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

Well Name:	**Razor 27I-2214B**		
Location:	**NESW 27-T10N-R58W**		
License Number:	**05-123-37949**	**Region:**	**Redtail Field**
Spud Date:	**9/22/2013**	**Drilling Completed:**	**9/XX/2013**
Surface Coordinates:	**Lat.: 40.808719 Long.: -103.843914**		
Bottom Hole Coordinates:	**Lat.: 40.831192 Long.: -103.844706**		
Ground Elevation (ft):	**4757**	**K.B. Elevation (ft):**	**4774**
Logged Interval (ft):	**5100 To:**	**Total Depth (ft):**	
Formation:	**Pierre, Sharon Springs, Niobrara**		
Type of Drilling Fluid:	**Water Based Mud**		

OPERATOR

Company: **Whiting Oil & Gas Corp.**
Address: **1700 Broadway Suite 2300**
Denver, CO 80290

GEOLOGIST

Name: **Luke Schwantes and Kyle Newman**
Company: **Acme Geologic Consulting**
Address: **108 Berry Street**
Little Rock, AR 72205

Drilling Company

Cade Drilling, LLC
Rig #23

Gas Detection

Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph

Comments

Lithologies and tops at drilled depths, not corrected to elogs. Where the well bore gas is 100% methane, the C1 line is moved to 85% for graphical purposes only.

ROCK TYPES

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- 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

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

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

OIL SHOW

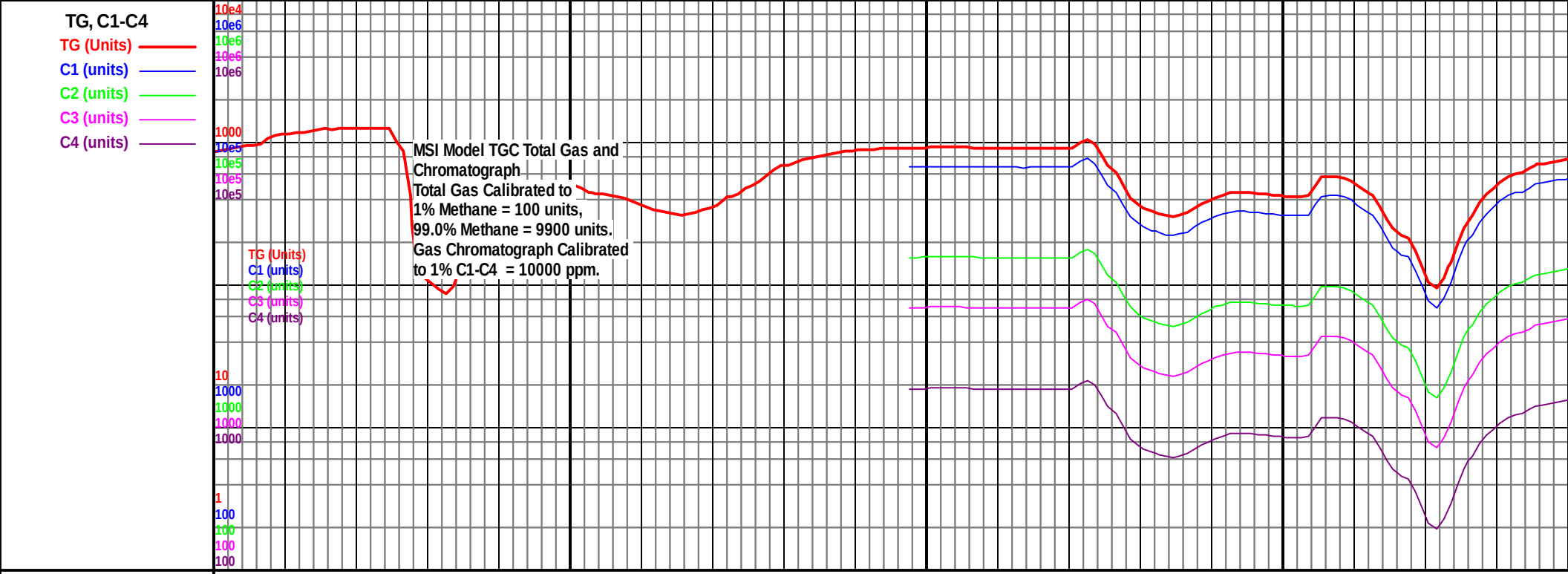
- Even
- Spotted
- Ques
- Dead

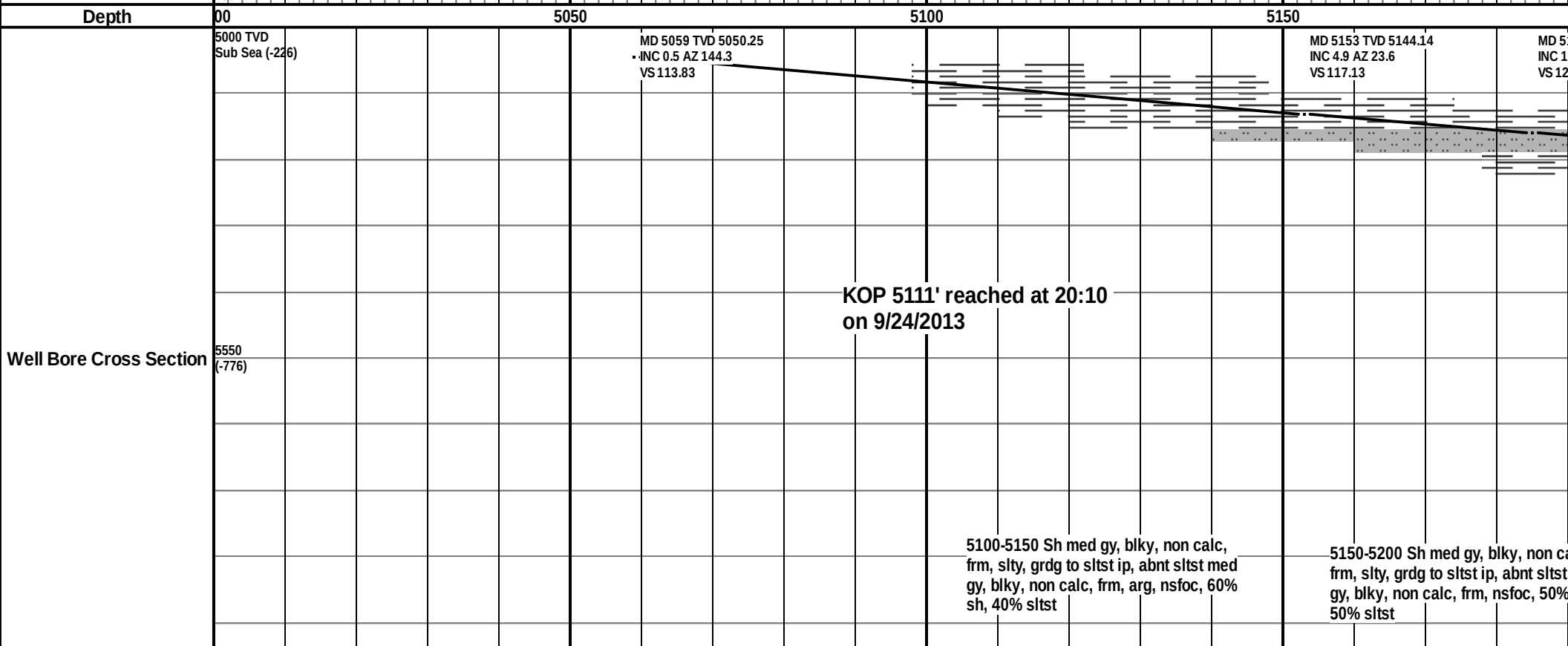
INTERVAL

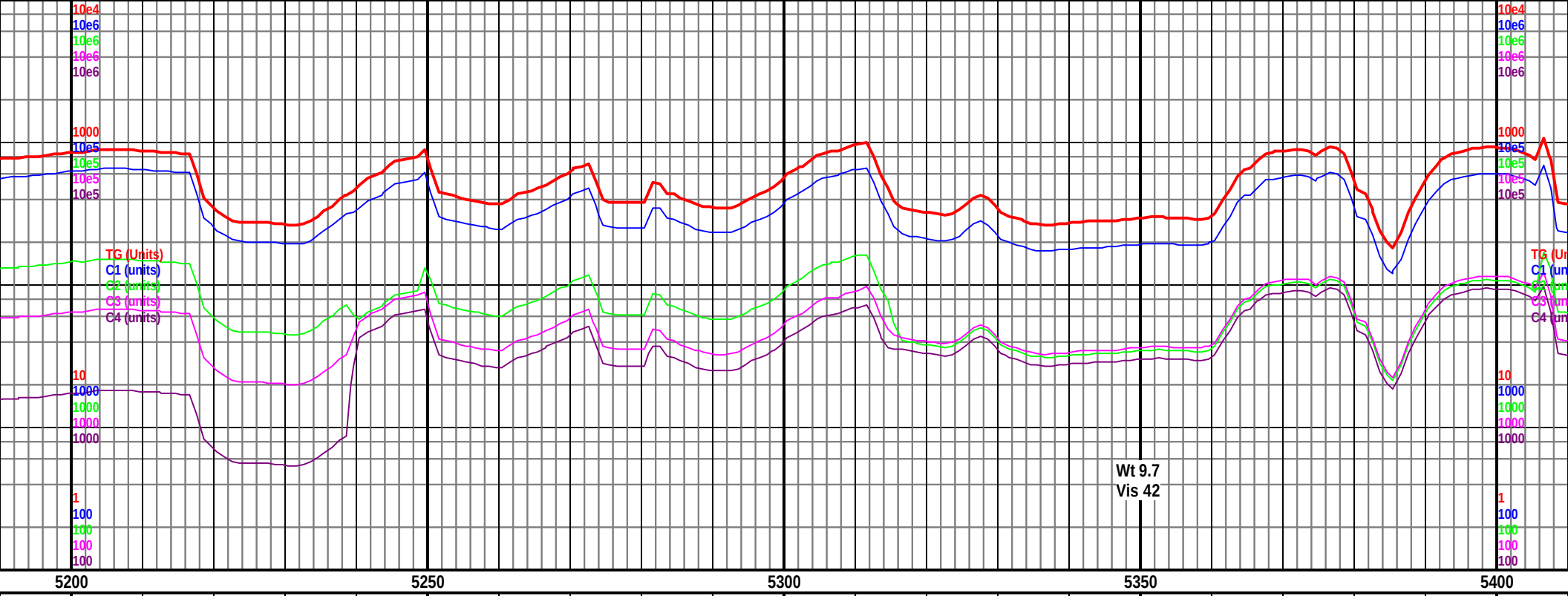
- Core
- Dst

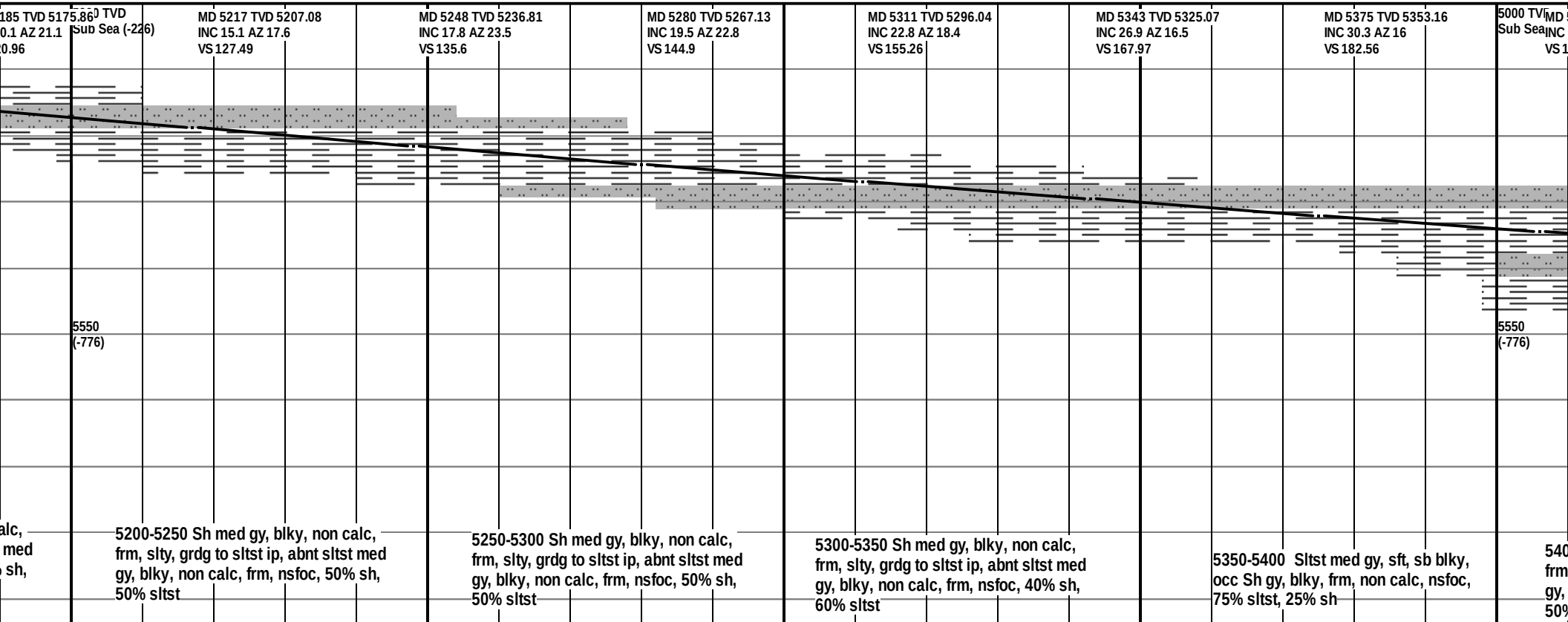
EVENT

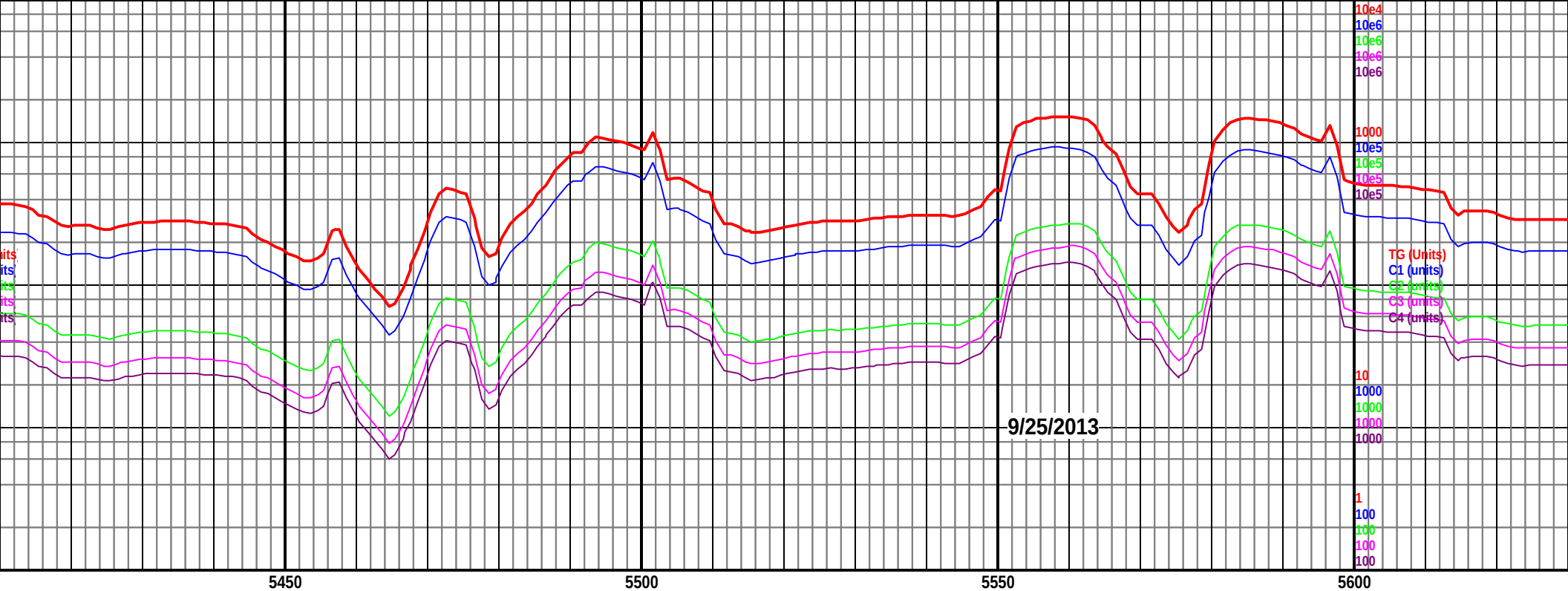
- Rft
- Sidewall

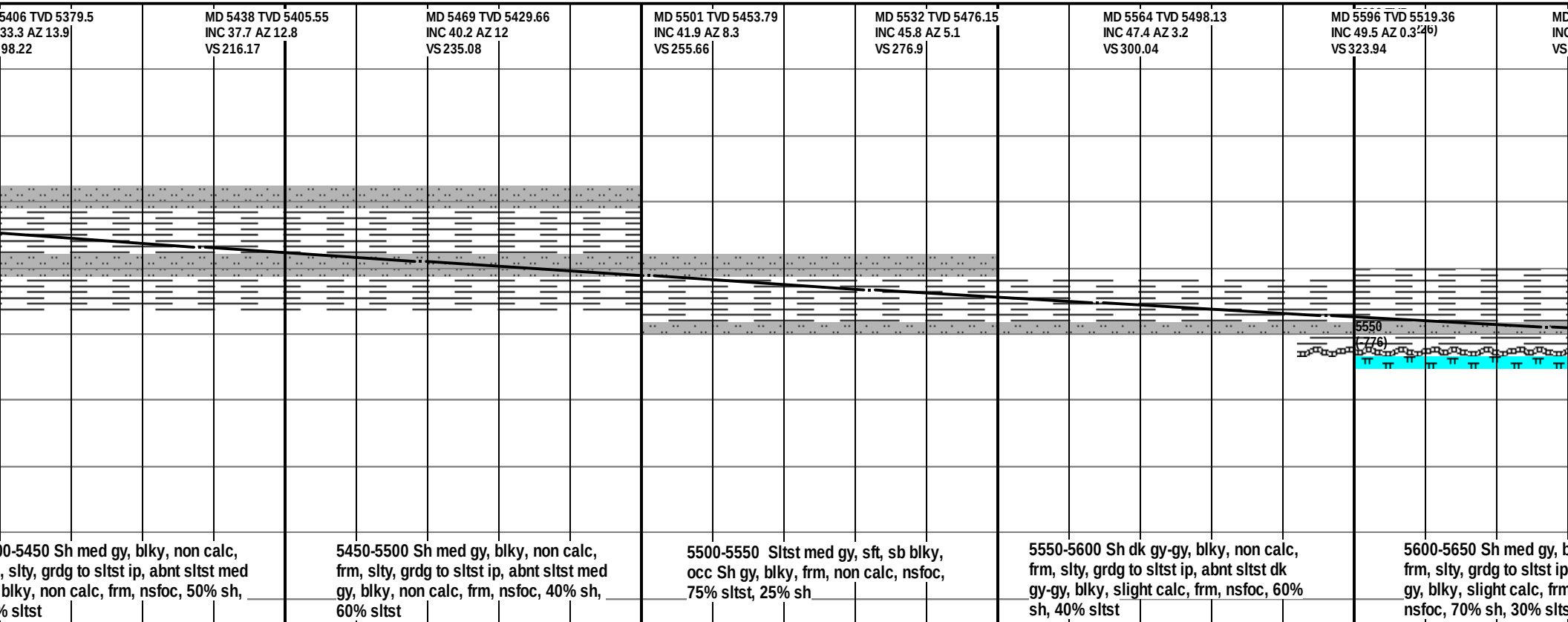

TG, C1-C4
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
MSI Model TGC Total Gas and Chromatograph
Total Gas Calibrated to 1% Methane = 100 units, 99.0% Methane = 9900 units.
Gas Chromatograph Calibrated to 1% C1-C4 = 10000 ppm.
10
1000
1000
1000
1000
1
100
100
100
100

