



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1171833
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
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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: _____

1171833

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

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Woolsey Operating Company, LLC
Well Name	HARDTNER HOMES 1
Doc ID	1171833

Tops

Name	Top	Datum
CHASE	1956	-459
ONAGA	2332	-835
HEEBNER	3872	-2375
DOUGLAS	3924	-2427
SWOPE LS	4561	-3064
MISSISSIPPIAN	4800	-3303
KINDERHOOK SH	5160	-3663
SIMPSON	5390	-3893

ALLIED OIL & GAS SERVICES, LLC 059558

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Medicine Lodge, KS

DATE <i>8-11-2012</i>	SEC. <i>25</i>	TWP. <i>34S</i>	RANGE <i>13W</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Homes</i>				WELL # <i>1</i>	LOCATION <i>Gyphill Rd, 16 south</i>	COUNTY <i>Berber</i>	STATE <i>KS</i>
OLD OR <u>NEW</u> (Circle one)				<i>to Rattlesnake Rd, 1 east, 1/2 mile</i>			

CONTRACTOR *Fossil #3*

TYPE OF JOB *Surface*

HOLE SIZE *17 1/2* T.D.

CASING SIZE *13 3/4* DEPTH *210'*

TUBING SIZE *8 5/8 LJS* DEPTH *15'*

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. *20'*

PERFS.

DISPLACEMENT *30 bbls of fresh water*

EQUIPMENT

PUMP TRUCK CEMENTER *Darin F.*

471-265 HELPER *Jake H.*

BULK TRUCK

364 DRIVER *Ron G.*

BULK TRUCK

DRIVER

OWNER *Woolsey Operating*

CEMENT

AMOUNT ORDERED *230 sp class b + 8% gel*

2% Gel

COMMON <i>A</i>	<i>230 sk @ 17.90</i>	<i>4117.00</i>
POZMIX	@	
GEL	<i>4 sk @ 23.40</i>	<i>93.60</i>
CHLORIDE	<i>8 sk @ 64.60</i>	<i>512.00</i>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	<i>248 @ 2.48</i>	<i>615.04</i>
MILEAGE	<i>11.35 / 20 / 2.60</i>	<i>590.22</i>
TOTAL		<i>5927.86</i>

REMARKS:

See Cement Log

Cement dit Circulate

WELL FILE

Regulatory Correspondence
Orig / Comp Workovers
Tests / Meters Operations

SERVICE

DEPTH OF JOB	<i>225'</i>	
PUMP TRUCK CHARGE	<i>1512</i>	<i>RS</i>
EXTRA FOOTAGE	@	
MILEAGE	<i>20 @ 7.70</i>	<i>154.00</i>
MANIFOLD	<i>Swagelok</i>	@
<i>LU</i>	<i>20 @ 4.40</i>	<i>88.00</i>
	@	

TOTAL *1754.25*

CHARGE TO: *Woolsey Operating*

STREET _____
CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

None

	@	
	@	
	@	
	@	
	@	

TOTAL _____

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

SALES TAX (If Any) _____
TOTAL CHARGES *7682.11*

PRINTED NAME *X Mike Thompson*

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE *X Mike Thompson*
Thank you!!!

(Net) 5761.58

ALLIED OIL & GAS SERVICES, LLC 059890

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Medicine Lodge KS

DATE <u>08/23/13</u>	SEC. <u>25</u>	TWP. <u>34e</u>	RANGE <u>13w</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Hardtner Homes</u>	WELL # <u>1</u>	LOCATION <u>Hardtner KS, North to Rattlesnake</u>			COUNTY <u>Barber</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)		Rd, West, South into					

CONTRACTOR Fossil Drilling OWNER Woolsey

TYPE OF JOB Production

HOLE SIZE <u>7 3/8</u>	T.D.
CASING SIZE <u>5 1/2</u>	DEPTH <u>5373</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX <u>1700</u>	MINIMUM
MEAS. LINE	SHOE JOINT <u>44</u>

CEMENT LEFT IN CSG. 44

PERFS.

DISPLACEMENT 127 BBLs 2% KCL H₂O

CEMENT

AMOUNT ORDERED 90sx 60:40:4% Gel, 125sx Class H + 10% Gypseal + 10% Salt + 6# Kolseal + .8% FL-160 + 4# Floseal, ~~12 BBLs~~ 14 Gal. KCL

EQUIPMENT	COMMON <u>54</u>	@ <u>12.90</u>	<u>966.60</u>
PUMP TRUCK CEMENTER <u>Jason Thimesch</u>	POZMIX <u>36</u>	@ <u>9.35</u>	<u>336.60</u>
# <u>360/302</u> HELPER <u>Jake Heard</u>	GEL <u>3</u>	@ <u>23.40</u>	<u>70.20</u>
BULK TRUCK	CHLORIDE	@	
# <u>364</u> DRIVER <u>Carl Rackley/Jama Bowen</u>	ASC	@	
BULK TRUCK	<u>H 125 sx</u>	@ <u>21.20</u>	<u>2650.00</u>
#	<u>Gypseal 23 sx</u>	@ <u>32.60</u>	<u>883.66</u>
	<u>Salt 13 sx</u>	@ <u>26.35</u>	<u>342.55</u>
	<u>Kolseal 750 #</u>	@ <u>.98</u>	<u>735.00</u>
	<u>FL-160 94 #</u>	@ <u>18.90</u>	<u>1776.60</u>
	<u>Floseal 36.25</u>	@ <u>2.97</u>	<u>92.81</u>
	<u>Clap/rv 13 Gal</u>	@ <u>34.40</u>	<u>447.20</u>
		@	
	HANDLING <u>250</u>	@ <u>2.48</u>	<u>620.00</u>
	MILEAGE <u>11.26 / 20 / 2.60</u>	@ <u>5.85</u>	<u>585.52</u>
			TOTAL <u>9436.74</u>

REMARKS:

WELL FILE

Regulatory Correspondence
Drig (Comp) Workovers
Tests / Meters Operations

SERVICE

DEPTH OF JOB <u>5373</u>	
PUMP TRUCK CHARGE <u>2765.75</u>	
EXTRA FOOTAGE	@
MILEAGE <u>20</u>	@ <u>7.70</u> <u>154.00</u>
MANIFOLD <u>4 Head</u>	@ <u>275.00</u>
LV <u>20</u>	@ <u>4.40</u> <u>88.00</u>
	@

TOTAL 3282.75

CHARGE TO: Woolsey

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

<u>5 1/2</u>	
AFU Float Shoe <u>1</u>	@ <u>339.30</u>
Latch down Plug <u>1</u>	@ <u>398.75</u>
Scratchers <u>24</u>	@ <u>36.00</u> <u>864.00</u>
Turbalizers <u>11</u>	@ <u>48.30</u> <u>531.30</u>
	@

TOTAL 2133.35

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

SALES TAX (If Any) _____

TOTAL CHARGES 14,852.84

PRINTED NAME MIKE THARP

SIGNATURE [Signature]

DISCOUNT _____ IF PAID IN 30 DAYS

(NET) 11,672.96



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Scott Alberg

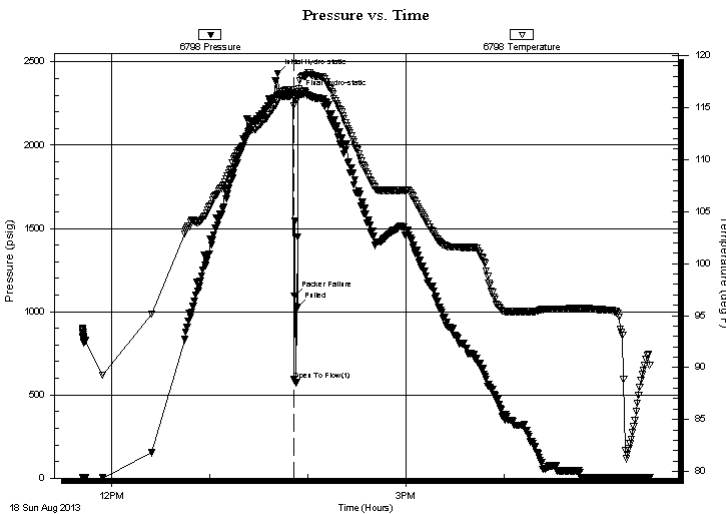
25-34S-13W Barber
Hardtner Homes 1
Job Ticket: 52388 **DST#: 1**
Test Start: 2013.08.18 @ 11:42:32

GENERAL INFORMATION:

Formation: **Cherokee-Mississippi**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 13:51:32 Tester: Leal Cason
Time Test Ended: 17:29:32 Unit No: 45
Interval: 4737.00 ft (KB) To 4850.00 ft (KB) (TVD) Reference Elevations: 1497.00 ft (KB)
Total Depth: 4850.00 ft (KB) (TVD) 1485.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 12.00 ft

Serial #: 6798 Inside
Press @ Run Depth: psig @ 4738.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.18 End Date: 2013.08.18 Last Calib.: 2013.08.18
Start Time: 11:42:33 End Time: 17:29:32 Time On Btm: 2013.08.18 @ 13:41:47
Time Off Btm: 2013.08.18 @ 13:54:17

