

Agricultural Energy Services

Hope 1-23

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

Well Name: Hope #1-23
API: 15-175-22277-00-00
Location: NE/4 of Section 23-T33S-R31W
License Number: 34089
Spud Date: 7/27/2021
Surface Coordinates: 990' FNL & 990' FEL
Region: Seward Co., KS
Drilling Completed:
Bottom Hole Coordinates: 990' FNL & 990' FEL
Ground Elevation (ft): 2,744.1' K.B. Elevation (ft): 2,756.1
Logged Interval (ft): 2,300' To: Total Depth (ft):
Formation: Mississippian
Type of Drilling Fluid: Chemical

Printed by WellSight LogViewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Agricultural Energy Services, Inc.
Address: P.O. Box 622377
Oviedo, FL 32762

GEOLOGIST

Name: Thomas M. Williams
Company: Petroleum Geologist
Address: Wichita, KS

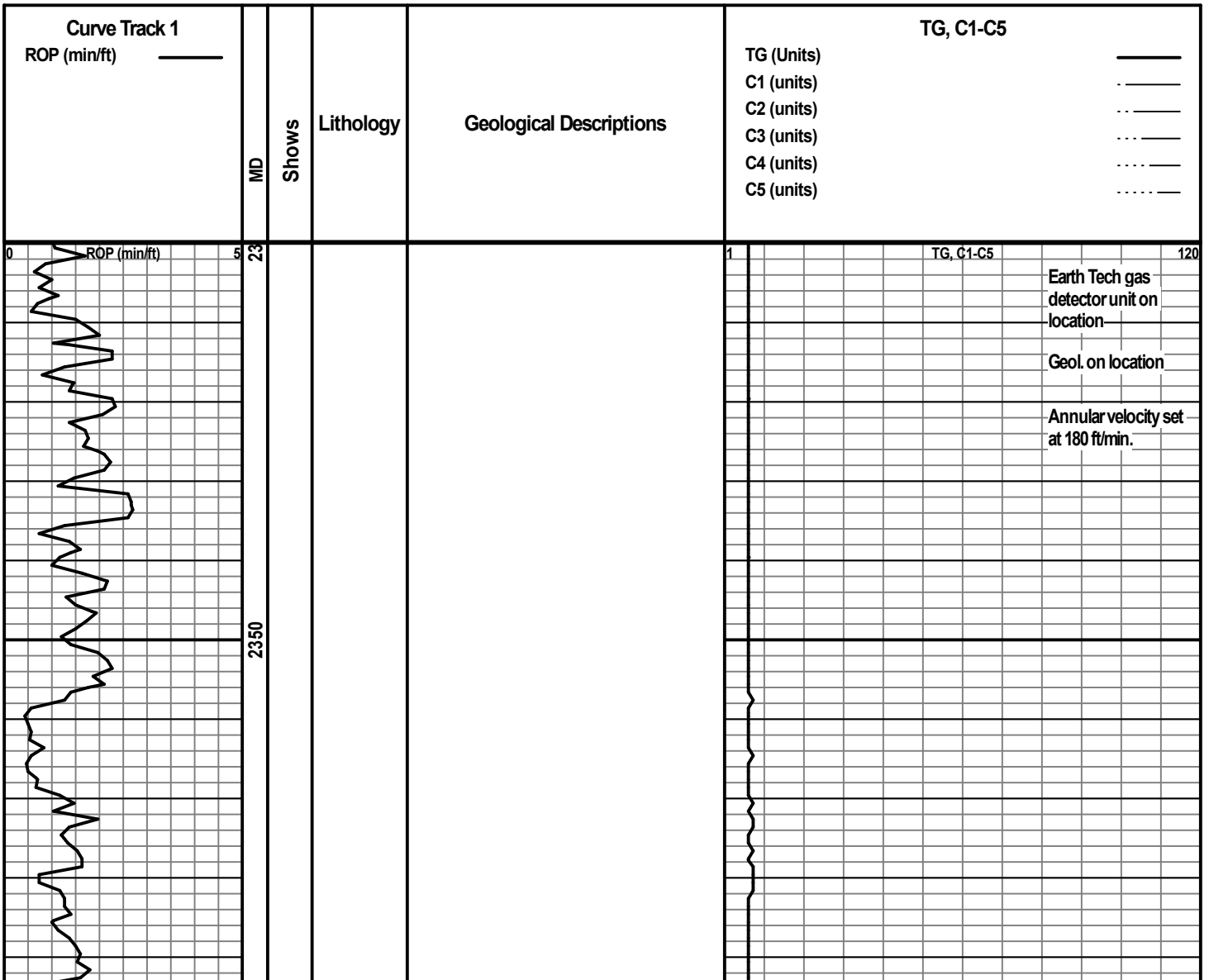
DSTs

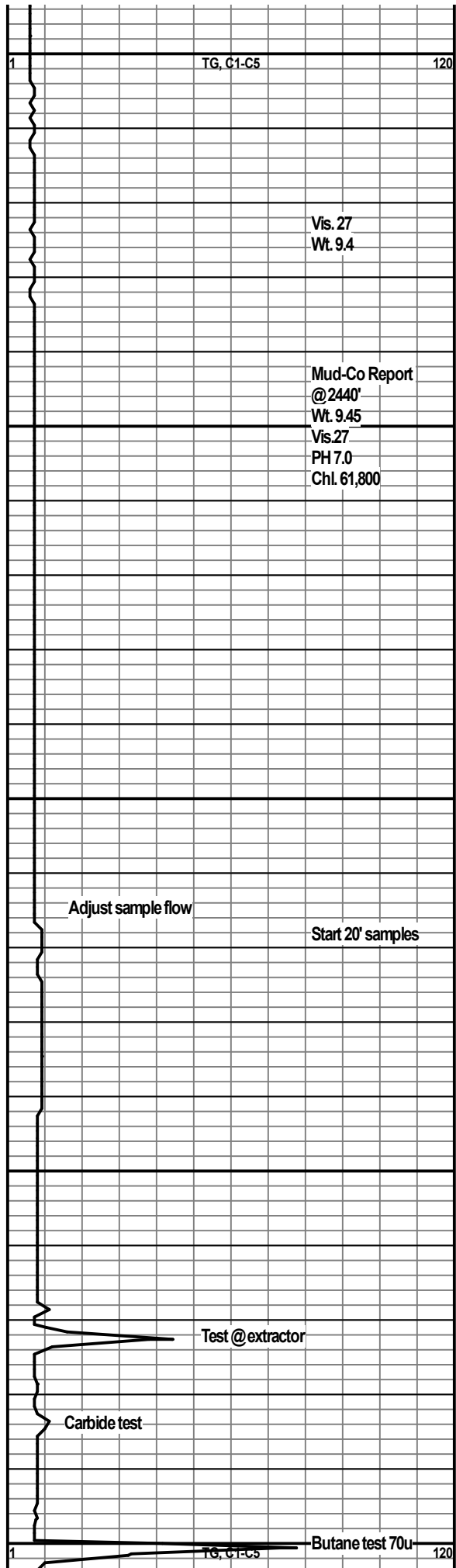
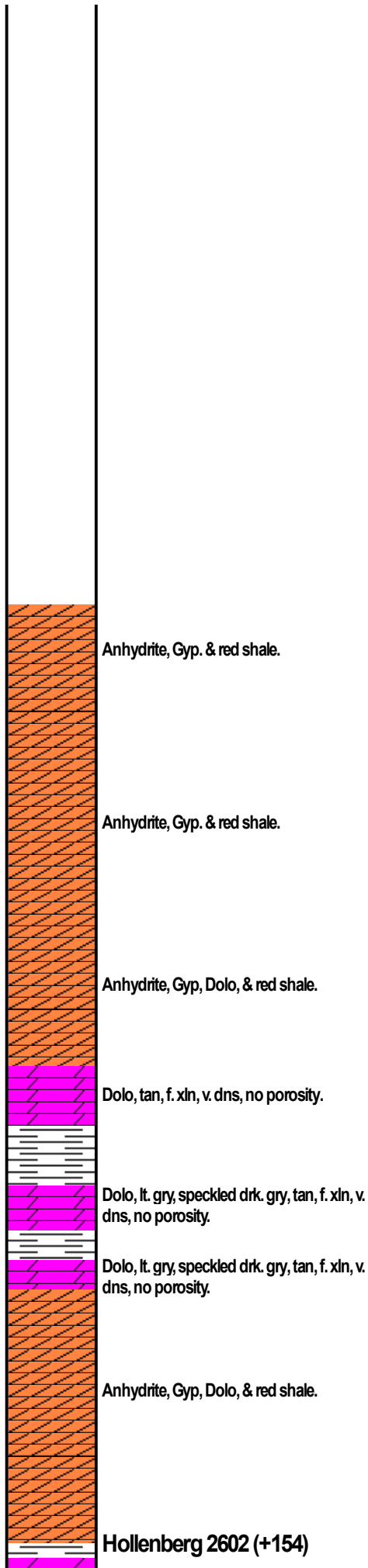
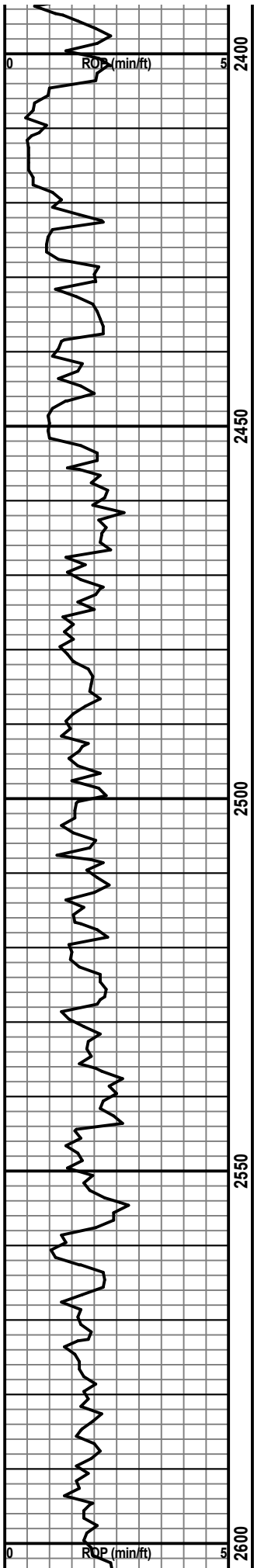
Comments

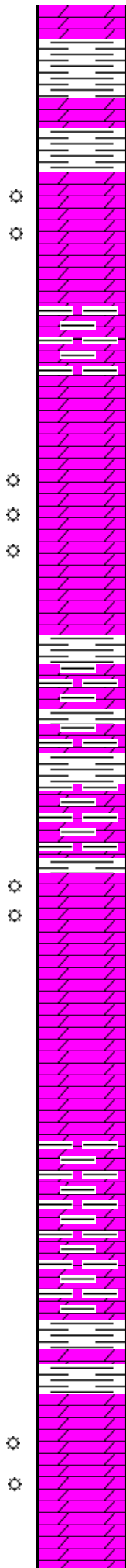
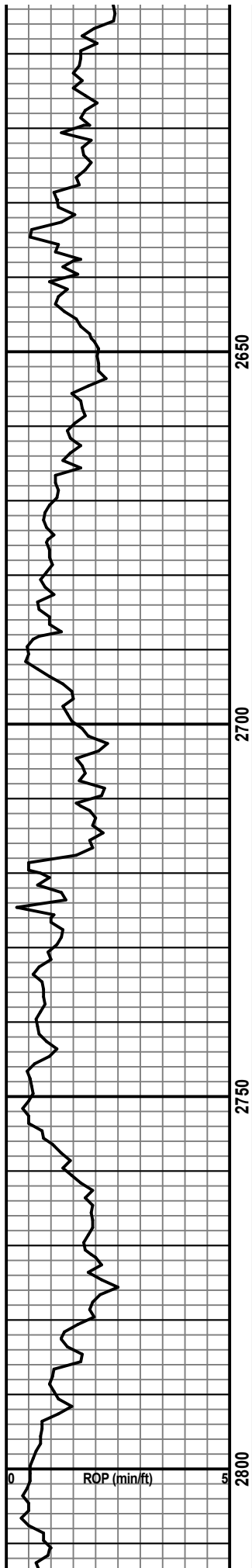
Well Comp.	Hope 1-23	Louthan 1-23	Stoddard 1-14
Base/Heeb	4327 (-1571)	4295 (-1544) +27	4318 (-1560) +11
Lansing	4447 (-1691)	4428 (-1677) +14	4456 (-1698) -7
Iola	4639 (-1883)	4612 (-1861) +22	4638 (-1880) +3
Swope	4936 (-2180)	4902 (-2151) +29	4934 (-2176) +4
Cherokee Sh	5284 (-2528)	5238 (-2487) +41	5265 (-2507) +21
Thorpe Lm	5441 (-2685)	5403 (-2652) +33	5424 (-2666) +19

ROCK TYPES

	Anhy		Carb.sh		Lmst		Shcol
	Bent		Congl		Meta		Shgy
	Brec		Dol		Mrlst		Sltst
	Cht		Gyp		Salt		Ss
	Clyst		Igne		Shale		Till







Dolo, tan, f. xln, v. dns, no porosity.

