



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1070679
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: _____

1070679

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	NUSSER 1
Doc ID	1070679

Tops

Name	Top	Datum
CHASE	1907	-518
ONAGA	2771	-1382
ELGIN SD	3697	-2308
DOUGLAS	3866	-2477
QUINDARO SH	4375	-2986
PAWNEE LS	4719	-3330
MISSISSIPPIAN	4821	-3432
VIOLA	5215	-3826
SIMPSON	5641	-3952

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

December 22, 2011

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

Re: ACO1
API 15-007-23749-00-00
NUSSER 1
SW/4 Sec.11-35S-12W
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. 037788

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Medicine Lodge KS

DATE <i>0826 11</i>	SEC. <i>11</i>	TWP. <i>35s</i>	RANGE <i>12w</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <i>6:00 PM</i>
LEASE <i>Nusser</i>	WELL # <i>1</i>	LOCATION <i>2814 Roundup Rd, Ks, 5/into</i>			COUNTY <i>Barber</i>	STATE <i>KS</i>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR *Duke #10*

TYPE OF JOB *Surface*

HOLE SIZE *14 3/4* T.D. *225*

CASING SIZE *10 3/4* DEPTH *207' + (13.85')*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX *250 #* MINIMUM *—*

MEAS. LINE SHOE JOINT *N/A*

CEMENT LEFT IN CSB. *20'*

PERES

DISPLACEMENT *19k Bbls Fresh H₂O*

EQUIPMENT

OWNER *Woolsey*

CEMENT AMOUNT ORDERED *240sx class A + 3%cc + 2%gel*

COMMON *class A 240sx @ 16.25 3900.00*

POZMIX @

GEL *5 sx @ 21.25 106.25*

CHLORIDE *9 sx @ 58.20 523.80*

ASC @

WELL FILE

Regulatory Correspondence @

Drig / Comp @ Workovers

Tests / Meters @ Operations

HANDLING *254 @ 2.25 571.50*

MILEAGE *254/20/11 558.00*

TOTAL *5660.35*

PUMP TRUCK CEMENTER *D. Felio*

414-302 HELPER *C. Balding*

BULK TRUCK

363-290 DRIVER *D. Felio*

BULK TRUCK

DRIVER

REMARKS:

*Pipe on Brrm Break Cc w/ TRUCK, Pump 240sx
A-342 cement, Start Disp. w/ Fresh H₂O, Wash
up truck, See Steady increase in PSI, Slow Rate
Stop Pump at 19k total Disp., Shut in,
Cement Did CIR-OIL*

PLUG: PUMP AT 6:00 PM.

SERVICE

DEPTH OF JOB *220*

PUMP TRUCK CHARGE *1125.00*

EXTRA FOOTAGE @

MILEAGE *50 @ 2.00 200.00*

MANIFOLD *N/A @ N/A*

Light Vehicle *N/A @ N/A*

TOTAL *1405.00*

CHARGE TO: *Woolsey*

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

NONE

@

@

@

@

@

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 *Mike Tharp*

TOTAL

SALES TAX (If Any)

TOTAL CHARGES *7065.35*

DISCOUNT IF PAID IN 30 DAYS *5652.28*

ALLIED CEMENTING CO., LLC. 037729

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Med. Lodge KS

DATE <u>9-10-11</u>	SEC <u>11</u>	TWP <u>35s</u>	RANGE <u>12w</u>	CALLED OUT	ON LOCATION	JOB START <u>2:30am</u>	JOB FINISH <u>3:30am</u>
LEASE <u>Wagner</u>		WELL # <u>1</u>	LOCATION <u>Hardwood East to Roundup Rd.</u>		COUNTY <u>Barber</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)		<u>1/2 south, East into</u>					

CONTRACTOR Duke #10
 TYPE OF JOB Production
 HOLE SIZE 7 7/8 T.D. 5548'
 CASING SIZE 5 1/2 DEPTH 5323'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX 1600 psi MINIMUM
 MEAS. LINE SHOE JOINT 42'
 CEMENT LEFT IN CSG. 42'
 PERFS
 DISPLACEMENT 28 1/2 bbls 2% KCL
 EQUIPMENT

PUMP TRUCK CEMENTER North Thimesch
 # 360/265 HELPER Jason Thimesch
 BULK TRUCK
 # 363/296 DRIVER Adam Miller
 BULK TRUCK
 # DRIVER

REMARKS:

Bit arc with rig pump ball through
MTR 25sx for bit hole MTR 15sx for main hole
MTR 50sx scavenger cement
MTR 175sx cement shutdown
wash pump + lines release plug
disp. 90 bbls 2% KCL. Blow union shutdown
scrap joint disp to 128 1/2 bbls 2% KCL
bump plug 1000psi to 1600psi
plug hold

CHARGE TO: Woolsey operating

WELL FILE
 CITY STATE ZIP
 Regulatory Correspondence
 Drig / Comp Workovers
 Tests / Meters Operations

OCT 21 2011

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 MIRE ZHARP
 SIGNATURE Mire ZHarp

OWNER Woolsey operating

CEMENT
 AMOUNT ORDERED 90sx 60:40; 4% gel
175sx class H + 10% gel + 10% salt
+ 6% Kcl gel + 8% Fl-160 + 4% closed
13 gal. Clapro

COMMON <u>A</u>	<u>54 sx</u>	@ <u>16.25</u>	<u>877.50</u>
POZMIX	<u>36 sx</u>	@ <u>8.50</u>	<u>306.00</u>
GEL	<u>3 sx</u>	@ <u>21.25</u>	<u>63.75</u>
CHLORIDE		@	
ASC		@	
<u>H</u>	<u>175 sx</u>	@ <u>22.15</u>	<u>3876.25</u>
<u>Byscal</u>	<u>17 sx</u>	@ <u>34.20</u>	<u>581.40</u>
<u>Salt</u>	<u>19 sx</u>	@ <u>12.00</u>	<u>228.00</u>
<u>Kalscal</u>	<u>1050 #</u>	@ <u>.89</u>	<u>934.50</u>
<u>Fl-160</u>	<u>131 #</u>	@ <u>17.20</u>	<u>2253.20</u>
<u>Floscal</u>	<u>43 #</u>	@ <u>2.70</u>	<u>116.10</u>
<u>Clapro</u>	<u>13 Gals</u>	@ <u>31.25</u>	<u>406.25</u>

HANDLING 330 @ 2.25 742.50
 MILEAGE 330/11/20 726.00

TOTAL 11,111.45

SERVICE

DEPTH OF JOB <u>5323'</u>		
PUMP TRUCK CHARGE	<u>2695.00</u>	
EXTRA FOOTAGE	@	
MILEAGE <u>40</u>	@ <u>7.00</u>	<u>280.00</u>
MANIFOLD	@	
<u>Head Rental</u>	@	<u>280.00</u>
<u>Light Vehicle</u> <u>40</u>	@ <u>4.00</u>	<u>160.00</u>

TOTAL 3335.00

PLUG & FLOAT EQUIPMENT

<u>5 1/2</u>		
<u>1-AFU gradeshoe</u>		<u>349.00</u>
<u>1-Latchdam plug</u>	@	<u>277.00</u>
<u>20-scratchers</u>	@ <u>76.00</u>	<u>1520.00</u>
<u>12-ferbolizers</u>	@ <u>80.00</u>	<u>960.00</u>
	@	
	@	

TOTAL 3106.00

SALES TAX (If Any) _____

TOTAL CHARGES 17,552.45

DISCOUNT 20% IF PAID IN 30 DAYS

Net 14,041.96



DRILL STEM TEST REPORT

Woolsey Operating Company LLC

Nusser #1

125 North Market
Suite 1000
Wichita, Kansas 67202+1729
ATTN: Bill Klaver

11/35S/12W/Barber

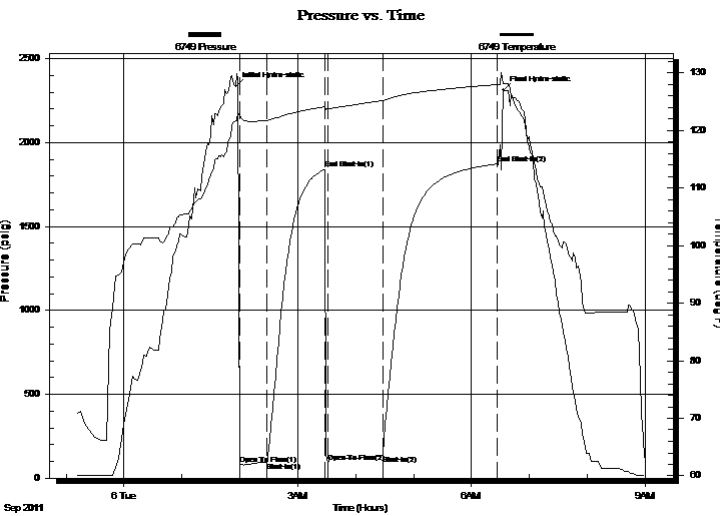
Job Ticket: 15845 **DST#: 1**
Test Start: 2011.09.05 @ 23:21:00