TEST COMMENT: IF: Packer Failure, (After Sliding 10-12 Feet) Tried to reset, Pulled Tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2432.20	115.69	Initial Hydro-static
10	591.44	115.20	Open To Flow (1)
11	1096.66	115.80	Packer Failure
13	1027.10	116.07	Pulled
13	2302.87	116.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1500.00	Drig Mud	19.92

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Scott Alberg

25-34S-13W Barber
Hardtner Homes 1
Job Ticket: 52388 **DST#: 1**
Test Start: 2013.08.18 @ 11:42:32

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4800.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1500.00	Drig Mud	19.921

Total Length: 1500.00 ft Total Volume: 19.921 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6798

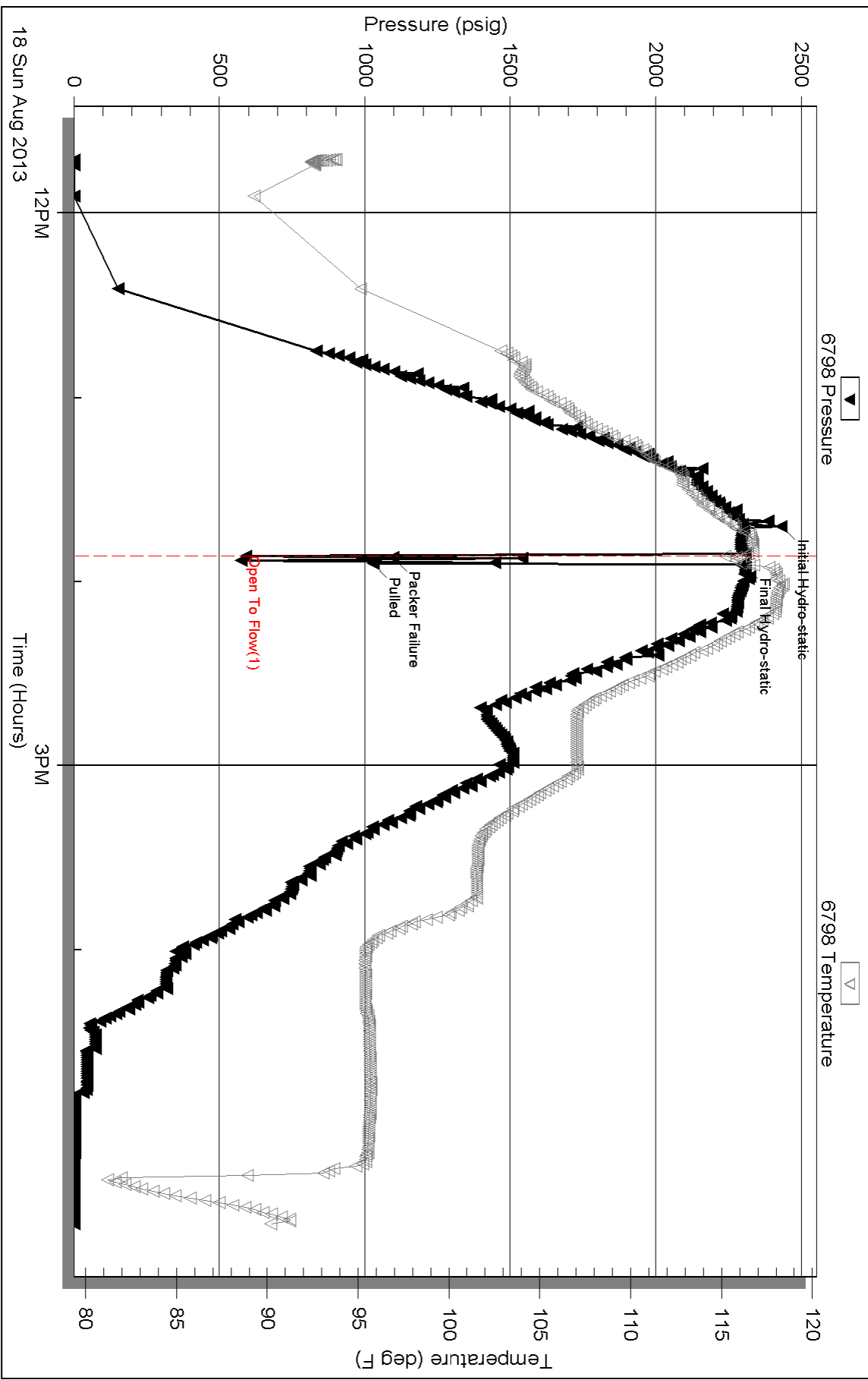
Inside

Woodsey Operating Co

Hardner Homes 1

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52388

Printed: 2013.08.18 @ 23:23:36



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co
 125 N Market Ste 1000
 Wichita, KS 67202
 ATTN: Scott Alberg

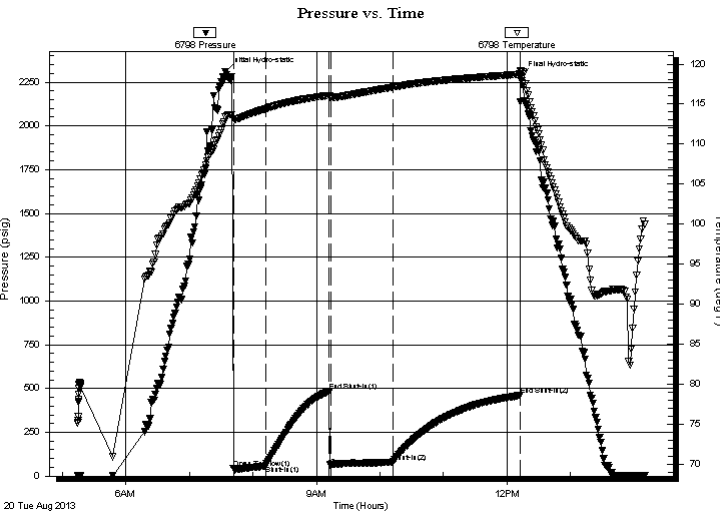
25-34S-13W Barber
Hardtner Homes 1
 Job Ticket: 52389 **DST#: 2**
 Test Start: 2013.08.20 @ 05:14:15

GENERAL INFORMATION:

Formation: **Cherokee-Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:41:21
 Time Test Ended: 14:10:50
 Interval: **4737.00 ft (KB) To 4850.00 ft (KB) (TVD)**
 Total Depth: 4850.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 45
 Reference Elevations: 1497.00 ft (KB)
 1485.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6798 Inside
 Press @ Run Depth: 78.64 psig @ 4738.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.20 End Date: 2013.08.20 Last Calib.: 2013.08.20
 Start Time: 05:14:16 End Time: 14:10:50 Time On Btm: 2013.08.20 @ 07:33:51
 Time Off Btm: 2013.08.20 @ 12:13:21

TEST COMMENT: IF: Fair Blow , BOB in 26 minutes
 IS: No Blow Back
 FF: Weak Blow , BOB in 34 minutes
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2311.69	113.37	Initial Hydro-static
8	43.88	113.19	Open To Flow (1)
38	61.60	114.41	Shut-In(1)
99	484.11	116.09	End Shut-In(1)
100	56.55	115.81	Open To Flow (2)
158	78.64	117.09	Shut-In(2)
279	462.14	118.73	End Shut-In(2)
280	2286.49	119.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
123.00	Mud	0.60

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Scott Alberg

25-34S-13W Barber
Hardtner Homes 1
Job Ticket: 52389 **DST#: 2**
Test Start: 2013.08.20 @ 05:14:15

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4800.00 ppm			
Filter Cake: 0.02 inches			

