

SUNBURST CONSULTING

A G E O L O G Y S E R V I C E

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GEOSTEERING LOG

WellSight Systems

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

Well Name: EQT Richard Knotts 511400
Location: Rosemont 7.5' Quadrangle, Booth Creek District, Taylor County, WV
License Number: API: 47-091-01229
Spud Date: 30 June 2011
Surface Coordinates: Latitude: 39.321868
Longitude: 80.141260
Bottom Hole Coordinates: 2,867.07' South, 1,348.68' East of Surface Location
Ground Elevation (ft): 1,328' K.B. Elevation (ft): 1343
Logged Interval (ft): 6,870' To: 10,495' Total Depth (ft): 10,495'
Formation: Sonyea through Marcellus
Type of Drilling Fluid: water based mud
Region: Apalachian
Drilling Completed: 14 July 2011
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com




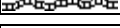
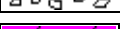

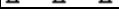
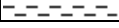








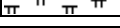

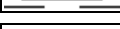
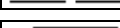
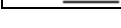



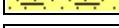

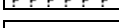
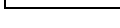
OPERATOR

Company: EQT Production Company
Address: EQT Plaza
625 Liberty Avenue
Pittsburgh, PA 15222








































































GEOLOGISTS

Name: Isaah Land, Andrew Reeder, Philip Broache
Company: Sunburst Consulting, Inc.
Address: Mailing: P.O. Box 51297, Billings, MT 59105
 Physical: 2150 Harnish Blvd, Billings, MT 59101
 (406) 259-4124; geology@sunburstconsulting.com

ROCK TYPES

 Anhy  Arg dol  Arg ls  Bent  Brec  Calc dol  Cht	 Clyst  Coal  Congl  Dol  Dol ls  Gyp  Igne	 Ls  Meta  Mrlst  Salt  Shale  Shblk  Schol	 Shgy  Sltst  Ss  Sssilty  Tuff  Unknown  Blank
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ACCESSORIES

FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite  Ostra  Pelec  Pellet  Pisolite	 Plant  Strom MINERAL  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau  Gyp	 Hvymn  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff STRINGER  Anhy  Arg  Bent  Coal  Dol	 Gyp  Ls  Mrst  Sltstrg  Ssstrg TEXTURE  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackest
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OTHER SYMBOLS

INTERVALS

- None
- Core
- Dst

EVENTS

- Rft
- Sidewall
- Bit change

OIL SHOWS

- Even
- Spotted
- Ques
- Dead

POROSITY TYPE

- Earthy
- Fenest

- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

- #### ROUNDING
- Rounded

- Subrnd
- Subang
- Angular

SORTING

- Well
- Moderate
- Poor

COMMENTS

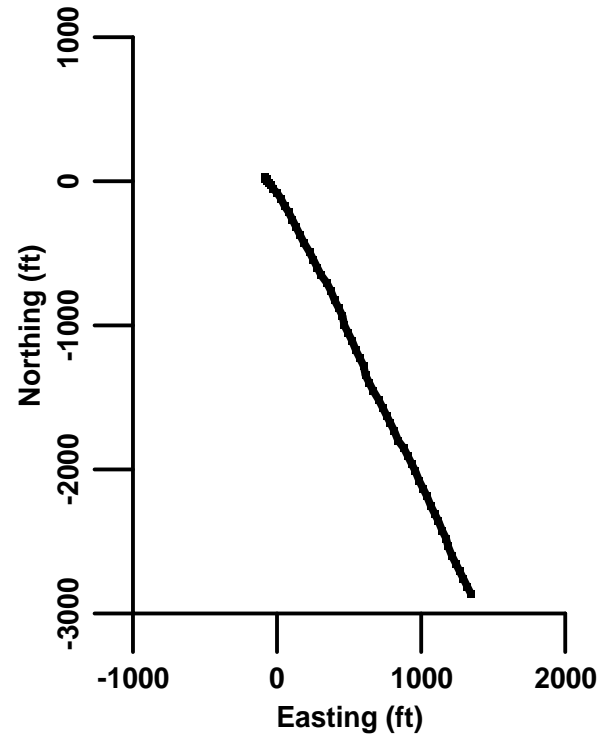
COMPANY MAN: Bill Ruff Teel, Jeff Lofton
TOOLPUSHER: Bruce Lambert,
RIG: Savanna 640E

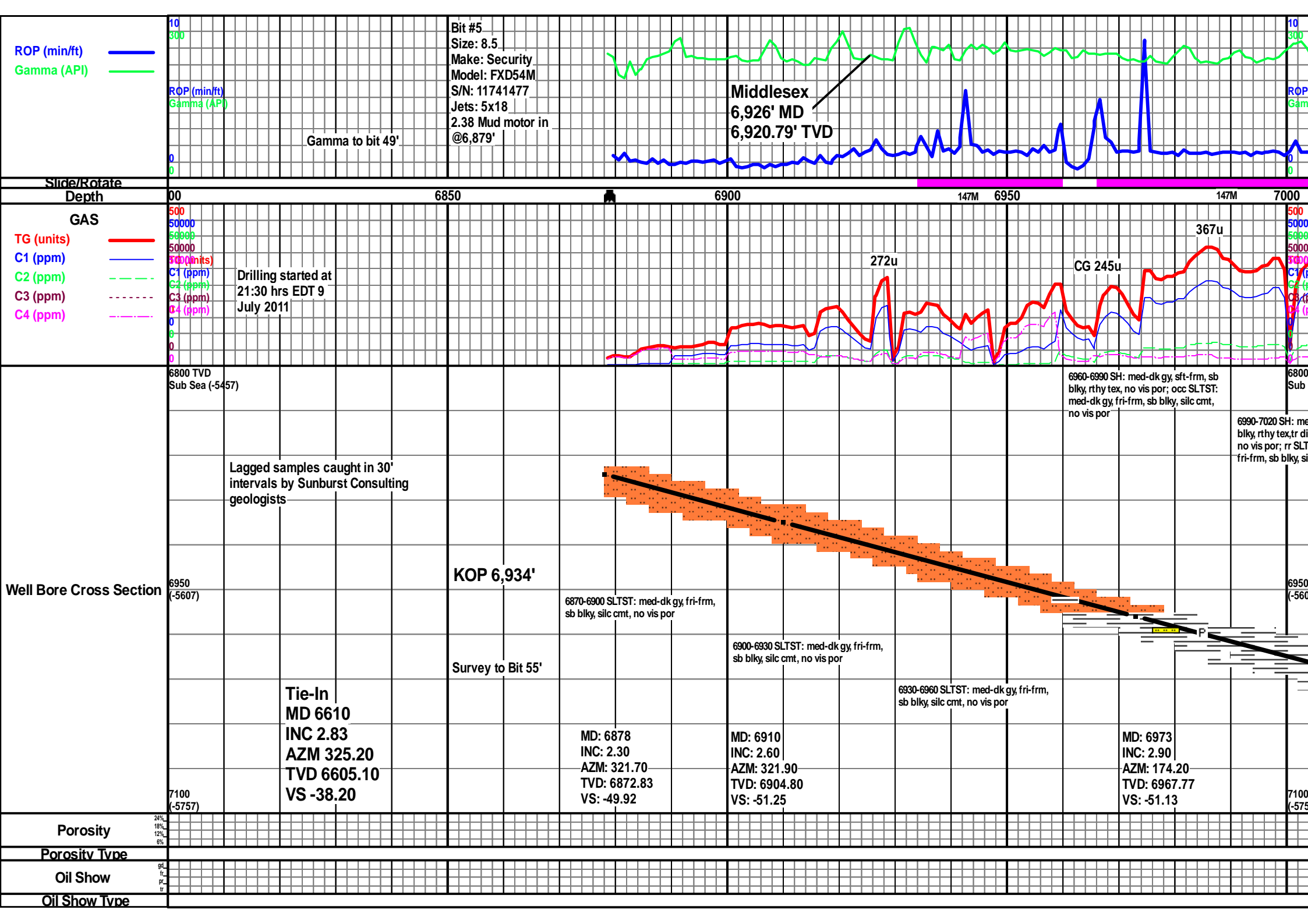
SURFACE CASING: 13 3/8" MC-50, 54.5#, 23 Jts, set to 894'
INTERMEDIATE CASING: 9 5/8" MC-50, 40#, 37 Jts, set to 2,583'

