5042	drilling Cherokee, run short trip at 5050', drill Morrow, warrants DST
11/02/2011	5125	conducting DST #1, complete DST #1, resume drilling Morrow, Miss, show in Miss St. Gen, warrants DST, TOH for DST #2
11/03/2011	5226	conducting DST #2, complete, successful test, resume drilling, show and kick in St. Louis, cfs
11/04/2011	5323	warrants test, TOH and conduct and complete DST #3, successful test
11/05/2011	5397	resume drilling, TD @ 5550 ft, ctch, TOH for logs
11/06/2011	5550	conduct and complete logging operations, geologist off loc. @ 0800 hrs

**Falcon Exploration, Inc.**  
**well comparison sheet**

Formation	DRILLING WELL Smith #2-5 2170' FNL & 2440' FWL Sec 5-T28S-R30W				COMPARISON WELL Smith #1-5 1460' FNL & 330' FWL Sec 5-T28S-R30W				COMPARISON WELL Josserand #1-5 380' FSL & 850' FEL Sec 5-T28S-R30W			
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Stotler	3540	-714	3541	-715	3530	-698	-16	-17	3542	-719	5	4
Tarkio	3612	-786	3613	-787	3602	-770	-16	-17	3616	-793	7	6
Bern	3712	-886	3712	-886	3700	-868	-18	-18	3712	-889	3	3
Topeka	3812	-986	3810	-984	3800	-968	-18	-16	3812	-989	3	5
Heebner	4147	-1321	4146	-1320	4140	-1308	-13	-12	4151	-1328	7	8
Lansing	4245	-1419	4249	-1423	4236	-1404	-15	-19	4250	-1427	8	4
Stark	4612	-1786	4610	-1784	4590	-1758	-28	-26	4614	-1791	5	7
Marmaton	4742	-1916	4748	-1922	4738	-1906	-10	-16	4746	-1923	7	1
Pawnee	4833	-2007	4832	-2006	4822	-1990	-17	-16	4843	-2020	13	14
Cherokee	4881	-2055	4881	-2055	4870	-2038	-17	-17	4889	-2066	11	11
Morrow Sand	5081	-2255	5081	-2255	5078	-2246	-9	-9	5103	-2280	25	25
Mississippian	5146	-2320	5145	-2319	5154	-2322	2	3	5139	-2316	-4	-3
St. Lo Por	5276	-2450	5276	-2450	5284	-2452	2	2	5302	-2479	29	29
Salem	5474	-2648	5476	-2650	5474	-2642	-6	-8	5473	-2650	2	0
Total Depth	5550	-2724	5551	-2725	5552	-2720	-4	-5	5547	-2724	0	-1

**Drill Stem Test #1**

**RICKETTS TESTING** (620) 326-5830 Page 1

Company: Falcon Exploration, Inc.  
 Address: 125 N. Market, Ste. 1252  
 CSZ: Wichita, KS 67202  
 Attn: Keith Reavis

Lease Name: Smith (NW)  
 Lease #: 2-5  
 Legal Desc: NE-SE-SE-NW  
 Section: 5  
 Township: 28S  
 County: Gray  
 Drilling Cont: Sterling Drilling Co. Rig #5

Job Ticket: 2170  
 Range: 30W  
 State: KS

Comments: Legal Description Feet: 2170' FNL & 2440' FWL

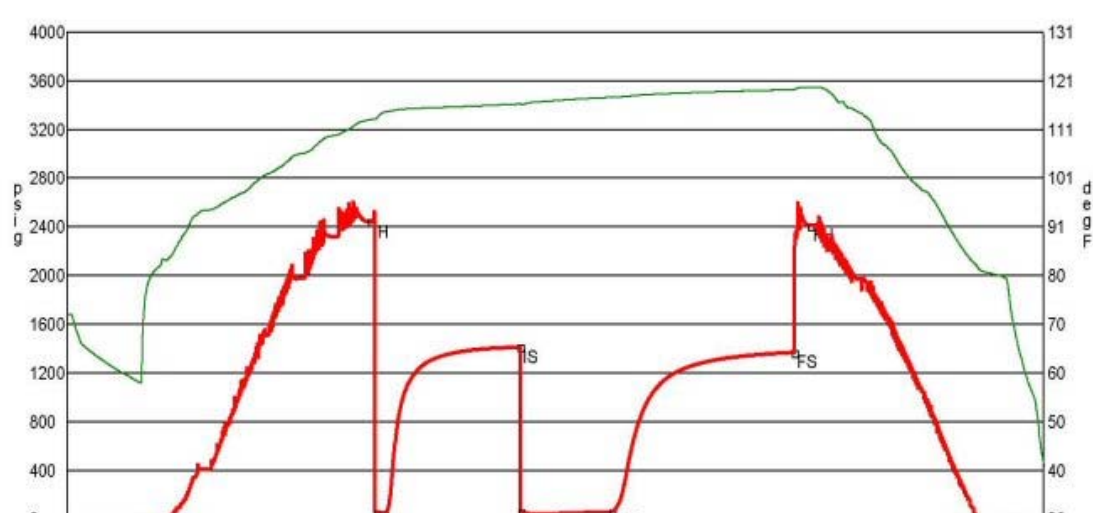
**GENERAL INFORMATION**

Test #1: 11/2/2011  
 Tester: Tim Venters  
 Test Type: Conventional Bottom Hole Successful Test  
 # of Packers: 2.0 Packer Size: 6 3/4  
 Mud Type: Gel Chem  
 Mud Weight: 9.2 Viscosity: 56.0  
 Filtrate: 8.4 Chlorides: 2400  
 Drill Collar Len: 337.0  
 Wght Pipe Len: 0  
 Formation: Morrow  
 Interval Top: 5061.0  
 Anchor Len Below: 64.0  
 Total Depth: 5125.0  
 Blow Type: Weak 1/4 inch blow at the start of the initial flow period, building to 3/4 inch. Very weak surface blow at the start of the final flow period, building to 1 1/2 inches. Times: 5, 90, 60, 120.

