

# LITHOLOGY STRIP LOG

## WellSight Systems

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

Well Name: HERMAN L. LOEB LLC. HINZ #3-26

Location: NE NE NE SW SEC.26-T32S-R14W, BARBER CO. KANSAS

License Number: 15-007-24091-00-00

Region: ELSEA EAST

Spud Date: 10/11/13

Drilling Completed: 10/21/13

Surface Coordinates: 2,590' FWL, 2,590' FSL

### Bottom Hole Coordinates:

Ground Elevation (ft): 1,918'

K.B. Elevation (ft): 1,927'

Logged Interval (ft): 3,200'

To: 5,004'

Total Depth (ft): 5,004'

Formation: Viola

Type of Drilling Fluid: Native Mud /Gel Sweeps To: 3,363'. Chem.Gel To RTD.

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

Company: Herman L. Loeb LLC.

Address: PO Box 838

Lawrenceville IL 62439

Phone: 812-453-0385

### GEOLOGIST

Name: Jame R. Hall Well Site Supervision

Company: Black Gold Petroleum

Address: 5530 N. Sedgwick

Wichita, Kansas 67204-1828

316-838-2574

## Comments

Drilling contractor: Sterling Drilling, Rig #4, Tool Pusher: Lanny Saloga.

Status: 5.5" casing to evaluate the Mississippi.

Surface Casing: 13 3/8" set at 312' w/315sx, cmt. Did circulate.

### Drilling Activity:

10/11/13; Move in and Spud.

10/12/13; 315' WOC.

10/13/13; 1,215' drilling.

10/14/13; 2,225' drilling.

10/15/13; 2,930' drilling.

10/16/13; 3,534' drilling.

10/17/13; 4,010' drilling.

10/18/13; 4,456' drilling.

10/19/13; 4,672' (DST #1) Marmaton / Massy, pipe strap 1.36' short to the board.

10/20/13; 4,712' (DST #2) Mississippi Chert.

10/21/13; 4,908' drilling in lower Mississippi.

10/22/13; 5,004' (DST #3) Viola. Run open hole logs.

Deviation Surveys: 1/8 @ 315', 3/4 @ 4,672', 3/4 @ 5,004'.

### Bit Record:

#1 17 1/2" out @ 315' in 5.5hrs.

#2 7 7/8" JZ HA20-Q in @ 315', out @ 5,004', made 4,689' in 145.25hrs.

Drilling time commenced: @ 3,200'. Minimum 10' wet and dry samples commenced: @ 3,400' to RTD. Samples delivered to Kansas Geological Sample Library at Wichita, Kansas.

Gas Detector: Sterling Rig unit # 4. Tooke Daq Drilling time and Hotwire gas values were placed on this Plotte Sample Strip log.

Mud System: Mud-Co/Service Mud. Chemical Gel system @ 3,363', Mud Engineer: Brad Bortz.

DST Co. Trilobite Testing Co., Tester: Chris Staats.

Open Hole Logs: Nabors Completaion & Porduction Services Co. (Hays Kansas), Logging Engineer: Jeff Luebbers.

DIL, CDL/CNL/PE, MEL.

E-Log Formation Tops, are placed on the plotted geological report, with the reference wells: "A" Texas Energies Hinz #1-26 SW NE 26-T32S-R14W, "B" Edmiston Elsea #1 S/2 N/2 SW/4 26-T32S-14W and "C" Loeb Hinz #2-26 NW/4 26-T32S-R14W, with datum differences shown.

Note: The Geologic Strip Log was shifted 2', for better correlation with the open hole logs.

## DSTs

**DST #1 (Marmaton / Massy) 4,615' - 4,672' (57').15-45-30-60, IH 2261, IF 25-47 (weak 1.75inc blow), ISI 132, FF 53-64 (weak 1inc blow), FSI 100, FH 2264, Rec; 70' mud (1%water,99%mud), BHT 1115F.**

**DST #2 (Miss. Chert) 4,685' - 4,712' (27'), 15-45-45-90, IH 2313, IF 27-46(BOB 2min), ISI 533(No blow), FF 50-80(BOB 10sec.), FSI 494, FH 2316, Rec; 1615' GIP, 95' GWM (20%gas,20%water,60%mud), 120' GMW (5%gas,75%water,25%mud), BHT 120F Rwa 0.39 @ 54F, (@BHT 0.175), chl rec.mud 22,000ppm, chl drl. mud 7,000ppm. Mud Co. check 48,000ppm.**





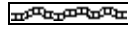

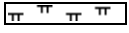

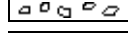



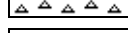


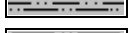






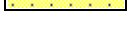
**DST #3 (Viola), 4,984' - 5,004' (20'), 15-45-30-60, IH 2511, IF 19-24 (1/2inc. Blow), ISI 19 (no blow), FF 18-24 (1/4in. Blow), FSI 53 (no blow), FH 2520, Rec; 10' mud, BHT 120F.**

## Other














































































### CARBONATE CLASSIFICATION:

**AFTER DUNHAM: GRAIN;** any fossil, fossil fragment, sand grain, or other rock fragment within the rock. **MUDSTONE;** muddy carbonate rocks containing less than 10% grains. **WACKESTONE;** mud supported carbonate rocks with more than 10% grains. **PACKSTONE;** grain supported muddy carbonate rocks. **GRAINSTONE;** mud free carbonate rock, grain supported. **BOUNDSTONE;** carbonate rock bound together at deposition (coral, etc.). **CRYSTALLINE CARBONATE;** carbonate rock retaining to little of their depositional texture to be classified.

## ROCK TYPES

	Anhy		Congl		Lmst		Black sh
	Bent		Sdy dolo		Mrlst		Gry sh
	Brec		Shy dolo		Salt		Shale
	Cht		Dol		Shale		Shysltst
	Clyst		Gyp		Sltst		Sitysh
	Coal		Sdy lmst		Ss		

## ACCESSORIES

<b>MINERAL</b>		Chlorite		Pelec		Grysh			
	Anhy		Dol		Pelloidal		Gryslt		
	Arg		Sand		Pisolite		Lms		
	Bent		Sity		Plant		Sandylms		
	Bit				Strom		Sh		
	Brecfrag	<b>FOSSIL</b>		Algae		Fuss		Sltstn	
	Calc		Amph		Oomoldic				
	Carb		Belm	<b>STRINGER</b>		Anhy	<b>TEXTURE</b>		Boundst
	Chtdk		Bioclst		Arg		Chalky		
	Chtlt		Brach		Bent		Cryxln		
	Dol		Bryozoa		Coal		Earthy		
	Ferrpel		Cephal		Dol		Finexln		
	Ferr		Coral		Gyp		Grainst		
	Glau		Crin		Ls		Lithogr		
	Gyp		Echin		Mrst		Microxln		
	Marl		Fish		Sltstrg		Mudst		
	Nodule		Foram		Ssstrg		Packst		
	Phos		Fossil		Carbsh		Wackest		
	Pyr		Gastro		Clystn				
	Salt		Oolite		Dol				
	Sandy		Ostra						
	Silt								

Curve Track 1

ROP (min/ft) ———  
 Gamma (API) - - - -  
 Caliper (API) ·····

TG, C1-C5

TG (units) ———  
 C1 (units) - - - -  
 C2 (units) ·····  
 C3 (units) ·····  
 C4 (units) ·····  
 C5 (units) ·····