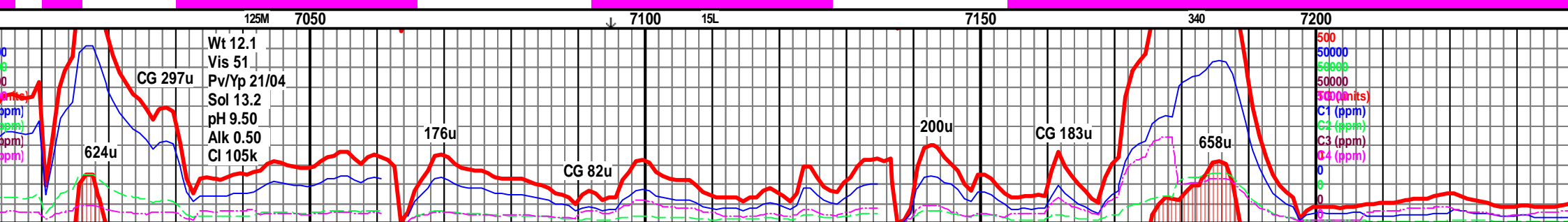
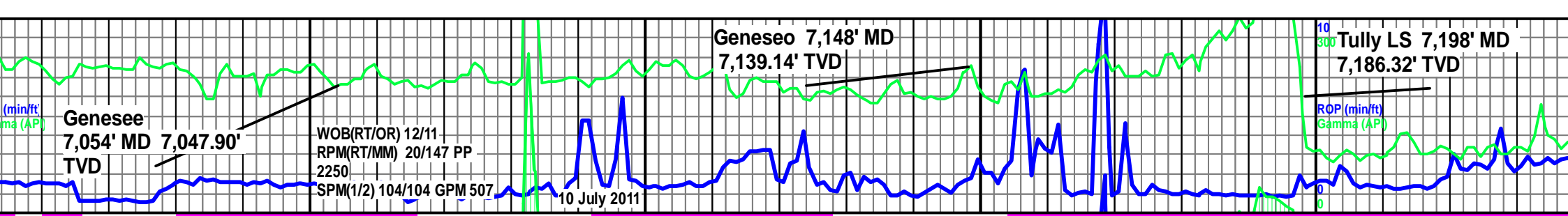
KOP: 6,934'

CLOSURE DIRECTION: 154.81°
CLOSURE DISTANCE: 3,168.44'

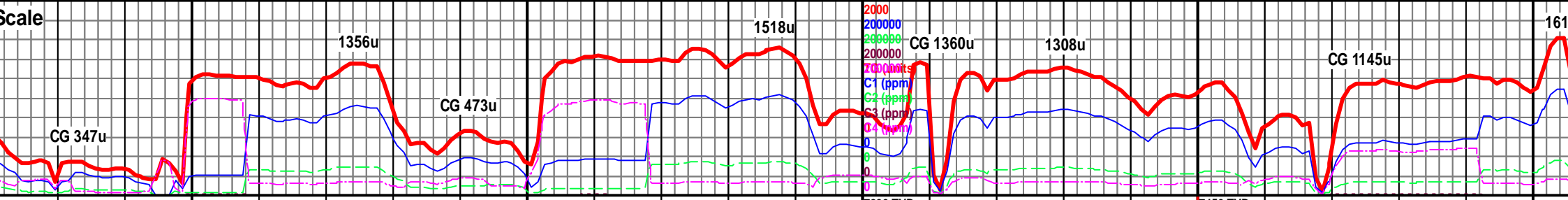
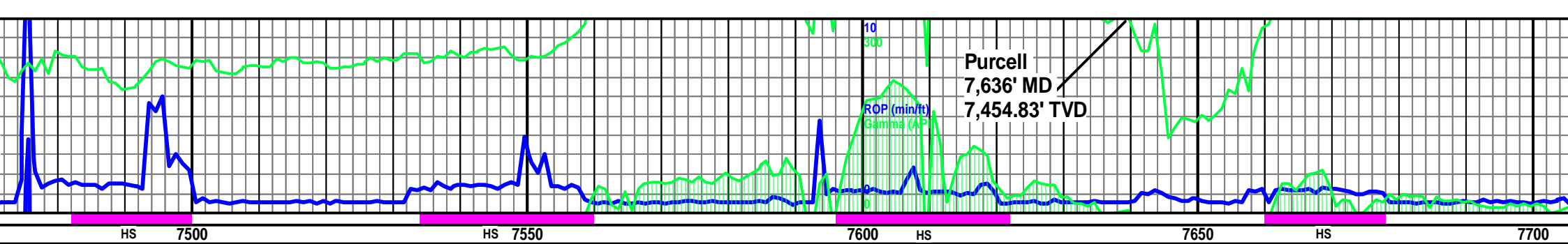
Plan





