



GEOSearch LOGGING INC.

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

Well Name: TURNER 3406 1-7H

Location: SEC 7, T34S, R6W

License Number: 15077218680100

Spud Date: 9/21/2012

Surface Coordinates: 250' FSL & 660' FEL
SEC7 T34S R6W

HARPER COUNTY, KANSAS

Region: GUEDEMAN

Drilling Completed:

Bottom Hole Coordinates: 2,310' FSL & 660' FEL
SEC6 T34S R6W

Ground Elevation (ft): 1,315'

K.B. Elevation (ft): 1,335'

Logged Interval (ft): 802' To:

Total Depth (ft):

Formation: MISSISSIPPIAN

Type of Drilling Fluid: WATER BASED

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

OPERATOR

Company: SANDRIDGE ENERGY, INC.
Address: 123 ROBERT S KERR AVENUE
OKLAHOMA CITY, OK 73102

GEOLOGIST


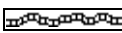
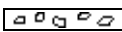
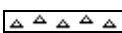
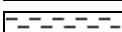


Name: DARRYL MCDANIEL/BART BUMP
Company: Geosearch Logging, Inc.
Address: P.O. Box 6005
Edmond, OK 73083-6005
(405) 340-5545






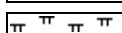

Comments

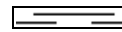
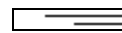
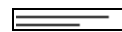



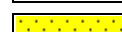
2 Manned Logging Service
Start Logging Date: 9/23/2012
Released Logging Date:

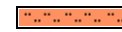




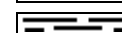
Drilling Contractor: LARIAT #39

ROCK TYPES

 Anhy
 Bent
 Brec
 Cht
 Clyst
 Coal
 Congl

 Dol
 Gyp
 Igne
 Lmst
 Meta
 Mrlst
 Salt

 Shale
 Shcol
 Shgy
 Sltst
 Ss
 Till
 Sandstn

 Siltstn
 Granwash
 Dolowash
 Cement
 Granite
 Hotshale

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl

- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

- #### FOSSIL
- Algae
 - Amph
 - Belm
 - Bioclst
 - Brach
 - Bryozoa
 - Cephal
 - Coral

- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

- #### STRINGER
- Anhy
 - Arg
 - Bent
 - Coal
 - Dol

- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

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

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS

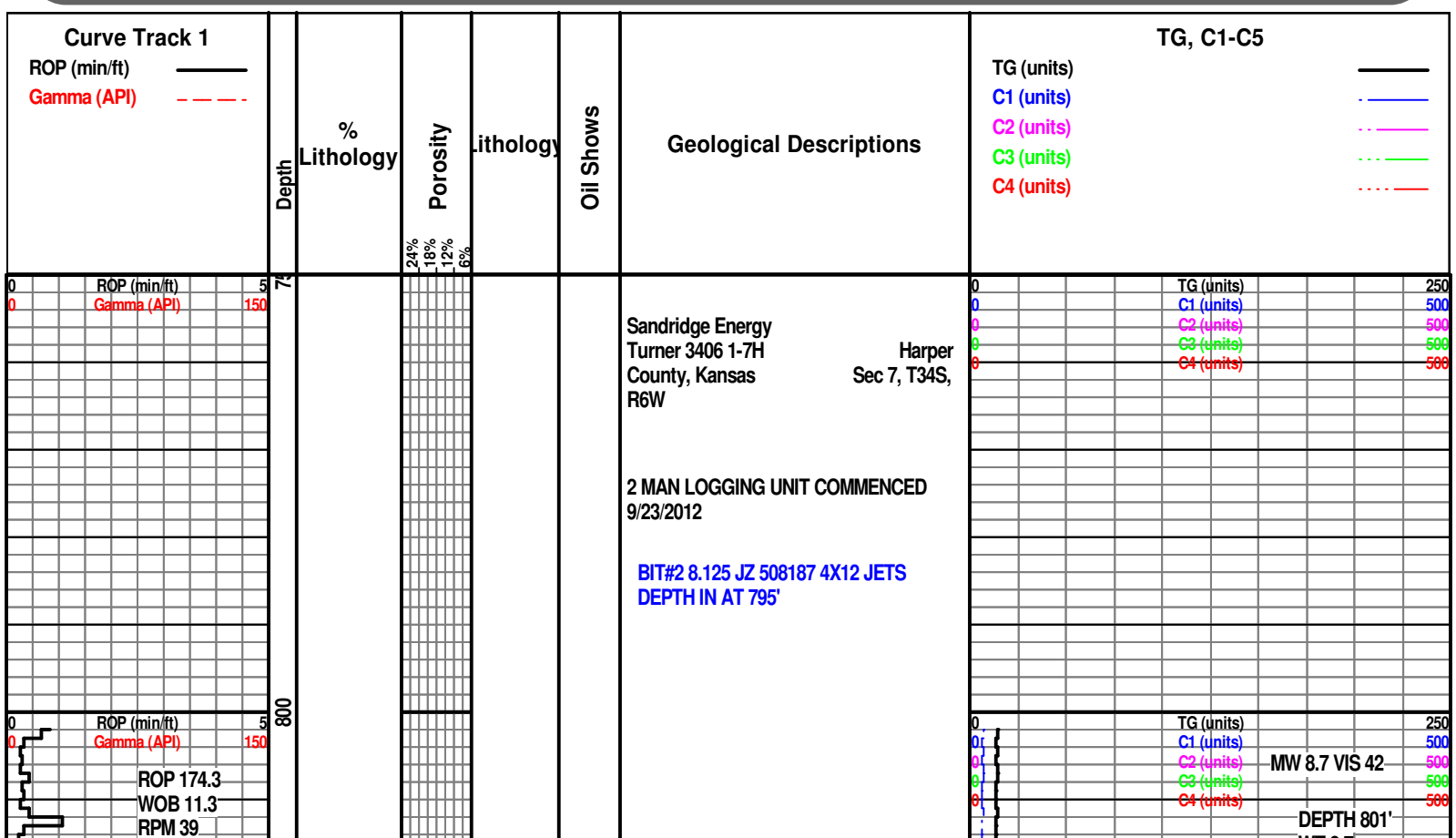
- Even
- Spotted
- Ques
- Dead
- Poor
- Fair
- Good
- Excelent
- Csgshoe

INTERVALS

- Core
- Dst

EVENTS

- Rft
- Sidewall



PP 2114
SPM 74/77

850

CONN

900

950

CONN

1000

ROP (min/ft)
Gamma (API)

150

WT 8.7
VIS 42
PV 5
YP 15
GELS 8/16
FIL60.0
CK 2/64
pH 9.0
SOL 2.7
OIL/H2O 0/97.4
SAND 0.25
MUD ALK 0.1
CL 1200

CG 15u

CG 14u

TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

SURVEY @1019' INC 0.6 AZM
359.3 TVD 1018.98'

ROP 256.2
WOB 10.1
RPM 56
PP 1330
SPM 71/72

1050

CONN

1100

ROP 132.2
WOB 22.3
RPM 57
PP 1502
SPM 68/69

1150

CONN

1200

ROP (min/ft)
Gamma (API) 150

ROP 129.4
WOB 14.6
RPM 58
PP 1532
SPM 71/72

1250

CG 15u

CG 15u

0	TG (units)	250
0	C1 (units)	500
0	C2 (units)	500
0	C3 (units)	500
0	C4 (units)	500

SPW 7/72

CONN

CG 15u

1300

ROP 139.1
WOB 15.5
RPM 58
PP 1548
SPM 67/70

1350

CONN

CG 16u

1400

ROP (min/ft) 5
Gamma (API) 150

0	TG (units)	250
0	C1 (units)	500
0	C2 (units)	500
0	C3 (units)	500
0	C4 (units)	500

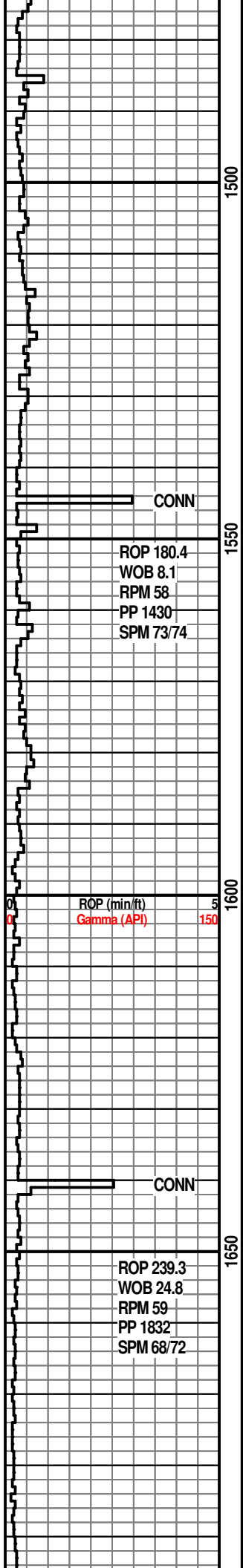
1450

CONN

ROP 222.1
WOB 16.8
RPM 58
PP 1570
SPM 74/70

CG 17u

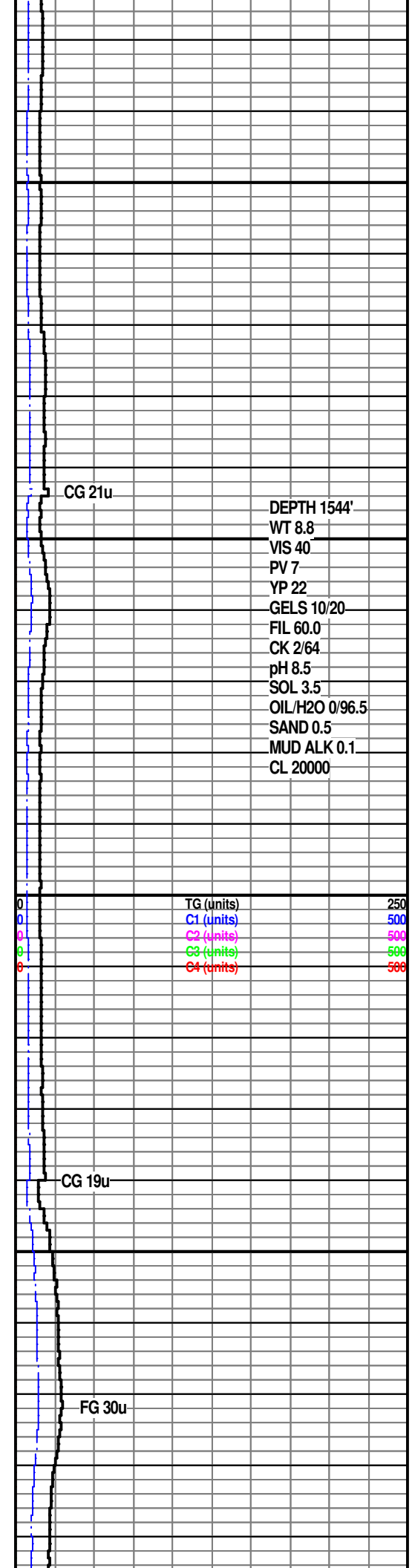
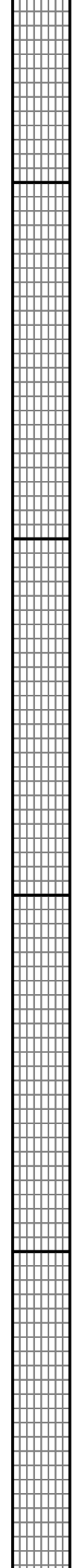
SURVEY @1496' INC 0.7 AZM
329.1 TVD 1495.95'



ROP 180.4
WOB 8.1
RPM 58
PP 1430
SPM 73/74

ROP (min/ft) 150
Gamma (API) 150

ROP 239.3
WOB 24.8
RPM 59
PP 1832
SPM 68/72



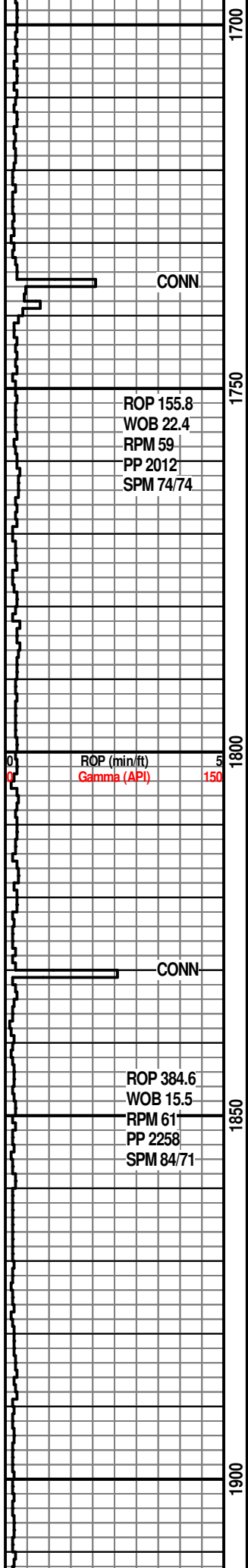
DEPTH 1544'
WT 8.8
VIS 40
PV 7
YP 22
GELS 10/20
FIL 60.0
CK 2/64
pH 8.5
SOL 3.5
OIL/H2O 0/96.5
SAND 0.5
MUD ALK 0.1
CL 20000

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500

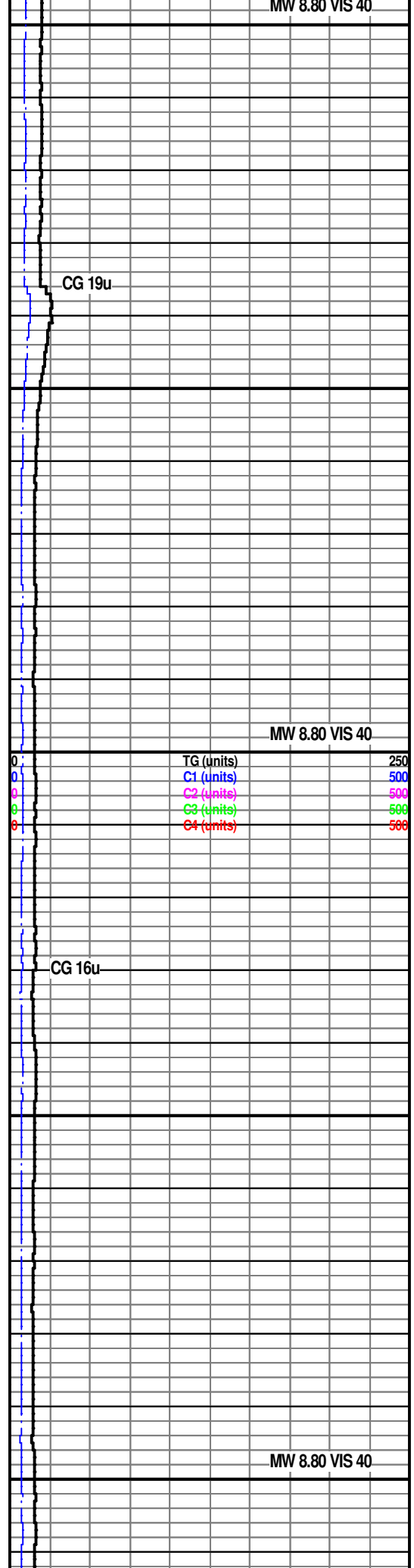
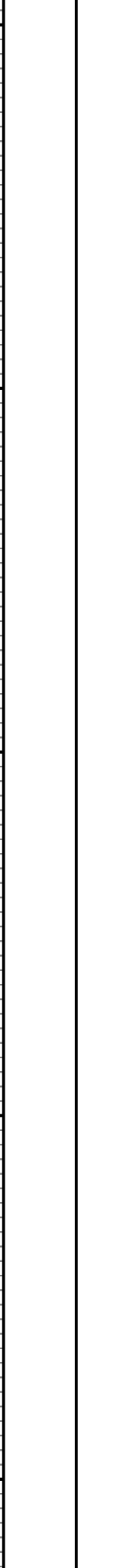
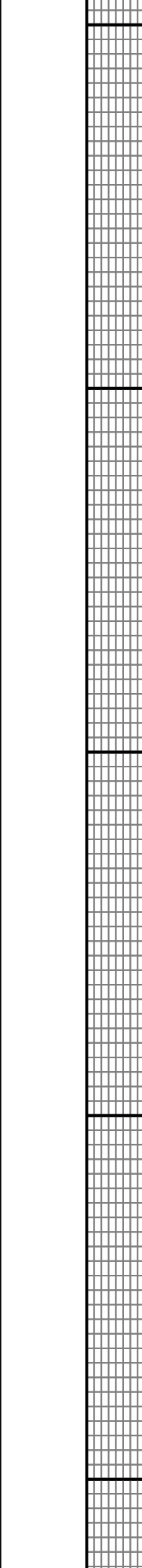
CG 21u

CG 19u

FG 30u



1700
1750
1800
1850
1900



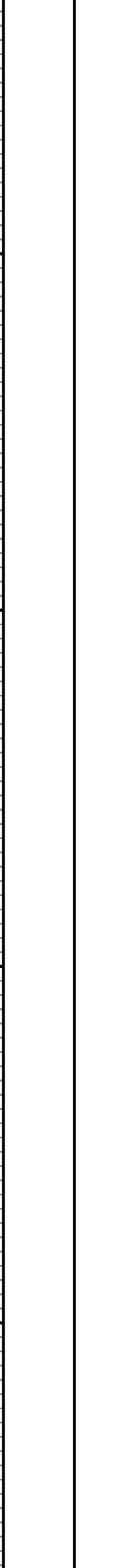
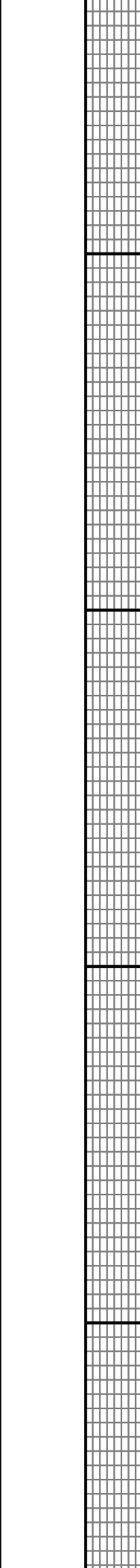
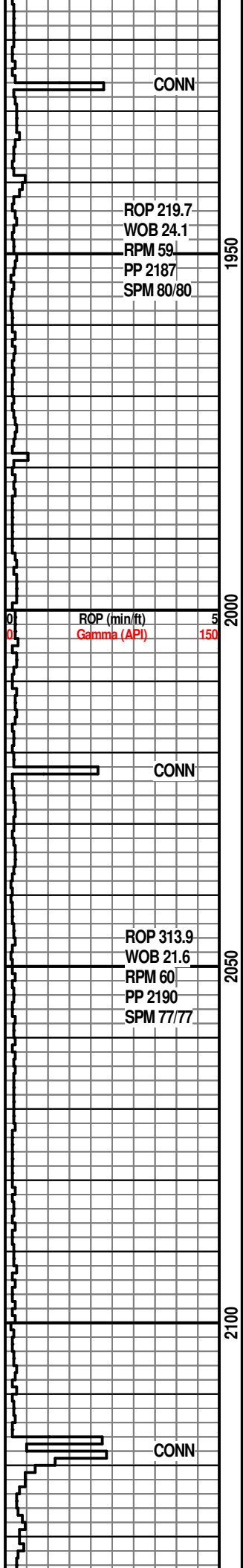
ROP 155.8
WOB 22.4
RPM 59
PP 2012
SPM 74/74

ROP (min/ft)
Gamma (API)

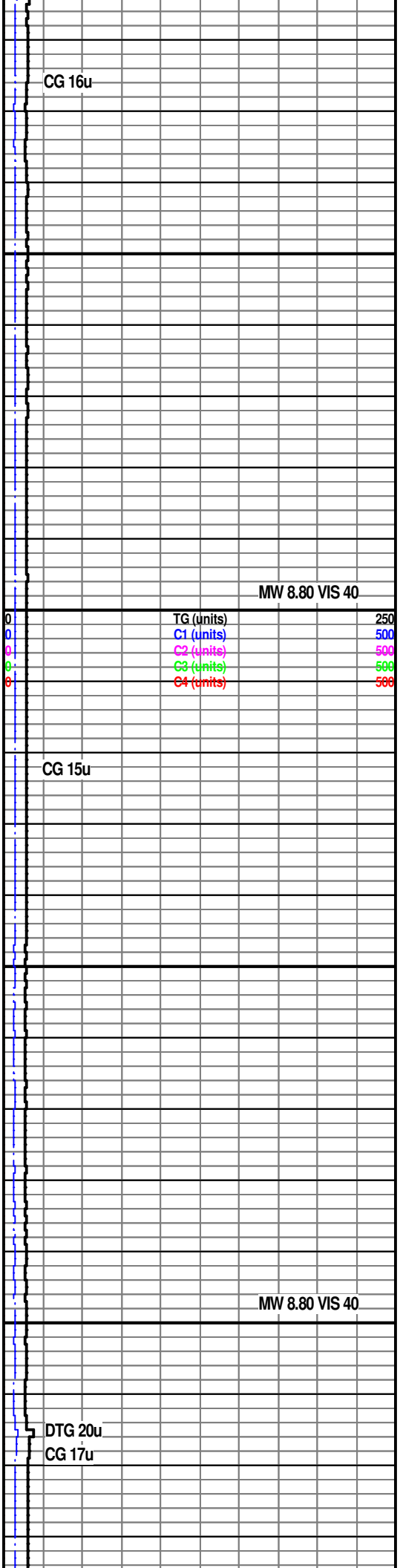
ROP 384.6
WOB 15.5
RPM 61
PP 2258
SPM 84/71

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

250
500
500
500
500



SURVEY @1972' INC 0.5 AZM
22.5 TVD 1971.93'



ROP 137.7
WOB 20.0
RPM 61
PP 2130
SPM 75/78

2150

ROP (min/ft)
Gamma (API) 150

2200

CONN

ROP 245.1
WOB 16.3
RPM 60
PP 2049
SPM 82/72

2250

CONN

2300

ROP 255.1
WOB 18.3
RPM 59

2350

MW 8.80 VIS 40

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500

CG 15u

MW 8.80 VIS 40

CG 16u

FG 29u

PP 2171
SPM 74/84

ROP (min/ft)
CONN (API) 150

ROP 220.1
WOB 18.3
RPM 58
PP 2149
SPM 80/72

ROP 226.5
WOB 19.3
RPM 62
PP 2449
SPM 78/70

2400

2450

2500

2550

SURVEY @2448' INC 0.6
AZM 12.8 TVD 2447.91'

MW 8.80 VIS 40

CG 19 u

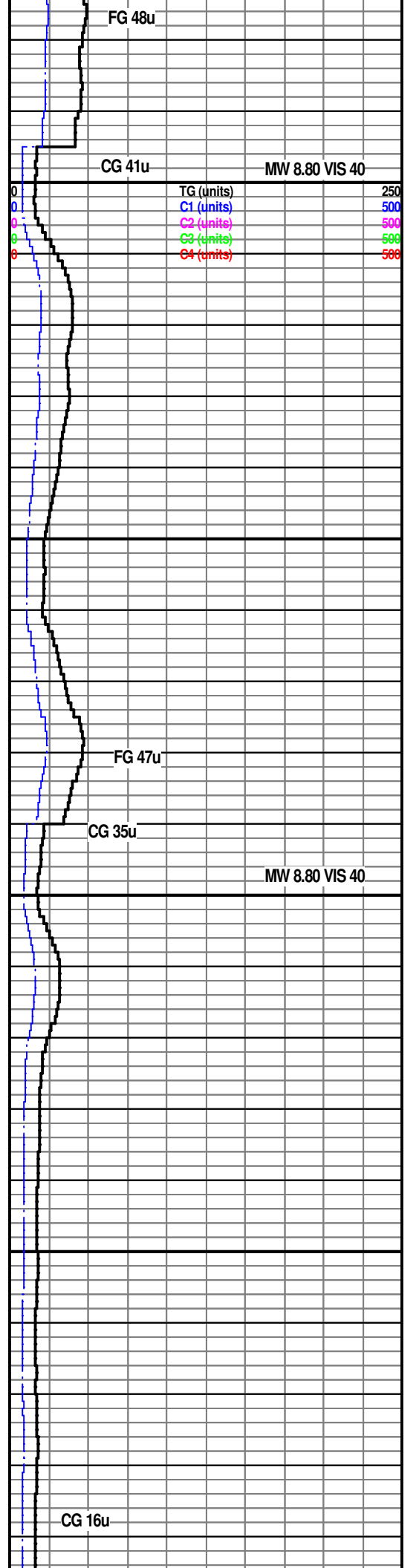
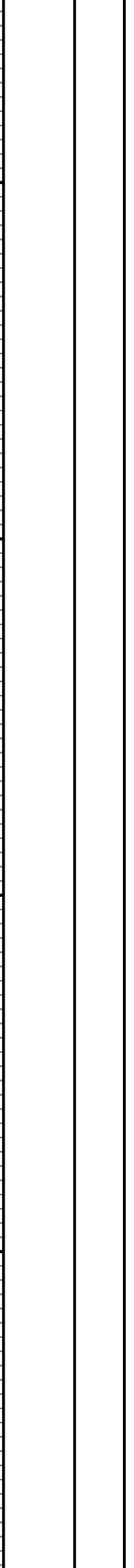
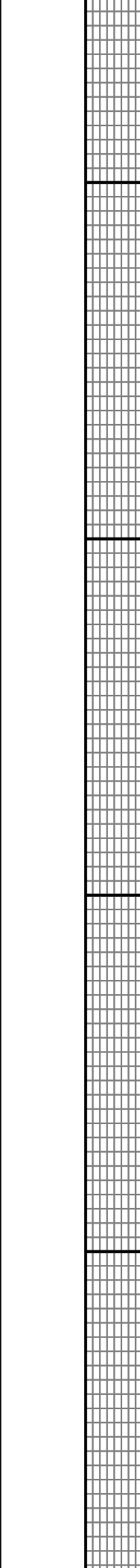
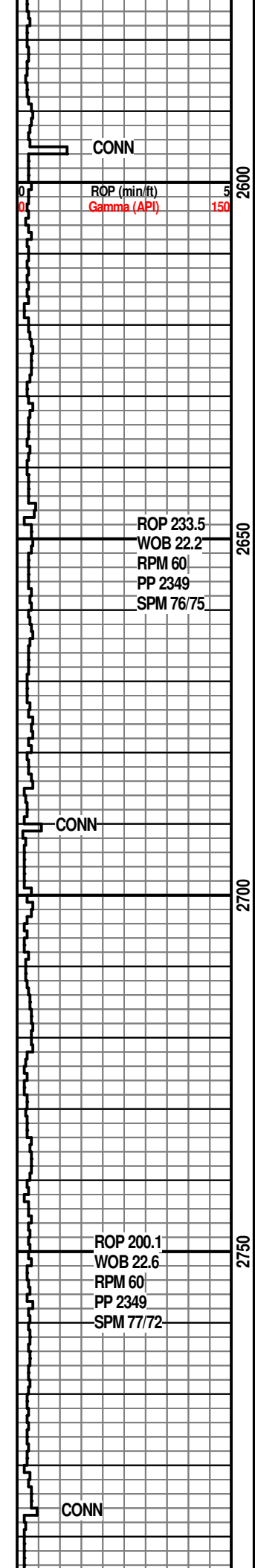
FG 42u