Depth

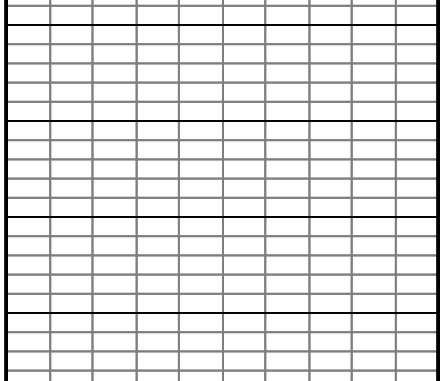
Porosity Type

Lithology

Oil Shows

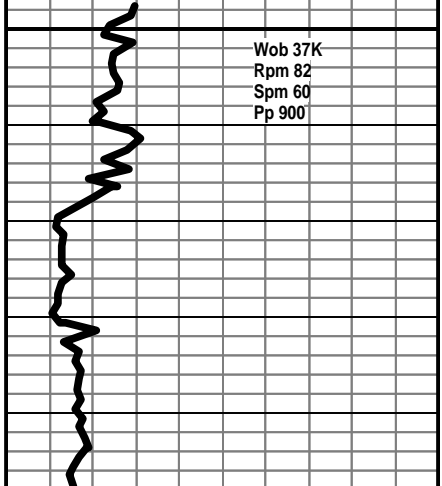
Geological Descriptions

0 ROP (min/ft) 10  
 0 Gamma (API) 150  
 6 Caliper (API) 16



3150

Wob 37K  
 Rpm 82  
 Spm 60  
 Pp 900

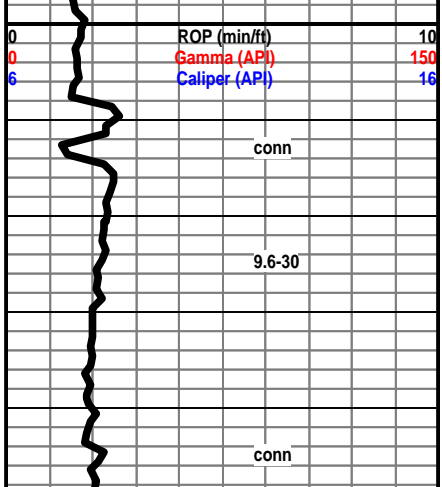


3200

conn

9.6-30

conn

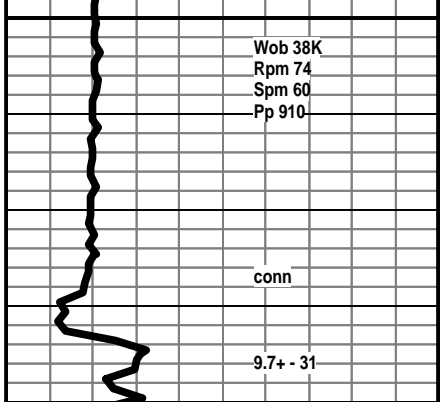


3250

Wob 38K  
 Rpm 74  
 Spm 60  
 Pp 910

conn

9.7+ - 31



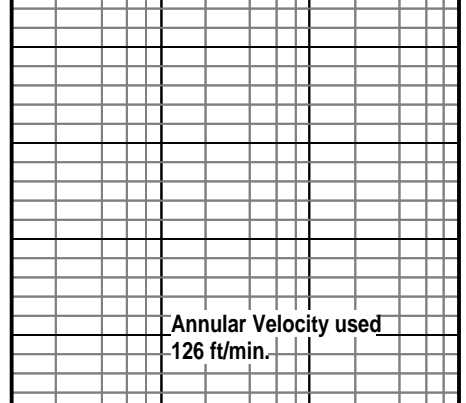
JIM HALL ON LOCATION 10/15/13,  
 TOOKE DAQ DRILLING TIME  
 COMMENCED @ 3,150'. RIG  
 DRILLING TIME COMMENCED @  
 3,200'.

COMMENCED SAMPLES @ 3,400'

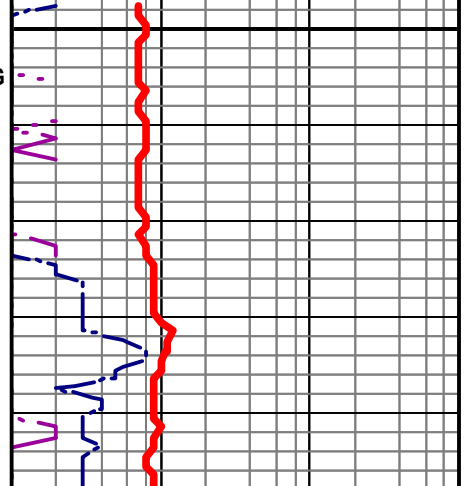
INTERPRETATION OF LITHOLOGY BY DRILLING  
 TIME ONLY!

Tarkio 3285 (-1358) A-3 B-5 C-21, Not on detail  
 open hole log.

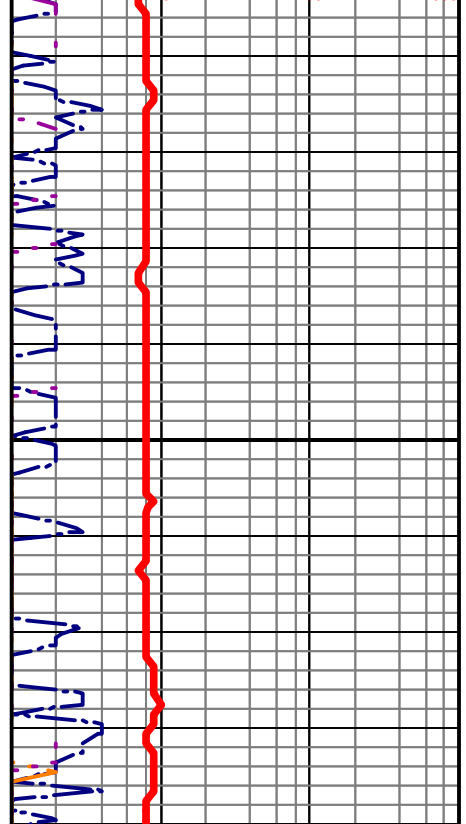
1 10 TG 100 1000

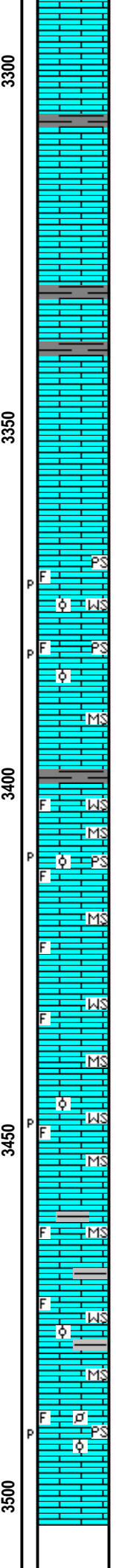
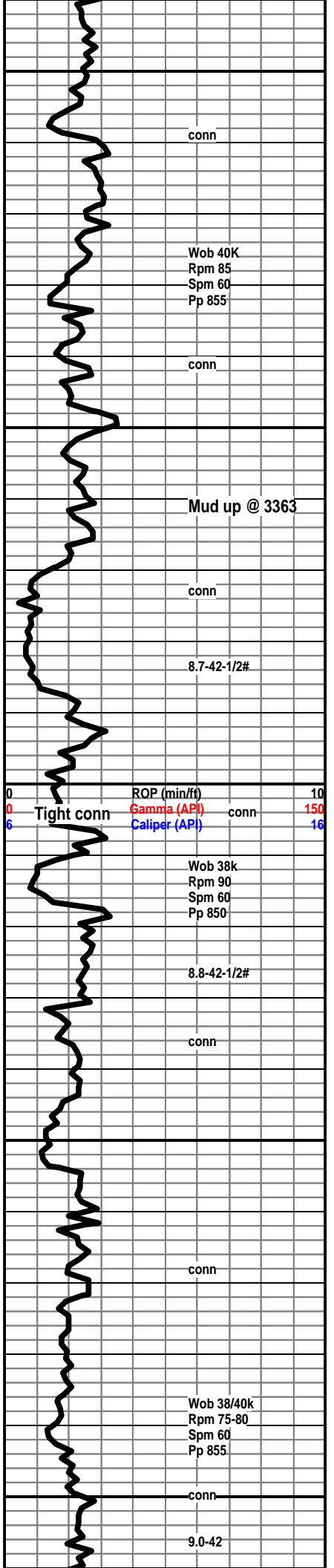


Annular Velocity used  
 126 ft/min.