Chokes: 3/4  
 Top Recorder # W1119  
 Mid Recorder # W1023  
 Bott Recorder # 13310  
 Mileage: 244  
 Standby Time: 0  
 Extra Equipmnt: Jars & Safety joint  
 Time on Site: 9:20 PM  
 Tool Picked Up: 11:25 PM  
 Tool Layed Dwn: 8:50 AM  
 Elevation: 2813.00  
 Kelley Bushings: 2826.00  
 Start Date/Time: 11/2/2011 10:22 PM  
 End Date/Time: 11/3/2011 9:03 AM

**RECOVERY**

Feet	Description	Gas	Oil	Water	Mud
30	Mud	0% Ofl	0% Ofl	0% Ofl	100%3Ofl
90	Mud with specs of oil	0% Ofl	trace	0% Ofl	100%9Ofl



Date	Time	Pressure	Temp	
IH	11/3/2011 1:40:00 AM	3.3	2444.288	112.815
IF1	11/3/2011 1:43:40 AM	3.361111	57.781	112.871
IF2	11/3/2011 1:49:20 AM	3.455556	48.601	114.358
IS	11/3/2011 3:18:30 AM	4.941667	1416.089	116.103
FF1	11/3/2011 3:19:10 AM	4.952778	64.459	115.995
FF2	11/3/2011 4:19:00 AM	5.95	63.773	117.477
FS	11/3/2011 6:19:40 AM	7.944444	1372.835	119.044
FH	11/3/2011 6:28:10 AM	8.119444	2412.334	119.514



### Drill Stem Test #2

RICKETTS TESTING

(620) 326-5830

Page 1

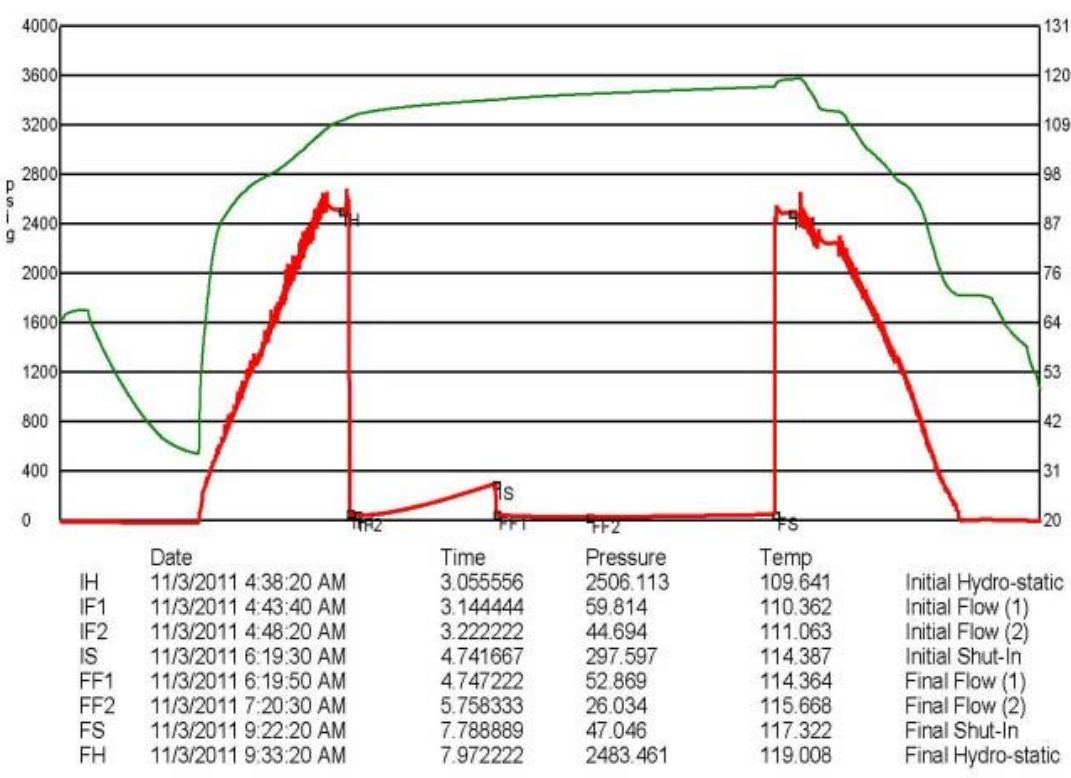
Company: <b>Falcon Exploration, Inc.</b> Address: <b>125 N. Market, Ste. 1252</b> CSZ: <b>Wichita, KS 67202</b> Attn: <b>Keith Reavis</b>	Lease Name: <b>Smith (NW)</b> Lease #: <b>2-5</b> Legal Desc: <b>NE-SE-SE-NW</b> Section: <b>5</b> Township: <b>28S</b> County: <b>Gray</b> Drilling Cont: <b>Sterling Drilling Co. Rig #5</b>
Job Ticket: <b>2170</b> Range: <b>30W</b> State: <b>KS</b>	Comments: <b>Legal Description Feet: 2170' FNL &amp; 2440' FWL</b>

#### GENERAL INFORMATION

Test # <b>2</b> Tester: <b>Tim Venters</b> Test Type: <b>Conventional Bottom Hole Successful Test</b> # of Packers: <b>2.0</b> Packer Size: <b>6 3/4</b> Mud Type: <b>Gel Chem</b> Mud Weight: <b>9.3</b> Filtrate: <b>7.6</b> Drill Collar Len: <b>337.0</b> Wght Pipe Len: <b>0</b> Formation Interval Top: <b>Mississippian 5148.0</b> Anchor Len Below: <b>78.0</b> Total Depth: <b>5226.0</b> Blow Type: <b>Weak 1/4 inch blow throughout the initial flow period. Very weak surface blow throughout the final flow period. Times: 5, 90, 60, 124</b>	Test Date: <b>11/3/2011</b> Chokes: <b>3/4</b> Top Recorder #: <b>W1119</b> Mid Recorder #: <b>W1023</b> Bott Recorder #: <b>13310</b> Mileage: <b>88</b> Standby Time: <b>0</b> Extra Equipmnt: <b>Jars &amp; Safety joint</b> Time on Site: <b>11:45 PM</b> Tool Picked Up: <b>2:45 AM</b> Tool Layed Dwn: <b>12:00 PM</b> Elevation: <b>2813.00</b> Kelley Bushings: <b>2826.00</b> Bottom: <b>5226.0</b> Between: <b>0</b> Start Date/Time: <b>11/3/2011 1:35 AM</b> End Date/Time: <b>11/3/2011 12:16 PM</b>	Hole Size: <b>7 7/8</b> Approved By:
---	---	---