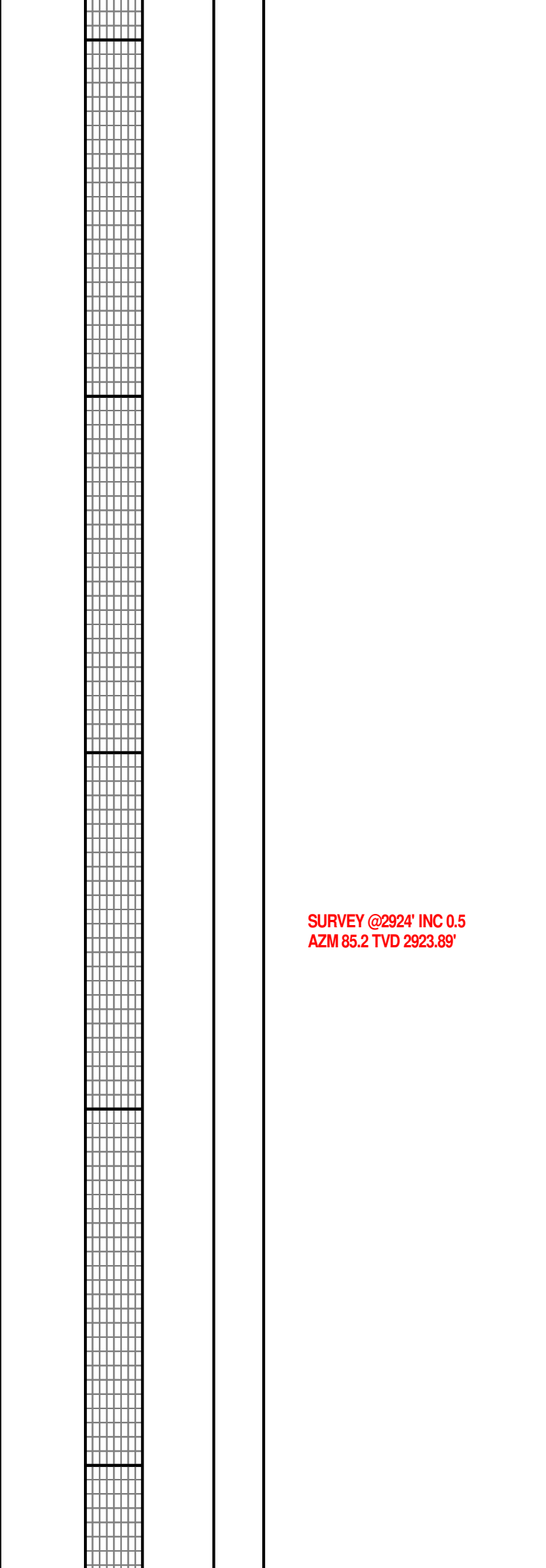
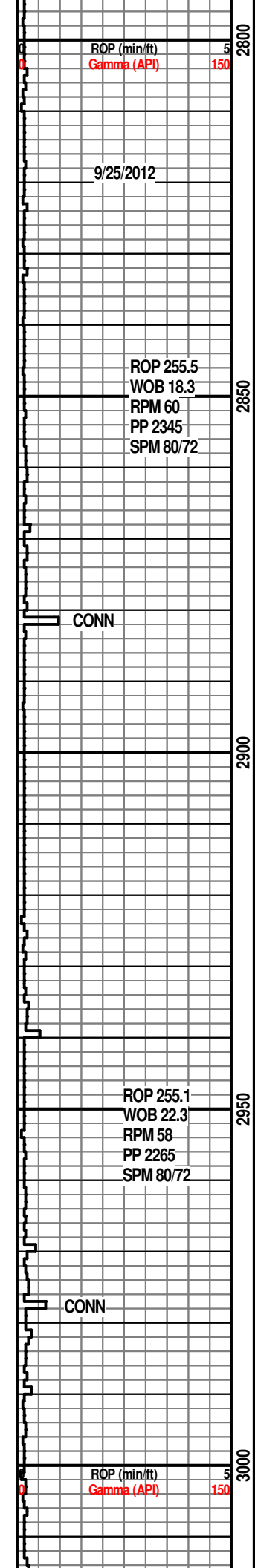
FG 45u

DTG 51u

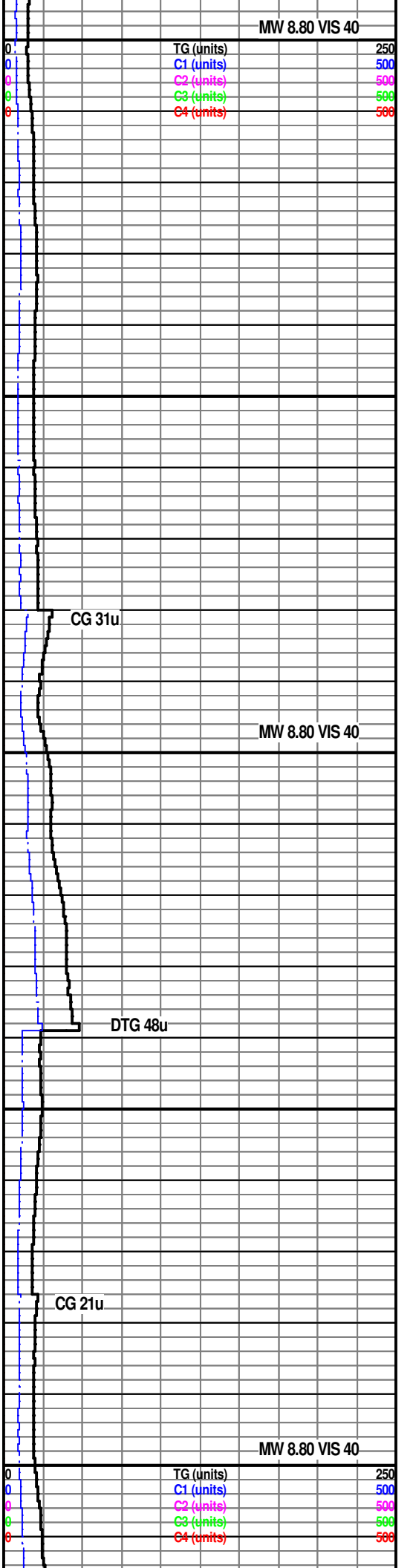
MW 8.80 VIS 40

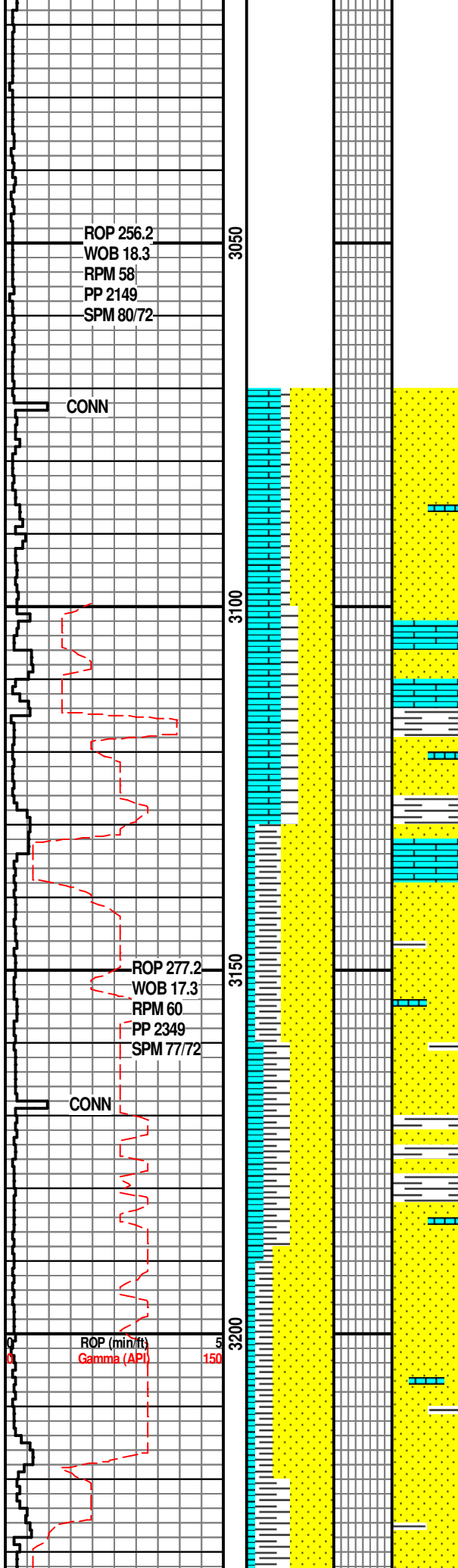
TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500





SURVEY @2924' INC 0.5
AZM 85.2 TVD 2923.89'





SS: WHT-LT GY, PRED UNCONSOL, SMCONSOL, FRM-HD, CALC CMT;LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LTGY, GY-DK GY, FRM-HD, BLKY, TRCSPNTRY; NO FLUOR

MW 8.80 VIS 40

SS: WHT-LT GY, PRED UNCONSOL, SMCONSOL, FRM-HD, CALC CMT;LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LTGY, GY-DK GY, FRM-HD, BLKY, TRCSPNTRY; NO FLUOR

SS: WHT-LT GY, PRED UNCONSOL, SM CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

CG 16u

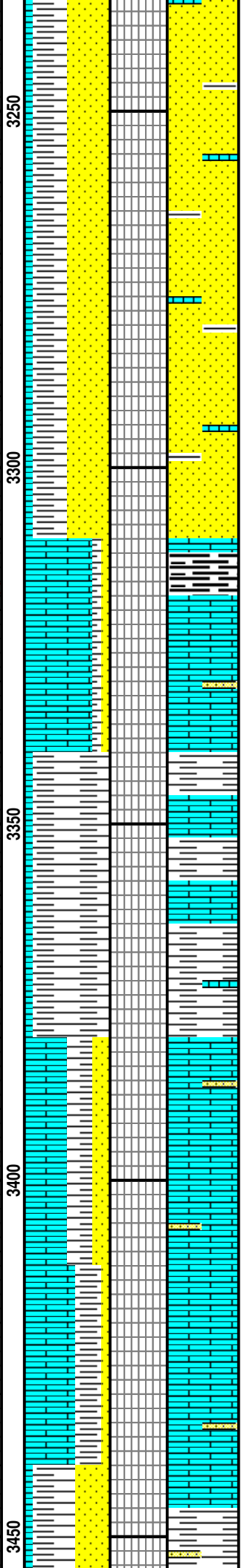
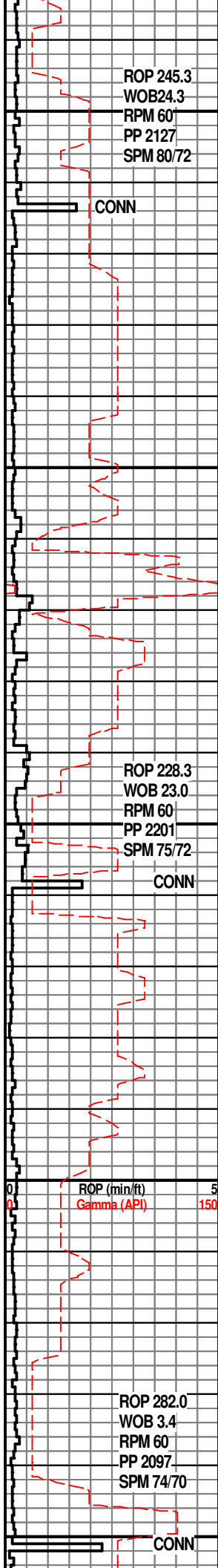
SS: WHT-LT GY, PRED UNCONSOL, SM CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

MW 8.80 VIS 40

SS: WHT-LT GY, PRED UNCONSOL, SM CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

SS: WHT-LT GY, PRED UNCONSOL, SM

TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500



CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

SS: WHT-LT GY, PRED UNCONSOL, SM CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

SS: WHT-LT GY, PRED UNCONSOL, SM CONSOL, FRM-HD, CALC CMT; LS: CRM-WHT, MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK GY, SM BLK, FRM-HD, BLKY, TRC SPNTRY; NO FLUOR

BASE HEEBNER @ 3,317' MD/ 3,316.88' TVD

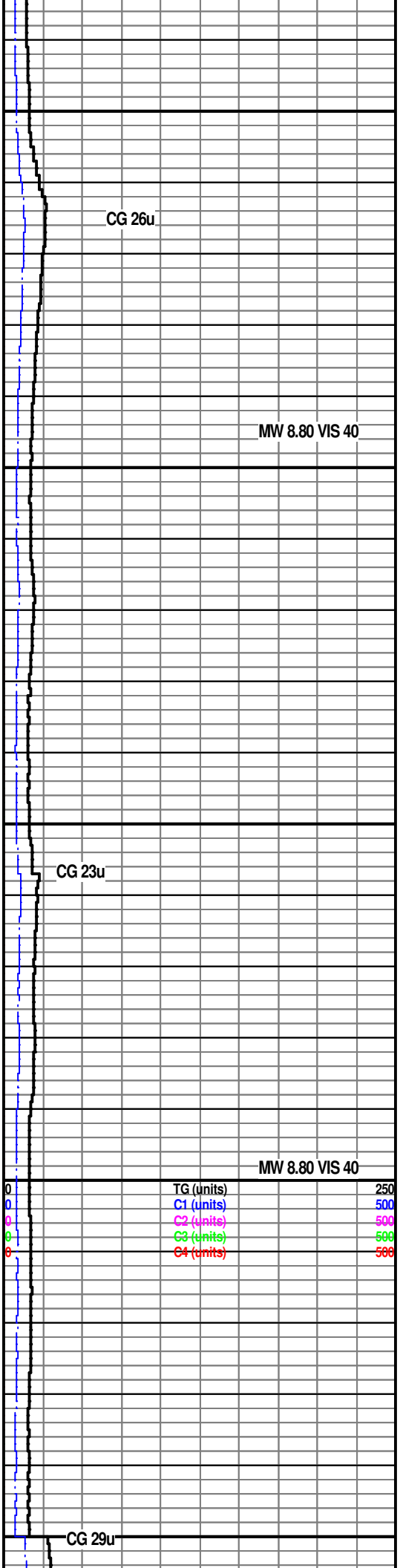
LS: OFF WH-WH, MICRO-CRYPTO XLN, SBSMTH TXT, SFT; SH: LT-M GY, SLI FRM-SFT, CHNKY, PLTY, SPLNTY IP; SS: TRNSL-OFF WH, F-VF GR, MOD SRTD, MOD CONS

SH: LT GY-GY, SM DK GY, CHNKY, SBBLKY, SM PLTY, SLI FRM-FRM; SS: WHT-TRNSL, VF-F GR, MOD SRTD, MOD CONS, ; SLI TRC LS; NO FLUOR

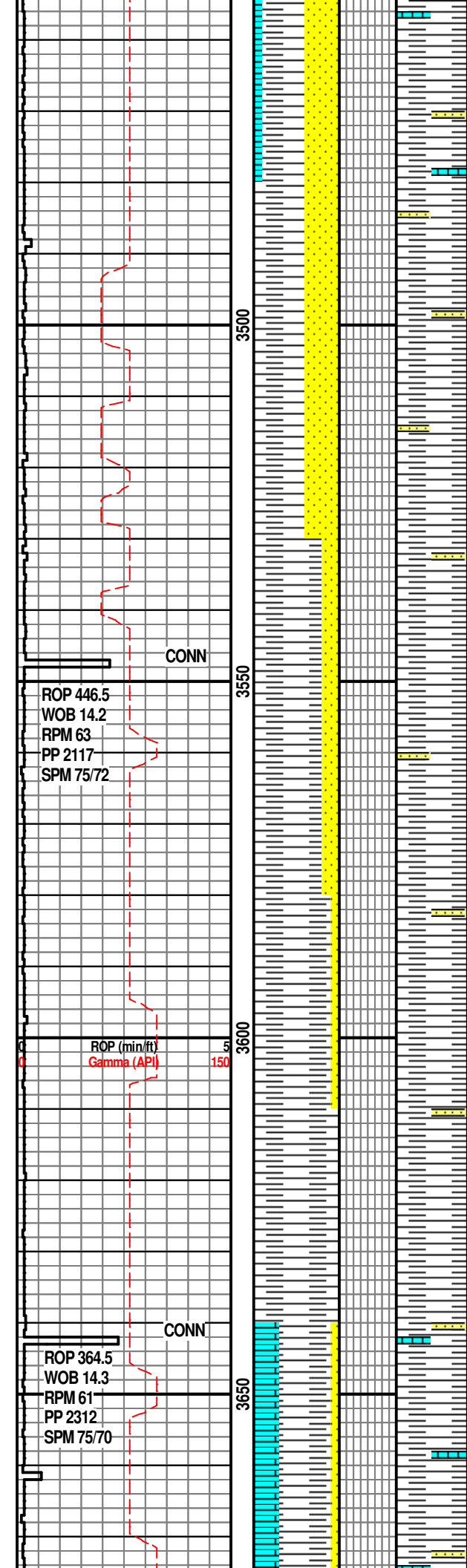
LS: OFF WH-WH, MICRO-CRYPTO XLN, SBSMTH TXT, SFT; SH: LT-M GY, SLI FRM-SFT, CHNKY, PLTY, SPLNTY IP; SS: TRNSL-OFF WH, F-VF GR, MOD SRTD, MOD CONS

SURVEY @ 3400' INC 0.3 AZM 131.9 TVD 3399''

LS: OFF WH-WH, MICRO-CRYPTO XLN, SBSMTH TXT, SFT; SH: LT-M GY, SME BLK, SLI FRM-SFT, CHNKY, PLTY, SPLNTY IP; SS: TRNSL-OFF WH, F-VF GR, MOD SRTD, MOD CONS, TRC MICROBD PYR



TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500



SH: LT GY-GY, SM DK GY, CHNKY, SBBLKY, SM PLTY, SLI FRM-FRM; SS: WHT-TRNSL, VF-F GR, MOD SRTD, MOD CONS, ; TRC LS; NO FLUOR

SH: LT GY-GY, SM DK GY, CHNKY, SBBLKY, SM PLTY, SLI FRM-FRM; SS: WHT-TRNSL, VF-F GR, MOD SRTD, MOD CONS, ; TRC LS; NO FLUOR

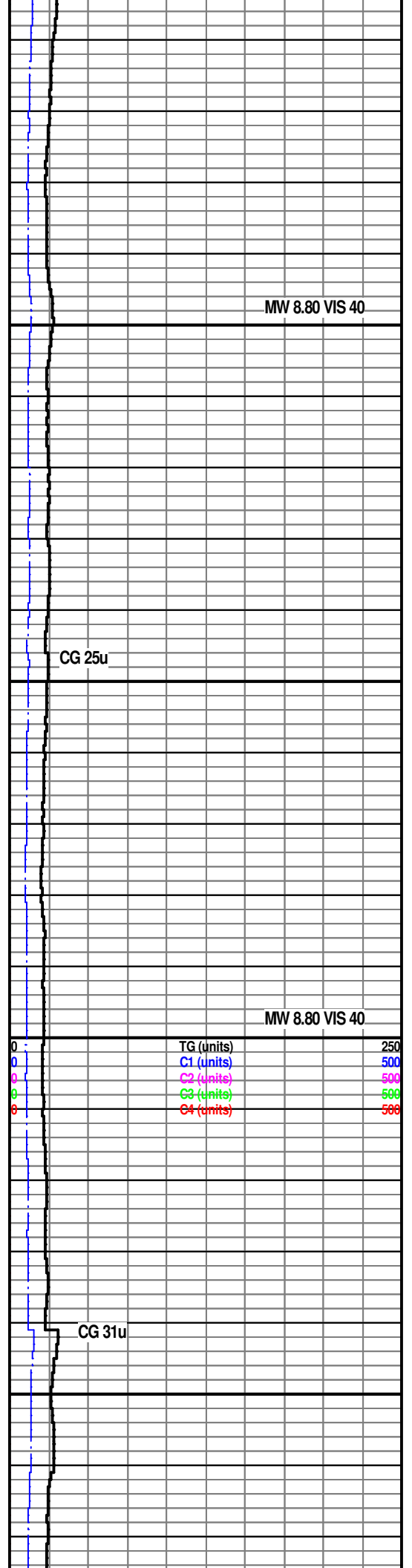
SH: LT GY-GY, SM DK GY, CHNKY, SBBLKY, SM PLTY, SLI FRM-FRM; SS: WHT-TRNSL, VF-F GR, MOD SRTD, MOD CONS, ; TRC LS; NO FLUOR

SH: LT GY-GY, SM DK GY, CHNKY, SBBLKY, PLTY, SLI FRM-FRM; SS: WHT-TRNSL, VF GR, MOD W SRTD, SLI CONS, ; SLI TRC LS; NO FLUOR

SH: M-LT GY, CHNKY, SBPLTY, SPLNTY IP, SBSMTH TXT, DLL LSTR, FRM-SLI FRM, TRC SS, NO FLUOR, NSOC

**TONKAWA @ 3670'
MD/ 3669.87' TVD**

SH: M-LT GY, SME DK GY-BLK. PLTY.



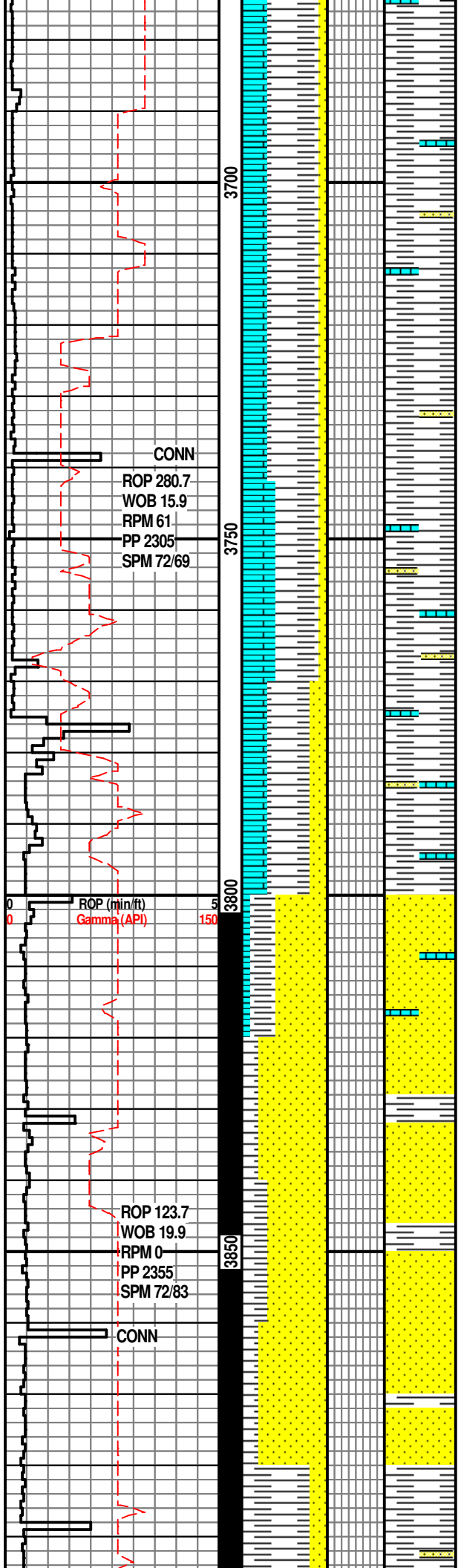
MW 8.80 VIS 40

CG 25u

MW 8.80 VIS 40

0	TG (units)	250
0	C1 (units)	500
0	C2 (units)	500
0	C3 (units)	500
0	C4 (units)	500

CG 31u



SPLNTY, CHNKY, SMTH-SBSMTH TXT,
 DLL LSTR, SLI FRM-FRM; LS: OFF
 WH-WH, SLI GY, CRYPTO-MICRO XLN,
 SFT, TRC SS: TRNSL-OFF WH, VF GR

**SURVEY @3725' INC 0.9 AZM
 190.7TVD 3724'**

SH: M-LT GY, SME DK GY, OCC BLK,
 PLTY, SPLNTY, CHNKY, SMTH-SBSMTH
 TXT, DLL LSTR, SLI FRM-FRM; LS: OFF
 WH-WH, SLI GY, CRYPTO-MICRO XLN,
 SFT, TRC SS: TRNSL-OFF WH, VF GR

**SURVEY @3749' INC 0.7 AZM
 194.3 TVD 3748.86'**

SH: M-LT GY, SME DK GY-BLK, PLTY,
 SPLNTY, CHNKY, SMTH-SBSMTH TXT,
 DLL LSTR, SLI FRM-FRM; LS: OFF
 WH-WH, SLI GY, CRYPTO-MICRO XLN,
 SFT, TRC SS: TRNSL-OFF WH, VF GR

**SURVEY @3781' INC 0.6 AZM
 4.3 TVD 3780.86'**

**BIT#3 8.125 HTC M423 5X12 JETS DEPTH
 IN @3,775'**

SH: M-LT GY, SME DK GY-BLK, PLTY,
 SPLNTY, CHNKY, SMTH-SBSMTH TXT,
 DLL LSTR, SLI FRM-FRM; LS: OFF
 WH-WH, SLI GY, CRYPTO-MICRO XLN,
 SFT, TRC SS: TRNSL-OFF WH, VF GR

**SURVEY @3812' INC 3.6
 AZM 10.3 TVD 3811.84'**

SS: WHT-LT GY, PRED UNCONSOL, SM
 CONSOL, FRM-HD, CALC CMT; LS:
 CRM-WHT, MOTTLED, RGH-SM TXT,
 FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK
 GY, SM BLK, FRM-HD, BLKY, TRC
 SPNTRY; NO FLUOR

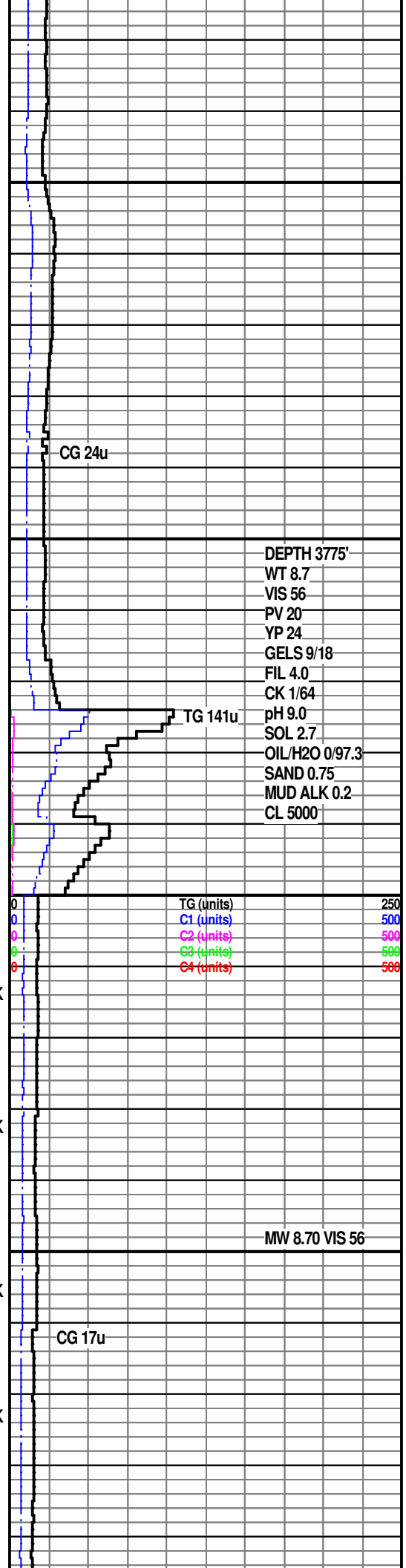
SS: WHT-LT GY, PRED UNCONSOL, SM
 CONSOL, FRM-HD, CALC CMT; LS:
 CRM-WHT, MOTTLED, RGH-SM TXT,
 FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK
 GY, SM BLK, FRM-HD, BLKY, TRC
 SPNTRY; NO FLUOR