GENERAL INFORMATION:

Formation: **Mississippian**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:09:30
Time Test Ended: 09:10:30
Interval: **4829.00 ft (KB) To 4905.00 ft (KB) (TVD)**
Total Depth: 4905.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 1389.00 ft (KB)
1378.00 ft (CF)
KB to GR/CF: 11.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Pratt/98

Serial #: 6749 Inside
Press @ Run Depth: 1873.37 psig @ 4901.01 ft (KB) Capacity: 5000.00 psig
Start Date: 2011.09.05 End Date: 2011.09.06 Last Calib.: 2011.09.06
Start Time: 23:11:00 End Time: 09:00:30 Time On Btm: 2011.09.06 @ 01:56:00
Time Off Btm: 2011.09.06 @ 06:33:00

TEST COMMENT: 1ST Open 30 Minutes/Stong blow /Blow to bottom of bucket in 1 minute
1ST Shut In 60 Minutes/No blow back
2ND Open 60 Minutes/Stong blow /Blow to bottom of bucket at open/Gas to surface in 3 minutes
2ND Shut In 120 Minutes/Weak surface blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2334.80	121.64	Initial Hydro-static
4	85.11	122.52	Open To Flow (1)
33	96.43	121.75	Shut-In(1)
93	1842.52	124.10	End Shut-In(1)
95	94.34	123.73	Open To Flow (2)
152	134.66	125.19	Shut-In(2)
271	1873.37	127.97	End Shut-In(2)
277	2312.27	128.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
85.00	Lightly gassy Mud with show of oil	1.24
0.00	Gas 5% Mud 95%	0.00
95.00	light gas cut w atery mud w ith show oil	1.39
0.00	10% gas 25% water 65% mud	0.00
0.00	Recovery Chlorides 27000 ppm	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	9.00	14.50
Last Gas Rate	0.25	7.43	12.01
Max. Gas Rate	0.25	9.00	14.50



DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Company LLC

Nusser #1

125 North Market
Suite 1000
Wichita, Kansas 67202+1729
ATTN: Bill Klaver

11/35S/12W/Barber

Job Ticket: 15845

DST#: 1

Test Start: 2011.09.05 @ 23:21:00

Tool Information

Drill Pipe:	Length: 4805.00 ft	Diameter: 3.88 inches	Volume: 70.27 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 115000.0 lb
			<u>Total Volume: 70.27 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	4.75 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4829.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.01 ft			
Tool Length:	104.76 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			4805.25	
Hydraulic tool	5.00			4810.25	
Change over sub	0.75			4811.00	
Jars	6.00			4817.00	
Safety Joint	2.00			4819.00	
Packer	5.00			4824.00	28.75 Bottom Of Top Packer
Packer	5.00			4829.00	
Anchor	5.00			4834.00	
change over sub	0.65			4834.65	
drill pipe	30.71			4865.36	
change over sub	0.65			4866.01	
anchor	34.00			4900.01	
Recorder	1.00	6749	Inside	4901.01	
Recorder	1.00	6748	Outside	4902.01	
bull plug	3.00			4905.01	76.01 Bottom Packers & Anchor

Total Tool Length: 104.76



DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company LLC

Nusser #1

125 North Market
Suite 1000
Wichita, Kansas 67202+1729
ATTN: Bill Klaver

11/35S/12W/Barber

Job Ticket: 15845

DST#: 1

Test Start: 2011.09.05 @ 23:21:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 8.99 in³
Resistivity: ohm.m
Salinity: 3000.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

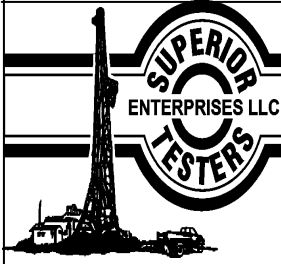
Length ft	Description	Volume bbl
85.00	Lightly gassy Mud w ith show of oil	1.243
0.00	Gas 5% Mud 95%	0.000
95.00	light gas cut w atery mud w ith show oil	1.389
0.00	10% gas 25% w ater 65% mud	0.000
0.00	Recovery Chlorides 27000 ppm	0.000

Total Length: 180.00 ft Total Volume: 2.632 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Company LLC

Nusser #1

125 North Market
Suite 1000
Wichita, Kansas 67202+1729
ATTN: Bill Klaver

11/35S/12W/Barber

Job Ticket: 15845

DST#: 1

Test Start: 2011.09.05 @ 23:21:00

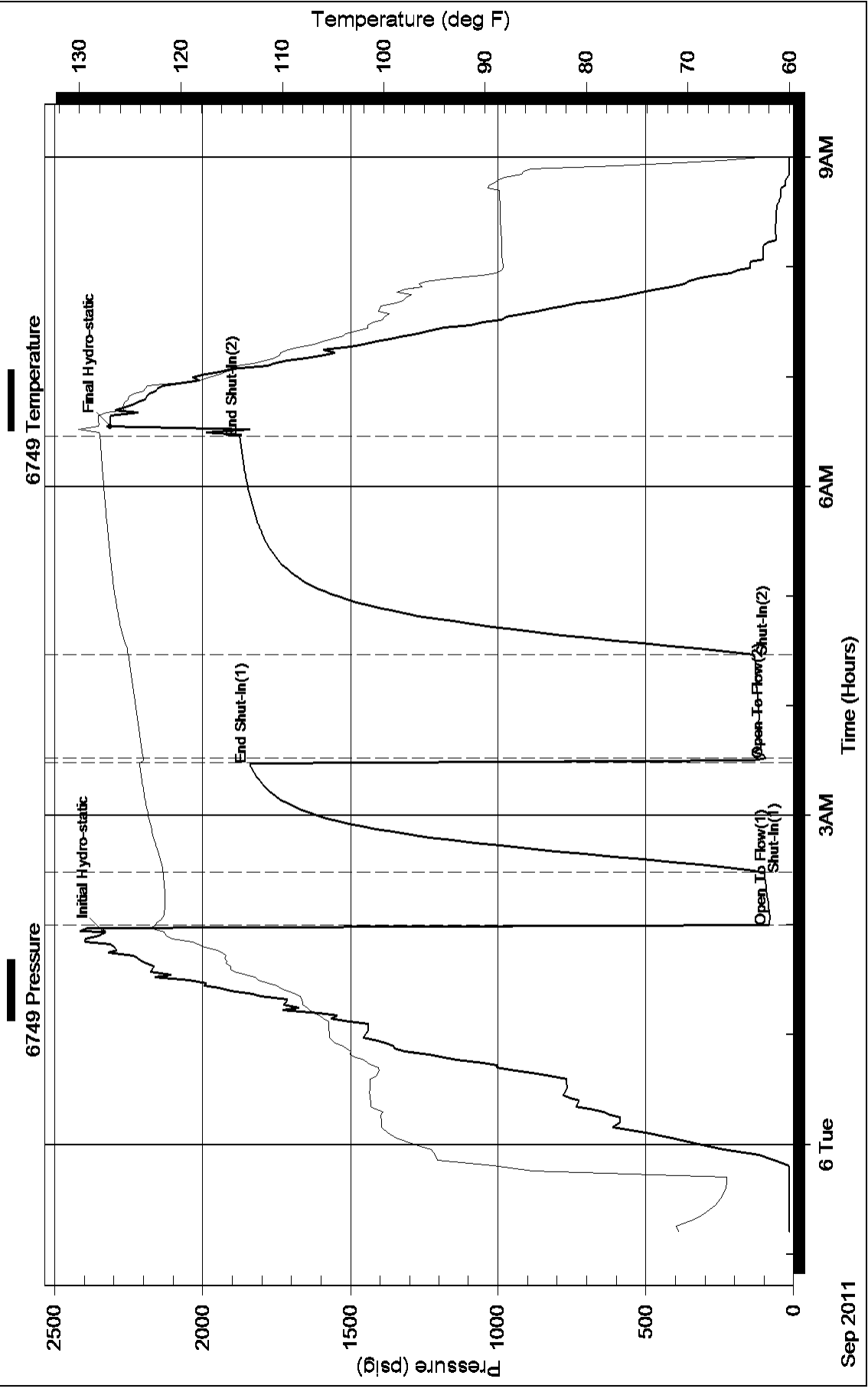
Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	5	0.25	9.00	14.50
2	10	0.25	8.35	13.47
2	20	0.25	7.90	12.76
2	30	0.25	7.62	12.31
2	40	0.25	7.50	12.12
2	50	0.25	7.43	12.01