#### RECOVERY

Feet	Description	Gas	Oil	Water	Mud
20	Mud	0% 0ft	0% 0ft	0% 0ft	100% 20ft



### Drill Stem Test #3

RICKETTS TESTING

(620) 326-5830

Page 1

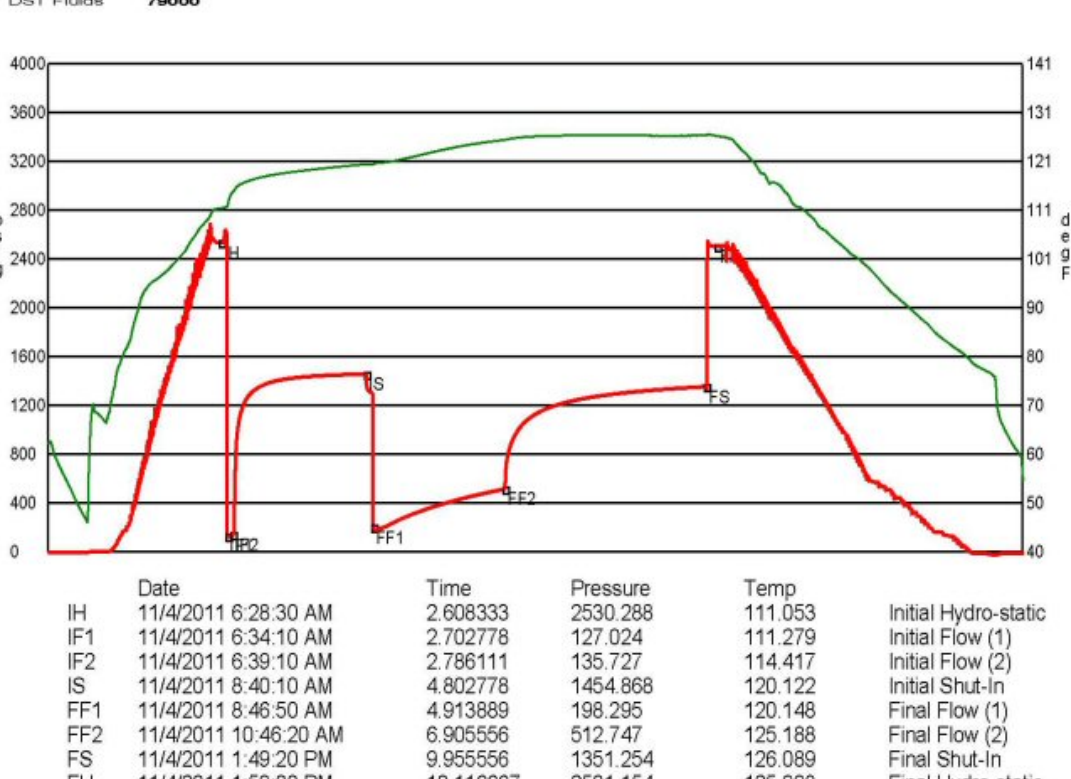
Company: <b>Falcon Exploration, Inc.</b> Address: <b>125 N. Market, Ste. 1252</b> CSZ: <b>Wichita, KS 67202</b> Attn: <b>Keith Reavis</b>	Lease Name: <b>Smith (NW)</b> Lease #: <b>2-5</b> Legal Desc: <b>NE-SE-SE-NW</b> Section: <b>5</b> Township: <b>28S</b> County: <b>Gray</b> Drilling Cont: <b>Sterling Drilling Co. Rig #5</b>
Job Ticket: <b>2170</b> Range: <b>30W</b> State: <b>KS</b>	Comments: <b>Legal Description Feet: 2170' FNL &amp; 2440' FWL</b>

#### GENERAL INFORMATION

Test # <b>3</b> Tester: <b>Tim Venters</b> Test Type: <b>Conventional Bottom Hole Successful Test</b> # of Packers: <b>2.0</b> Packer Size: <b>6 3/4</b> Mud Type: <b>Gel Chem</b> Mud Weight: <b>9.3</b> Filtrate: <b>7.2</b> Drill Collar Len: <b>337.0</b> Wght Pipe Len: <b>0</b> Formation Interval Top: <b>Mississippian St. Louis 5270.0</b> Anchor Len Below: <b>53.0</b> Total Depth: <b>5323.0</b> Blow Type: <b>Strong blow throughout the initial flow period, reaching the bottom of the bucket in 1 minute. Gas to surface: 70 minutes, but was too small to measure. Weak 1/4 inch blow back at the start of the initial shut-in period, building to 3 inches. Strong blow throughout the final flow period, reaching the bottom of the bucket in 1 1/2 minutes. Weak surface blow back after we bled line off, building, reaching the bottom of the bucket in 13 minutes. Times: 5, 120, 126, 182. Oil Gravity: 28.</b>	Test Date: <b>11/4/2011</b> Chokes: <b>3/4</b> Top Recorder #: <b>W1119</b> Mid Recorder #: <b>W1022</b> Bott Recorder #: <b>13310</b> Mileage: <b>88</b> Standby Time: <b>0</b> Extra Equipmnt: <b>Jars &amp; Safety joint</b> Time on Site: <b>2:46 AM</b> Tool Picked Up: <b>4:45 AM</b> Tool Layed Dwn: <b>6:30 PM</b> Elevation: <b>2813.00</b> Kelley Bushings: <b>2826.00</b> Bottom: <b>5323.0</b> Between: <b>0</b> Start Date/Time: <b>11/4/2011 3:52 AM</b> End Date/Time: <b>11/4/2011 6:37 PM</b>	Approved By:
--	--	--------------

#### RECOVERY

Feet	Description	Gas	Oil	Water	Mud
3980	Gas in Pipe	100% 3980ft	0% 0ft	0% 0ft	0% 0ft
705	Gassy oil	5% 35.2ft	95% 669.8ft	0% 0ft	0% 0ft
125	Gassy, water and mud cut oil	15% 18.8ft	49% 61.2ft	13% 16.2ft	23% 28.8ft
65	Gassy, mud, slight oil cut water	10% 6.5ft	7% 4.6ft	60% 39ft	23% 15ft
65	Slight oil and mud cut water	0% 0ft	3% 2ft	84% 54.6ft	13% 8.4ft
295	Very slight mud cut water with trace of oil	0% 0ft	trace	97% 286.2ft	3% 8.8ft
10	Mud	0% 0ft	0% 0ft	0% 0ft	100% 10ft



