

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1247929
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: _____

1247929

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 <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 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
<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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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

6276

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124 JUN 06 2015

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	12-04-14	Sec.	12	Twp.	35s	Range	12w	County	Barber	State	KS	On Location	9:45 PM	Finish	12:30 AM
Lease	Sten N Bengen		Well No.	B-4		Location									
Contractor										Owner					
Fossil #3										Woolsey					
Type Job										To Quality Well Service, Inc.					
Surface										You are hereby requested to rent cementing equipment and furnish					
Hole Size										cementer and helper to assist owner or contractor to do work as listed.					
17 1/2										Charge					
Csg.										To					
13 3/4										Woolsey					
Tbg. Size										Street					
										Depth					
										13 3/8"					
Tool										City					
										State					
Cement Left in Csg.										The above was done to satisfaction and supervision of owner agent or contractor.					
20'										Cement Amount Ordered					
Meas Line										300sx class A + 3 1/2cc + 2%					
Displace										29 BBLs Fresh					

EQUIPMENT

Pumptrk	8	No.	David B	Common	300
Bulktrk	7	No.	Mike B	Poz. Mix	
Bulktrk		No.		Gel.	6
Pickup		No.	D Felio	Calcium	11

WELL FILE

JOB SERVICES & REMARKS

Rat Hole	Hulls	Regulatory Correspondence
Mouse Hole	Salt	Drig / Comp Workover
Centralizers	Flowseal	Tests / Meters Operations
Baskets	Kol-Seal	
D/V or Port Collar	Mud CLR 48	
Pipe on Bttm, Break Circ w/ truck	Sand	
Pump 5 BBLs Spacer, Mix 300sx A+2 1/2	Handling	317
Start Disp. w/ Fresh H ₂ O, wash up to truck, see steady increase in PST, slow rate, stop Pump at 29 BBLs total Disp., Shut in, Cement Did Circ	Mileage	20

FLOAT EQUIPMENT

Guide Shoe	LMV	20
Centralizer	Service Supervisor	
Baskets	Pumptrk Charge	Surface
AFU Inserts	Mileage	20 x 2
Float Shoe		
Latch Down		

X Signature	Tax	
	Discount	
	Total Charge	

ALLIED OIL & GAS SERVICES, LLC 065081

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Medicine Lake KS

DATE <u>12-10-11</u>	SEC <u>12</u>	TWP <u>35S</u>	RANGE <u>12W</u>	CALLED OUT	ON LOCATION <u>8:00 PM</u>	JOB START	JOB FINISH
STERN BESSER LEASE	WELL # <u>03 #4</u>	LOCATION <u>1/2 East of hardsmes KS</u>			COUNTY <u>Barber</u>	STATE <u>K.S.</u>	
OLD OR (NEW) (Circle one)		<u>South into</u>					

CONTRACTOR Fossil Drilling
 TYPE OF JOB Production
 HOLE SIZE 7 7/8 T.D.
 CASING SIZE 5 1/2 DEPTH 5,053
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT 16 FT
 CEMENT LEFT IN CSG. 45 FT
 PERFS.
 DISPLACEMENT

OWNER Woolsey

CEMENT
 AMOUNT ORDERED 90SKS 60% 40% 2% Seal
100 SKS class H + 10% E/F Seal 10% salt
+ 6% Kol Seal 18% f 1100 + 1/4" Flaseal

COMMON H <u>100%</u>	@ <u>27.74</u>	<u>2774.00</u>
POZMIX	@ <u>DEC 30 2011</u>	
GEL	@	
CHLORIDE	@	
ASC	@	
<u>60:40: 4% Seal 90 SX</u>	@ <u>18.43</u>	<u>1658.70</u>
<u>Flaseal 940 #</u>	@ <u>.88</u>	<u>827.20</u>
<u>salt 540 #</u>	@ <u>.68</u>	<u>367.20</u>
<u>Kol Seal 600 #</u>	@ <u>.98</u>	<u>588.00</u>
<u>Flaseal 25 #</u>	@ <u>2.97</u>	<u>74.25</u>
<u>Class H 12 seal's</u>	@ <u>34.40</u>	<u>412.80</u>
<u>f-160 75 #</u>	@ <u>18.70</u>	<u>1417.50</u>
HANDLING	@	
MILEAGE	@	

EQUIPMENT

PUMP TRUCK CEMENTER Sustin Owner
 # 892/555 HELPER TJ
 BULK TRUCK
 # DRIVER Paul
 BULK TRUCK
 # DRIVER

REMARKS:

20% 1,613.93 TOTAL 8069.65

SERVICE

DEPTH OF JOB <u>5,053</u>		
PUMP TRUCK CHARGE <u>3099.25</u>		
EXTRA FOOTAGE <u>LV 20</u>	@ <u>4.40</u>	<u>88.00</u>
MILEAGE <u>20</u>	@ <u>7.70</u>	<u>154.00</u>
MANIFOLD	@	<u>275.00</u>
Handling <u>230.94</u>	@ <u>2.48</u>	<u>572.73</u>
mileage <u>176.29</u>	@ <u>2.75</u>	<u>484.79</u>

20% = 945.74 TOTAL 4,728.73

PLUG & FLOAT EQUIPMENT

<u>1 Air float shoe</u>	@	<u>545.00</u>
<u>1 - Hatch Down plug</u>	@	<u>660.00</u>
<u>2 - Turbo lifters</u>	@ <u>95.00</u>	<u>190.00</u>
<u>16 - scrapers</u>	@ <u>89.00</u>	<u>1424.00</u>

TOTAL 3294.00

SALES TAX (If Any) _____
 TOTAL CHARGES 16,092.38
 DISCOUNT 13,532.70 IF PAID IN 30 DAYS

CHARGE TO: Woolsey
 STREET _____
 CITY _____ STATE _____ ZIP _____

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.