1 10 TG 100 1000





conn

Wob 40K  
Rpm 85  
Spm 60  
Pp 855

conn

Mud up @ 3363

conn

8.7-42-1/2#

Shale; gray, black to gray-green, hard to soft.

Packstone / Wackestone; tan, light brown, hard, chalky matrix fossiliferous to fine oolites and micro-oolites, no show dull yellow-gold mineral fluorescence, rare barren porosity in the dry.

Mudstone; cream to tan, hard, most chalky matrix, tight in wet, some fossil fragments, sample quality is poor, much shale carvings in the samples.

Shale; gray, black to gray-green, hard to soft.

Packstone / Wackestone; fossiliferous to micro-oolitic, hard tight looking in wet, dull mineral fluorescence, scattered bright yellow fluorescence, no show.

Mudstone; cream to tan, chalky, hard, occasionally crystalline some fossiliferous, tight looking in wet, dull fluorescence, scattered bright yellow mineral fluorescence on cream fine crystalline to sandy looking hard wackestone no show.

Mudstone; most as above, no show, still poor sample quality, much shale cavings.

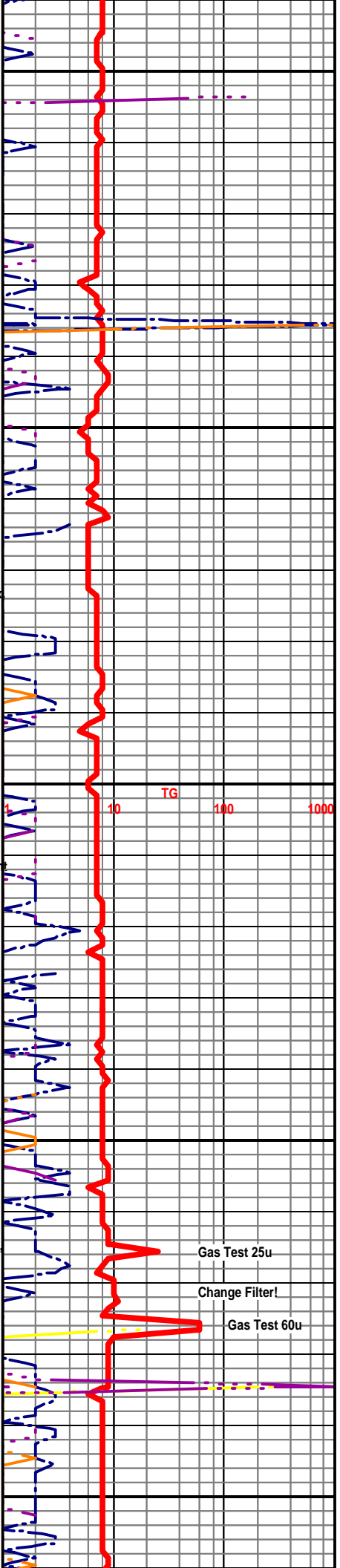
Wackestone; fossiliferous to sub-oolitic, some pelets, pellets, tight looking in wet, most chalky matrix, no show, rare barren porosity in the dry.

Mudstone; cream to light gray, chalky, fossiliferous to micro-oolitic Wackestone, no show, looks tight in wet sample sample quality very poor, large influx of shale and shale cavings!

Most as above, very poor quality sample.

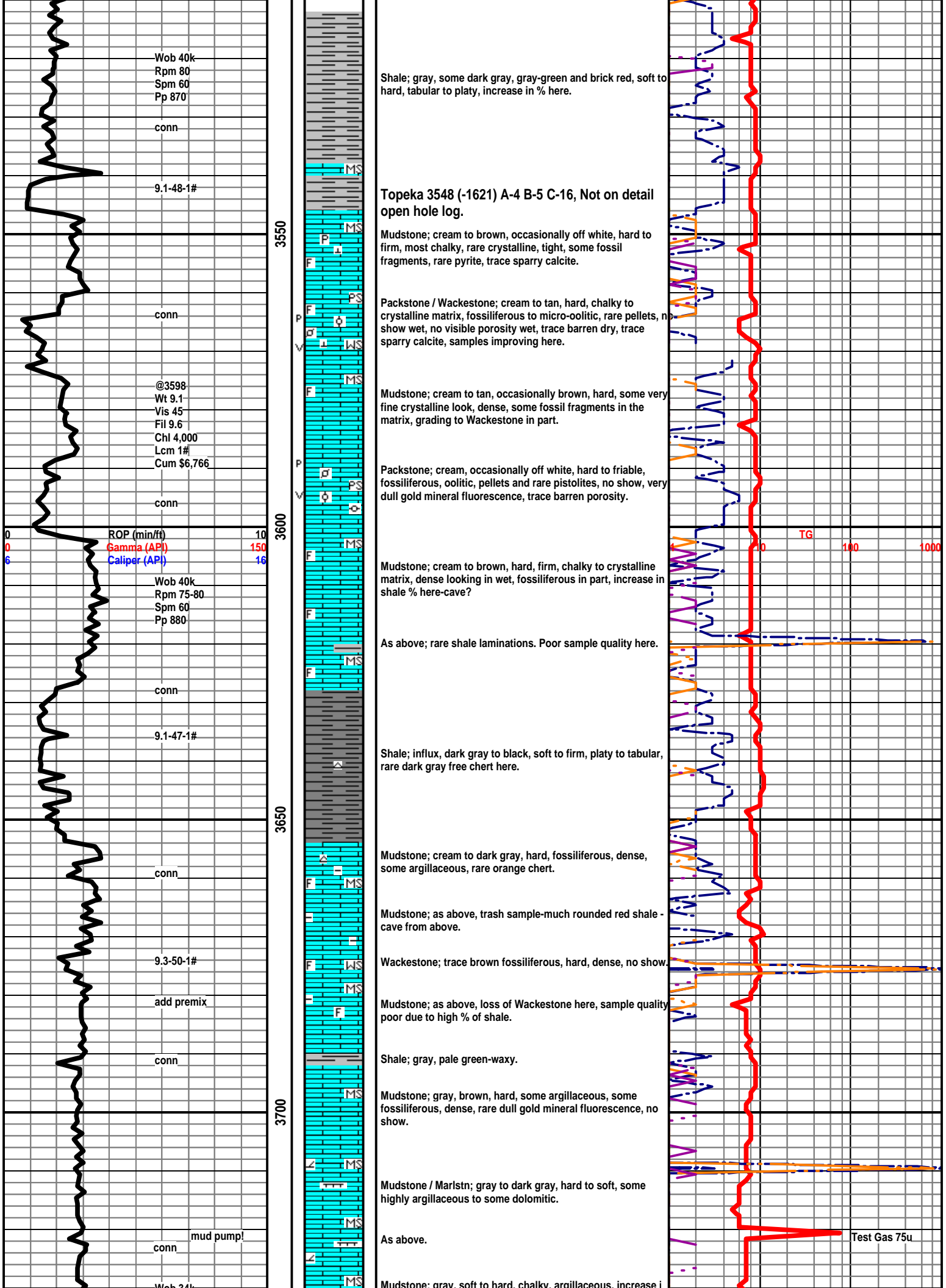
Packstone; cream to tan, hard, most crystalline tight looking matrix in the wet, rare barren porosity in the dry, no show, fossiliferous, to oolitic and pellets.

