



**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: \_\_\_\_\_



1062826

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
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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
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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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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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

September 08, 2011

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

Re: ACO1  
API 15-007-23706-00-00  
VOGEL 3  
SW/4 Sec.30-33S-10W  
Barber County, Kansas

Dear Production Department:

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

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

Respectfully,  
DEAN PATTISSON

# ALLIED CEMENTING CO., LLC. 040162

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
*McK Label*

DATE <u>5-15-11</u>	SEC. <u>30</u>	TWP. <u>33S</u>	RANGE <u>10W</u>	CALLED OUT	ON LOCATION	JOB START <u>12:30pm</u>	JOB FINISH <u>1:00pm</u>
LEASE <u>Vogel</u>	WELL # <u>3</u>	LOCATION <u>Sharon, KS, Tricity Rd 7 S of highway</u>			COUNTY <u>Barber</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>2.5w, N into</u>				

CONTRACTOR H-2 #3  
 TYPE OF JOB Surface  
 HOLE SIZE 14 3/4 T.D. 220'  
 CASING SIZE 10 3/4 DEPTH 215'  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX 300psi MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. 20'  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 18 bbls H2O

OWNER Woolsey operating  
 CEMENT AMOUNT ORDERED 240SK class A 3/8" 2 1/2"

EQUIPMENT  
 PUMP TRUCK CEMENTER matthimesch  
 # 471-265 HELPER Jason Himesch  
 BULK TRUCK # 356-250 DRIVER Quinn E  
 BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

**WELL FILE**  
 Regulatory Correspondence  
 Drilling / Comp Workovers  
 Tests / Meters Operations

COMMON <u>Class A</u>	<u>240SK @ 16.25</u>	<u>3900.00</u>
POZMIX	@	
GEL	<u>5SK @ 21.25</u>	<u>106.25</u>
CHLORIDE	<u>9SK @ 58.20</u>	<u>523.80</u>
ASC	@	
HANDLING <u>254</u>	@ <u>2.25</u>	<u>571.50</u>
MILEAGE <u>30/254/11</u>		<u>838.20</u>
TOTAL		<u>5939.75</u>

REMARKS:

Bk are with H2O  
mix 240SK cement  
displ 18 bbls H2O  
shut in cement did circulate

JUN - 9 2011

SERVICE

DEPTH OF JOB <u>215'</u>		
PUMP TRUCK CHARGE		<u>1125.00</u>
EXTRA FOOTAGE	@	
MILEAGE <u>60</u>	@ <u>7.00</u>	<u>420.00</u>
MANIFOLD <u>Light Vehicle</u>	@ <u>4.00</u>	<u>240.00</u>
TOTAL		<u>1785.00</u>

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

PLUG & FLOAT EQUIPMENT

<u>NONE</u>	@	
	@	
	@	
	@	
	@	
TOTAL		

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

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 1785.00  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME Randon Smith  
 SIGNATURE Randon Smith

# ALLIED CEMENTING CO., LLC. 040166

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
*medford*

DATE <i>5-22-11</i>	SEC. <i>30</i>	TWP. <i>33S</i>	RANGE <i>10W</i>	CALLED OUT	ON LOCATION	JOB START <i>11:30 am</i>	JOB FINISH <i>4:30 pm</i>
LEASE <i>Uygel</i>	WELL # <i>3</i>	LOCATION			COUNTY <i>Osage</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one)							

CONTRACTOR *H-2 Rg #3*  
 TYPE OF JOB *Production*  
 HOLE SIZE *7 7/8* T.D. *5130'*  
 CASING SIZE *5 1/2* DEPTH *5011'*  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX *1500 psi* MINIMUM  
 MEAS. LINE SHOE JOINT *44'*  
 CEMENT LEFT IN CSG. *44'*

OWNER *Woolsey operating*

CEMENT  
 AMOUNT ORDERED *75 sk 60:40:4% gel*  
*140 sk # + 10% gyp + 10% salt + .8% FL-160*  
*+ 1/4" flo seal + 6" kelsal*

PERFS.  
 DISPLACEMENT *120 bbls 2% cell*  
 EQUIPMENT  
 PUMP TRUCK CEMENTER *Math Thimesch*  
 # *344/265 #352* HELPER *Ron Gilroy*  
 BULK TRUCK  
 # *353/290* DRIVER *Rustin Elam*  
 BULK TRUCK  
 # DRIVER