#### ROCK TYPES

Dolprim Dolsec sdy lmst	Lmst fw<7 Lmst fw7> shale, grn	shale, gry Carbon Sh shale, red	Ss
-------------------------------	--------------------------------------	---------------------------------------	----

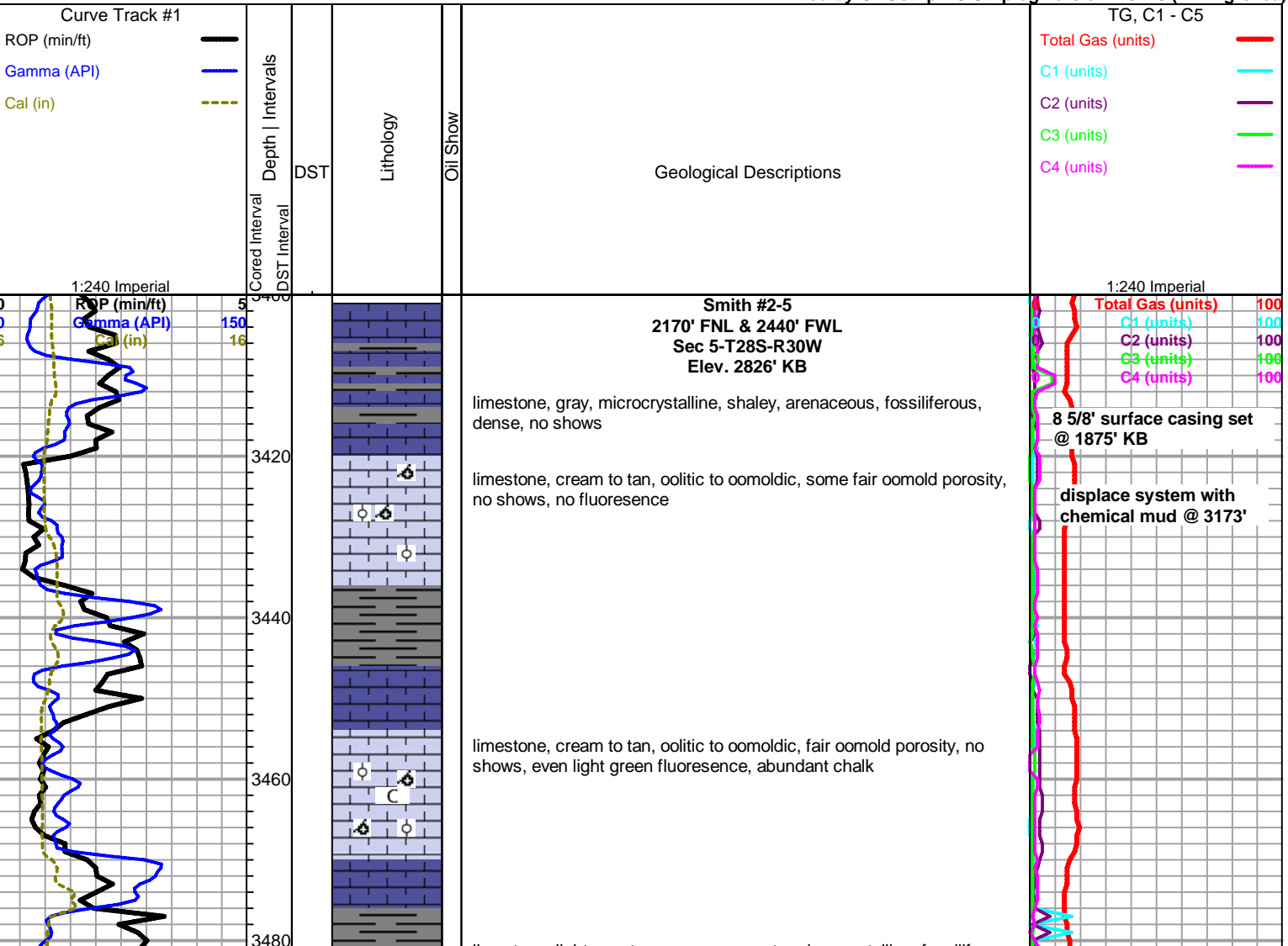
#### ACCESSORIES

<b>MINERAL</b> - Argillaceous ▲ Chert, dark ▲ Dolomitic ∩ Glaucanite ✕ Mineral Crystals P Pyrite • Sandy △ Chert White	<b>FOSSIL</b> ∩ Bioclastic or Fragmental ∩ Bryozoa F Fossils < 20% ∩ Oolite ∩ Pellets ∩ Oomoldic	<b>STRINGER</b> ▨ Dolomite ▨ Limestone ▨ Sandstone ▨ Shale ▨ green shale ▨ red shale ▨ carb shale	<b>TEXTURE</b> C Chalky L Lithogr
--	--	--	---

#### OTHER SYMBOLS

<b>MISC</b> DR Daily Report Digital Photo Document Folder Link Vertical Log File Horizontal Log File Core Log File Drill Cuttings Rpt	<b>DST</b> DST Int DST alt Core
--	--

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



chalky to dense, poor visible porosity, trace pyritic, some chalk, no shows, scattered fluorescence