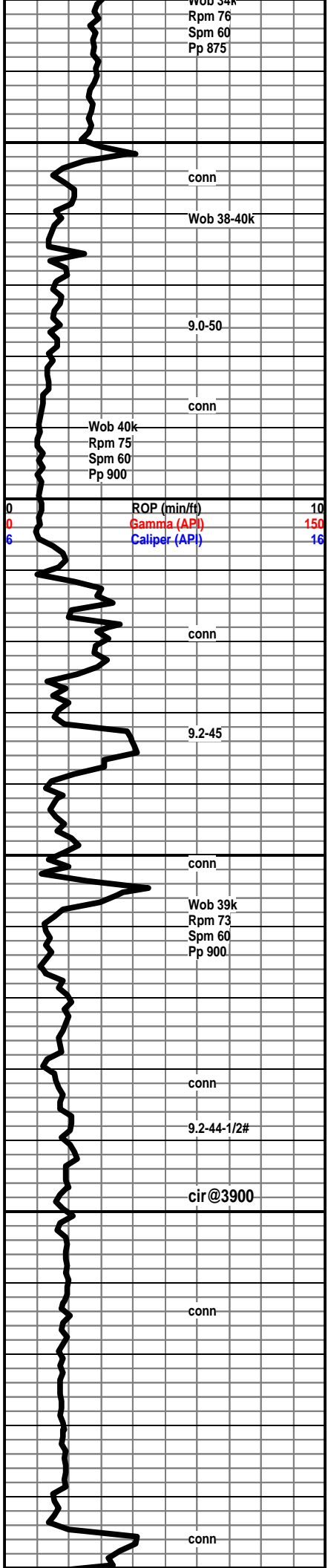
No sample.



TG 10 100 1000

Gas Test 25u  
Change Filter!  
Gas Test 60u





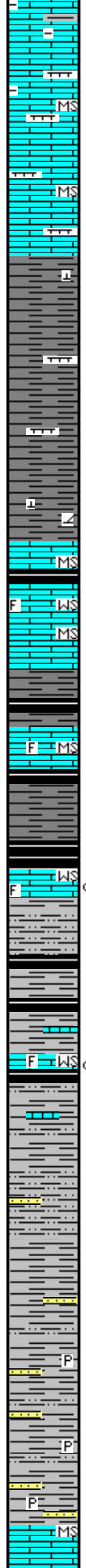
3750

3800

3850

3900

50



Marlstn; gray, dark gray, hard to soft, blocky to tabular, mixed with occasional dark brown to gray Mudstones with rare fossil fragments in the matrix, no show, and shales.

Sample as above, no real change here.

Shale; increase in dark gray, gray and black, soft to firm, tabular to platy, some blocky, some calc.

Shale; dark gray, gray, to black, soft to hard, platy to tabular, some blocky, some marlstn.

Shale; most as above, calc to slightly calc-dolomitic.

**Lecompton 3812 (-1885) A+20 B-3 C-17**

Shale; small influx, black-carb, slightly gassy.

Mudstone to fossiliferous Wackestone; gray some mottled off white, brown, tight look wet, no show.

Shale; gray, dark gray to black with visible gas bubbles.

Mudstone; gray-chalky, brown to tan-fossiliferous, tight looking some crystalline matrix, no show, trace very dull gold mineral fluorescence.

Shale; gray, dark gray, pale green and black-gassy shale when broken.

Wackestone; brown, cream, crystalline matrix, fossiliferous, looks tight, 3 samples with residual ring cut, no odor, no visible oil.

**Elgin Shale 3860 (-1933) A+24 B-5 C-23**

Shale; gray some silty, dark gray and black-carb some with visible gas bubbles when broken.

Wackestone; brown, hard, tight, fossiliferous in part, 3 samples with residual ring cut, no odor, no visible oil.

Shale as above some carbonaceous-gassy, some silty to smooth, rare pyrite, scattered brown Wackestone and Mudstone.

Shale; gray, light gray, to dark gray, some arenaceous, traces light gray ufg argillaceous sandstone-tight, some micaceous shales.

Shale; as above, some smooth, rare pyrite.

Shale; gray, light gray, some arenaceous, some micaceous, some laminated, Scattered ufg sandstone, argillaceous, hard, no show.

Mudstone; gray, brown to off white, chalky, dense.

adjust chromatograph!

TG 100 1000

15u

15u

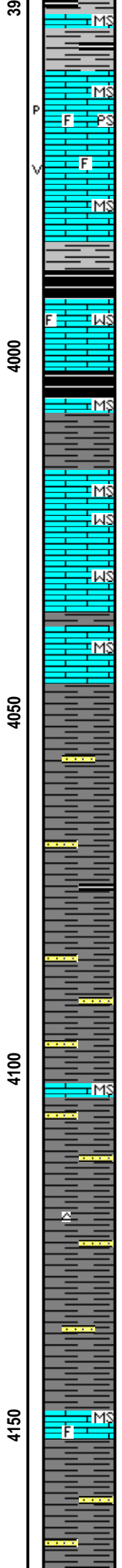
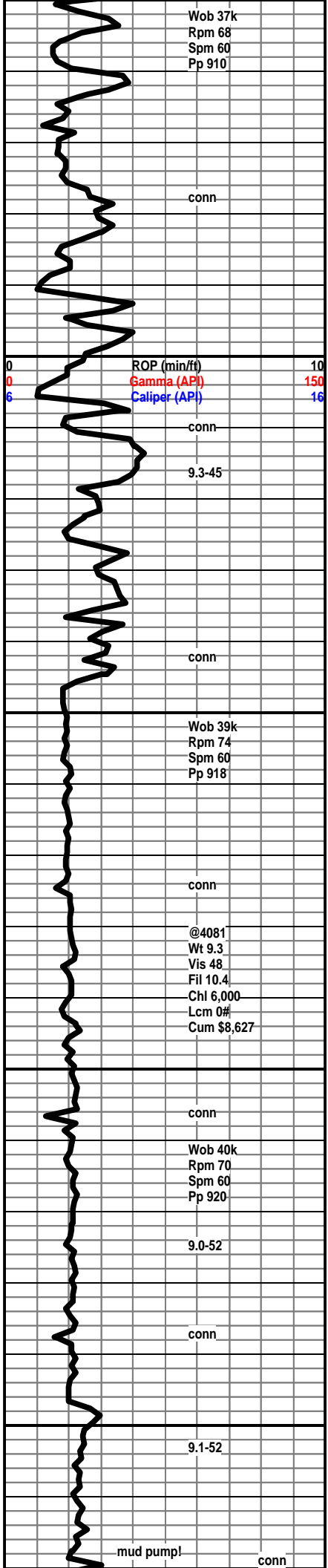
15u

20u-25u

20u

28u +8u

27u +7u



Shale; gray, black-carbonaceous.

Packstone; cream, buff and off white, hard to brittle, some friable, fossiliferous, chalky to crystalline matrix, barren porosity in the dry sample, no show, dull blue mineral fluorescence.