## WELL FILE

Regulatory Correspondence  
 Drig / Comp Workovers  
 Tests / Meters Operations

COMMON <i>Class A</i>	<i>45 sk @ 16.25</i>	<i>731.25</i>
POZMIX <i>FL-160</i>	<i>30 sk @ 8.50</i>	<i>255.00</i>
GEL	<i>3 @ 21.25</i>	<i>63.75</i>
CHLORIDE	@	
Class H	<i>140 sk @ 19.25</i>	<i>2695.00</i>
<i>gyp seal</i>	<i>145 sk @ 34.20</i>	<i>478.00</i>
<i>salt</i>	<i>15 sk @ 23.95</i>	<i>359.25</i>
<i>Kelsal</i>	<i>840 # @ 1.09</i>	<i>747.60</i>
<i>FL-160</i>	<i>105 # @ 17.20</i>	<i>1806.00</i>
<i>Flo seal</i>	<i>35 # @ 2.70</i>	<i>94.50</i>
	@	
	@	
HANDLING <i>268</i>	@ <i>2.25</i>	<i>603.00</i>
MILEAGE <i>30/260% 11</i>		<i>884.40</i>
TOTAL		<i>8718.55</i>

### REMARKS:

*Back arc with Rg pump ball through  
 mix 2.5 sk for Rothole mix 50 sk scavenger  
 pump problems shut down. Circulate  
 pipe clean with Rg. Sweep pumps.  
 mix 140 sk cement shut down wash pump lines  
 Release plug drg. 120 bbls 2% cell  
 bump plug 800 psi to 1500 psi  
 plug held*

JUN - 9 2011

### SERVICE

DEPTH OF JOB <i>5011'</i>		
PUMP TRUCK CHARGE		<i>2695.00</i>
EXTRA FOOTAGE	@	
MILEAGE <i>60</i>	@ <i>7.00</i>	<i>420.00</i>
MANIFOLD <i>Head Rental</i>	@	<i>200.00</i>
<i>Light Vehicle 60</i>	@ <i>4.00</i>	<i>240.00</i>
	@	
TOTAL		<i>3555.00</i>

CHARGE TO: *Woolsey Operating*  
 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 *MIKE THARP*  
 SIGNATURE *M. Tharp*

### 5 1/2" PLUG & FLOAT EQUIPMENT

<i>Industrial Rubber</i>		
<i>1 AFU guide shoe</i>		<i>349.00</i>
<i>20-Scratchers</i>	@ <i>76.00</i>	<i>1520.00</i>
<i>9-thermalizers</i>	@ <i>80.00</i>	<i>720.00</i>
<i>3-thermalizers</i>	@ <i>80.00</i>	<i>240.00</i>
<i>1-latch down plug</i>	@	<i>277.00</i>
<i>4-scratchers</i>	@ <i>76.00</i>	<i>304.00</i>
TOTAL		<i>3410.00</i>

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES ~~3555.00~~  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS ~~3555.00~~



**Woolsey Operating Company, LLC**

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

Measured Depth Log

Well Name: Vogel #3  
Location: NW SE SW SW  
License Number: API: 15-007-23706-00-00  
Spud Date: May 14, 2011  
Surface Coordinates: 515' FSL & 690' FWL Section 30-Twp 33 South - Rge 10 West  
Traffas South Pool  
Bottom Hole Vertical Hole  
Coordinates:  
Ground Elevation (ft): 1472  
Logged Interval (ft): 4000 To: RTD  
Formation: McLish Shale  
Type of Drilling Fluid: Chemical Mud, Displace at 3400'  
K.B. Elevation (ft): 1481  
Total Depth (ft): 5130  
Region: Barber County, Kansas  
Drilling Completed: May 22, 2011  
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: Woolsey Operating Company, LLC  
Address: 125 N. Market, Suite 1000  
Wichita, KS 67202

**GEOLOGIST**

Name: W. Scott Alberg  
Company: Alberg Petroleum, LLC  
Address: 609 Meadowlark Lane  
Pratt, Kansas 67124

## FORMATION TOPS

	SAMPLE TOPS	LOG TOPS
HUSHPUCKNEY SHALE	4373(-2892)	4373(-2892)
B/KC	4429(-2948)	4429(-2948)
PAWNEE	4518(-3037)	4518(-3037)
CHEROKEE GROUP	4567(-3086)	4567(-3086)
MISSISSIPPIAN	4590(-3109)	4588(-3107)
KINDERHOOK SHALE	4814(-3333)	4818(-3337)
WOODFORD SHALE	4890(-3409)	4895(-3114)
VIOLA	4932(-3451)	4937(-3456)
SIMPSON GROUP	5023(-3542)	5026(-3545)
SIMPSON SAND	5051(-3570)	5056(-3575)
MCLISH SHALE	5084(-3603)	5083(-3602)
RTD	5130(-3649)	
LTD		5130(-3649)

## COMMENTS

Surface Casing: Set 5 joints 10 3/4" at 215' with 240 sxs Class A, 2% gel, 3% cc, plug down at 1:00 am on May 15, 2011. Cement did Circulate.