**SURVEY @3844' INC 6.8 AZM
 5.4 TVD 3843.70'**

SS: WHT-LT GY, PRED UNCONSOL, SM
 CONSOL, FRM-HD, CALC CMT; LS:
 CRM-WHT, MOTTLED, RGH-SM TXT,
 FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK
 GY, SM BLK, FRM-HD, BLKY, TRC
 SPNTRY; NO FLUOR

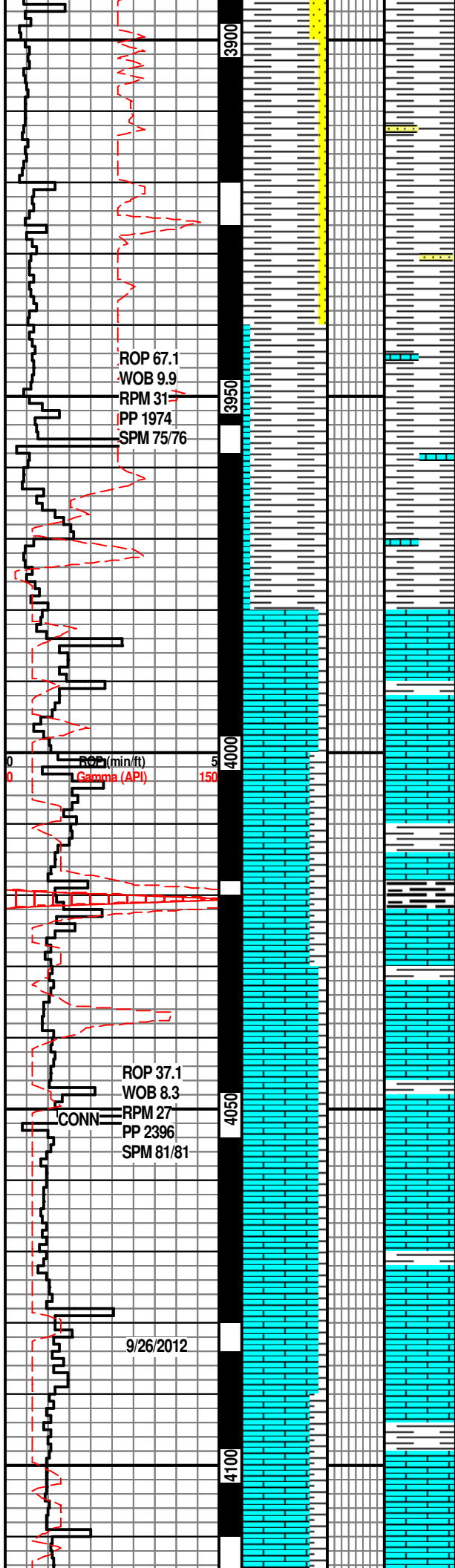
SS: WHT-LT GY, PRED UNCONSOL, SM
 CONSOL, FRM-HD, CALC CMT; LS:
 CRM-WHT, MOTTLED, RGH-SM TXT,
 FXLN-VFXLN, FRM-HD SH: LT GY, GY-DK
 GY, SM BLK, FRM-HD, BLKY, TRC
 SPNTRY; NO FLUOR

SH: M-LT GY, SME DK GY-BLK, PLTY,
 SPLNTY, CHNKY, SMTH-SBSMTH TXT,
 DLL LSTR, SLI FRM-FRM; LS: OFF
 WH-WH, SLI GY, CRYPTO-MICRO XLN,
 SFT, TRC SS: TRNSL-OFF WH, VF GR



TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

MW 8.70 VIS 56



SFT, TRC SS: TRNSL-OFF WH, VF GR

**SURVEY @3908' INC 11.0
AZM 357.1 TVD 3906.89'**

SH: M-LT GY, SME DK GY-BLK, PLTY, SPLNTY, CHNKY, SMTH-SBSMTH TXT, DLL LSTR, SLI FRM-FRM; LS: OFF WH-WH, SLI GY, CRYPTO-MICRO XLN, SFT, TRC SS: TRNSL-OFF WH, VF GR

SH: GY-DK GY, SM LT GY, BLKY-PLTY, FRM-HD; SS: WHT-LT GY, CONSOL, TRC UNCONSOL, FRM-HD, CALC & LS CMT; TRC LS; TRC CHRT, TRC PYR, NO FLUOR

**SURVEY @3939' INC 12.7 AZM
355.4 TVD 3937.23'**

SH: GY-DK GY, SM LT GY, BLKY-PLTY, FRM-HD; SS: WHT-LT GY, CONSOL, TRC UNCONSOL, FRM-HD, CALC & LS CMT; LS: OFF WH-WH, SLI GY, CRYPTO-MICRO XLN, SFT; TRC CHRT, TRC PYR, NO FLUOR

MW 8.70 VIS 56

SH: GY-DK GY, SM LT GY, BLKY-PLTY, FRM-HD; SS: WHT-LT GY, CONSOL, TRC UNCONSOL, FRM-HD, CALC & LS CMT; LS: OFF WH-WH, SLI GY, CRYPTO-MICRO XLN, SFT; TRC CHRT, TRC PYR, NO FLUOR

**SURVEY @3971' INC 14.9 AZM
356.4 TVD 3968.30'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

**SURVEY @4003' INC 16.3 AZM
357.9 TVD 3999.08'**

**COTTAGE GROVE @ 4019'
MD/ 4014.29' TVD**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

**SURVEY @4035' INC 19.4 AZM
359.9 TVD 4029.50'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

MW 8.70 VIS 56

CG 13u

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

**SURVEY @4098' INC 25.2
AZM 0.0 TVD 4088.75'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK,

FRM-HD, BLKY-PLTY, NO FLUOR

**SURVEY @4130' INC 27.7
AZM 0.1TVD 4116.40'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

CG 13u

MW 8.70 VIS 56

**SURVEY @4162' INC 29.8 AZM
359.01 TVD 4144.45'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

**SURVEY @4193' INC 31.9
AZM 358.8 TVD 4171.06'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

**SURVEY @4225' INC 34.5 AZM
358.5 TVD 4197.84'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

CG 13u

MW 8.70 VIS 56

**SURVEY @4257' INC 36.6 AZM
358.3 TVD 4223.87'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

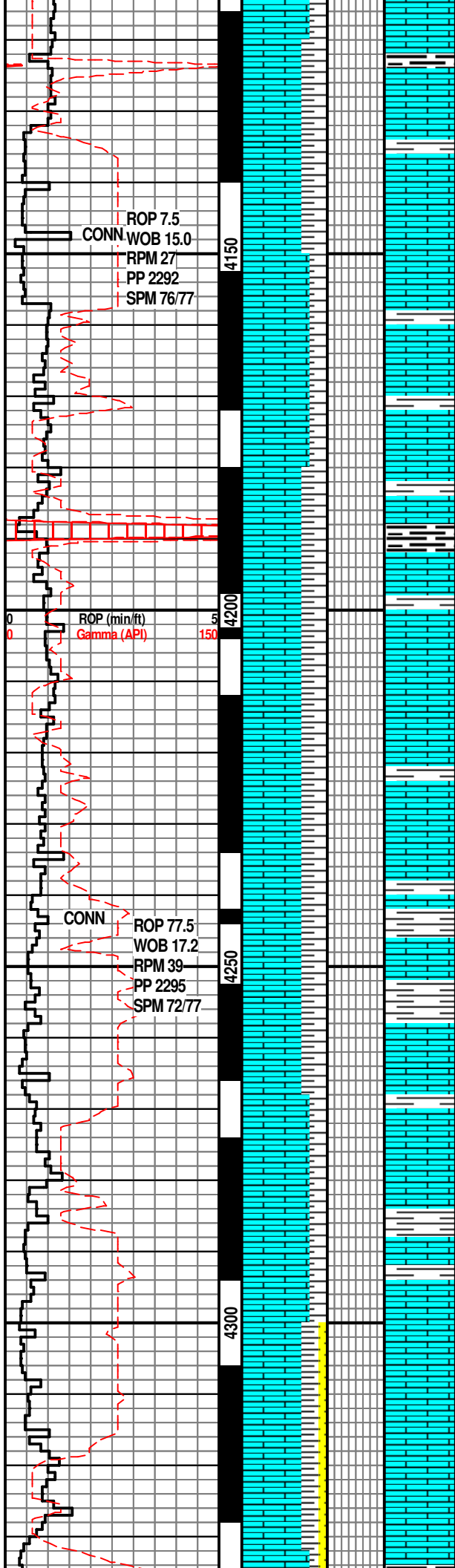
BUTANE TEST 490u

**SURVEY @4289' INC 38.1 AZM
358.4 TVD 4249.31'**

LS: CRM-WHT, SM TN, W/ SH INCL, SM MOTTLED, RGH-SM TXT, FXLN-VFXLN, FRM-HD; SH: GY- DK GY, SM BLK, FRM-HD, BLKY-PLTY, NO FLUOR

LS: OFF WH-WH, SME CRM-BGE, MICRO-CRYPTO XLN, SBSMTH TXT, SLI FRM-FRM; SH: LT-M-DK GY, SME BLK, CHNKY, PLTY, SPLNTY, SBSMTH TXT, SLI FRM-FRM, TRC MICROBD PYR; SS: OFF WH-WH, SME TRNSL, VF GR, MOD W SRTD, MOD CONS, SBANG-SBRD, SILC CMT

**SURVEY @4320' INC 38.8 AZM
359.4 TVD 4273.50'**



ROP 7.5
CONN WOB 15.0
RPM 27
PP 2292
SPM 76/77

ROP (min/ft)
Gamma (API)

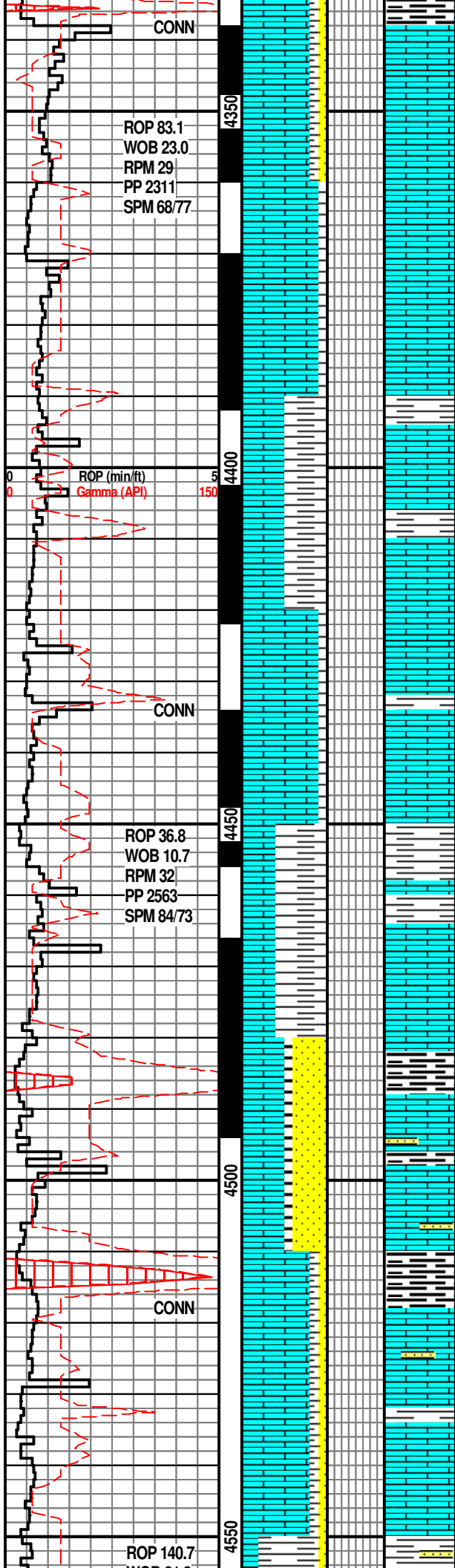
CONN
ROP 77.5
WOB 17.2
RPM 39
PP 2295
SPM 72/77

4150

4200

4250

4300



339.4 TVD 4275.39
 LS: OFF WH-WH, MICRO-CRYPTO XLN, SBSMTH TXT, SLI FRM-FRM; SS: OFF WH-WH, SME TRNSL, VF GR, MOD W SRTD, MOD CONS, SBANG-SBRD; TRC SH: LT GY-BLK, CHNKY, SPLNTY, SMTH TXT, SLI FRM, NSOC

**SURVEY @4352' INC 40.7 AZM
 359.8 TVD 4298.19'**

**OSWEGO @ 4344' MD/
 4292.04' TVD**

LS: CRM-OFF WH, MICRO-CRYPTO XLN, SLI FRM-FRM; SH: LT-M GY, BLK, SPLNTY, CHNKY, SBSMTH-SMTH TXT, SLI FRM-FRM, TRC MICROBD PYR, TRC SS, NSOC

**SURVEY @4384' INC 42.7
 AZM 359.9 TVD 4322.08'**

SH: BLK-V DK GY, CHNKY, DLL-GLSSY LSTR,SBSMTH-SLTY TXT, SLI FRM-FRM; LS: OFF WH-CRM, MICRO-CRPTO XLN, SLI FRM-FRM; TRC SS, NSOC

**SURVEY @4416' INC 44.5 AZM
 0 TVD 4345.25'**

LS: CRM-OFF WH, MICRO-CRYPTO XLN, SLI FRM-FRM; SH: LT-M GY, BLK, SPLNTY, CHNKY, SBSMTH- SMTH TXT, SLI FRM-FRM, TRC SS

**SURVEY @4448' INC 46.8 AZM
 359.3 TVD 4367.62'**

**SURVEY @4479' INC 49.2 AZM
 358.6TVD 4388.36'**

SH: BLK-DK GY, SME M-LT GY, SPLNTY, PLTY, SME SBBLKY, GLSSY-DLL LSTR, SMTH-SBSMTH TXT, SLI FRM-FRM, OCC SLI HD; LS: CRM-OFF WH, MICRO-CRYPTO XLN, SLI FRM-FRM; TRC SS, NSOC

**CHEROKEE @ 4486'MD /
 4392.9' TVD**

LS: CRM-OFF WH, MICRO-CRYPTO XLN, SLI FRM-FRM; SS: TRNSL-OFF WH, F GR, W SRTD, SBRD, MOD CONS, SME LS CMT; SH: BLK-DK GY, SME M-LT GY, SPLNTY, PLTY, SME SBBLKY, GLSSY-DLL LSTR, SMTH-SBSMTH TXT, SLI FRM-FRM, NSOC

**SURVEY @4511' INC 49.9 AZM
 358.1 TVD 4409.12'**

LS: CRM-OFF WH, MICRO-CRYPTO XLN, SLI FRM-FRM, SLI DOLO; SS: TRNSL-OFF WH, F GR, W SRTD, SBRD, MOD CONS, SME LS CMT; SH: BLK-DK GY, SME M-LT GY, SPLNTY, PLTY, SME SBBLKY, GLSSY-DLL LSTR, SMTH-SBSMTH TXT, SLI FRM-FRM, NSOC

CG 13u

MW 8.70 VIS 56

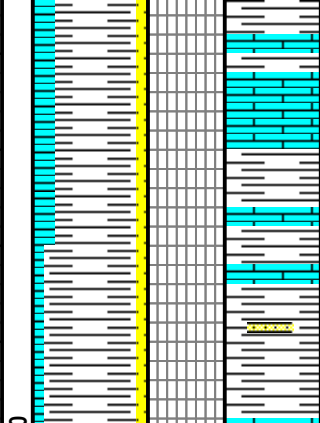
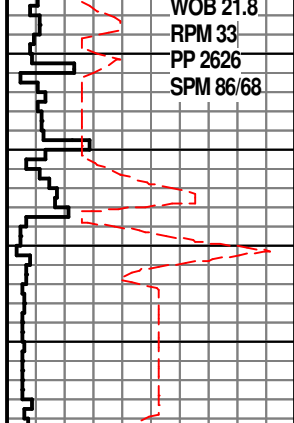
TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

CG 13u

CG 13u

MW 8.70 VIS 56

WOB 21.8
RPM 33
PP 2626
SPM 86/68



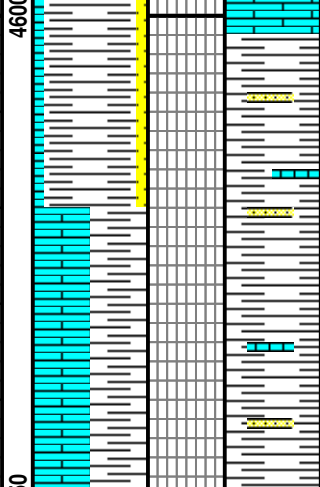
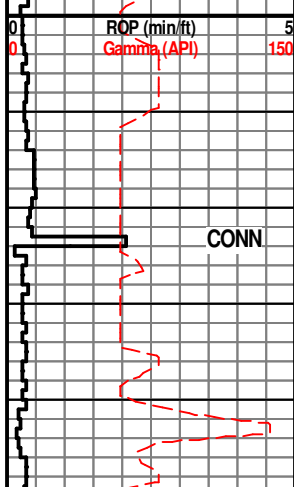
**VERDIGRIS @ 4577' MD/
4452.11' TVD**

**SURVEY @4575' INC 48.9 AZM
357.3 TVD 4450.77'**

SH: LT-M GY, SME BLK, CHNKY, PLTY,
SPLNTY, DLL LSTR, SBSMTH-SLTY TXT,
SLI FRM-FRM, PYR INCLS; LS: LS:
WH-OFF WH, MICRO-CRYPTO XLN, SLI
FRM-FRM, TRC SS

DEPTH 4569'
WT 9.1
VIS 50
PV 16
YP 26
GELS 10/20
FIL 6.0
CK 1/64
pH 8.0
SOL 5.7

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500
OIL/H2O 0/94.3
SAND 0.25
MUD ALK 0.2
CL 10000



SH: LT-M GY, SME BLK, CHNKY, PLTY,
SPLNTY, DLL LSTR, SBSMTH-SLTY TXT,
SLI FRM-FRM, PYR INCLS; LS: WH-OFF
WH, MICRO-CRYPTO XLN, SLI FRM-FRM,
TRC SS

**SURVEY @4638' INC 47.0 AZM
356.3 TVD 4492.97'**

SH: LT-M GY, OCC BLK, CHNKY, PLTY,
SPLNTY, DLL LSTR, SBSMTH-SLTY TXT,
SLI FRM-FRM, FREE PYR; LS: WH-OFF
WH, MICRO- CRYPTO XLN, SLI
FRM-FRM, TRC SS

**SURVEY @4670' INC 46.1 AZM
356.0 TVD 4514.98'**

SH: LT-M GY, SME DK GY, SME BRN,
SME RD, OCC BLK, CHNKY, SPLNTY,
OCC SBBLKY, SBSMTH-SLTY LSTR, SLI
FRM-FRM; LS: OFF WH-WH, SBSMTH
TXT, CRYPTO XLN, SLI FRM; TRC SS

**SURVEY @4702' INC 46.8 AZM
356.8 TVD 4537.02'**

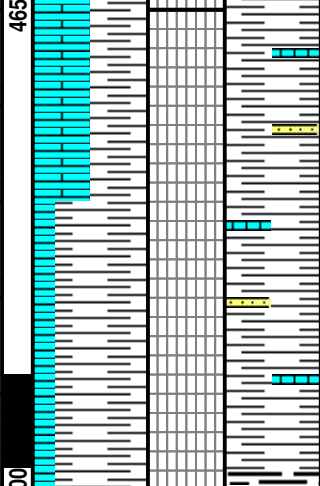
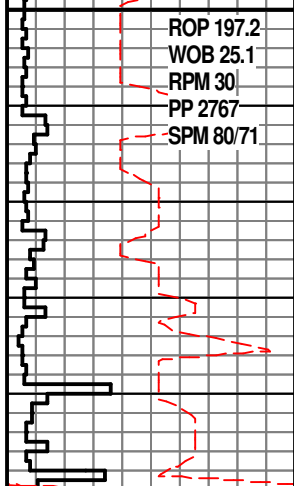
SH: LT-M GY, SME DK GY, SME BRN,
SME RD, CHNKY, SPLNTY, OCC SBBLKY,
SBSMTH-SLTY LSTR, SLI FRM-FRM; LS:
OFF WH-WH, SBSMTH TXT, CRYPTO
XLN, SLI FRM; TRC SS

**SURVEY @4733' INC 49.7 AZM
358.6 TVD 4557.66'**

SH: LT-M GY, SME DK GY, SME BRN,
SME RDDSH BRN, OCC BLK, CHNKY,
SPLNTY, OCC SBBLKY, SBSMTH-SLTY
LSTR, SLI FRM-FRM; LS: OFF WH-WH,
SBSMTH TXT, CRYPTO XLN, SLI FRM;
TRC SS

**SURVEY @4765' INC 52.4 AZM
359.4 TVD 4577.78'**

SH: M-LT-DK GY, SME BRN-RDDSH BRN,
OCC BK K, CHNKY, PLTY, SPLNTY, OCC



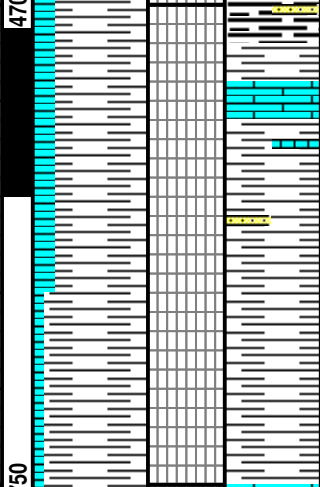
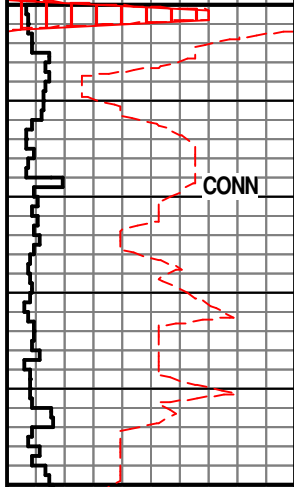
SH: LT-M GY, SME DK GY, SME BRN,
SME RD, CHNKY, SPLNTY, OCC SBBLKY,
SBSMTH-SLTY LSTR, SLI FRM-FRM; LS:
OFF WH-WH, SBSMTH TXT, CRYPTO
XLN, SLI FRM; TRC SS

**SURVEY @4702' INC 46.8 AZM
356.8 TVD 4537.02'**

SH: LT-M GY, SME DK GY, SME BRN,
SME RDDSH BRN, OCC BLK, CHNKY,
SPLNTY, OCC SBBLKY, SBSMTH-SLTY
LSTR, SLI FRM-FRM; LS: OFF WH-WH,
SBSMTH TXT, CRYPTO XLN, SLI FRM;
TRC SS

**SURVEY @4733' INC 49.7 AZM
358.6 TVD 4557.66'**

SH: M-LT-DK GY, SME BRN-RDDSH BRN,
OCC BK K, CHNKY, PLTY, SPLNTY, OCC



SH: M-LT-DK GY, SME BRN-RDDSH BRN,
OCC BK K, CHNKY, PLTY, SPLNTY, OCC

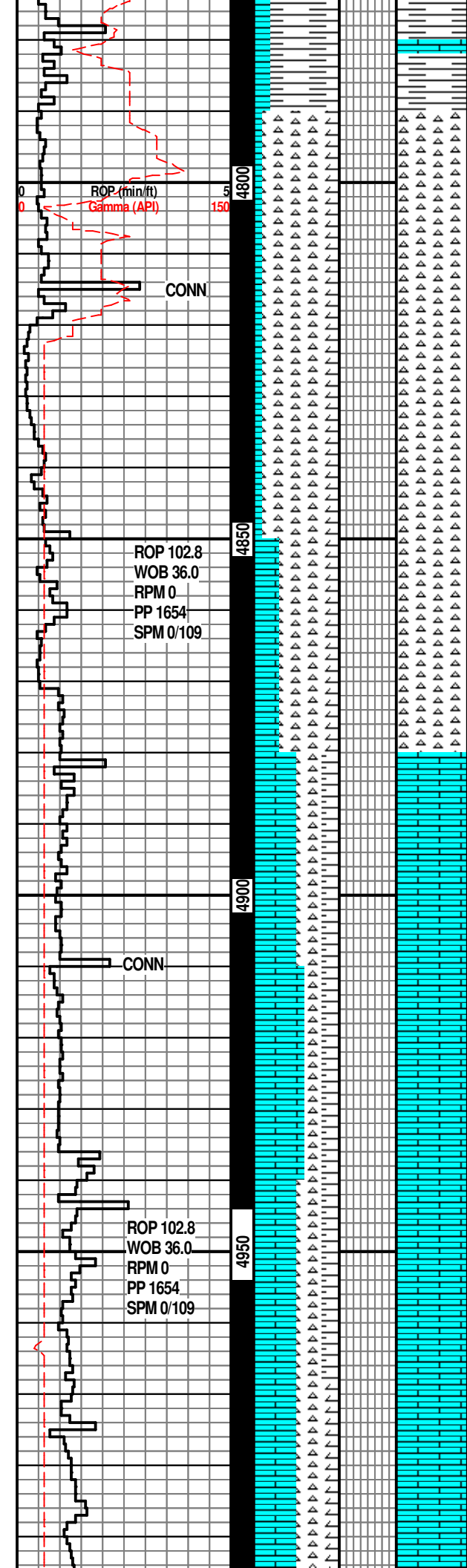
**SURVEY @4765' INC 52.4 AZM
359.4 TVD 4577.78'**

SH: M-LT-DK GY, SME BRN-RDDSH BRN,
OCC BK K, CHNKY, PLTY, SPLNTY, OCC

CG 13u
REPLACE GAS TRAP

MW 9.1 VIS 50

CG 17u



SBBLKY, SLI FRM-FRM, OCC MOD FRM;
 LS: OFF WH-WH, SBSMTH TXT,
 CRYPTO-MICRO XLN, SLI FRM-SFT; TRC
 GRN CHRT

**SURVEY @4797' INC 55.5
 AZM 0.3 TVD 4596.61'**

CHRT: OFF WH-WHT, W/SM LS INCL,
 DNS, HD; LS: OFF WH-WH,
 MICRO-CRYPTO XLN, SLI FRM-FRM, SME
 SLI HD, TRC SH; BRGHT YLWSH WH
 FLUOR, BRGHT YLW RNG CUT

**MISS LIME @4823'
 MD/4611' TVD**

**SURVEY @4829' INC 59.3 AZM
 1.1 TVD 4613.85'**

CHRT: OFF WH-WHT, W/SM LS INCL,
 DNS, HD; LS: OFF WH-WH,
 MICRO-CRYPTO XLN, SLI FRM-FRM, SME
 SLI HD, TRC SH; TRC PALE YLW FLUOR

**SURVEY @4860' INC 63.2 AZM
 1.6 TVD 4628.75'**

CHRT: OFF WH-WHT, W/ LS INCL, DNS,
 HD; LS: OFF WH-WH, MICRO-CRYPTO
 XLN, SLI FRM-FRM, SME SLI HD, TRC
 SH: M-DK GY, SME BLK; TRC PALE YLW
 FLUOR