Pressure vs. Time





Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: Nusser #1

Location: Section 11 Township 35 South - Range 15 West

License Number: 15-007-23749 00 00

Region: Barber Co. KS

Spud Date: August 26, 2011

Drilling Completed:

Surface Coordinates: 330' FSL, 330' FWL or SW1/4 SW1/4 SW1/4

Stranathan Field

Bottom Hole Coordinates: Verticle Hole

Ground Elevation (ft): 1378'

K.B. Elevation (ft): 1389'

Logged Interval (ft): 4000'

To:

Total Depth (ft):

Formation: Kansas City Group ----> Simpson Group

Type of Drilling Fluid: Chemical Mud Displaced at 3382'

Printed by MUD.LOG 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: Bill Klaver

Company: Woolsey Operating Co. LLC

Address: 125 N. Market, Wichita Kansas, 67202

COMMENTS

Surface Casing: Spud at 10 am on 8/26/2011. Set 5 joints of 10 3/4" X 32.75#/ft new casing at 220' KB (tally 207') w/240 sx Class A, 2% gel, 3% cc. Plug down at 6 pm on 8/26/2011. Cement did circulate.

Production Casing:

Deviation Surveys: 1/4 at 225', 1/4 at 1195', 1/2 at 1695', 1/4 at 2196', 1/2 at 2692', 1/2 at 3193', 1/2 at 3696', 1 at 4193', 1 at 4905',

Pipe Strap @ 4905', Strap: 4908.44', Board: 4909.89'. Strap 1.45' short, no correction was made to the board.

Duke Drilling Rig 10 Bit Record:

#1 14 3/4" HTC RR in at 0' out at 225', 225' in 2.5 hours.

#2 7 7/8" Varel HE 21 in at 225', out at

#3 7 7/8" Varel HE 29

Gas Detector: Woolsey Operating Co. Gas Trailer #2

Mud System: Mud-Co. Brad Bortz, Engineer

Open Hole Tests: Trilobite

OH Logs: Superior Well Service: Dual Induction Laterolog w/SP, CNL-FDC w/PE, Gamma Ray and Caliper.

In House Geologist: Brian Wilhite.

DSTs

DST #1 Mississippi, 4829'-4905', 30"-60"-60"-120". Strong blow, BOB one minute into IFP. Strong blow GTS 3 minutes into FFP. Rec: 85' SGCM w/SSO (5%G, 95%M), 95' SGCWM w/SSO (10%G, 65%M, 25%W). Recovery chlorides were 27,000 ppm. IHP 2337, IFP 83-96, ISIP 1842, FFP 94-130, FSIP 1870, FHP 2315. BHT 126 degrees. FFP: 5" 14.50 MCF, 10" 13.47 MCF, 20" 12.76 MCF, 30" 12.31 MCF, 40" 12.12 MCF, 50-60" 12.01 MCF