PRINTED NAME MIKE THARP
 SIGNATURE [Signature]

WELL FILE

Regulatory Correspondence
 Drig / Comp Workovers
 Tests / Meters Operations



Woolsey Operating Company, LLC

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

Well Name: STERNBERGER 'B' #4
Location: Section 12 - Township 35 South - Range 12 West
License Number: 15-007-24259-00-00 Region: Barber County, Kansas
Spud Date: December 4, 2014 Drilling Completed: December 10, 2014
Surface Coordinates: Approx. S 1/2 N 1/2 NW SW
2010' FSL and 660' FWL

Bottom Hole
Coordinates:
Ground Elevation (ft): 1383' K.B. Elevation (ft): 1395'
Logged Interval (ft): 4200' To: 5075' Total Depth (ft): 5075'
Formation: Kansas City ----> Mississippian
Type of Drilling Fluid: Chemical Mud

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 5 pm on 12/4/2014. Set 5 joints of 13 3/8" X 48#/ft new casing at 217' (tally 200.46') with 300 sx Class A, 2% gel, 3% cc (by Allied). Cement did circulate. Plug down at 12:30 am on 12/5/2014.

Production Casing: 5 1/2" X 16.5#/ft

Deviation Surveys: 3/4 at 217', 1/4 at 1108', 1/2 at 1581', 3/4 at 2118', 0 at 2625', 1/4 at 3101', 1/2 at 3609', 1 at 4085', 1 at 4528', 1 at 5075'.

Pipe Strap @ no pipe strap taken

Fossil Drilling Co. Rig 3 Bit Record:

- 1) 17 1/2" Smith Tool RR in at 0' out at 217', 2.75 hours
- 2) 7 7/8" Varel H333 PDC in at 217' out at 5075', 85 1/2 hours

Gas Detector: Woolsey Operating Co. Gas Shack #2

Mud System: Chemical Mud, Mud-Co, Brad Bortz, Engineer

DSTs: No tests were ran.

Company Man: Mike Tharp, Woolsey Operating Company

E-Logs: Nabors Completion and Production Services, Dual Induction Laterolog w/SP, CNL/FDC w/PE, Gamma Ray and Caliper.





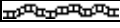



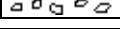




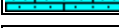
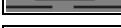


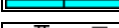
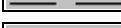





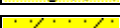
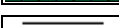






DSTs

No formation tests were ran.

CREWS

Jim Wenrich, Tool Pusher
Daniel Orrentia, Daylights
Ron Burns, Evening
Kirk Shuman, Morning
Chris Slatts, Relief

ROCK TYPES

	Anhy		Shy dolo		Sltst		Shale 3
	Bent		Dol		Ss		Silty dol
	Brec		Gyp		Black sh		Dol lmst
	Cht		Sdy lmst		Gry sh		Dol 2
	Clyst		Lmst		Shale		Granite wash
	Coal		Mrlst		Shysltst		Lmst
	Congl		Salt		Slysh		Calc dol
	Sdy dolo		Shale		Ss 2		Shale 3