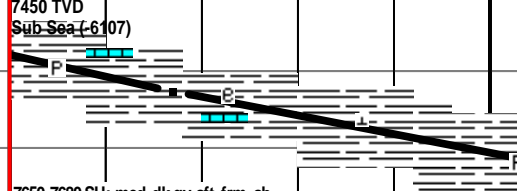


TVD Sea (-5457)	Note: TVD Scale Change	7030 TVD Sub Sea (-5687)			7170-7200 LS: mdst, wht-lt gy, mot ip, micxn, sb blk, sft, chky tex, tr dsem pyr, no vis por, alizarin test red; tr SH: lt-med gy, blk, frm, rthy tex, calc, tr dsem pyr	7030 TVD Sub Sea (-5687)	Note: Scale
med-dk gy, sft-frm, sb ssm pyr, tr nodr pyr, ST: med-dk gy, lc cmt, no vis por	7020-7050 SH: med gy, sft-frm, sb blk-sb plty, rthy tex, calc, no vis por	7050-7080 SH: med gy, sft-frm, sb blk-sb plty, rthy tex, calc, no vis por	7080-7110 SH: med gy, sft-frm, sb blk-sb plty, rthy tex, calc, tr cal frac fl, no vis por	7110-7140 SH: med gy, tr lt gy, frm, rthy tex, calc, tr dsem pyr, tr cal frac fl	7140-7170 SH: med gy, rr lt gy, frm, rthy tex, calc, tr dsem pyr, tr cal frac fl	7200-7230 LS: mdst, wht-lt gy, mot ip, micxn, sb blk, sft, chky tex, rr dsem pyr, no vis por, alizarin test red; tr SH: med gy, sb plty, frm, rthy tex, calc, tr dsem pyr	7230-7260 LS: mdst, wht-lt gy, mot ip, micxn, sb blk, sft, chky tex, rr dsem pyr, no vis por, alizarin test red; tr SH: med gy, sb plty, frm, rthy tex, calc, tr dsem pyr
	MD: 7036 INC: 10.50 AZM: 153.90 TVD: 7030.30 VS: -43.88	MD: 7099 INC: 13.70 AZM: 140.40 TVD: 7091.91 VS: -30.91			MD: 7163 INC: 17.10 AZM: 140.30 TVD: 7153.60 VS: -14.47	MD: 7226 INC: 24.30 AZM: 137.60 TVD: 7212.50 VS: 6.88	
	Scale Change 7180 (-5837)					7180 (-5837)	
	7330 (-5987)					7330 (-5987)	



<p>7470-7500 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr frac fl cal, no vis por; tr LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por</p>	<p>7500-7530 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr free cal, tr frac fl cal, no vis por</p>	<p>7530-7560 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr free cal, tr frac fl cal, no vis por; tr LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por</p>	<p>7560-7590 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr nodr pyr, tr free cal, tr frac fl cal, no vis por</p>	<p>7590-7620 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr nodr pyr, tr free cal, tr frac fl cal, no vis por</p>	<p>7620-7650 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr nodr pyr, tr free cal, tr frac fl cal, no vis por; tr LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por</p>	<p>7650-7680 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr nodr pyr, tr free cal, tr frac fl cal, no vis por; tr LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por</p>	<p>7680-7710 SH: med-dk gy, sft-frm blk, sl calc, rthy tex, tr nodr pyr, cal, tr frac fl cal, no vis por</p>
<p>MD: 7478 INC: 60.70 AZM: 151.10 TVD: 7393.31 VS: 174.14</p>	<p>MD: 7541 INC: 65.60 AZM: 152.20 TVD: 7421.76 VS: 230.24</p>			<p>MD: 7604 INC: 71.40 AZM: 152.30 TVD: 7444.84 VS: 288.76</p>		<p>MD: 7667 INC: 75.40 AZM: 151.90 TVD: 7462.83 VS: 349.04</p>	

Note TVD Scale Change



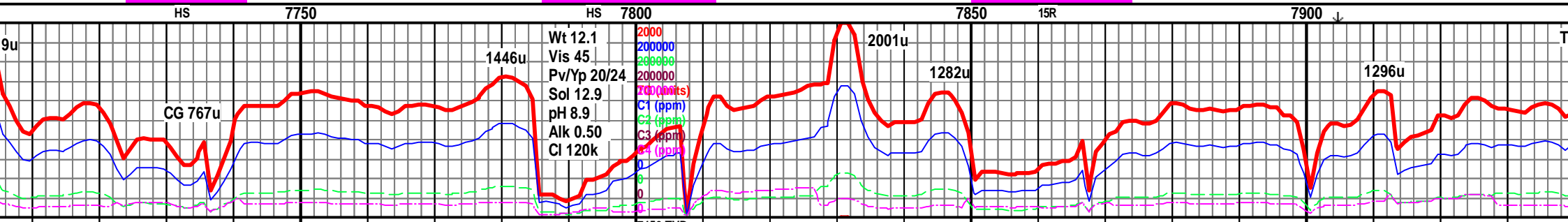
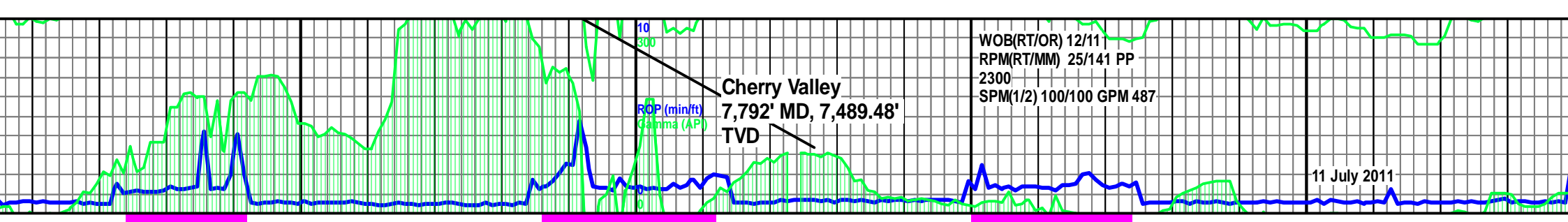
Scale Change
7500
(-6157)

7230 TVD
Sub Sea (-5887)

7380
(-6037)

7530
(-6187)

7550
(-6207)



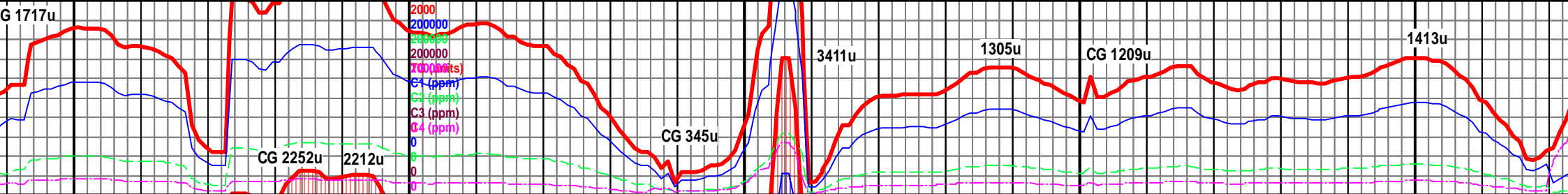
7450 TVD Sub Sea (-6107)		7800-7830 SH: dk gy-blk, sft-frm, sb blk, sl calc, rthy tex, tr diss pyr, tr nodr pyr, tr free cal, tr frac fl cal, no vis por		7830-7860 SH: dk gy-blk, sft-frm, sb blk, sl calc, rthy tex, tr diss pyr, tr nodr pyr, tr free cal, tr frac fl cal, no vis por; rr LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por		7860-7890 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, com cal frac fl & free cal		7890-7920 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, com cal frac fl & free cal		7920-7950 SH: dk gy-blk, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal	
7710-7740 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, tr nodr pyr, tr free cal, tr frac fl cal, no vis por		7740-7770 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, rr nodr pyr, tr free cal, no vis por		7770-7800 SH: med-dk gy, sft-frm, sb blk, sl calc, rthy tex, rr nodr pyr, tr free cal, no vis por; occ LS: mdst, lt-med gy, micxn, fri-frm, rthy-chky mot tex, no vis por							
MD: 7730 INC: 77.40 AZM: 150.90 TVD: 7477.65 VS: 410.15		MD: 7794 INC: 80.60 AZM: 149.80 TVD: 7489.86 VS: 472.76		7550 (-6207)		MD: 7857 INC: 85.40 AZM: 151.00 TVD: 7497.53 VS: 535.07		MD: 7919 INC: 88.00 AZM: 152.20 TVD: 7501.10 VS: 596.85			