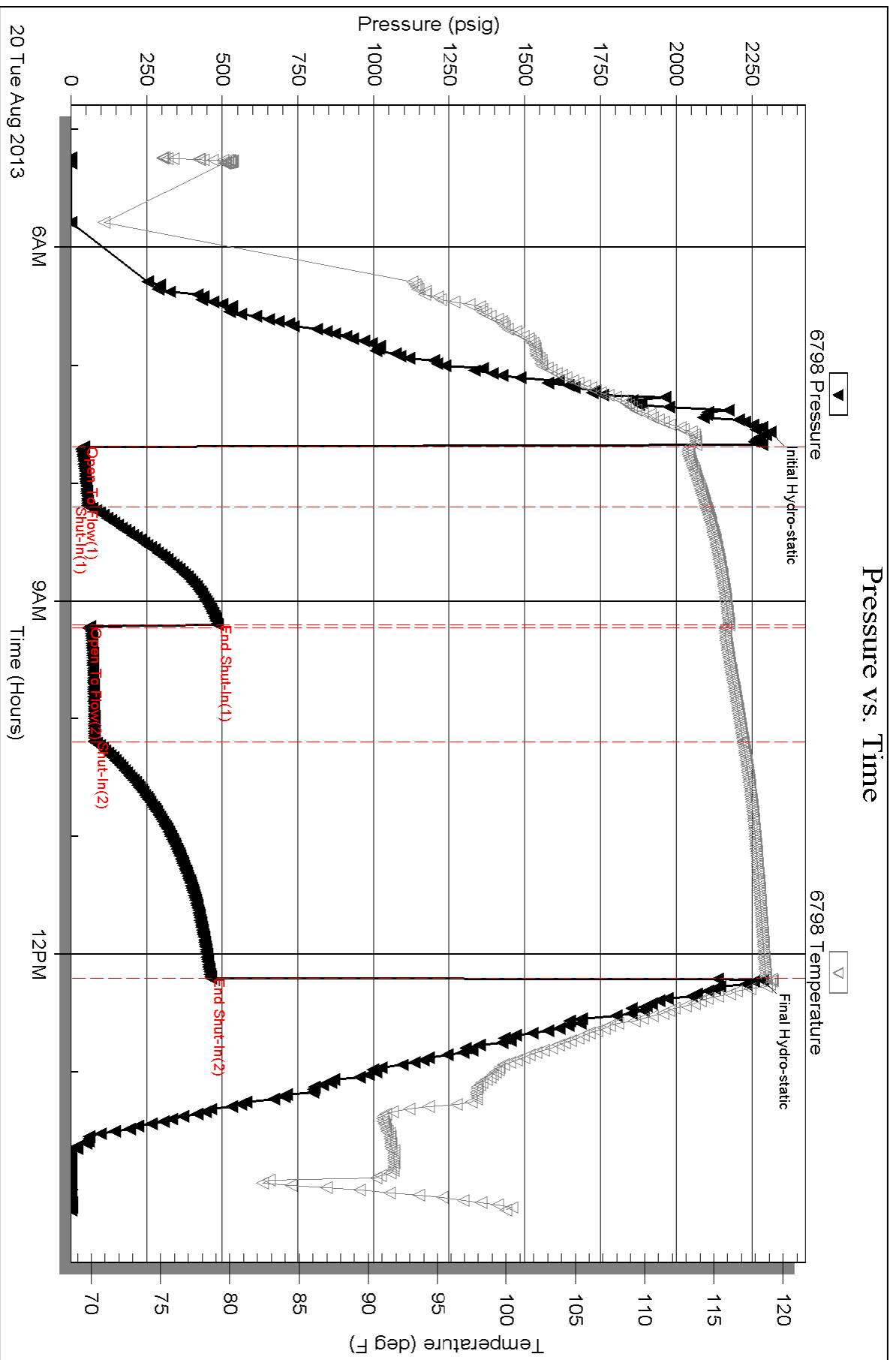
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
123.00	Mud	0.605

Total Length: 123.00 ft Total Volume: 0.605 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time





Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: HARDTNER HOMES 1
Location: E/2 NW NW SE
License Number: API: 15-007-24046-00-00
Spud Date: August 11, 2013
Surface Coordinates: Section 25-T34S-R13W, 2310' FSL, 2150' FEL
Hardtner
Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 1485
Logged Interval (ft): 3800 To: RTD
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3376'.
Region: Barber County, Kansas
Drilling Completed: August 23, 2013
K.B. Elevation (ft): 1497
Total Depth (ft): 5485

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
LECOMPTON	3624(-2127)	3622(-2125)
KANWAKA	3637(-2140)	3634(-2137)
HEEBNER	3877(-2380)	3872(-2375)
HASKELL	4079(-2582)	4077(-2580)
STARK SHALE	4558(-3061)	4555(-3058)
HUSHPUCKNEY SHALE	4585(-3088)	4580(-3083)
B/KC	4636(-3139)	4632(-3135)
PAWNEE	4726(-3229)	4725(-3228)
CHEROKEE GROUP	4774(-3277)	4774(-3277)
MISSISSIPPIAN	4810(-3313)	4800(-3303)
KINDERHOOK SHALE	5162(-3665)	5160(-3663)
WOODFORD SHALE	5231(-3734)	5229(-3732)
VIOLA	5279(-3782)	5282(-3785)
SIMPSON SHALE	5390(-3893)	5390(-3893)
SIMPSON SAND	5406(-3909)	5406(-3909)
MCLISH SHALE	5448(-3951)	5447(-3950)
RTD	5485(-3988)	
LTD		5485(-3988)

COMMENTS

Surface Casing: Set 5 joints 13 3/8" at 223' with 235 sxs Class A, 2% gel, 3% cc, plug down at 2:30 am on August 12, 2013. Cement did Circulate.

Production Casing: Ran 5 1/2" Casing

Deviation Surveys: 1 - 225', 1/4 - 2046', 3/4 - 2522', 3/4 - 3027', Missrun - 3563', 3/4 - 3627', 1 - 4293', 1 - 4850', 1/2 - 5485'.

Contractor Bit Record:

1- 17 12" out at 225'.

2- 7 7/8" out at 4850'.

3- 7 7/8" out at 5485'.

Pipe Strap at

Board 4862.45'
Strap 4863.36'
Strap Long .91'

Gas Detector: Woolsey Operating Company, Trailer #1

Mud System: Mud Co, Brad Bortz, Terry Ison, Engineers

DSTs: Trilobite Testing

Logged by Nabors Completion and Production Services

LTD - 5485'.

DSTs

DST #1 4737 to 4850' Cherokee-Mississippian

Missrun - Could not get to bottom, tool slide 10', packer failed. Had 25' fill when reconditioning the hole.

Recovery: 1500' Drilling Mud.

IHP 2432# FHP 2302#

FP invalid, No SIP

DST #2 4737 to 4850' Cherokee-Mississippian

Times 30-60-60-120

1st Opening - fair blow, BOB 26 minutes, no blow back.

2nd Opening - weak to fair blow, BOB 34 minutes, no blow back.

Recovery: 123' Drilling Mud.

IFP 44-62# FFP 57-79#

ISIP 484# FSIP 462#

IHP 2312# FHP 2286#

Temp 119 degrees.

CREWS

Fossil Drilling, Inc Rig #3

Tool Pusher - Jim Wenrich


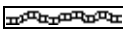
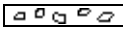
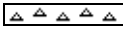
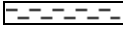

Drillers - Days - Daniel Orranta







Evening - Ron Burns


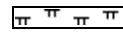

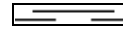


Morning - Andres Maestas






Relief - Allen Collins

ROCK TYPES

 Anhy
 Bent
 Brec
 Cht
 Clyst
 Coal

 Congl
 Sdy dolo
 Shy dolo
 Dol
 Gyp
 Sdy lmst

 Lmst
 Mrlst
 Salt
 Shale
 Slstst
 Ss

 Black sh
 Gry sh
 Shale
 Shyslstst
 Sltysh

ACCESSORIES

MINERAL

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

- Chlorite
- Dol
- Sand
- Slty

FOSSIL

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

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

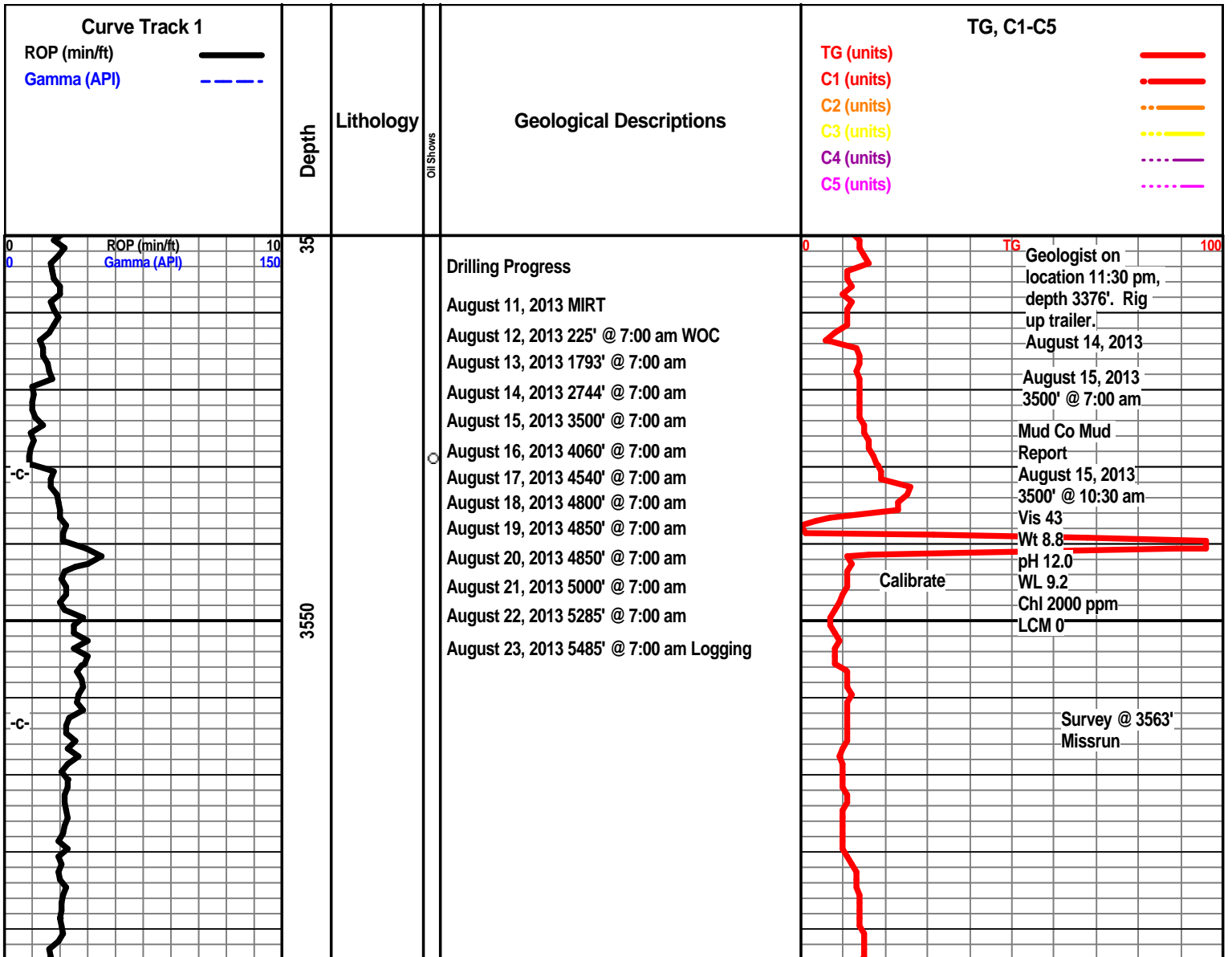
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Slststn