CREWS

Scott Edwards, Tool Pusher

Alex Ordonez, Days

Colby Crawford, Evening

Chad Hallmark, Morning

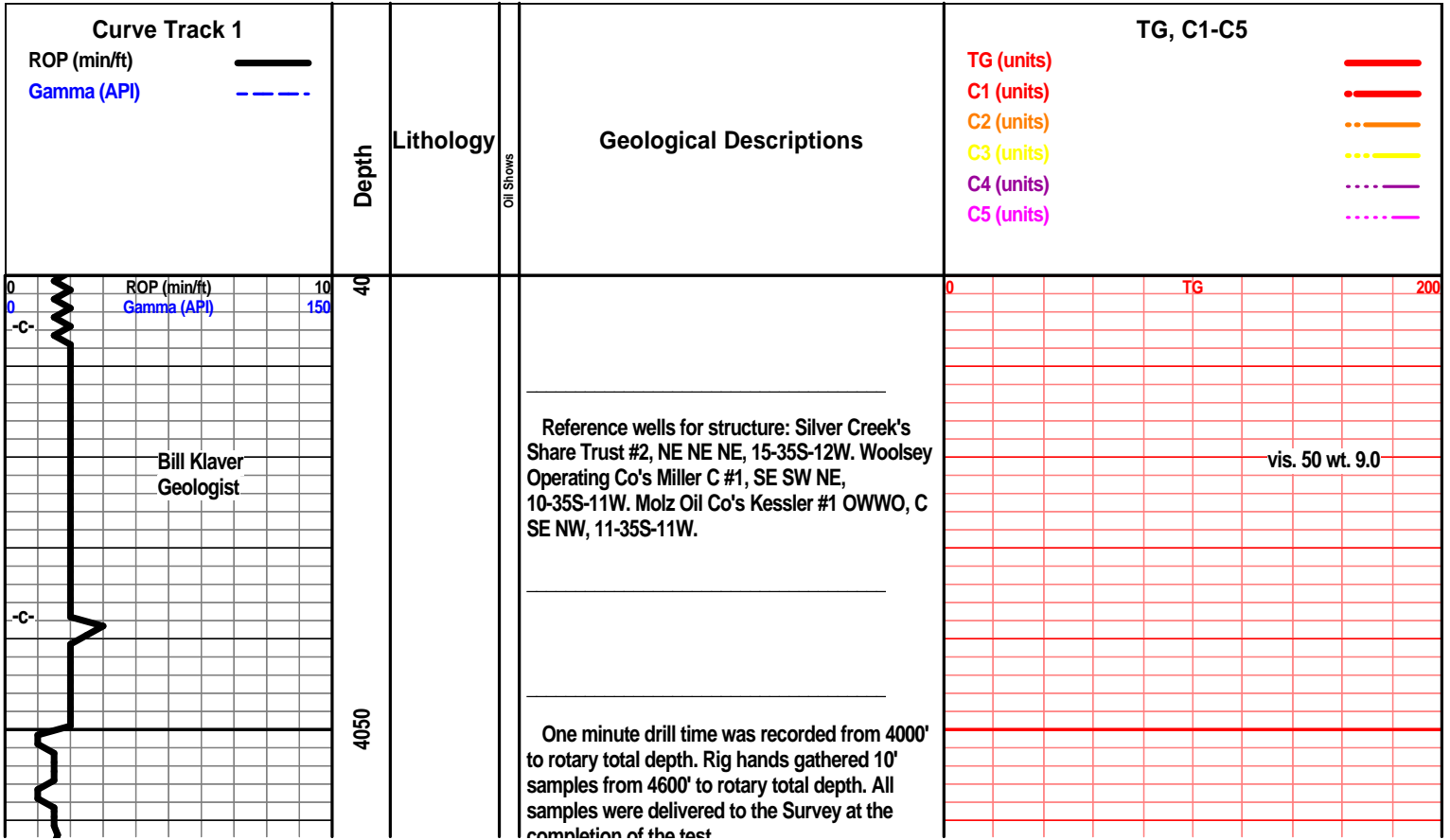
Ron Burns, Relief

ROCK TYPES

Anhy Bent Brec Cht Clyst Coal	Congl Sdy dolo Shy dolo Dol Gyp Sdy lmst	Lmst Mrlst Salt Shale Sltst Ss	Black sh Gry sh Shale Shyslstst Sltysh
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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 Silty FOSSIL Algae Amph Belm Bioclst Brach Bryozoa Cephal Coral Crin Echin Fish Foram Fossil Gastro Oolite Ostra	Pelec Pellet Pisolite Plant Strom Fuss Oomoldic STRINGER Anhy Arg Bent Coal Dol Gyp Ls Mrst Sltstgr Ssstgr Carbsh Clystn Dol	Grysh Gryslt Lms Sandylms Sh Sltstn TEXTURE Boundst Chalky Cryxln Earthy Finexln Grainst Lithogr Microxln Mudst Packst Wackst
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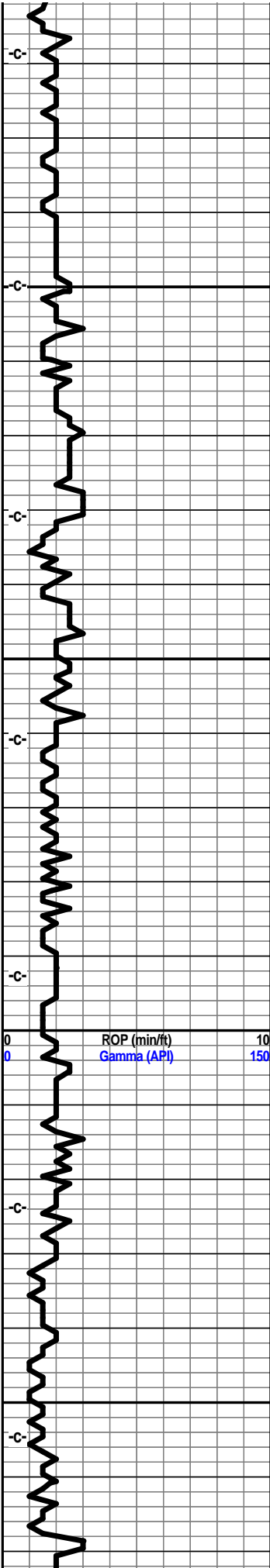


Completion of the test.

7 am Prograss:

- August 25, 2011 MIRT
- August 26, 2011 SPUD 10 am
- August 27, 2011 Drilling at 452'
- August 28, 2011 Rig repairs at 1540'
- August 29, 2011 Down-rig repairs
- August 30, 2011 Down-rig repairs
- August 31, 2011 Drilling at 1638'
- September 1, 2011 Drilling at 2353'
- September 2, 2011 Drilling at 3105'
- September 3, 2011 Drilling at 3696'
- September 4, 2011 Drilling at 4311'
- September 5, 2011 Drilling at 4698'
- September 6, 2011 DST #1 at 4905'
- September 7, 2011 Drilling at 5118'
- September 8, 2011 CFS at 5370'
- September 9, 2011
- September 10, 2011

- E-Log Tops
- Herington
- Onaga
- Wabaunsee
- LeCompton
- Kanwaka
- Elgin Sand
- Heebner
- Toronto
- Douglas Grp
- Douglas Shl
- Haskell
- Stalnaker
- Quindaro
- Kansas City 'F'
- Kansas City 'G'
- Stark
- Swope
- Hushpuckney
- Hertha
- B/Kansas City
- Pawnee
- Cherokee Grp
- Cherokee Sand



4100

4150

4200

4250

vis. 50 wt. 9.0

Main hoisting clutch shaft, bearings and sprocket out.

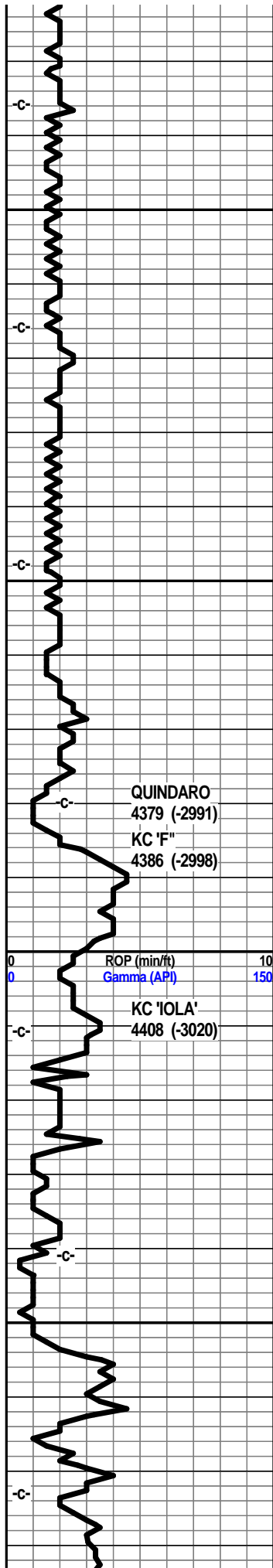
vis. 50 wt. 9.0

vis. 70 wt. 8.9

TG

vis. 58 wt 8.9

vis. 56 wt 9.0

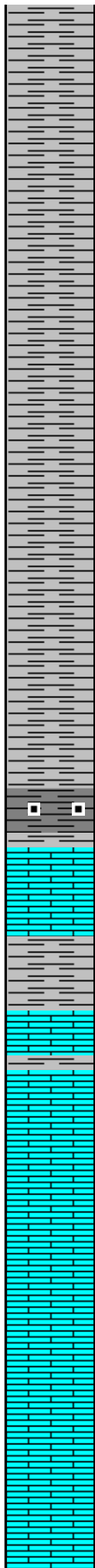


4300

4350

4400

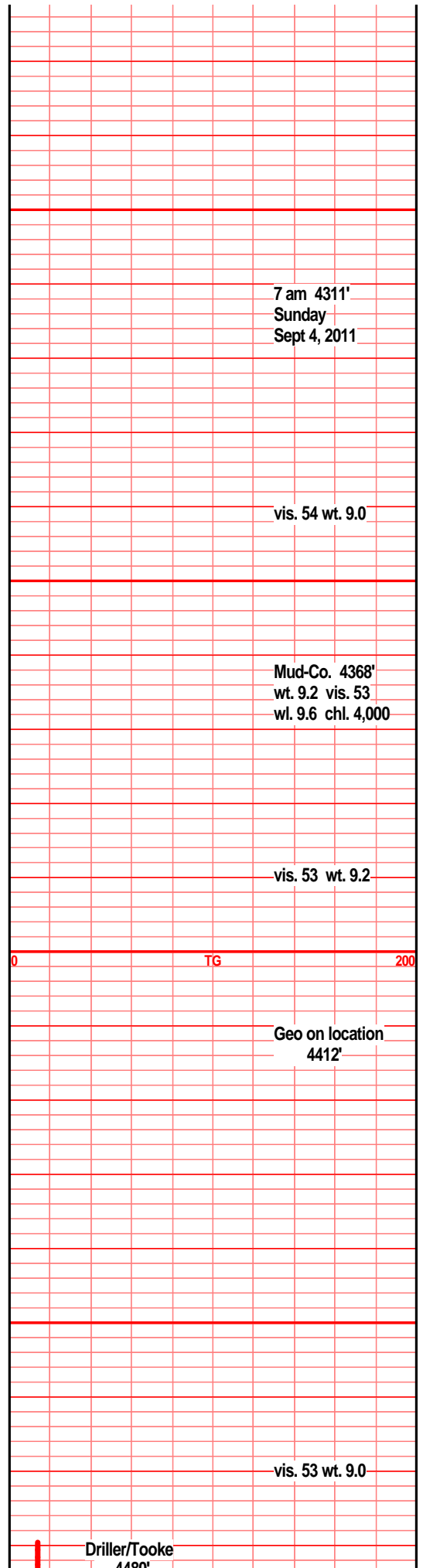
4450

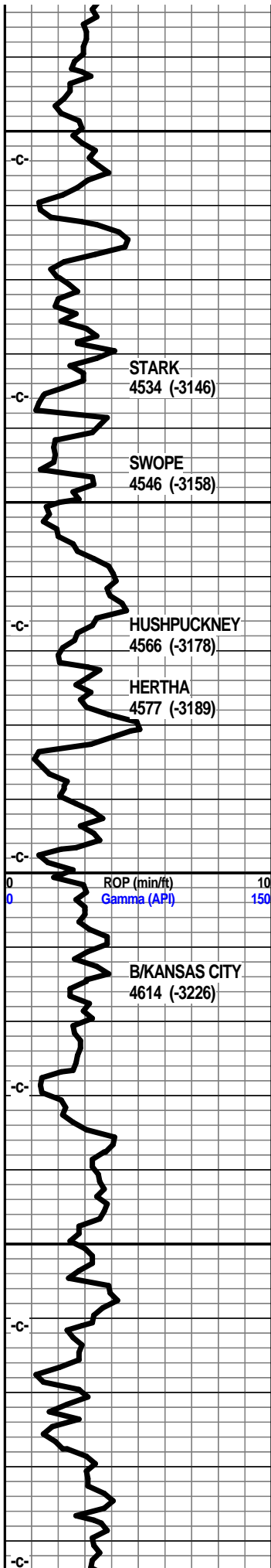


- Mississippi
- C4
- C3
- C2A
- C2
- C1
- Osage
- Northview Shl
- Compton
- Kinderhook
- Woodford
- Misener Sand
- Maquoketa
- Viola
- Simpson Grp
- Wilcox Sand
- McLish Shl