Bit #6
 Size: 7 7/8
 Make: Security
 Model: FXD54M
 S/N: 11686701
 Jets: 5x15, 2x18
 1.15 Mud motor in
 @7,944'

10
 300

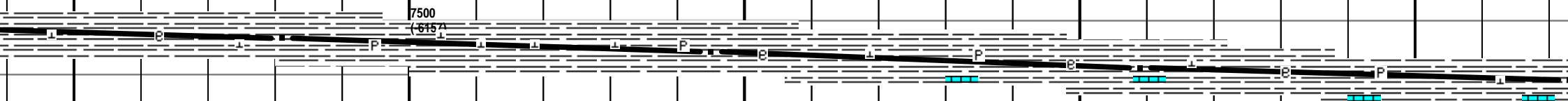
ROP (min/ft)
 Gamma (API)

7950 8000 120R 8050 8100 8150



7450 TVD
 Sub Sea (-6107)

sb blk, frm, & nodr pyr, no vis por	7950-7980 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por	7980-8010 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por	8010-8040 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por	8040-8070 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por	8070-8100 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por; rr LS: mdst, lt-med gy, micdn, fri-frm, rthy-chky mot tex, no vis por	8100-8130 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por; rr LS: mdst, lt-med gy, micdn, fri-frm, rthy-chky mot tex, no vis por	8130-8160 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por; rr LS: mdst, lt-med gy, micdn, fri-frm, rthy-chky mot tex, no vis por	8160-8190 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal, no vis por; rr LS: mdst, lt-med gy, micdn, fri-frm, rthy-chky mot tex, no vis por
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7500
 (-6154)

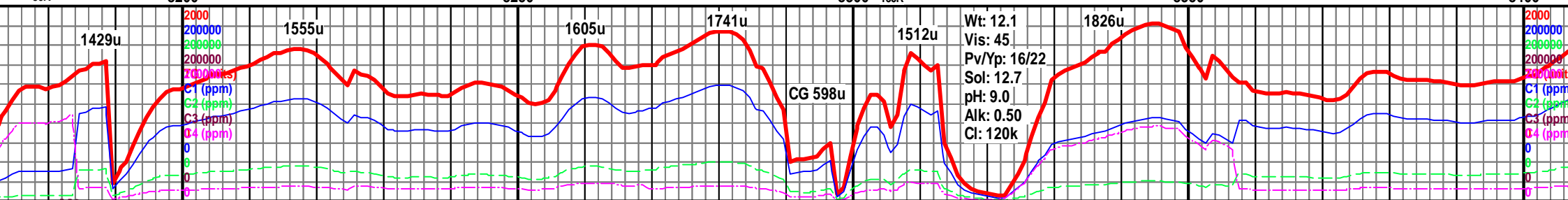
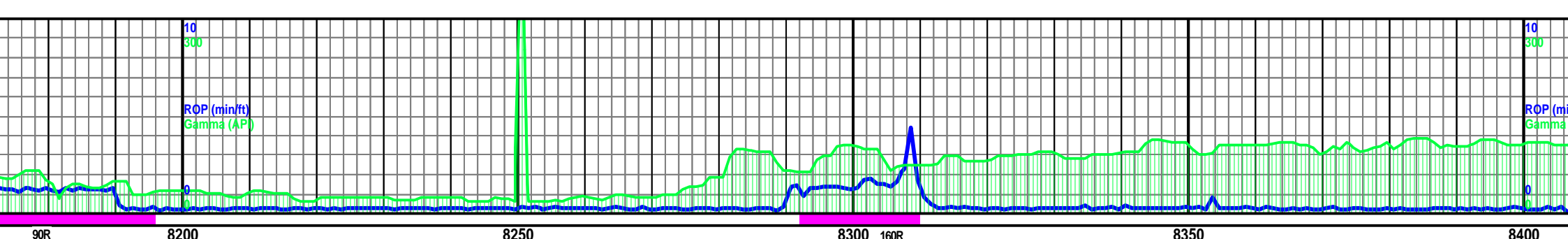
MD: 7981
 INC: 88.00
 AZM: 151.60
 TVD: 7503.27
 VS: 658.72

7550
 (-6207)

MD: 8045
 INC: 87.40
 AZM: 151.30
 TVD: 7505.83
 VS: 722.55

MD: 8109
 INC: 87.20
 AZM: 152.40
 TVD: 7508.85
 VS: 786.38

MD: 8163
 INC: 87.20
 AZM: 152.40
 TVD: 7508.85
 VS: 786.38



7450 TVD
Sub Sea (-6107)

8190-8220 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

8220-8250 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

8250-8280 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

8280-8310 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

8310-8340 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

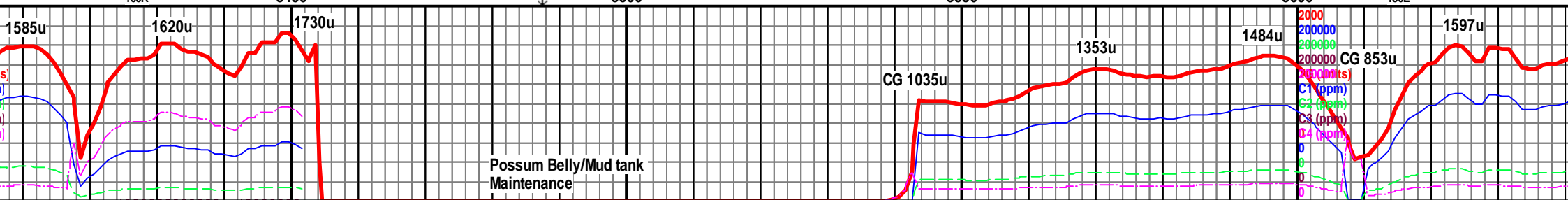
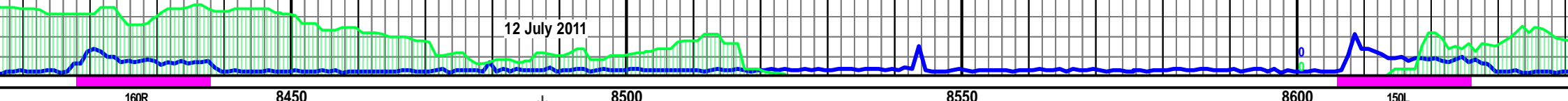
8340-8370 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por