Mudstone; cream to buff, hard, chalky to some crystalline, dense.

Shale; gray, to dark gray.

Shale; black-carb. most soft, no visible gas bubbles.

Mudstone to fossiliferous Wackestone; tight, no shows.

**Heebner 4002 (-2075) A-15 B-1 C-13**

Shale; black, carbonaceous-gassy.

Shale; gray, drak gray to black.

Wackestone; fossiliferous, tight matrix, brown to off white, mixed with chalky Mudstone, no show wet.

Wackestone; off white, oolitic to fossiliferous, hard to firm, chalky to crystalline matrix, mixed with Mudstone, no show in wet.

Shale; gray, dark gray to black, very colored in part.

Mudstone; tan, light gray to occasionally brown, tight.

Shale; gray, dark gray, soft to firm, earthy to smooth texture, some gry-green sub wxy, scattered, light gray vfg sandstone, wlstrd, wlcons, rare glauc, tight looking-no show, some shale are also arenaceous.

Shale; most as above, influx black carbonaceous here. Still carry brown to off white mudstones and wackestones- cave? -no shows.

Shale; gray, dark gray, some arenaceous, some micaceous, Scattered ufg to fg sandstone, light gray, rare glauc, some micaceous, tight, no show.

Mudstone; cream, brown, some fossiliferous, no show.

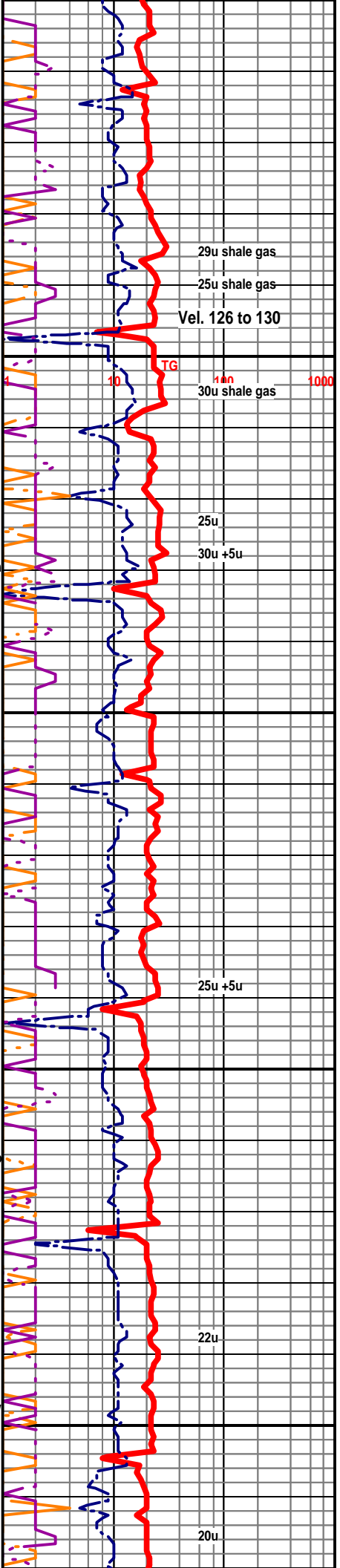
Shale; gray, some arenaceous, scattered light gray uf-fg sandstone, tight, wlcons, some micaceous to argillaceous, no show.

Shale; as above, no real change here, trace brown blocky chert.

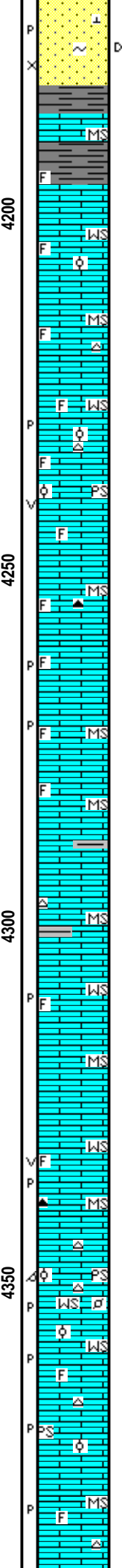
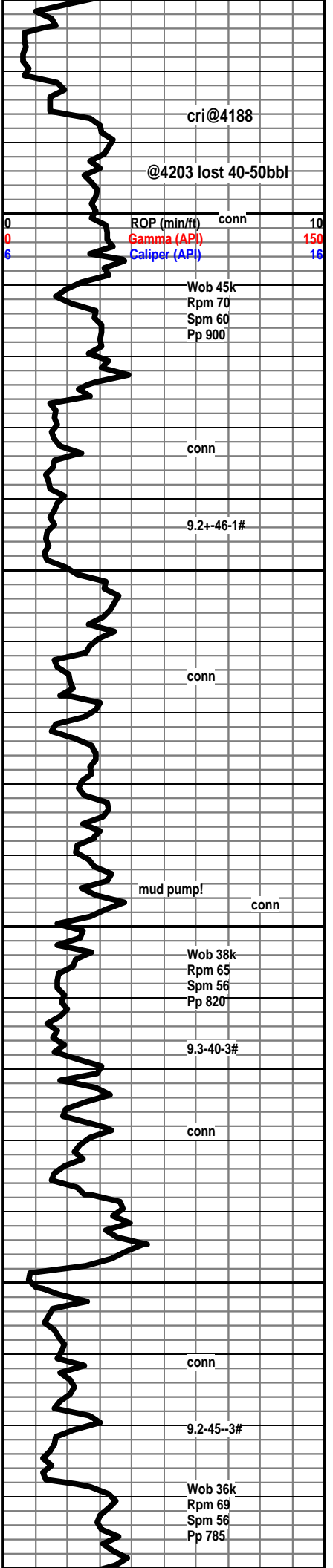
Mudstone; brown, cream, off white, hard, crystalline to chalky matirx, fossiliferous in part, tight.

Shale; gray, dark gray, scattered light gray ufg-fg sandstone, micaceous in part, some argillaceous.

**Lower Sand 4169 (-2242) A-10 B+8 C-10**







Sandstone; off white to light gray, cons to porcons, rnd, wlstrd, calc to silica cement, s&p, some dark wormy stain, no visible oil, no odor, no cut on selected samples, dry sample with visible barren porosity, some with dark patchy stain, micaceous in part, rare glauconite, no sample show.

### Lansing 4192 (-2265) A-15 B+1 C-12

Mudstone; cream to brown, hard, chalky to crystalline matrix, fossiliferous, no show.

Wackestone; tan, brown to cream, crystalline to chalky matrix fossiliferous to micro-oolitic, no show.

Mudstone; gray to light gray, chalky, cream to brown some crystalline-dense.

Wackestone to Packstone; off white, crystalline to chalky matrix, occasionally fine crystalline, hard to trace friable, fossiliferous to micro-oolitic, no show in wet, very dull gold mineral fluorescence, visible barren porosity.

Mudstone; brown, buff and gray, chalky, silky-crystalline, no show, rare black blocky free chert.

Mudstone; off white, gray, occasionally brown, hard, chalky, some fossil fragments in the matrix, bare barren porosity.

Mudstone; cream to gray, hard, most chalky, occasionally crystalline, tight.

Mudstone; cream to off white, chalky, tight, influx, pale green wxy shale here.

Mudstone; cream to buff, white, chalky to crystalline matrix, increase in gray and black shale here.

Mudstone; brown, hard, crystalline-silky texture, dense, some free gray chert.

Wackestone; off white, cream to tan, chalky to crystalline, fossiliferous, some very fine crystalline matrix, no show, barren porosity in the dry.