3500

3520

3540

3560

3580

3600

3620

3640

3660

3680

3700

3720

3740

3760

3780

3800

3820

3840

3860

3880

3900

3920

3940

3960

3980

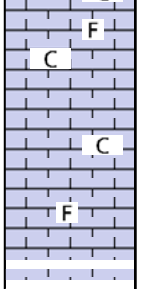
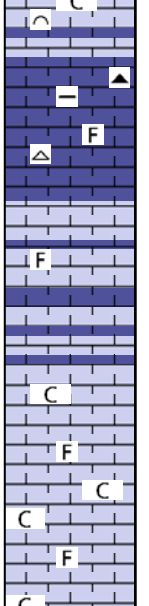
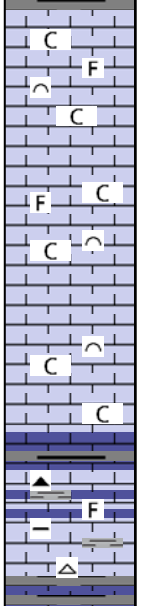
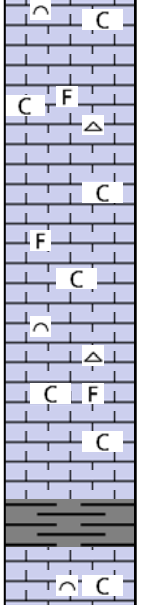
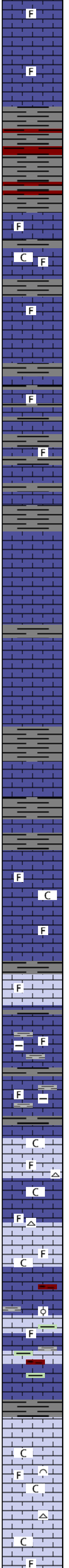
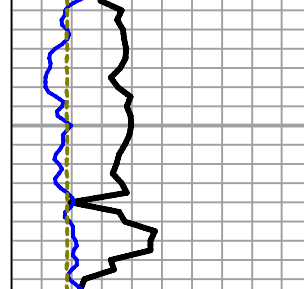
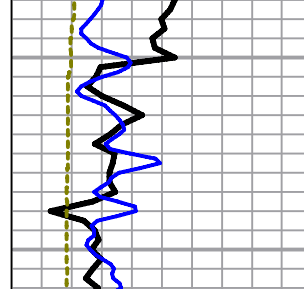
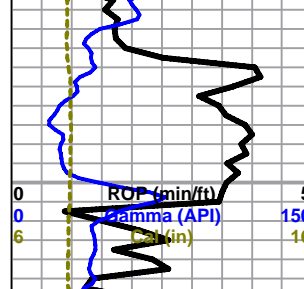
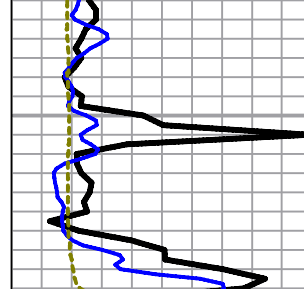
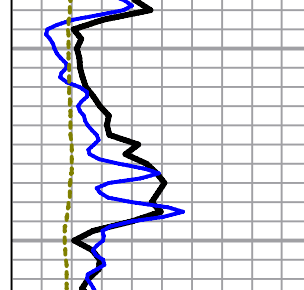
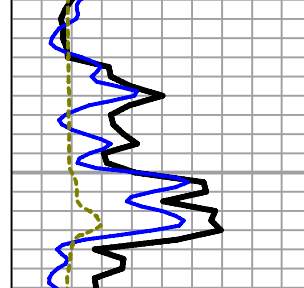
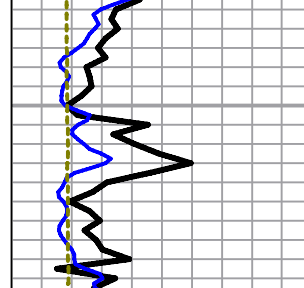
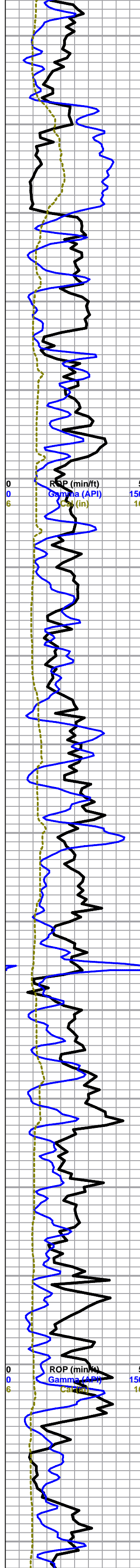
4000

4020

4040

4060

4080



**Stotler 3540 -714**

limestone, cream to light gray to pale green, crypto-microcrystalline, dense, fossiliferous, some mottled weathered chalky fossiliferous, , no shows, light green fluorescence

limestone, cream to white, microcrystalline, slightly fossiliferous, some secondary calcite, poor visible porosity, no shows, faint fluorescence

limestone, gray to gray/green, cryptocrystalline, dense, some fossiliferous, some arenaceous, with limestone, cream, cryptocrystalline, chalky, slightly fossiliferous, some mixed shales

**Tarkio 3612 -786**

limestone, gray/green to cream, cryptocrystalline, dense, arenaceous, some secondary calcite, no shows, faint fluorescence

limestone as above

limestone, light gray, cryptocrystalline, chalky, with limestone, mixed gray, cryptocrystalline, dense, fossiliferous, no shows

**Bern 3712 -886**

limestone, tan, microcrystalline, fossiliferous, some vugs, with limestone, gray, mottled, very fossiliferous, some large clasts, poor visible porosity, no shows

limestone, gray, microcrystalline, argillaceous, with gray limey shales

limestone, cream to white to light gray, microcrystalline, fossiliferous, fairly chalky, poor visible porosity, no shows, some scattered white cherts

limestone, cream to light gray, mixed fossiliferous, chalky, some oolitic, with limestone, gray, dense fossiliferous, abundant mixed shales

**Topeka 3812 -986**

limestone, light gray to white, chalky fossiliferous to bioclastic, poor visible porosity, no shows, 20-30% chalk, some white scattered cherts, no shows

limestone and chalk as above

as above, increasing chalk

limestone, light gray to white, microcrystalline, chalky, bioclastic to fossiliferous, some scattered pinpoint porosity, no shows, abundant chalk in samples 30%+

as above

as above, with limestone, gray grainy, shaley, argillaceous, dark gray chalky, some gray silty shale, gray to white cherts