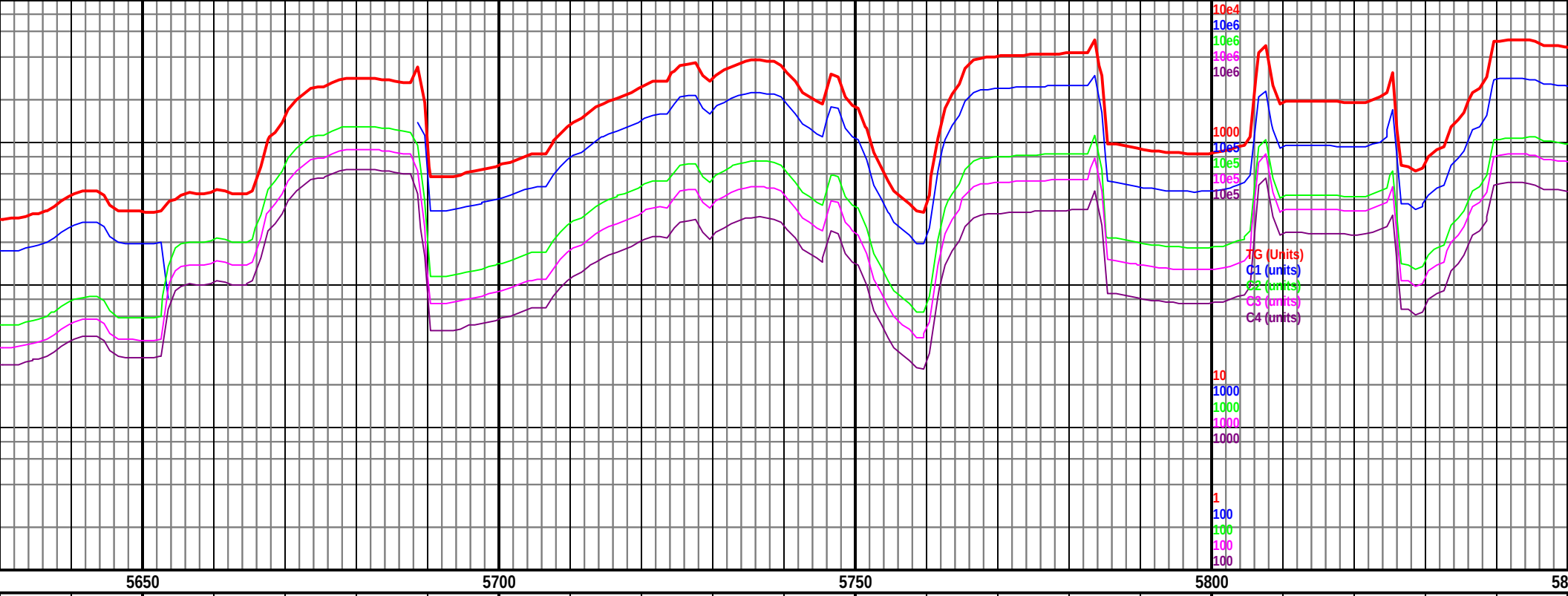

Depth
00
5050
5100
5150
Well Bore Cross Section
5000 TVD
Sub Sea (-226)
MD 5059 TVD 5050.25
INC 0.5 AZ 144.3
VS 113.83
MD 5153 TVD 5144.14
INC 4.9 AZ 23.6
VS 117.13
KOP 5111' reached at 20:10
on 9/24/2013
5550
(-776)
5100-5150 Sh med gy, blky, non calc, frm, slty, grdg to sltst ip, abnt sltst med gy, blky, non calc, frm, arg, nsfoc, 60% sh, 40% sltst
5150-5200 Sh med gy, blky, non ca
frm, slty, grdg to sltst ip, abnt sltst
gy, blky, non calc, frm, nsfoc, 50%
50% sltst

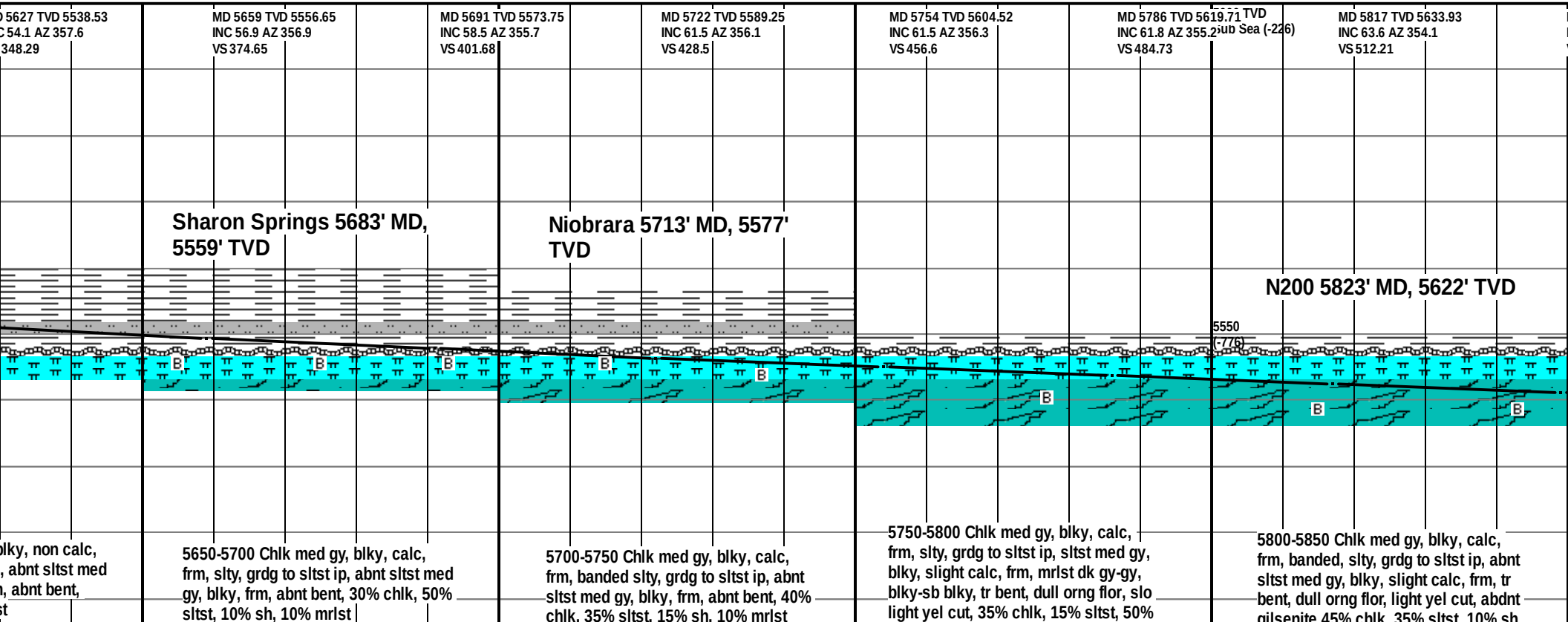

TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
Wt 9.7
Vis 42
5200
5250
5300
5350
5400

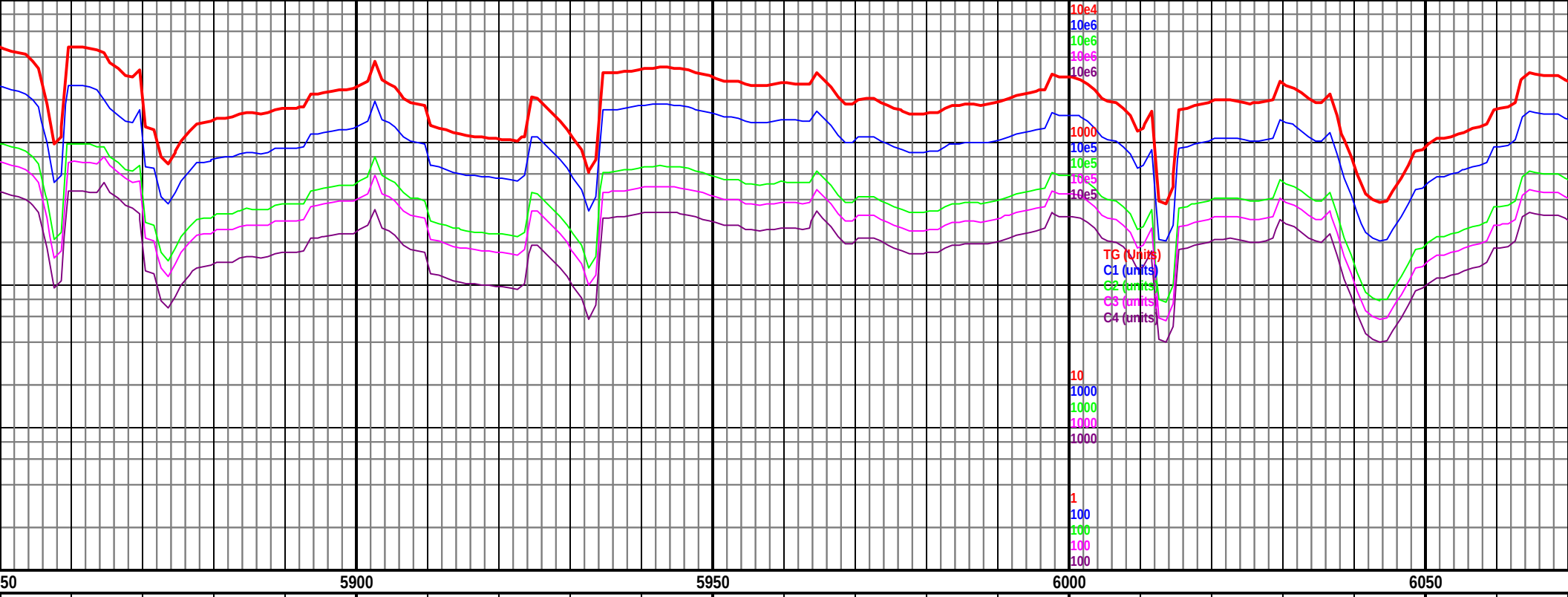

MD 5217 TVD 5207.08
INC 15.1 AZ 17.6
VS 127.49
MD 5248 TVD 5236.81
INC 17.8 AZ 23.5
VS 135.6
MD 5280 TVD 5267.13
INC 19.5 AZ 22.8
VS 144.9
MD 5311 TVD 5296.04
INC 22.8 AZ 18.4
VS 155.26
MD 5343 TVD 5325.07
INC 26.9 AZ 16.5
VS 167.97
MD 5375 TVD 5353.16
INC 30.3 AZ 16
VS 182.56
Sub Sea (-226)
5550
(-776)
5200-5250 Sh med gy, blky, non calc, frm, slty, grdg to sltst ip, abnt sltst med gy, blky, non calc, frm, nsfoc, 50% sh, 50% sltst
5250-5300 Sh med gy, blky, non calc, frm, slty, grdg to sltst ip, abnt sltst med gy, blky, non calc, frm, nsfoc, 50% sh, 50% sltst
5300-5350 Sh med gy, blky, non calc, frm, slty, grdg to sltst ip, abnt sltst med gy, blky, non calc, frm, nsfoc, 40% sh, 60% sltst
5350-5400 Sltst med gy, sft, sb blky, occ Sh gy, blky, frm, non calc, nsfoc, 75% sltst, 25% sh


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
9/25/2013
5450
5500
5550
5600


5406 TVD 5379.5
33.3 AZ 13.9
98.22
MD 5438 TVD 5405.55
INC 37.7 AZ 12.8
VS 216.17
MD 5469 TVD 5429.66
INC 40.2 AZ 12
VS 235.08
MD 5501 TVD 5453.79
INC 41.9 AZ 8.3
VS 255.66
MD 5532 TVD 5476.15
INC 45.8 AZ 5.1
VS 276.9
MD 5564 TVD 5498.13
INC 47.4 AZ 3.2
VS 300.04
MD 5596 TVD 5519.36
INC 49.5 AZ 0.3
VS 323.94
5550
(776)
0-5450 Sh med gy, blky, non calc,
, slty, grdg to sltst ip, abnt sltst med
blky, non calc, frm, nsfoc, 50% sh,
% sltst
5450-5500 Sh med gy, blky, non calc,
frm, slty, grdg to sltst ip, abnt sltst med
gy, blky, non calc, frm, nsfoc, 40% sh,
60% sltst
5500-5550 Sltst med gy, sft, sb blky,
occ Sh gy, blky, frm, non calc, nsfoc,
75% sltst, 25% sh
5550-5600 Sh dk gy-gy, blky, non calc,
frm, slty, grdg to sltst ip, abnt sltst dk
gy-gy, blky, slight calc, frm, nsfoc, 60%
sh, 40% sltst
5600-5650 Sh med gy, b
frm, slty, grdg to sltst ip
gy, blky, slight calc, frm
nsfoc, 70% sh, 30% slts


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
5650
5700
5750
5800


D 5627 TVD 5538.53
C 54.1 AZ 357.6
348.29
MD 5659 TVD 5556.65
INC 56.9 AZ 356.9
VS 374.65
MD 5691 TVD 5573.75
INC 58.5 AZ 355.7
VS 401.68
MD 5722 TVD 5589.25
INC 61.5 AZ 356.1
VS 428.5
MD 5754 TVD 5604.52
INC 61.5 AZ 356.3
VS 456.6
MD 5786 TVD 5619.71 TVD
INC 61.8 AZ 355.2
Sub Sea (-226)
VS 484.73
MD 5817 TVD 5633.93
INC 63.6 AZ 354.1
VS 512.21
Sharon Springs 5683' MD, 5559' TVD
Niobrara 5713' MD, 5577' TVD
N200 5823' MD, 5622' TVD
5550
(-776)
B
lky, non calc,
, abnt sltst med
, abnt bent,
st
5650-5700 Chlk med gy, blky, calc, frm, slty, grdg to sltst ip, abnt sltst med gy, blky, frm, abnt bent, 30% chlk, 50% sltst, 10% sh, 10% mrlst
5700-5750 Chlk med gy, blky, calc, frm, banded slty, grdg to sltst ip, abnt sltst med gy, blky, frm, abnt bent, 40% chlk, 35% sltst, 15% sh, 10% mrlst
5750-5800 Chlk med gy, blky, calc, frm, slty, grdg to sltst ip, sltst med gy, blky, slight calc, frm, mrlst dk gy-gy, blky-sb blky, tr bent, dull orng flor, slo light yel cut, 35% chlk, 15% sltst, 50%
5800-5850 Chlk med gy, blky, calc, frm, banded, slty, grdg to sltst ip, abnt sltst med gy, blky, slight calc, frm, tr bent, dull orng flor, light yel cut, abdnt gilsenite 45% chlk, 35% sltst, 10% sh



MD 5849 TVD 5647.25
INC 67.2 AZ 353.5
VS 541.21

MD 5880 TVD 5657.87
INC 72.7 AZ 353.1
VS 570.2

MD 5912 TVD 5666.72
INC 75.2 AZ 352.8
VS 600.81

MD 5944 TVD 5674.84
INC 75.4 AZ 352
VS 631.59

MD 5975 TVD 5682.71
INC 75.2 AZ 351.6
VS 661.37

5000 TVD Sub Sea (

MD 6007 TVD 5690.58
INC 76.3 AZ 351.6
VS 692.17

MD 6039 TVD 5697.48
INC 78.8 AZ 353.3
VS 723.24

N400 5885' MD, 5655' TVD

55

(-776)

N430 6019' MD, 5693' TVD

N460 607

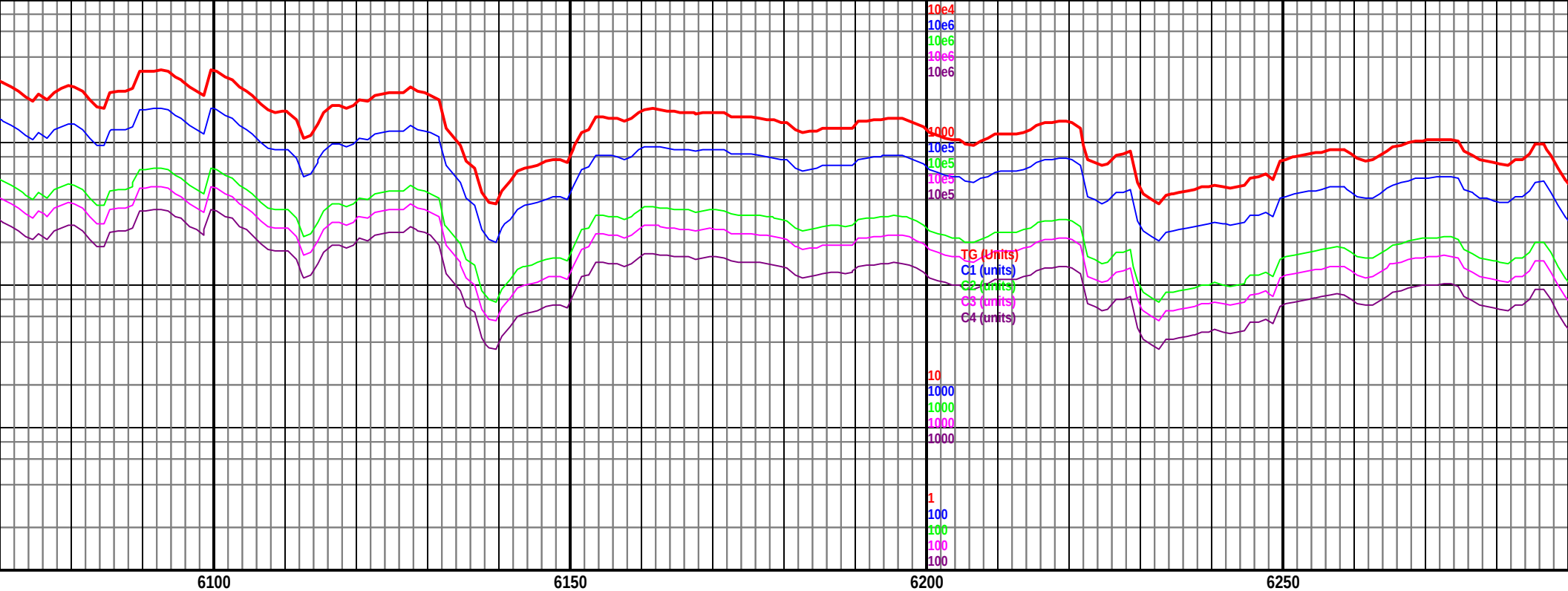
5850-5900 Chlk med gy, blky, calc, frm, banded, slty, grdg to sltst ip, abnt sltst med gy, blky, slight calc, frm, bent, dull orng flor, light yel cut, gilsenite 45% chlk, 35% sltst, 20%

5900-5950 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, rr bent, dull orng flor, light yel cut, gilsenite 60% chlk, 40% mrlst

5950-6000 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, rr bent, dull orng flor, light yel cut, gilsenite, 60% mrlst, 40% chlk

6000-6050 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, rr bent, dull orng flor, light yel cut, 70% chlk, 30% mrlst

6050-6100 Chlk
frm, banded, mr
calc, frm, dull o
cut, 80% chlk, 2



MD 6070 TVD 5702.73
INC 81.7 AZ 355.1
VS 753.71

MD 6102 TVD 5706.27
INC 85.6 AZ 356.4
VS 785.47

MD 6133 TVD 5707.65
INC 89.3 AZ 358.1
VS 816.42

MD 6165 TVD 5707.57
INC 91 AZ 358.5
VS 848.42

MD 6197 TVD 5706.84
INC 91.6 AZ 357.6
VS 880.41

MD 6228 TVD 5706.35
INC 90.2 AZ 358.2
VS 911.41

MD 6260 TVD 5706.33
INC 89.9 AZ 358.9
VS 943.41

5' MD, 5702' TVD

5550
(-776)