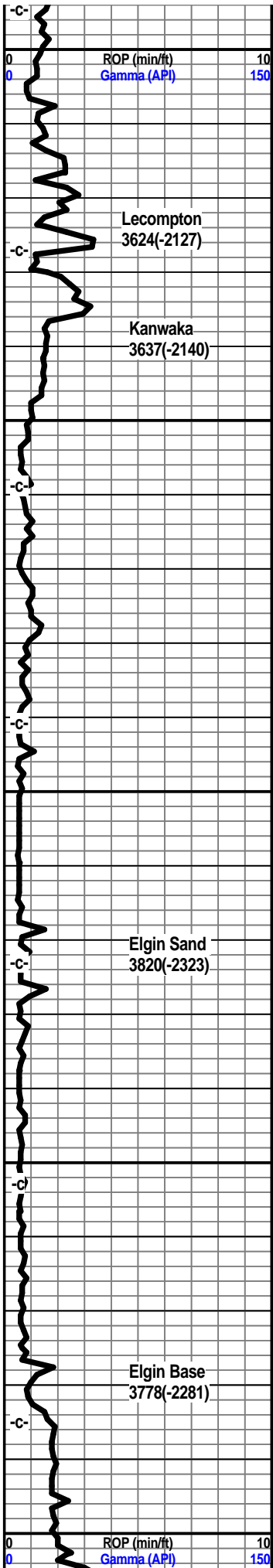
STRINGER

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

TEXTURE

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





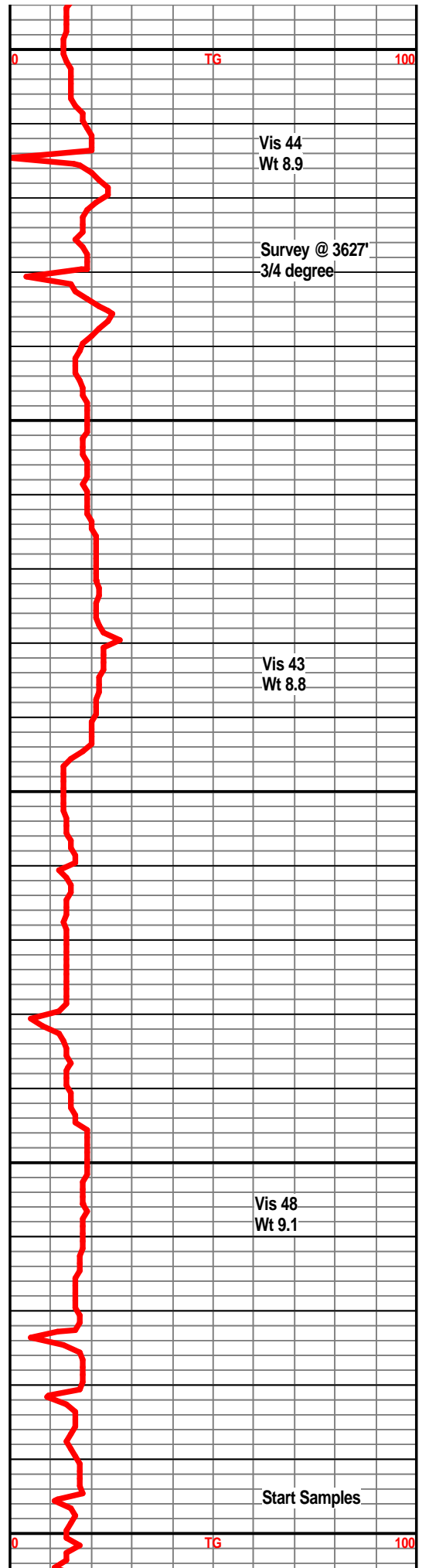
3600

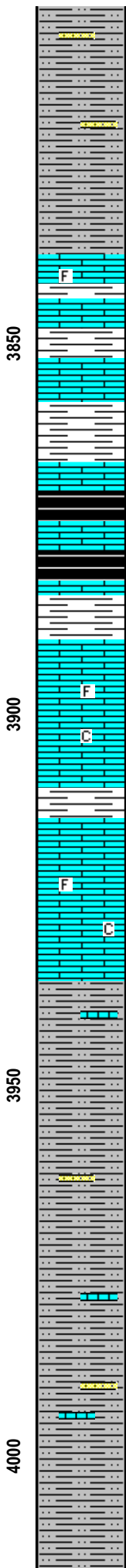
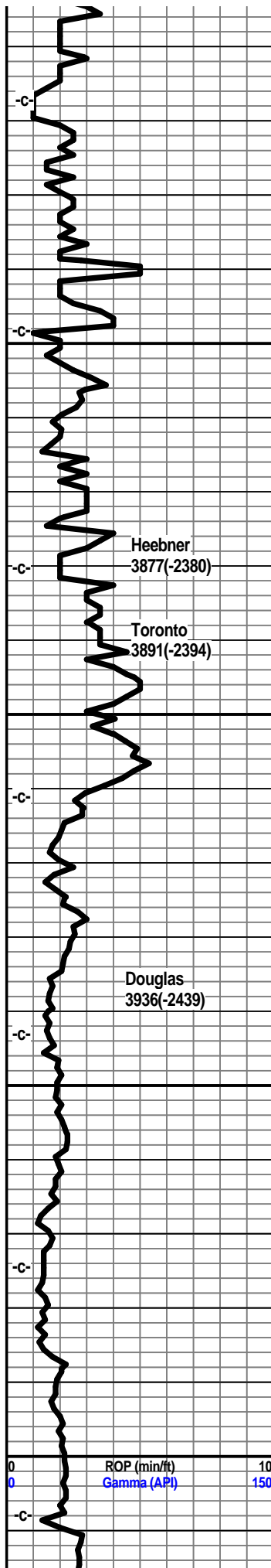
3650

3700

3750

3800





Shale, light grey, very silty to sandy, abundant sand clusters from above.

Shale, light grey, very silty to sandy.

Limestone, tan, tan-brown, dense, trace fossils.

Limestone, tan, tan-grey, xln, dense.

Shale, grey.

Limestone, grey-tan, xln, dense.

Shale, dark-grey, black, slightly carb.

Limestone, grey-tan, xln, dense, trace fossils.

Shale, grey, dark-grey, black, carb. in part.

Shale, light grey, light green.

Limestone, tan, cream, xln, dense, trace of fossils, slightly chalky.

Limestone, tan, cream-white, xln, dense, trace fossils, chalky in part.