Production Casing: Ran 5 1/2" Casing.

Deviation Surveys: 1/4- 220', 1/2 - 1261', 3/4 - 1765', 3/4 - 2269', 1/2 - 2773', 1-3246', 1-3813', 1 3939', 1- 4096', 3/4 - 4656', 1/4 - 5130'

Contractor Bit Record:

1- 14 3/4" out at 220'.

2- 7 7/8" out at 5130'

Gas Detector: Woolsey Operating Company, Trailer #2

Mud System: Mud Co, Aaron Rush, Brad Bortz, Engineers

DSTs: None

Logged by Superior Well Services.

LTD - 5130'

## DSTs

No DST's Taken

## CREWS

H2 Drilling Rig #3

Tool Pusher - Randy Smith

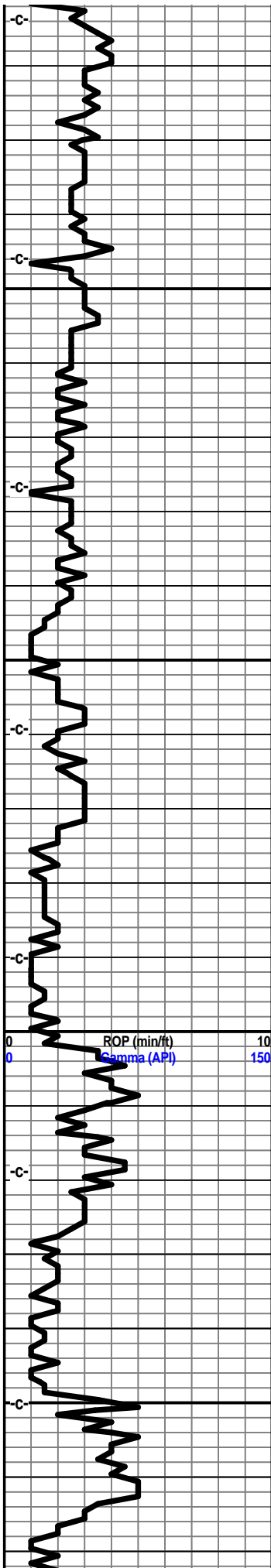
Drillers - Gary Axtell

Luis Marquez

Cain Charles







4100

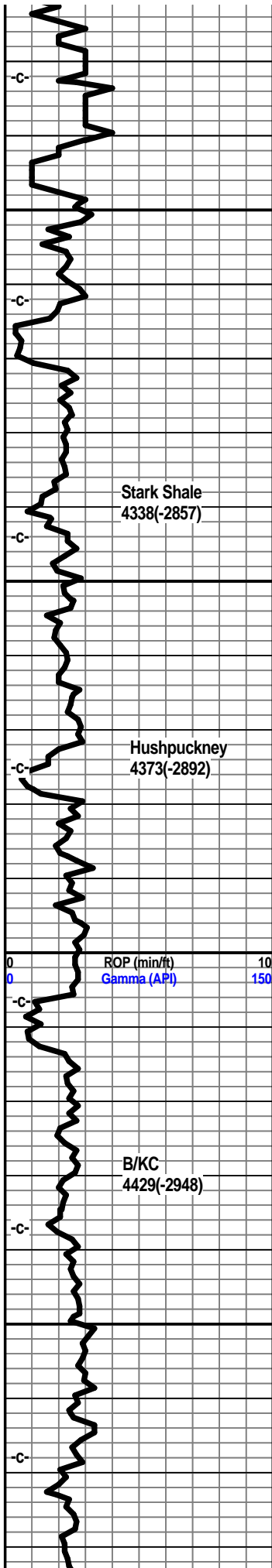
4150

4200

4250

	Vis 47 Wt 9.2+
	Vis 53 Wt 9.3
	Survey at 4096' 1 degree
	Vis 54 Wt 9.2
	Vis 51 Wt 9.1
	Vis 50 Wt 9.2
	Vis 50 Wt 9.2
	Vis 42 Wt 9.3
	Vis 51 Wt 9.2
	Geologist on Location 5-19-2011 4253' @ 6:00 am
	Vis 48 Wt 9.2+
	Turn on Gas Detector





4300

4350

4400

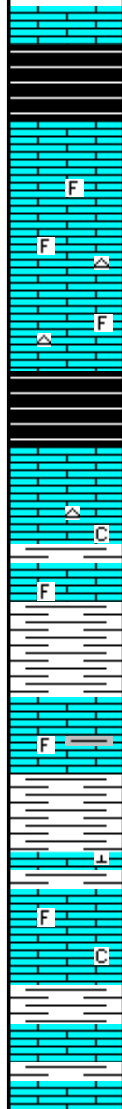
4450

Stark Shale  
4338(-2857)

Hushpuckney  
4373(-2892)

B/KC  
4429(-2948)

ROP (min/ft)  
Gamma (API)



Shale, Grey-black, carb.