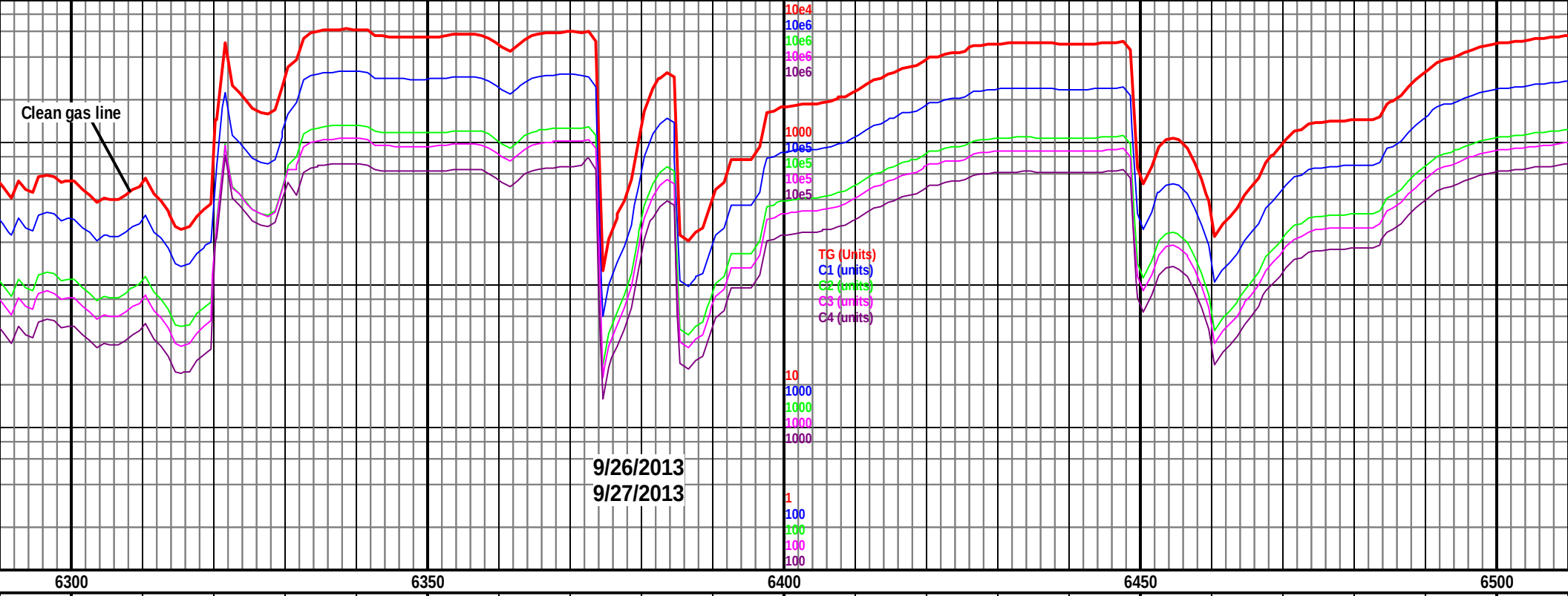
med gy, blky, calc,
lst med gy- dk gy, blky,
rng flor, slo light yel
0% mrlst

6100-6150 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, dull orng flor, tr bent, fst oil cut, light yel cut, 80% chlk, 20% mrlst

6150-6200 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, dull orng flor, bent, tr inoc, fst oil cut, light yel cut, 90% chlk, 10%

6200-6250 Chlk med gy, blky, calc, frm, banded, mrlst med gy- dk gy, blky, calc, frm, dull orng flor, bent, tr inoc, fst oil cut, light yel cut, 85% chlk, 15%

6250-6300 Mrlst med gy- dk gy, blky
calc, frm, chlk med gy, blky, calc, f
banded,dull orng flor, tr inoc, fst oil
light yel cut, 70% mrlst, 30% chlk



MD 6291 TVD 5706.52
INC 89.4 AZ 0.1
VS 974.4

MD 6323 TVD 5706.77
INC 89.7 AZ 0.1
VS 1006.39

MD 6399 TVD 5706.1
INC 91.3 AZ 359.2
VS 1082.36

MD 6493 TVD 5705.1
INC 89.9 AZ 359.7
VS 1176.34

TD @ 6375 for intermediate casing, 12:45, 9/25/2013, begin drilling at 01:30, 9/27/2013

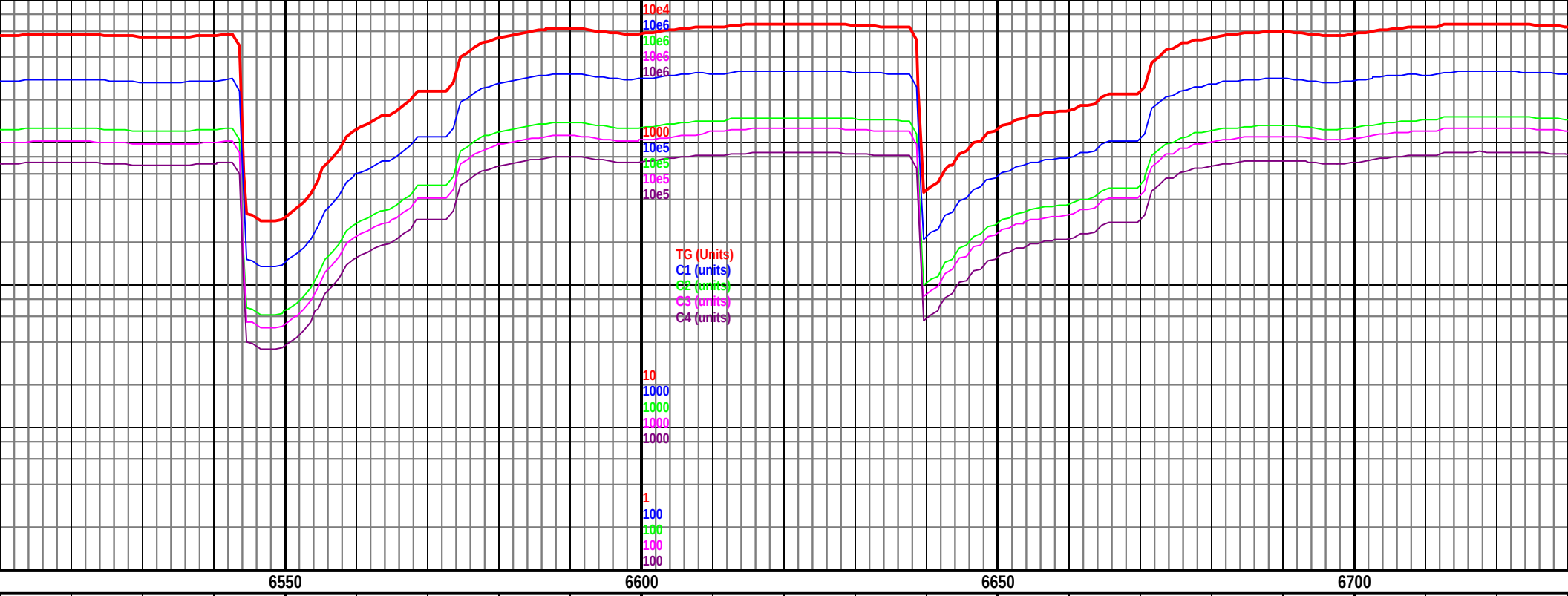
5550
(-776)

y,
rm,
cut,

6300-6350 Mrlst med gy- dk gy, blky, calc, frm, chlk med gy, blky, calc, frm, banded,dull orng flor, tr inoc, rr bent, rr yel min oil cut, fst oil cut, light yel cut,

6350-6375 Mrlst med gy- dk gy, blky, calc, frm, chlk med gy, blky, calc, frm, banded,dull orng flor, tr inoc, rr bent, rr yel min flor, fst oil cut, light yel cut, 70% mrlst, 30% chlk

6375-6500 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, dull orng flor, rr inoc, fst light yel cut, 85% chlk, 15%



2

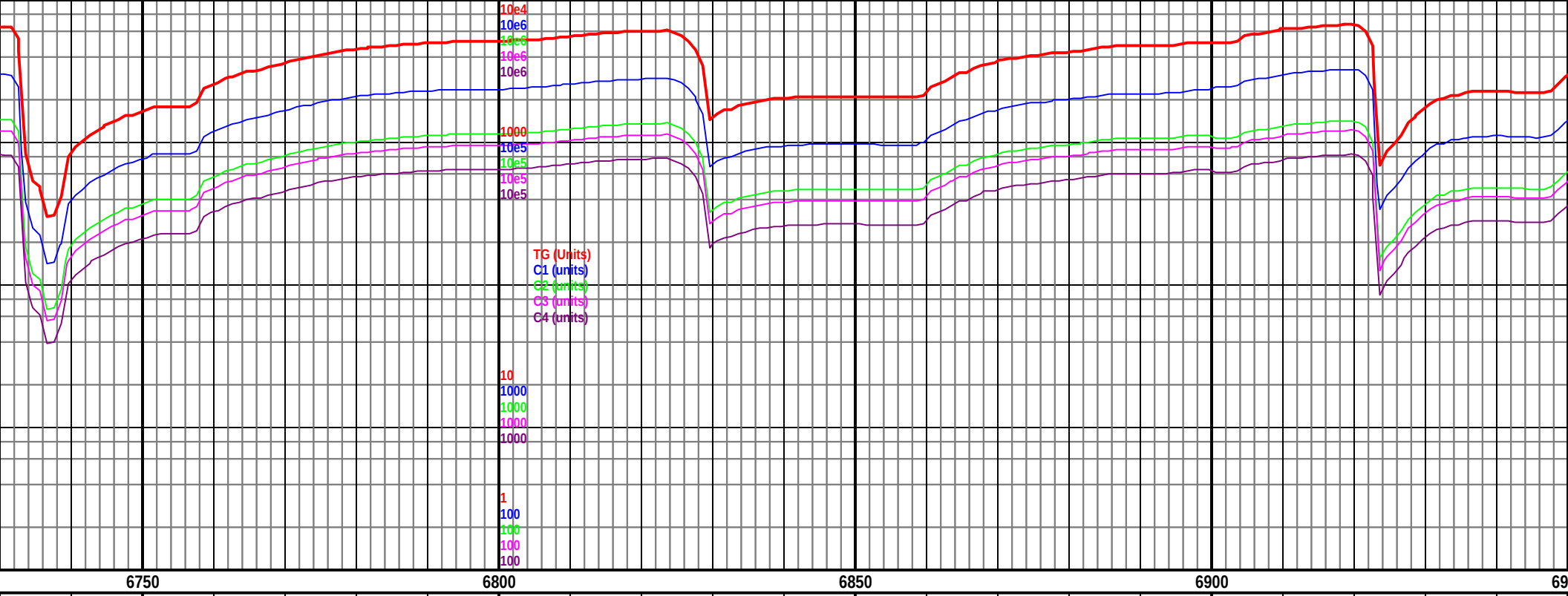
MD 6588 TVD 5705.37 D
INC 89.8 AZ 359.6 Sea (-226)
VS 1271.32

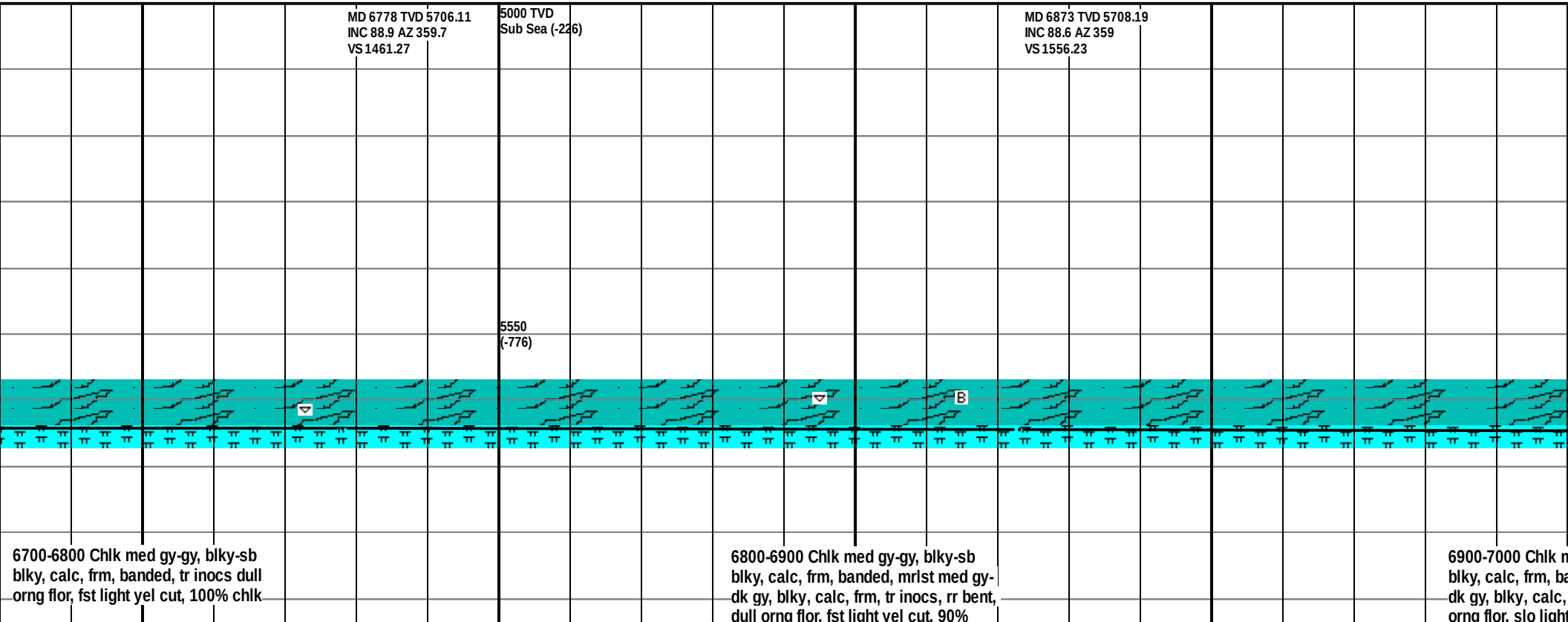
MD 6683 TVD 5705.37
INC 90.2 AZ 359.8
VS 1366.3

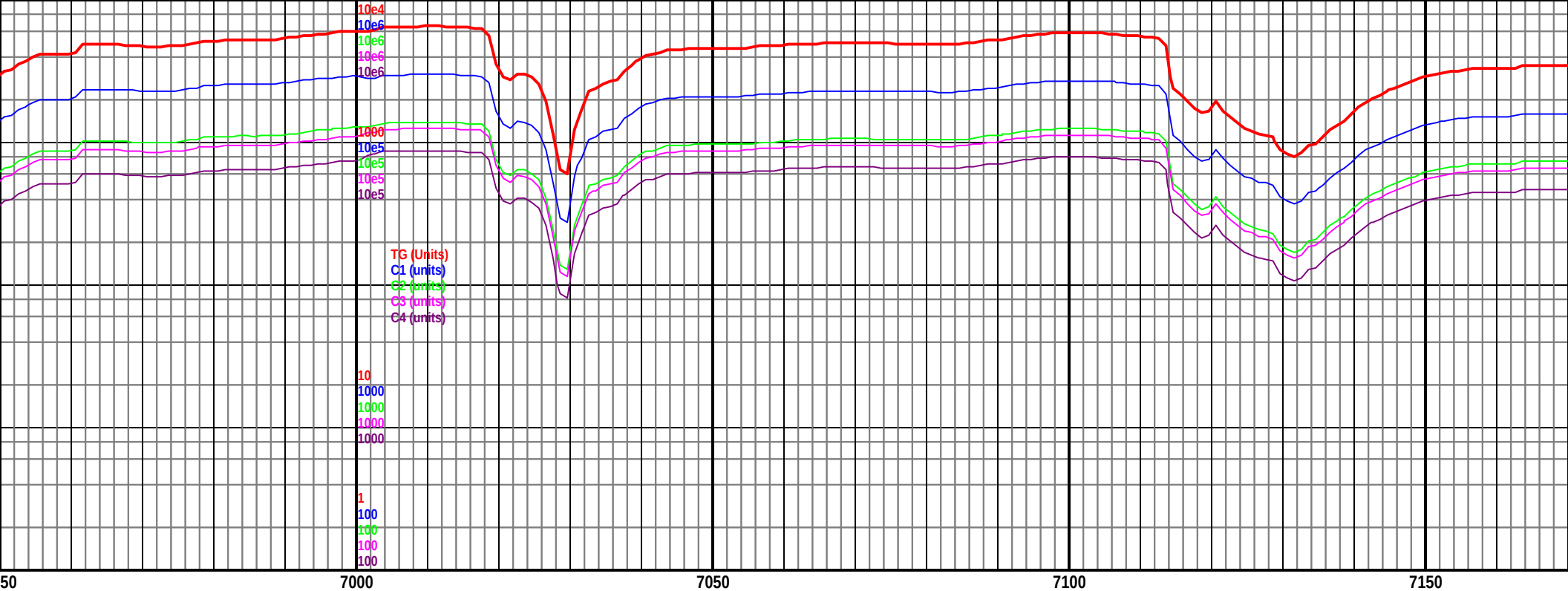
5550
(-776)

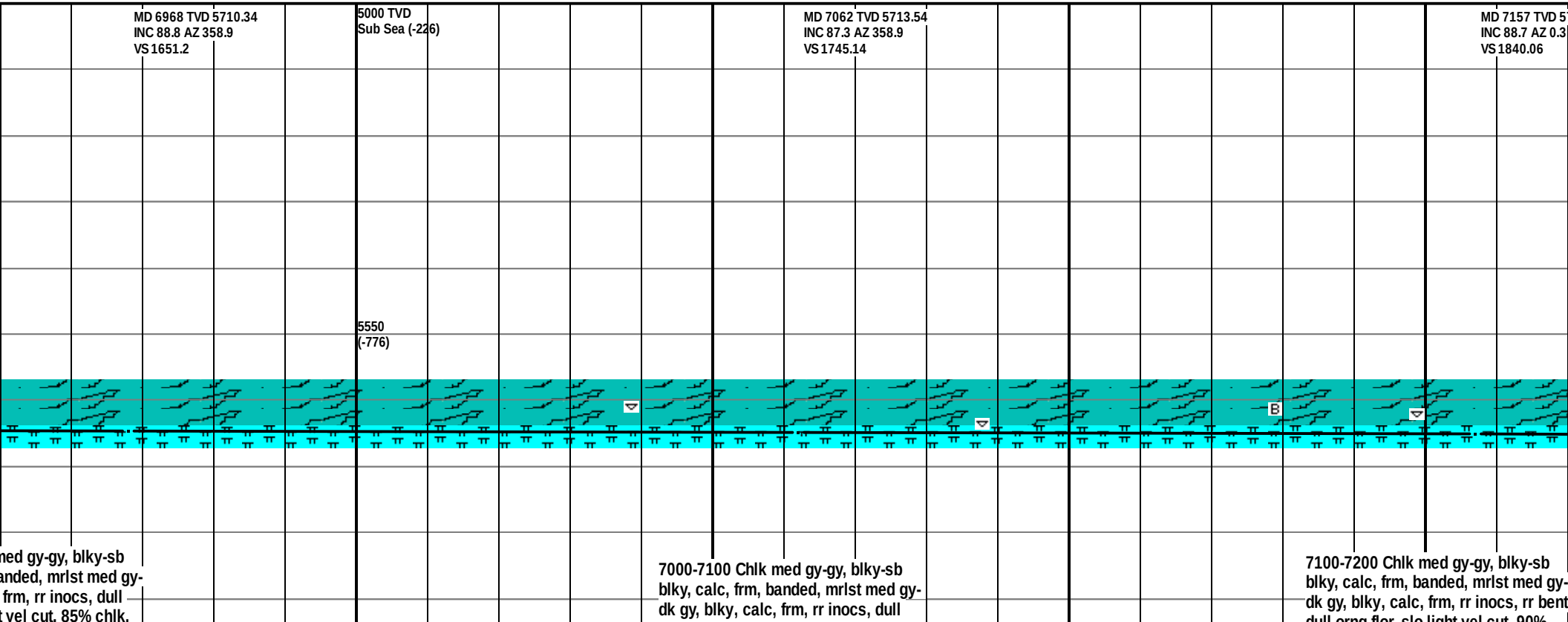
6500-6600 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, dull orng flor, tr inoc, fst light yel cut, 90% chlk, 10%