8370-8400 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal, no vis por



D: 8173 C: 88.80 AZM: 154.20 TVD: 7511.08 VS: 850.31	7550 (-6207)	MD: 8236 INC: 88.20 AZM: 155.10 TVD: 7512.73 VS: 913.29	MD: 8298 INC: 88.20 AZM: 155.80 TVD: 7514.68 VS: 975.25	MD: 8362 INC: 87.60 AZM: 155.80 TVD: 7517.02 VS: 1039.20	7550 (-6207)
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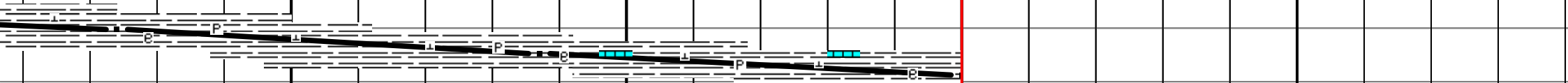
WOB(RT/OR): 9/12
 RPM(RT/MM): 95/150 PP:
 2550
 SPM(1/2): 106/106 GPM:
 516



Possum Belly/Mud tank
 Maintenance

Note: TVD
 Scale Change

80 SH: dk gy-blk, sb blk, frm, sl calc, tr dsem & nodr pyr, tr cal & free cal, no vis por	8430-8460 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem pyr	8460-8490 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem pyr	8490-8520 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal; tr LS: wkst, lt-dk gy mot, micdn, blk, sft, rthy tex, no vis por	8520-8550 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl & free cal; tr LS: wkst, lt-dk gy mot, micdn, blk, sft, rthy tex, no vis por	8550-8580 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, r cal frac fl	8580-8610 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal	8610-8640 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, com cal frac fl
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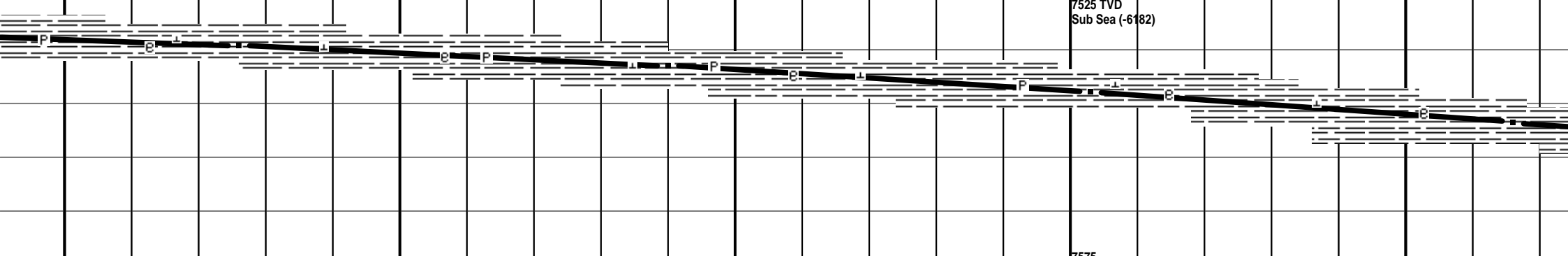
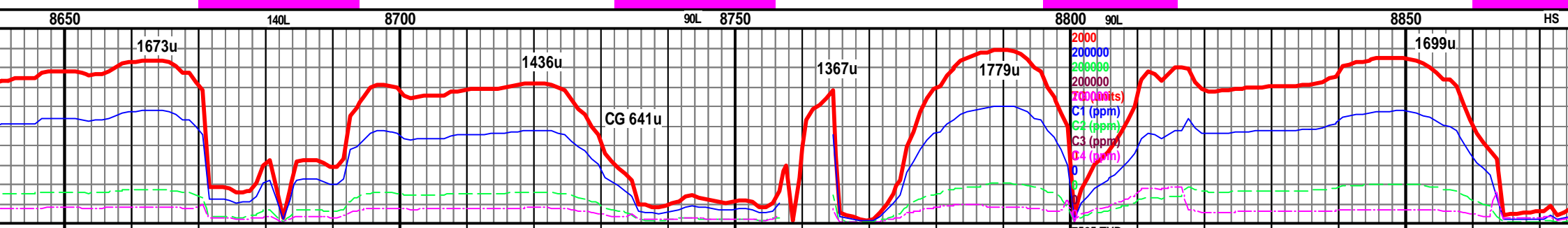
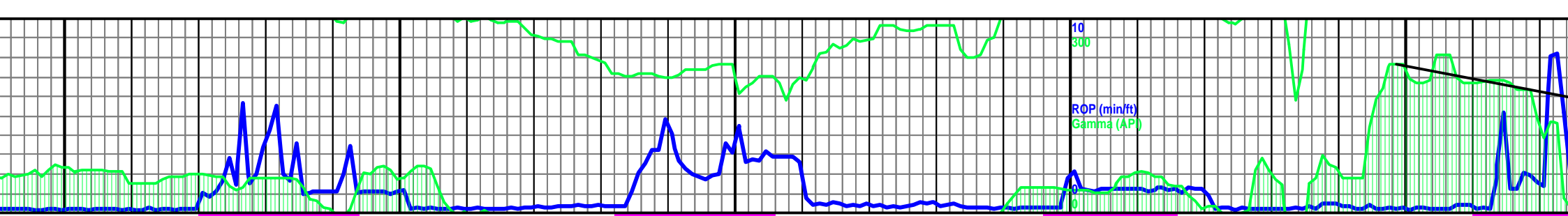