Limestone, grey-white to tan, fmxln, traces of foss. porosity, slightly chalky in part, traces of tan to grey-white cherts.

Shale, grey-black, carb.

Limestone, grey-white, xln, dense, trace of foss., tan chert, subchalky in part.

Shale, light grey.

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

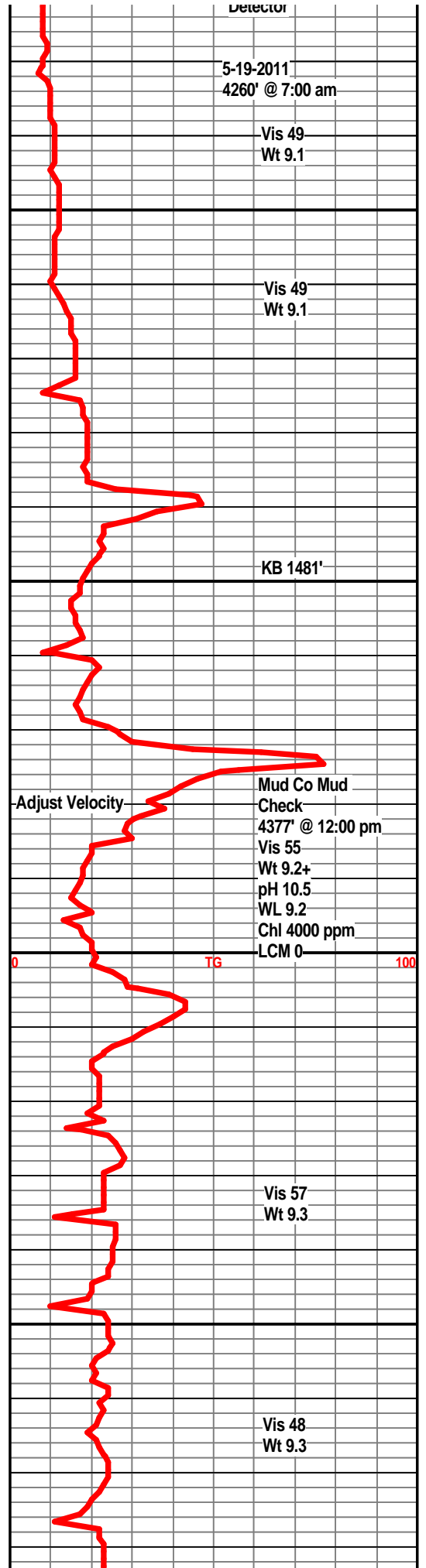
Shale, lt grey, some light green.

Limestone, grey-white, some pale green, xln, dense, shaley in part.

Shale, light grey, green, calcitic.

Limestone, tan-white, cream, xln, slightly foss, trace subchalky.

Shale, grey, light grey.



Detector

5-19-2011  
4260' @ 7:00 am

Vis 49  
Wt 9.1

Vis 49  
Wt 9.1

KB 1481'

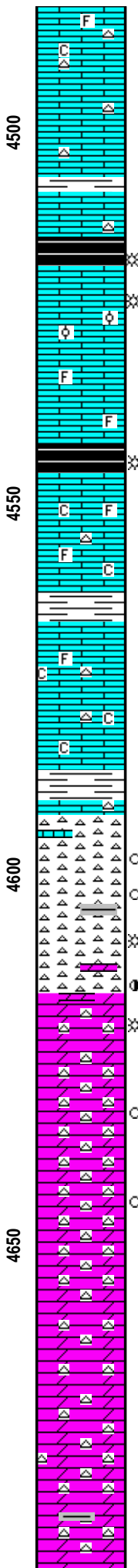
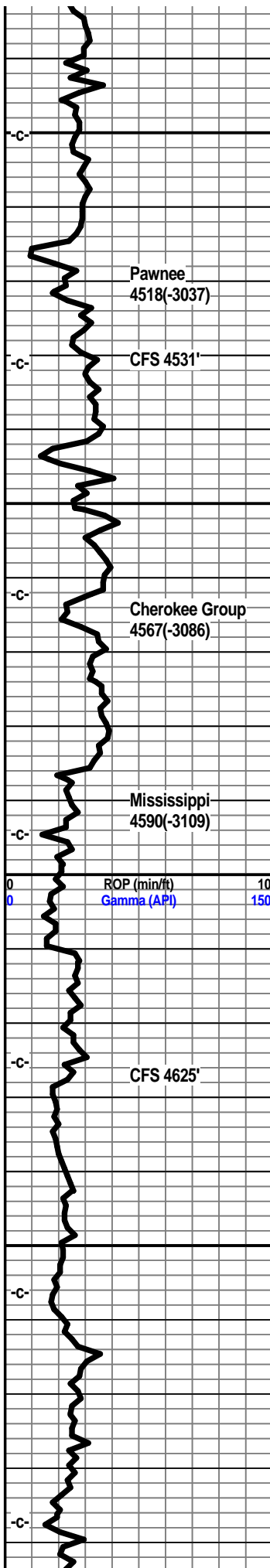
Adjust Velocity