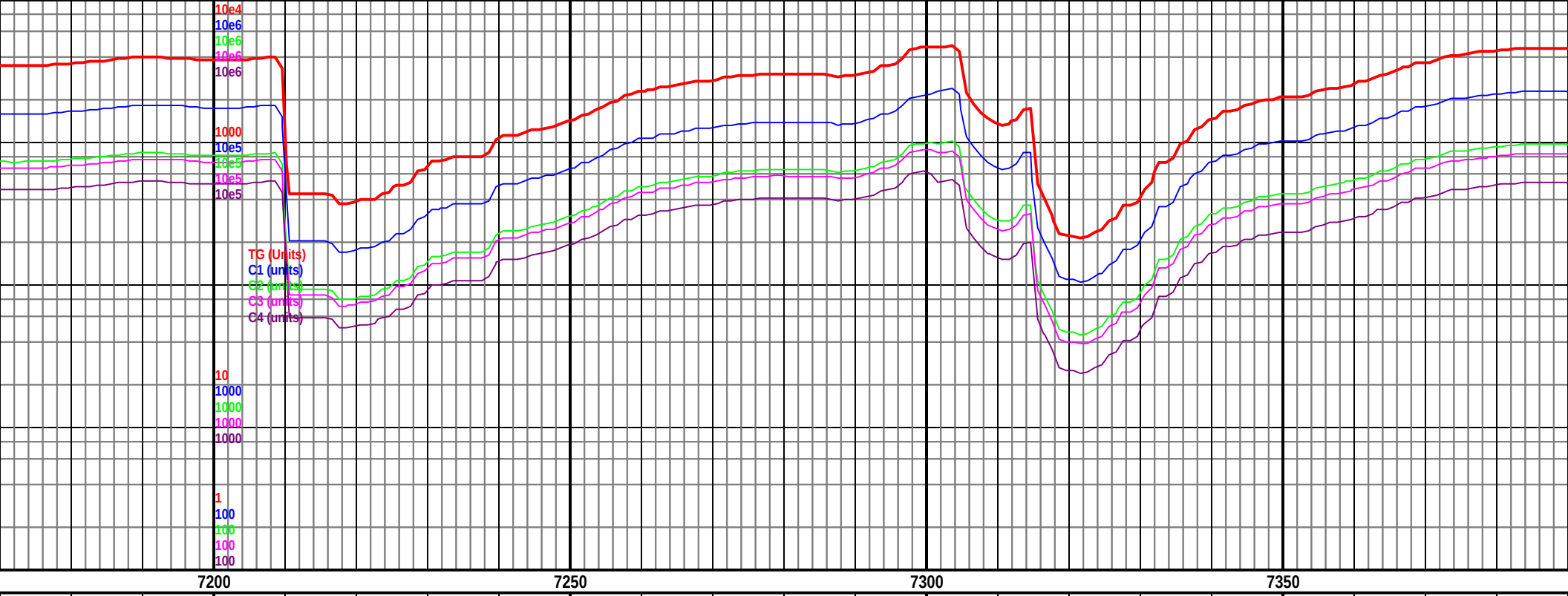
6600-6700 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, dull orng flor, fst


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
6750
6800
6850
6900
69


MD 6778 TVD 5706.11
INC 88.9 AZ 359.7
VS 1461.27
5000 TVD
Sub Sea (-226)
MD 6873 TVD 5708.19
INC 88.6 AZ 359
VS 1556.23
5550
(-776)
B
6700-6800 Chlk med gy-gy, blky-sb blky, calc, frm, banded, tr inocs dull orng flor, fst light yel cut, 100% chlk
6800-6900 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, rr bent, dull orng flor, fst light yel cut, 90%
6900-7000 Chlk m
blky, calc, frm, ba
dk gy, blky, calc,
orng flor, slo light


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
50
7000
7050
7100
7150


MD 6968 TVD 5710.34
INC 88.8 AZ 358.9
VS 1651.2
5000 TVD
Sub Sea (-226)
MD 7062 TVD 5713.54
INC 87.3 AZ 358.9
VS 1745.14
MD 7157 TVD 5
INC 88.7 AZ 0.3
VS 1840.06
5550
(-776)
B
med gy-gy, blky-sb
anded, mrlst med gy-
frm, rr inocs, dull
t vel cut, 85% chlk,
7000-7100 Chlk med gy-gy, blky-sb
blky, calc, frm, banded, mrlst med gy-
dk gy, blky, calc, frm, rr inocs, dull
7100-7200 Chlk med gy-gy, blky-sb
blky, calc, frm, banded, mrlst med gy-
dk gy, blky, calc, frm, rr inocs, rr bent
dull orng flor, slo light yel cut, 90%



716.86

5000 TVD
Sub Sea (-226)

MD 7252 TVD 5719.51
INC 88.1 AZ 0.1
VS 1934.98

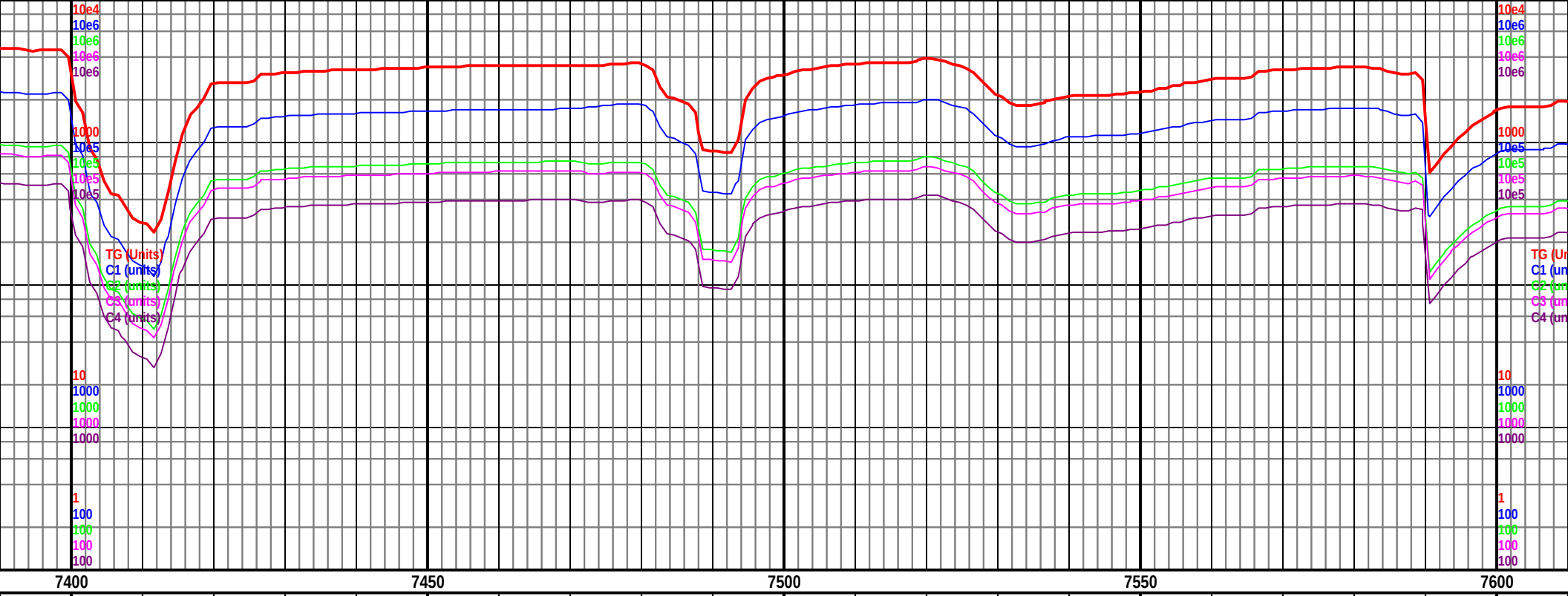
MD 7347 TVD 5721.66
INC 89.3 AZ 0.5
VS 2029.9

5550
(-776)

B B B B

7200-7300 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, rr inocs, dull orng flor, slo light yel cut, 90% chlk,

7300-7400 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, tr bent, dull orng flor, slo light yel cut, 90%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C2 (units)
C3 (units)
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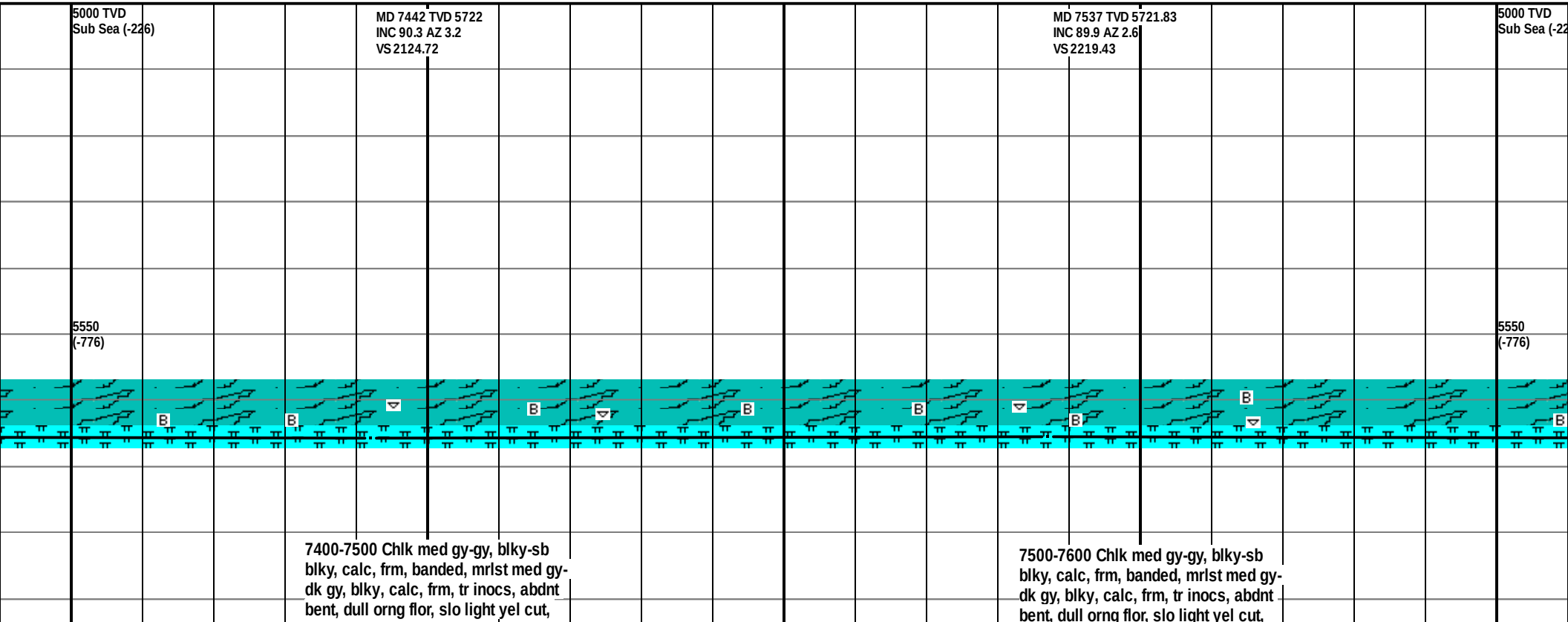
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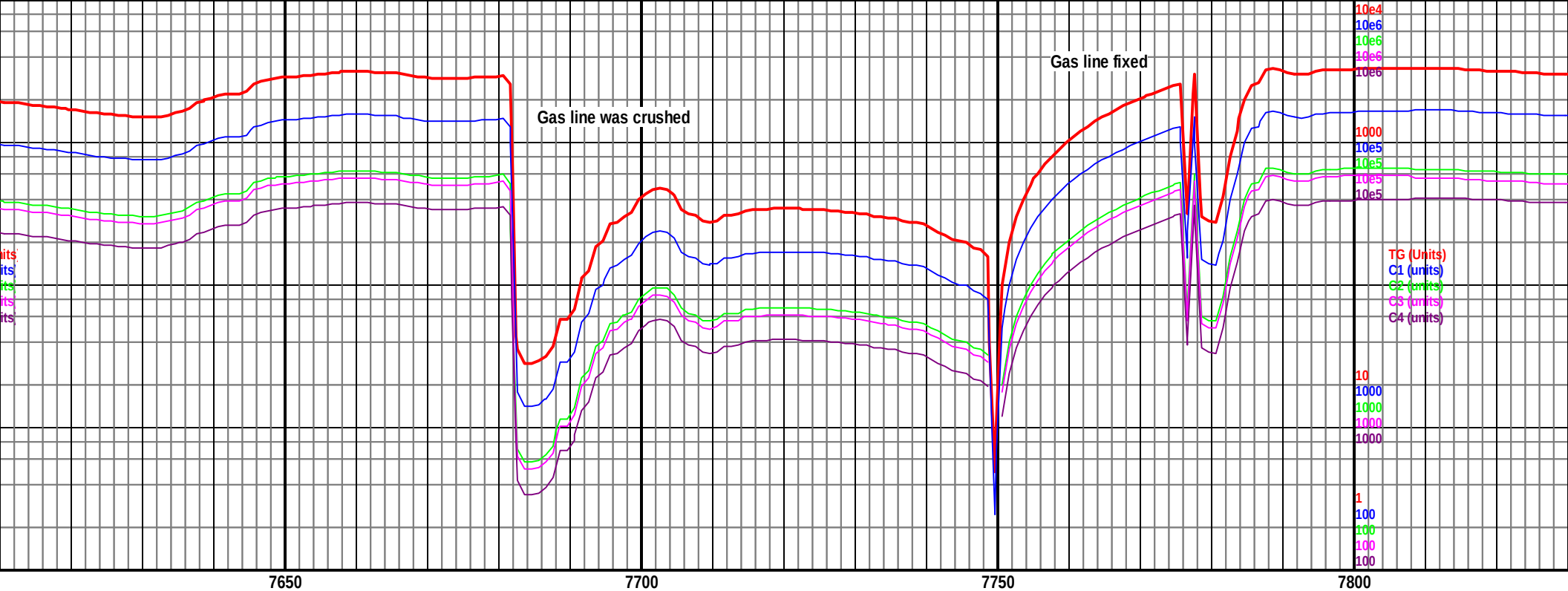
Sub Sea (-226)
MD 7442 TVD 5722
INC 90.3 AZ 3.2
VS 2124.72
MD 7537 TVD 5721.83
INC 89.9 AZ 2.6
VS 2219.43
5000 TVD
Sub Sea (-22
5550
(-776)
5550
(-776)
B
7400-7500 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, abdnt bent, dull orng flor, slo light yel cut,
7500-7600 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, abdnt bent, dull orng flor, slo light yel cut,



MD 7631 TVD 5721.91
INC 90 AZ 3.2
VS 2313.15

MD 7726 TVD 5721.75
INC 90.2 AZ 4
VS 2407.76

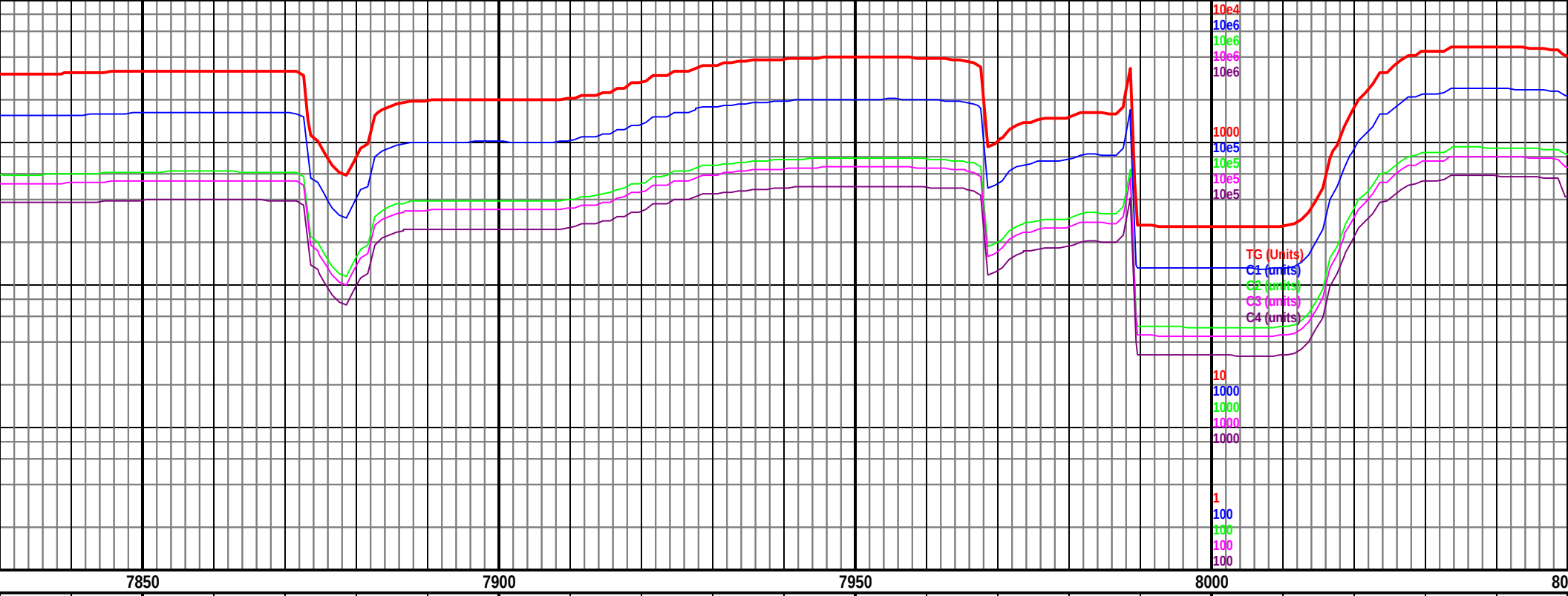
5000 TVD
Sub Sea (-226)

MD 7821 T
INC 89.9 A
VS 2502.4

5550
(-776)