Abdt. red & gry. shale, anhy.

Herington 2626 (+130)

Dolo, buff, tan, lt. gry-wh, f. xln, granular, sucrosic, fair dev. int. xln. porosity, sli. shw gas, no fluor, no odor, no staining.

Abdt. red & gry. shale in samples.

Krider 2654 (+102)

Krider 2666 (+90)

Dolo, lt. gry, white, tan, f. xln, sucrosic to granular, well dev. int. xln. porosity, sli. show of gas, no fluor, no odor, no staining.

Abdt. red & gry. shale in samples.

Sh, med. gry.

Abdt. red & gry. shale in samples.

Winfield 2720 (+36)

Dolo, lt. gry, buff, tan, f. xln, sucrosic to granular, fair to well dev. int. xln. & vugular porosity, v. sli. show of gas, dull gold fluor.

Abdt. red & gry. shale in samples.

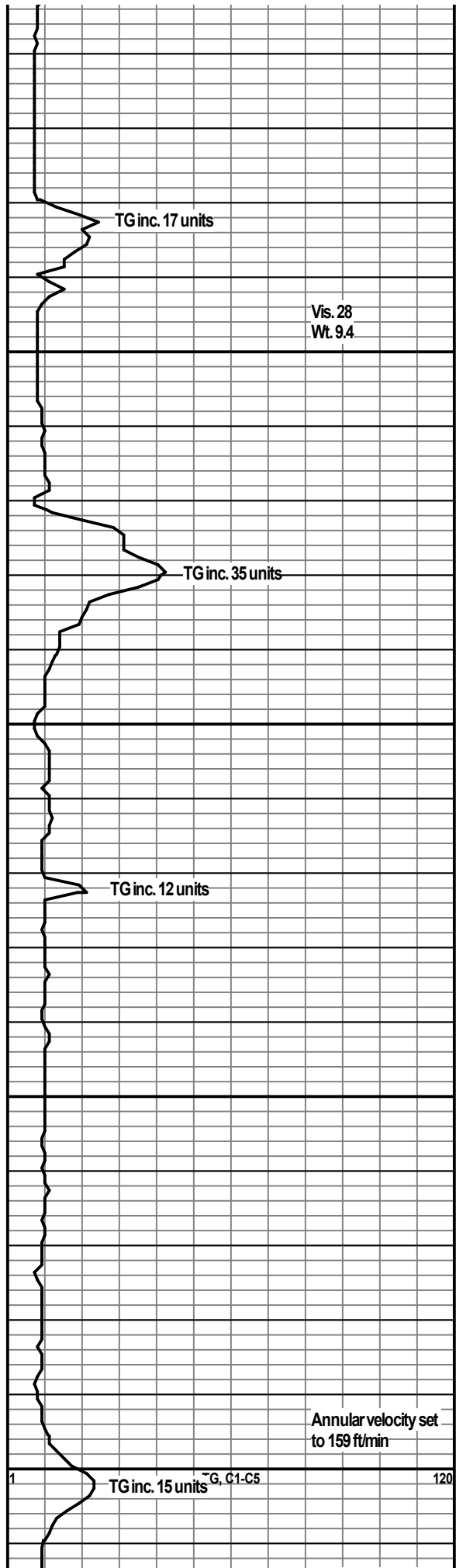
Dolo, lt. gry, buff, tan, f. xln, sucrosic to granular, fair to well dev. int. xln. & vugular porosity, no show, no odor, no fluor.

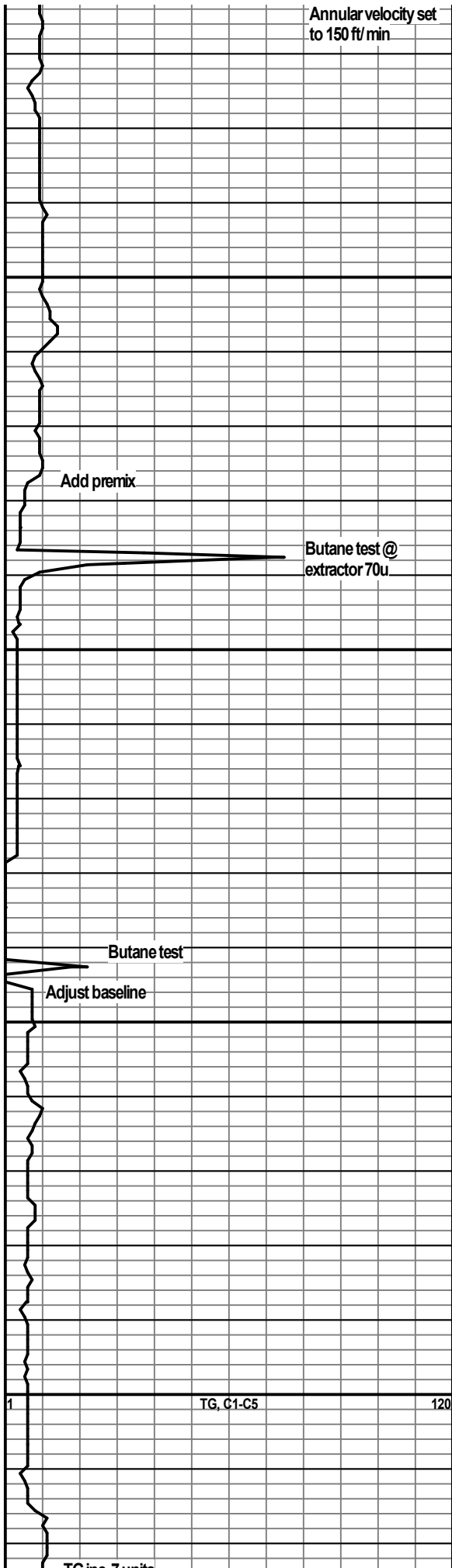
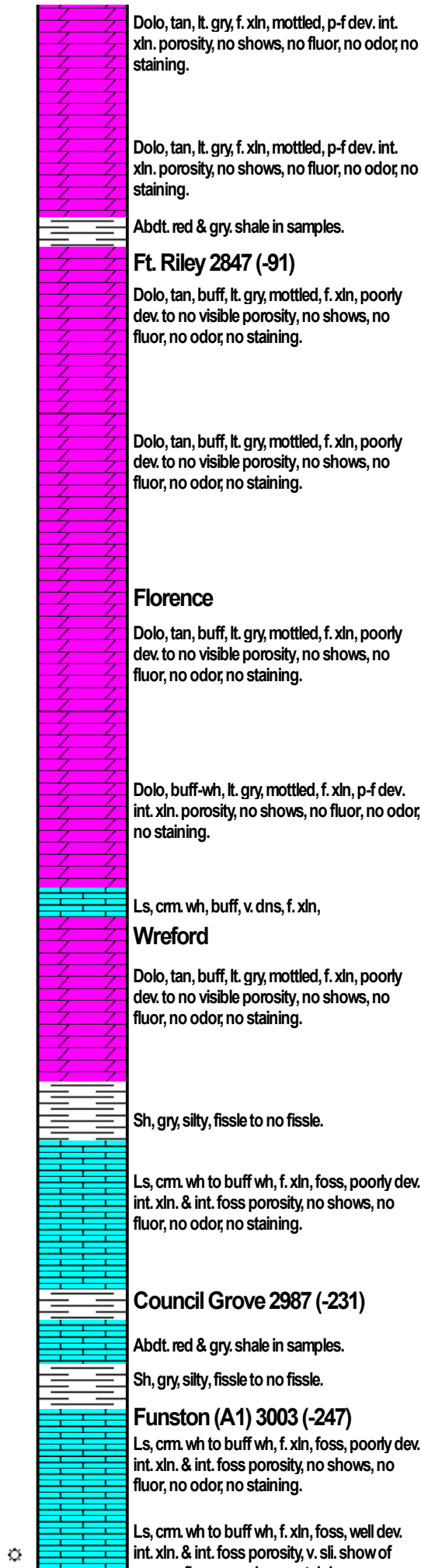
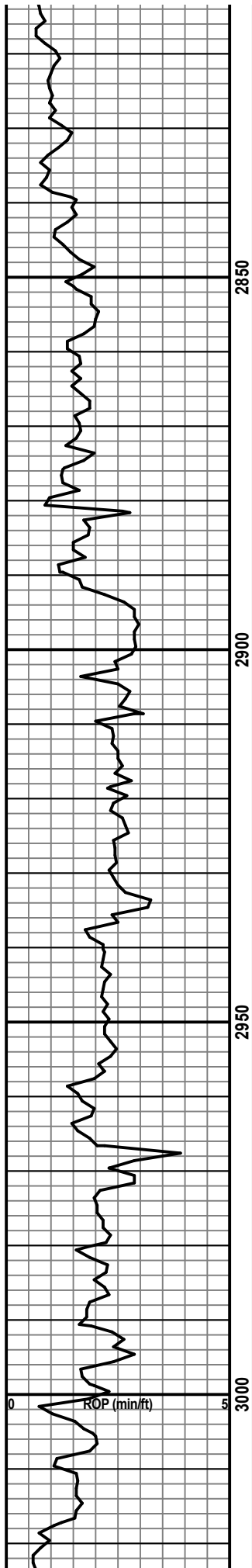
Abdt. red & gry. shale in samples.

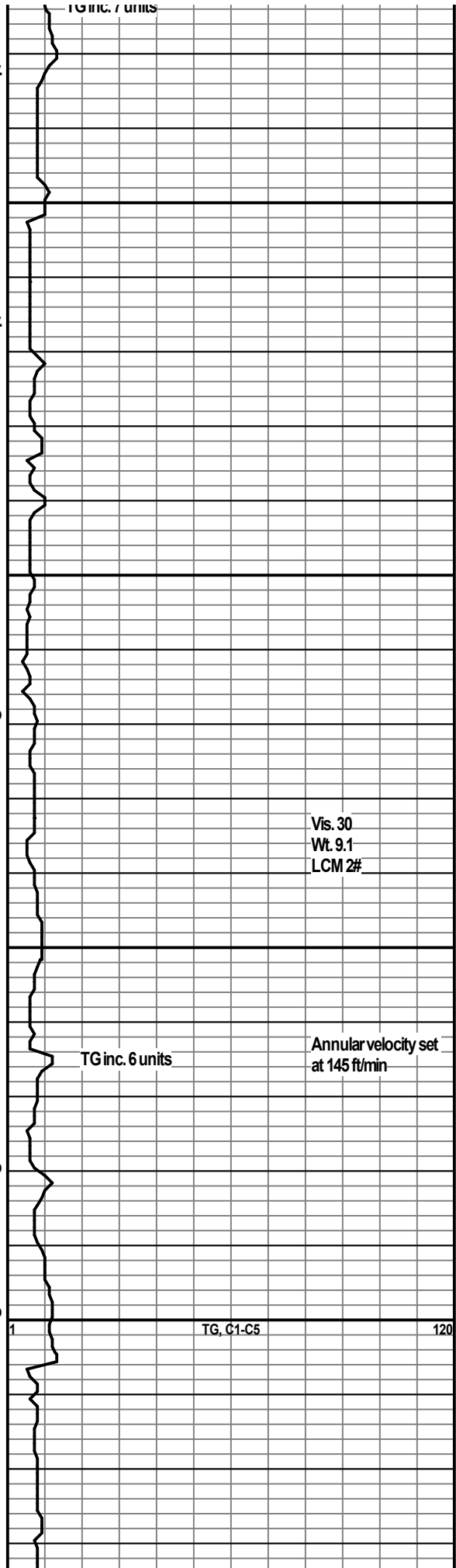
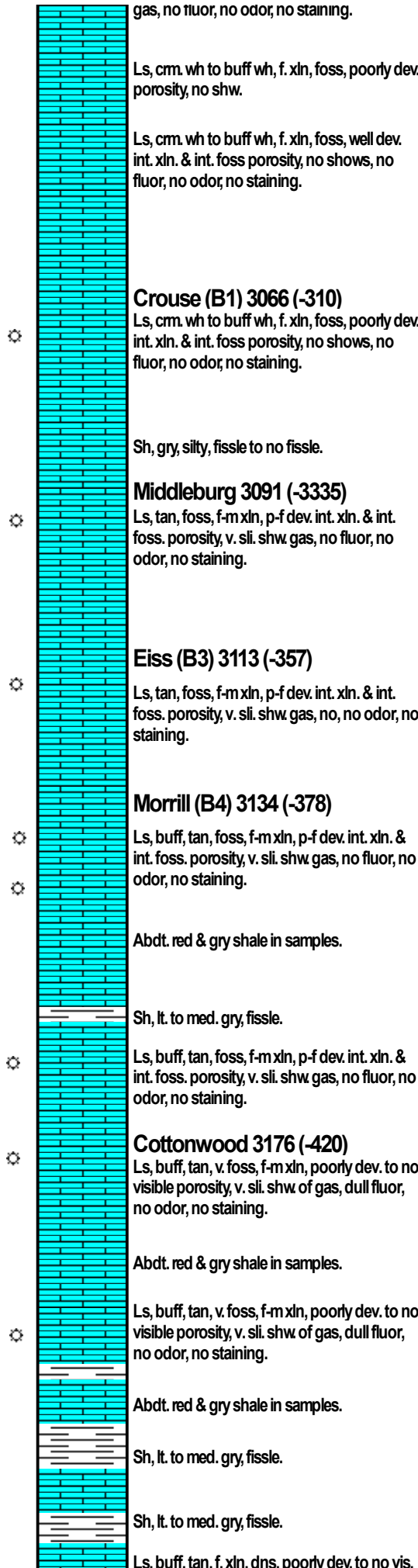
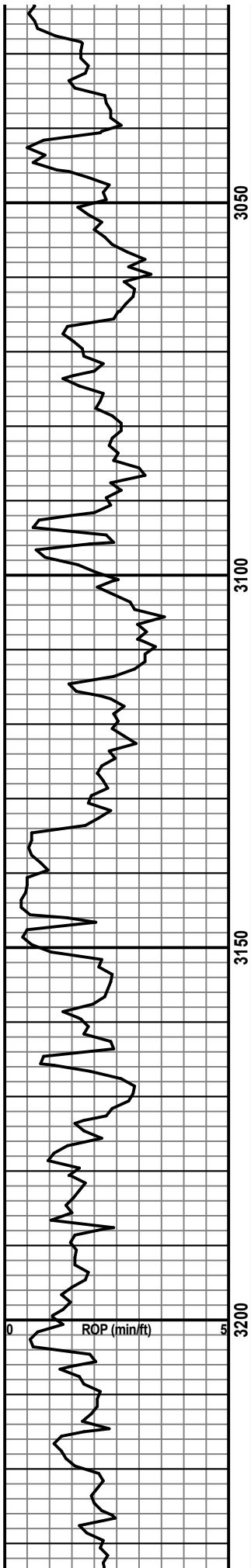
Sh, lt. to med. gry, fistle to non-fistle, sli. silty.