LS: OFF WH-WH, MICRO-CRYPTO XLN,
 SLI FRM-FRM, SME SLI HD; CHRT: OFF
 WH-WHT, W/ LS INCL, DNS, HD; SH:
 M-DK GY, SME LT GY, SME BLK, CHNKY,
 PLTY, SLI FRM-FRM

**SURVEY @4924' INC 71.1
 AZM 2.4 TVD 4653.56'**

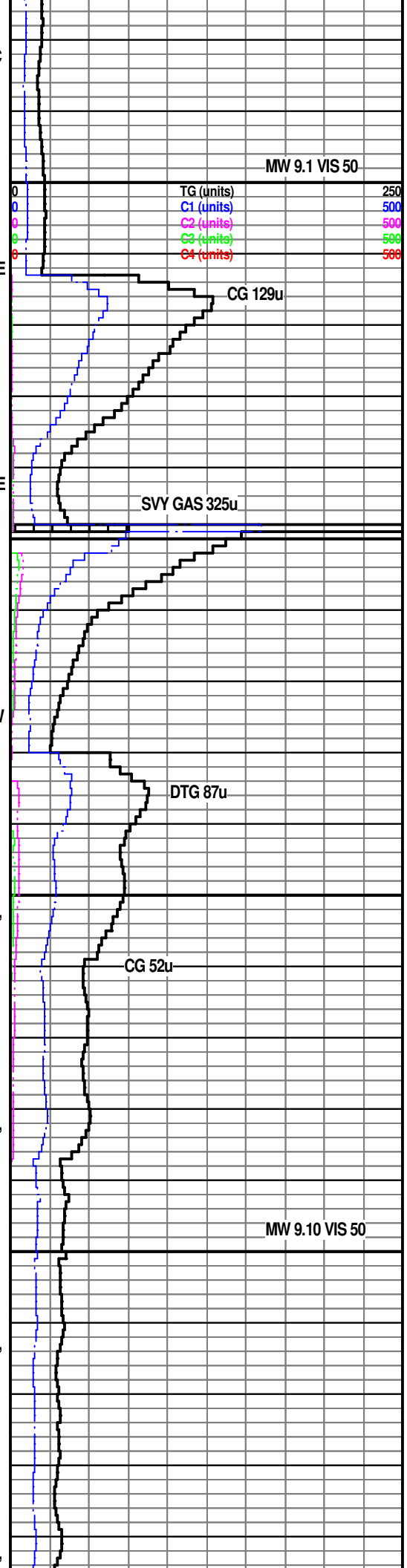
LS: OFF WH-WH, MICRO-CRYPTO XLN,
 SLI FRM-FRM, SME SLI HD; CHRT: OFF
 WH-WHT, W/ LS INCL, DNS, HD; SH:
 M-DK GY, SME LT GY, SME BLK, CHNKY,
 PLTY, SLI FRM-FRM

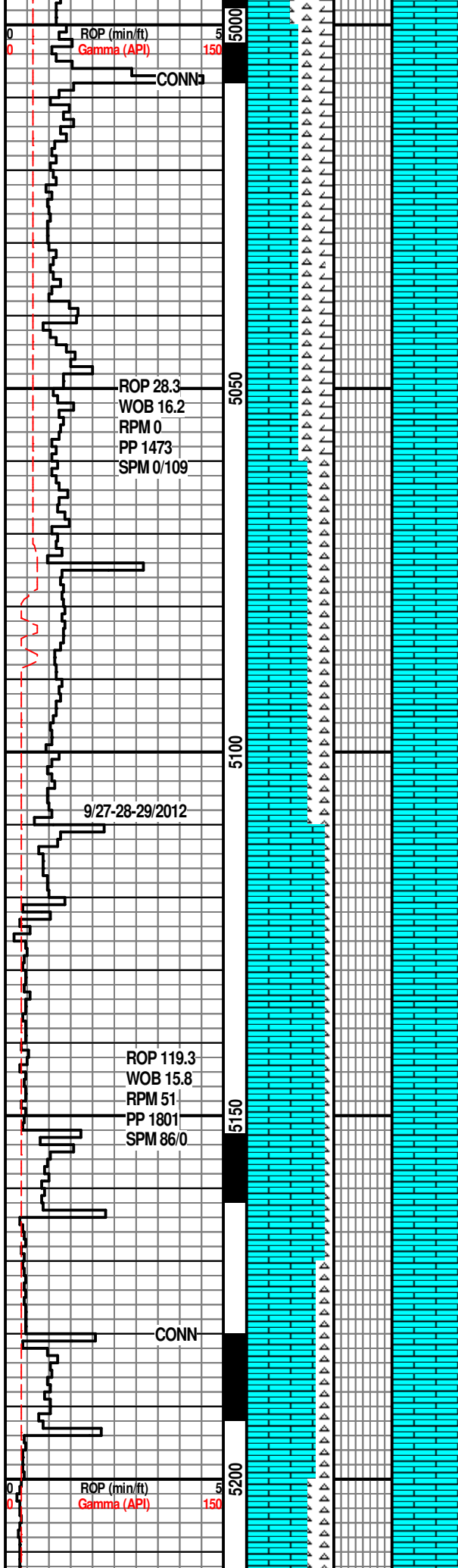
**SURVEY @4956' INC 75.1
 AZM 1.9 TVD 4662.86'**

LS: OFF WH-WH, MICRO-CRYPTO XLN,
 SLI FRM-FRM, SME SLI HD; CHRT: OFF
 WH-WHT, W/ LS INCL, DNS, HD; SH:
 M-DK GY, SME LT GY, SME BLK, CHNKY,
 PLTY, SLI FRM-FRM

**SURVEY @4988' INC 79.5 AZM
 1.5 TVD 4669'**

LS: OFF WH-WH, MICRO-CRYPTO XLN,
 SLI FRM-FRM, SME SLI HD; CHRT: OFF
 WH-WHT, W/ LS INCL, DNS, HD; SH:
 M-DK GY, SME LT GY, SME BLK, CHNKY,





PLTY, SLI FRM-FRM

**SURVEY @5019' INC 83.6 AZM
0.8 TVD 4674.45'**

LS: OFF WH-WH, MICRO-CRYPTO XLN,
SLI FRM-FRM, SME SLI HD; CHRT: OFF
WH-WHT, W/ LS INCL, DNS, HD; SH:
M-DK GY, SME LT GY, SME BLK, CHNKY,
PLTY, SLI FRM-FRM

**SURVEY @5051' INC 87.8
AZM 359.8 TVD 4676'**

LS: OFF WH-WH, MICRO-CRYPTO XLN,
SLI FRM-FRM, SME SLI HD; CHRT: OFF
WH-WHT, W/ LS INCL, DNS, HD; SH:
M-DK GY, SME LT GY, SME BLK, CHNKY,
PLTY, SLI FRM-FRM

LS: CRM-BUFF, VFXLN-CRPXLN,
FRM-HD, DNS; CHT: WHT-CRM, W/SM LS
INCL, DNS, HD; TRC SH;

LS: CRM-BUFF, VFXLN-CRPXLN,
FRM-HD, DNS; CHT: WHT-CRM, W/SM LS
INCL, DNS, HD; TRC SH;

**CURVE LANDED 5019'
TOOH FOR INTERMEDIATE CASING**

**SURVEY @5101' INC 90.0 AZM 359.1
TVD 4677.81'**

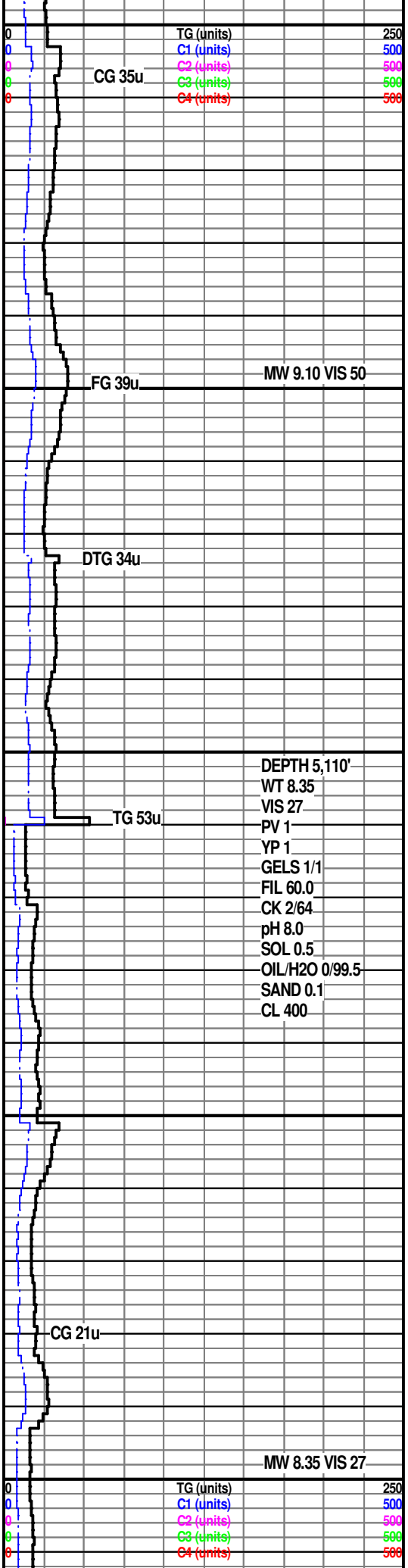
**BIT#4 6.125 HAL PDC 5X12 JETS
DEPTH IN @5,110'**

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI HD,
SMTH-SBSMTH TXT; CHRT: OFF WH-WH,
OCC TRNSL, HD, TRC SH, NSOC

**SURVEY @5131' INC 90.5 AZM
358.5 TVD 4677.68'**

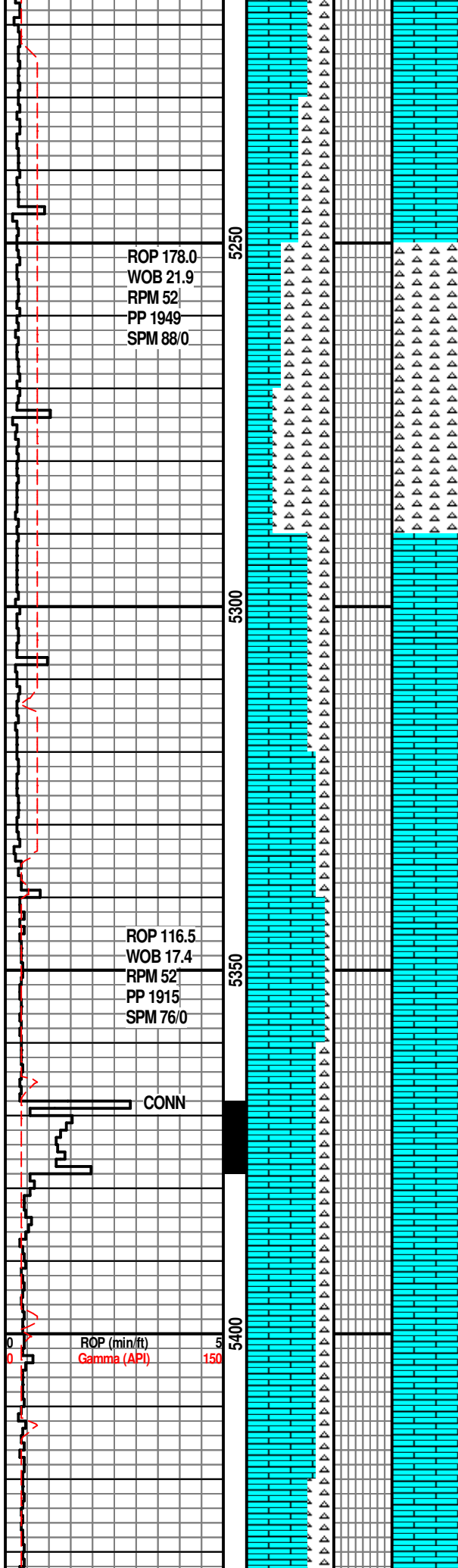
LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI HD,
SMTH-SBSMTH TXT; CHRT: OFF WH-WH,
OCC TRNSL, HD, W/ SH INCLS; TRC SH:
M-LT GY, SME BLK, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI HD,
SMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, V HD, W/ TRC SH INCLS;
SLI TRC SH, NSOC



DEPTH 5,110'
WT 8.35
VIS 27
PV 1
YP 1
GELS 1/1
FIL 60.0
CK 2/64
pH 8.0
SOL 0.5
OIL/H2O 0/99.5
SAND 0.1
CL 400

MW 8.35 VIS 27

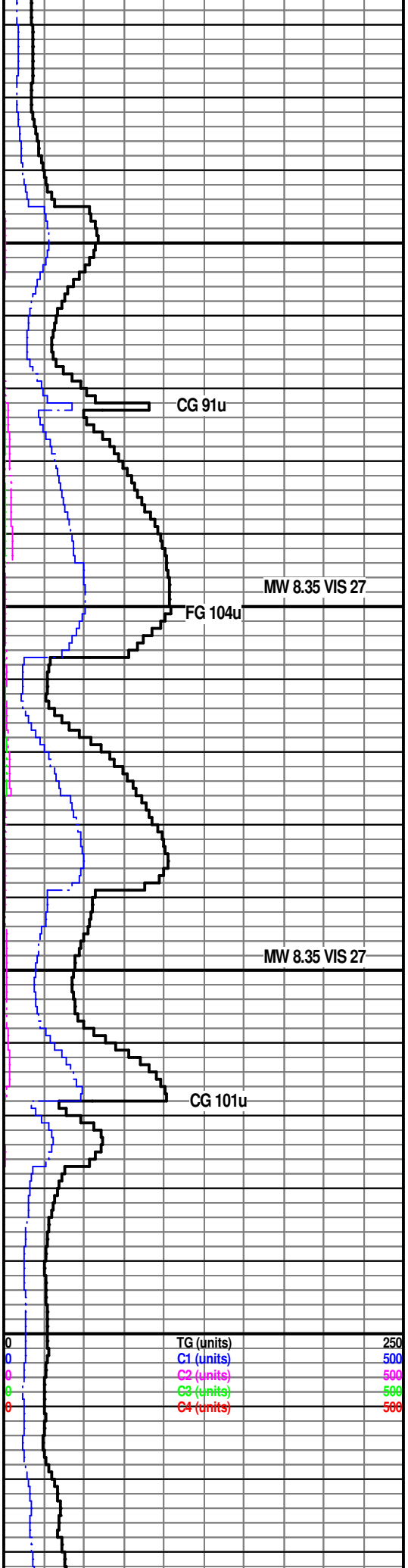


ROP 178.0
WOB 21.9
RPM 52
PP 1949
SPM 88/0

ROP 116.5
WOB 17.4
RPM 52
PP 1915
SPM 76/0

ROP (min/ft)
Gamma (API)

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, V HD, W/ TRC SH INCLS; SLI TRC SH, NSOC
SURVEY @5223' INC 93.8 AZM 358.6 TVD 4674.23'
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, V HD, W/ TRC SH INCLS; SLI TRC SH, NSOC
 CHRT: OFF WH-WH-LT GY, V HD, W/ TRC SH INCLS, LS INCLS; LS: OFF WH-WH, MICRO-CRYPTO XLN, SLI FRM-FRM, OCC SLI HD, SMTH- SBSMTH TXT, NSOC
 CHRT: OFF WH-WH-LT GY, V HD, W/ TRC SH INCLS, LS INCLS; LS: OFF WH-WH, MICRO-CRYPTO XLN, SLI FRM-FRM, OCC SLI HD, SMTH- SBSMTH TXT; TRC SH: BLK, NSOC
SURVEY @5318' INC 94.1 AZM 357.8 TVD 4667'
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC
SURVEY @5413' INC 93.0 AZM 358.0 TVD 4662.96'
 LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC



CG 91u

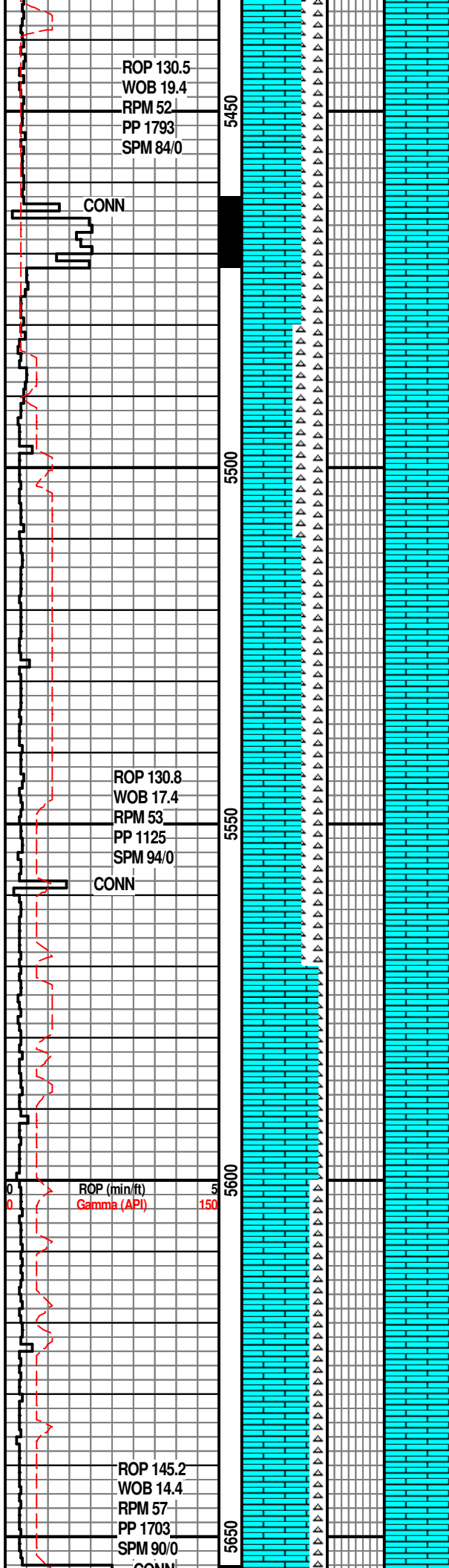
MW 8.35 VIS 27

FG 104u

MW 8.35 VIS 27

CG 101u

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500



LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

MW 8.35 VIS 27

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

CG 41u

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

FG 34u

**SURVEY @5508' INC 93.5 AZM
359.1 TVD 4657.57'**

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

DTG 39u

MW 8.35 VIS 27

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

CG 88u

FG 99u

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

**SURVEY @5603' INC 94.0
AZM 359.8 TVD 4651.36'**

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500

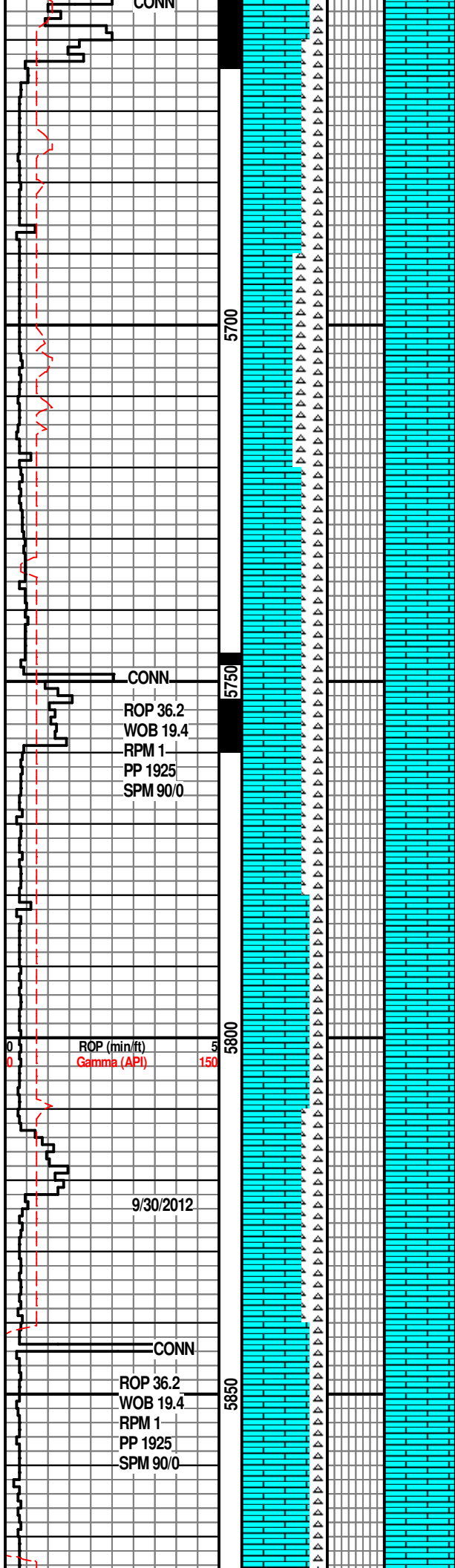
LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

FG 98u

MW 8.35 VIS 27

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF

CG 88u



WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

**SURVEY @5698' INC 93.8
AZM 359.1 TVD 4644.90'**

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

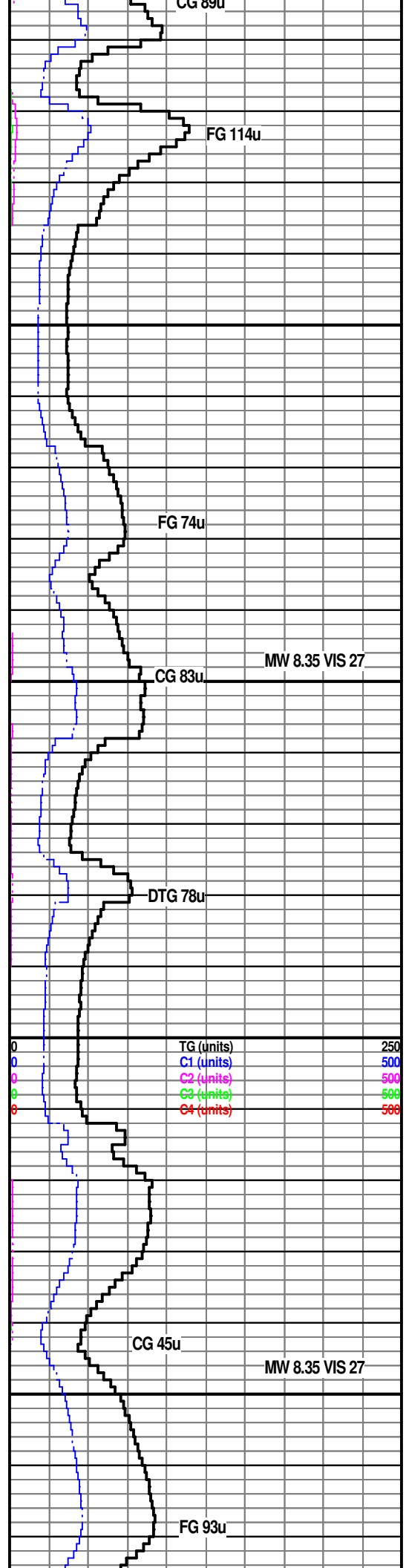
LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

**SURVEY @5793' INC 92.8 AZM
359.3 TVD 4639.43'**

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC



CG 89u

FG 114u

FG 74u

MW 8.35 VIS 27

CG 83u

DTG 78u

TG (units) 250
C1 (units) 500
C2 (units) 500
C3 (units) 500
C4 (units) 500

MW 8.35 VIS 27

CG 45u

FG 93u

SURVEY @5888' INC 92.6
AZM 359.3 TVD 4634.45'

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

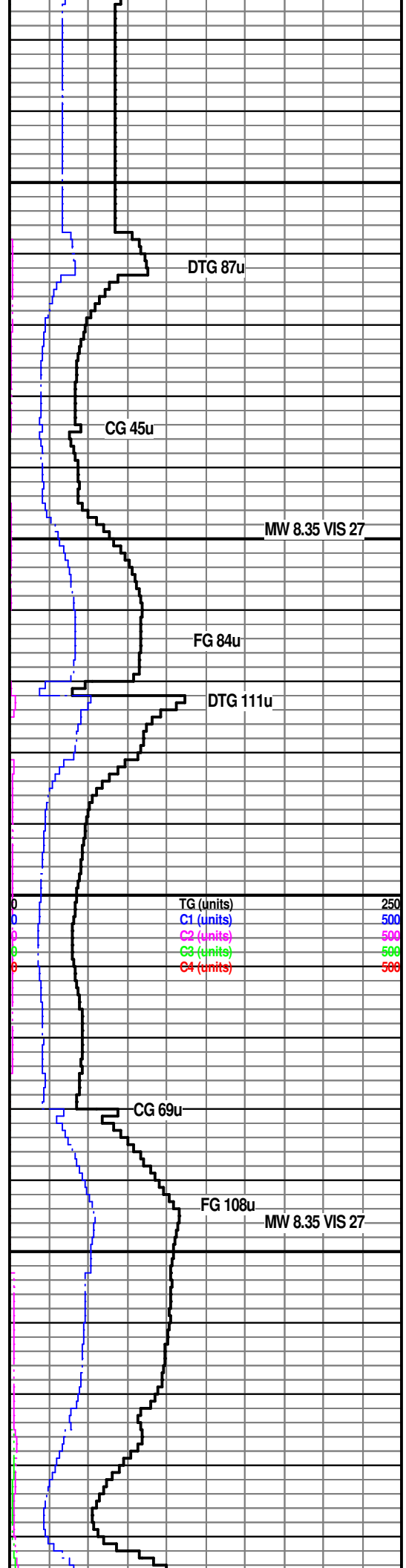
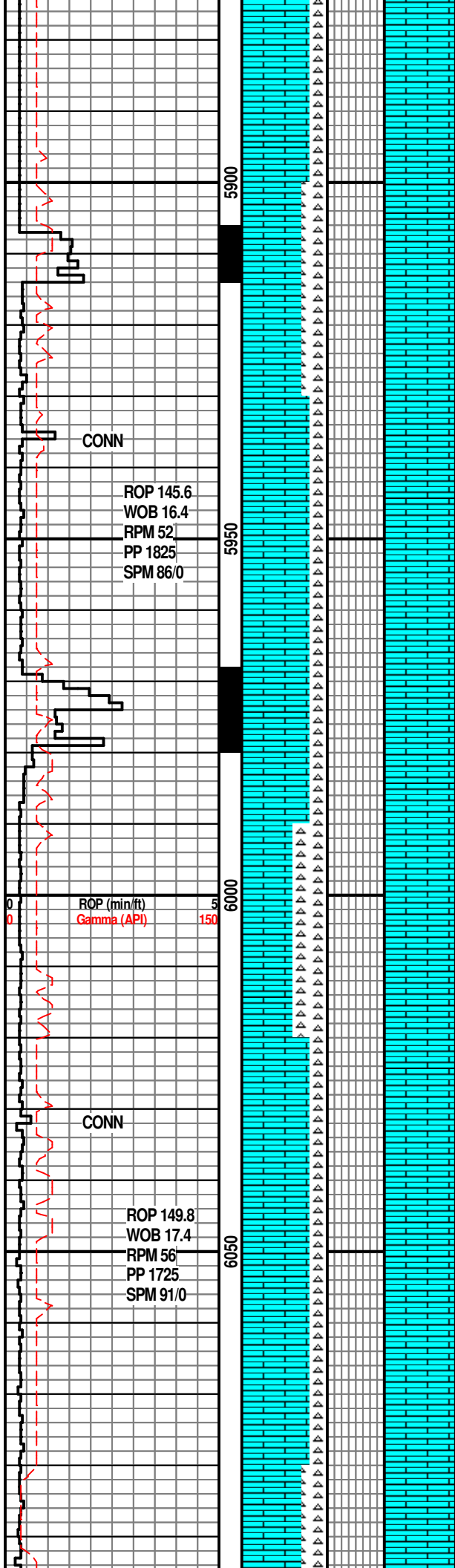
SURVEY @5983' INC 90.4 AZM
0.1 TVD 4632.47'