Mudstone; off white to light gray, occasionally tan, hard, chalky to crystalline matrix, dense.

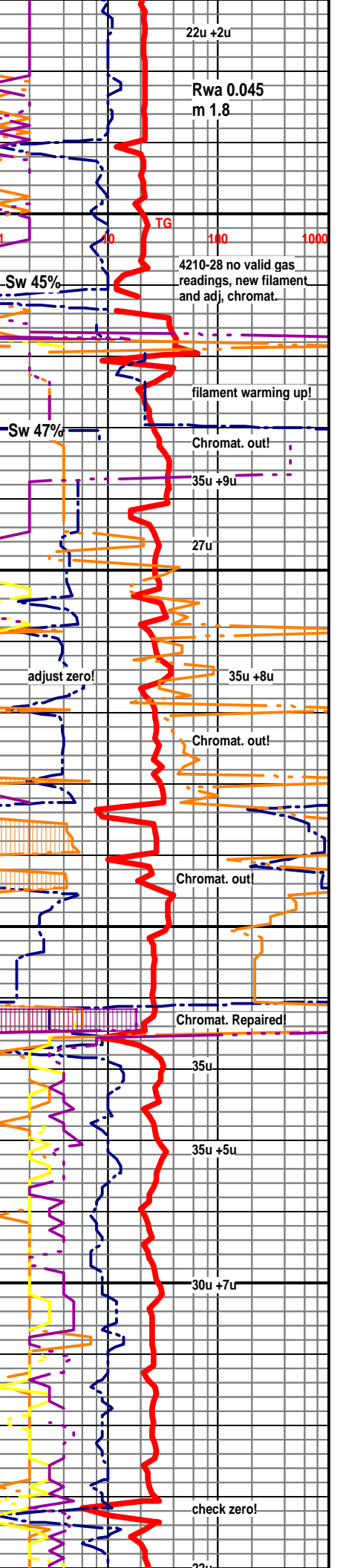
Wackestone; fossil fragments in the matrix, rare micro-oolites and pellets, no show, barren porosity in the dry.

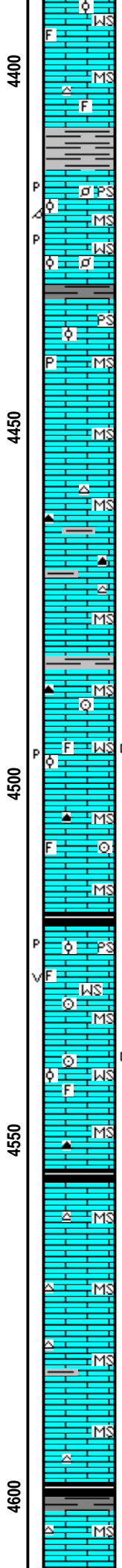
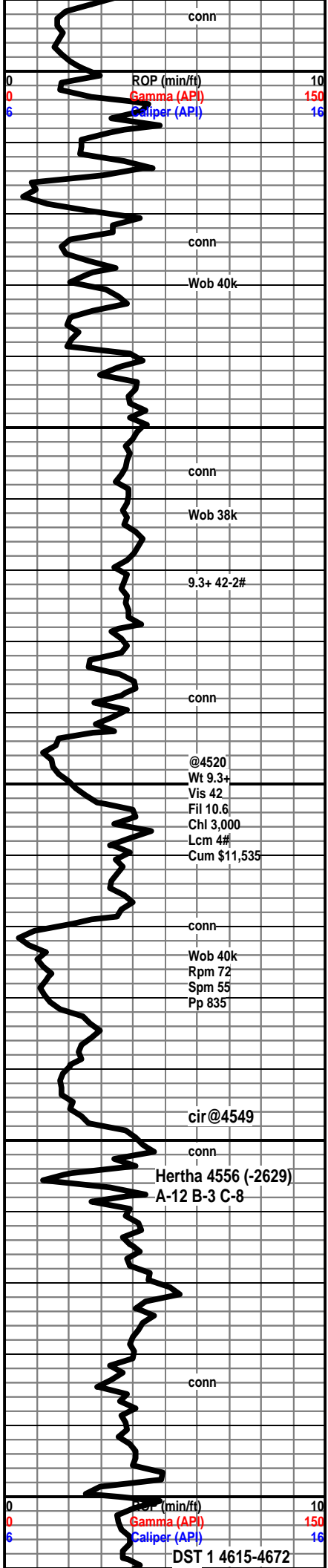
Mudstone; brown, hard, crystalline, dense, rare brown free chert.

Packstone / Wackestone; cream to buff, hard, micro-oolitic, pelloidal, no show, barren porosity in the dry.

Wackestone to Packstone; cream to buff, hard, most with chalky matrix, fossiliferous to micro-oolitic, barren porosity in the dry sample, trace off white chert, no show.

Mudstone; cream to buff, some brown, hard, fossiliferous inprt, most chalky matrix, rare barren porosity, rare pale green chert here.





Wackestone; cream to buff, some light gray, most chalky, fossiliferous to micro-oolitic inprt, no show in the wet sample.

Mudstone; gray, light gray, some brown, dense, some fossiliferous inprt.

Packstone; oolitic to pelloidal, hard to firm, chalky to crystalline matrix, barren porosity, no show, no cut on selected samples.

Wackestone; oolitic to pelloidal, hard, most with crystalline matrix, no show, barren porosity.

Packstone; light gray, crystalline matrix, oolitic, looks tight in the wet, no show, dull mineral fluorescence only

Mudstone; off white, cream, most chalky matrix, hard to brittle dense.

Mudstone; gray to brown, hard, chalky to crystalline matrix, large influx % gray and very colored shale-cave?

Mudstone as above, slight decrease in % shale here, sample quality very poor!

Loss of chert here, shale is gray, dark gray and black mixed with very colored shales-cave?

Mudstone; cream to brown, some gray, hard, chalky to crystalline matrix, fossiliferous inprt, brown chert.

Wackestone; hard, crystalline matrix, fossiliferous to micro-oolitic, dense look wet, no show, rare black wormy stain.

Mudstone; cream to gray and brown, hard, to firm, chalky to crystalline, fossiliferous inprt, no show.

**Swope 4520 (-2593) A-12 B-1 C-12**

Shale; hard, blocky carbonaceous-gassy.

Wackestone / Packstone; off white, micro-fossiliferous to micro-oolitic, chalky matrix, looks tight in wet, hard to friable, sandy appearance, no show, no cut on selected samples, no odor, no visible gas bubbles, no stain, small barren porosity in dry sample.

Mudstone; cream, tan, light gray, hard, most chalky, scattered Wackestone-no show, rare black wormy stain-no cut, dense look in wet.

Mudstone; cream, hard to brittle, chalky to crystalline, dense rare black chert.

Shale; black carbonaceous, soft to hard, some gassy.

Mudstone; cream to buff, hard to brittle, chalky to crystalline matrix, dense, trace off white to mottled light gray chert.

Mudstone; cream to tan, hard to brittle, crystalline to chalky, dense, cream free chert, and rare off white fossiliferous chert.