Mud Co Mud  
Check  
4377' @ 12:00 pm  
Vis 55  
Wt 9.2+  
pH 10.5  
WL 9.2  
Chl 4000 ppm  
LCM 0

TG

Vis 57  
Wt 9.3

Vis 48  
Wt 9.3



Limestone, cream, tan-white, xln, subchalky, traces of tan chert, foss. in part.

Limestone, cream-tan, fmxln, traces of foss., tan cherts, dense, trace of shale stringer.

Shale, grey-black, carb.

Limestone, cream to tan-white, fxln, foss., trace foss porosity, slightly oolitic, some inter oolitic porosity, traces of crystalline porosity, very slight trace of gas, very faint odor, no visible shows of free oil, dull scattered fluor.

Shale, grey-black

Limestone, grey-white, tan, xln, dense, subchalky, slightly foss in part, trace of grey chert.

Shale, grey.

Limestone, tan-white, cream, xln, foss, subchalky, traces of tan-grey chert.

Limestone, grey-white, xln, subchalky, foss., tan cherts.

Shale, lt grey, traces of white to grey fn grained sand clusters, no visible shows.

Limestone, tan, grey-white, xln, dense, slightly cherty.

Chert, off-white to grey-white, some weathered with pp porosity, light brown to dark scattered staining, very faint odor, no visible free oil, very dull fluor.

Chert, bone-white to off-white, some sharp, mostly weathered with light scattered staining, scattered pp porosity, trace show of gas, faint odor, some grey shales interbedded, traces of grey-white dolo, scattered dull fluor.

Dolo, off-white, xln, fn grained, abundant weathered cherts, pp porosity, faint odor, scattered light staining, dull fluor., trace gas,

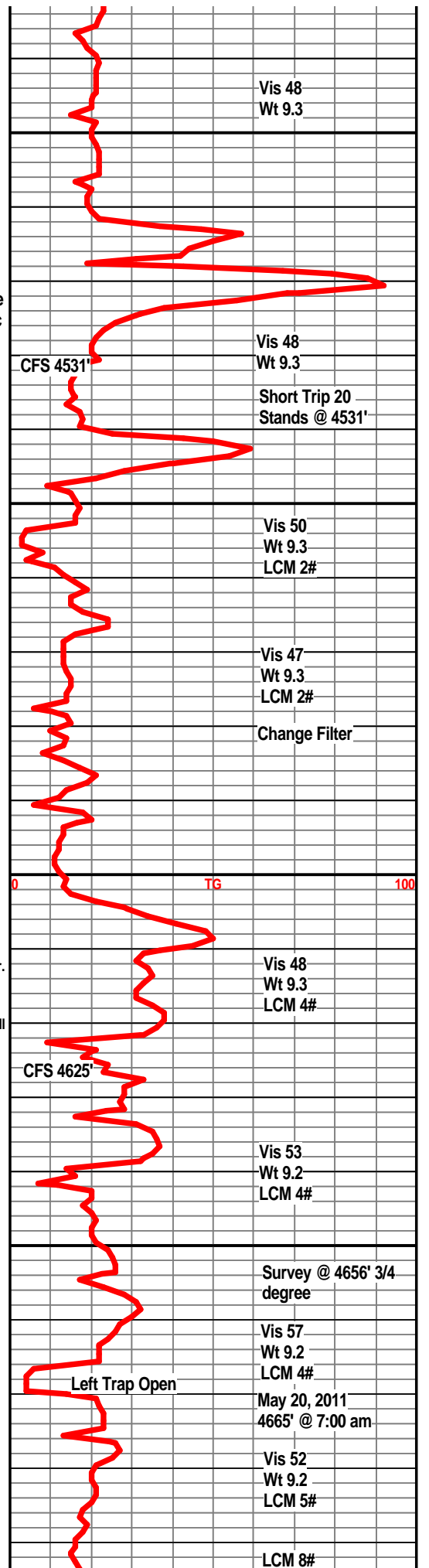
Dolo, off-white to cream, xln, very cherty, weathered cherts, pp porosity, light brown to dark staining, trace show of gas, some scummy oil, faint odor, dull spotted fluor.