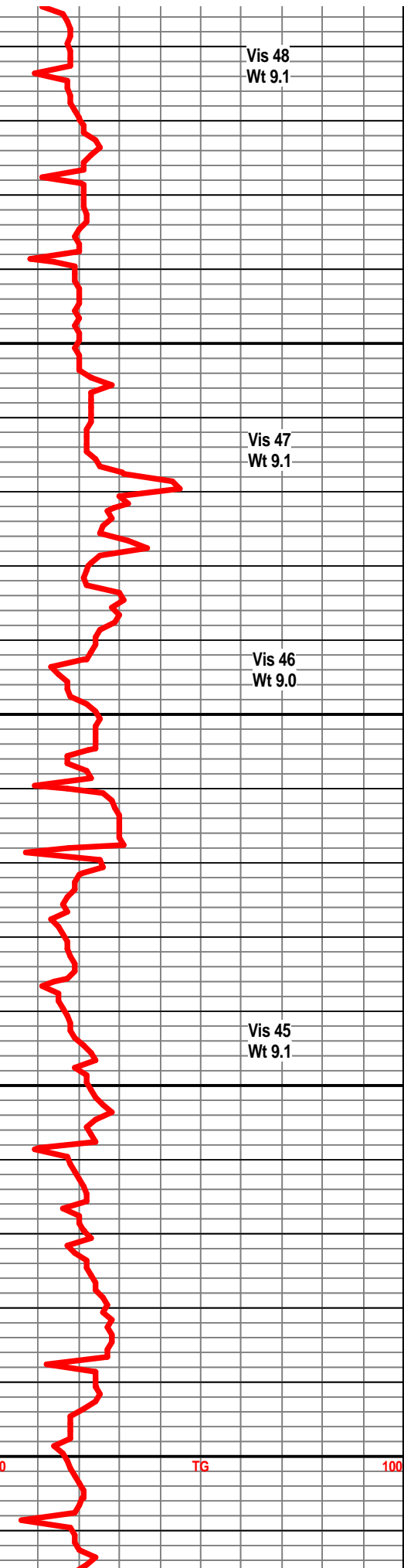
Shale, light grey.

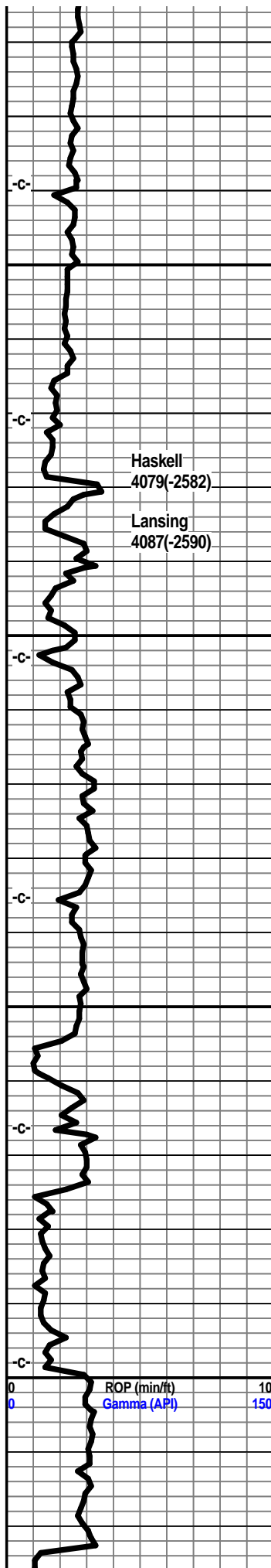
Limestone, tan, cream, xln, dense, trace fossils, some tan-brown.

Shale, light grey, very silty, ls frags.

Shale, light grey, silty, ls frags, few sand clusters.

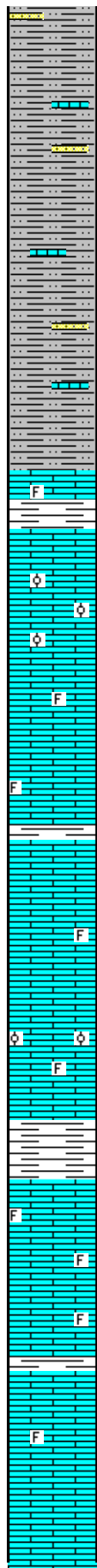
Shale, light grey, very silty to sandy, sand clusters, ls frags.





Haskell
4079(-2582)
Lansing
4087(-2590)

4050
4100
4150
4200



Shale, light grey, silty, abundant sand clusters, some ls frags.

Shale, grey to light grey, very silty to sandy, sand clusters, ls frags.

Shale, light grey, silty to sandy.

Limestone, tan, tan-brown, mxln, dense, fossils.
Shale, grey.

Limestone, cream-tan, xln, oolitic, trace oolimoldic porosity, some inter oolitic porosity, no visible shows, no odor, no kick

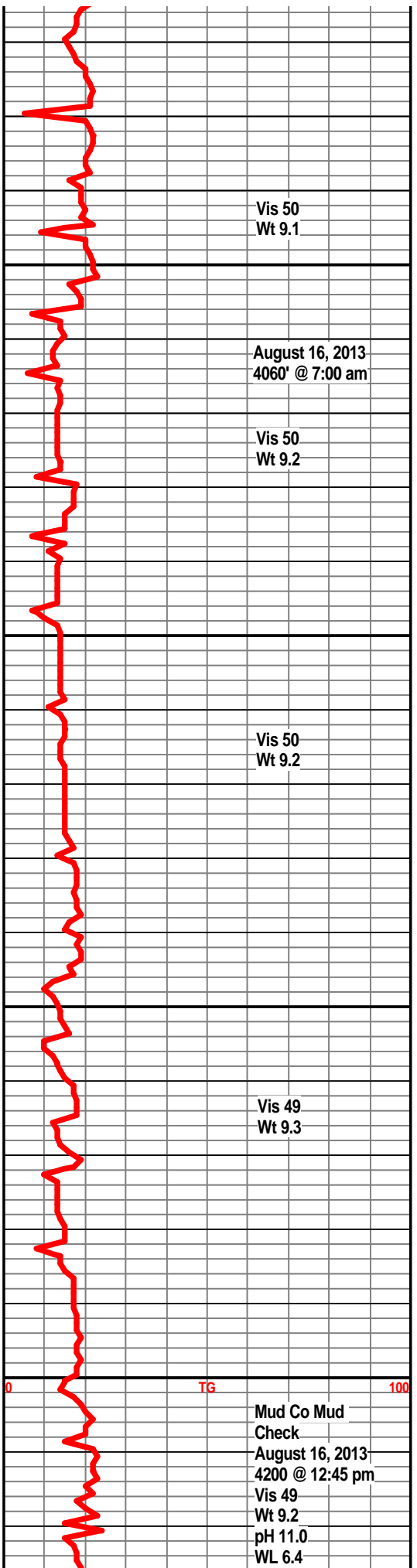
Limestone, cream, tan-white, xln, dense, traces of fossil frags, no visible shows, no odor.

Limestone, tan, buff, xln, dense, fossils, no visible shows, no odor, some grey shales.

Limestone, tan, cream-white, xln, partly dense, oolites, trace oolimolic porosity, no visible shows, no odor.

Limestone, cream to tan, xln, traces of xln porosity, foss frags, good porosity, no odor, no visible shows, grey splintery shales abundant.

Limestone, tan, grey-white, xln dense, trace foss.



Vis 50
Wt 9.1

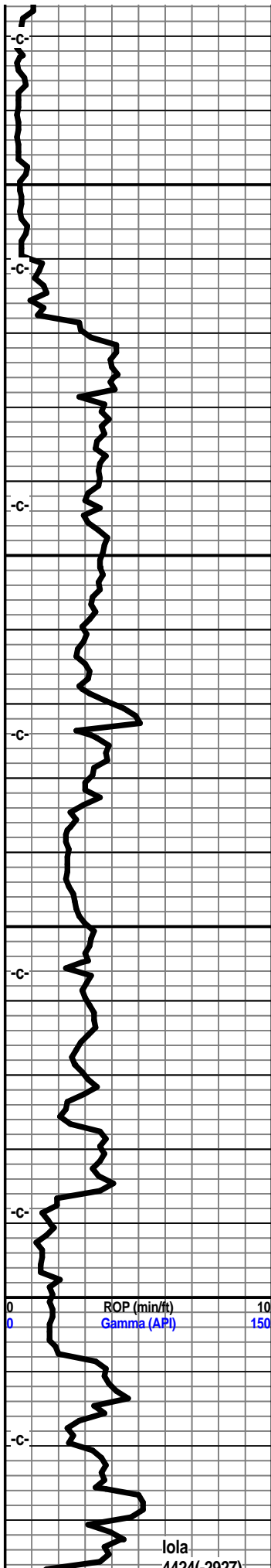
August 16, 2013
4060' @ 7:00 am

Vis 50
Wt 9.2

Vis 50
Wt 9.2

Vis 49
Wt 9.3

Mud Co Mud
Check
August 16, 2013
4200 @ 12:45 pm
Vis 49
Wt 9.2
pH 11.0
WL 6.4



Limestone, tan, buff, xln, oolmoldic, trace micro oolites, barron porosity, some fossil frags.

Limestone, a/a, splintery grey shales.

Limestone, grey-white, xln, dense, splintery silty to limey shales.

Limestone, grey-white, xln, dense, very shaley.