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
- Sltly

FOSSIL

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

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

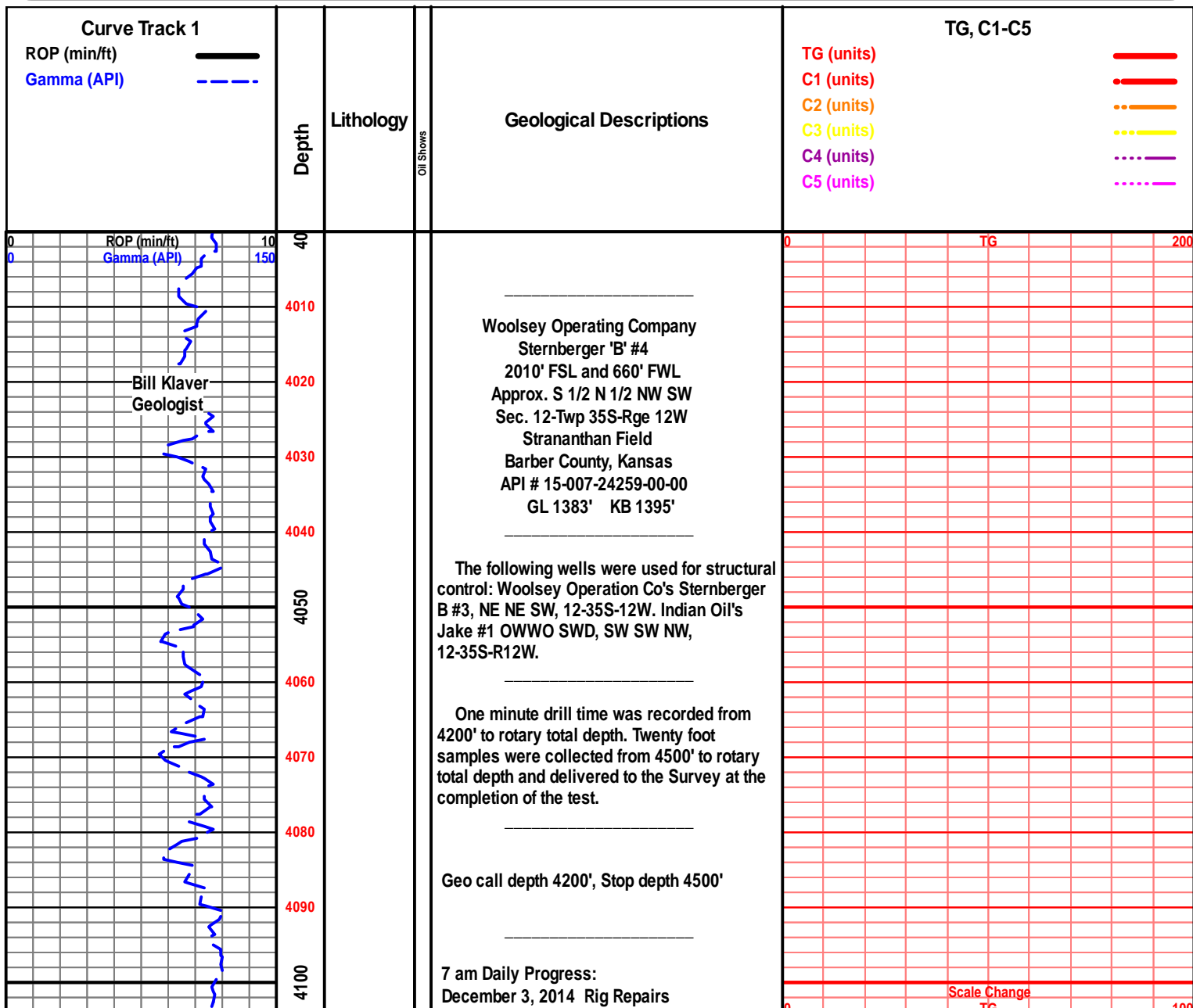
STRINGER

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

- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE

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

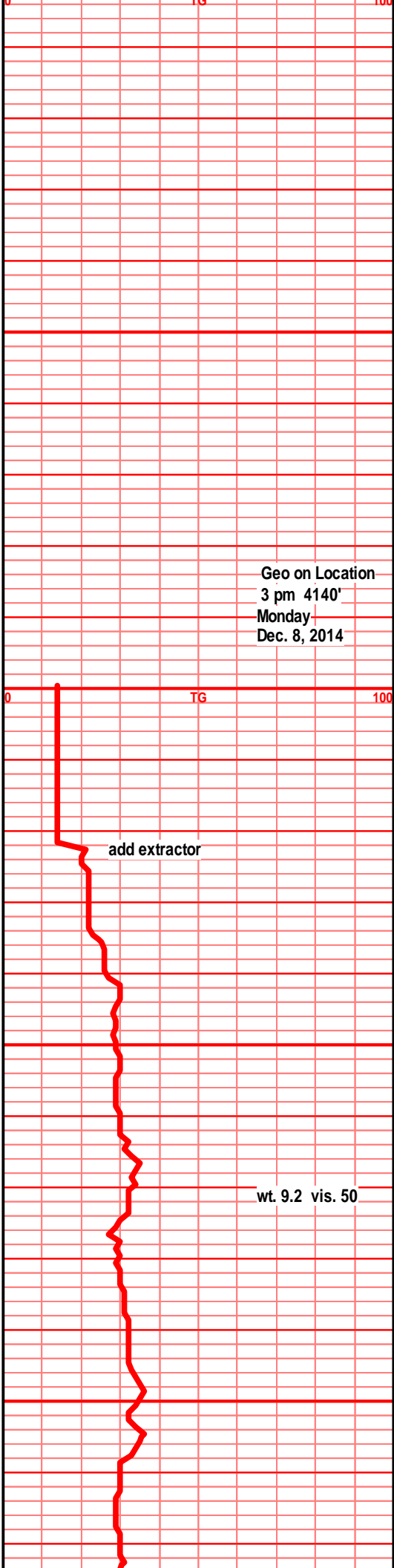
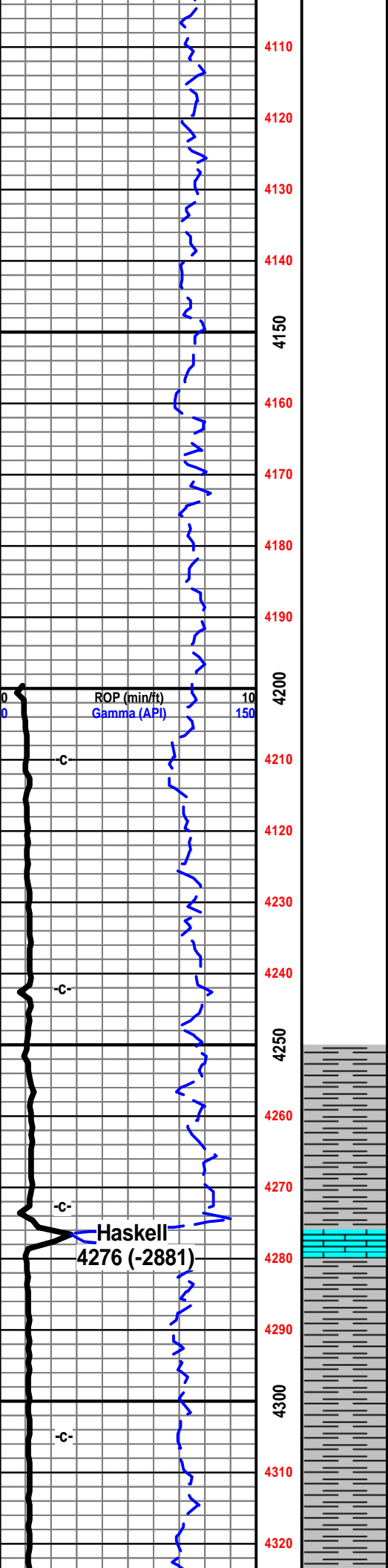