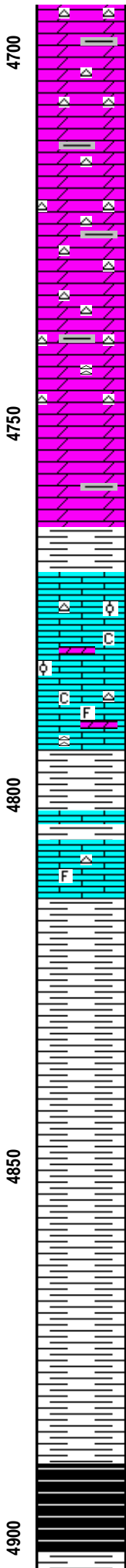
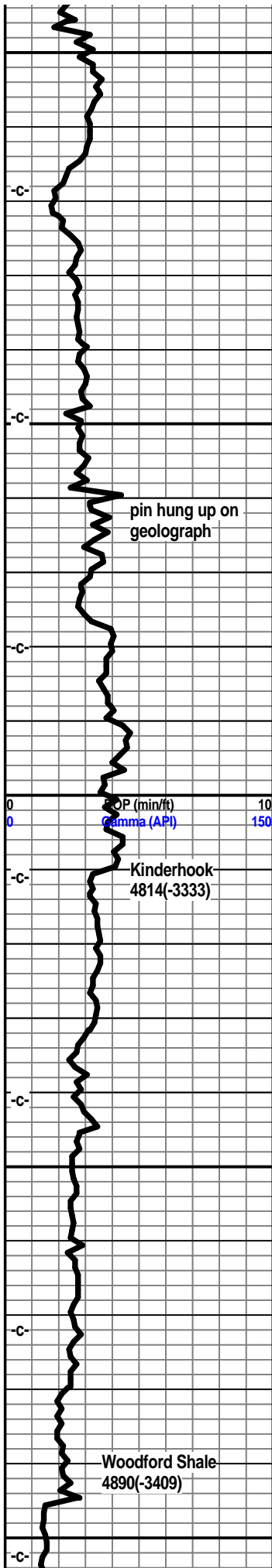
Dolo, off-white, xln, abundant cherts, mostly weathered with scattered pp porosity, fair staining, faint odor, very faint show light oil and gas. dull scattered fluor.

Dolo, tan-white, xln, fn grained, weathered cherts, light brown staining, some pp porosity, very faint odor.

Dolo, tan-white to grey-white, xln fn grained weathered cherts, some sharp trans to white, traces of pp porosity, scattered light stain, dull fluor.

Dolo, grey-white, xln, fn grained, weathered and fresh ceherts, slight staining, scattered splintery grey-green shales.





Dolo, grey-white, xln, fn grained, abundant cherts, some weathered with light brown staining, fresh, bone white to grey, no visible shows, no odor.

Dolo, grey-white, fnxln, cherty, some grey-green splintery shales.

Dolo, grey-white, fxl, traces of tan-grey chert, mostly weathered to bone white chert.

Dolo, grey-white, xln, fn grained, grey to tan sharp cherts, few weathered, some grey-green splintery shales.

Dolo, light grey, xln fn grained, grey-white cherts, some grey-green shales.

Shale, light green to grey.

Limestone, tan-white, cream, xln, oolitic in part, poor porosity, subchalky, white to grey-white cherts, some grey-white dolo streaks.

Shale, grey, some rust to brick red.

Limestone, fxl, dense, foss, subchalky.