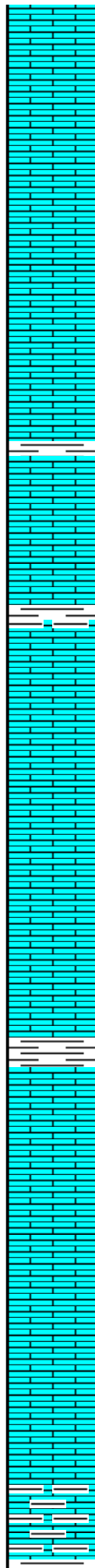
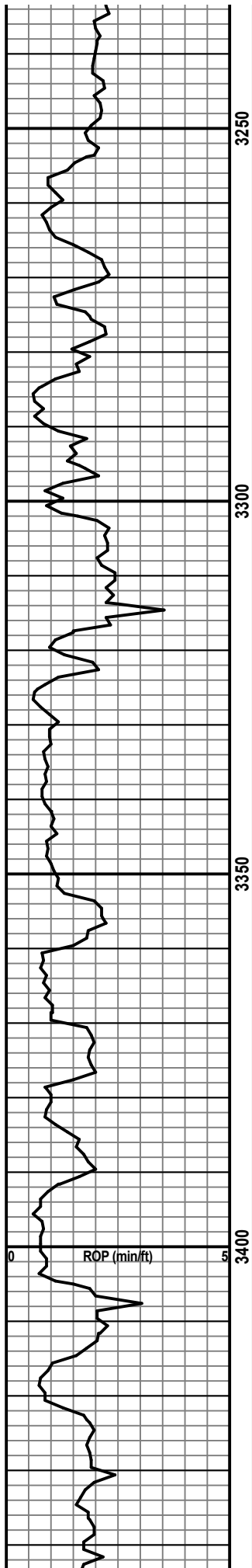
Towanda 2791 (-35)

Dolo, lt. gry, buff, tan, f. xln, sucrosic to granular, fair to well dev. int. xln. & vugular porosity, sli. show of gas, no fluor.









porosity, no shows.

Abdt. red & gry shale in samples.

Neva (C) 3254 (-498)

Ls, cm wh, m. xln, granular to sucrosic, well dev. int. xln. porosity, no shows, no fluor, no odor, no staining.

Sh, med. gry, fissle to non-fissle.

Ls, cm wh, buff, f-c xln, v. foss, well dev. int. xln. & int. foss porosity, no shw. gas, no fluor, no odor, no staining.

Abdt. red shale & anhydrite in samples.

Ls, buff, tan, f. xln, dns, poorly dev. to no vis. porosity, no shows.

Howe 3317 (-561)

Ls, buff, tan, lt. gry, f-m xln, v. foss, well dev. int. xln, vugular & int. foss. porosity, no shows, no fluor, no odor, no staining.

Ls, buff, tan, lt. gry, f-m xln, v. foss, well dev. int. xln, vugular & int. foss. porosity, no shows, no fluor, no odor, no staining.

Ls, buff, tan, f. xln, dns, poorly dev. to no vis. porosity, no shows.

Ls, buff, tan, lt. gry, f-m xln, v. foss, well dev. int. xln, vugular & int. foss. porosity, no shows, no fluor, no odor, no staining.

Long Creek 3377 (-621)

Ls, buff, tan, lt. gry, f-m xln, v. foss, fair dev. int. xln, vugular & int. foss. porosity, no shows, no fluor, no odor, no staining.

Ls, buff, tan, lt. gry, f-m xln, v. foss, well dev. int. xln, vugular & int. foss. porosity, no shows, no fluor, no odor, no staining.

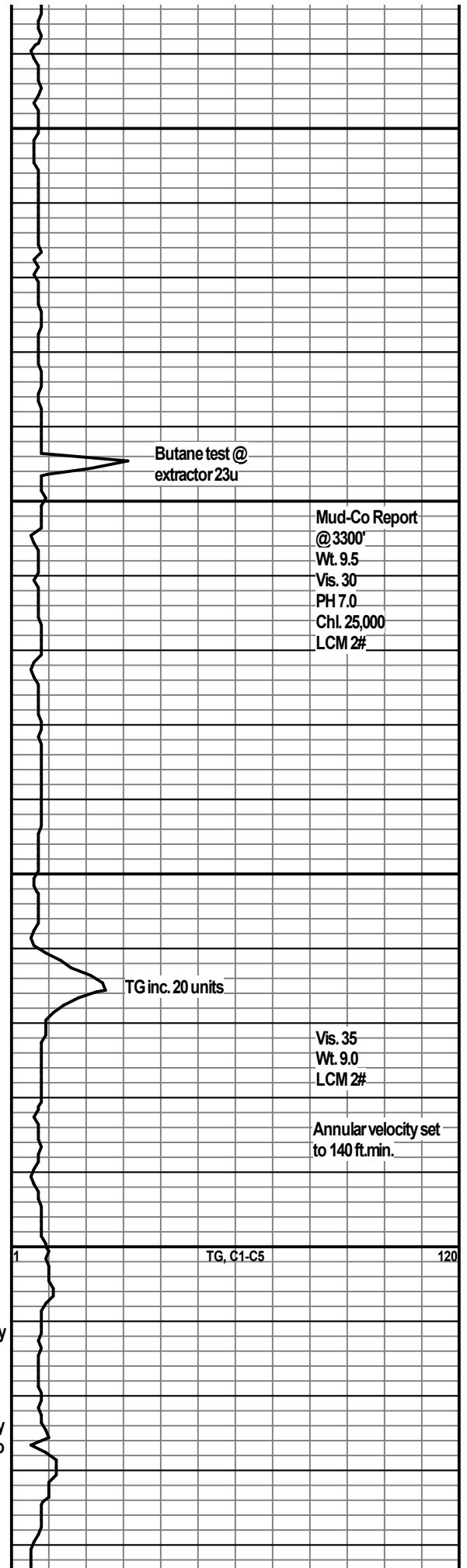
Abdt. red shale & anhydrite in samples.

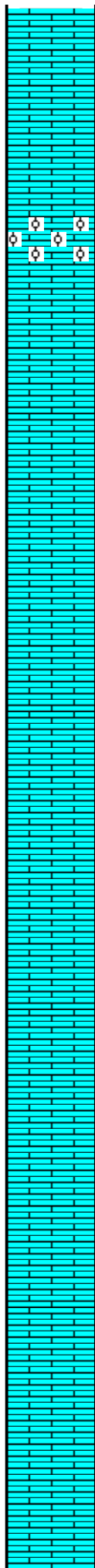
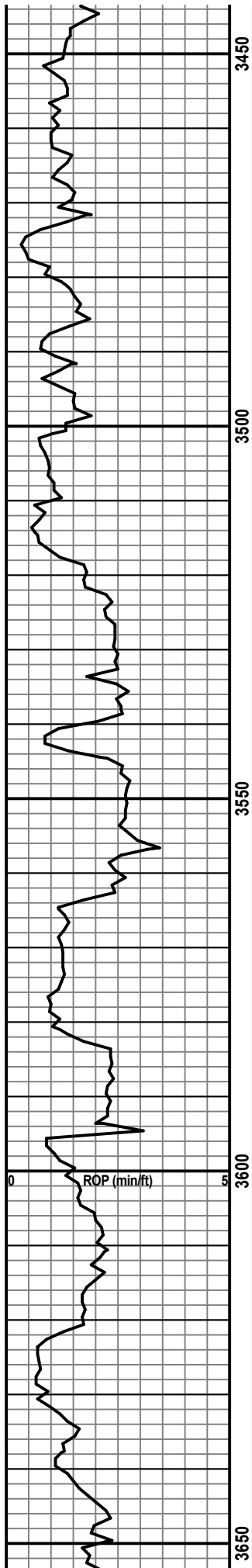
Ls, cm wh, buff, lt. gry-wh, f. xln, foss, chalky in part, fair to well dev. int. xln & vugular porosity, no shows, no fluor, no strn.

Ls, lt. to med. gry, arg. & shaley in part, poorly dev. to no vis. porosity, no show, no fluor, no staining, no odor.

Sh, gry, silty to calcareous.

Sh. & siltstone, gry, calcareous.





Wabaunsee 3446 (-690)

Ls, lt. to med. gry, arg. & shaley in part, poorly dev. to no vis. porosity, no show, no fluor, no staining, no odor.

Ls, tan, buff, f-m xln, oolitic, fair to well dev. oomoldic porosity, no shows, no fluor, no odor, no staining.

Ls, cm. wh, buff, lt. gry-wh, f. xln, foss, chalky in part, fair to well dev. int. xln & vugular porosity, no shows, no fluor, no strn.

Ls, cm. wh, buff, lt. gry-wh, f. xln, foss, chalky in part, fair to well dev. int. xln & vugular porosity, no shows, chalky fluor, no strn.

Ls, buff-wh, f. xln, v. dns, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no strn.

Ls, cm. wh, buff, lt. gry-wh, f. xln, foss, chalky in part, fair to well dev. int. xln & vugular porosity, no shows, chalky fluor, no strn.

Ls, buff-wh, f. xln, v. dns, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no strn.

Ls, cm. wh, buff, lt. gry-wh, f. xln, v. foss, fair to well dev. int. xln & vugular porosity, no shows, chalky fluor, no strn.