Oil & Gas Show Legend

- Gas
- Even Stain/Saturation
- Spotten Stain/Saturation
- Questionable
- Dead/Gilsonitic





lst crm tan lt brn in prt, f sli med xln gran sub chlky calc xln fill, foss frags, micro ool, gritty gran in prt

lst tan crm brn f med xln blk ang gran sub chlky foss frags, calc xln fill crumbly, shl gry drk gry brn calc

shl gry, gry brn, silty calc, lst tan gry brn f xln dns hrd blk ang arg silty, gritty, sndy in prt

shl gry drk gry brn silty gritty calc, lst tan gry brn vf xln dns hrd gran arg silty

shl gry blk, drk gry gritty calc, lst tan drk gry brn vf xln dns hrd blk arg silty gritty gran

lst tan buff lt brn f vf xln dns hrd blk, tr sub chlky, foss frags, calc xln fill, micro ool, sbun gry gry blk brn gritty calc shls

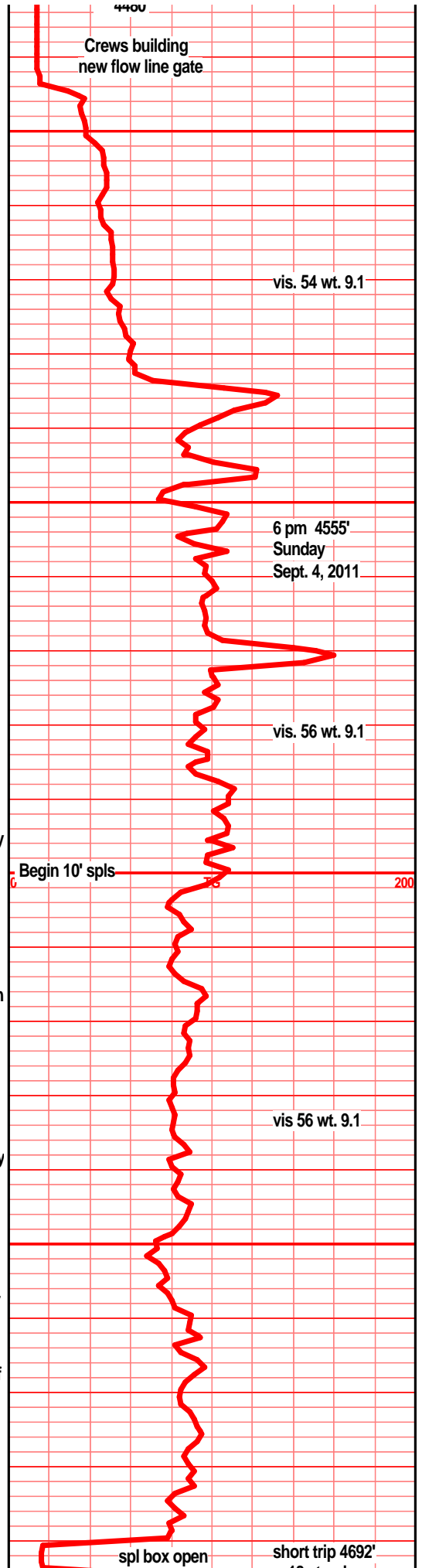
lst crm off wht tan, tr green tint, vf xln blk ang hrd dns, sub chlky, arg, shl gry brn calc silty gritty

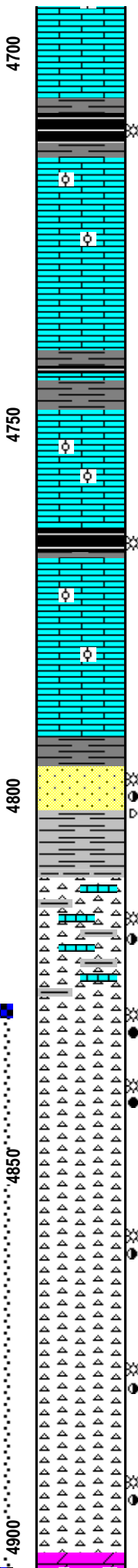
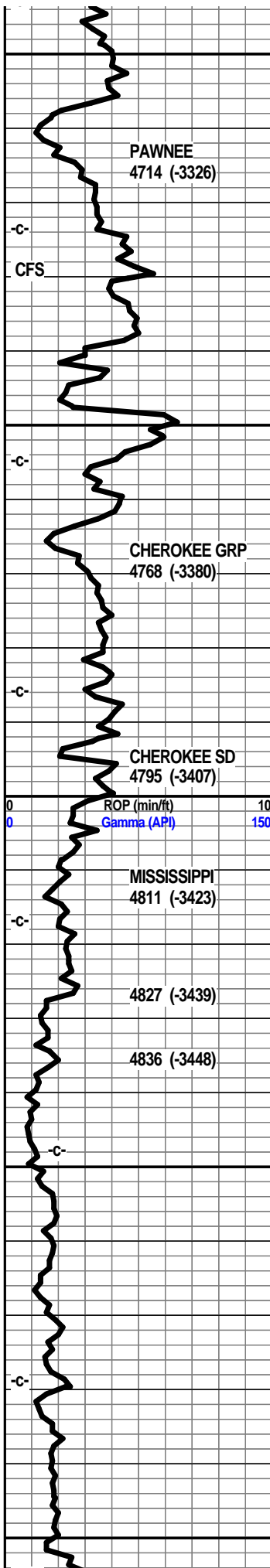
lst lt gry/green, tan buff, f vf xln arg silty gritty, tr soft gran, shl gry green silty calc, soft mushy

shl gry drk gry blk semi carb, lst tan buff crm f vf xln blk ang dns, sub chlky micro foss frags

shl gry drk gry calc silty, lst crm buff tan f vf xln blk ang, sub chlky, foss frags, micro foss, tr calc xln fill

lst crm buff tan f vf xln blk ang sub chlky, foss frags, micro foss/ool oomoldic,





lst crm buff tan f vf xln bky ang dns hrd, sub chlky in prt, tr calc fill, micro foss frags, micro ool,
shl med gry, gry blk, silty gritty, shl blk semi carb, carb in prt, blk ang pcs, tr gas bubs

lst tan buff gry vf xln blk ang dns hrd, sub chlky tr calc xln fill, micro foss, micro ool,

lst crm buff off wht, f xln blk ang dns, tr sub chlky, foss frags, micro foss in prt, ool, pelletal, calc xln fill NS

shl gry, drk gry blk, carb in prt, lst tan buff off wht f xln dns hrd blk sub chlky foss frags, calc xln fill

shl gry silty calc, lst tanbrn f vf xln dns hrd blk dns arg silty, tr sub chlky gran gritty

lst crm buff gry f vf lxn blk dns hrd, micro foss frags, calc xln fill, mstly tan buff vf xln blk dns hrd

shl drk gry blk, blk carb, gas bubs, lst tan buff lt gry vf xln dns hrd blk sub chlky micro foss frags, calc xln fill

lst tan buff lt gry f vf xln ang blk pcs, tr sub chlky micro foss frags, calc fill, tr arg silty

lst tan buff lt gry f vf xln dns hrd sub chlky gritty gran, tr micro foss

shl gry drk gry blk, blk carb, wxy grsy, gas bubs, 4820' spl >> sst clr/drk brn-blk clstrs, vf grnd, sub ang grns, w/srtd, v-well cem, hrd blk clstrs, quartzitic, text, sst aa, wht brn mott, calc, hrd dns, tr blk flky stain, gas bubs, nodor

chrt wht off wht, lt gry, smokey, frsh shrp opa, transl, blk, tr weath edge, tr blk stain, tr gas bub, frac por, nodor, gry green silty gritty shls, lst tan wht green tint, vf xln blk ang dns tr chlky