**Lecompton**

as above, abundant chalk

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

limestone, cream to gray, micro-cryptocrystalline, grainy, fossiliferous, chalky, no shows, appx 30-40% chalk

chalk, appx 60% of samples, with limestone as above

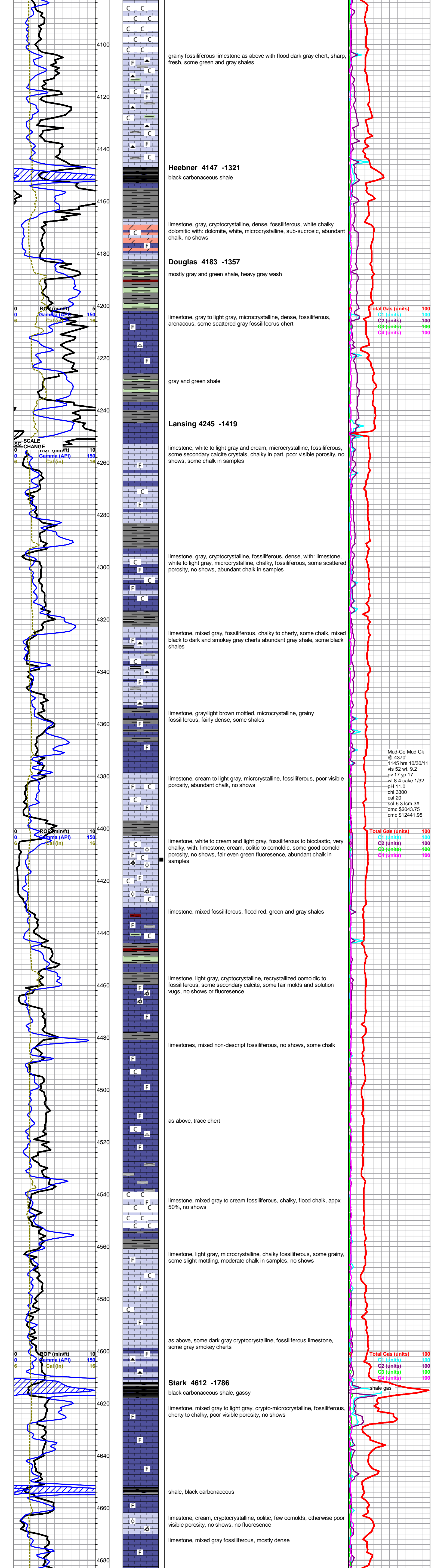
Total Gas (units)	100
C1 (units)	100
C2 (units)	100
G3 (units)	100
C4 (units)	100

Total Gas (units)	100
C1 (units)	100
C2 (units)	100
G3 (units)	100
C4 (units)	100

Total Gas (units)	100
C1 (units)	100
C2 (units)	100
G3 (units)	100
C4 (units)	100

Mud-Co Mud Ck  
 @ 3775'  
 0845 hrs 10/29/11  
 vis 47 wt.8.9  
 pv 14 yp 15  
 wl 8.4 cake 1/32  
 pH 10.0  
 chl 3600  
 cal 20  
 sol 4.8 lcm2#  
 dmc \$66.15  
 cmc \$10398.20





grainy fossiliferous limestone as above with flood dark gray chert, sharp, fresh, some green and gray shales

**Heebner 4147 -1321**

black carbonaceous shale

limestone, gray, cryptocrystalline, dense, fossiliferous, white chalky dolomitic with: dolomite, white, microcrystalline, sub-sucrosic, abundant chalk, no shows

**Douglas 4183 -1357**

mostly gray and green shale, heavy gray wash

limestone, gray to light gray, microcrystalline, dense, fossiliferous, arenaceous, some scattered gray fossiliferous chert

gray and green shale

**Lansing 4245 -1419**

limestone, white to light gray and cream, microcrystalline, fossiliferous, some secondary calcite crystals, chalky in part, poor visible porosity, no shows, some chalk in samples

limestone, gray, cryptocrystalline, fossiliferous, dense, with: limestone, white to light gray, microcrystalline, chalky, fossiliferous, some scattered porosity, no shows, abundant chalk in samples

limestone, mixed gray, fossiliferous, chalky to cherty, some chalk, mixed black to dark and smokey gray cherts abundant gray shale, some black shales

limestone, gray/light brown mottled, microcrystalline, grainy fossiliferous, fairly dense, some shales

Mud-Co Mud Ck @ 4370  
 1145 hrs 10/30/11  
 vis 52 wt. 9.2  
 pv 17 yp 17  
 wl 8.4 cake 1/32  
 pH 11.0  
 chl 3300  
 cal 20  
 sol 6.3 lcm 3#  
 dmc \$2043.75  
 cmc \$12441.95

limestone, cream to light gray, microcrystalline, fossiliferous, poor visible porosity, abundant chalk, no shows

limestone, white to cream and light gray, fossiliferous to bioclastic, very chalky, with: limestone, cream, oolitic to oomoldic, some good oomold porosity, no shows, fair even green fluorescence, abundant chalk in samples

limestone, mixed fossiliferous, flood red, green and gray shales

limestone, light gray, cryptocrystalline, recrystallized oomoldic to fossiliferous, some secondary calcite, some fair molds and solution vugs, no shows or fluorescence

limestones, mixed non-descript fossiliferous, no shows, some chalk

as above, trace chert

limestone, mixed gray to cream fossiliferous, chalky, flood chalk, appx 50%, no shows

limestone, light gray, microcrystalline, chalky fossiliferous, some grainy, some slight mottling, moderate chalk in samples, no shows

as above, some dark gray cryptocrystalline, fossiliferous limestone, some gray smokey cherts