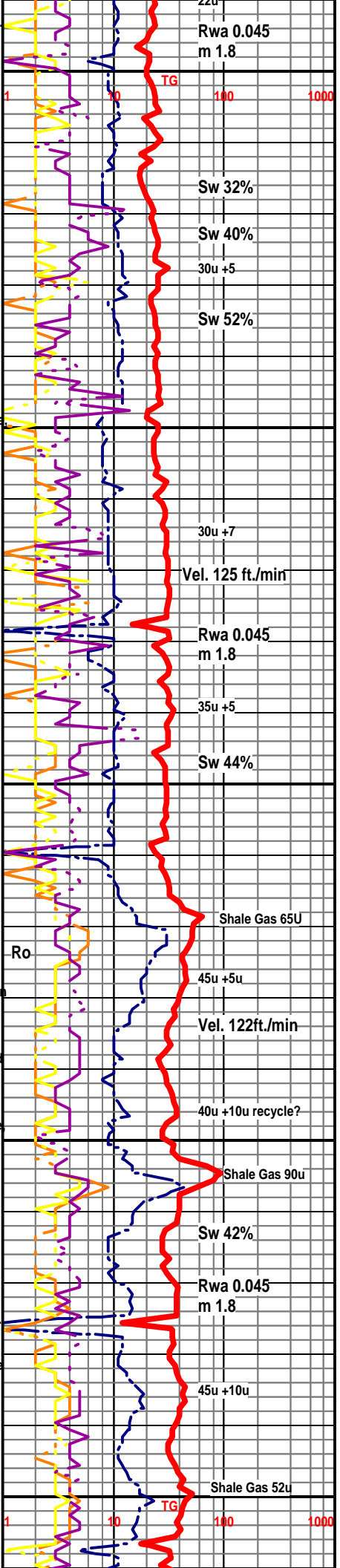
Mudstone; aa, trace cream with dark fossil inclusions, increase in dark to black shale here.

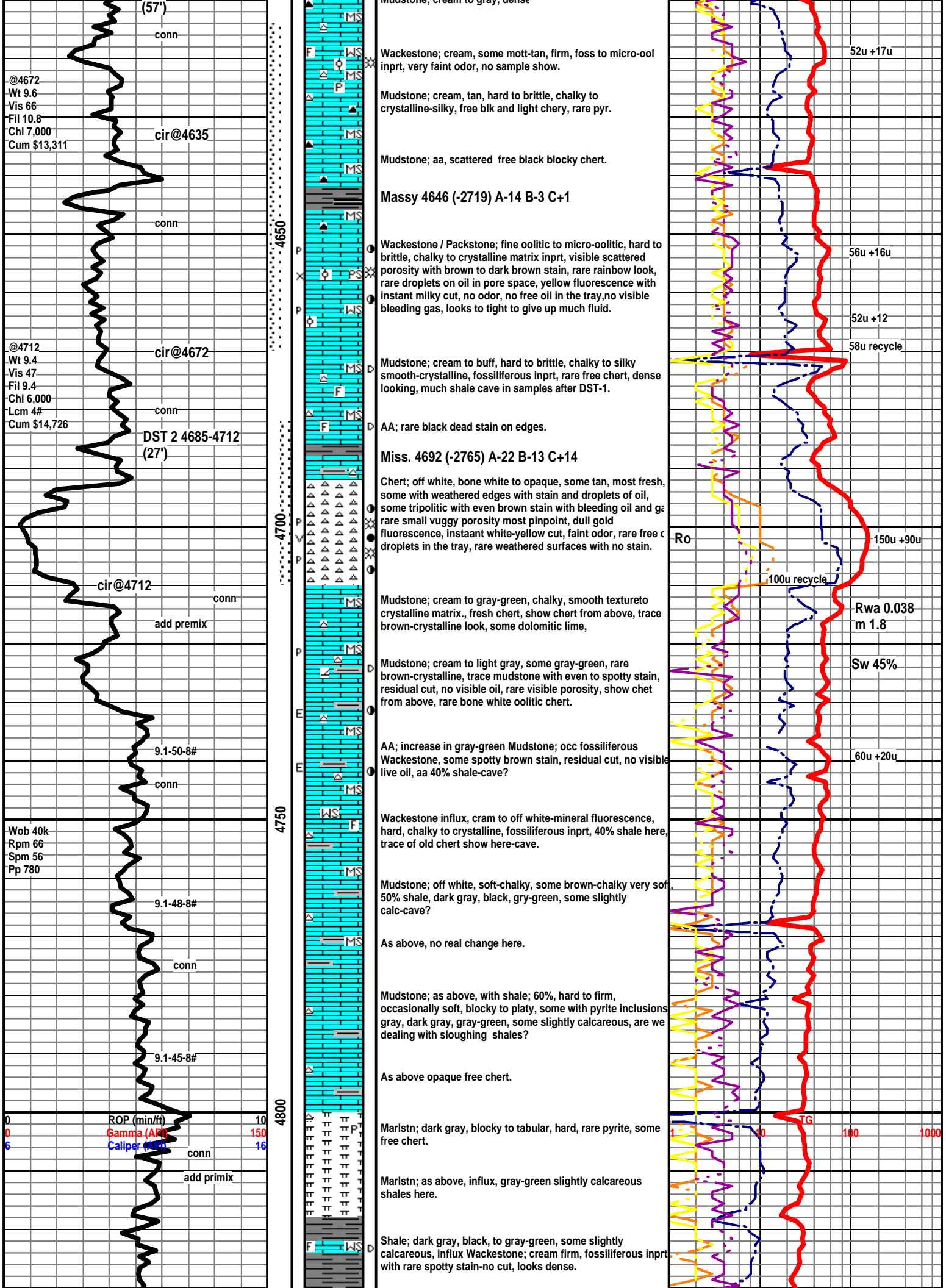
Mudstone; aa, influx light gray, hard-silky crystalline, dense, cream and light gray chert.

**Marmaton 4604 (-2677) A-10 B-3 C-4**

Shale; black-carb, gassy when broken.

Mudstone; cream to gray, dense





@4672  
Wt 9.6  
Vis 66  
Fil 10.8  
Chl 7,000  
Cum \$13,311

@4712  
Wt 9.4  
Vis 47  
Fil 9.4  
Chl 6,000  
Lcm 4#  
Cum \$14,726

Wob 40k  
Rpm 66  
Spm 56  
Pp 780

conn

conn

conn

conn

DST 2 4685-4712  
(27')

conn

add primix

9.1-50-8#

conn

9.1-48-8#

conn

9.1-45-8#

conn

add primix

ROP (min/ft) 10  
Gamma (API) 150  
Caliper (in) 16

4650

4700

4750

4800

Wackestone; cream, some mott-tan, firm, foss to micro-ool inprt, very faint odor, no sample show.

Mudstone; cream, tan, hard to brittle, chalky to crystalline-silky, free blk and light chery, rare pyr.

Mudstone; aa, scattered free black blocky chert.

**Massy 4646 (-2719) A-14 B-3 C+1**

Wackestone / Packstone; fine oolitic to micro-oolitic, hard to brittle, chalky to crystalline matrix inprt, visible scattered porosity with brown to dark brown stain, rare rainbow look, rare droplets on oil in pore space, yellow fluorescence with instant milky cut, no odor, no free oil in the tray, no visible bleeding gas, looks to tight to give up much fluid.

Mudstone; cream to buff, hard to brittle, chalky to silky smooth-crystalline, fossiliferous inprt, rare free chert, dense looking, much shale cave in samples after DST-1.

AA; rare black dead stain on edges.

**Miss. 4692 (-2765) A-22 B-13 C+14**

Chert; off white, bone white to opaque, some tan, most fresh, some with weathered edges with stain and droplets of oil, some tripolitic with even brown stain with bleeding oil and ge rare small vuggy porosity most pinpoint, dull gold fluorescence, instaan white-yellow cut, faint odor, rare free c droplets in the tray, rare weathered surfaces with no stain.