7600-7700 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, abdnt

7700-7800 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, rr inocs, tr bent,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C2 (units)
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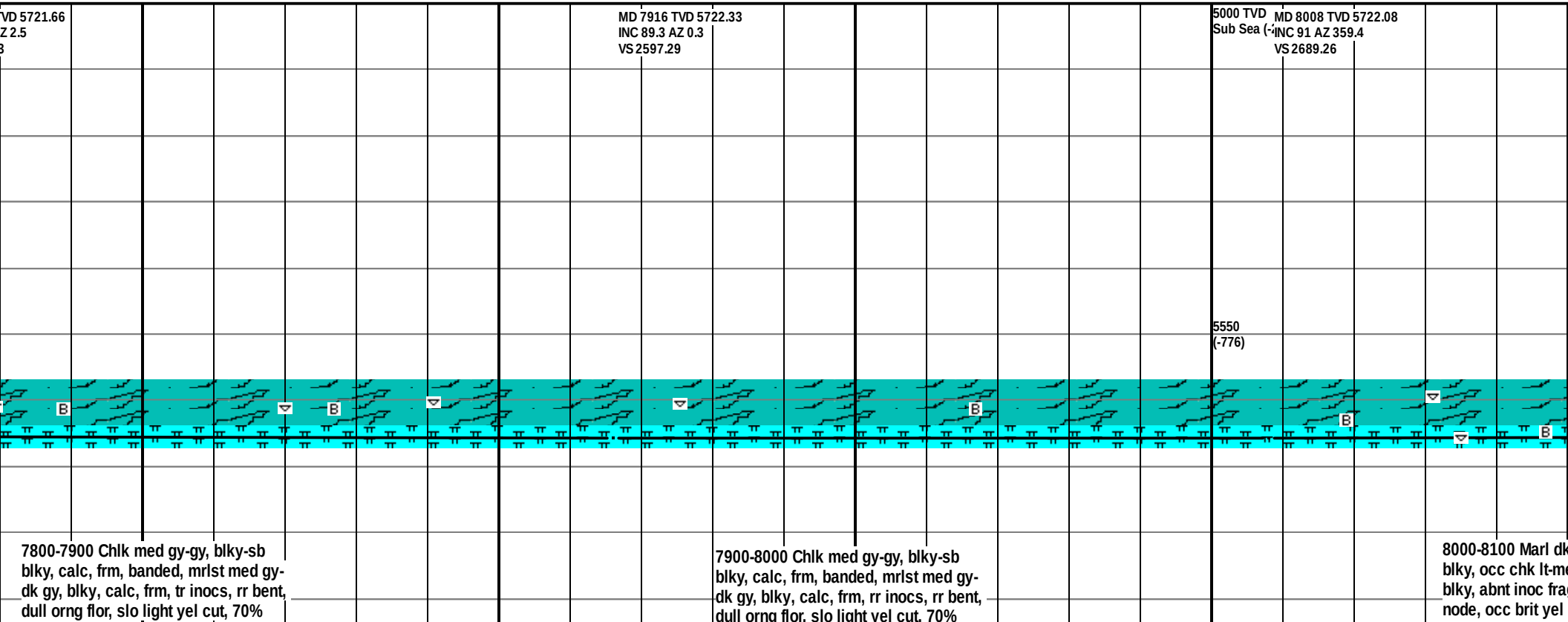
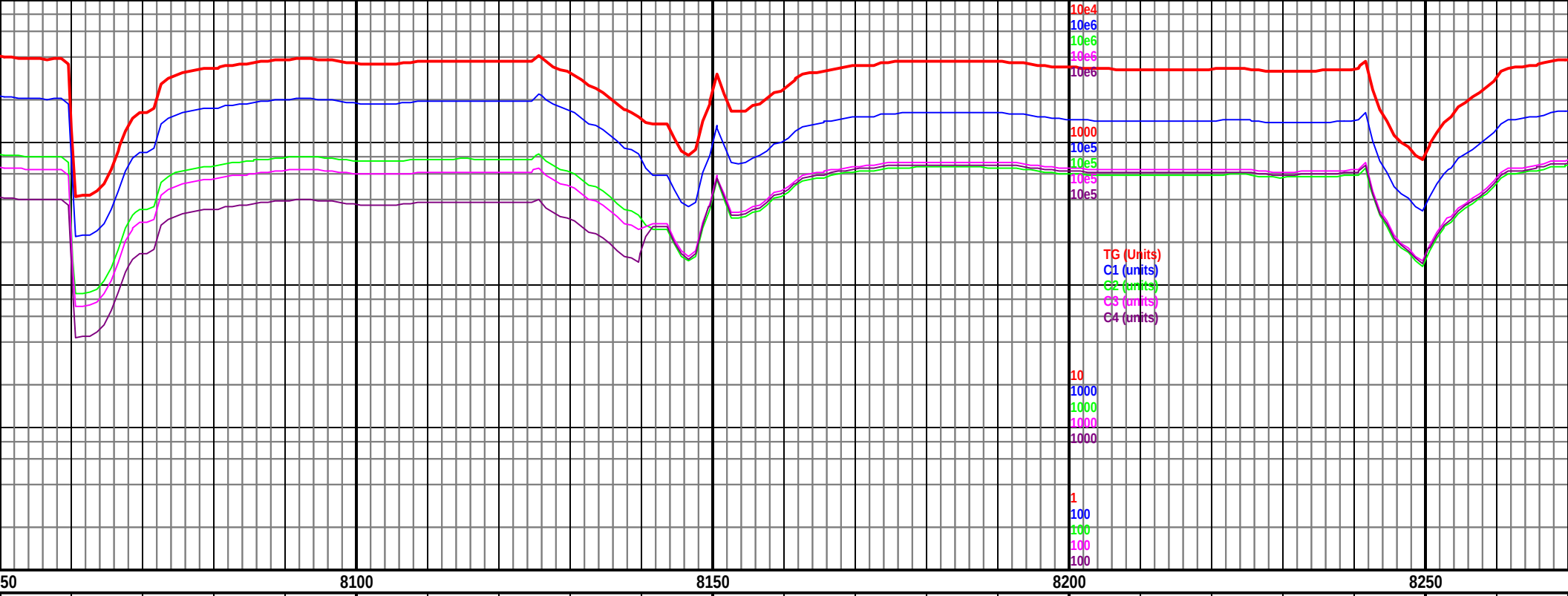
8000
80


VD 5721.66
Z 2.5
3
MD 7916 TVD 5722.33
INC 89.3 AZ 0.3
VS 2597.29
5000 TVD
Sub Sea (-
MD 8008 TVD 5722.08
INC 91 AZ 359.4
VS 2689.26
5550
(-776)
B
7800-7900 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, tr inocs, rr bent, dull orng flor, slo light yel cut, 70%
7900-8000 Chlk med gy-gy, blky-sb blky, calc, frm, banded, mrlst med gy-dk gy, blky, calc, frm, rr inocs, rr bent, dull orng flor, slo light yel cut, 70%
8000-8100 Marl dk
blky, occ chk lt-m
blky, abnt inoc fra
node, occ brit yel



50 8100 8150 8200 8250

MD 8100 TVD 5720.56
INC 90.9 AZ 358.9
VS 2781.24

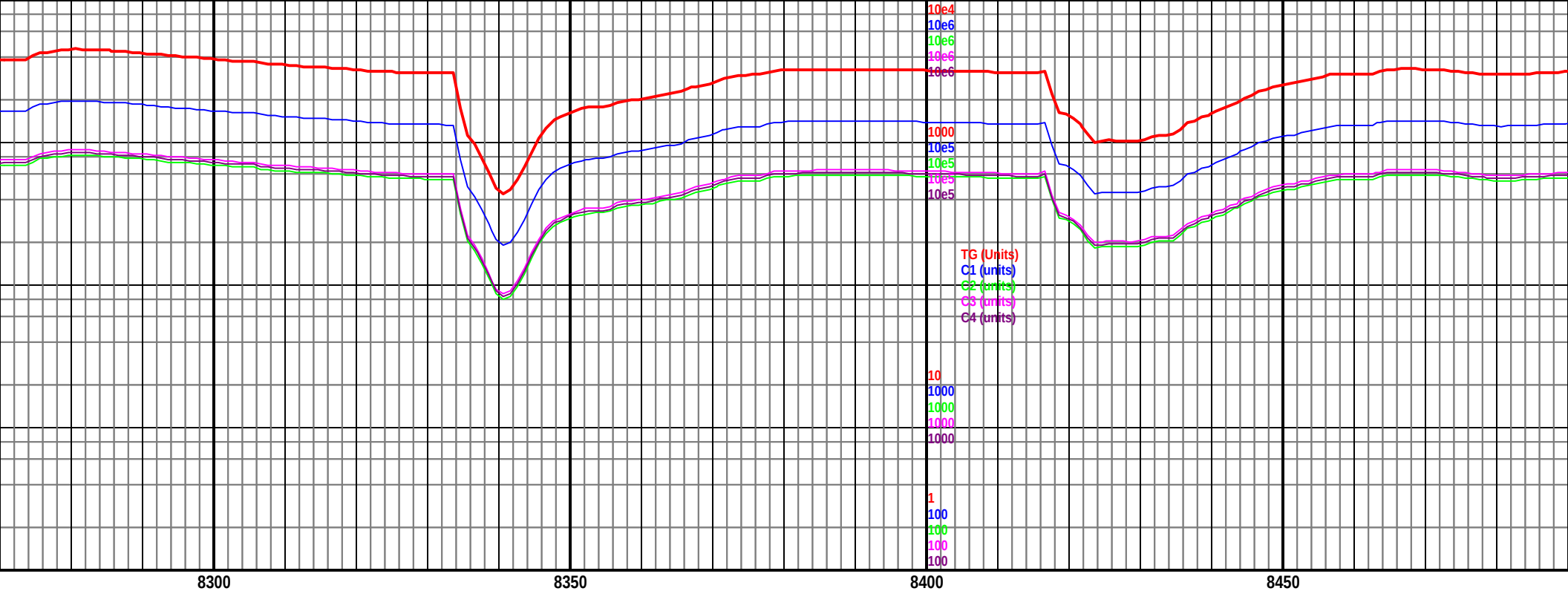
MD 8191 TVD 5719.29
INC 90.7 AZ 358.6a (-226)
VS 2872.23

5550
(-776)

k gy, sl frm-sl hd,
ed gy, sft, banded, sb
gs, occ bent, tr pyr
min flor, slo oil cut,

8100-8200 Marl dk gy, sl frm-sl hd,
blky, occ chk lt-med gy, sft, banded, sb
blky, abnt inoc frags, occ bent, tr pyr
node, occ brit yel min flor, slo oil cut,

8200-8300 Marl dk gy, sl frm-sl hd,
blky, occ chk lt-med gy, sft, banded, sb
blky, abnt inoc frags, occ bent, tr pyr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C1 (units)
C2 (units)
C3 (units)
C4 (units)
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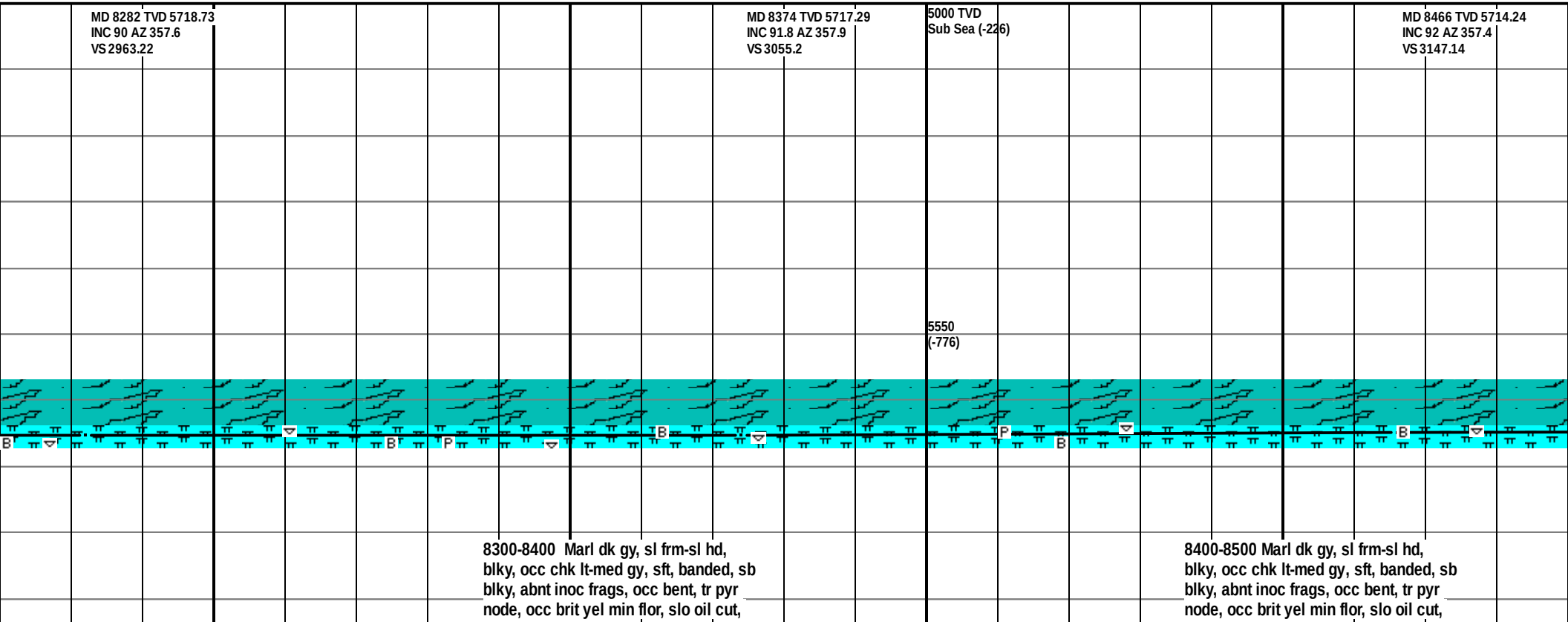
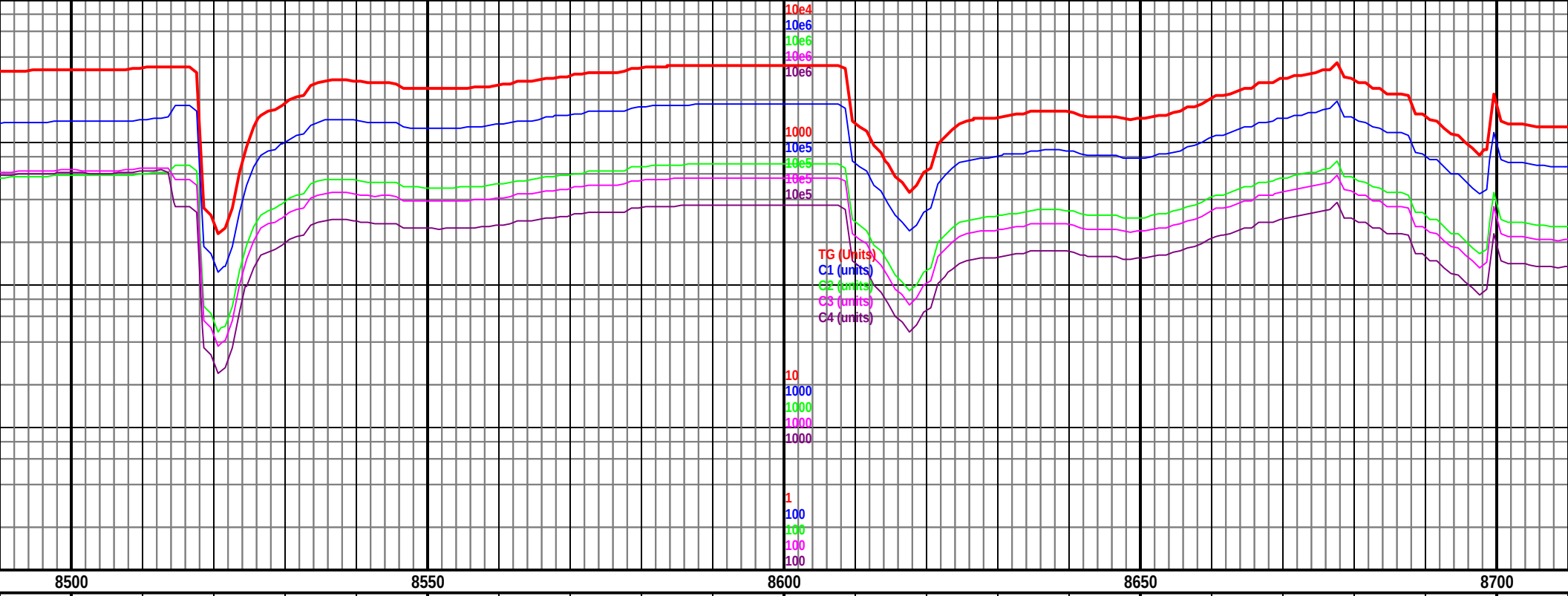

MD 8282 TVD 5718.73
INC 90 AZ 357.6
VS 2963.22
MD 8374 TVD 5717.29
INC 91.8 AZ 357.9
VS 3055.2
5000 TVD
Sub Sea (-226)
MD 8466 TVD 5714.24
INC 92 AZ 357.4
VS 3147.14
5550
(-776)
8300-8400 Marl dk gy, sl frm-sl hd, blky, occ chk lt-med gy, sft, banded, sb blky, abnt inoc frags, occ bent, tr pyr node, occ brit yel min flor, slo oil cut,
8400-8500 Marl dk gy, sl frm-sl hd, blky, occ chk lt-med gy, sft, banded, sb blky, abnt inoc frags, occ bent, tr pyr node, occ brit yel min flor, slo oil cut,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C3 (units)
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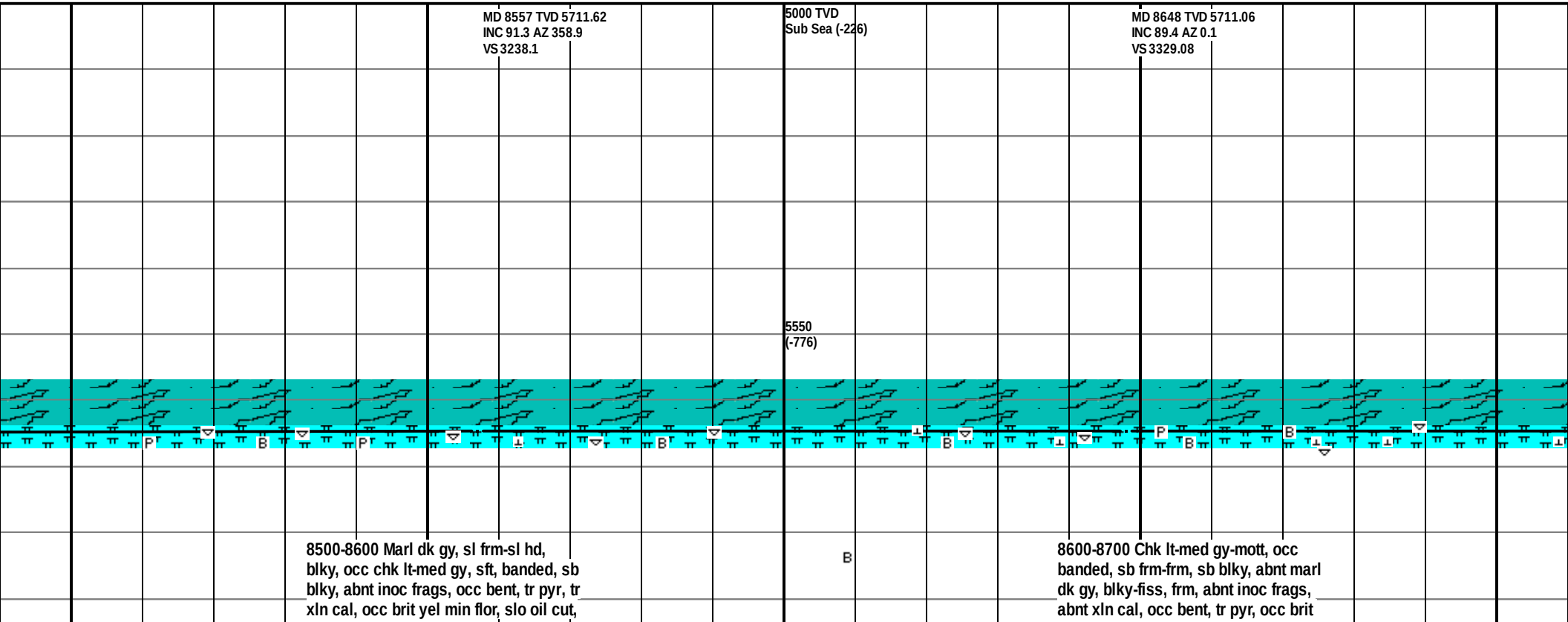
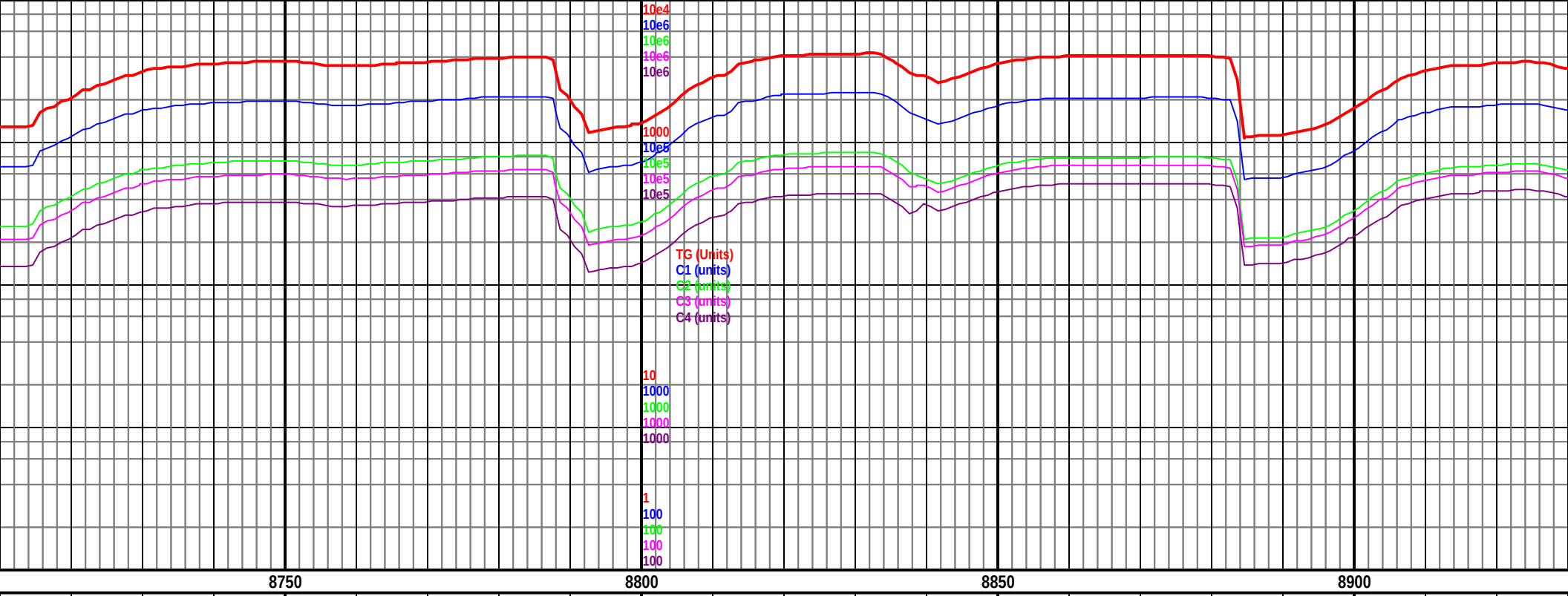
8700