Bill Klaver
Geologist

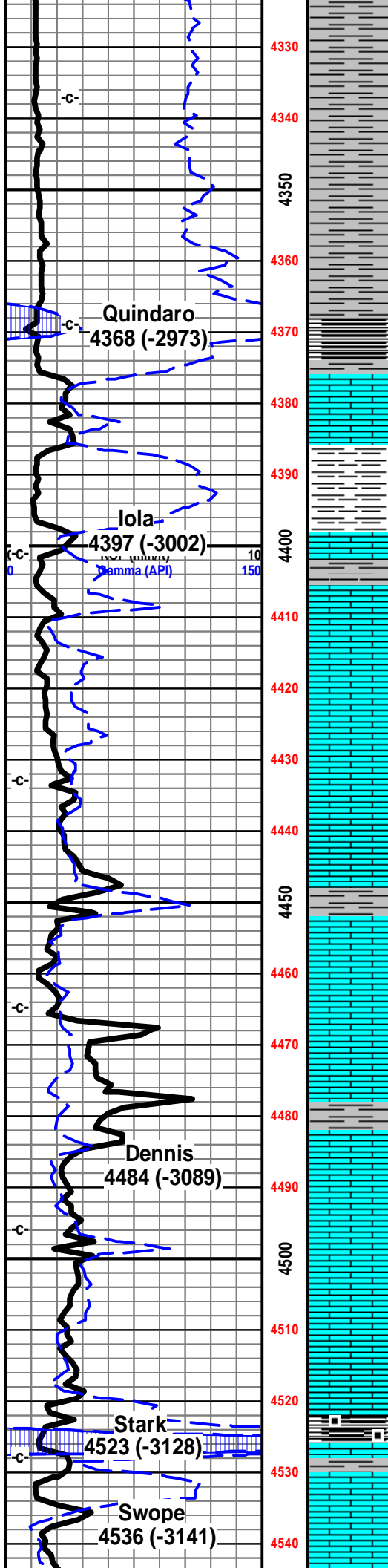
December 4, 2014 MIRT/Spud
 December 5, 2014 Drill plug 8:30 am
 December 6, 2014 Drilling at 1830'
 December 7, 2014 Drilling at 3140'
 December 8, 2014 Drilling at 3780'
 December 9, 2014 Drilling at 4634'
 December 10, 2014 Logging at 5075'

- E- Log Tops:
- Herington 1907 (-512)
 - Onaga 2777 (-1382)
 - Waubunsee 2834 (-1439)
 - Stotler 2967 (-1572)
 - Topeka 3273 (-1878)
 - LeCompton 3605 (-2210)
 - Kanwaka 3633 (-2238)
 - Heebner 3829 (-2434)
 - Toronto 3838 (-2443)
 - Douglas Group 3867 (-2472)
 - Douglas Shale 3928 (-2533)
 - Haskell 4280 (-2885)
 - Quindaro 4370 (-2975)
 - Iola 4402 (-3007)
 - Drum 4456 (-3061)
 - Dennis 4490 (-3095)
 - Stark 4527 (-3132)
 - Swope 4539 (-3144)
 - Hushpuckney 4559 (-3164)
 - Hertha 4570 (-3175)
 - B/Kansas City 4609 (-3214)
 - Pawnee 4718 (-3323)
 - Cherokee Group 4763 (-3368)
 - Mississippi 4828 (-3433)
 - LTD 5078 (-3683)

- Gas/Oil Show Legend
- Gas
 - Even Stain/Saturation
 - ◐ Spotted Stain/Saturation
 - Questionable Show
 - Dead/Gilsonitic



Geo on Location
 3 pm 4140'
 Monday
 Dec. 8, 2014



4330
4340
4350
4360
4370
4380
4390
4400
4410
4420
4430
4440
4450
4460
4470
4480
4490
4500
4510
4520
4530
4540

lola
4397 (-3002)
gamma (API)