MD: 8424
 INC: 86.40
 AZM: 156.30
 TVD: 7520.27
 VS: 1101.11

MD: 8487
 INC: 85.50
 AZM: 156.40
 TVD: 7524.72
 VS: 1163.93

MD: 8550
 INC: 87.00
 AZM: 157.70
 TVD: 7528.84
 VS: 1226.75

MD: 8613
 INC: 88.10
 AZM: 158.40
 TVD: 7531.53
 VS: 1289.60



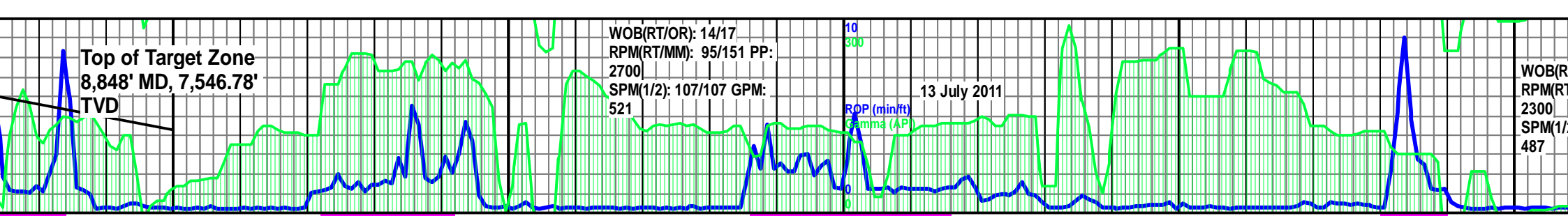
<p>8640-8670 SH: dk gy-blk, sb plty-sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, rr cal frac fl & free cal</p>	<p>8670-8700 SH: dk gy-blk, sb plty, frm, rthy tex, sl calc, tr dsem & nodr pyr, occ cal frac fl & free cal</p>	<p>8700-8730 SH: dk gy-blk, sb plty, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, occ cal frac fl & free cal; tr LS: wkst, lt-dk gy mot, micxn, blk, sft-frm, rthy tex, no vis por</p>	<p>8730-8760 SH: dk gy-blk, sb plty, frm, rthy tex, sl calc, tr dsem & nodr pyr, rr cal frac fl & free cal; tr LS: wkst, lt-dk gy mot, micxn, sb blk, sft-frm, rthy tex, no vis por</p>	<p>8760-8790 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal</p>	<p>8790-8820 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal</p>	<p>8820-8850 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal fld frac & free cal</p>	<p>8850-8880 SH: dk gy-blk, sb blk, sft-frm, rthy tex, v calc, tr dsem & pyr, tr cal fld frac & free cal</p>
	<p>MD: 8676 INC: 86.80 AZM: 158.00 TVD: 7534.34 VS: 1352.44</p>		<p>MD: 8740 INC: 86.70 AZM: 158.00 TVD: 7537.96 VS: 1416.25</p>		<p>MD: 8803 INC: 84.60 AZM: 155.00 TVD: 7542.74 VS: 1479.04</p>		<p>MD: 8866 INC: 85.10 AZM: 155.00 TVD: 7548.40 VS: 1541.78</p>

10
300

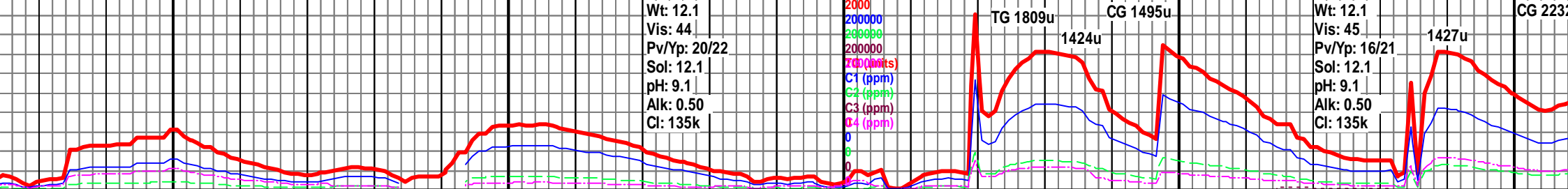
2000
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200000
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7575
(-6232)

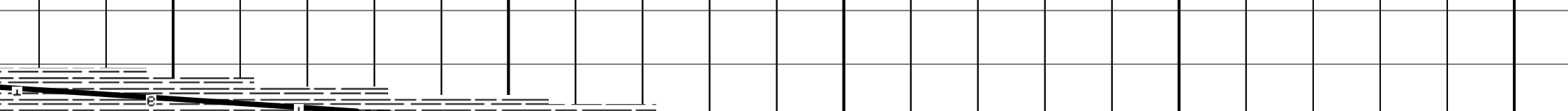
7625
(-6282)



8900 HS 8950 9000 HS 9050 HS 9100



7525 TVD
 Sub Sea (-6182)



8880-8910 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, tr dsem & nodr pyr, tr cal fld frac & free cal

8910-8940 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, tr dsem & nodr pyr, tr cal fld frac & free cal, pos rthy por

8940-8970 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, tr dsem & nodr pyr, tr cal fld frac & free cal, pos rthy por

8970-9000 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, tr dsem & nodr pyr, tr cal fld frac & free cal, pos rthy por

9000-9030 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, tr dsem & nodr pyr, tr cal fld frac & free cal, pos rthy por; tr LS: wkst, lt-dk gy mot, micln, blk, sft-frm, rthy tex, no vis por

9030-9060 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, rr dsem & nodr pyr, tr frc fl & free cal, pos rthy por; rr LS: wkst, lt-dk gy mot, micln, blk, blk, sft-frm, rthy tex, no vis por

9060-9090 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, rr dsem & nodr pyr, tr frc fl & free cal, pos rthy por; rr LS: wkst, lt-dk gy mot, micln, blk, sft-frm, rthy tex, no vis por

9090-9120 SH: dk gy-blk, sb blk-ylky, sft-frm, rthy tex, v calc, rr dsem & nodr pyr, tr cal frac fl & free cal, pos rthy por; rr LS: wkst-mdst, med-dk gy mot, blk, sft-frm, rthy tex, no vis por

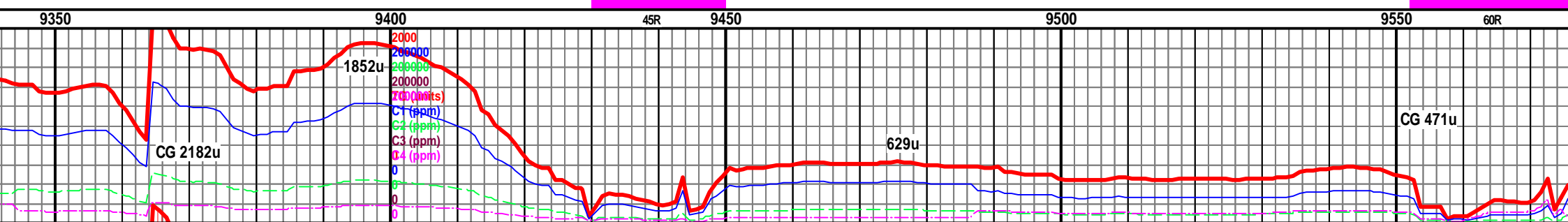
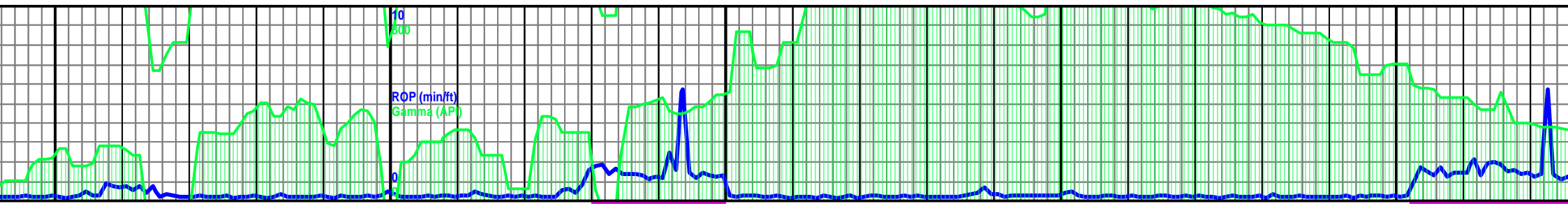
MD: 8929
 INC: 84.90
 AZM: 153.70
 TVD: 7553.89
 VS: 1604.54