Mudstone; cream to gray-green, chalky, smooth texture to crystalline matrix., fresh chert, show chert from above, trace brown-crystalline look, some dolomitic lime,

Mudstone; cream to light gray, some gray-green, rare brown-crystalline, trace mudstone with even to spotty stain, residual cut, no visible oil, rare visible porosity, show chert from above, rare bone white oolitic chert.

AA; increase in gray-green Mudstone; occ fossiliferous Wackestone, some spotty brown stain, residual cut, no visible live oil, aa 40% shale-cave?

Wackestone influx, cram to off white-mineral fluorescence, hard, chalky to crystalline, fossiliferous inprt, 40% shale here, trace of old chert show here-cave.

Mudstone; off white, soft-chalky, some brown-chalky very soft, 50% shale, dark gray, black, gry-green, some slightly calc-cave?

As above, no real change here.

Mudstone; as above, with shale; 60%, hard to firm, occasionally soft, blocky to platy, some with pyrite inclusions gray, dark gray, gray-green, some slightly calcareous, are we dealing with sloughing shales?

As above opaque free chert.

Marlstn; dark gray, blocky to tabular, hard, rare pyrite, some free chert.

Marlstn; as above, influx, gray-green slightly calcareous shales here.

Shale; dark gray, black, to gray-green, some slightly calcareous, influx Wackestone; cream firm, fossiliferous inprt with rare spotty stain-no cut, looks dense.

52u +17u

56u +16u

52u +12

58u recycle

150u +90u

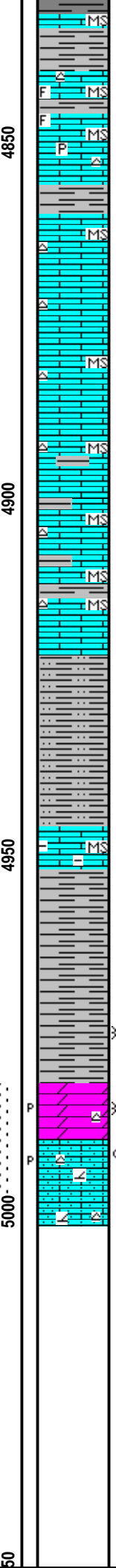
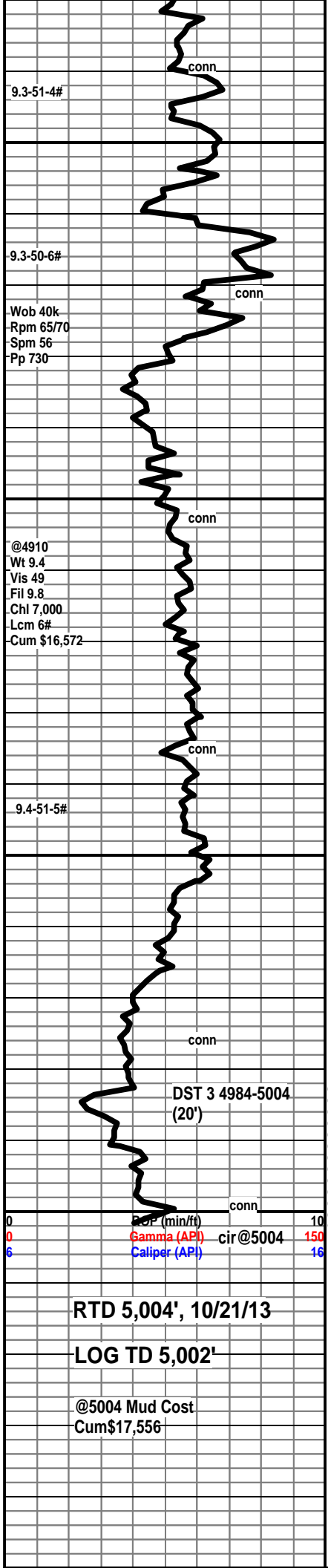
100u recycle

Rwa 0.038  
m 1.8

Sw 45%

60u +20u

TG 100 1000



Shale; gray, gray-green, firm to hard, platy, smooth, most non-calcareous.

Mudstone; cream to brown, chalky, fossiliferous inprt, tight, bone white to blue gray free chert.

Mudstone; cream to buff, occasionally brown, chalky some crystalline-silky, tight.

Shale; pale green here, sub waxy.

Mudstone; cream to tan, occasionally brown, hard to brittle, some chalky soft, most with chalky matrix, some silky crystalline, dense looking in wet, white to gray free chert, still high % of shale in the samples.

Mudstone; cream, gray, to tan, most chalky matrix, trace free chert.

Mudstone; aa, increase in gray, black and pale green shales here, cave?

Mudstone; cream to brown, some off white, most, chalky, rare pale green chert, Shale aa-cave?

**Kinderhook 4922 (-2995) A-11 B-9**

Shale; small influx gray, soft some laminated with siltstone, some with micaceous material in the matrix, with pale green sub waxy shale.

Shale; increase gray silty inprt, influx very soft claystone, gray in color, samples wash heavy gray here, mixed with pale green sub waxy and dark gray shales.

Mudstone; slight increase in soft cream, and light gray, some look argillaceous.

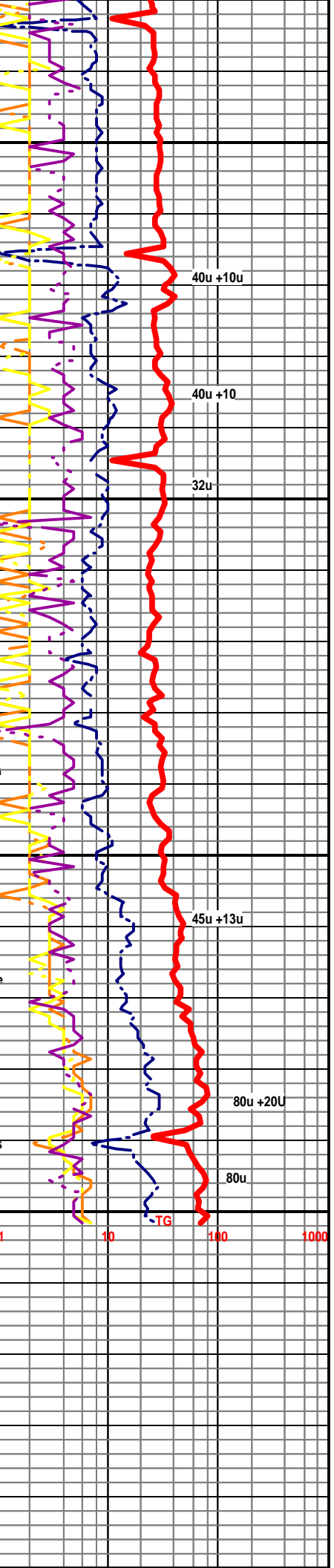
**Woodford 4952 (-2995) A-11 B-9**

Shale; gray, gray-green (sub waxy), small influx very soft brown shale, samples still wash heavy gray.

Shale; increase in brown, earthy, soft to firm, some with visible gas bubbles, one sample with very faint odor.

**Viola 4985 (-3058) A-12 B-12, Not Reached W/E-log.**

Dolomite; light gray, gritty-vf sucrosic, friable to very hard, some with spotty brown and black stain, some with chert inclusions, mixed with a sandy light gray dolomitic Wackestone white spotty show, free chert and chert inclusions with weathered edges and spotty show, rare bleeding sample, rare pinpoint porosity with stain, yellow fluorescence and milky cut, faint sample odor in the dolomite and sandy dolomitic lime, majority of Dolomite, (sandy) Dolomitic Wackestone and chert have no show.



RTD 5,004', 10/21/13

LOG TD 5,002'

@5004 Mud Cost  
Cum\$17,556