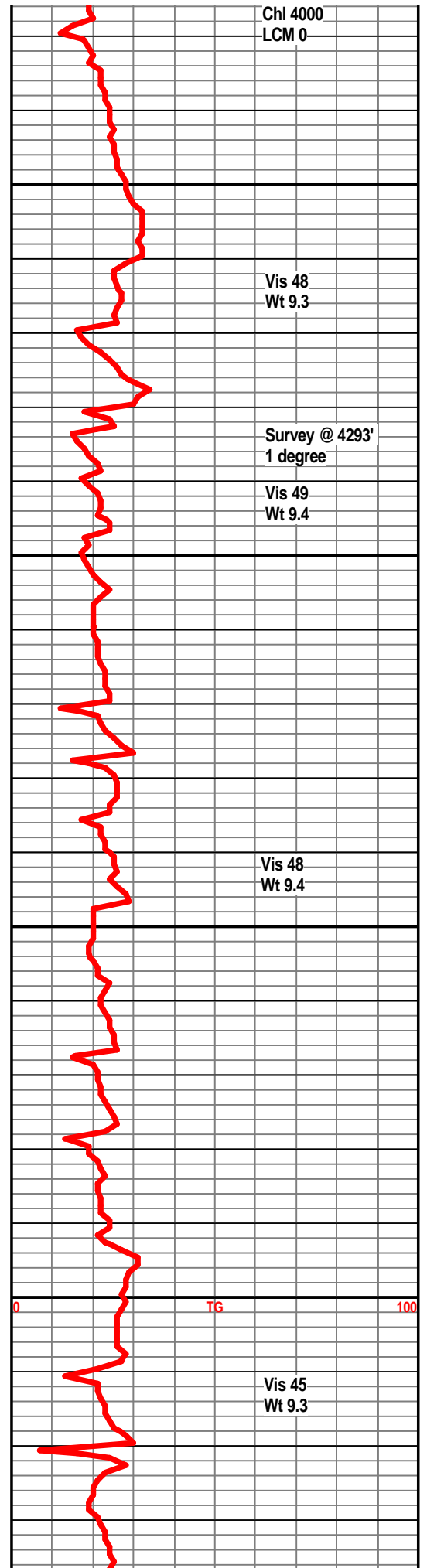
Shale, dark grey, silty, abundant dark grey to brown limestone frags.

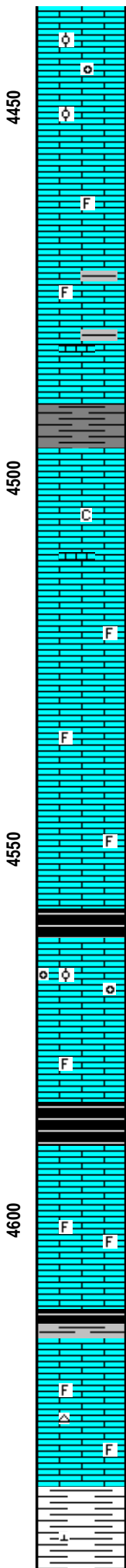
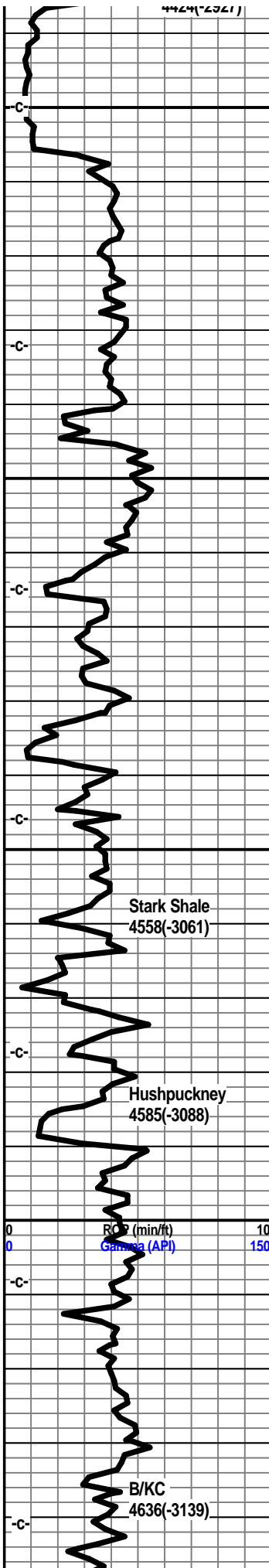
Shale, dark grey, silty, ls frags.

Shale, dark grey, silty, abundant ls fragments.

Limestone, cream, buff, fn xln, traces of xln porosity, few fossils, no visible shows, no odor.

Shale, grey, traces of ls stringers.





Limestone, cream, buff-white, xln, traces of oolites, fossils, traces of xln porosity, some inter oolitic porosity, no visible shows, no odor.

Limestone, tan, buff-white, xln, dense, fossils.

Shales, dark grey, ls fragments.

Limestone, tan, buff, xln, dense, slightly chalky.

Limestone, buff, cream-white, xln, partly dense, trace xln porosity, trace fossils.

Limestone, buff, tan, xln, traces oolites trace oolitic porosity, barron, no visible shows.

Limestone, grey-white, xln, dense, trace tan chert.

Shale, grey-black, trace gas

Limestone, cream, tan-white, xln, trace oolites, trace oolitic porosity, some xln porosity, no visible shows, no odor.

Limestone, grey-white, xln, dense, trace fossils.

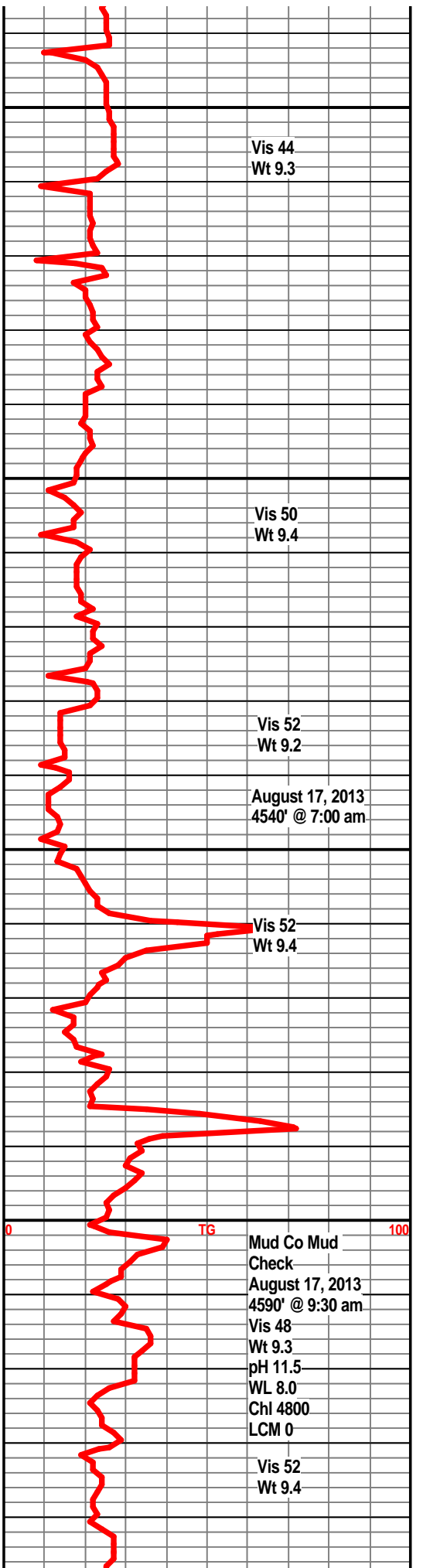
Shale, grey-black, slightly carb.

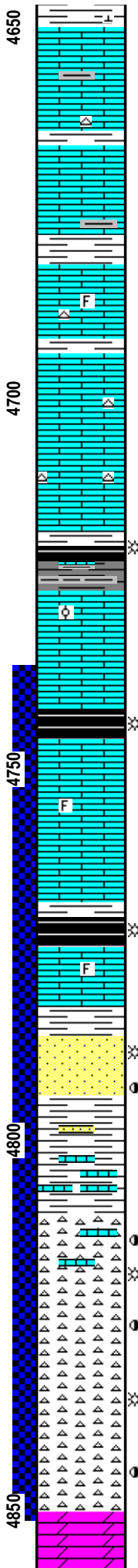
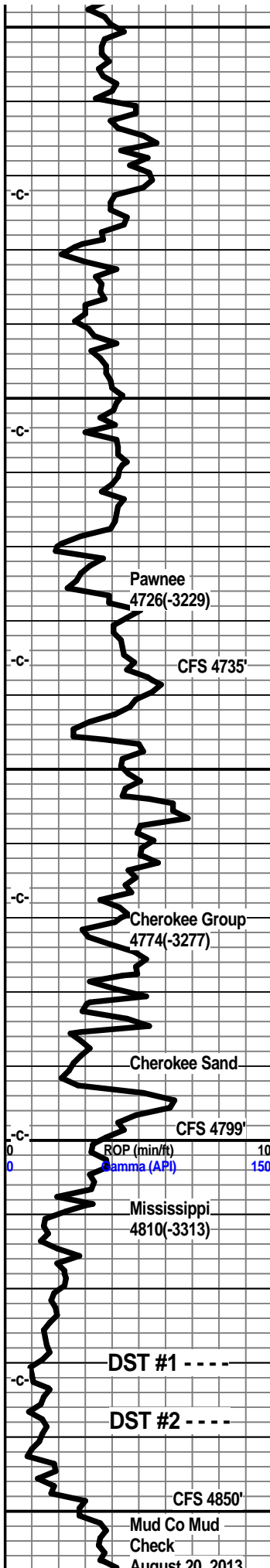
Limestone, tan, grey-white, xln, dense, fossils, trace fossil porosity, no visible shows, no odor.