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO
XLN, SLI FRM-FRM, OCC SLI
HDSMTH-SBSMTH TXT; CHRT: OFF
WH-WH-LT GY, HD; SLI TRC SH, NSOC

SURVEY @6078' INC 90.9 AZM 359.8
TVD 4630.23'



TG (units)	250
C1 (units)	500
C2 (units)	500
C3 (units)	500
C4 (units)	500

CONN

ROP 145.6
WOB 16.4
RPM 52
PP 1825
SPM 86/0

CONN

ROP 149.8
WOB 17.4
RPM 56
PP 1725
SPM 91/0

DTG 87u

CG 45u

MW 8.35 VIS 27

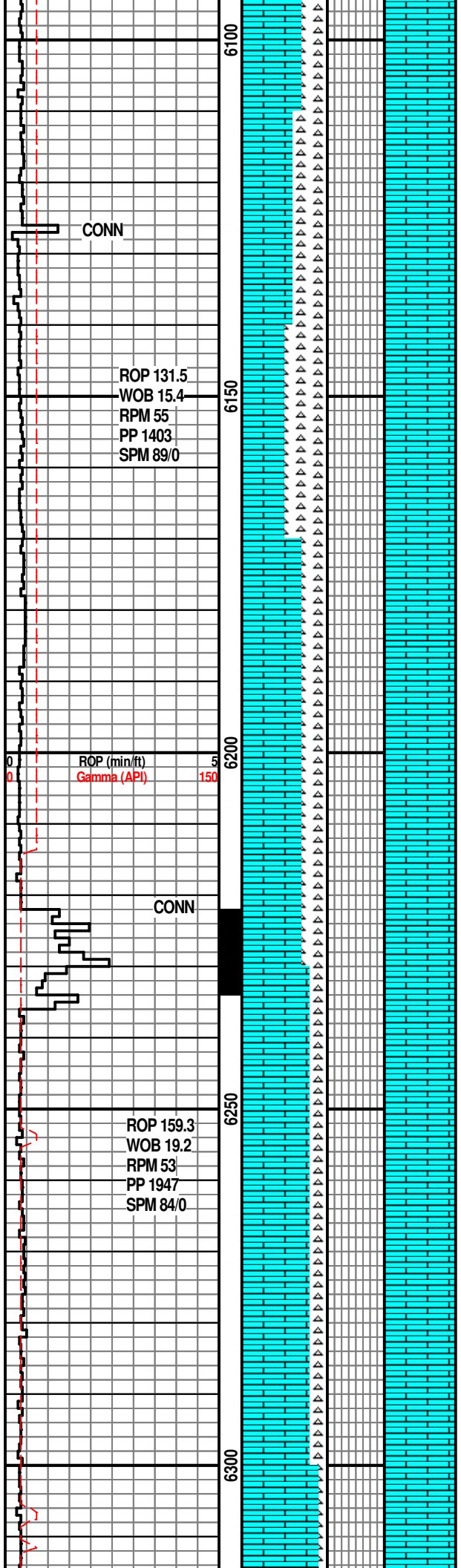
FG 84u

DTG 111u

CG 69u

FG 108u

MW 8.35 VIS 27



CONN

ROP 131.5
WOB 15.4
RPM 55
PP 1403
SPM 89/0

ROP (min/ft)
Gamma (API)

CONN

ROP 159.3
WOB 19.2
RPM 53
PP 1947
SPM 84/0

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

**SURVEY @6173' INC 91.7
AZM 359.3 TVD 4628.08'**

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH-CRM, MICRO- CRYPTO XLN, SLI FRM-FRM, OCC SLI HDSMTH-SBSMTH TXT; CHRT: OFF WH-WH-LT GY, HD; SLI TRC SH, NSOC

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH INCLS

**SURVEY @6268' INC 90.8
AZM 359.5 TVD 4626.00'**

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH INCLS, NO FLUOR, NSOC

FG 103u

CG 105u

MW 8.35 VIS 27

FG 124u

CG 78u

Scale Change
TG (units) 500
C1 (units) 750
C2 (units) 750
P1 (units) 750
P2 (units) 750
P4 (units) 750

FG 876u

FG 554u

MW 8.35 VIS 27

CONN

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, BRGHT YLLWSH WH FLUOR, FLSH CT, BRGHT YLLW RNG CT

CG 78u

FG 243u

ROP 139.9
WOB 18.0
RPM 55
PP 1905
SPM 85/0

6350

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, OCC GRYSH WH, SME TRNSL, HD, TRC SH, DLL GRNSH WH FLUOR

**SURVEY @6363' INC 90.8
AZM 359.6 TVD 4624.68'**

FG 1244u

FG 871u

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, BRGHT YLLWSH WH FLUOR, FLSH CT, BRGHT YLLW RNG CT

ROP (min/ft)
Gamma (API) 150

6400

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, DLL YLLWSH WH FLUOR

TG (units) MW 8.35 VIS 27 500
C1 (units) 750
C2 (units) 750
C3 (units) 760
C4 (units) 750

CG 138u

CONN

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, DLL YLLWSH WH FLUOR, YLLW RNG CT

FG 2022u

ROP 208.2
WOB 18.4
RPM 57
PP 2286
SPM 0/94

6450

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, DLL YLLWSH WH FLUOR

**SURVEY @6458' INC 90.4 AZM
358.6 TVD 4623.68'**

FG 1788u

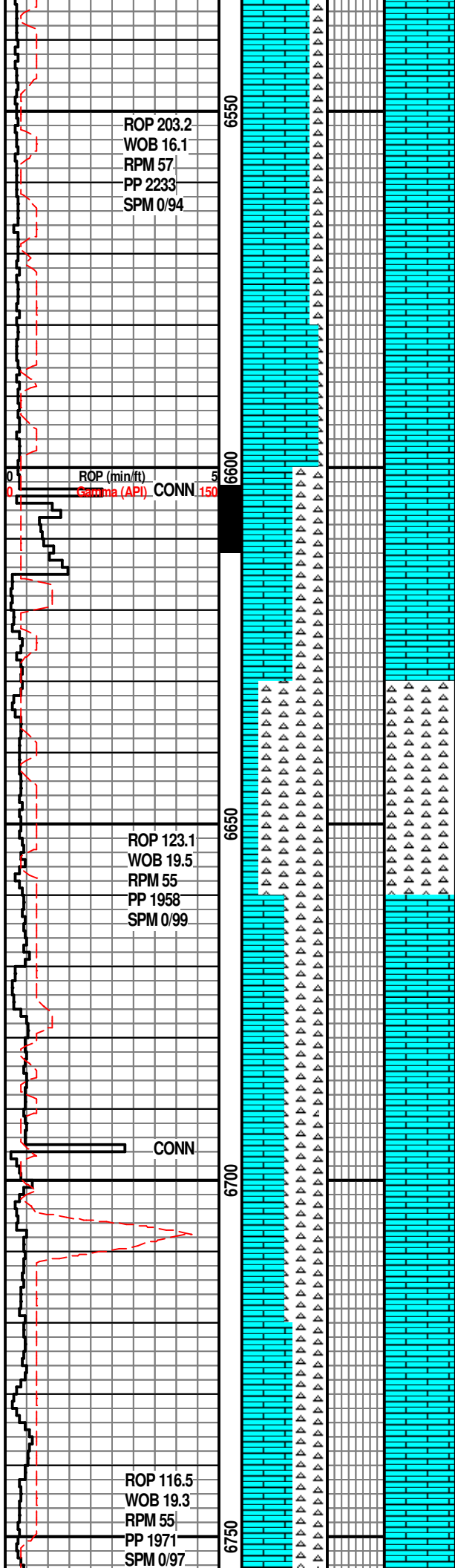
CONN

LS: OFF WH-WH, MICRO-CRYPTO XLN, FRM-SLI FRM, SBSMTH TXT; CHRT: OFF WH-WH, SME TRNSL, HD, TRC SH, DLL YLLWSH WH FLUOR

MW 8.35 VIS 27

CG 304u

6500



ROP 203.2
WOB 16.1
RPM 57
PP 2233
SPM 0/94

6550

6600

6650

6700

6750

ROP (min/ft)
Gamma (API) CONN 150

ROP 123.1
WOB 19.5
RPM 55
PP 1958
SPM 0/99

CONN

ROP 116.5
WOB 19.3
RPM 55
PP 1971
SPM 0/97

LS: OFF WH-WH, MICRO-CRYPTO XLN,
FRM-SLI FRM, SBSMTH TXT; CHRT: OFF
WH-WH, SME TRNSL, HD, TRC SH, NO
FLUOR

**SURVEY @6553' INC 91.0 AZM
358.9 TVD 4622.52'**

OIL STAIN IN PITS

LS: OFF WH-WH, MICRO-CRYPTO XLN,
FRM-SLI FRM, SBSMTH TXT; CHRT: OFF
WH-WH, SME TRNSL, HD, TRC SH, DLL
YLLW FLUOR

LS: OFF WH-WH, MICRO-CRYPTO XLN,
FRM-SLI FRM, SBSMTH TXT; CHRT: OFF
WH-WH, HD, TRC SH, DLL GRNSH YLLW
FLUOR

LS: OFF WH-WH, MICRO-CRYPTO XLN,
FRM-SLI FRM, SBSMTH TXT; CHRT: OFF
WH-WH, HD, TRC BLK SH, DLL YLLW
FLUOR

**SURVEY @6647' INC 90.5 AZM
359.4 TVD 4621.29'**

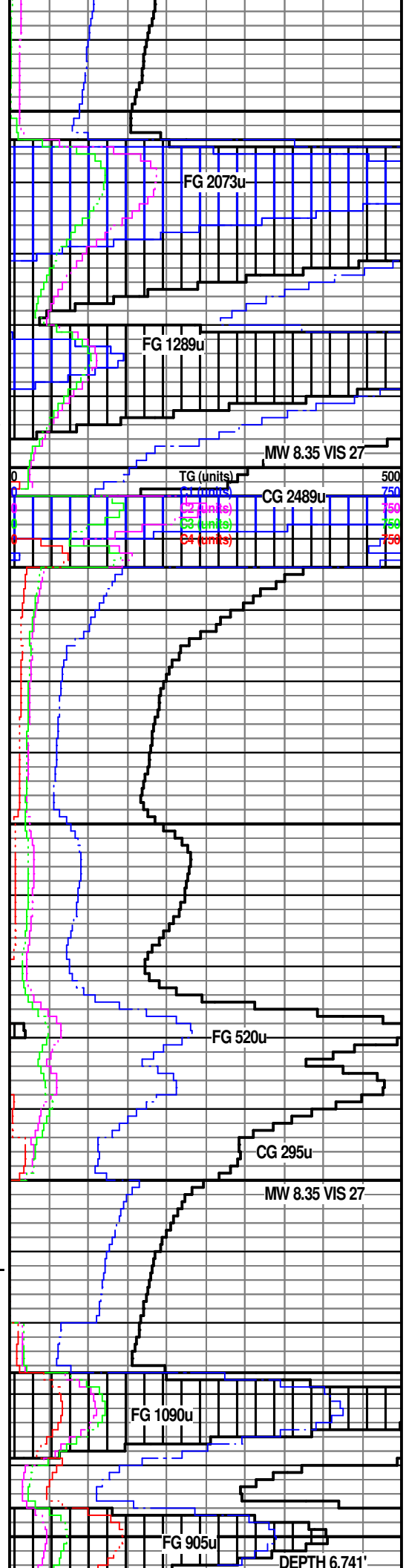
CHRT: OFF WH-WH-GY, SBSMTH TXT,
HD, DNS, SME SH INCLS, SME LS INCLS;
LS: OFF WH-WH, OCC CRM, CRYPTO-
MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, NSOC, NO FLUOR

LS: OFF WH-WH, OCC CRM, CRYPTO-
MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, CHRT: OFF
WH-WH-GY, SBSMTH TXT, HD, DNS,
FLSH CT, BRIGHT YLLWSH WH FLUOR,
YLLW RNG CT

LS: OFF WH-WH, OCC CRM, CRYPTO-
MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, CHRT: OFF
WH-WH-GY, SBSMTH TXT, HD, DNS, DLL
YLLW FLUOR

LS: OFF WH-WH, OCC CRM, CRYPTO-
MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, CHRT: OFF
WH-WH-GY, SBSMTH TXT, HD, DNS,
FLSH CT, DLL YLLWSH WH FLUOR,
YLLW RNG CT

**SURVEY @6742' INC 91.4 AZM
359.6 TVD 4619.72'**



FG 2073u

FG 1289u

MW 8.35 VIS 27

TG (units)

CG 2489u

750
350
368
758

01 (units)
02 (units)
03 (units)
04 (units)

FG 520u

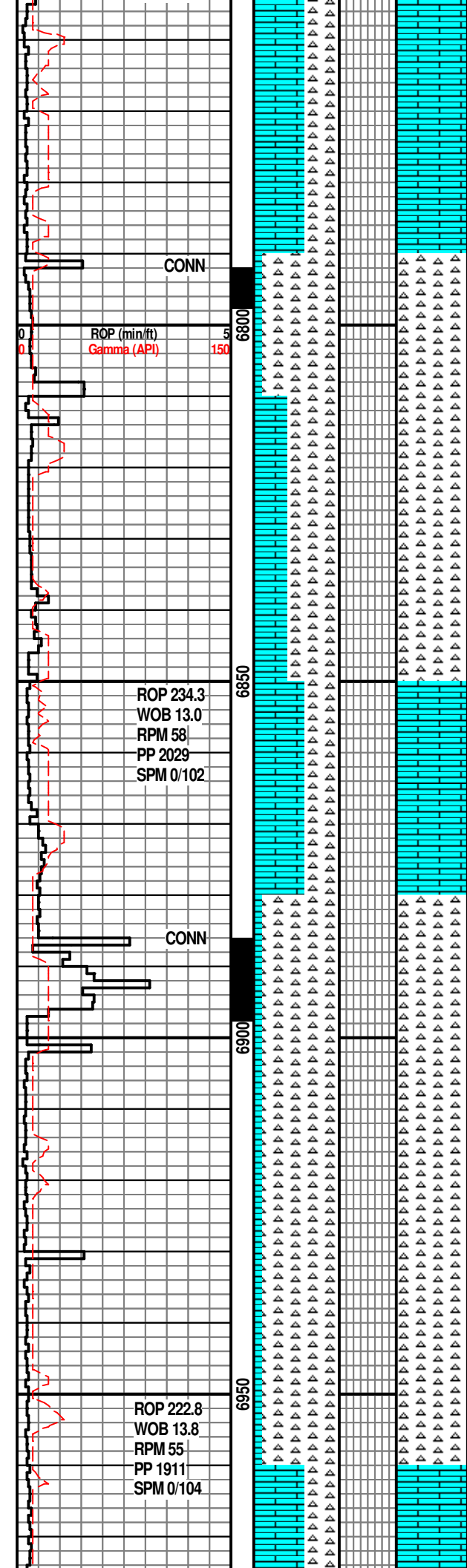
CG 295u

MW 8.35 VIS 27

FG 1090u

FG 905u

DEPTH 6.741'



LS: OFF WH-WH, OCC CRM, CRYPTO-MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH-GY, SBSMTH TXT, HD, DNS, BRGHT YLLWSH WH FLUOR, YLLW RNG CT

CHRT: OFF WH-WH-GY, SBSMTH TXT, HD, DNS, LS: OFF WH-WH, OCC CRM, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, DLL YLLW FLUOR

**SURVEY @6837' INC 90.9 AZM
359.0 TVD 4617.81'**

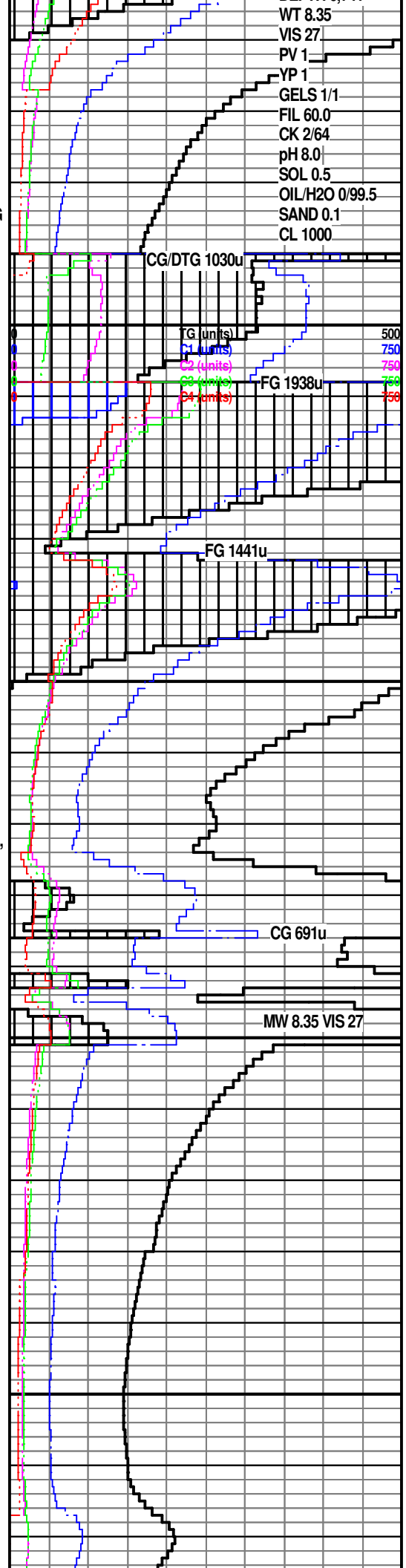
CHRT: OFF WH-WH-GY, SBSMTH TXT, HD, DNS, LS: OFF WH-WH, OCC CRM, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, DLL YLLW FLUOR, RNG CT

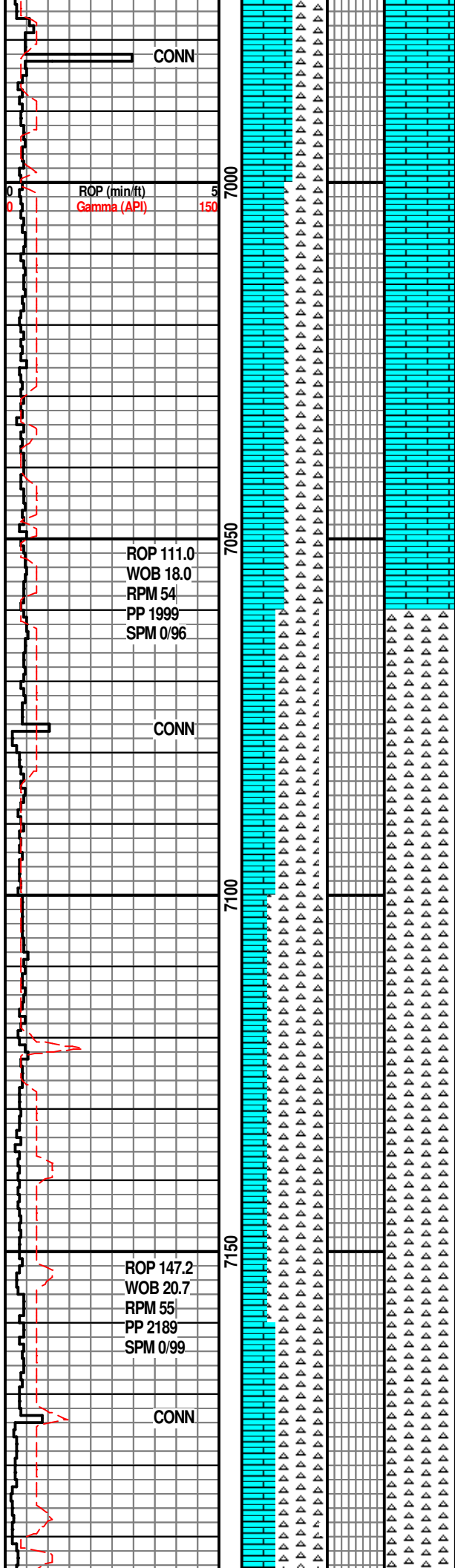
LS: OFF WH-WH, OCC CRM, CRYPTO-MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH INCLS

CHRT: OFF WH-WH-GY, SBSMTH TXT, HD, DNS, LS: OFF WH-WH, OCC CRM, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, NO FLUOR

**SURVEY @6932' INC 89.8 AZM
359.0 TVD 4617.2'**

CHRT: WH-OFF WH, SME GYSH, SBSMTH TXT, HD, DNS, LS: OFF WH-WH, OCC CRM, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, NO FLUOR





LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, NO FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH INCLS, NO
FLUOR

**SURVEY @7027' INC 89.9 AZM
358.9 TVD 4616.48'**

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH INCLS, NO
FLUOR

CHRT: WH-OFF WH, SBSMTH TXT, HD,
DNS, LS: OFF WH-WH, OCC CRM,
CRYPTO- MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SBSMTH TXT, HD,
DNS, LS: OFF WH-WH, OCC CRM,
CRYPTO- MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, BRGHT YLLW
FLUOR, FL SH CT

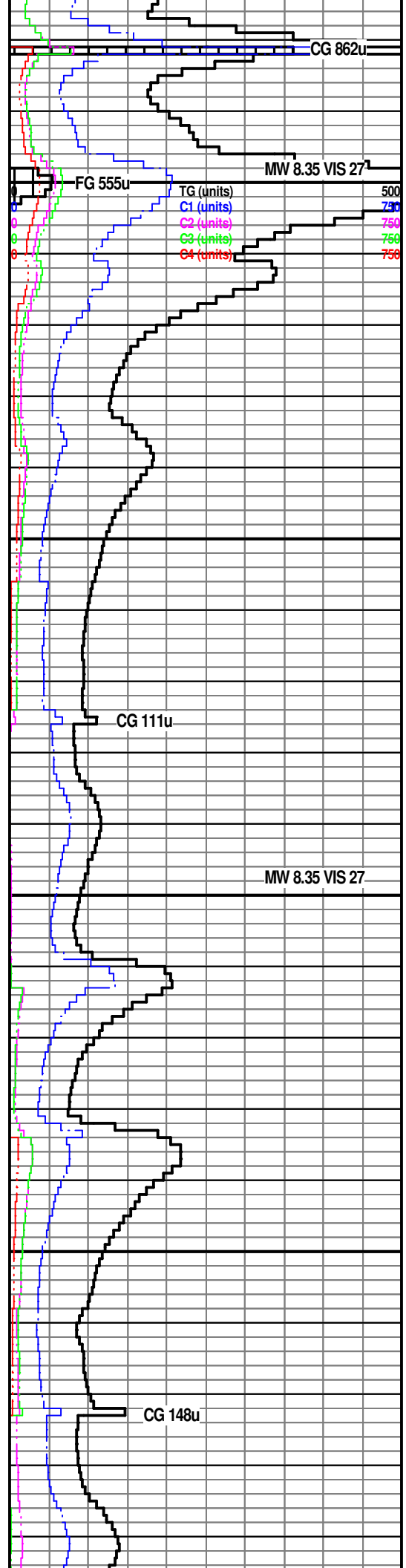
**SURVEY @7122' INC 90.3
AZM 358.1 TVD 4617.30'**

OIL STAIN IN PITS

CHRT: WH-OFF WH, SBSMTH TXT, HD,
DNS, LS: OFF WH-WH, OCC CRM,
CRYPTO- MICRO XLN, SLI FRM-FRM,
SMTH-SBSMTH TXT, TRC SH, DLL YLLW
FLUOR

OIL STAIN IN PITS

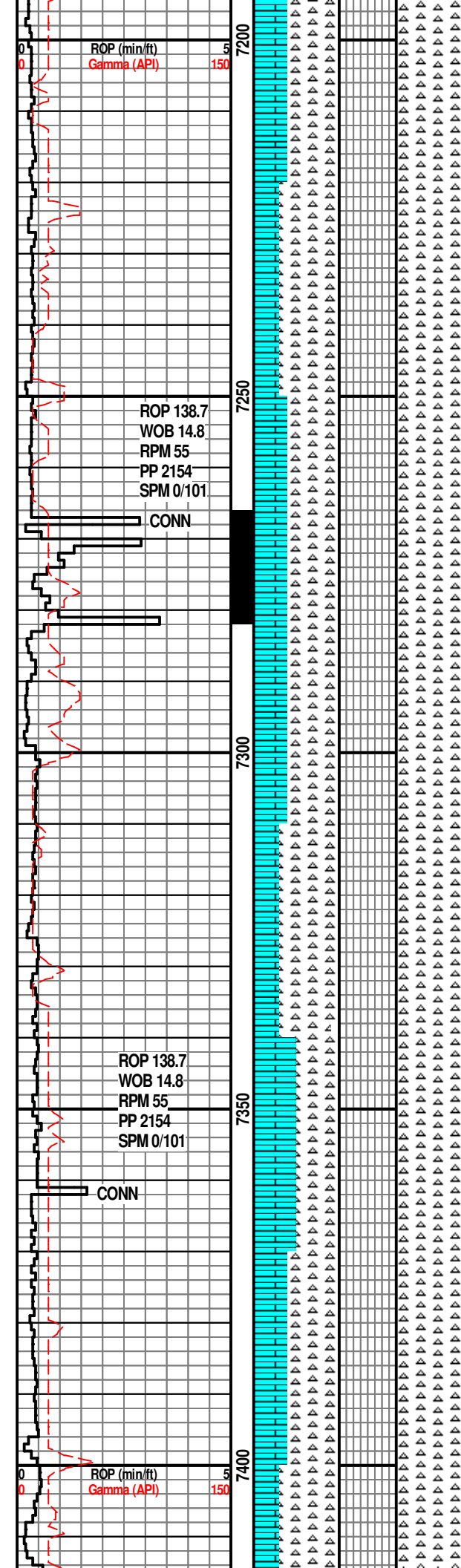
CHRT: WH-OFF WH, OCC GY, SME
TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
WH-WH, OCC CRM, CRYPTO- MICRO
XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
TRC SH, DLL YLLW FLUOR



MW 8.35 VIS 27'

MW 8.35 VIS 27'

MW 8.35 VIS 27'



SURVEY @7217' INC 90.8
AZM 358.0 TVD 4615.4'

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

SURVEY @7312' INC 89.1
AZM 359.5 TVD 4615.49'