Dennis
4484 (-3089)

Stark
4523 (-3128)

Swope
4536 (-3141)

lst crm buff tan f xln gran sub chlky, foss frags, tr foss ool/pelletal, calc xln fill, inter xln, foss mold por

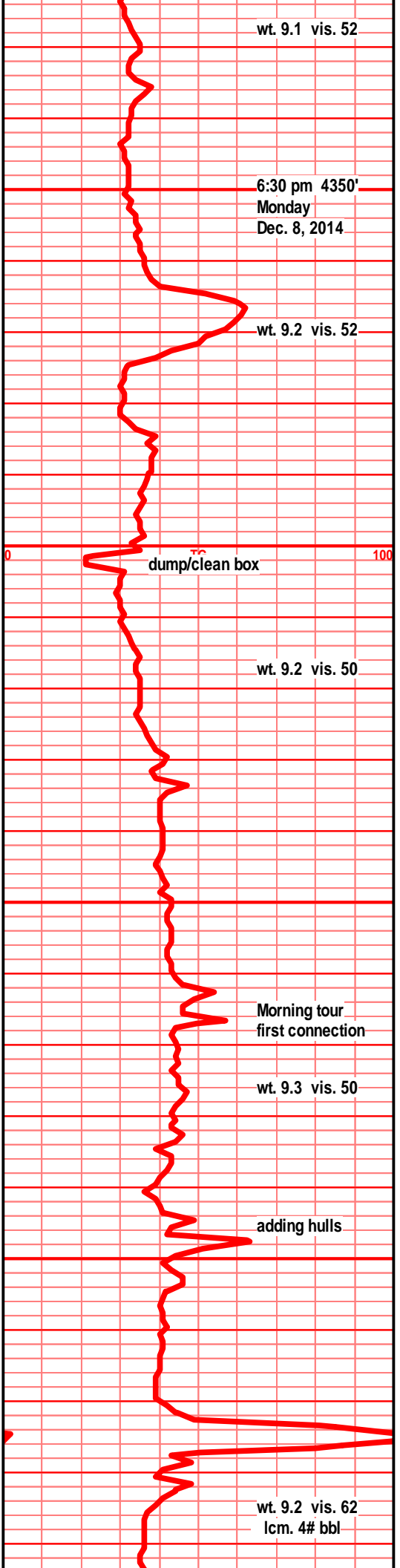
lst crm tan buff f sli med xln gran blk ang sub chlky foss frags, inter xln por, foss mold por,

lst crm buff tan f xln sub chlky gran soft, foss frags, tr foss ool, pelletal, calc xln fill, pp moldic por

shl gry blk, blk carb, wxy grsy pcs, gas bubs, blk ang cab pieces

lst crm tan lt gry in prt, f xln, gran blk ang mstly dns, sub chlky, foss frags, calc xln fill, foss mold pp por

lst crm tan lt arv/tan f xln gran blk ang dns



1st crm tan gry, tan xln gran blk ang dns
sub chlky foss frags, tr ool/pelletal, inter xln
por, calc xln fill

shl drk gry, blk carb, blk ang pcs, grsy wxy
text, abun gas bubs

shl gry calc, 1st tan lt gry tan f xln blk ang,
dns, tr sub chlky, foss frags, calc xln fill, tr
inter xln, foss mold por

1st crm gry tan tr buff f xln blk ang gran dns,
foss frags, foss ool/pelletal, calc xln fill sub
chlky,

1st crm tan lt gry tan f vf xln dns hrd blk ang
gran, sub chlky, foss frags, tr foss ool, calc
xln fill, tr pp foss mold por

shl drk gry blk, tr carb text, 1st crm gry tan f
xln, dns blk ang sli arg, tr sub chlky, calc xln
fill, tr foss frags, gran soft arg in prt

shl gry drk gry blk, silty, gritty, calc in prt,

1st crm tan, gry tan brn in prt, f vf xln dns hrd
blk ang arg silty, tr calc fill, tr micro foss
frags

shl gry, gry brn silty gritty calc, 1st tan gry brn
f xln dns hrd blk ang arg silty, calc xln fill, tr
foss frags,

shl gry drk gry blk brn, silty gritty, 1st lt blkue
gry green f vf xln dns hrd arg, micro xln in prt,
tr calc xln fill

1st crm buff tan f vf xln dns hrd blk, sub
chlky, micro foss frags, micro ool, pelletal,
micro calc xln fill

shl gry brn calc, 1st tan crm buff, f vf xln dns
hrd blk, sub chlky, foss frags, micro ool,
micro calc xln fill,

1st crm buff tan f vf xln dns hrd blk ang tr sub
chlky, micro foss frags/ool, calc xln fill,

1st crm buff tan f vf xln dns hrd blk, some sub
chlky, foss frags, micro ool tr pelletal, calc
xln fill

1st crm buff tan f vf xln dnse hrd sub chlky
foss frag micro ool, calc xln fill

shl drk gry blk, silty gritty, blk carb in prt, wxy
grsy text, blk ang pcs, abun gas bub, tr filmy
cond on brk