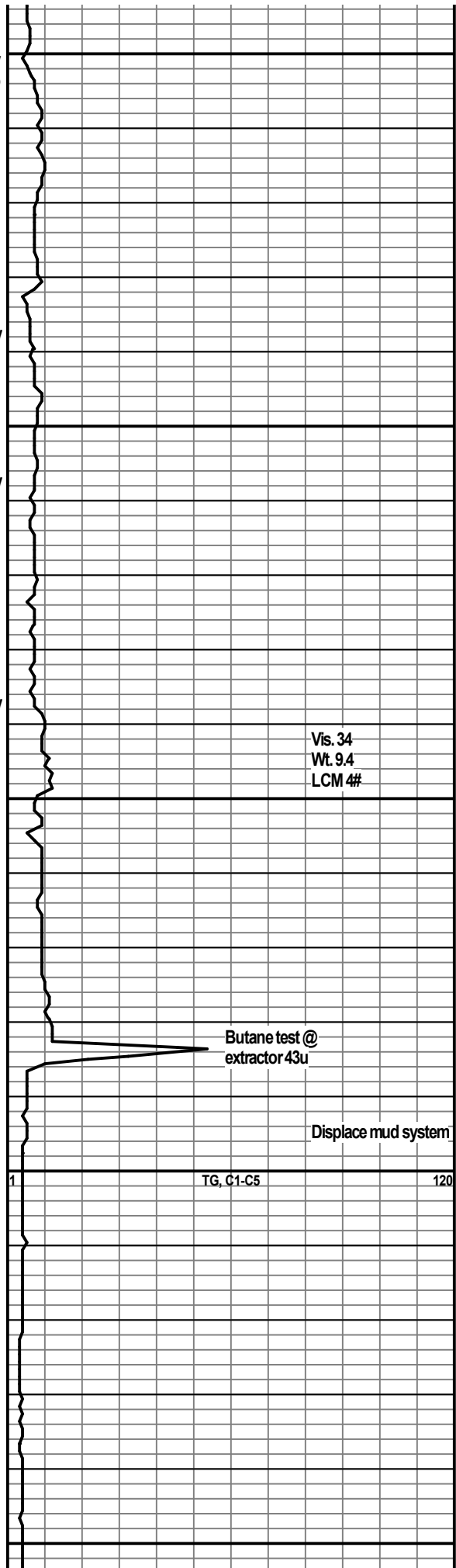
Ls, buff-wh, f. xln, v. dns, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no strn.

Ls, cm-wh, buff, f-m xln, fair to well dev. int. xln. & vug. porosity, no shows, chalky fluor, no odor, no staining.

Ls, buff-wh, f. xln, v. dns, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no strn.

Ls, lt. gry, cm. wh, buff, v. foss, well dev. int. foss & vug. porosity, no shows, chalky fluor, no odor, no staining.

Ls, buff-wh, f. xln, v. dns, poorly dev. to no vis. porositv. no shows. no fluor. no odor: no



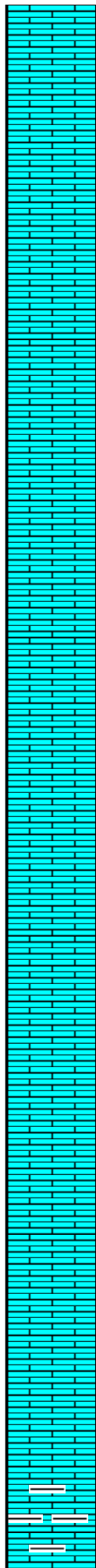
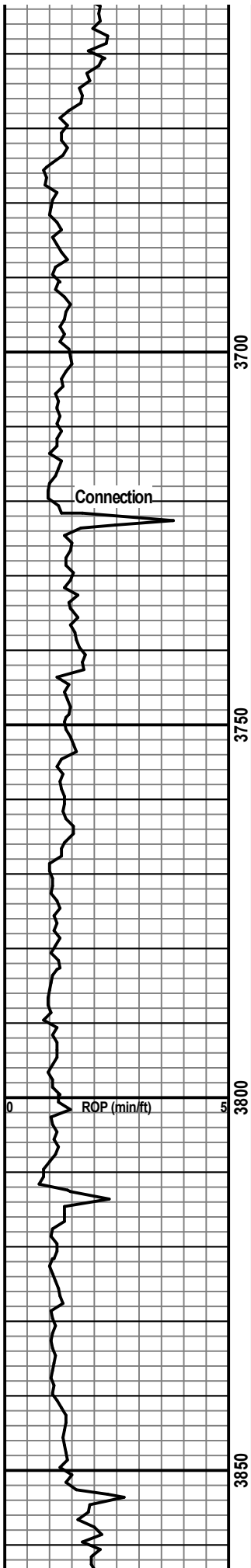
Vis. 34
Wt. 9.4
LCM 4#

Butane test @
extractor 43u

Displace mud system

TG, C1-C5

120



str.

Topeka 3664 (-908)

Ls, lt. gry, buff, tan, granular, m. xln, well dev. int. foss & int. xln. porosity, no shows, chalky fluor, no odor, no staining.

Ls, buff, cm-wh, v. foss, well dev. int. xln. & int. foss porosity, no shows, chalky fluor, no odor, no staining.

Ls, cm. wh, buff, f-c xln, v. foss, well dev. int. foss. & vugular porosity, no shows, no fluor, no odor, no staining.

Ls, buff, lt. gry, cm. wh, f-m xln, sub-chalky, well dev. int. xln. & vug. porosity, no shows, no odor, no staining, chalky fluor.

Ls, lt. gry, buff, tan, granular, m. xln, well dev. int. foss & int. xln. porosity, no shows, chalky fluor, no odor, no staining.

Ls, buff, cm-wh, v. foss, well dev. int. xln. & int. foss porosity, no shows, chalky fluor, no odor, no staining.

Ls, cm. wh, buff, f-c xln, v. foss, well dev. int. foss. & vugular porosity, no shows, no fluor, no odor, no staining.

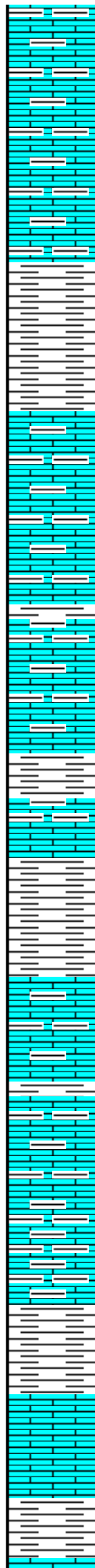
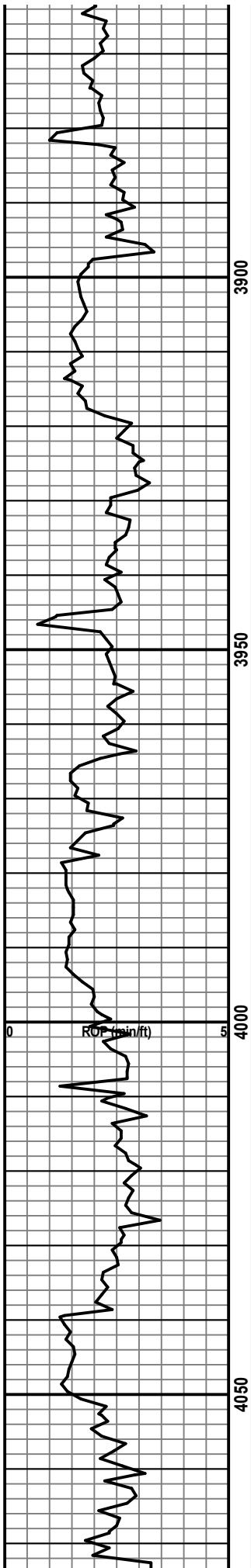
Ls, buff, lt. gry, cm. wh, f-m xln, sub-chalky, well dev. int. xln. & vug. porosity, no shows, no odor, no staining, chalky fluor.

Ls, lt. gry, f. xln, dns, arg., w/ abdt. lt. to med. gry. shale, no vis. por., no shows, no odor, no fluor.

Wt. 8.7
Vis 42
LCM 2#

TG, C1-C5

120



Ls, lt. gry, f. xln, dns, arg., w/ abdt. lt. to med. gry. shale, no vis. por., no shows, no odor, no fluor.

3897 (-1141)

Sh, lt. to med. gry, silty, fissle.

Sh, lt. to med. gry, calcareous.

3918 (-1162)

Ls, med. gry, f. xln, v. dns, v. arg., no vis. porosity, no shows, no fluor, no odor, no staining.

Ls, med. gry, f. xln, v. dns, v. arg., no vis. porosity, no shows, no fluor, no odor, no staining.

Sh, med. to drk. gry, brittle.

Ls, med. gry, f. xln, v. dns, v. arg., no vis. porosity, no shows, no fluor, no odor, no staining.

Sh, med. to drk. gry, silty, fissle.

Ls, tan, f. xln to micritic, v. dns, no vis. porosity, no shows.

Tecumseh Sh 3978 (-1222)

Sh, lt. to med. gry, calcareous.

Sh, lt. to med. gry, silty, fissle.

3994 (-1238)

Ls, lt. gry, mottled buff, tan, f. xln, no vis. porosity, no show, no fluor, no odor, no staining.

Sh, lt. to med. gry, silty, fissle.

Ls, lt. gry, mottled buff, tan, f. xln, no vis. porosity, no show, no fluor, no odor, no staining.

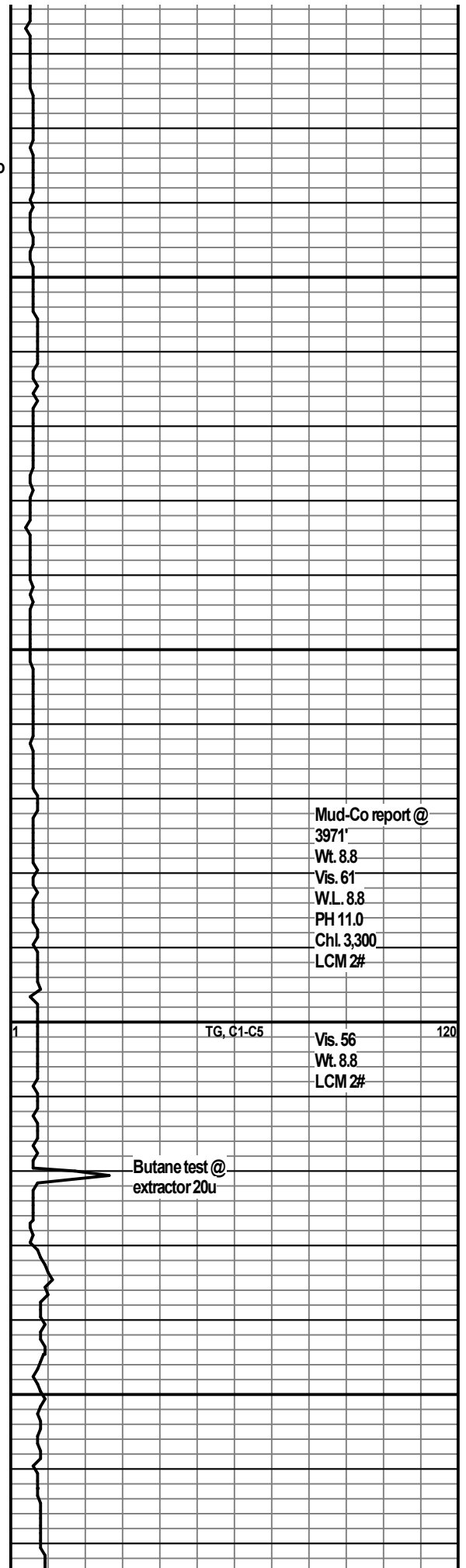
Ls, tan & gry, v. f. xln. to micritic, no vis. porosity, no shows, no odor, no fluor.

Sh. & siltstone lt. to med. gry, fissle.

Ls, tan & gry, v. f. xln. to micritic, no vis. porosity, no shows, no odor, no fluor.

Sh. & siltstone, gry, fissle.