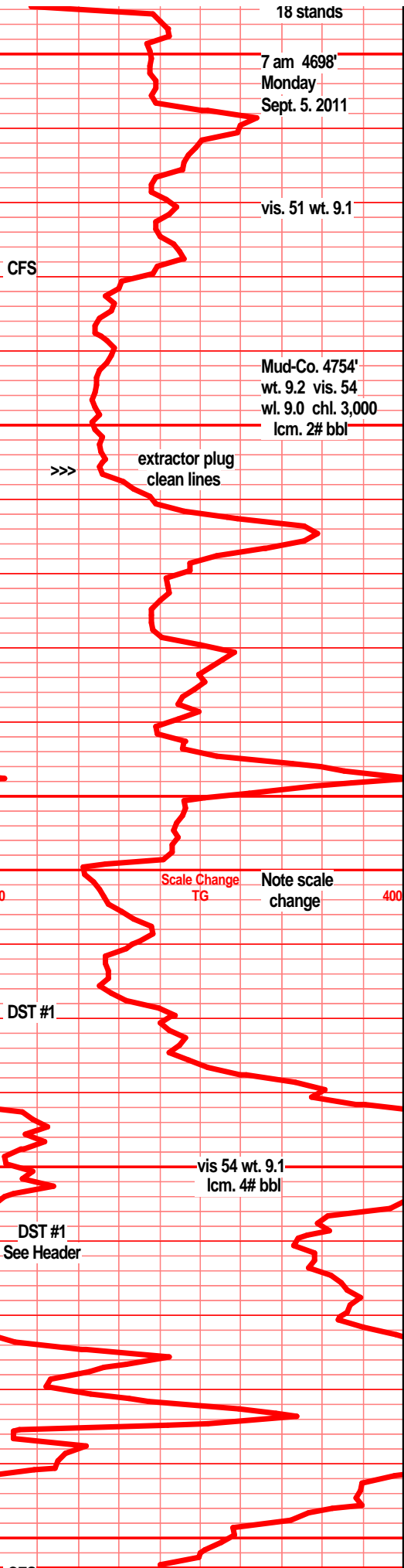
chrt wht off wht lt gry smokey, frsh shrp opa blk ang pcs, tr weath/text edge, sli pp/moldic por, frac por, sli odor, blk stain, gas bubs, gry green tint limy chrt, soft chlky

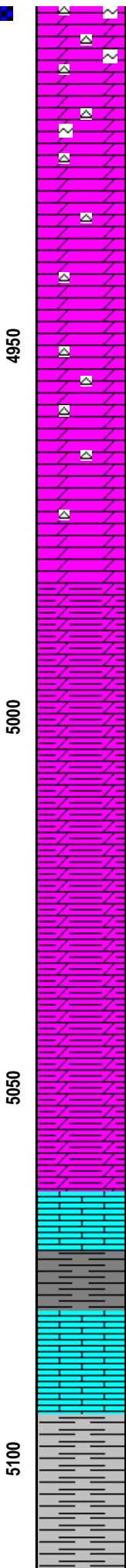
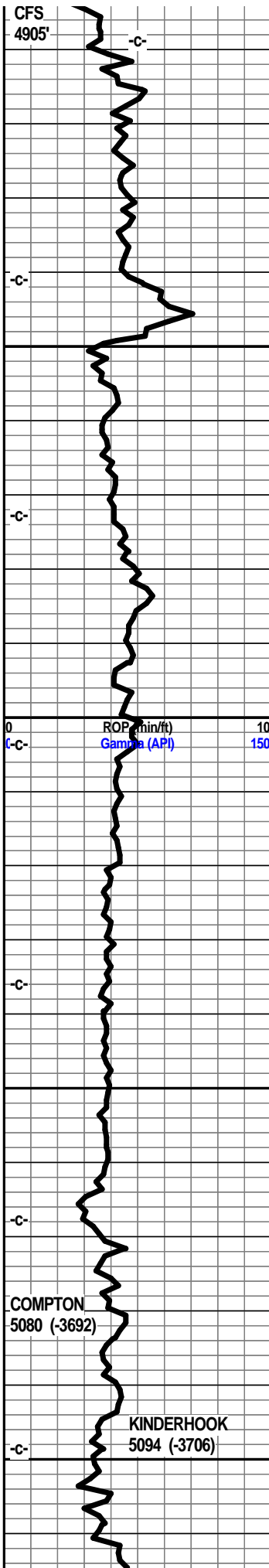
chrt off wht lt gry shrp frsh opa aa, weath text edge aa, chrt lt gry tan mottled, gran, tr spongy text, weath trip text, gd vug/moldic por, incr/gd odor, abun gas bubs, dull UV, filmy SFO on spl wtr, floating oil in spl cup

chrt wht tan lt gry, smokey, shrp frsh blk ang pcs, opa transl, weath trip text edge, pp/moldic por, frac por, even stain, SFO, abun gas bubs, fair/gd odor, dull UV,

chrt wht off wht lt gry smokey, shrp frsh opa, transl (incr frsh chrt in 4900' spl) w/weath trip text edge, w/gd pp/moldic por, frac por, fair to gd odor, SFO, gas bubs, dull UV, free oil in tray and spl cup

chrt wht off wht lt gry, shrp frsh opa, blk ang pcs, (incr frsh chrt w/depth), w/weath trip text edge, fair pp/moldic por, frac por, sli odor?, even stain, SFO, gas bubs, dull UV.





dolo sh with lt tan v xln gritty, shly text, dry ang pcs, tr glau, chrt wht shrp frsh opa, tr edge stain, SSFO, tr gas bubs nodor

dolo off wht lt gry/green tinted, f vf xln silic in prt, sndy gritty text, glau in prt, chrt wht shrp frsh opa, tr edge stain, VSSFO, tr gas nodor

dolo off wht bec lt gry/gry vf xln gran tr silic, blk ang pcs, tr glau, tr chrt wht shrp frsh opa

dolo drk tan lt gry f vf xln gran blk dn tr silty, tr silic text, gritty, calc/silty in prt, tr glau

dolo gry med gry vf xln gran gritty silty, shly in prt, arg, silic text in prt, mstly dns gritty hard

dolo gry med gry vf xln gran arg silty tr silc pcs, mstly silty shly gritty cacl dolostn

dolo gry meed drk gry f vf xln gran hrd blk pcs, silty gritty, tr silic text, calc dolostn

dolo gry med/drk gry vf xln dilty gritty arg, calc dolostn in prt, tr chrt gry shrp frsh opa

dolo gry med/drk gry silty gritty gran arg shl dolo shl, drk gry silty gritty calc

dolo, drk gry silty shly gritty calc in prt, mstly dns silty dolostns

dolo, silty shly gritty dolostn, calc in prt, gry med to drk gry, tr silic text

shl, calc silty dolo shls, drk gry, silty gritty gran, silic in prt, arg

dolostn drk med to drk gry vf xln silty gritty arg, calc, chrt gry shrp frsh opa

dolostn, med gry to drk gry silty gritty silic in prt, calc, arg dns hrd

dolo, silty shly dolo, vf xln gran gritty silty, calc, calc silty gritty shl, silic text in prt, dns

dolostn, drk gry vf xln gritty calc dns hrd blk pcs, shl drk gry silty gritty calc