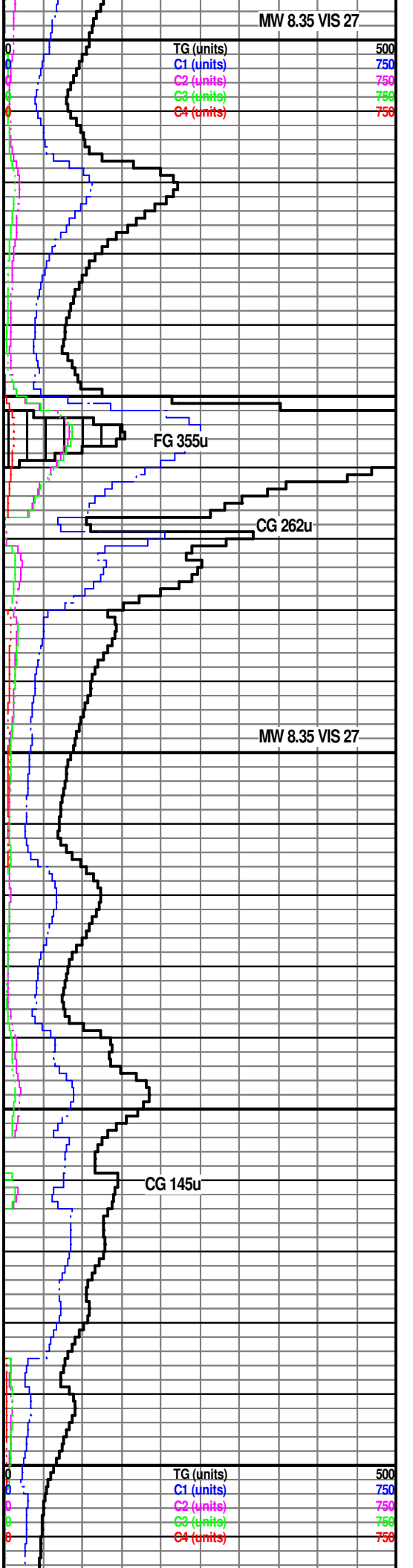
CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, OCC GY, SME
 TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
 WH-WH, OCC CRM, CRYPTO- MICRO
 XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
 TRC SH, DLL YLLW FLUOR

SURVEY @7407' INC 88.5
AZM 359.4 TVD 4617'

CHRT: WH-OFF WH, OCC GY, SME



MW 8.35 VIS 27

TG (units) 500
 C1 (units) 750
 C2 (units) 750
 C3 (units) 750
 C4 (units) 750

FG 355u

CG 262u

MW 8.35 VIS 27

CG 145u

TG (units) 500
 C1 (units) 750
 C2 (units) 750
 C3 (units) 750
 C4 (units) 750

CHRT: WH-OFF WH, OCC GT, SME
TRNSL, SBSMTH TXT, HD, DNS, LS: OFF
WH-WH, OCC CRM, CRYPTO- MICRO
XLN, SLI FRM-FRM, SMTH-SBSMTH TXT,
TRC SH, DLL YLLW FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

**SURVEY @7502' INC 90.4 AZM
359.3 TVD 4618.39'**

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

**SURVEY @7597' INC 90.8
AZM 359.6 TVD 4617'**

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH
TXT, HD, DNS, TRC SH, DLL YLLW
FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, SMTH-SBSMTH TXT,
CHRT: OFF WH-WH, SME GY, SBSMTH

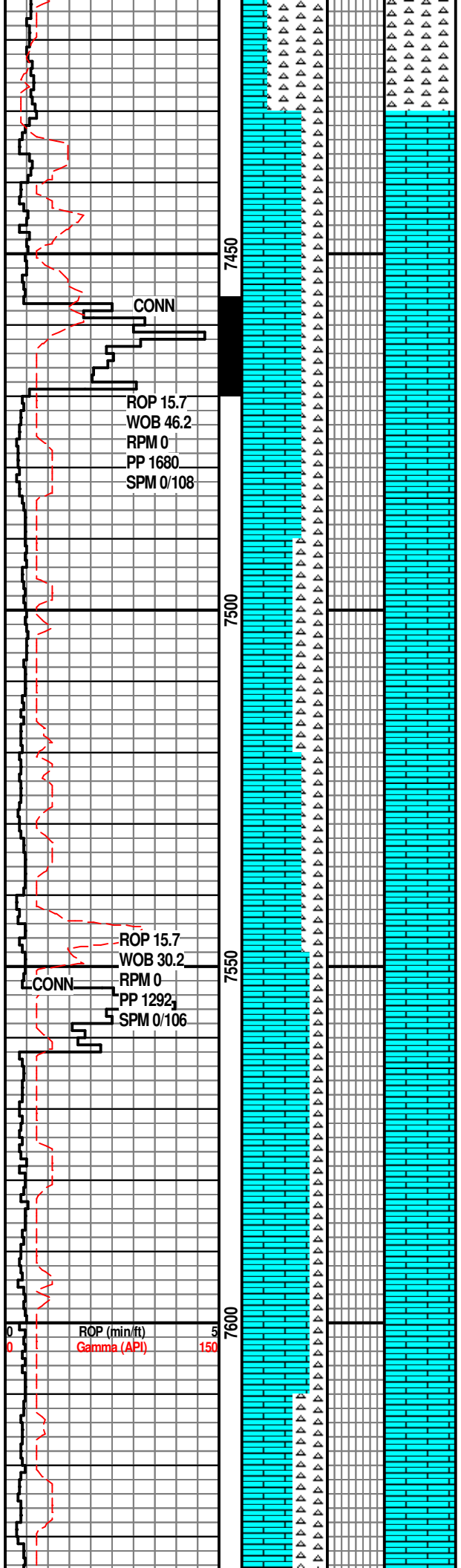
MW 8.35 VIS 27

CG 99u

MW 8.35 VIS 27

CG 220u

TG (units) 500
C1 (units) 750
C2 (units) 750
C3 (units) 750
C4 (units) 750



CONN

ROP 15.7
WOB 46.2
RPM 0
PP 1680
SPM 0/108

7450

7500

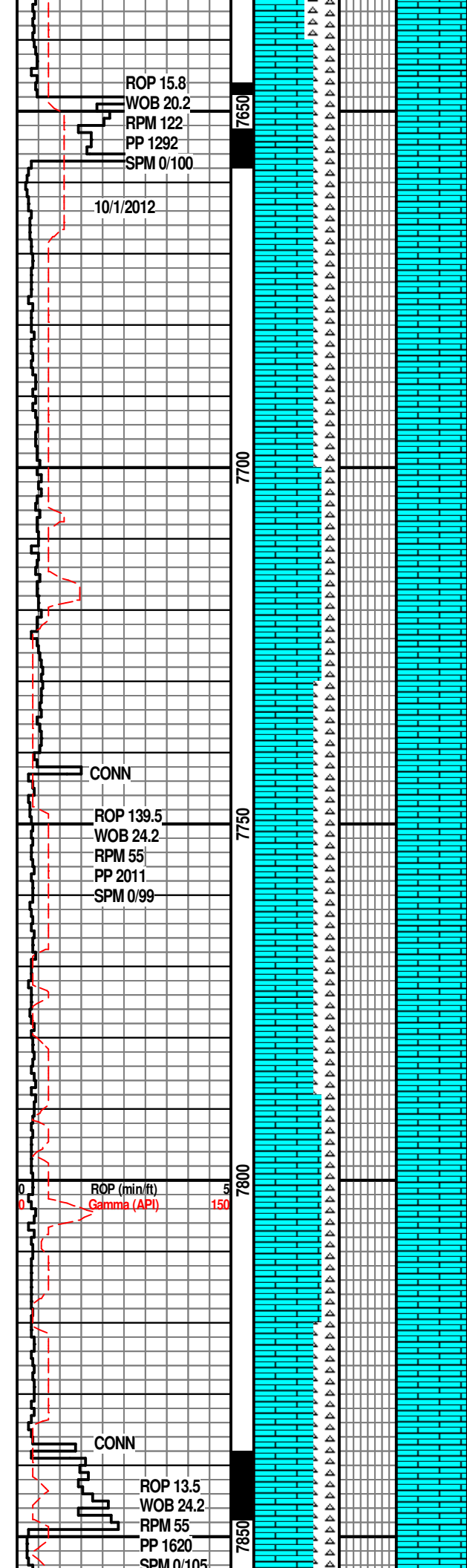
7550

7600

ROP (min/t)
Gamma (API) 150

0

6



TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

MW 8.35 VIS 27

LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

**SURVEY @7692' INC 92.4 AZM
359.5 TVD 4614.74'**

LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

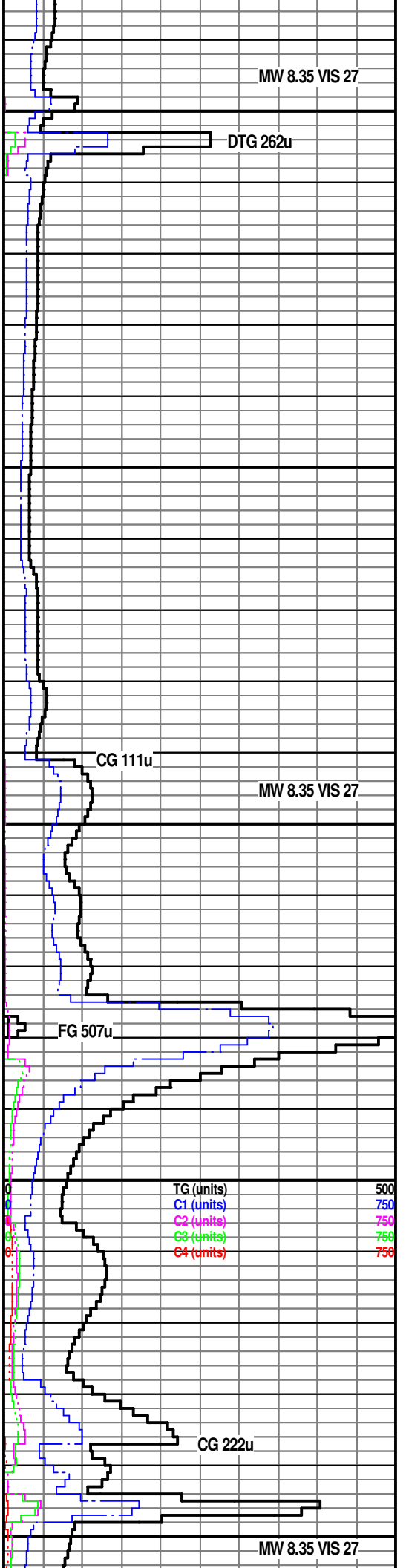
LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

**SURVEY @7787' INC 93.5 AZM
359.4 TVD 4609.85'**

LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

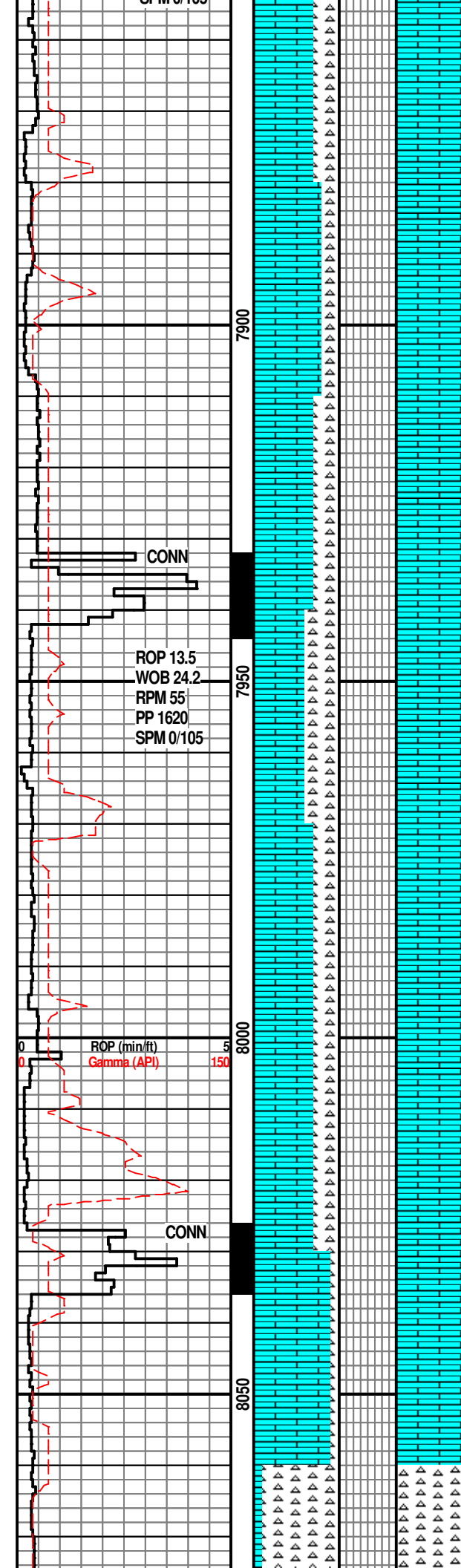
LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, SMTH-SBSMTH TXT, CHRT: OFF WH-WH, SME GY, SBSMTH TXT, HD, DNS, TRC SH,DLL YLLW FLUOR



TG (units) 500
C1 (units) 750
C2 (units) 750
C3 (units) 750
C4 (units) 750

MW 8.35 VIS 27



LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

**SURVEY @7882' INC 91.9
 AZM 359.1 TVD 4605.38'**

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

CONN

ROP 13.5
 WOB 24.2
 RPM 55
 PP 1620
 SPM 0/105

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

**SURVEY @7977' INC 91.2 AZM
 358.9 TVD 4603.97'**

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

MW 8.35 VIS 27

ROP (min/ft)
 Gamma (API)

CONN

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SMTH-SBSMTH TXT,
 CHRT: OFF WH-WH, SME GY, SBSMTH
 TXT, HD, DNS, TRC SH,DLL YLLW
 FLUOR

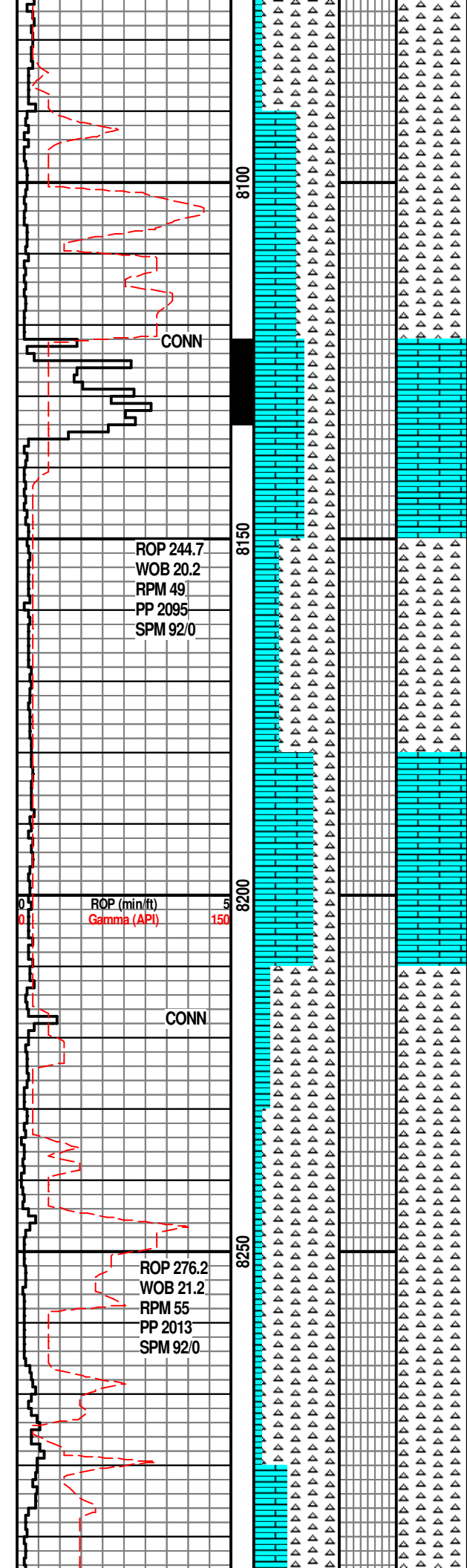
TG (units) 500
 C1 (units) 750
 C2 (units) 750
 C3 (units) 750
 C4 (units) 750

LS: OFF WH-WH, CRYPTO- MICRO XLN,
 SLI FRM-FRM, SBSMTH-SMTH TXT;
 CHRT: WH-OFF WH, SBSMTH TXT, HD,
 DLL YLLW FLUOR

**SURVEY @8072' INC 91.5 AZM
 0.8 TVD 4601.73'**

CG 1050u

CG 1905u



CHRT: WH-OFF WH, SME GY, TRC TRNSL, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, DLL GRNSH YLLW FLUOR

MW 8.35 VIS 27

CHRT: WH-OFF WH, SME GY W/ GRN INCLS, TRC TRNSL, SBSMTH TXT, HD, TRC SH INCLS; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, FLSH CT, RNG CT, GRNSH YLLW FLUOR

CG 2061u

LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT; CHRT: WH-OFF WH, SME BRNSH GY, TRC TRNSL, SBSMTH TXT, HD, TRC SH INCLS, TRC FREE PYR, FLSH CT, RNG CT, GRNSH YLLW FLUOR

OIL STAIN IN PITS

SURVEY @8167' INC 89.9
AZM359.8 TVD 4600.5'

CHRT: WH-OFF WH, SME GY-BRN, SBSMTH TXT, HD, TRC SH INCLS; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, FLSH CT, STRMG CT, RNG CT, GRNSH YLLW FLUOR

OIL STAIN IN PITS

LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT; CHRT: WH-OFF WH, SME BRNSH GY, TRC TRNSL, SBSMTH TXT, HD, TRC SH INCLS, FLSH CT, STRMG CT, RNG CT, GRNSH YLLW FLUOR

MW 8.35 VIS 27

TG (units)	500
C1 (units)	750
C2 (units)	750
C3 (units)	750
C4 (units)	750

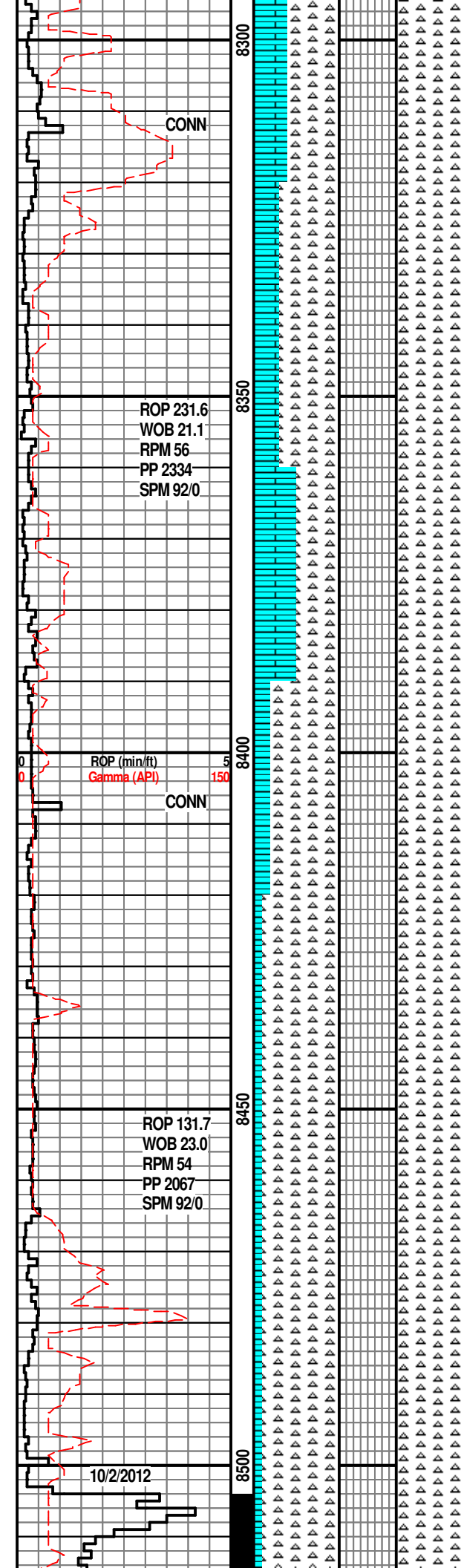
CG 1285u

CHRT: WH-OFF WH, SME GY W/ GRN INCLS, TRC TRNSL, ABNT SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, DLL YLLW FLUOR

SURVEY @8262' INC 89.8
AZM 357.9 TVD 4600.8'

CHRT: WH-OFF WH, SME GY W/ GRN INCLS, TRC TRNSL, ABNT SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, DLL YLLW FLUOR, STRMG CT, TRC SH

FG 1092u



CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, ABNT SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, YLLW FLUOR, STRMG CT, TRC SH

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH-SMTH TXT, YLLW FLUOR, FLSH CT, RNG CT, TRC SH: BLK-DK GY

SURVEY @8357' INC 90.0 AZM 357.3 TVD 4600.9'

LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH- SMTH TXT; CHRT: WH-OFF WH-BRNSH GY, SBSMTH TXT, HD, DNS, ABNT SH INCLS, DLL YLLW FLUOR, FLSH CT, STRMG CT

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, NO FLUOR, NSOC

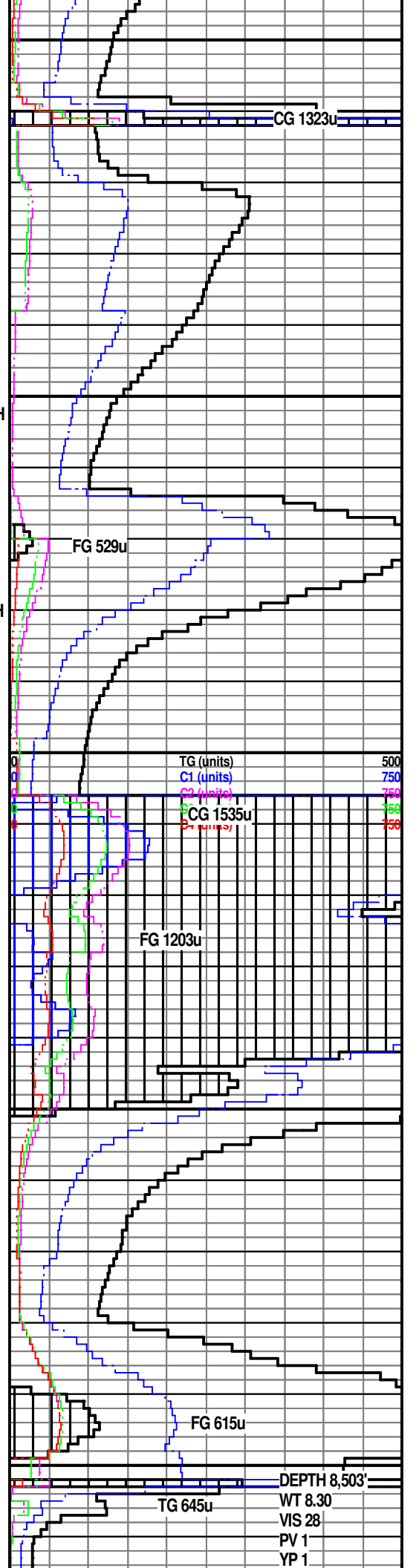
CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, YLLW FLUOR, FLSH CT

SURVEY @8452' INC 91.8 AZM 358.3 TVD 4599.4'

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR

BIT#5 6.125 HAL FX74D 3X12 3X14 JETS DEPTH IN @8,503'



CG 1323u

FG 529u

TG (units) 500
C1 (units) 750
C2 (units) 750
CG 1535u 350
Pressure 350

FG 1203u

FG 615u

TG 645u

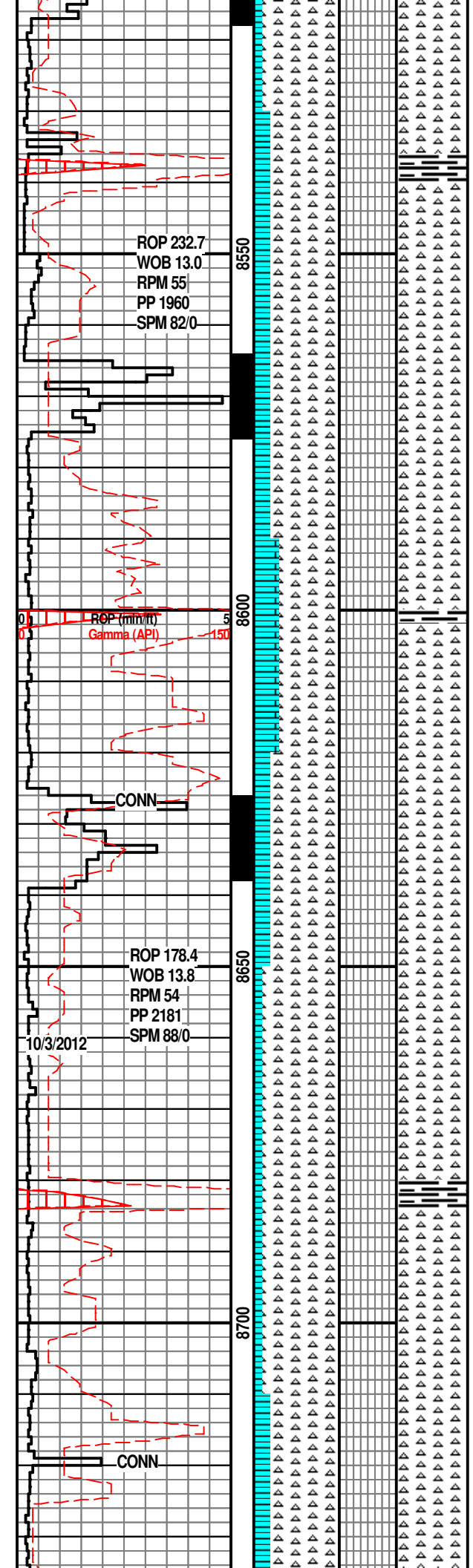
DEPTH 8,503'

WT 8.30

VIS 28

PV 1

YP 1



CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

**SURVEY @8576' INC 90.3
AZM 359.0 TVD 4597'**

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

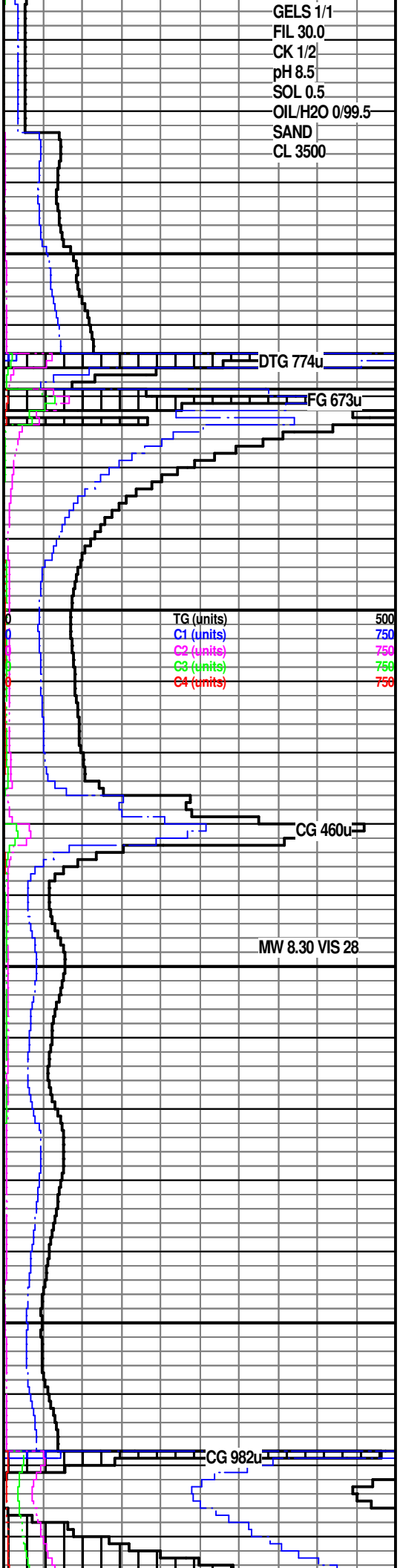
CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