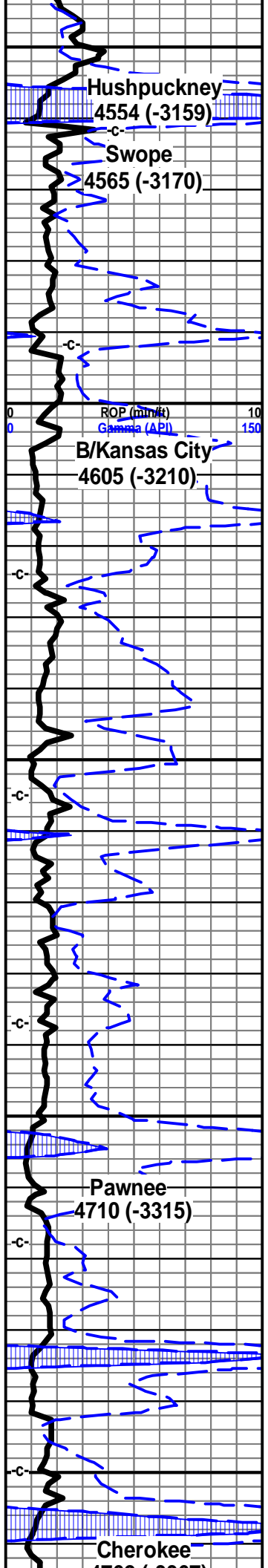
1st crm buff lt gry tan f vf xln dns hrd blk ang
foss frags, foss ool, micro ool/pelletal, crs
calc xln fill, tr pp por, tr gas bubs on brk

1st crm buff tan f xln blk ang dns hrd, tr sli
sub chlky, foss frags, micro ool, calc xln fill

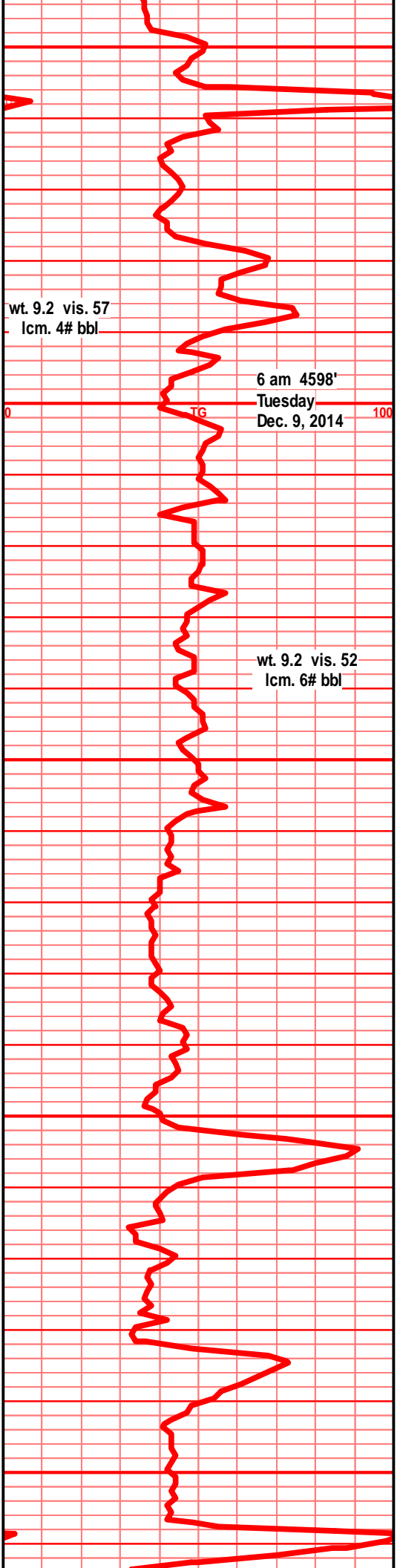
shl gry drk gry blk, blk carb, blk ang pcs,
wxy grsy text in prt, gas bubs

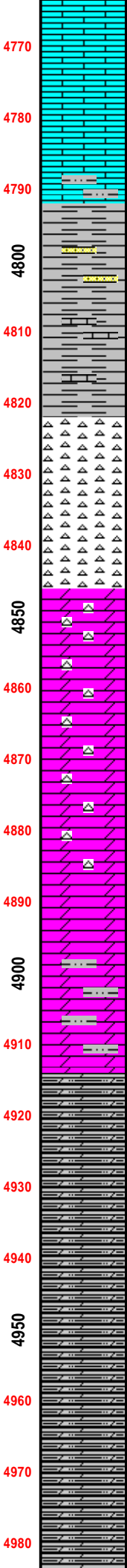
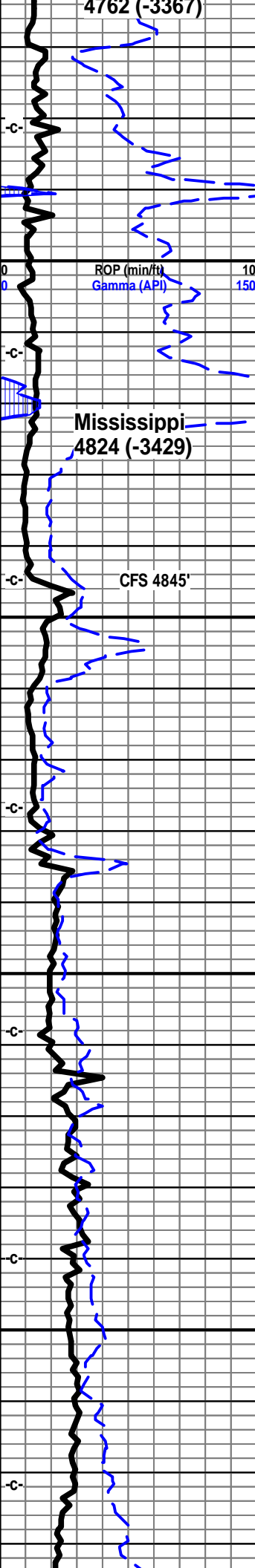
1st crm buff lt gry f vf xln, dns hrd blk ang tr
sli sub chlky, foss frags, micro calc xln fill