Shale, grey, grey-black

Limestone, tan, tan-brown, xln, dense, traces tan chert, scattered fossils.

Shale, grey, light grey-green, calcitic.





Limestone, tan, cream, some pale green, dense, shaley in part, traces of tan chert.

Shale, light grey.

Limestone, tan, cream-white, xln, dense, trace fossils, trace tan-brown cherts.

Limestone, tan, buff-white, xln, dense, trace tan chert.

Shale, grey-black, slightly carb.

Limestone, tan, cream, xln, partly dense, traces fossil frags, trace micro oolites, no visible shows, no odor, no kick.

Shale, grey, grey-black, slightly carb.

Limestone, tan, buff-white, xln, dense, trace fossils.

Shale grey-black, carb

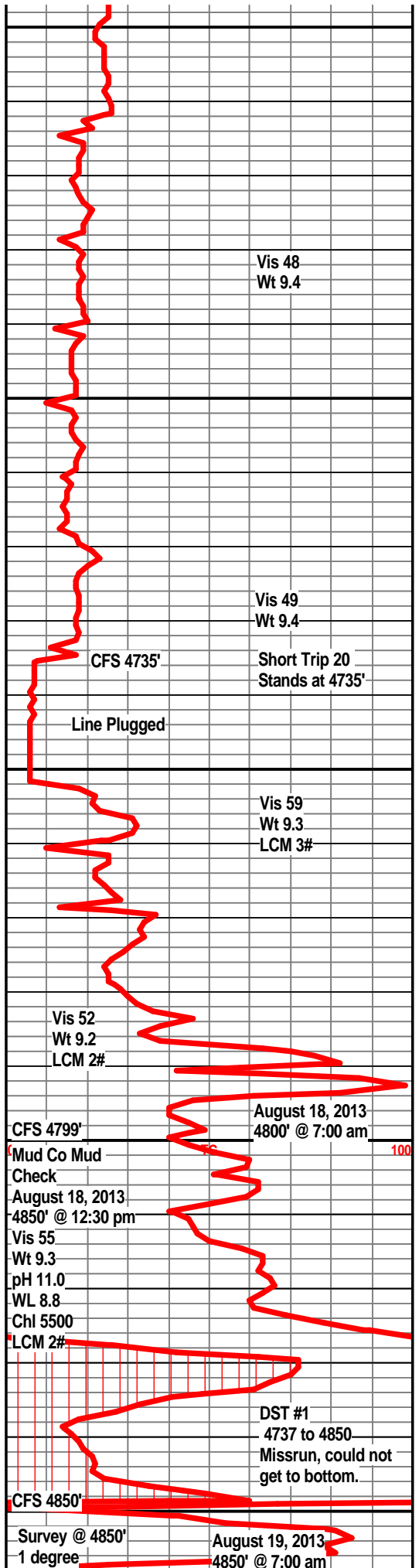
Limestone, tan, tan-brown, xln, dense, trace fossils.

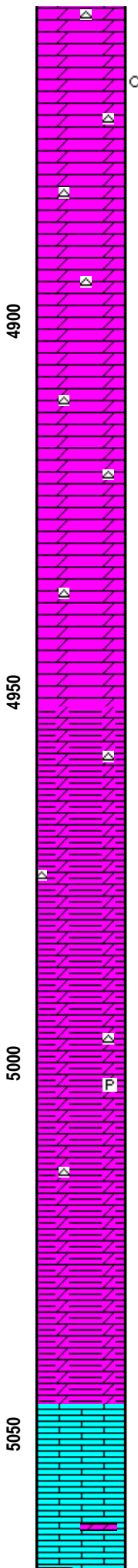
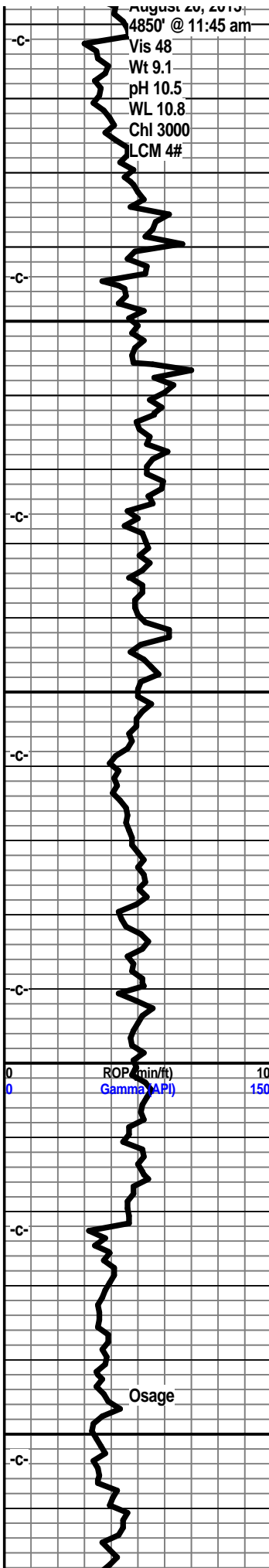
Sandstone, clear to tan, fine grained, sa to sr, fair cementing, some friable, good even golden brown staining, good odor, slight show bleeding gas, traces of free oil, very dull fluor.

Shale, light grey, some vari-colored, ls frags, some sand stringers.

Chert, tan, off-white, sharp to weathered, small scattered vugs, scattered golden stain, fair odor, trace free oil in tray, slightly limey on top, very dull spotty fluorescence.

Chert, tan to off-white, fresh to weathered, pin point porosity, few small vugs, fractured, fair odor, fair show of oil and bleeding gas, scattered staining, very dull spotty fluorescence.





Dolomite, grey-white, fxln, dense, trace of weathered cherts, slight spotty staining on cherts.

Dolo, light grey, xln, light grey green splintery shales, traces of chert. Samples ???

Dolo, grey, light grey, xln, dense, trace chert, some light grey shales.

Dolo, light grey to grey, tan, xln, fine grained, dense, trace of chert, grey shales.

Dolo, light grey, grey, dense, xln, light grey shale.

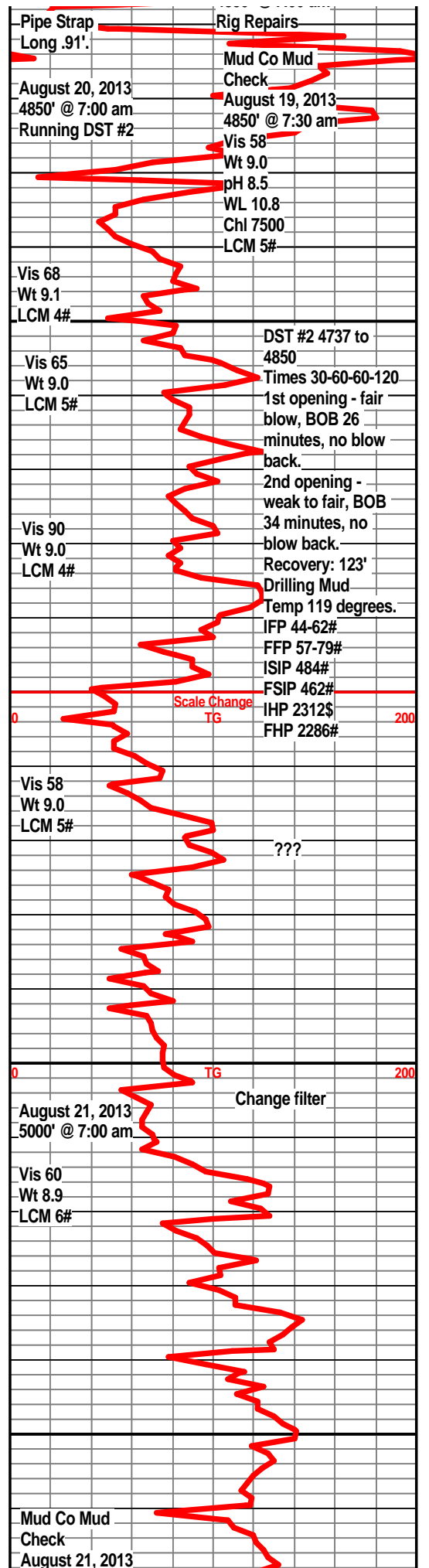
Dolo, grey, light grey, tan, xln, dense, trace light grey shale, trace chert.