MD: 8993
 INC: 86.60
 AZM: 153.30
 TVD: 7558.63
 VS: 1668.34

MD: 9056
 INC: 88.30
 AZM: 153.60
 TVD: 7561.44
 VS: 1731.25

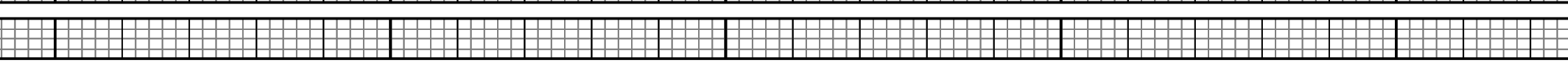
7575 (-6232)

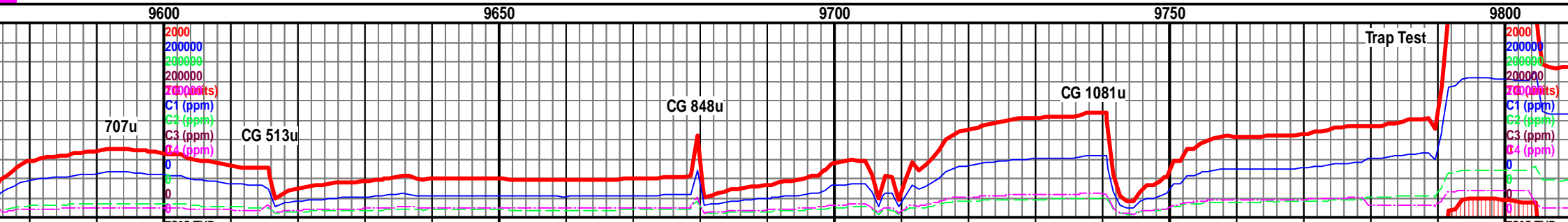
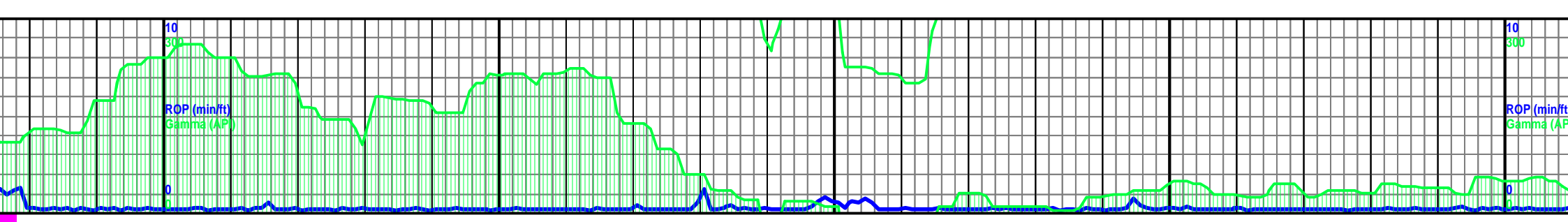
7625 (-6282)



7525 TVD Sub Sea (-6182)	9420-9450 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl; rr LS: wkst, lt-med gy mot, micxn, blk, sft, rthy tex, no vis por	9450-9480 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl; tr LS: wkst, lt-med gy mot, micxn, blk, sft, rthy tex, no vis por	9480-9510 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl	9510-9540 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl	9540-9570 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl	9570-9600 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl
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7575 (-6232)	9360-9390 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl; tr LS: wkst, lt-med gy mot, micxn, blk, sft, rthy tex, no vis por	9390-9420 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl; tr LS: wkst, lt-med gy mot, micxn, blk, sft, rthy tex, no vis por				
MD: 9373 INC: 87.90 AZM: 152.30 TVD: 7568.52 VS: 2047.92			MD: 9435 INC: 88.00 AZM: 152.70 TVD: 7570.74 VS: 2109.84	MD: 9497 INC: 88.50 AZM: 153.30 TVD: 7572.63 VS: 2171.78		MD: 9560 INC: 89.00 AZM: 154.50 TVD: 7574.01 VS: 2234.75





7525 TVD Sub Sea (-6182)

9600-9630 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal

9630-9660 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal

9660-9690 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal

9690-9720 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl

9720-9750 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal

9750-9780 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl

9780-9810 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl

7575 (-6232)

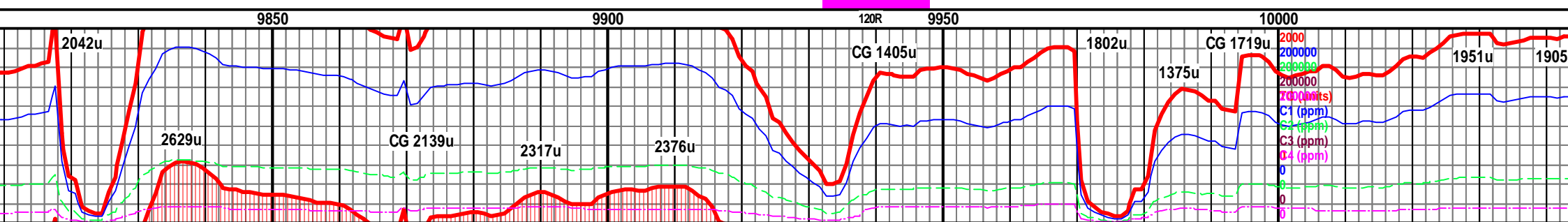
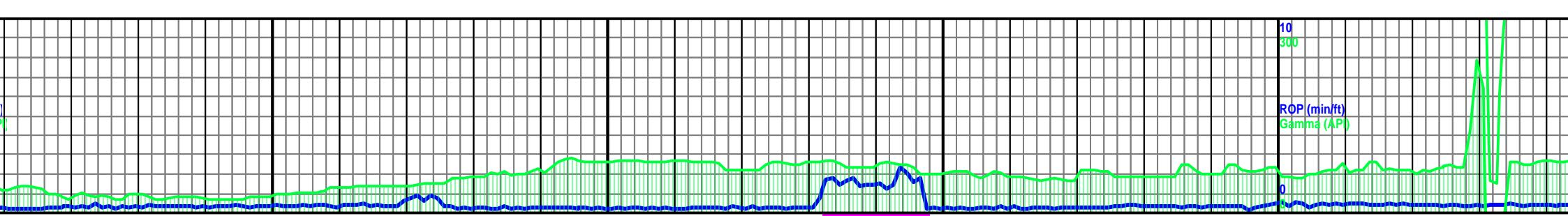
7625 (-6282)