MD 8557 TVD 5711.62
INC 91.3 AZ 358.9
VS 3238.1
5000 TVD
Sub Sea (-226)
MD 8648 TVD 5711.06
INC 89.4 AZ 0.1
VS 3329.08
5550
(-776)
8500-8600 Marl dk gy, sl frm-sl hd, blky, occ chk lt-med gy, sft, banded, sb blky, abnt inoc frags, occ bent, tr pyr, tr xln cal, occ brit yel min flor, slo oil cut,
8600-8700 Chk lt-med gy-mott, occ banded, sb frm-frm, sb blky, abnt marl dk gy, blky-fiss, frm, abnt inoc frags, abnt xln cal, occ bent, tr pyr, occ brit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C1 (units)
C2 (units)
C3 (units)
C4 (units)
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8800
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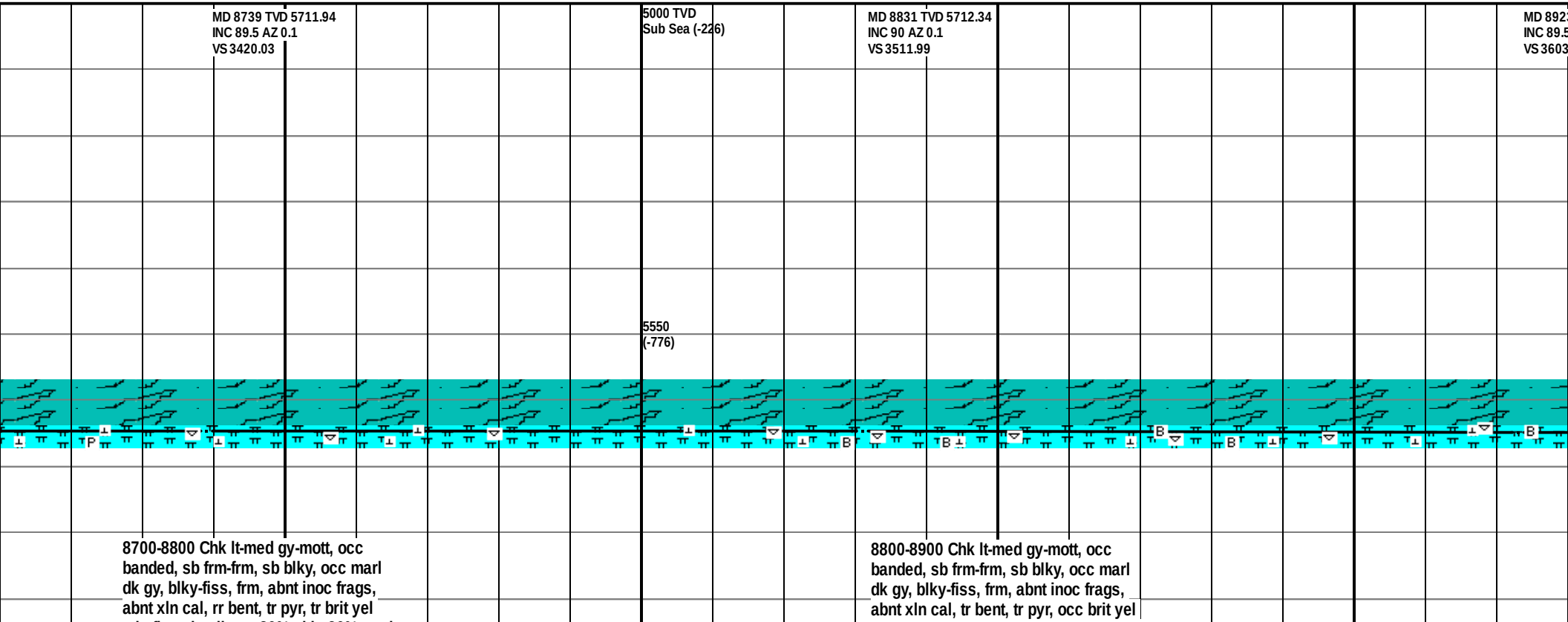
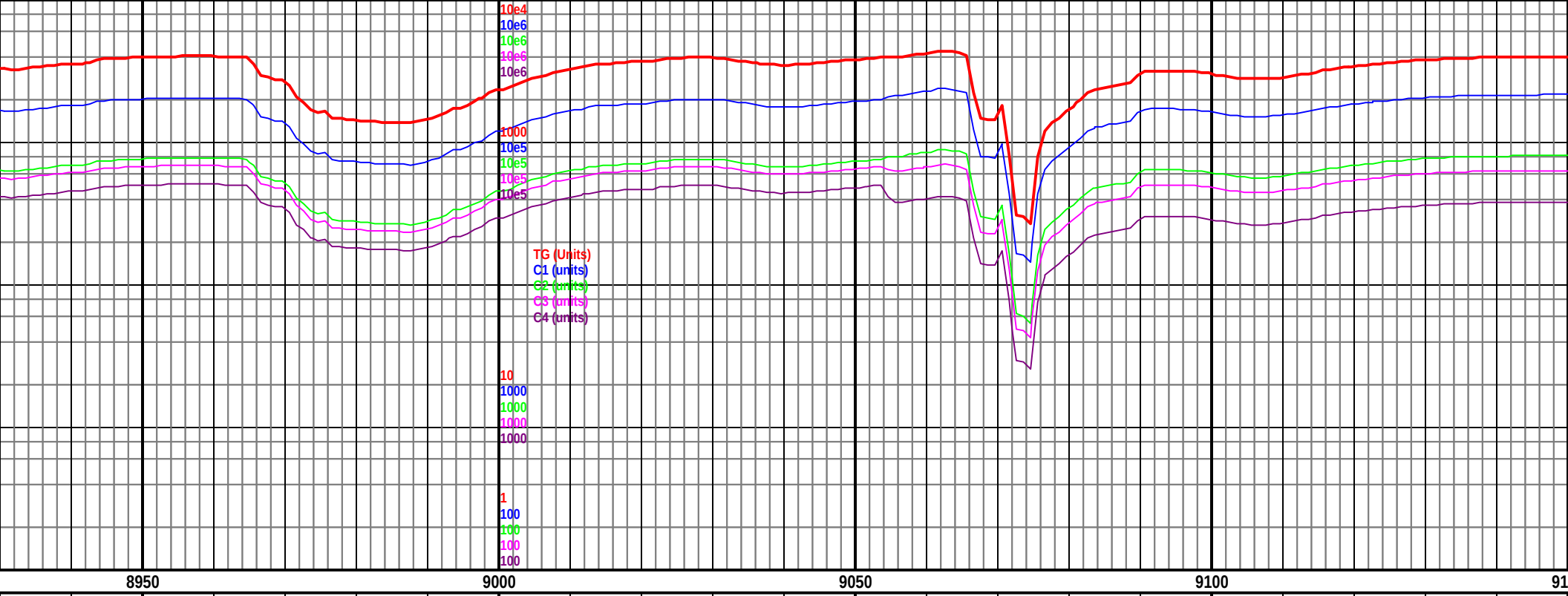
8900


MD 8739 TVD 5711.94
INC 89.5 AZ 0.1
VS 3420.03
5000 TVD
Sub Sea (-226)
MD 8831 TVD 5712.34
INC 90 AZ 0.1
VS 3511.99
MD 892
INC 89.5
VS 3603
5550
(-776)
8700-8800 Chk lt-med gy-mott, occ banded, sb frm-frm, sb blky, occ marl dk gy, blky-fiss, frm, abnt inoc frags, abnt xln cal, rr bent, tr pyr, tr brit yel
8800-8900 Chk lt-med gy-mott, occ banded, sb frm-frm, sb blky, occ marl dk gy, blky-fiss, frm, abnt inoc frags, abnt xln cal, tr bent, tr pyr, occ brit yel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C1 (units)
C2 (units)
C3 (units)
C4 (units)
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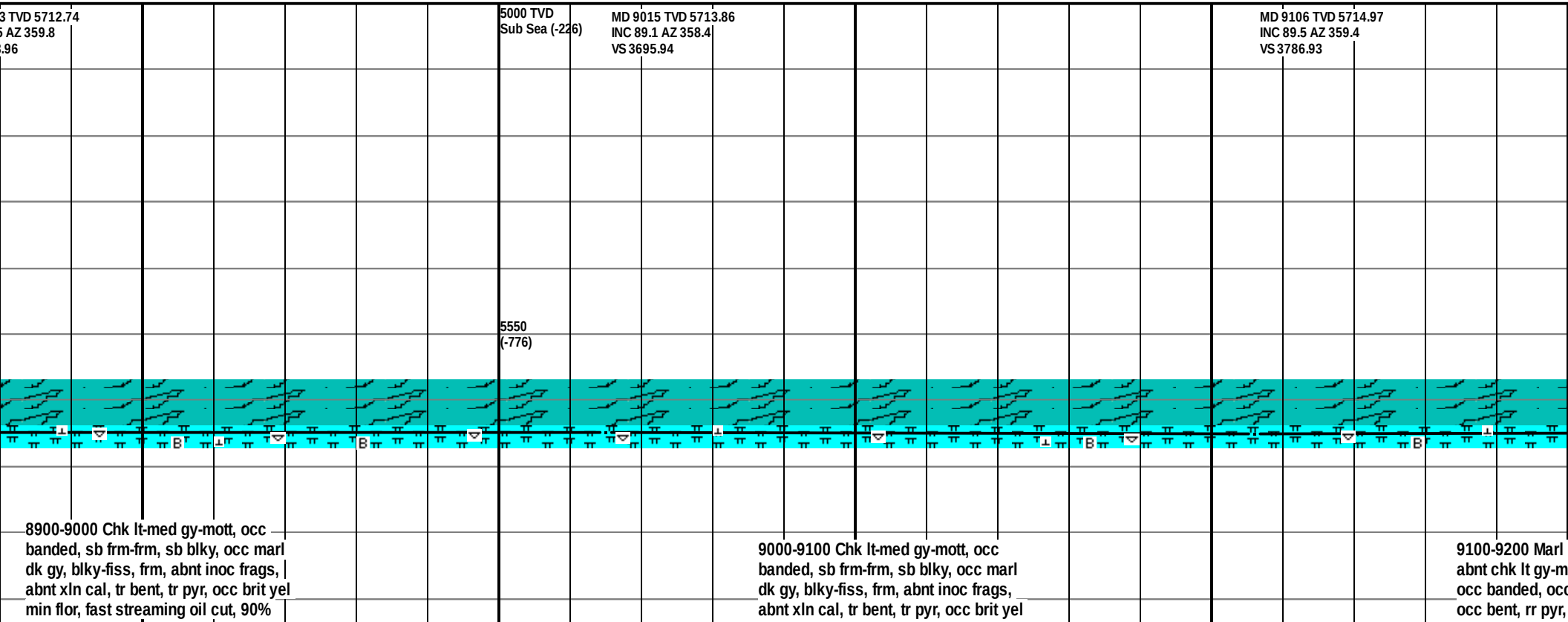
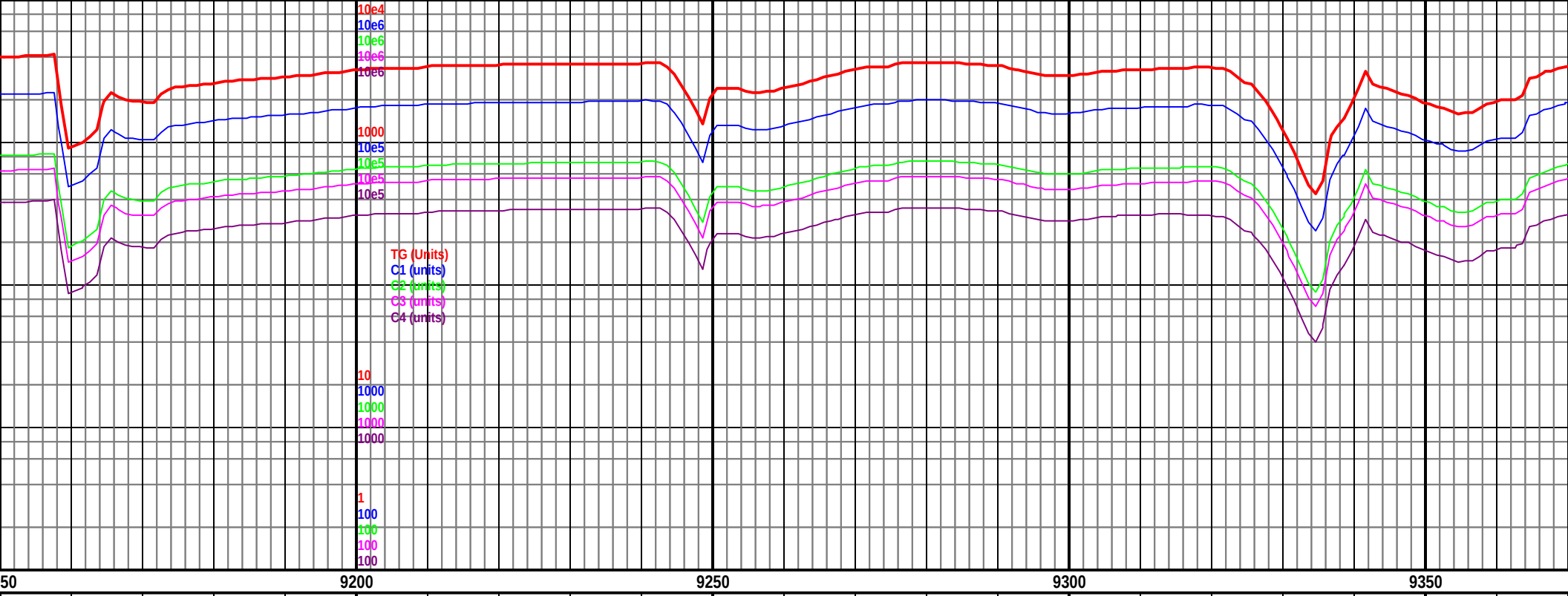
9050
9100
91


3 TVD 5712.74
5 AZ 359.8
.96
5000 TVD
Sub Sea (-226)
MD 9015 TVD 5713.86
INC 89.1 AZ 358.4
VS 3695.94
MD 9106 TVD 5714.97
INC 89.5 AZ 359.4
VS 3786.93
5550
(-776)
8900-9000 Chk lt-med gy-mott, occ banded, sb frm-frm, sb blky, occ marl dk gy, blky-fiss, frm, abnt inoc frags, abnt xln cal, tr bent, tr pyr, occ brit yel min flor, fast streaming oil cut, 90%
9000-9100 Chk lt-med gy-mott, occ banded, sb frm-frm, sb blky, occ marl dk gy, blky-fiss, frm, abnt inoc frags, abnt xln cal, tr bent, tr pyr, occ brit yel
9100-9200 Marl
abnt chk lt gy-m
occ banded, occ
occ bent, rr pyr,



50 9200 9250 9300 9350

MD 9197 TVD 5714.42
INC 91.2 AZ 0.8(6)
VS 3877.89

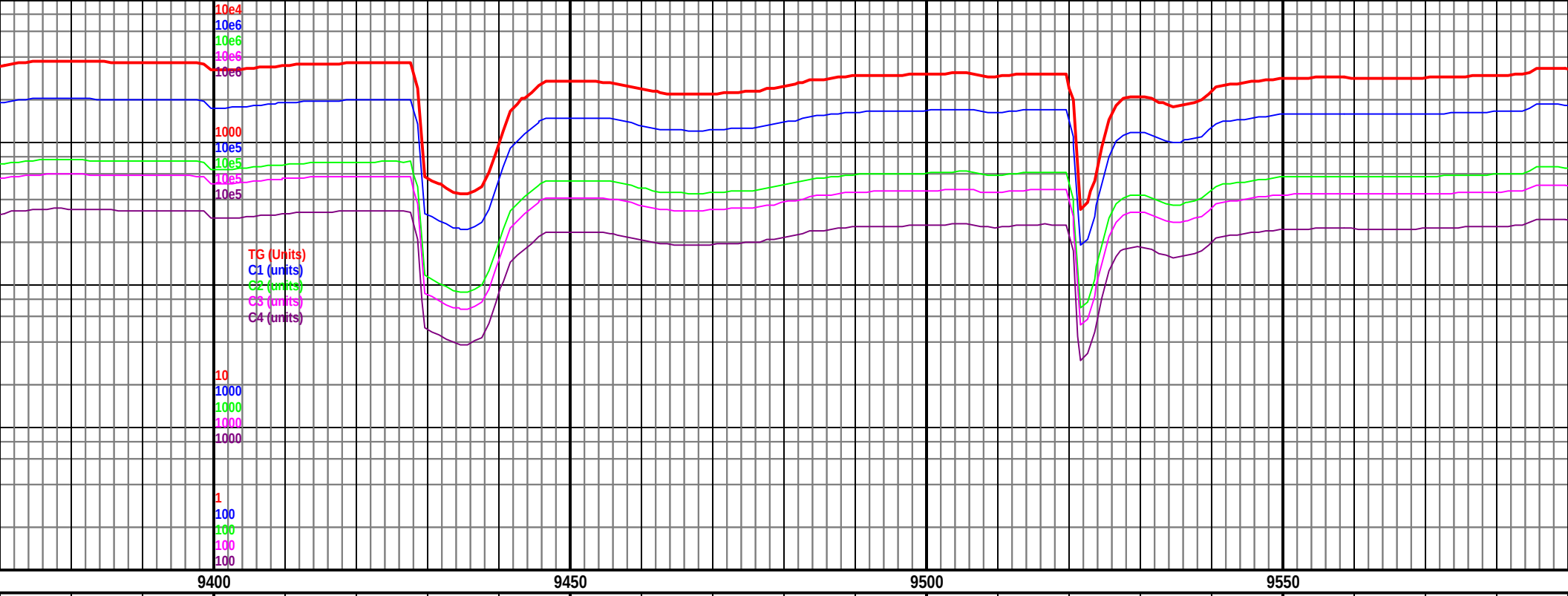
MD 9288 TVD 5713.86
INC 89.5 AZ 359.3
VS 3968.84