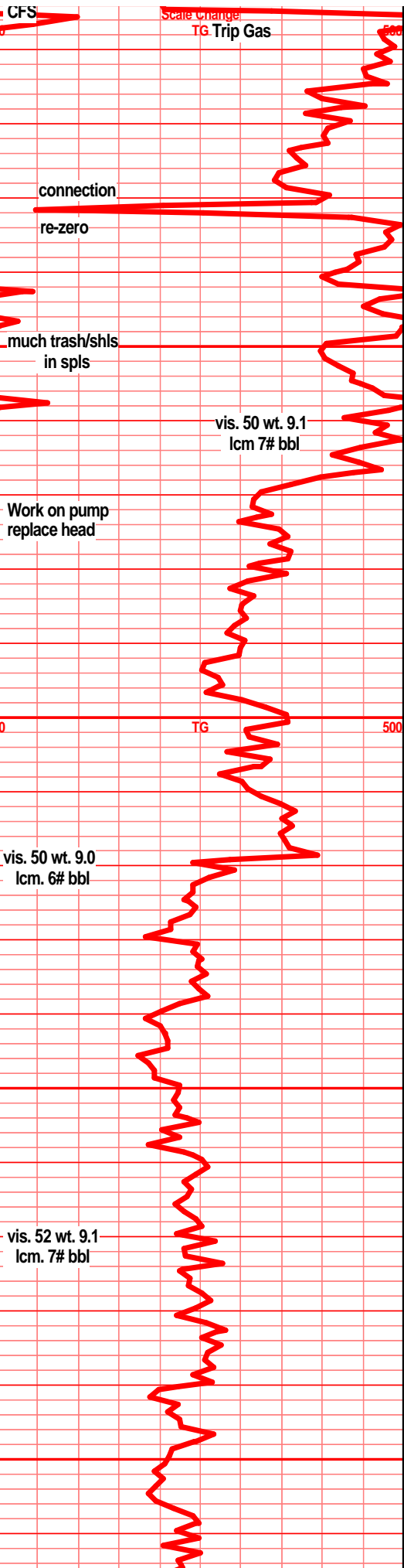
lst wht f xln blk ang dns hrd tr glau, tr calc inclu, tr chrt wht clr shrp frsh opa transl

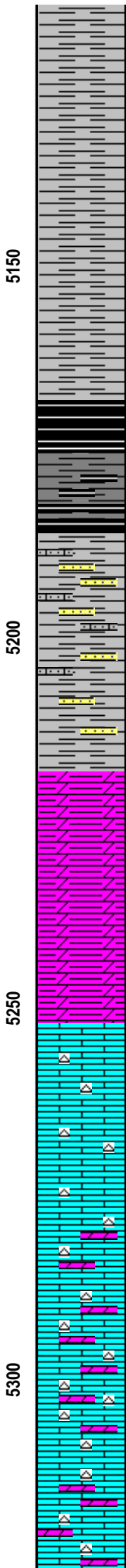
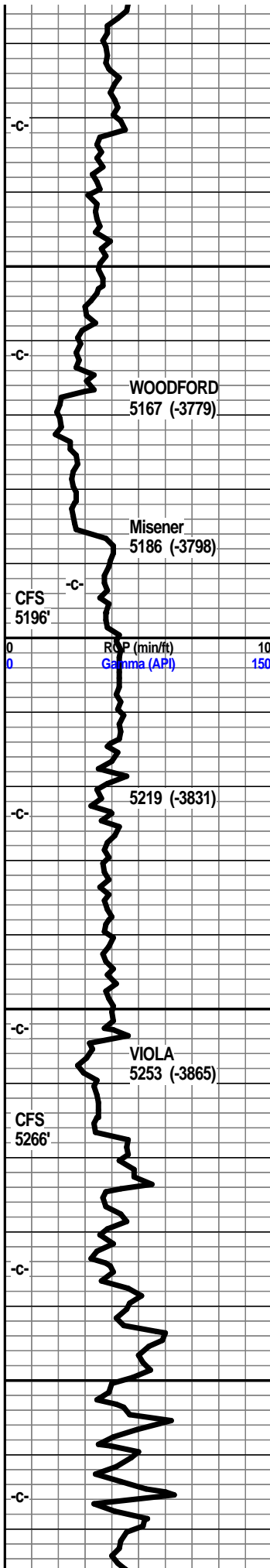
shl gry, gry/green drk green silty gritty calc in prt, lst wht off wht f vf xln dns hrd, blk calc inclu

lst wht off wht f sli med xln blk ang flky pcs, tr sub chky, foss frags, pelletal, tr ool, chrt wht shrp frsh opa transl in prt

shl drk gry blk, blk ang pcs, silty,

shl gry blk, gry drk green blk.





shl med gry, drk gry brn, drk brn blk, tr drk green tint, gritty, sndy in prt, tr gas bubs, filmy gilson stain

shl drk gry, drk reddish brn blk shls, silty gritty pyritic

shl drk gry, drk brn/reddish brn blk silty gritty pyritic, bedded, banded

shl drk gry/brn, brn/blk tr green tint silty gritty tr gas

shl gry dkr gry, gry drk green tint, reddish blk, platy, bedded, silty, pyritic

shl drk red/brn, drk red/blk in prt, silty gritty, carb in prt, abun gas bubs, copper/pyritic inclu

shl drk brn/blk, reddish brn/blk, silty gritty, carb in prt, abun gas, pyritic, filmy cond w/gas bubs

shl gry lt gry, silty, gritty, calc in prt, snd grn inclu, rded grns prly srted, soft, hvy pyrite fill, tr gas bubs, sst off wht lt gry clstrs f grnd prly srted, tite, calc fill, limy, pyritic, clay/min fill NS

shl gry, lt gry green, silty gritty, snd grn inclu, pyritic, tr sst wht off wht clstrs, f grnd, ang grns, sub fria to tite blk ang clstrs, prly srted, v pyritic, clay/min fill

sst lt gry, pale green clstrs, f grnd, ang grns, prly srted, fria to tiet, hvy clay fill, much pyrite, min fill

dolostn/dolo shls, gry drk gry green, silty gritty, sndy text, shls red brn, brn blk, silty gritty pyritic, silty semi carb text, gas bubs

dolo silty dolo, drk brn/red, drk red/blk, f vf xln blk ang dns hrd massive pcs, gritty sndy text, tr gas bubs NVP

dolo silty shly dolo, drk gry, brn/red/blk aa, f vf xln gritty sndy text, blk dns ang pcs, tr gas bubs

lst wht off wht, wht w/lt gry tint, f sli med xln blk flky, tr sub chlky tr foss frags, pelletal, inter xln por, NS, tr chrt wht opaqr shrp frsh tr glau, tr pyritic

lst off wht wht/gry mott f sli med xln blk flky ang tr sub chlky, foss frags, inter xln por, pyritic, chrt wht shrp frsh

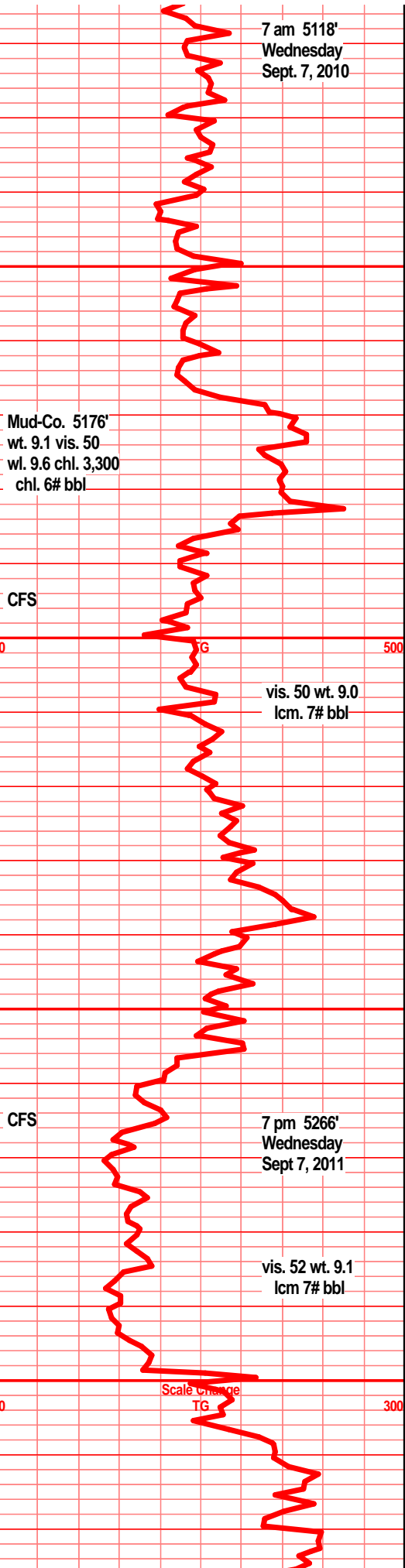
lst aa, lst/bec dolo in prt, tan off wht f vf xln gritty gran sub chlky chrty, tr foss frags tr min fill, chrt tan shrp frsh