Ls, tan & gry, v. f. xln. to micritic

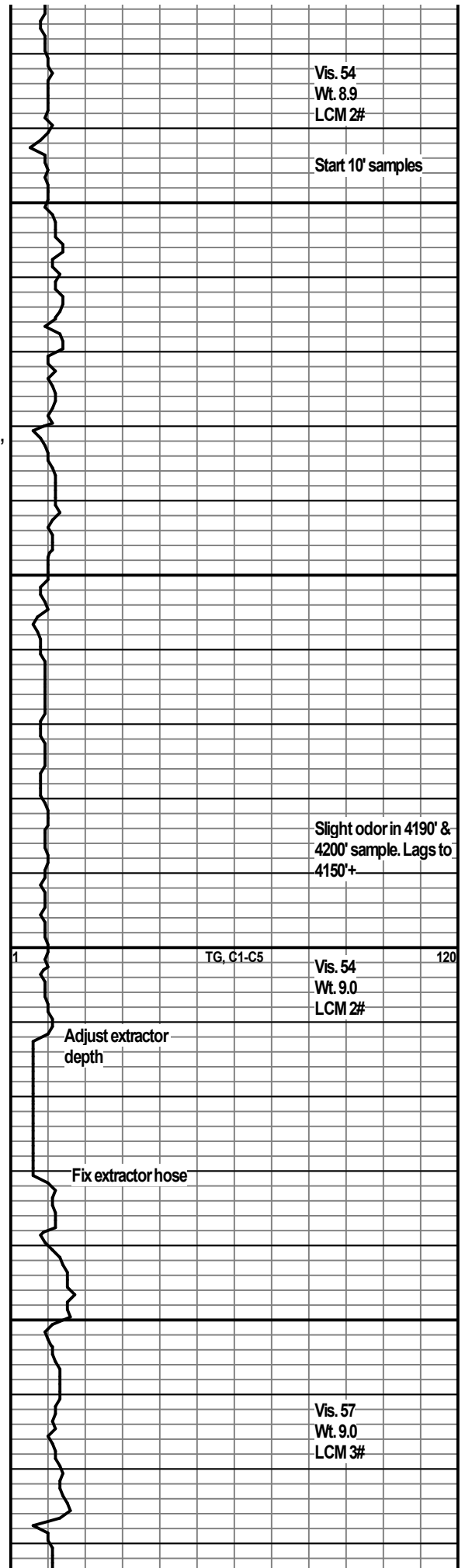
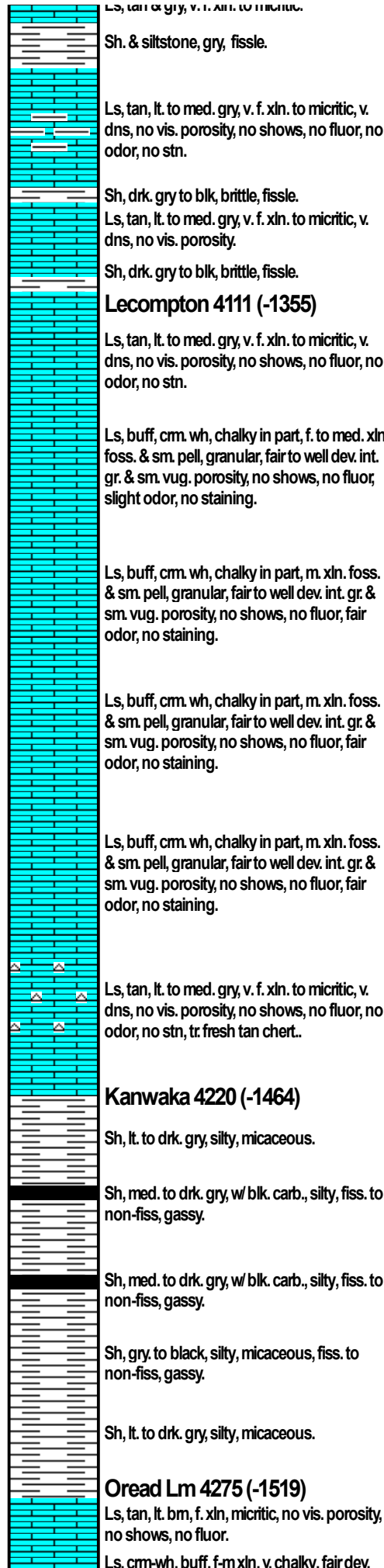
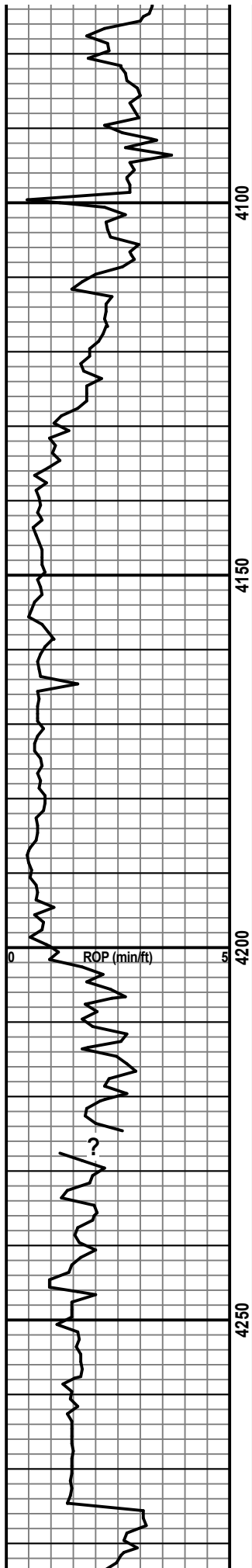


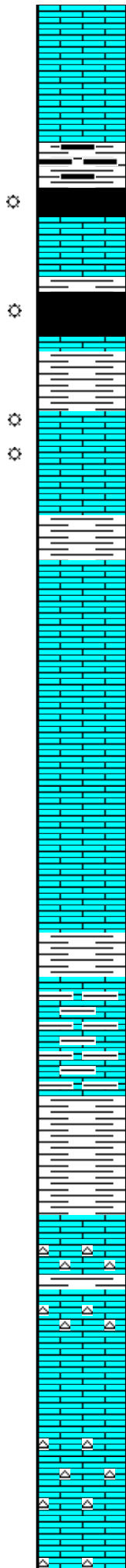
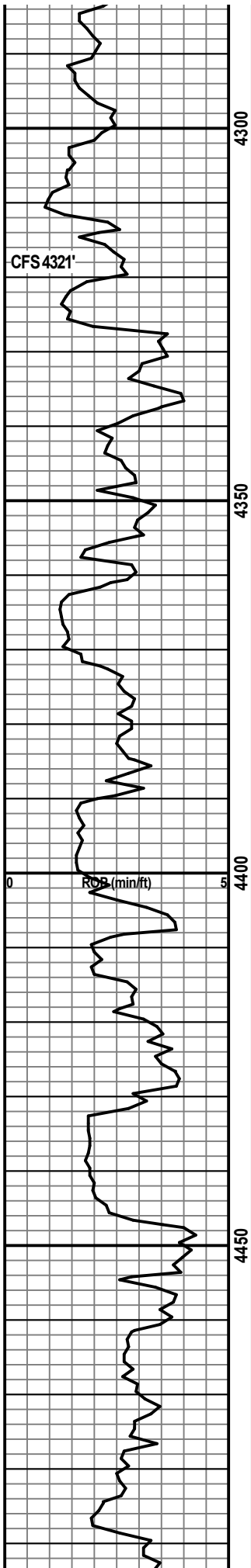
Mud-Co report @
3971'
Wt. 8.8
Vis. 61
W.L. 8.8
PH 11.0
Chl. 3,300
LCM 2#

TG, C1-C5

Vis. 56
Wt. 8.8
LCM 2#

Butane test @
extractor 20u





int. xln. & vug. porosity, no show, no fluor, no odor. no stain.

Ls, cm. wh, buff, tan, m. xln, granular, poorly dev. int. xln. por. no show, no fluor, no odor, no stn.

Sh, drk. gry. to blk. carbonaceous.

Sh, blk, carbonaceous, gassy.

Ls, tan, lt. bm, gry, f. xln, micritic, no vis. porosity, no shows.

Heebner Sh 4321 (-1565)
Sh, black, carb, bleeding abdt. gas.

Base/ Heeb. 4327 (-1571)
Sh, lt. to med. gry, silty, non-fissle, calcareous, micaceous.

Toronto 1 4338 (-1582)
Ls, buff, cm. wh, tan, f-m xln, poorly dev. int. xln. & sm. vugular porosity, v. sli. show gas, dull gold fluor, no odor, no staining.

Sh, lt. to med. gry, silty, calcareous.

Toronto 2 4351 (-1595)
Ls, buff, cm. wh, tan, f-m xln, poor to fair dev. int. xln. & sm. vugular porosity, no show gas, no fluor, no odor, no staining.

Ls, buff wh, tan, f-m xln, v. dns, poorly dev. to no vis. porosity, no shows, no odor, chalky fluor.

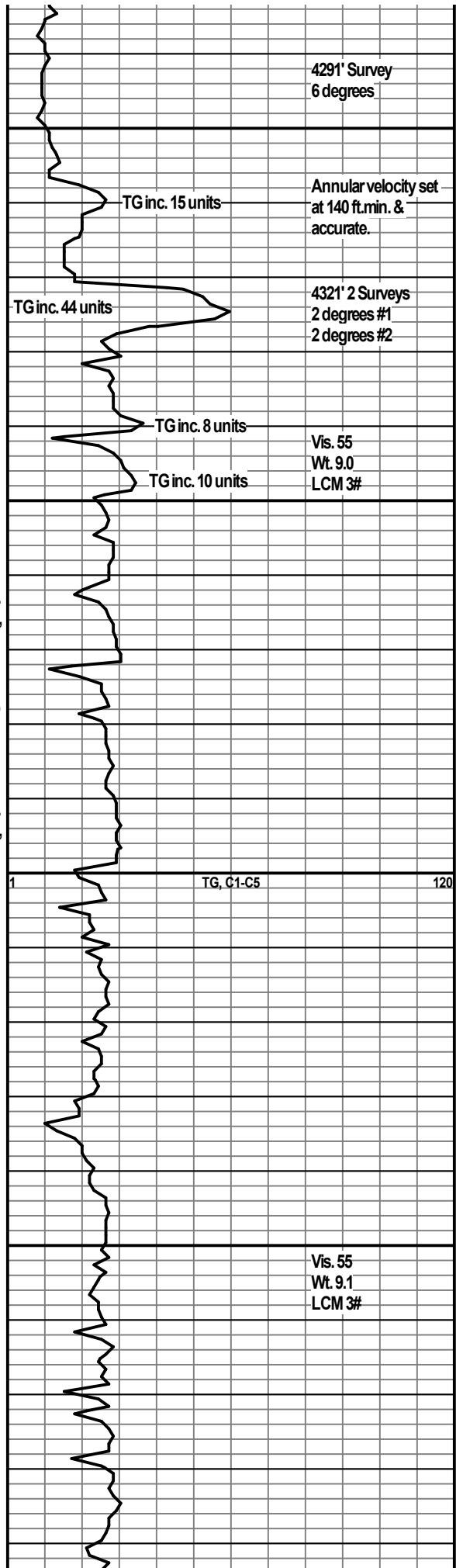
Ls, buff, cm. wh, tan, f-m xln, poor to fair dev. int. xln. & sm. vugular porosity, no show gas, no fluor, no odor, no staining.

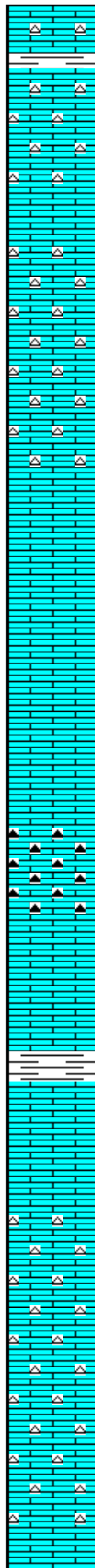
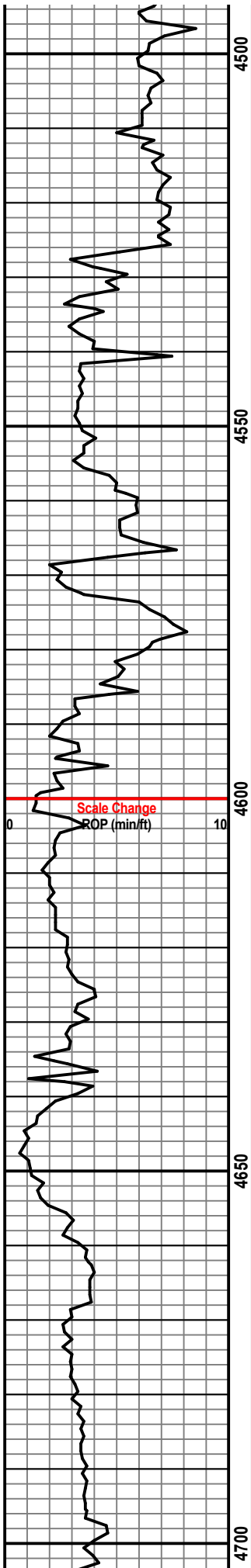
Sh, lt. to med. gry, silty, fissle.

Ls, buff, tan, gry, f-m xln, dns, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no stn.

Sh, lt. to med. gry, silty, fissle.

Lansing 4447 (-1691)
Ls, buff, lt. gry-wh, f. xln, v. dns, no vis. porosity, no show, no fluor.
Ls, buff, tan, lt. gry, f. xln, v. dns, no vis. porosity, no show, no fluor, no odor, w/ abdt. fresh tan chert.
Ls, tan, f-m xln, foss, poorly dev. int. xln. & small vug. porosity, no shows, no fluor, no odor, no staining.
Ls, tan, f-c xln, foss, poor to fair dev. int. xln. & small vug. porosity, no shows, no fluor, slight odor, no staining, w/ tan chert.