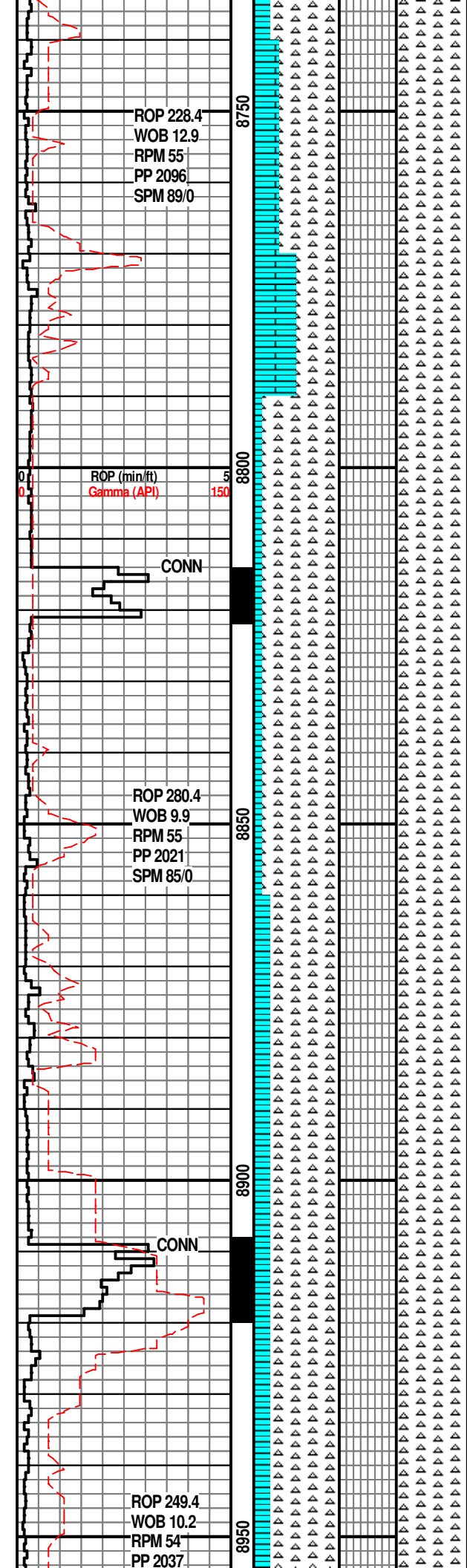
**SURVEY @8688' INC 89.2 AZM
0.8 TVD 4597'**

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR, TRC
SH

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR, TRC
SH

GELS 1/1
FIL 30.0
CK 1/2
pH 8.5
SOL 0.5
OIL/H2O 0/99.5
SAND
CL 3500





CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR, TRC SH

**SURVEY @8763' INC 89.0
AZM 0.6 TVD 4599'**

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR, TRC SH

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR, TRC SH

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR, TRC SH

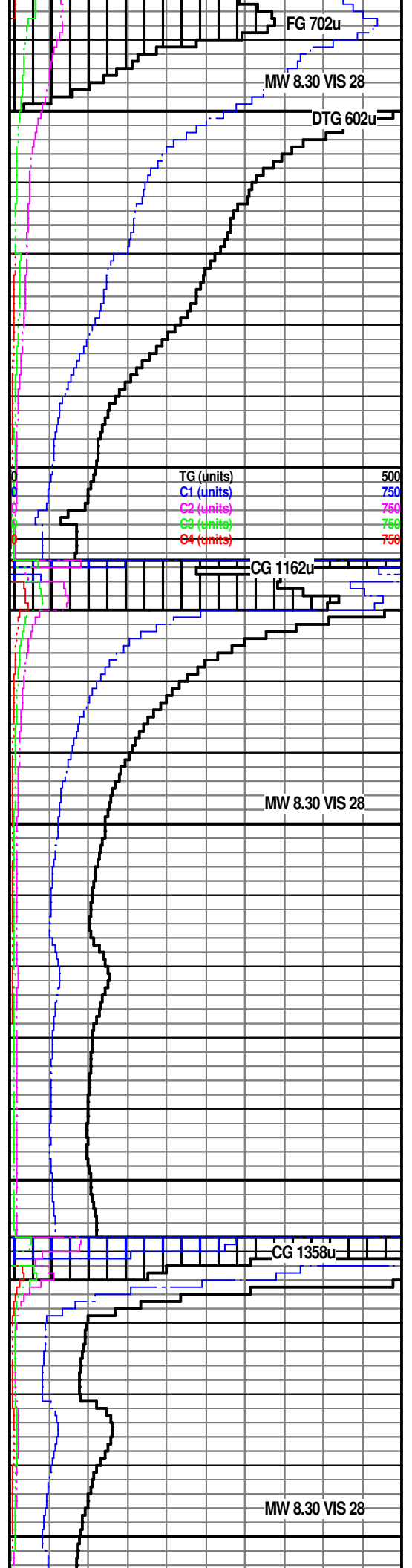
**SURVEY @8953' INC 91.2 AZM
2.3 TVD 4599'**

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN, TRC TRNSL, TRC SH INCLS, SBSMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, SBSMTH TXT, DLL YLLW FLUOR



FG 702u

MW 8.30 VIS 28

DTG 602u

TG (units)
C1 (units) 500
C2 (units) 750
C3 (units) 750
C4 (units) 750

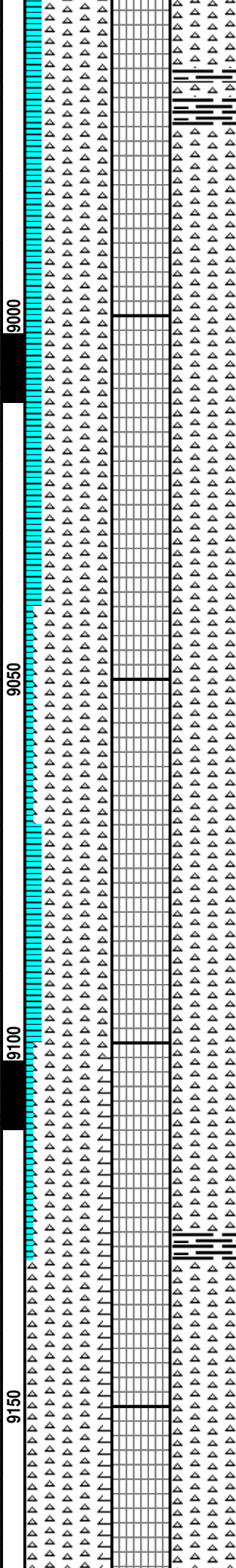
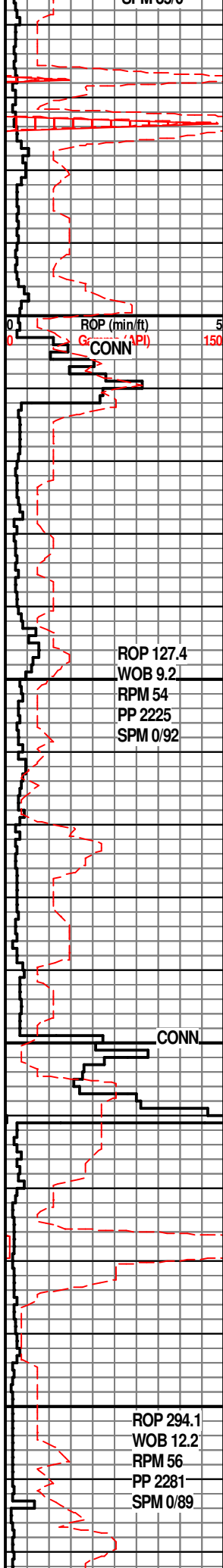
CG 1162u

MW 8.30 VIS 28

CG 1358u

MW 8.30 VIS 28

SPM 85/0



CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME GYSH BRN,
TRC TRNSL, TRC SH INCLS, SBSMTH
TXT, HD; LS: OFF WH-WH,
CRYPTO-MICRO XLN, SLI FRM-FRM,
SBSMTH TXT, DLL YLLW FLUOR

**SURVEY @9048' INC 92.3 AZM
2.3 TVD 4597.04'**

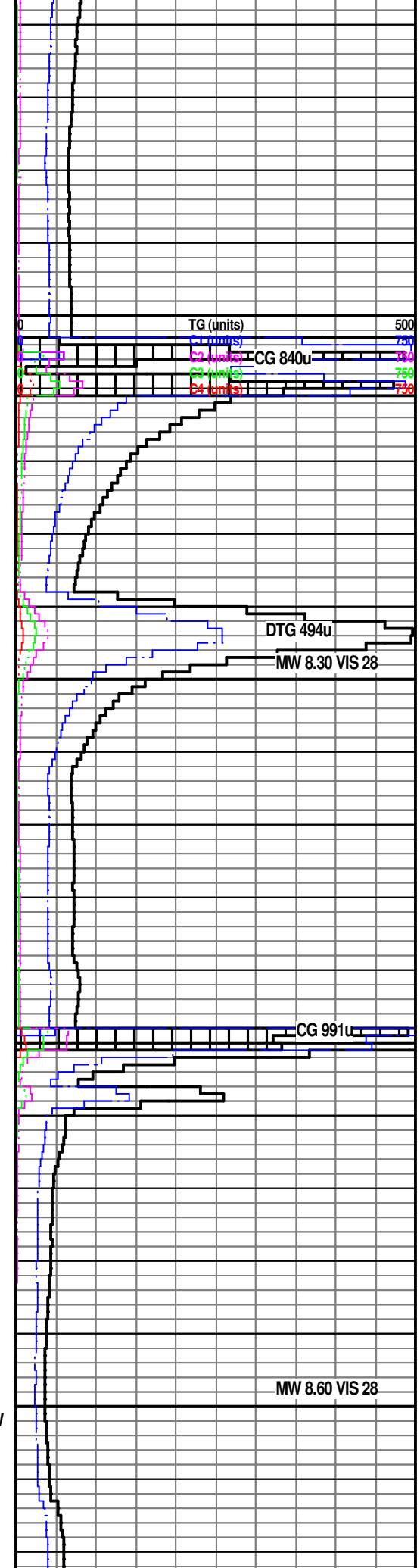
CHRT: WH-OFF WH, SME GY, TRC SH
INCLS, SBSMTH-SMTH TXT, HD, DNS;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC DLL YLLW FLUOR

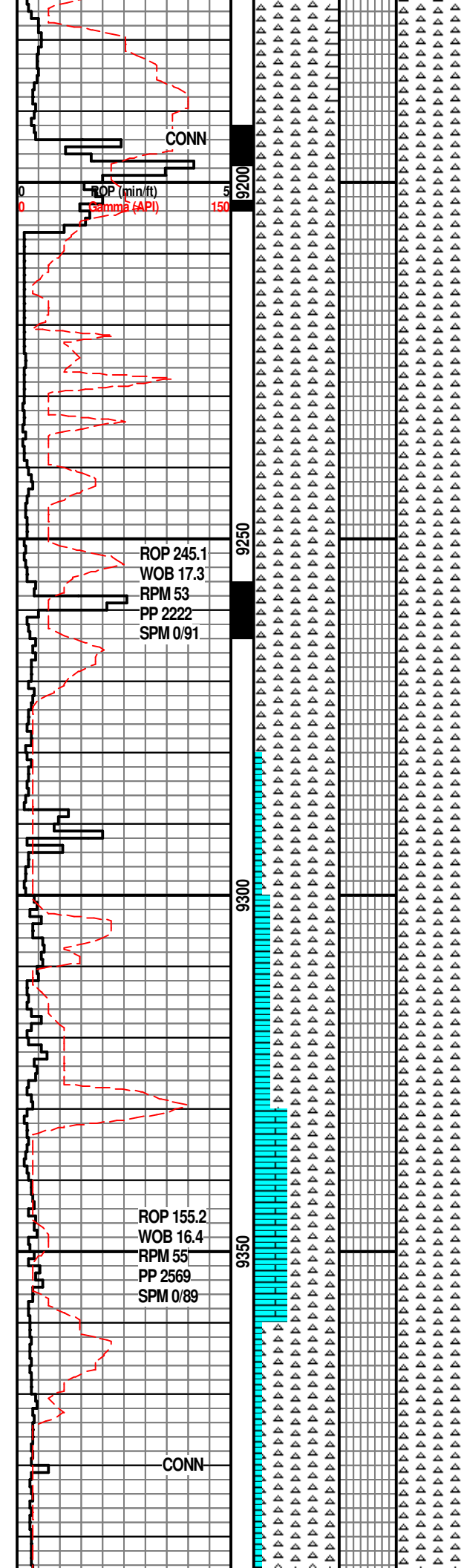
CHRT: WH-OFF WH, SME GY, TRC SH
INCLS, SBSMTH-SMTH TXT, HD, DNS;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC DLL YLLW FLUOR,
RNG CT, TRC SH

CHRT: WH-OFF WH, SME GY, SME
TRNSL, TRC SH INCLS, SBSMTH-SMTH
TXT, HD, DNS; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC DLL YLLW FLUOR, TRC SH: DK
GY-BLK, CHNKY, PLTY, SBSMTH TXT

**SURVEY @9143' INC 90.4 AZM
1.8 TVD 4594.8'**

CHRT: WH-OFF WH, SME GY, SME
TRNSL, TRC SH INCLS, SBSMTH-SMTH
TXT, HD, DNS; SH: DK GY-BLK, CHNKY,
PLTY, SBSMTH TXT; TRC LS, DLL YLLW
FLUOR, NSOC





CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD, DNS; SH: DK GY-BLK, CHNKY, PLTY, SBSMTH TXT; TRC LS, DLL YLLW FLUOR, NSOC

CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD, TRC SH, TRC LS, NO FLUOR, NSOC

**SURVEY @9238' INC 89.5 AZM
359.8 TVD 4594.89'**

CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD, TRC SH, TRC LS, NO FLUOR, NSOC

CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD, TRC SH, TRC LS, NO FLUOR, NSOC

**BIT#6 6.125 HAL FX64D
8X12JETS DEPTH IN @9,288'**

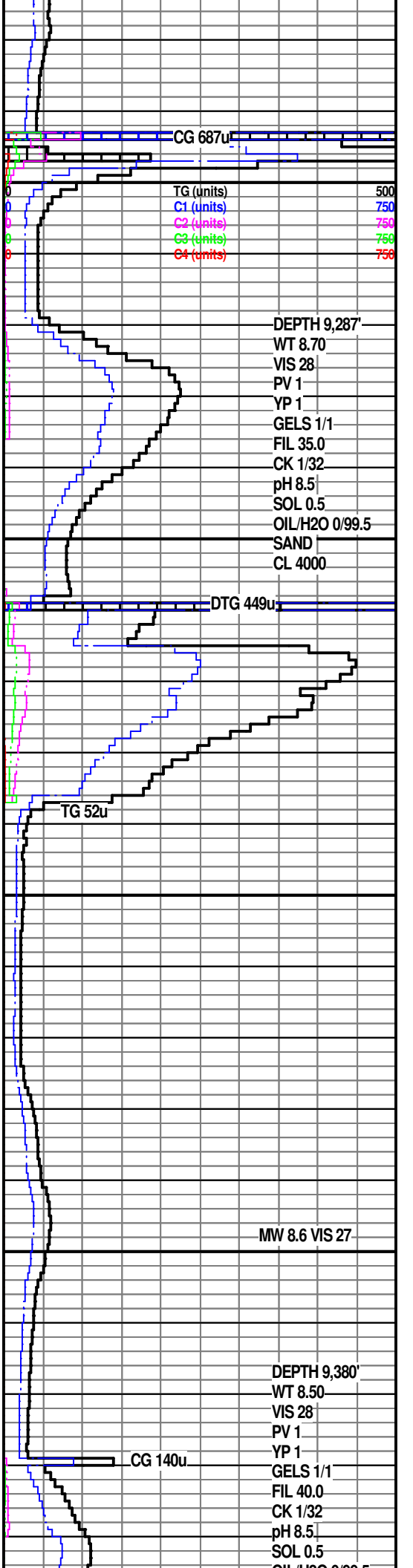
CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, DLL FLSH CT

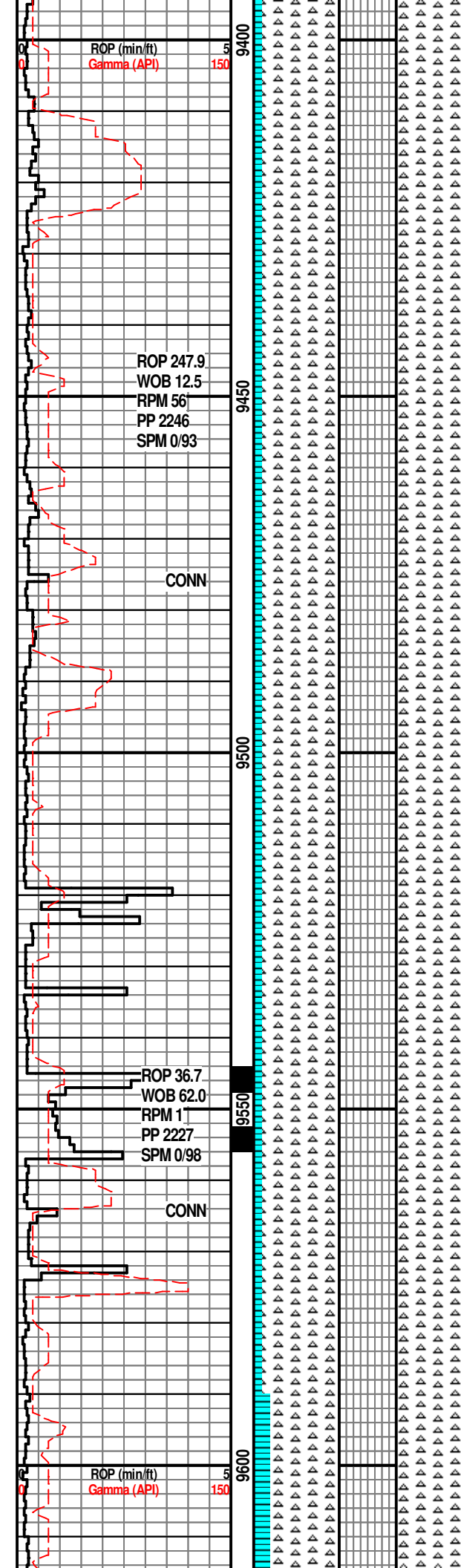
CHRT: WH-OFF WH, SME BRNSH GY, TRC SH INCLS, SBSMTH- SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, DLL FLSH CT

**SURVEY @9333' INC 89.5 AZM
359.1 TVD 4595.7'**

CHRT: WH-OFF WH, SME BRNSH GY, TRC SH INCLS, SBSMTH- SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, DLL FLSH CT, RNG CT

CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH- SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, DLL YLLW FLUOR





CHRT: WH-OFF WH, SME BRNSH GY,
SME TRNSL, TRC SH INCLS, SBSMTH-
SMTH TXT, HD; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC SH, DLL YLLW FLUOR

**SURVEY @9428' INC 89.1 AZM
359.3 TVD 4596.88'**

CHRT: WH-OFF WH, SME BRNSH GY,
SME TRNSL, TRC SH INCLS, SBSMTH-
SMTH TXT, HD; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
SME TRNSL, TRC SH INCLS, SBSMTH-
SMTH TXT, HD; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC SH, DLL YLLW FLUOR

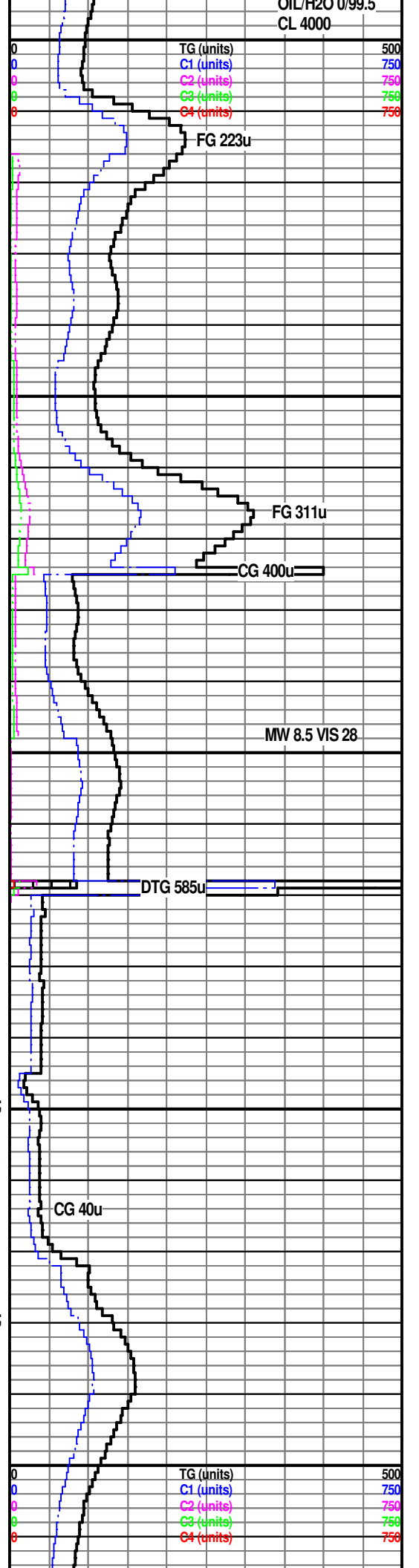
CHRT: WH-OFF WH, SME BRNSH GY,
SME TRNSL, TRC SH INCLS, SBSMTH-
SMTH TXT, HD; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC SH, DLL YLLW FLUOR

**SURVEY @9523' INC 88.4 AZM
0.3 TVD 4598.95'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, FLSH CT, DLL
YLLW FLUOR

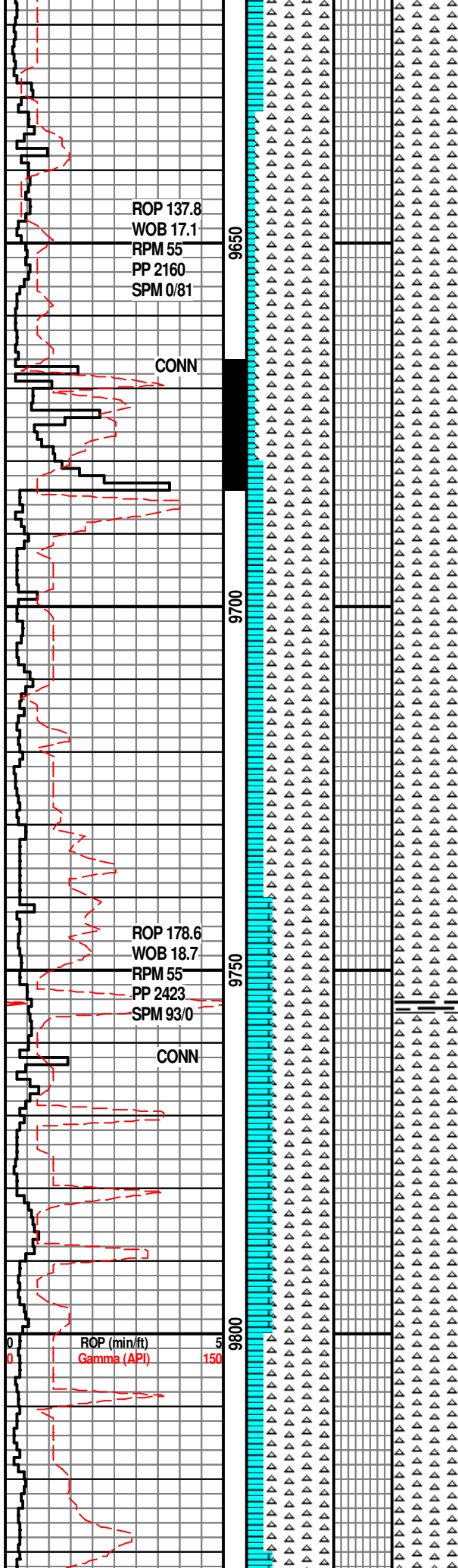
**SURVEY @9618' INC 89.8 AZM
0.38 TVD 4600.44'**



OIL/H2O 0/99.5
CL 4000

500
750
750
750
750

500
750
750
750
750



ROP 137.8
WOB 17.1
RPM 55
PP 2160
SPM 0/81

CONN

ROP 178.6
WOB 18.7
RPM 55
PP 2423
SPM 93/0

CONN

ROP (min/ft)
Gamma (API)

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, FLSH CT, STRMG
CT, RNG CT, NO FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, FLSH CT, STRMG
CT, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

**SURVEY @9713' INC 90.6 AZM
359.8 TVD 4600.11'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, NO FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, NO FLUOR

**SURVEY @9808' INC 89.8
AZM 358.8 TVD 4599.78'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

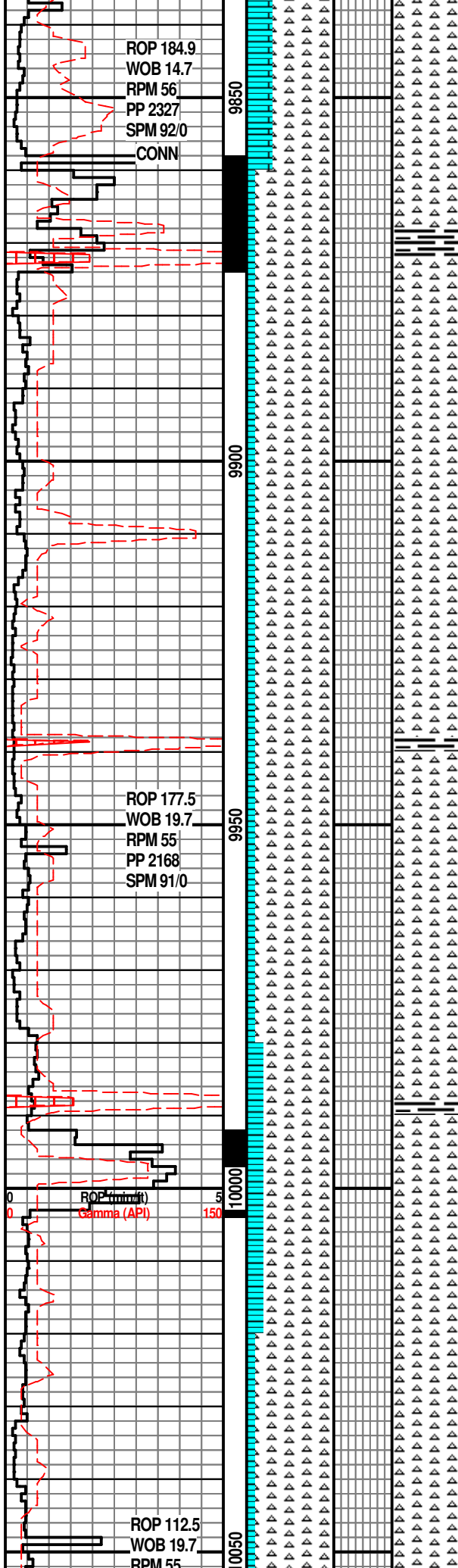
MW 8.5 VIS 28

CG 507u

MW 8.5 VIS 28

CG 62u

TG (units) 500
C1 (units) 750
C2 (units) 750
C3 (units) 750
C4 (units) 750



CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

MW 8.5 VIS 28

CG 65u

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, DLL YLLW
FLUOR

SURVEY @9903' INC 92.1 AZM
359.5 TVD 4598'

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, NO FLUOR

MW 8.5 VIS 28

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

SURVEY @9998' INC 90.9
AZM 359.3 TVD 4595'