shl gry dkr gry blk, blk carb text in prt, wxy
grsy text in prt, blk ang pcs, tr gas bubs



4550
4560
4570
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4590
4600
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4620
4630
4640
4650
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4670
4680
4690
4700
4710
4720
4730
4740
4750
4760





4762 (-3367)

4770
Ist tan dull gry f vf xln dns hrd blk ang, sli sub chlky, tr foss frags, calc xln fill

4780
Ist tan dull tan lt gry f vf xln dns hrd blk ang, micro foss frags, calc xln fill, sli silty arg text,

4790
Ist dull tan lt gry dull tan gry, f vf xln dns hrd blk ang, micro foss frags, sli sub chlky, tr calc xln fill.

4800
shl gry gry lt gry green silty gritty, sli sndy, gran, sli calc in prt, soft mushy in prt, tr sst, lt gry green vf grnd, sub ang/sub rded grns, w/srted, fria mushy, clay fill, tr stain, nodor NSFO

4810
Ist drk gry brn micro xln dns hrd blk ang vry arg, silty, clay clasts, shl gry med gry green silty gritty, soft gran

4820
chrt off wht tan brn mott, weath sli spongy sli trip text, gran soft, pp moldic por, brn stain, fair odor, SFO, abun gas bubs, chrt off wht bone wht, tr lt blue/gry, shrp frsh opa q with tan brn mottled weath edge, sli trip gran spongy edge text, pp moldic por, stain, SFO abun gas bubs

4830
chrt off wht tan brn mott, weath sli spongy sli trip text, gran soft, pp moldic por, brn stain, fair odor, SFO, abun gas bubs, chrt off wht bone wht, tr lt blue/gry, shrp frsh opa q with tan brn mottled weath edge, sli trip gran spongy edge text, pp moldic por, stain, SFO abun gas bubs

4840
chrt off wht tan brn mott, weath sli spongy sli trip text, gran soft, pp moldic por, brn stain, fair odor, SFO, abun gas bubs, chrt off wht bone wht, tr lt blue/gry, shrp frsh opa q with tan brn mottled weath edge, sli trip gran spongy edge text, pp moldic por, stain, SFO abun gas bubs

4850
chrt off wht tan brn mott, weath sli spongy sli trip text, gran soft, pp moldic por, brn stain, fair odor, SFO, abun gas bubs, chrt off wht bone wht, tr lt blue/gry, shrp frsh opa q with tan brn mottled weath edge, sli trip gran spongy edge text, pp moldic por, stain, SFO abun gas bubs

4860
chrt off wht tan brn mott, weath sli spongy sli trip text, gran soft, pp moldic por, brn stain, fair odor, SFO, abun gas bubs, chrt off wht bone wht, tr lt blue/gry, shrp frsh opa q with tan brn mottled weath edge, sli trip gran spongy edge text, pp moldic por, stain, SFO abun gas bubs

4870
dolo chrt, dolo tan lt gry w/gry green tint, f vf xln gran, sli suc r sndy text, tr sub chlky, with wht off wht lt gry shrp frsh chrt inclu w/weath gran sli triip text edges, stain, SSFO, sli odor, gas bubs, these samples are poor!

4880
dolo chrt, dolo tan lt gry w/gry green tint, f vf xln gran, sli suc r sndy text, tr sub chlky, with wht off wht lt gry shrp frsh chrt inclu w/weath gran sli triip text edges, stain, SSFO, sli odor, gas bubs, these samples are poor!

4890
dolo chrt, dolo tan lt gry, gry, f vf xln dns hrd blk ang gran, sli sndy sub suc r text, chrt wht shrp frsh opa q, less weath text, more dolo less chrt w/depth

4900
dolo chrt, dolo tan lt gry, gry, f vf xln dns hrd blk ang gran, sli sndy sub suc r text, chrt wht shrp frsh opa q, less weath text, more dolo less chrt w/depth

4910
dolo chrt, dolo tan lt gry, gry, f vf xln dns hrd blk ang gran, sli sndy sub suc r text, chrt wht shrp frsh opa q, less weath text, more dolo less chrt w/depth

4920
dolo silty dolo, drk gry, gry brn f xln gran silty gritty, incr arg

4930
dolo, silty dolo, vf xln gran gritty, silty arg, shls drk gry med to drk gry silty dolo