Ls, lt. gry-wh, buff, tan, f. xln. to micritic, no vis. porosity, no show, no fluor, no odor, no stain, w/ tan & gry. chert.

Ls, lt. gry-wh, buff, tan, f. xln. to micritic, no vis. porosity, no show, no fluor, no odor, no stain, w/ tan chert.

Kansas City 4526 (-1770)

Ls, cm. wh, tan, buff, f-m xln, chalky, fair dev. int. xln. & vug. porosity, no shows, chalky fluor, no odor, no staining, w/ abdt. tan & gry chert.

Ls, cm. wh, tan, buff, f-m xln, chalky, fair dev. int. xln. & vug. porosity, no shows, chalky fluor, no odor, no staining, w/ abdt. tan & gry chert.

Ls, buff, tan, f-m xln, fair to well dev. int. xln. & vug. porosity, no shows, chalky fluor, no odor, no staining.

Ls, buff, tan, f-m xln, brittle, fair to well dev. int. xln. & sm. vugular porosity, no show, chalky fluor, no odor, no stain.

Ls, lt. to med. gry, buff, f-m xln, chalky, poorly dev. to no vis. porosity, no shows, no fluor, no odor, no staining, w/ abdt. drk. gry chert.

Ls, lt. gry-wh, tan, f. xln, v. dns, no vis. porosity, no shows, no fluor.

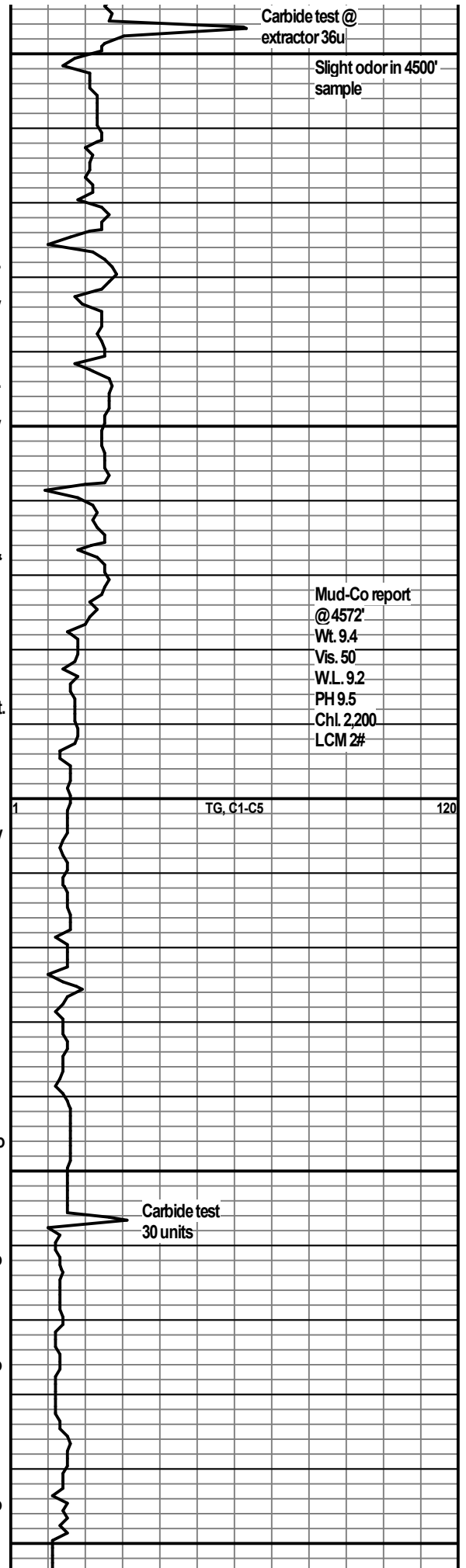
Iola Lm 4639 (-1883)

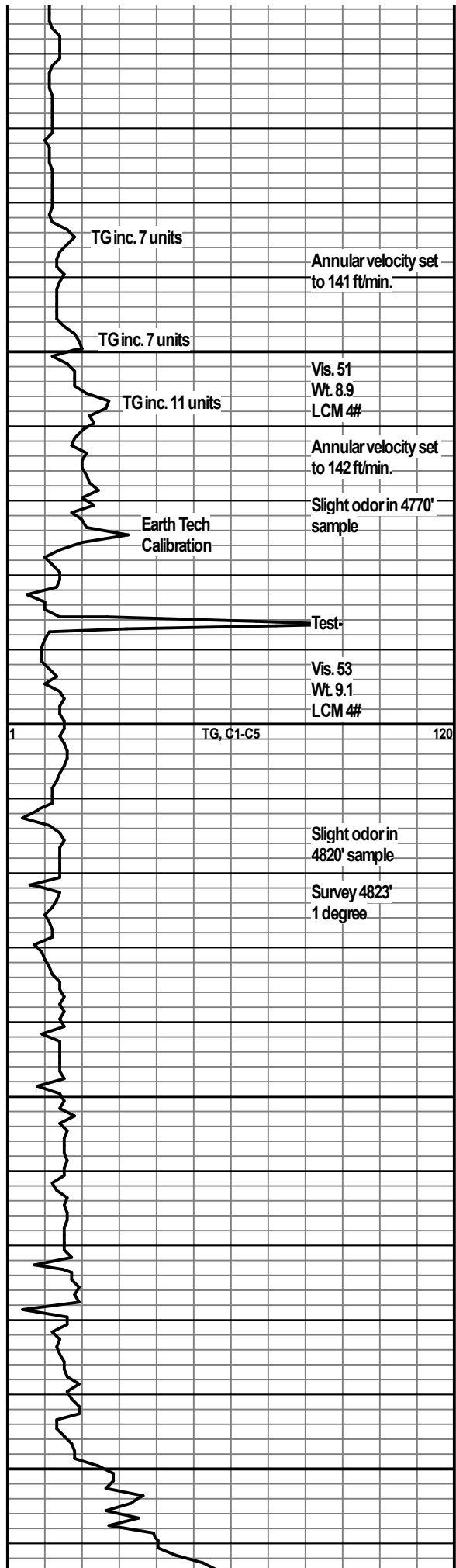
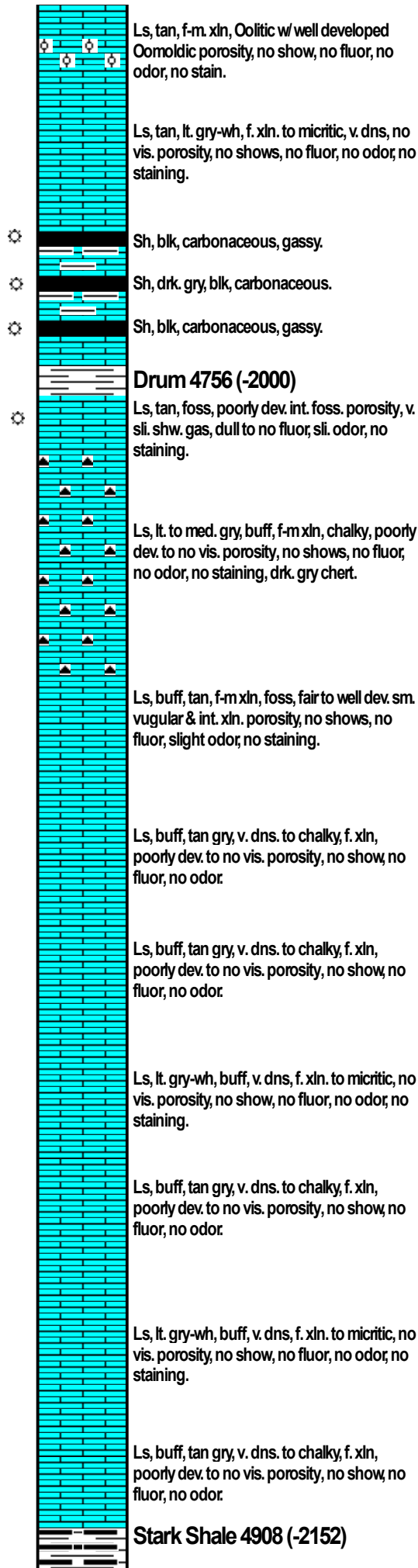
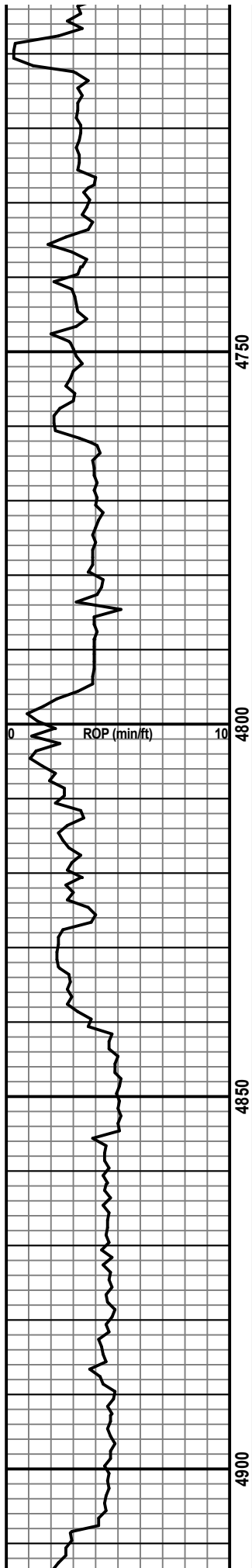
Ls, tan, buff, m-c xln, brittle, well dev. int. xln. & sm. vugular porosity, no show, no fluor, no odor, no staining.

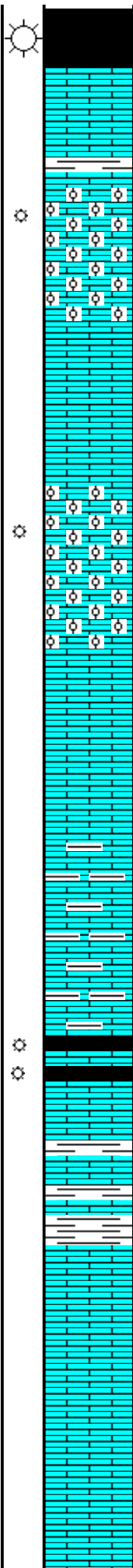
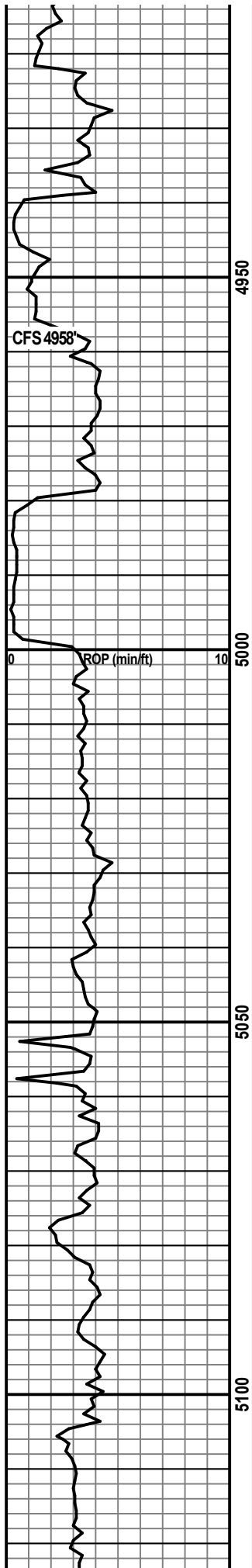
Ls, tan, lt. gry-wh, f. xln. to micritic, v. dns, no vis. porosity, no shows, no fluor, no odor, no staining.

Ls, tan, lt. gry-wh, f. xln. to micritic, v. dns, no vis. porosity, no shows, no fluor, no odor, no staining.

Ls, tan, lt. gry-wh, f. xln. to micritic, v. dns, no vis. porosity, no shows, no fluor, no odor, no staining.







Sh, black, carb, bleeding abdt. gas.

Ls, tan, oolitic, w/ gry. pell, f. xln, poorly dev. to no vis. porosity, no show, no fluor, sli odor, no stn.

Swope 4936 (-2180)

Ls, tan, f-c xln, v. oolitic w/ well dev. oomoldic and int. xln. por., sli. shw gas w/ abdt. barren porosity, dull fluor, sli. odor, no staining,

Ls, tan, buff, lt. gry, oolitic in part, f-m xln, some micritic, poorly dev. to no vis. porosity, no show, no fluor, sli. odor, no staining.