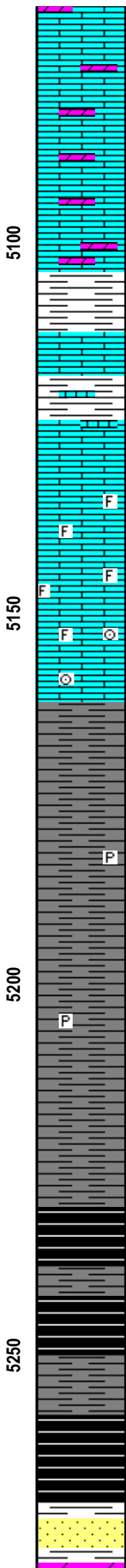
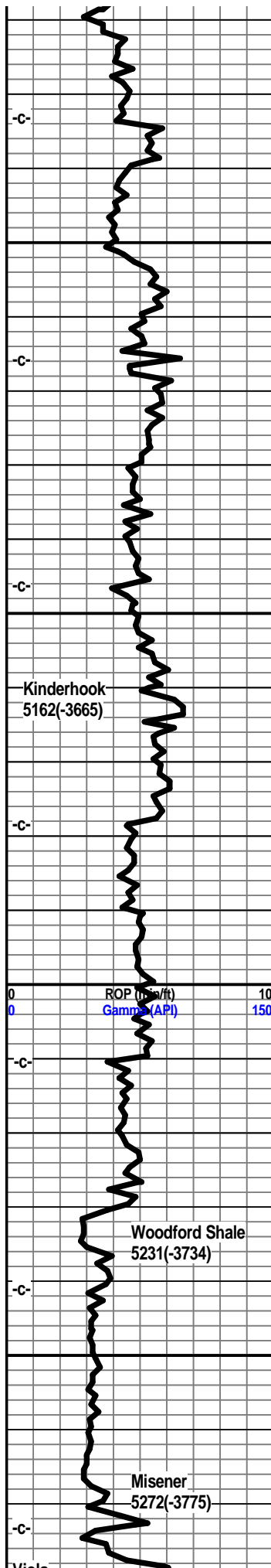
Dolo, light grey to grey, xln, fine grained, dense, traces of light grey shales, trace of pyrite inclusions, no visible shows, increasing gas background.

Dolo, light grey, grey, xln, fine grained, some shale, light grey to pale green. firm.

Limestone, cream, tan, grey-white, dolo, xln, dense, subchalky, trace glauc.

Limestone, cream, tan xln, grey dolo, xln, dense, trace translucent chert, trace glauc.





dense, traces translucent chert, trace glauc,
few pcs chalky, trace fossils.

Limestone, tan, cream, some reddish brown,
some grey dolo, xln, dense, trace grey shales.

Limestone, cream, reddish brown, xln, dense,
traces of green shales.

Shale, green, firm, ls frags.

Limestone, tan, reddish-brown, dense, green
shales.

Limestone, cream-white, xln, dense, subchalky,
traces reddish ls frags, grey-green shales.

Limestone, cream-white, tan, buff, xln, dense,
trace fossils, subchalky, trace glauc, some
green shales.

Shale, grey, light grey, firm, silty.

Shale, grey, dark grey, some grey brown, silty,
traces of pyrite, abundant cutting from above,
ls frags, green shales, ect.

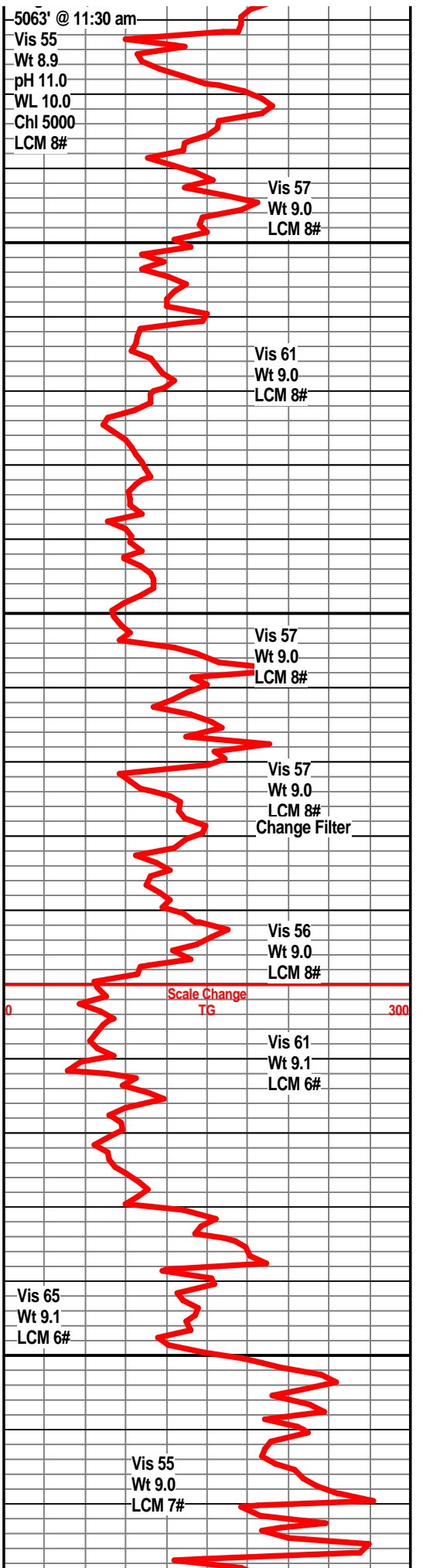
Shale, grey, dark grey, silty, pyritic in part,
abundant ls frags, from above??

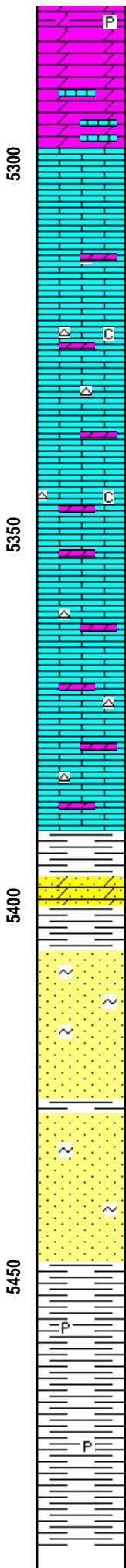
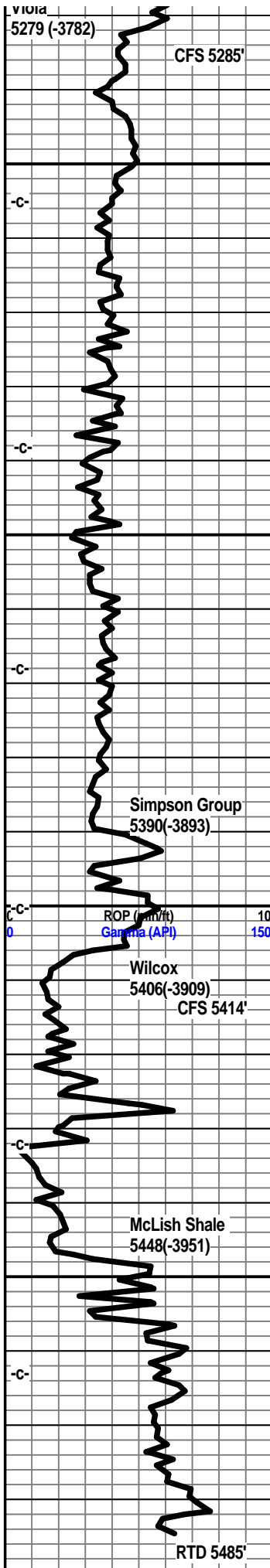
Shale, grey, black, firm pyrite, gas bubbles.

Shale, grey black, coffee brown, gas bubbles,
pyritic.

Shale, grey-black, gas bubbles.

Sandstone, clear to white, sa to sr, gil, friable in part, no
odor, one rx had very faint spotty fluor, very
tite, questionable spotty stain, no free oil.





Dolo, reddish-brown, silty to shaley, fine grained, few embedded sand grains, pyritic, no odor, no visible shows.

Dolo, grey-white, xln, dense, traces of limestone. Some traces of sand clusters from above, some with spotty fluor, still no odor.

Limestone, grey-white, xln, dense, angular, trace chert, no visible shows.

Limetone, tan, cream-white, grey-white, xln, dense, subchalky in part, trace chert, slightly dolo in part.

Limestone, tan, cream-white, xln, dense, traces tan sharp cherts, slightly dolo.

Limestone, tan, buff, xln, dolo in part, trace chalky, tan sharp cherts.

Limestone, tan, buff, xln, dense, traces of sharp tan cherts, slightly dolo in part.

Limestone, tan, tan-brown, xln, dense, dolo in part, tan sharp cherts.

Shale, dark green, teal green, firm.

Sandstone, tan, to clear-white, dirty in appearance, dolomitic, med grained, well cemented, glauc, no vis shows.

Sandstone, white to clear sr to sa qtz grains, medium sorting, friable in part, galuc, no odor, very slight show scummy oil in few samples, no fluor.

Sandstone, clear to white, some tan, dolo in part, sa to sr, fair sorting, glauc, traces of pyrite, trace green shales,

Shale, green, dark green, firm, trace pyrite, few sand stringers.

Shale, grey-green, firm, few sand clusters, trace pyrite.