DTG 318u

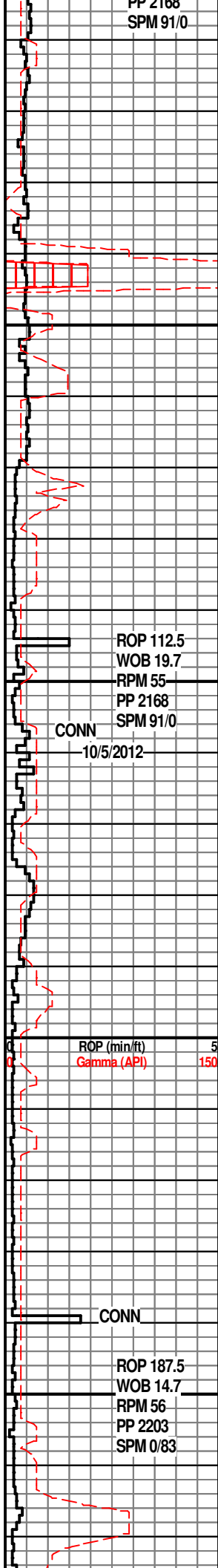
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, NO FLUOR

TG (units) 500
C1 (units) 750
C2 (units) 750
C3 (units) 750
C4 (units) 750

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

MW 8.5 VIS 28

PP 2168
SPM 91/0



10100

10150

10200

10250

**SURVEY @10093' INC 90.9
AZM 358.4 TVD 4594'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH: DK GY-BLK,
CHNKY, PLTY, SBSMTH TXT, DLL YLLW
FLUOR

FG 168u

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

DTG 180u

MW 8.5 VIS 28

**SURVEY @10188' INC 90.6
AZM 358.9 TVD 4592'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, NO FLUOR

CG 100u

FG 460u

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

TG (units)	500
C1 (units)	750
C2 (units)	750
C3 (units)	750
C4 (units)	750

FG 252u

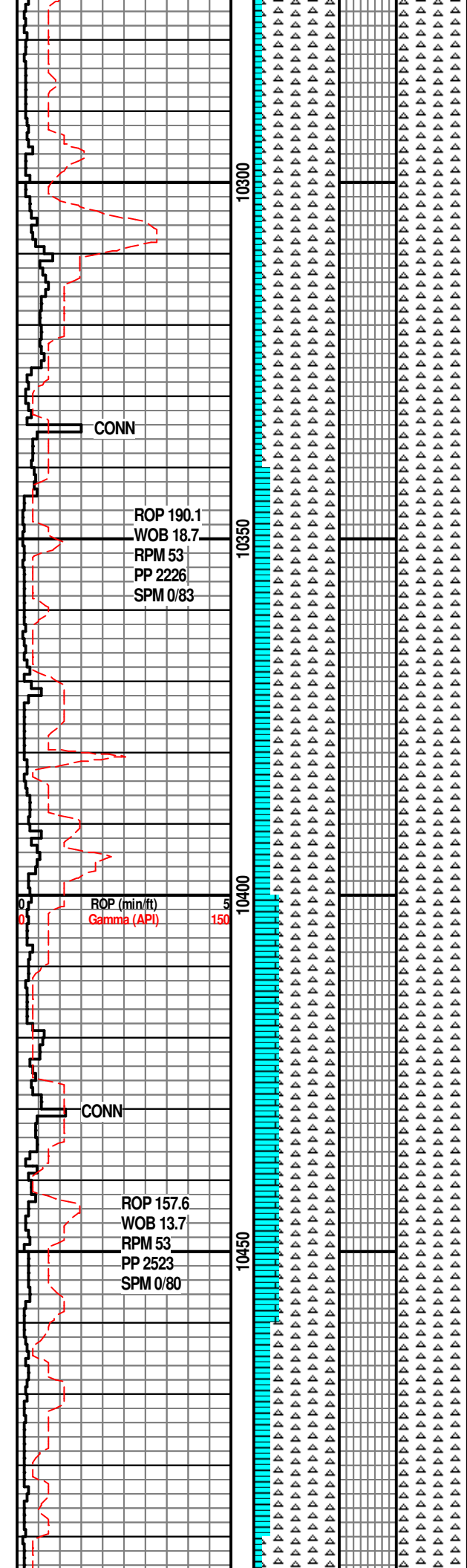
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CG 209u

MW 8.5 VIS 28

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,

FG 719u



SLI FRM-FRM, TRC SH, DLL YLLW FLUOR

**SURVEY @10283' INC 90.9
AZM 358.0 TVD 4591'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

**SURVEY @10378' INC 91.4
AZM 358.8 TVD 4589'**

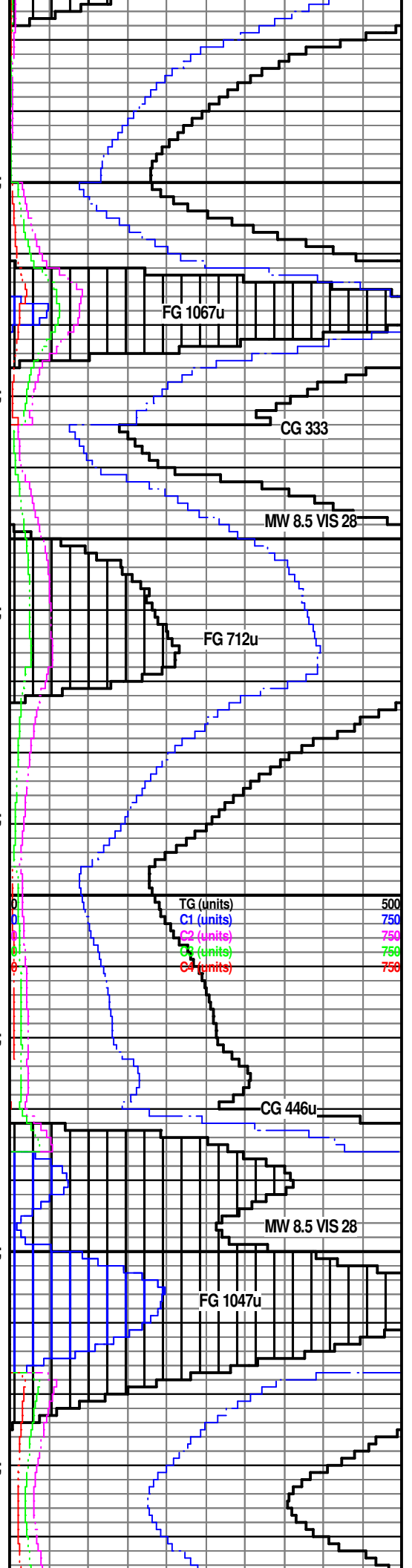
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

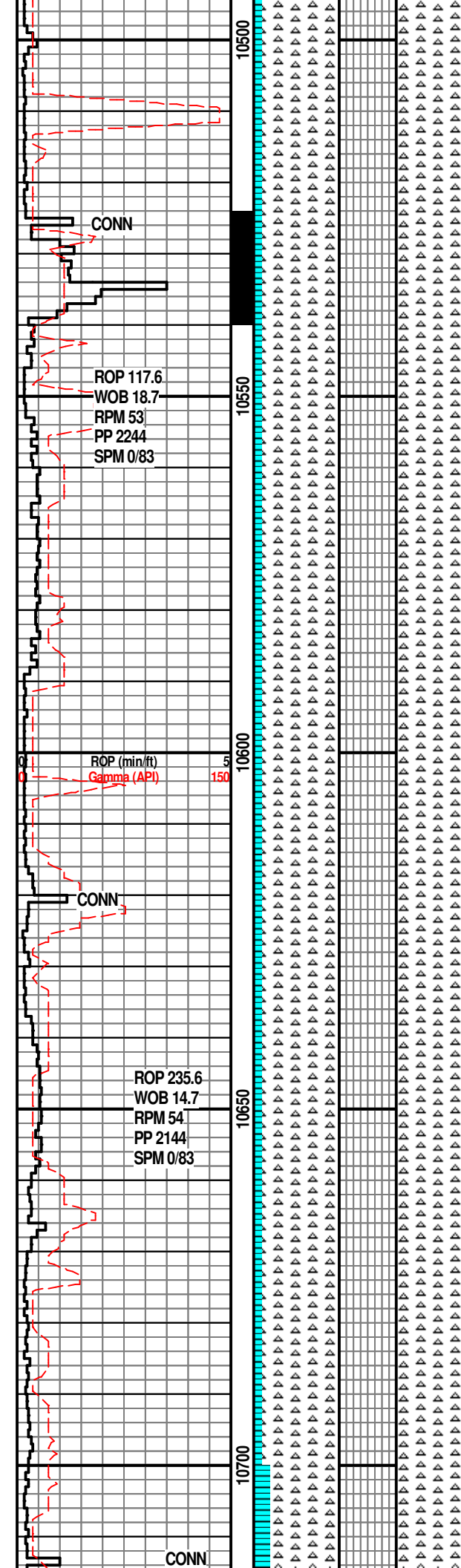
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

**SURVEY @10473' INC 92.3
AZM 359.5 TVD 4586'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR





CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

**SURVEY @10568' INC 90.6 AZM
359.3 TVD 4584'**

CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

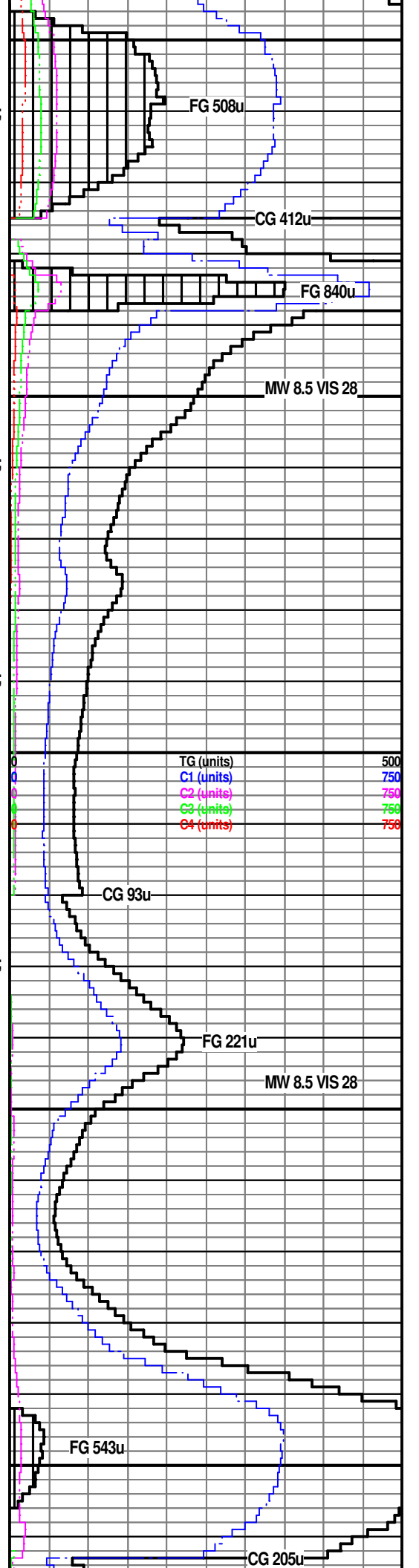
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

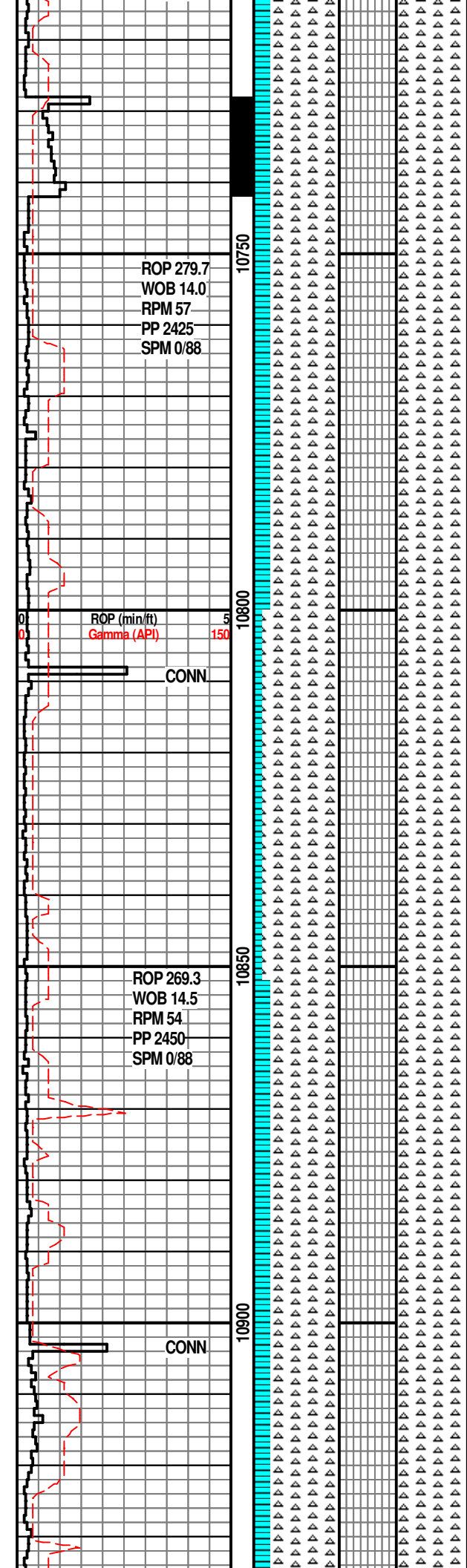
CHRT: WH-OFF WH, SME BRNSH GY,
TRC SH INCLS, SBSMTH- SMTH TXT, HD;
LS: OFF WH-WH, CRYPTO- MICRO XLN,
SLI FRM-FRM, TRC SH, DLL YLLW
FLUOR

**SURVEY @10663' INC 91.2
AZM 359.4 TVD 4582.87'**

CHRT: WH-OFF WH, SME BRNSH GY,
SME TRNSL, TRC SH INCLS, SBSMTH-
SMTH TXT, HD; LS: OFF WH-WH,
CRYPTO- MICRO XLN, SLI FRM-FRM,
TRC SH, DLL YLLW FLUOR

CHRT: WH-OFF WH, SME BRNSH GY.





SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, DLL YLLW FLUOR

**SURVEY @10758' INC 90.0 AZM
357.9 TVD 4581.87'**

CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, DLL YLLW FLUOR

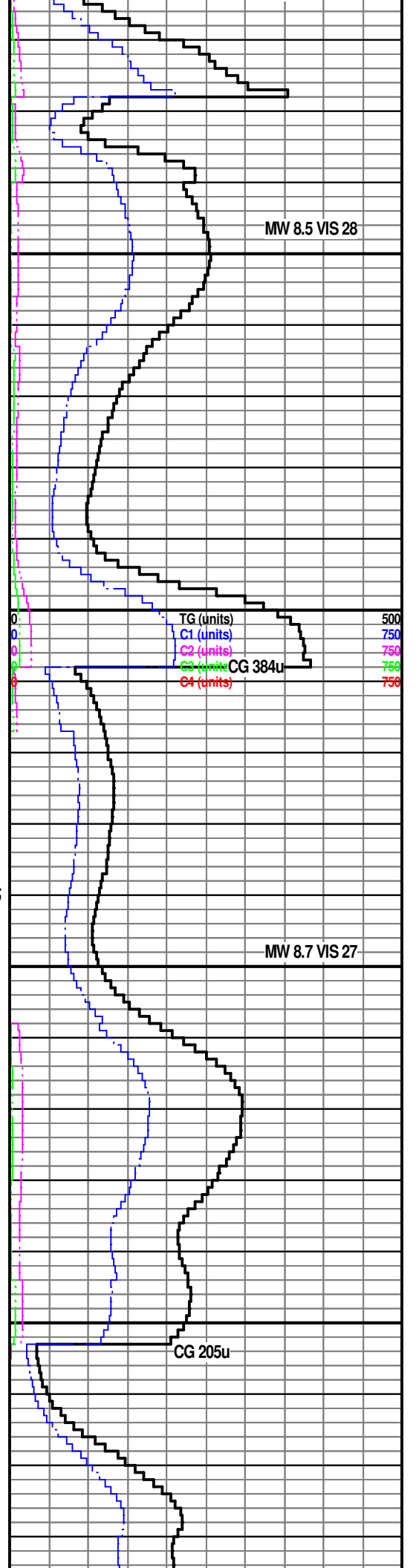
CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR

CHRT: WH-OFF WH, SME BRNSH GY, TRC SH INCLS, SBSMTH- SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR

**SURVEY @10853' INC 90.2 AZM
358.3 TVD 4581.71'**

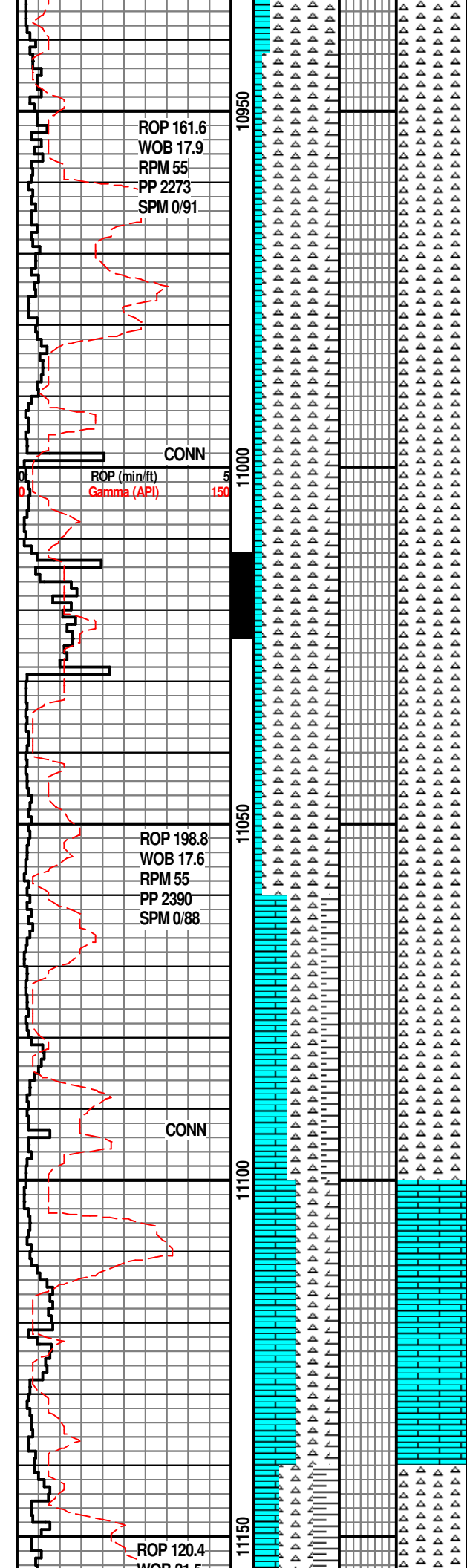
CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, TRC GLAUC

CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO- MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, TRC GLAUC



MW 8.5 VIS 28

MW 8.7 VIS 27



ROP 161.6
WOB 17.9
RPM 55
PP 2273
SPM 0/91

CONN

ROP (min/ft)
Gamma (API)

ROP 198.8
WOB 17.6
RPM 55
PP 2390
SPM 0/88

CONN

ROP 120.4
WOB 21.5

TRC SH, NO FLUOR, TRC GLAUC

SURVEY @10948' INC 91.1 AZM 358.3 TVD 4580.63'

CHRT: WH-OFF WH, SME BRNSH GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, TRC GLAUC

CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO-MICRO XLN, SLI FRM-FRM, TRC SH, TRC STRMG CT, NO FLUOR, TRC GLAUC

SURVEY @11043' INC 89.6 AZM 357.8 TVD 4580.05'

CHRT: WH-OFF WH, SME GY, SME TRNSL, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO XLN, SLI FRM-FRM, TRC SH, NO FLUOR, TRC GLAUC

CHRT: WH-OFF WH, SME GY, TRC SH INCLS, SBSMTH-SMTH TXT, HD; LS: OFF WH-WH, CRYPTO XLN, SLI FRM-FRM; SH: M-LT GY, PLTY, NO FLUOR, NSOC, TRC GLAUC

LS: OFF WH-WH, CRYPTO XLN, SLI FRM-FRM; CHRT: WH-OFF WH, SME GY, TRC SH INCLS, SBSMTH-SMTH TXT, HD; SH: M-LT GY, PLTY, SPLNTY

SURVEY @11138' INC 90.2 AZM 358.3 TVD 4580.21'

MW 8.7 VIS 27

CG 211u

TG (units)	DEPTH 11,005'	500
C1 (units)	WT 8.70	750
C2 (units)	VIS 28	750
C3 (units)	PV 1	750
C4 (units)	YP 1	
	GELS 1/1	
	FIL 33.0	
	CK 1/32	
	pH 8.5	
	SOL 0.5	
	OIL/H2O 0/99.5	
	CL 4000	

CG 129u

MW 8.7 VIS 28

FG 376u

WOB 21.5
RPM 57
PP 2574
SPM 47/92

CONN

11200

ROP (min/ft)
Gamma (API) 150

ROP 290.2
WOB 15.6
RPM 56
PP 2500
SPM 0/93

11250

CONN

11300

ROP 268.6
WOB 15.0
RPM 55
PP 2532
SPM 0/91

11350

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; SH: LT-M GY, OCC BLK,
PLTY, CHNKY, SME SPLNTY

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH

SURVEY @11232' INC 89.6 AZM
357.6 TVD 4580.4'

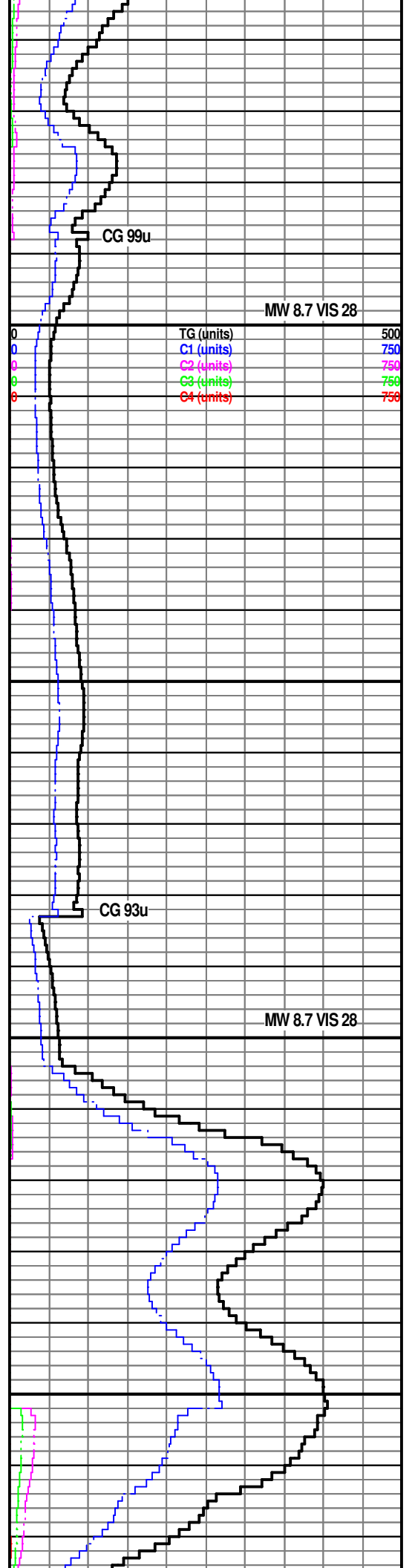
CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH, TRC GLAUC

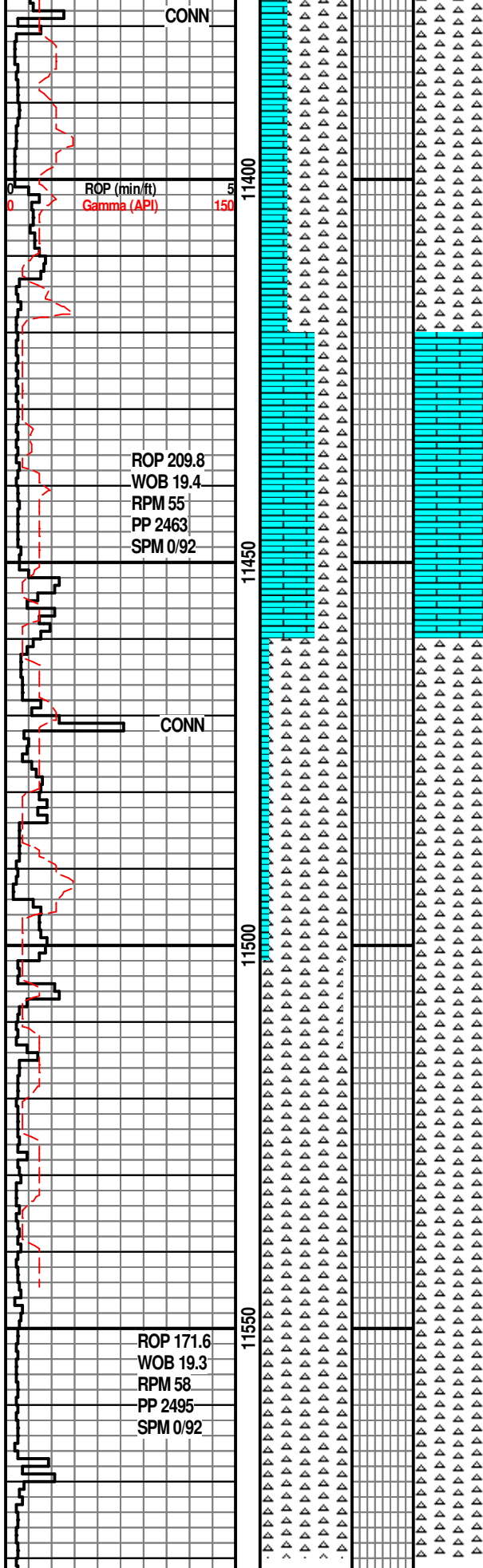
CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH, TRC GLAUC

SURVEY @11327' INC 89.5
AZM 357.8 TVD 4581.15'

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH, TRC GLAUC

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF





ROP 209.8
WOB 19.4
RPM 55
PP 2463
SPM 0/92

ROP 171.6
WOB 19.3
RPM 58
PP 2495
SPM 0/92

WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH, TRC GLAUC

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM; TRC SH, TRC GLAUC

**SURVEY @11422' INC 89.9 AZM
358.3 TVD 4581.62'**

LS: OFF WH-WH, CRYPTO-MICRO XLN,
SLI FRM-FRM; CHRT: WH-OFF WH, SME
GYSH BRN, SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD, TRC SH, TRC
GLAUC, STRMG CT

LS: OFF WH-WH, CRYPTO-MICRO XLN,
SLI FRM-FRM; CHRT: WH-OFF WH, SME
GYSH BRN, SME TRNSL, TRC SH INCLS,
SBSMTH-SMTH TXT, HD, TRC SH, SLI
TRC GLAUC

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS, TRC LS
INCLS, SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM, TRC SH, TRC GLAUC, NSOC

**SURVEY @11534' INC 91.3
AZM 358.4 TVD 4580.24'**

CHRT: WH-OFF WH, SME GYSH BRN,
SME TRNSL, TRC SH INCLS, TRC LS
INCLS, SBSMTH-SMTH TXT, HD; LS: OFF
WH-WH, CRYPTO-MICRO XLN, SLI
FRM-FRM, TRC SH, TRC GLAUC, NSOC

10/05/2012 TD WELL @ 11,584' MD

SAMPLE BOXES; KG (4) FOUR BOXES
SANDRIDGE-(3) THREE BOXES

CG 283u

MW 8.7 VIS 28

TG (units) 500
C1 (units) 750
C2 (units) 750
C3 (units) 760
C4 (units) 750

CG 192u

MW 8.7 VIS 28