MD: 9624
INC: 89.60
AZM: 155.10
TVD: 7574.79
VS: 2298.74

MD: 9686
INC: 89.20
AZM: 155.10
TVD: 7575.44
VS: 2360.74

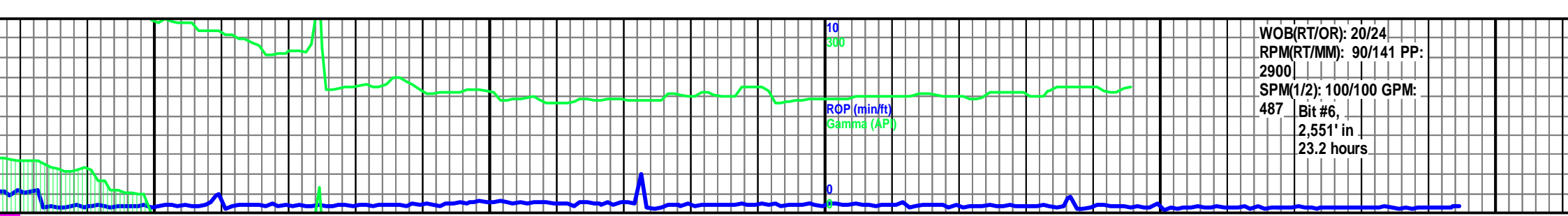
MD: 9750
INC: 89.10
AZM: 155.20
TVD: 7576.39
VS: 2424.73

7625 (-6282)

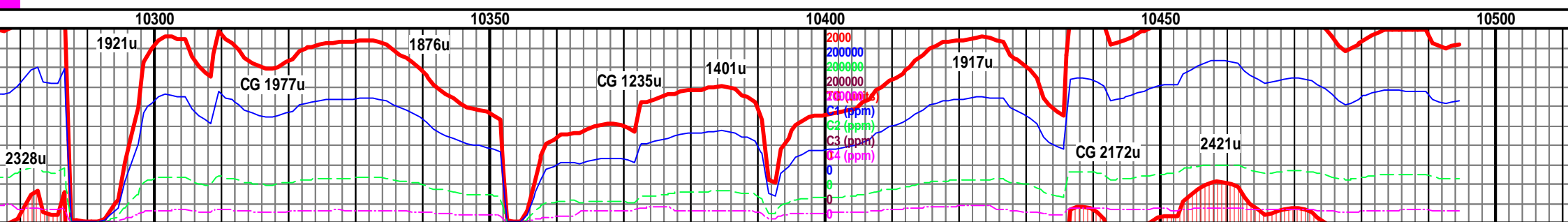


182	7525 TVD Sub Sea (-6182)
9810-9840 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl	9840-9870 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, tr cal frac fl
9870-9900 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsme & nodr pyr, tr cal frac fl	9900-9930 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal
9930-9960 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsme & rr nodr pyr, tr cal frac fl	9960-9990 SH: dk gy-blk, sb blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal frac fl & free cal
9990-10020 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, rr cal frac fl & free cal	10020-10050 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & rr nodr pyr, cal & pyr frac fl
	7575 (-6232)

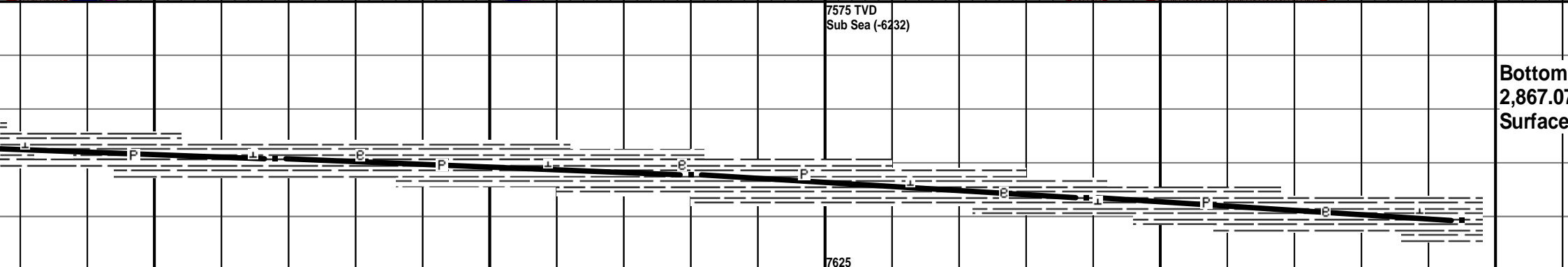
MD: 9813 INC: 89.50 AZM: 155.30 TVD: 7577.71 VS: 2487.72	MD: 9877 INC: 87.90 AZM: 155.10 TVD: 7579.72 VS: 2551.69	MD: 9940 INC: 86.80 AZM: 156.30 TVD: 7582.63 VS: 2614.61	MD: 10003 INC: 86.10 AZM: 156.40 TVD: 7586.53 VS: 2677.47
			7625 (-6282)



WOB(RT/OR): 20/24
 RPM(RT/MM): 90/141 PP:
 2900
 SPM(1/2): 100/100 GPM:
 487 Bit #6,
 2,551' in
 23.2 hours



7575 TVD
 Sub Sea (-6232)



Bottom
 2,867.07
 Surface

-blk, blk, frm, m & nodr pyr, tr
 10290-10320 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10320-10350 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10350-10380 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10380-10410 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10410-10440 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10440-10470 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl
 10470-10495 SH: dk gy-blk, blk, frm, rthy tex, sl calc, tr dsem & nodr pyr, tr cal & pyr frac fl

MD: 10318
 INC: 87.90
 AZM: 155.50
 TVD: 7604.35
 VS: 2991.90

MD: 10380
 INC: 86.60
 AZM: 153.70
 TVD: 7607.33
 VS: 3053.82

MD: 10439
 INC: 85.50
 AZM: 152.60
 TVD: 7611.39
 VS: 3112.65

Project
 MD: 10439
 INC: 85.50
 AZM: 152.60
 TVD: 7611.39
 VS: 3112.65

7625 (-6282)

7675 (-6332)

Total Depth of 10,495' MD
7,615.78' TVD reached @
2115 hrs on 14 July 2011

10

Wt: 12.15
Vis: 48
Pv/Yp: 20/25
Sol: 12.2
pH: 9.3
Alk: 0.50
Cl: 140k

Hole Location:
7' South, 1,348.68' East of
Location

ion to Bit:
495
.50
52.60
615.78
8.43