5550
(-776)

dk gy, frm, sb blky,
ed gy, sl frm, sb blky,
c inoc frag, occ xln cal,
occ brit yel min flor,

9200-9300 Marl dk gy, frm, sb blky, occ chk lt gy-med gy, sl frm, sb blky, occ banded, occ inoc frag, occ xln cal, occ bent, rr pyr, occ brit yel min flor, mod

9300-9400 Marl dk gy, frm, sb blk
chk lt gy-med gy, sl frm, sb blky,
banded, occ inoc frag, occ xln ca
bent, rr pyr, occ brit yel min flor,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TG (Units)
C1 (units)
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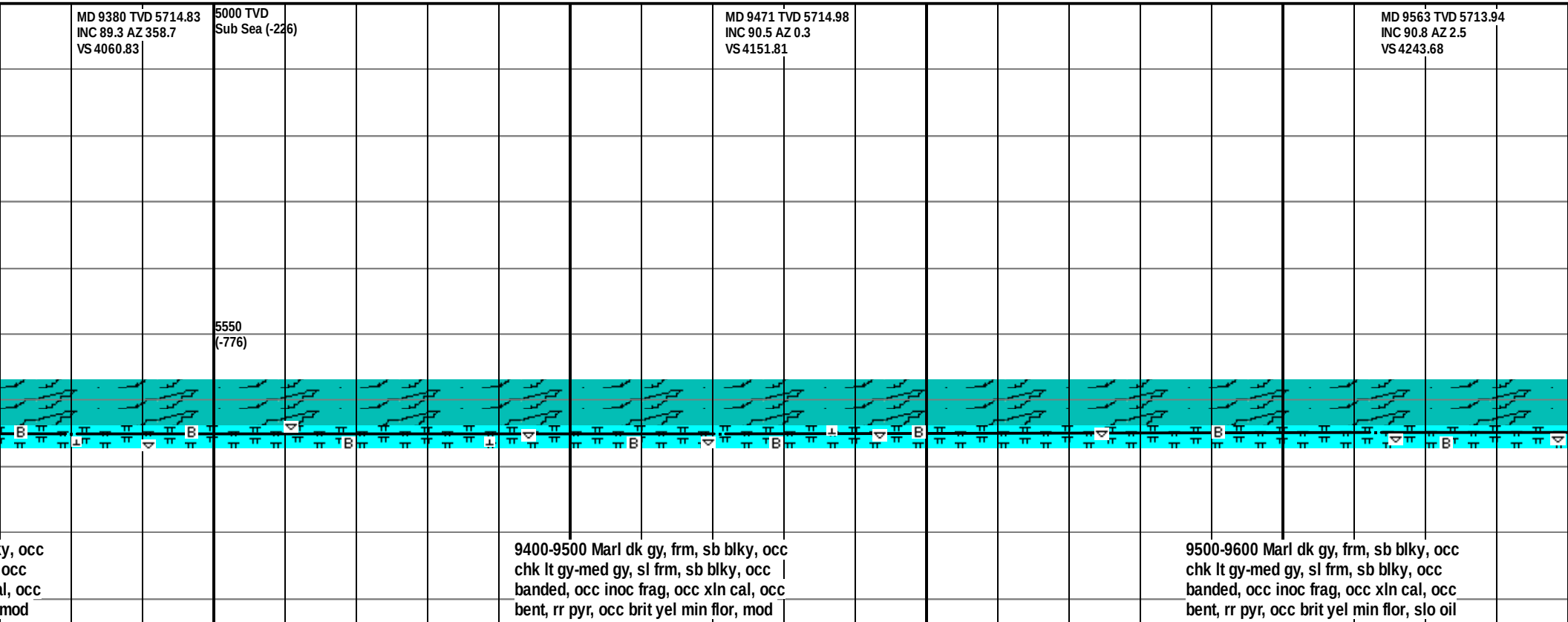
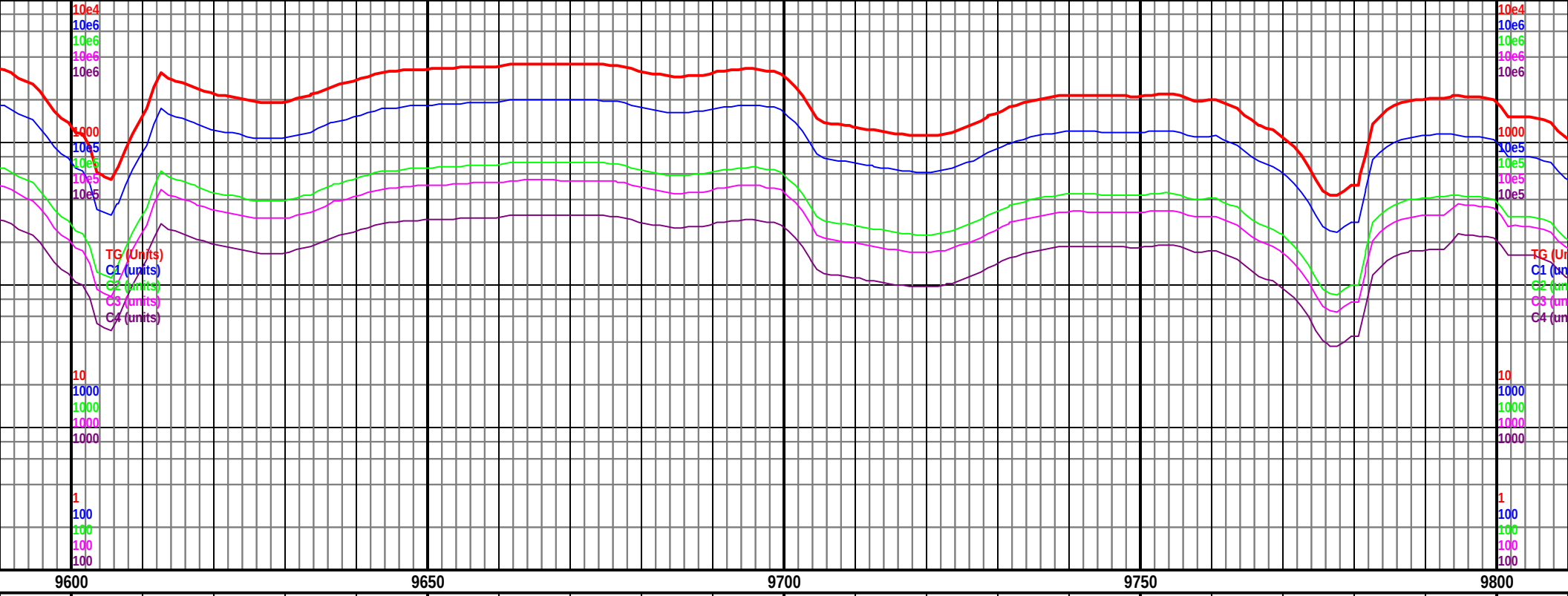

MD 9380 TVD 5714.83
INC 89.3 AZ 358.7
VS 4060.83
5000 TVD
Sub Sea (-226)
MD 9471 TVD 5714.98
INC 90.5 AZ 0.3
VS 4151.81
MD 9563 TVD 5713.94
INC 90.8 AZ 2.5
VS 4243.68
5550
(-776)
y, occ
occ
l, occ
mod
9400-9500 Marl dk gy, frm, sb blky, occ chk lt gy-med gy, sl frm, sb blky, occ banded, occ inoc frag, occ xln cal, occ bent, rr pyr, occ brit yel min flor, mod
9500-9600 Marl dk gy, frm, sb blky, occ chk lt gy-med gy, sl frm, sb blky, occ banded, occ inoc frag, occ xln cal, occ bent, rr pyr, occ brit yel min flor, slo oil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C1 (units)
C2 (units)
C3 (units)
C4 (units)
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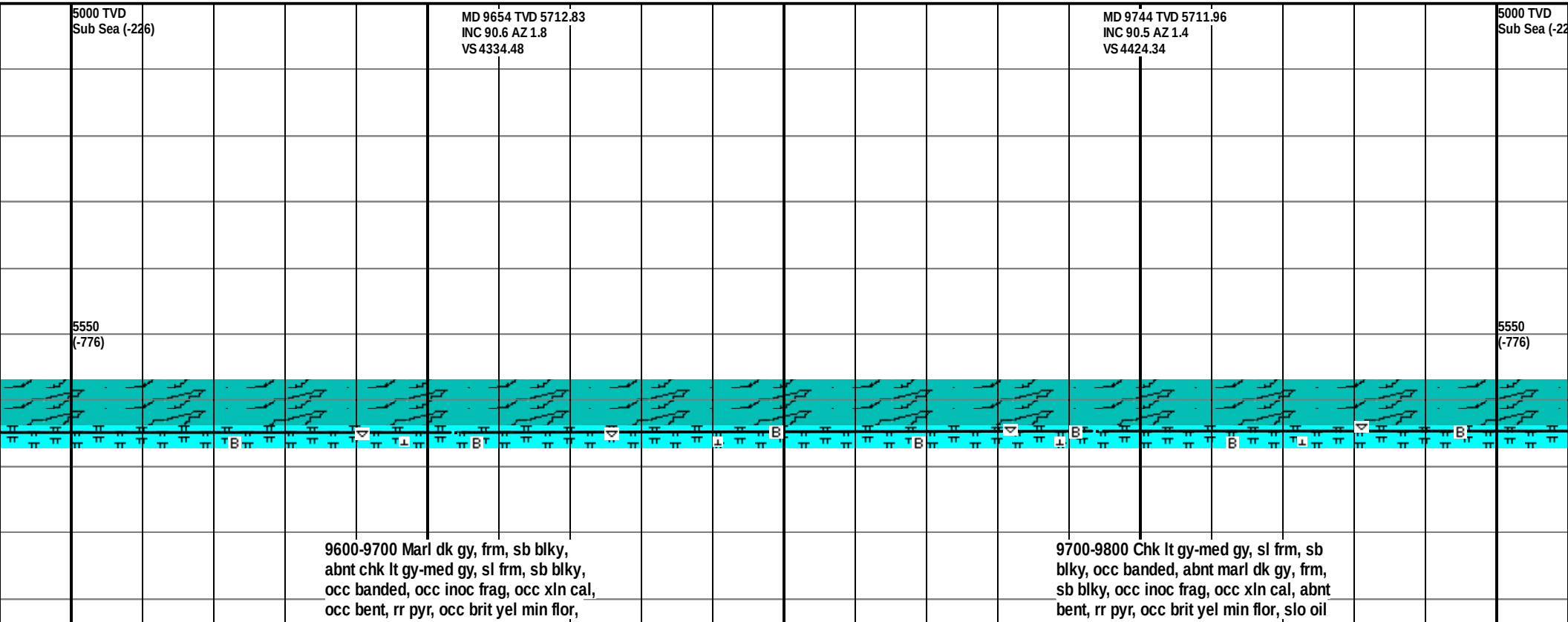
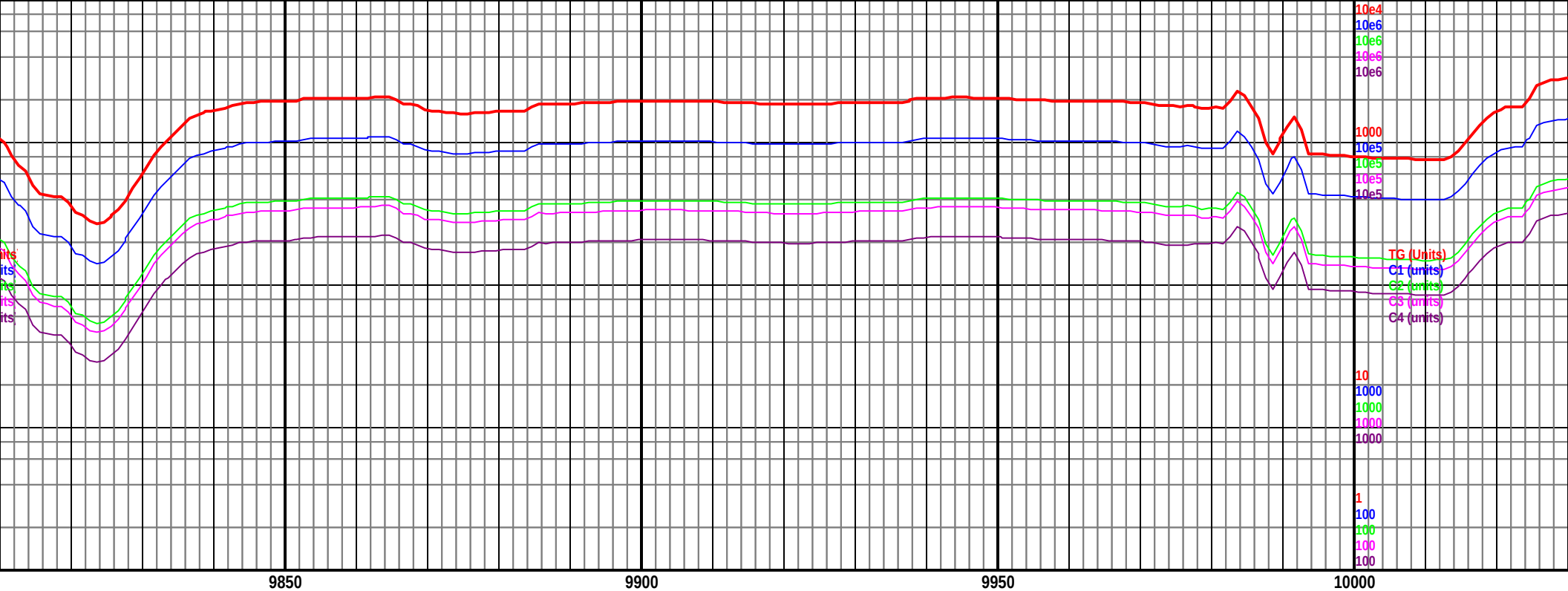
9700
9750
9800


5000 TVD
Sub Sea (-226)
MD 9654 TVD 5712.83
INC 90.6 AZ 1.8
VS 4334.48
MD 9744 TVD 5711.96
INC 90.5 AZ 1.4
VS 4424.34
5550
(-776)
9600-9700 Marl dk gy, frm, sb blky,
abnt chk lt gy-med gy, sl frm, sb blky,
occ banded, occ inoc frag, occ xln cal,
occ bent, rr pyr, occ brit yel min flor,
9700-9800 Chk lt gy-med gy, sl frm, sb
blky, occ banded, abnt marl dk gy, frm,
sb blky, occ inoc frag, occ xln cal, abnt
bent, rr pyr, occ brit yel min flor, slo oil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TG (Units)
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9900
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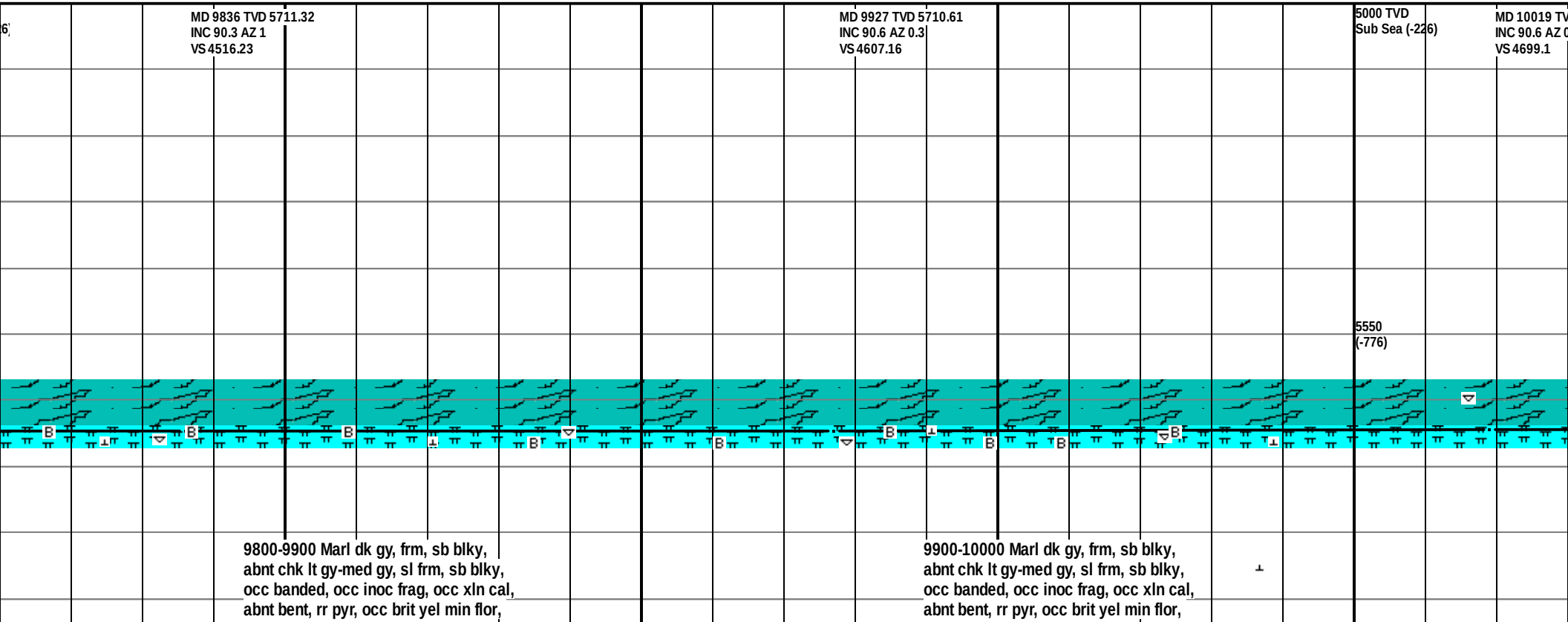
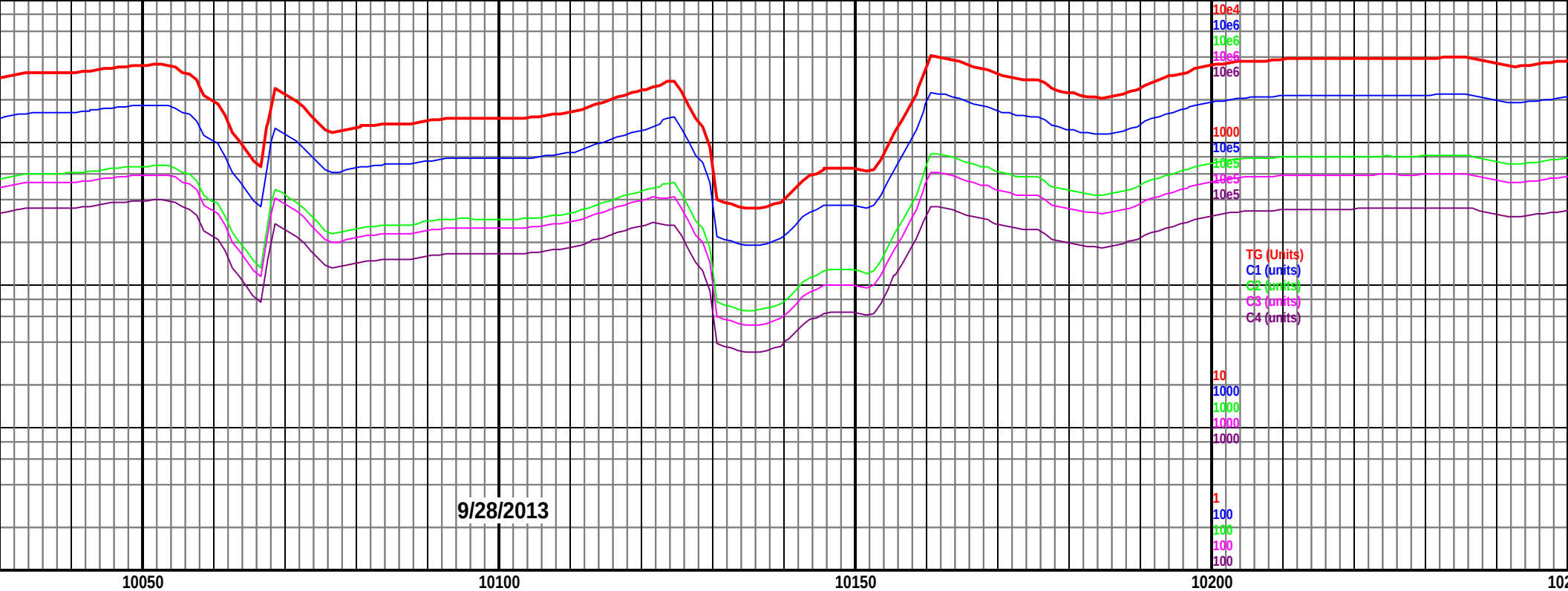
10000