**Stark 4612 -1786**

black carbonaceous shale, gassy

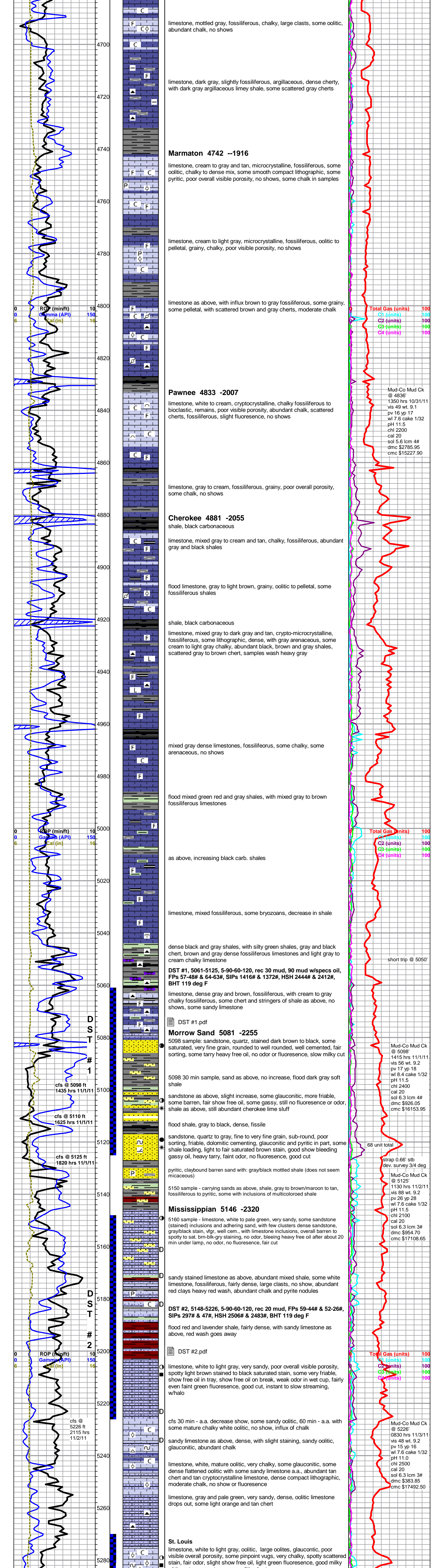
shale gas

limestone, mixed gray to light gray, crypto-microcrystalline, fossiliferous, cherty to chalky, poor visible porosity, no shows

shale, black carbonaceous

limestone, cream, cryptocrystalline, oolitic, few oomolds, otherwise poor visible porosity, no shows, no fluorescence

limestone, mixed gray fossiliferous, mostly dense



limestone, mottled gray, fossiliferous, chalky, large clasts, some oolitic, abundant chalk, no shows

limestone, dark gray, slightly fossiliferous, argillaceous, dense cherty, with dark gray argillaceous limey shale, some scattered gray cherts

**Marmaton 4742 --1916**

limestone, cream to gray and tan, microcrystalline, fossiliferous, some oolitic, chalky to dense mix, some smooth compact lithographic, some pyritic, poor overall visible porosity, no shows, some chalk in samples

limestone, cream to light gray, microcrystalline, fossiliferous, oolitic to pelletal, grainy, chalky, poor visible porosity, no shows

limestone as above, with influx brown to gray fossiliferous, some grainy, some pelletal, with scattered brown and gray cherts, moderate chalk

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

**Pawnee 4833 -2007**

limestone, white to cream, cryptocrystalline, chalky fossiliferous to bioclastic, remains, poor visible porosity, abundant chalk, scattered cherts, fossiliferous, slight fluorescence, no shows

Mud-Co Mud Ck @ 4836'  
1350 hrs 10/31/11  
vis 49 wt. 9.1  
pv 16 yp 17  
wl 7.6 cake 1/32  
pH 11.5  
chl 2200  
cal 20  
sol 5.6 lcm 4#  
dmc \$2785.95  
cmc \$15227.90

limestone, gray to cream, fossiliferous, grainy, poor overall porosity, some chalk, no shows

**Cherokee 4881 -2055**

shale, black carbonaceous

limestone, mixed gray to cream and tan, chalky, fossiliferous, abundant gray and black shales

flood limestone, gray to light brown, grainy, oolitic to pelletal, some fossiliferous shales

shale, black carbonaceous

limestone, mixed gray to dark gray and tan, crypto-microcrystalline, fossiliferous, some lithographic, dense, with gray arenaceous, some cream to light gray chalky, abundant black, brown and gray shales, scattered gray to brown chert, samples wash heavy gray

mixed gray dense limestones, fossiliferous, some chalky, some arenaceous, no shows

flood mixed green red and gray shales, with mixed gray to brown fossiliferous limestones

as above, increasing black carb. shales

limestone, mixed fossiliferous, some bryozoans, decrease in shale

dense black and gray shales, with silty green shales, gray and black chert, brown and gray dense fossiliferous limestones and light gray to cream chalky limestone

**DST #1, 5061-5125, 5-90-60-120, rec 30 mud, 90 mud w/specs oil, FPs 57-48# & 64-63#, SIPs 1416# & 1372#, HSH 2444# & 2412#, BHT 119 deg F**

limestone, dense gray and brown, fossiliferous, with cream to gray chalky fossiliferous, some chert and stringers of shale as above, no shows, some sandy limestone

DST #1.pdf

**Morrow Sand 5081 -2255**

5098 sample: sandstone, quartz, stained dark brown to black, some saturated, very fine grain, rounded to well rounded, well cemented, fair sorting, some tarry heavy free oil, no odor or fluorescence, slow milky cut

Mud-Co Mud Ck @ 5098'  
1415 hrs 11/1/11  
vis 56 wt. 9.2  
pv 17 yp 18  
wl 8.4 cake 1/32  
pH 11.5  
chl 2400  
cal 20  
sol 6.3 lcm 4#  
dmc \$926.05  
cmc \$16153.95

5098 30 min sample, sand as above, no increase, flood dark gray soft shale

sandstone as above, slight increase, some glauconitic, more friable, some barren, fair show free oil, some gassy, still no fluorescence or odor, shale as above, still abundant cherokee lime sluff

flood shale, gray to black, dense, fissile

sandstone, quartz to gray, fine to very fine grain, sub-round, poor sorting, friable, dolomitic cementing, glauconitic and pyritic in part, some shale loading, light to fair saturated brown stain, good show bleeding gassy oil, heavy tarry, faint odor, no fluorescence, good cut

pyritic, claybound barren sand with: gray/black mottled shale (does not seem micaceous)

5150 sample - carrying sands as above, shale, gray to brown/maroon to tan, fossiliferous to pyritic, some with inclusions of multicolored shale

**Mississippian 5146 -2320**

5160 sample - limestone, white to pale green, very sandy, some sandstone (stained) inclusions and adhering sand, with few clusters dense sandstone, gray/black stain, vfgr, well cem., with limestone inclusions, overall barren to spotty to sat. brn-blk-gry staining, no odor, bleeding heavy free oil after about 20 min under lamp, no odor, no fluorescence, fair cut

sandy stained limestone as above, abundant mixed shale, some white limestone, fossiliferous, fairly dense, large clasts, no show, abundant red clays heavy red wash, abundant chalk and pyrite nodules