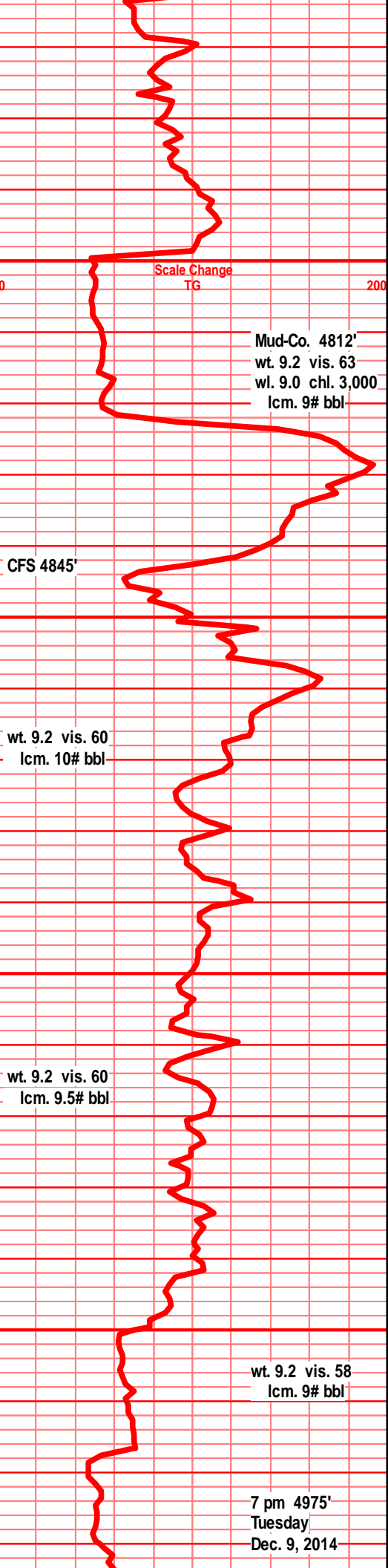
4940
dolo, silty dolo, drk gry, med to drk gry, f vf xln dns gritty arg silty

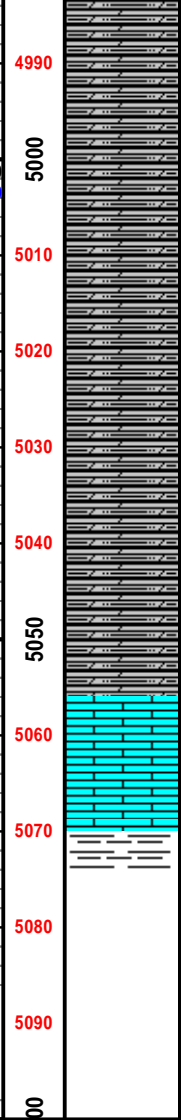
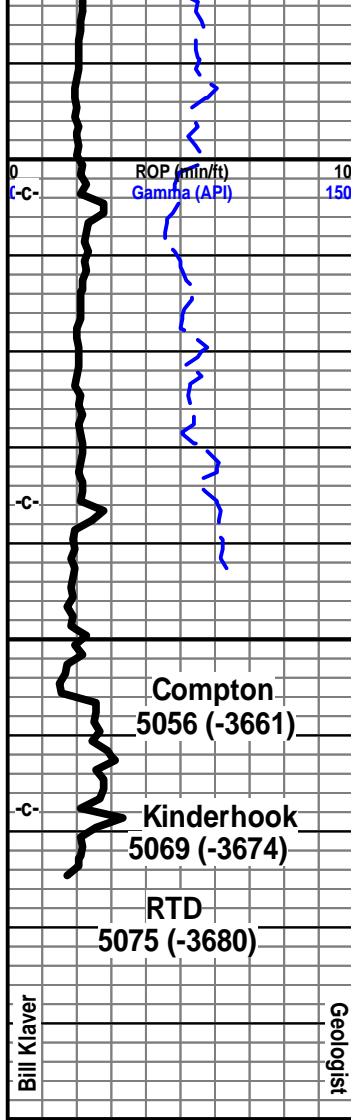
4950
dolo silty shly dolo, drk/med drk gry, f vf xln dns silty gritty, gran text,

4960
dolo silty gritty shly f vf xln text, silic text, gran text

4970
dolo silty gritty silic f vf xln gran, med drk gry

4980
dolo, silty silic, f vf xln, med/drk gry





dolo silty silic, f vf xln, med drk gry, arg,
 dolo silty, silic, f vf xln med, drk gry, gritty gran text,
 dolo f vf xln, gritty silty silic, shly, gran
 dolo, silty silic f vf xln, gran gritty text,
 dolo, silty silic, f vf xln gran gritty shly,
 shl, gry, drk gry, silty silic, dolomitic, f vf xln gran gritty
 dolo, silty dolo aa
 1st off wht dull tan f sli med xln, blk ang hrd pcs, crs calc xln fill, tr micro foss

Woolsey Operating Company
 Sternberger 'B' #4
 2010' FSL and 660' FWL
 Approx. S 1/2 N 1/2 NW SW
 Sec. 12 - Twp 35S - Rge 12W
 Stranathan Field
 Barber County, Kansas
 API # 15-007-24259-00-00
 GL 1383' KB 1395'