Hertha 4979 (-2223)

Ls, tan, f-c xln, v. oolitic w/ well developed oomoldic and inter crystalline porosity, with slight shows of 'trapped' gas when broken, w/ abdt. barren porosity, dull fluor, sli. odor, no staining,

Ls, tan, buff, lt. gry, oolitic in part, f-m xln, some micritic, poorly dev. to no vis. porosity, no show, no fluor, sli. odor, no staining.

Ls, med. gry, foss, arg, v. dns, fine xln. to micritic, no vis. porosity.

Ls, med. gry, foss, arg, v. dns, fine xln. to micritic, no vis. porosity.

Sh, blk, carbonaceous, gassy.

Sh, black, carb, bleeding abdt. gas.

Ls, med. gry, foss, arg, v. dns, fine xln. to micritic, no vis. porosity.

Ls, tan, lt. gry, buff, v. dns, fine xln. to micritic, no vis. porosity.

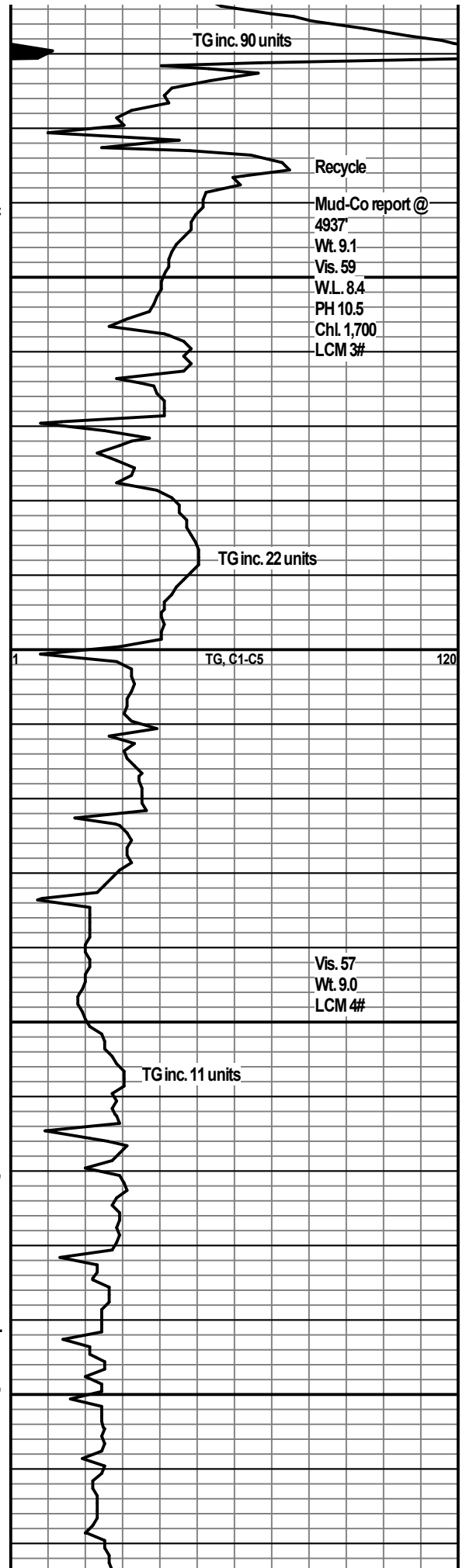
Sh, lt. to med. gry, silty, fissle.

Marmaton 5081 (-2325)

Ls, tan, buff, cm. wh, foss, oolitic, chalky in part, poorly dev. int. foss. & int. xln. porosity, no shows, chalky fluor, no odor, no staining.

Ls, tan, lt. gry, buff, v. dns, fine xln. to micritic, no vis. porosity.

Ls, buff wh, tan, v. dns, fine xln. to micritic, poorly dev. int. xln. porosity, no shows, no fluor, no odor, no staining.



TG inc. 90 units

Recycle

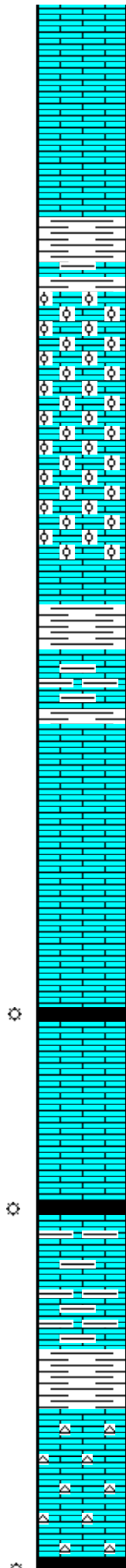
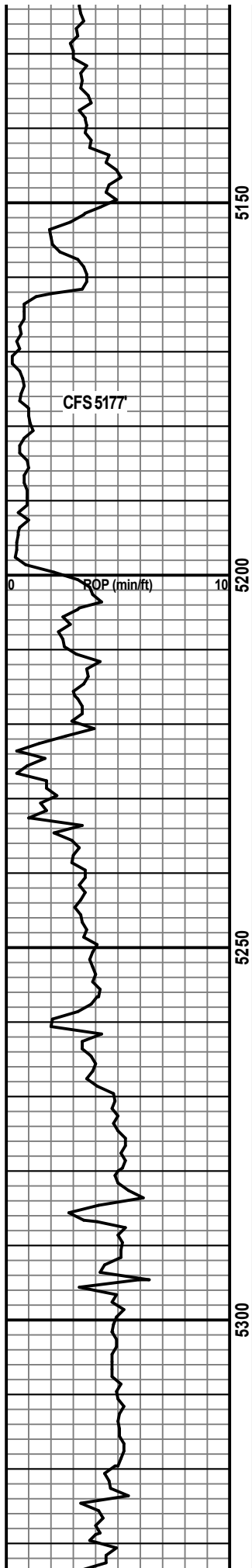
Mud-Co report @
4937'
Wt. 9.1
Vis. 59
W.L. 8.4
PH 10.5
Chl. 1,700
LCM 3#

TG inc. 22 units

TG, C1-C5

Vis. 57
Wt. 9.0
LCM 4#

TG inc. 11 units



Ls, buff wh, tan, v. dns, fine xln. to micritic, no vis. porosity, no shows, no fluor, no odor, no staining.

Ls, tan, lt. gry, buff, v. dns, fine xln. to micritic, no vis. porosity.

Sh, lt. to med. gry, silty, fissile.

Pawnee 5161 (-2402)
Ls, tan, f-c xln, foss, v. oolitic w/ well dev. oomoldic and int. foss. por., sli. shw gas w/ abdt. barren porosity, no fluor, slight odor, no staining.

Ls, tan, f-c xln, foss, v. oolitic w/ well dev. oomoldic and int. foss. por., no shows w/ abdt. barren porosity, no fluor, slight odor, no staining.

Ls, buff, lt. gry-wh, v. dns, f. xln. to micritic, foss.

Sh, lt. to med. gry, silty, fissile.

Ls, buff, lt. gry-wh, v. dns, f. xln. to micritic, foss.

Ft. Scott 5220 (-2464)
Ls, tan, f-c xln, foss, oolitic w/ fair to well dev. oomoldic and int. foss. por., no shows w/ abdt. barren porosity, no fluor, slight odor, no staining.

Ls, buff wh, tan, v. dns, fine xln. to micritic, no vis. porosity, no show, no fluor, no odor, no staining.

Ls, lt. to med. gry, arg., f. xln, v. dns, no vis. porosity, no shows,

L. Osage Sh. 5258 (-2502)
Sh, black, carb, bleeding abdt. gas.

Ls, tan, buff, f. xln, micritic, v. dns, no vis. porosity, no shows, no fluor, no odor, no str, abdt. chert.

Cherokee Sh 5284 (-2528)
Sh, black, carb, bleeding abdt. gas.

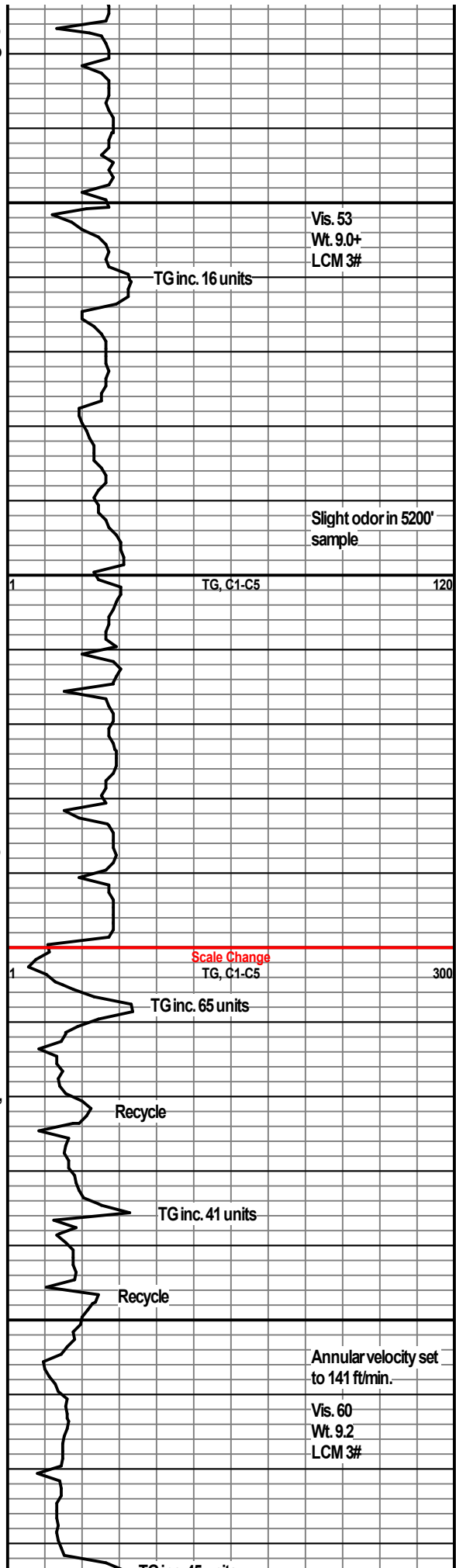
Ls, tan, lt. bm, lt. to med. gry, arg., f. xln. to micritic, no vis. porosity.

Ls, lt. to med. gry, tan, arg., f. xln, v. dns, no vis. porosity, no shows, no fluor, no odor, no staining.

Sh, med. to drk. gry, calcareous.

Ls, tan, buff, lt. gry, f. xln, micritic, no vis. porosity, no shows, no fluor, no odor, no staining, some fresh tan chert.

Sh, black carb. bleeding abdt. gas.