**DST #2, 5148-5226, 5-90-60-120, rec 20 mud, FPs 59-44# & 52-26#, SIPs 297# & 47#, HSH 2506# & 2483#, BHT 119 deg F**

flood red and lavender shale, fairly dense, with sandy limestone as above, red wash goes away

DST #2.pdf

limestone, white to light gray, very sandy, poor overall visible porosity, spotty light brown stained to black saturated stain, some very friable, show free oil in tray, show free oil on break, weak odor in wet cup, fairly even faint green fluorescence, good cut, instant to slow streaming, w/halo

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

cfs 30 min - a.a. decrease show, some sandy oolitic, 60 min - a.a. with some mature chalky white oolitic, no show, influx of chalk

Mud-Co Mud Ck @ 5226'  
0830 hrs 11/3/11  
vis 48 wt. 9.2  
pv 15 yp 16  
wl 7.6 cake 1/32  
pH 11.0  
chl 2500  
cal 20  
sol 6.3 lcm 3#  
dmc \$383.85  
cmc \$17492.50

sandy limestone as above, dense, with slight staining, sandy oolitic, glauconitic, abundant chalk

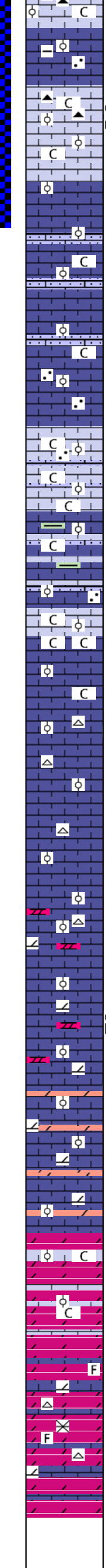
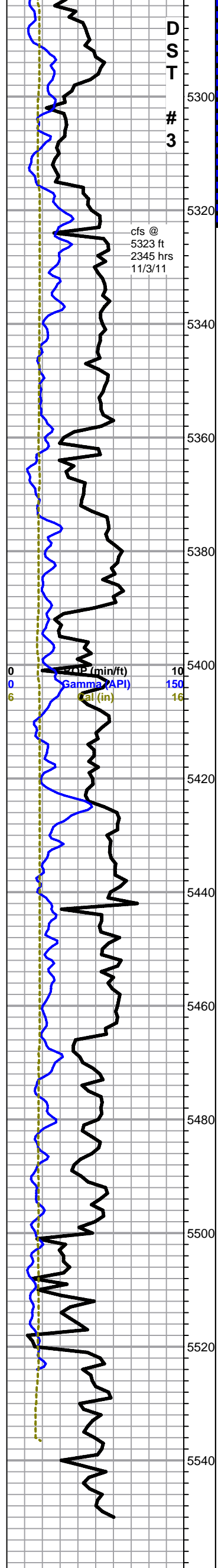
limestone, white, mature oolitic, very chalky, some glauconitic, some dense flattened oolitic with some sandy limestone a.a., abundant tan chert and tan cryptocrystalline limestone, dense compact lithographic, moderate chalk, no show or fluorescence

limestone, gray and pale green, very sandy, dense, oolitic limestone drops out, some light orange and tan chert

**St. Louis**

limestone, white to light gray, oolitic, large oolites, glauconitic, poor visible overall porosity, some pinpoint vugs, very chalky, spotty scattered stain, fair odor, slight show free oil, light green fluorescence, good milky





white cut, orange, tan - gray oolitic chert

limestone, gray, microcrystalline, arenaceous to argillaceous, some chalky mostly dense, some oolitic, dense

limestone, white to cream oolitic, no apparent stain, chalky, poor visible porosity, some friable with show light oil droplets on break, with limestone, microcrystalline arenaceous, friable, couple pieces with spotty stain and slight show free oil, fair cut on both facies, some free oil drops and fair odor in wet cup, flood chert in upper part of porosity, white to gray oolitic to fossiliferous, gray/black speckled, abundant chalk

DST #3.pdf

limestone, light gray to cream, mostly cryptocrystalline dense oolitic, glauconitic, abundant argillaceous-sandy, some chalky, no shows

**DST #3, 5270-5323, 5-120-120-180, rec GTS tstm @ 70 min, 705' CGO, 125'GWCMO, 130' O&MCW, 295' SMCW, tr oil, 10 mud, FPs 127-135# & 198-512#, SIPs 1454# & 1351#, HSH 2530# & 2501#, BHT 125 deg F**

a.a., grading to more mature chalky oolitic, some sandy with large sand grains and abundant glauconite

limestone, light gray to white, oolitic, mostly mature, very chalky, some sandy, some friable, poor visible porosity, no shows, odor or fluorescence, flood chalk in samples

limestone, mixed oolitic, flattened to mature, chalky to dense to sandy, moderate chalk in samples, some pale green shales

oolitic limestone as above, flood chalk, no shows

limestone, mixed gray to tan oolitic, dense and flattened, no shows, with: chert, light gray to tan, some oolitic, dense, fresh

as above, some chalk increase, chert drops decrease, some scattered gray microcrystalline dolomite

5470 as above, 1 rock, oolitic, mature, show with stain sl sfo, no, slow cut, heavy clingy free oil, no odor or free oil or other shows in wet cup

**Salem 5474 -2648**

limestone as above with: some light gray/blk speckled arenaceous dolomite

as above with limestone, dolomitic, dark brown, cryptocrystalline, lithographic, dense, some fossiliferous

dolomite, limey, gray mottled, fossiliferous to oolitic, some oolitic limestone weathered to chalk, dolomite, brown, crypt, grainy, oolitic to fossiliferous, dense, no shows

dolomite, gray/green to light gray, microcrystalline, arenaceous, dense, with dolomite to dolomitic limestone, mixed, gray to tan, some brown, fossiliferous, some grainy, mostly dense, some mixed chert and scattered large dolomite crystals, no shows

Rotary TD @ 5550 ft. 2030 hrs 11/5/11  
Log Tech TD @ 5551 ft  
complete logging operations @ 11/6/11