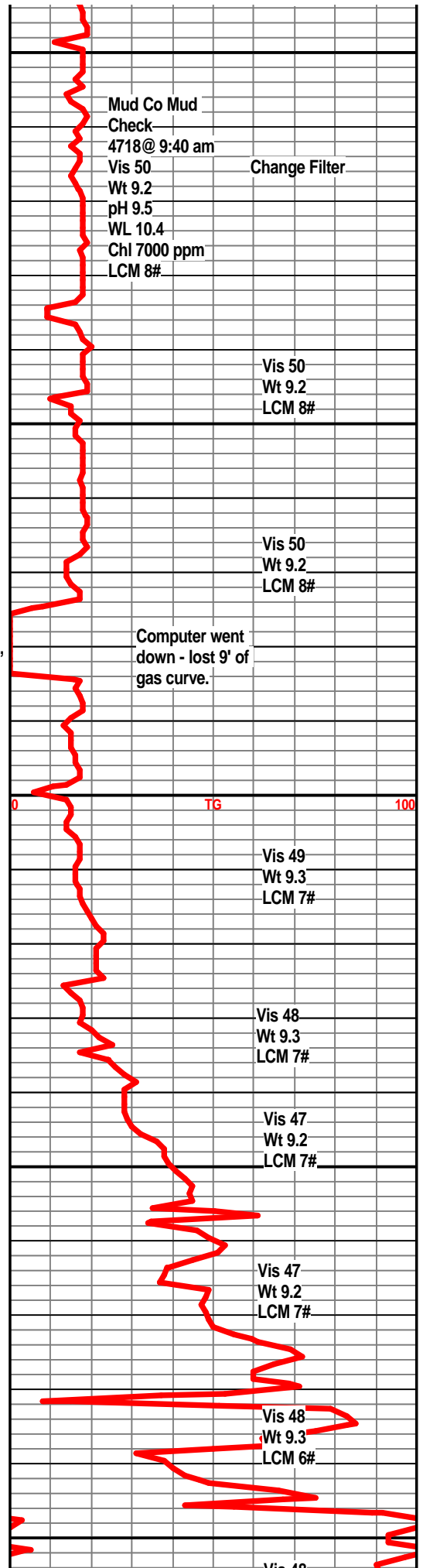
Shale, dark grey-green, firm, trace of pyrite.

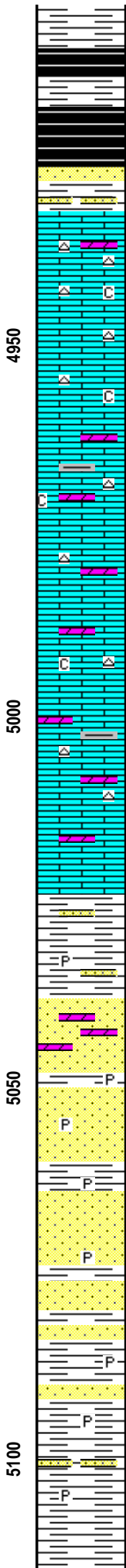
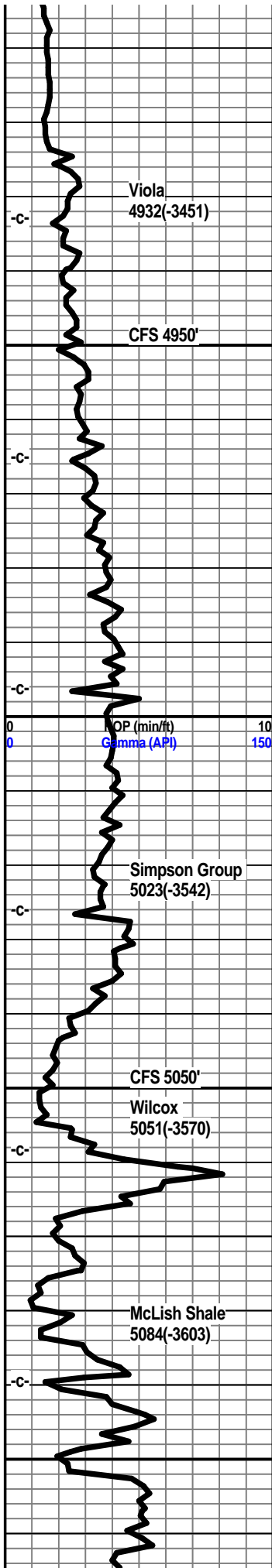
Shale, dark grey-green.

Shale, dark grey, slightly carb.

Shale, dark grey, carb, traces of pyrite.

Shale, grey-black, carb.





Shale, grey-black, coffee brown, carb

Shale, grey-black, coffee brown, carb.

Sandstone, grey to light brown, fn grained, well sorted, dirty, well cemented, some friable, no odor, very slight show of oil under UV, pyritic, shaley.

Limestone, cream-white, xln, xln porosity, subchalky, traces of tan-white chert, sharp, slightly dolo in part, questionable light staining, no visible shows, dull fluor.

Limestone, cream-white, xln, traces of xln porosity, scattered tan chert, slight trace oil under UV, no odor, subchalky in part.

Limestone, tan-white, grey-white, xln, slightly dolo, tan to tan-grey cherts, traces of xln porosity, chalky in part, no visible shows.