Vis. 53
Wt. 9.0+
LCM 3#

TG inc. 16 units

Slight odor in 5200' sample

TG, C1-C5

Scale Change
TG, C1-C5

TG inc. 65 units

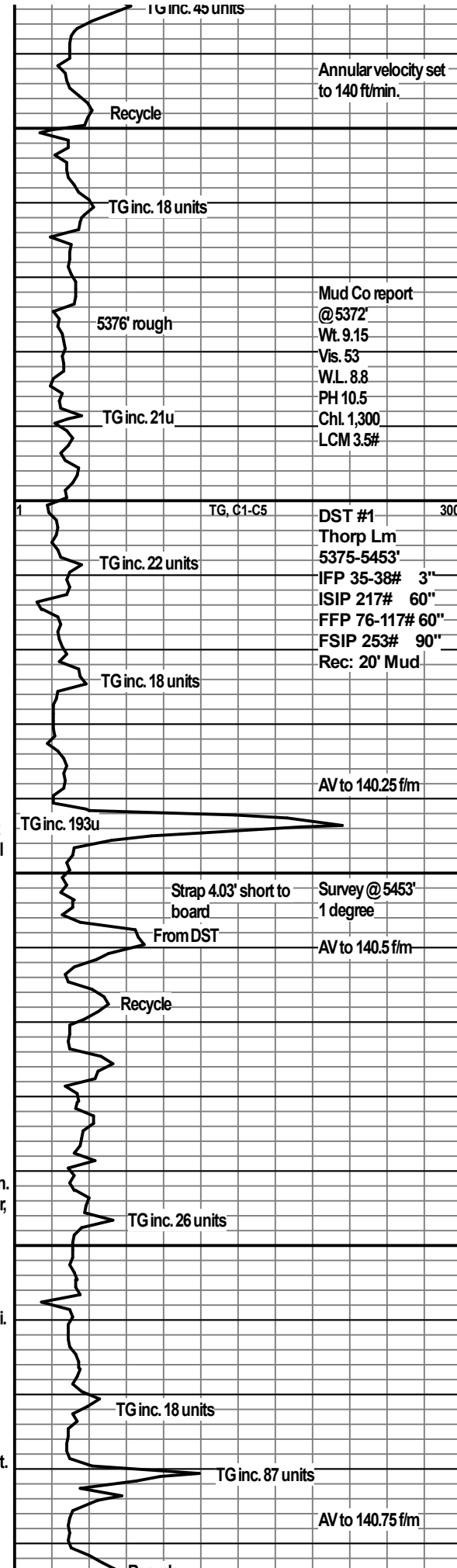
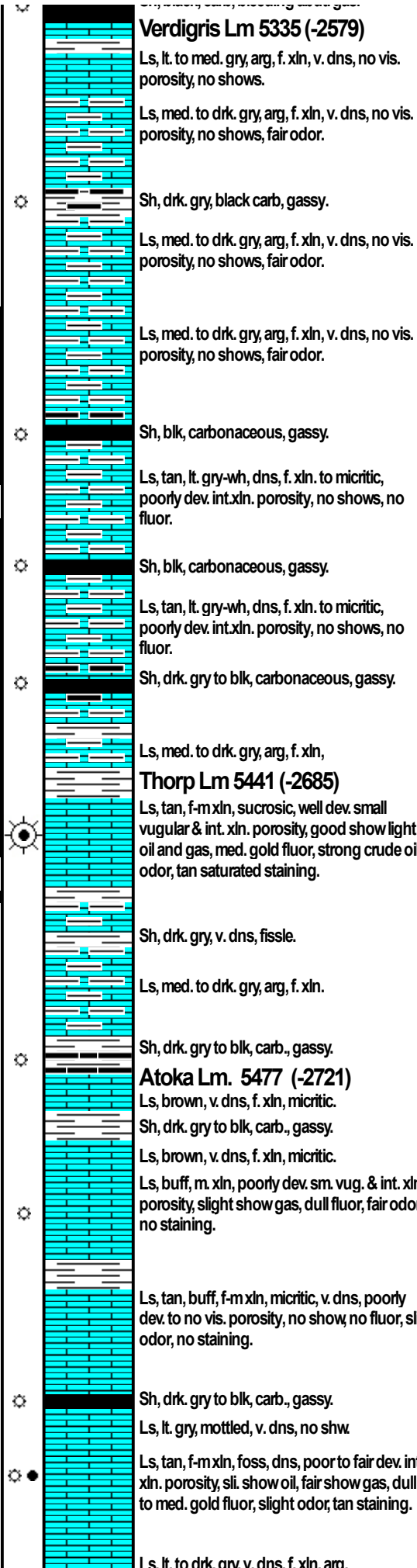
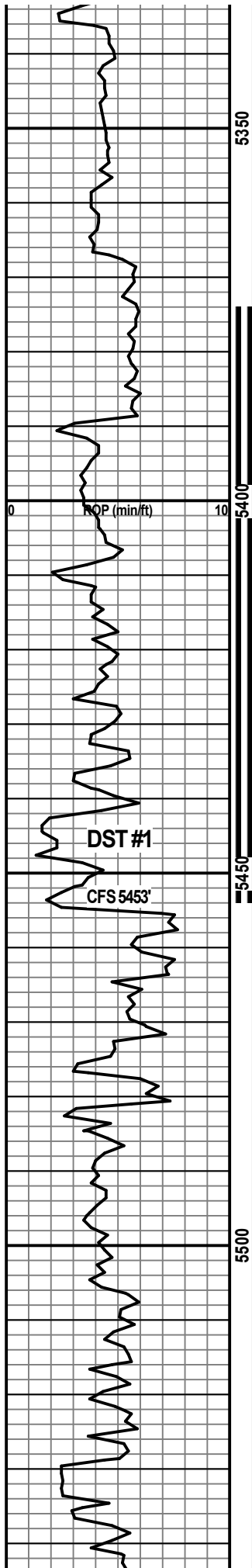
Recycle

TG inc. 41 units

Recycle

Annular velocity set to 141 ft/min.

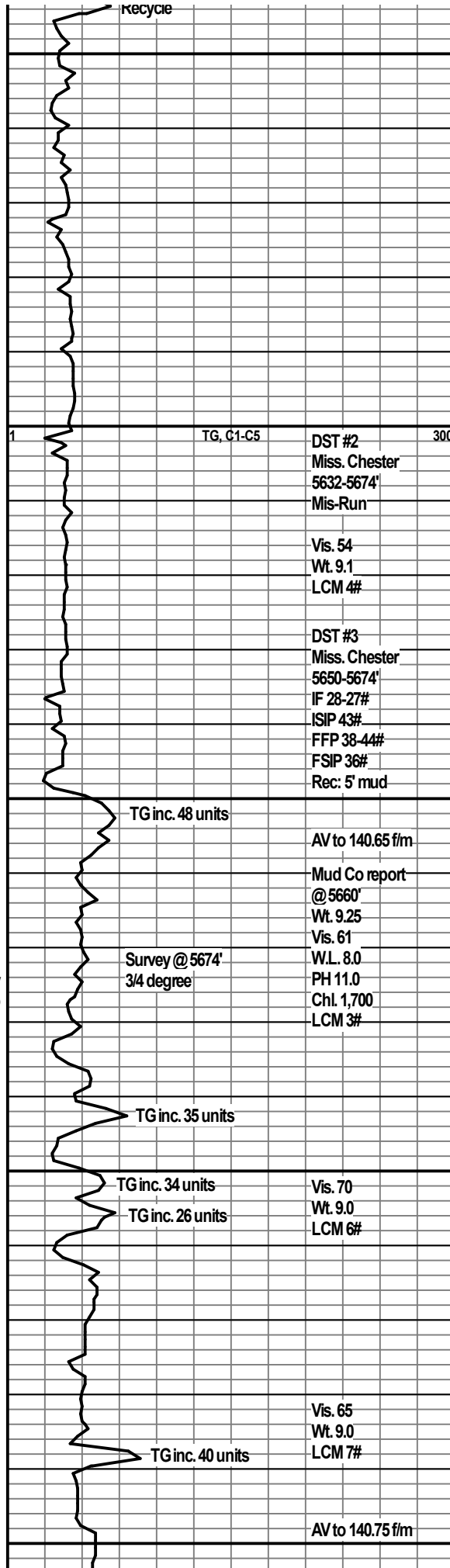
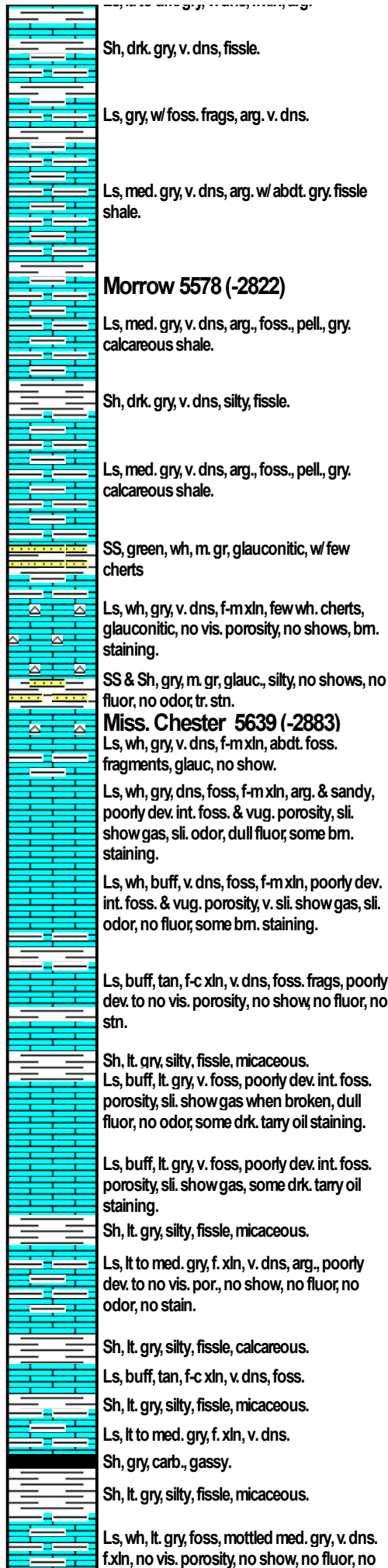
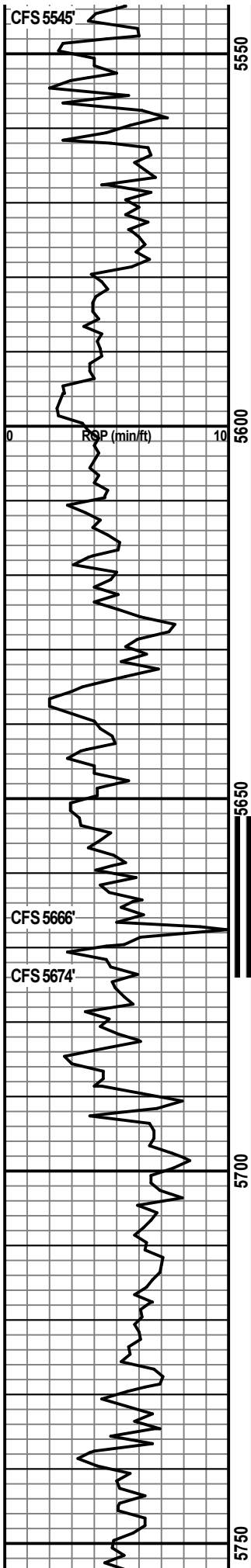
Vis. 60
Wt. 9.2
LCM 3#

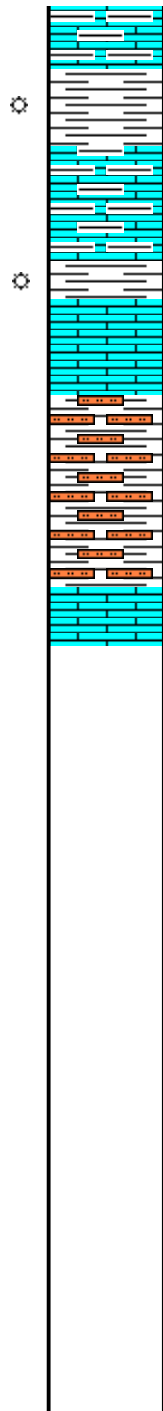
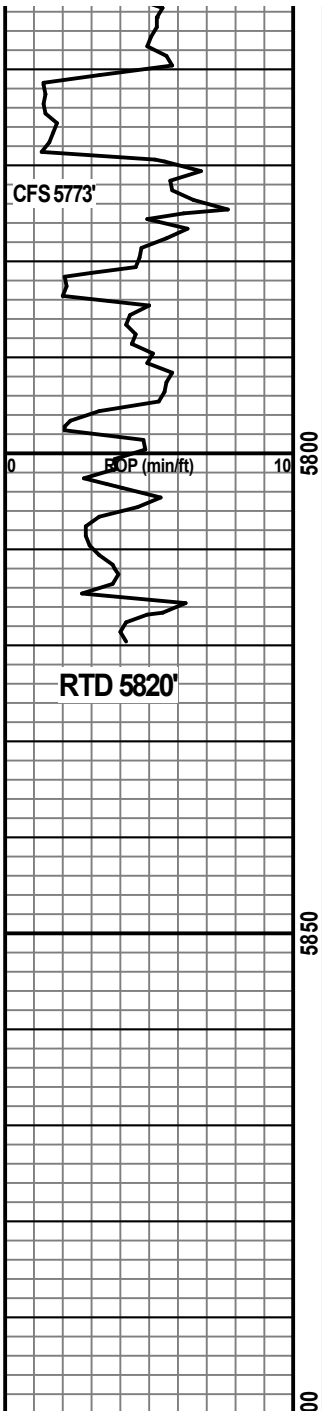


Mud Co report @ 5372'
 Wt. 9.15
 Vis. 53
 W.L. 8.8
 PH 10.5
 Chl. 1,300
 LCM 3.5#

DST #1
 Thorp Lm 5375-5453'
 IFP 35-38# 3"
 ISIP 217# 60"
 FFP 76-117# 60"
 FSIP 253# 90"
 Rec: 20' Mud

DST #1
 CFS 5453'





odor.

Sh, lt. gry, silty, brittle, laminated, fissle, w/ abdt. pyrite.

B/ Chest. Lm 5769 (-3013)
 Ls, lt. to med. gry, v. dns, f. xln, arg., no vis. porosity, no show, no fluor, no odor, no staining.

Sh, lt. gry, silty, w/ abdt. pyrite.

Ls, green-wh, gry-wh, v. dns, f. xln. to micritic, no vis. porosity, no shows, no fluor, no odor, no stain.

Sh & siltstone, red-brown, green, sandy in part, non-fissle.

Samples washing red-brown.

Sh & siltstone, red-brown, green, sandy in part, non-fissle.

Ste. Gen. 5815 (-3059)
 Ls, lt. gry-wh, sandy w/ f. gr. sand, no vis. por, no show, no fluor.