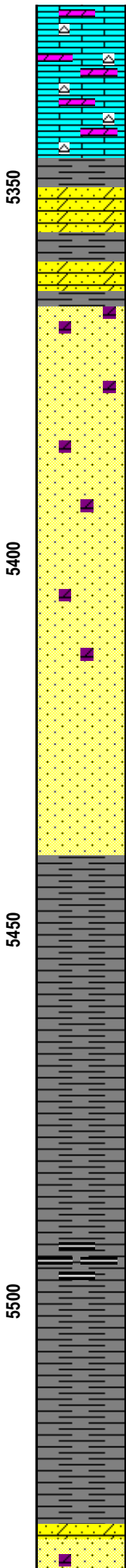
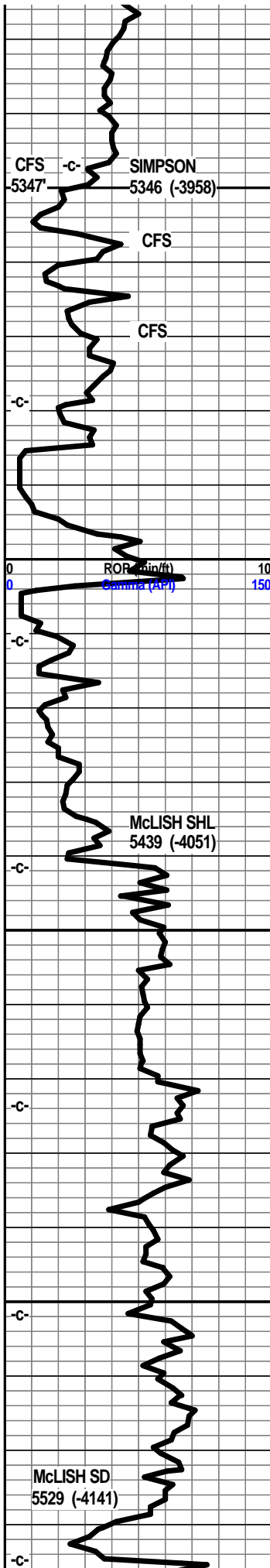
lst, dolo in prt, tan lt brn f vf xln gran gritty ang blk, tr sub chlky, chrty, chrt dull tan brn shrp frsh opaqr foss

lst, dolo in prt, tan lt brn f vf xln gran gritty blk pcs, chrty, chrt dull tan gry shrp frsh opaqr foss, incr chrt w/depth

lst dolo in prt, tan crm lt brn f vf xln gritty gran sub chlky tr foss, much chrt, dull tan gry shrp frsh

lst dolo aa no change incr dull tan, gry chrt, shrp frsh opaqr foss





lst dolo in prt, f vf xln gritty sub chlky, gran, blkly ang chrt, chrt dull gry/tan shrp frsh foss opa

lst crm tan lt brn f med xln blkly ang pcs, crs xln in prt, dolo drk tan brn vf xln dns blkly hrd pcs, tr inter xln por, chrt tan brn shrp frsh, tr tan green mott calc lst f xln, w/clr snd grn inclu

sst clr lt grn clstrs f grnd, ang/sub ang grns, prly srted, w/cem, dolo fill, crs rhom xstl incu, gas bubs, lt brn oil smears, nodor, SSFO

sst off wht lt tan clstrs, f grnd, sub ang grns, prly srted, sub fria to tite, tr xln fill, tr clay fill, min fill, dolo in prt, tr inter grn por, nodor, gas bubs, lt brn oil smears, VSSFO, tr lt transi SFO

sst off wht tan clstrs, f grnd sub ang grns, fair to prly srted, sub fria to tite mstly w/cem, min fill clay fill, tr rhom xln fill, dolo in prt, pyritic

sst wht off wht tr lt tan clstrs, f grnd, sub rded grns, fair/well srted, well cem, mstly sub fria, w/silic cem, tr lt brn dolo xln fill, tr min fill

sst wht tan clstrs, f grnd sub rded grns, fair/poorly srted, f/cem, fria, tr well cem, tr min fill, tr clay fill

sst wht off wht clstrs, tr tan, f grnd sub rded grns, w/srted, sub fria, gran, prly to fair cem, silic cem, tr min fill tr pyritic, tr blk flky stain

sst aa, sst off wht wht clstrs, f vf grnd, sub rded grns, f/well srted, sub fria, gran, silic fill, tr min fill, mstly soft fria,

shl drk gry, gry/green teal green silty slick, snd grn inclu, pyritic

shl gry gry green, teal green silty slick, pyritic in prt tr snd grn inclu

shl gry lt gry green teal green, silty snd grn inclu, pyritic, bedded

shl gry gry green teal green silty wxy grsy, pyritic, snd grn inclu

shl lt gry, gry, gry green, teal green silty wxy grsy, slick, bedded, pyritic bands, snd grn inclu

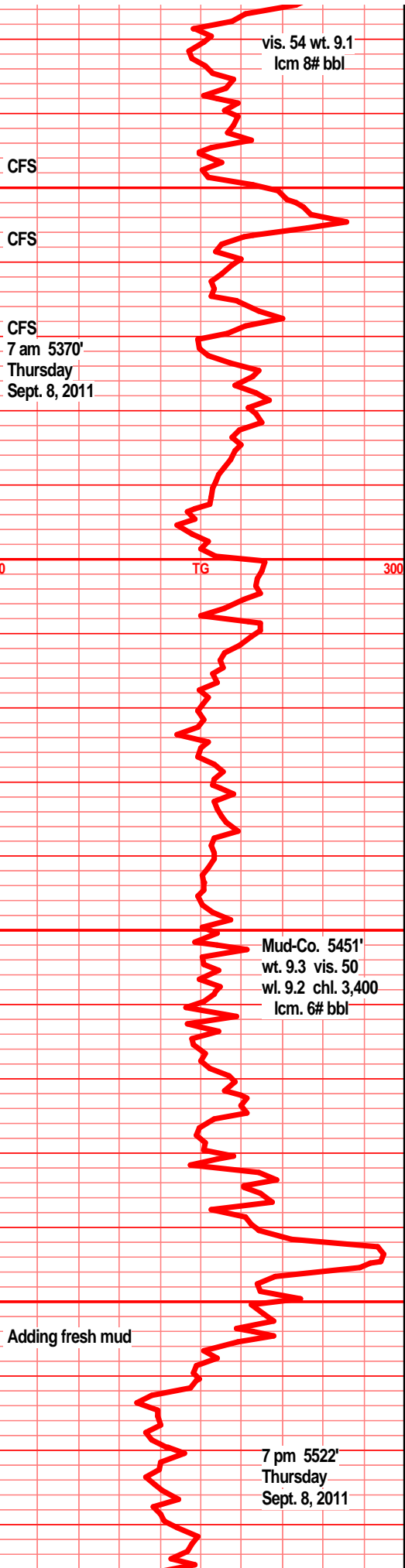
shl gry, drk gry silty, gritty, sndy, snd grn inclu, much glau fill

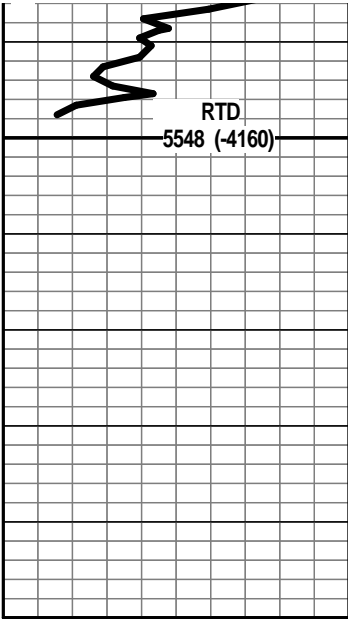
shl gry, drk gry silty gritty sndy, snd grn inclu, much glau fill, shl drk gry, blk semi carb, blkly ang pcs, abun gas bubs

shl gry drk gry tr green silty gritty ratty, pyritic, splintery, tr snd grn inclu, glau

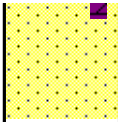
shl gry drk gry, drk gry green, teal green, silty, wxy grsy in prt, splintery, snd grn inclu, glau

sst gry med gry clstrs, green tint in prt, f grnd, ang grns, prly srted, non-fria, blkly tite dns clstrs, qtz text, hvy min fill, clay fill, pyritic, glau





5550



sst lt gry gry clstrs f vf grnd sub ang grns, prly
srted, w/cem, tr fria, mstly non fria, silic cem,
dolo in prt, blkly ang hrd clstrs, tr pyritic, min fill,
glau

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