Limestone, tan-white, xln fnxln, dolo in part, xln porosity, chalky, tan sharp cherts, no visible shows.

Limestone, tan, fnxlk, fine grained, dolo in part, tan sharp cherts, subchalky in part.

Limestone, tan-white, xln, dolo, xln porosity, subchalky, traces of green shales, no vis shows.

Limestone, tan-white, xln, granular texture, dolomitic, tan cherts, traces of green shale.

Shale, green to pale green, firm, trace of pyrite, slightly sandy in part.

Sandstone, clear to grey-white, dolomitic, fair sorting, well cemented, some friable, trace questionable light stain, SA to SR, no odor, no fluor.

Sandstone, clear to white, SA to SR, friable in part, fair sorting, traces of pyrite, no odor no visible shows, no gas kick

Sandstone, grey-white, SA to SR well cemented, slightly friable, some dolo streaks, traces of shale, pyritic.

Sandstone, white, to clear, well sorted, friable in part, trace gil, very slight show of oil when crushed, slight odor after crushing, no fluor, very slight increase in gas background.

Shale, green, firm.

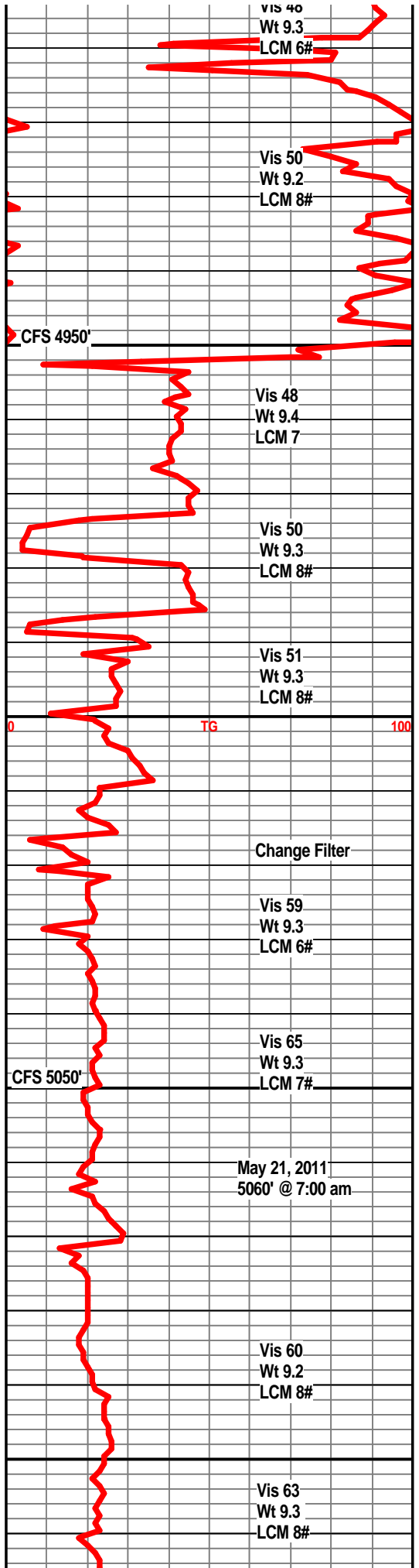
Sandstone, grey-white to white, SR to SA, friable in part, gil, trace pyrite, some shale stringers, few dolo, well cemented.

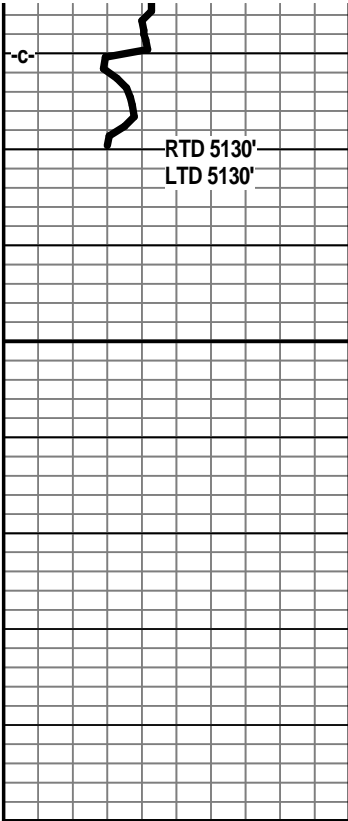
Shale, dark green, firm.

Sandstone, grey-white, fair sorting, SA to SR, well cemented, slightly pyritic.

Shale, green, dark green, firm, traces of pyrite, sand stringers..

Shale, green, grey, firm.





Shale, green-grey, firm, traces of pyrite.