MD 9836 TVD 5711.32
INC 90.3 AZ 1
VS 4516.23
MD 9927 TVD 5710.61
INC 90.6 AZ 0.3
VS 4607.16
5000 TVD
Sub Sea (-226)
MD 10019 TV
INC 90.6 AZ
VS 4699.1
5550
(-776)
9800-9900 Marl dk gy, frm, sb blky,
abnt chk lt gy-med gy, sl frm, sb blky,
occ banded, occ inoc frag, occ xln cal,
abnt bent, rr pyr, occ brit yel min flor,
9900-10000 Marl dk gy, frm, sb blky,
abnt chk lt gy-med gy, sl frm, sb blky,
occ banded, occ inoc frag, occ xln cal,
abnt bent, rr pyr, occ brit yel min flor,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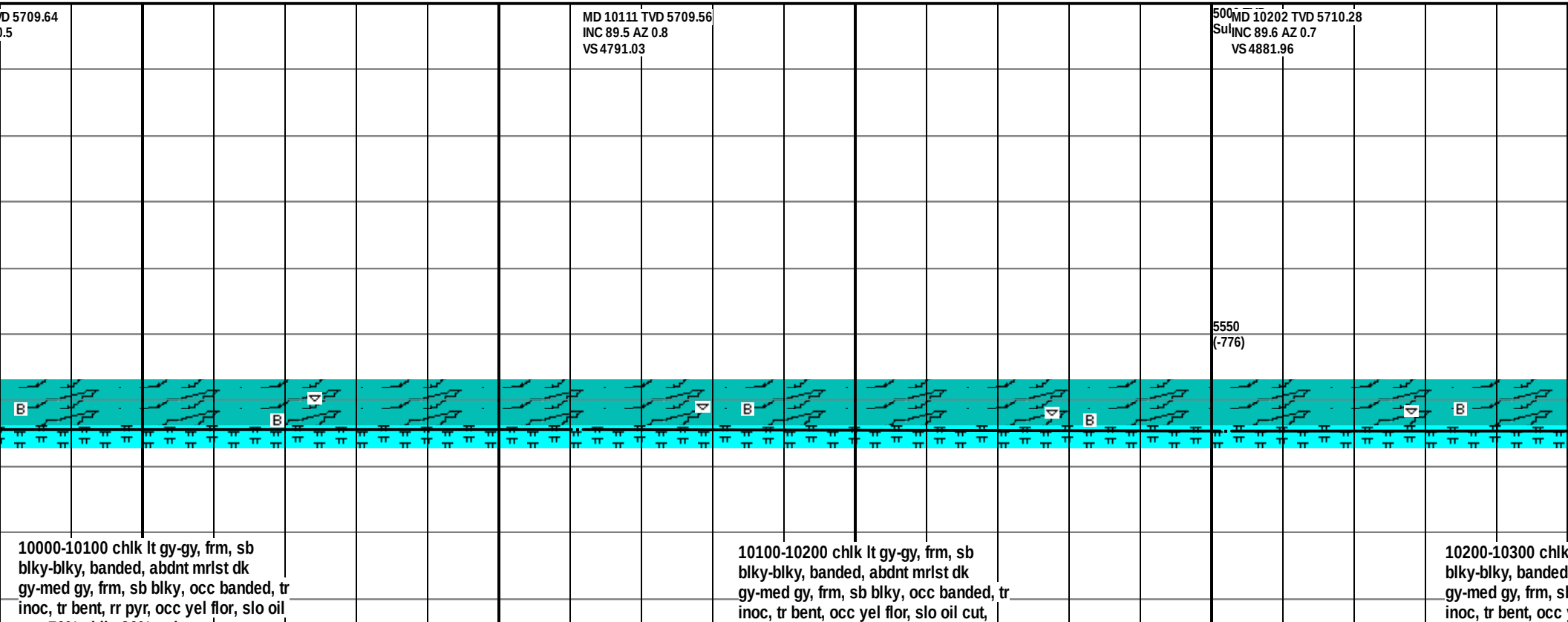
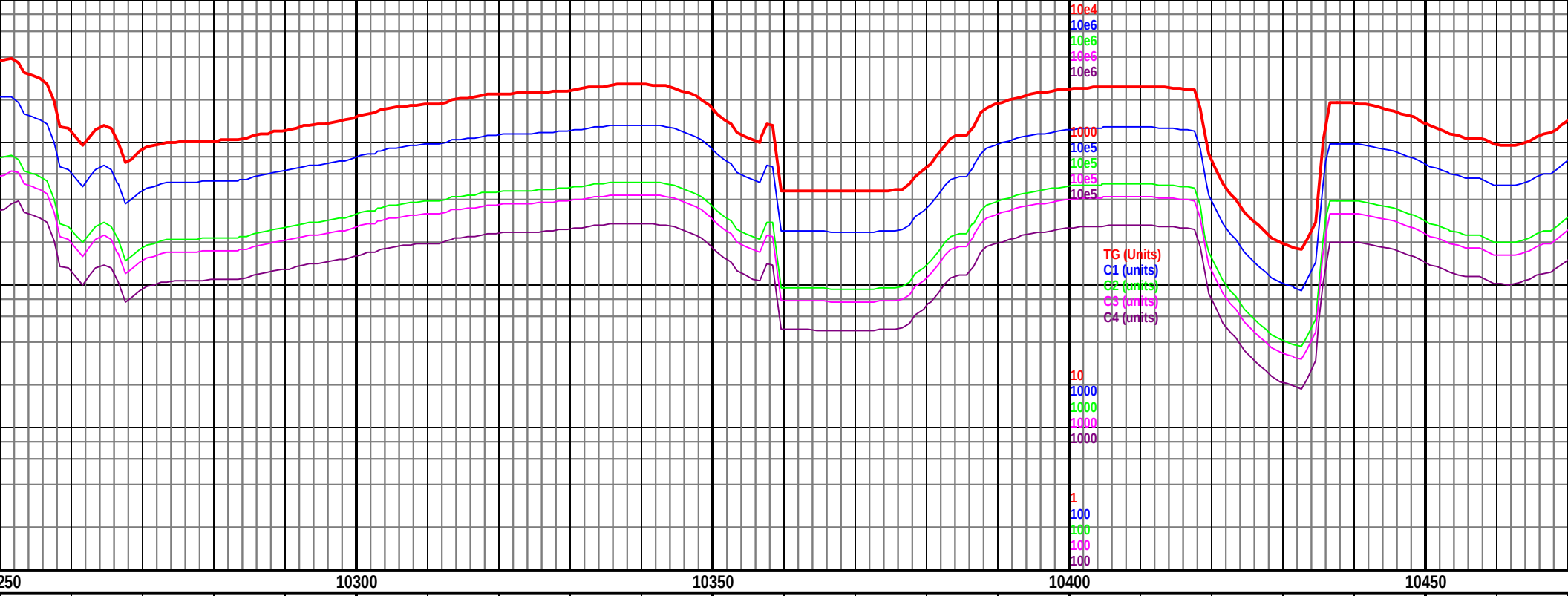
10200


D 5709.64
.5
MD 10111 TVD 5709.56
INC 89.5 AZ 0.8
VS 4791.03
500
Sul
MD 10202 TVD 5710.28
INC 89.6 AZ 0.7
VS 4881.96
5550
(-776)
B
B
B
B
B
10000-10100 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, sb blky, occ banded, tr inoc, tr bent, rr pyr, occ yel flor, slo oil
10100-10200 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, sb blky, occ banded, tr inoc, tr bent, occ yel flor, slo oil cut,
10200-10300 chlk
blky-blky, banded
gy-med gy, frm, sl
inoc, tr bent, occ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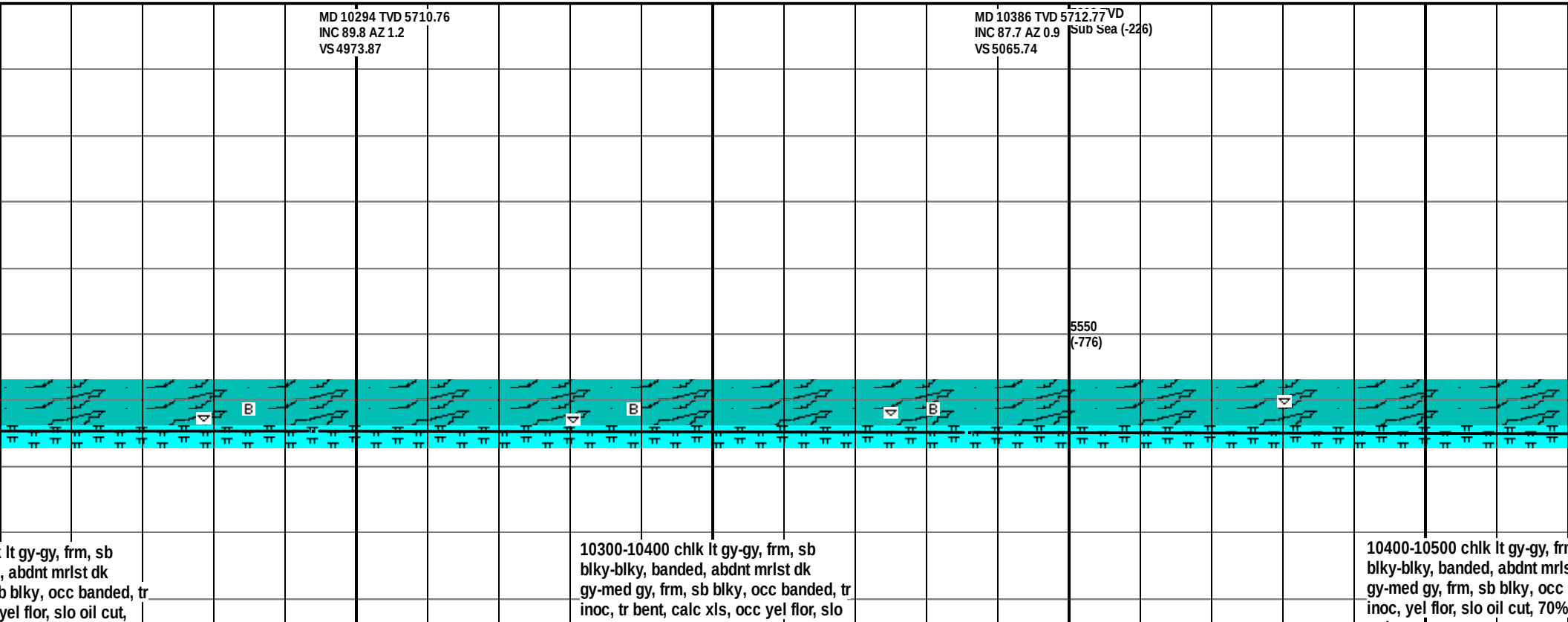
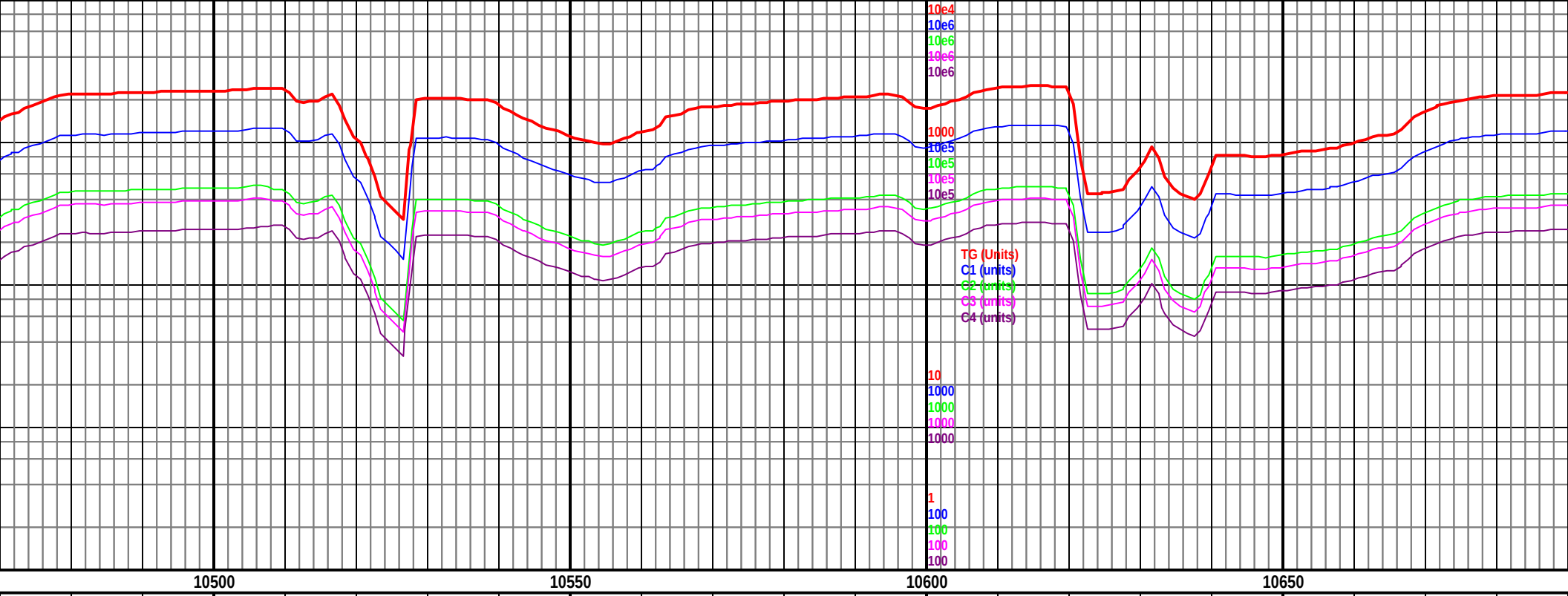

MD 10294 TVD 5710.76
INC 89.8 AZ 1.2
VS 4973.87
MD 10386 TVD 5712.77
INC 87.7 AZ 0.9
VS 5065.74
Sub Sea (-226)
5550
(-776)
B
B
B
lt gy-gy, frm, sb
, abdnt mrlst dk
b blky, occ banded, tr
yel flor, slo oil cut,
10300-10400 chlk lt gy-gy, frm, sb
blky-blky, banded, abdnt mrlst dk
gy-med gy, frm, sb blky, occ banded, tr
inoc, tr bent, calc xls, occ yel flor, slo
10400-10500 chlk lt gy-gy, fr
blky-blky, banded, abdnt mrls
gy-med gy, frm, sb blky, occ
inoc, yel flor, slo oil cut, 70%


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
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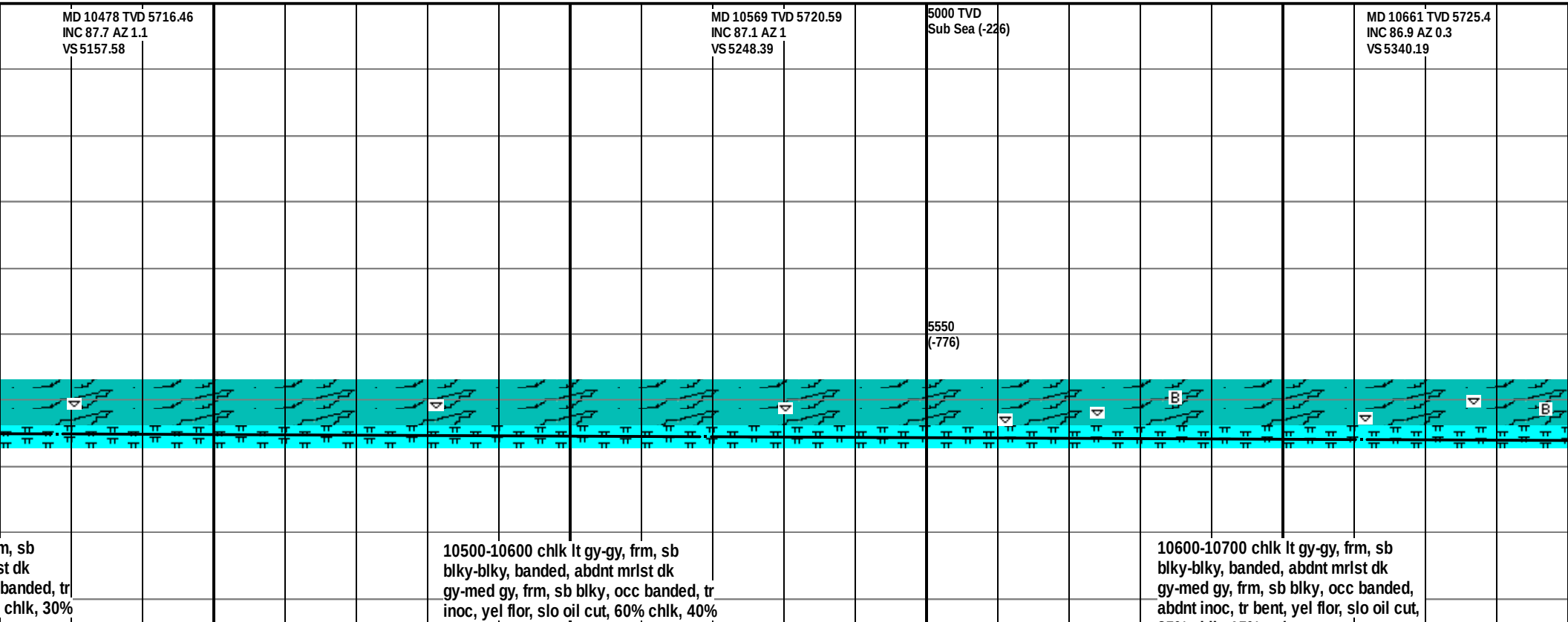
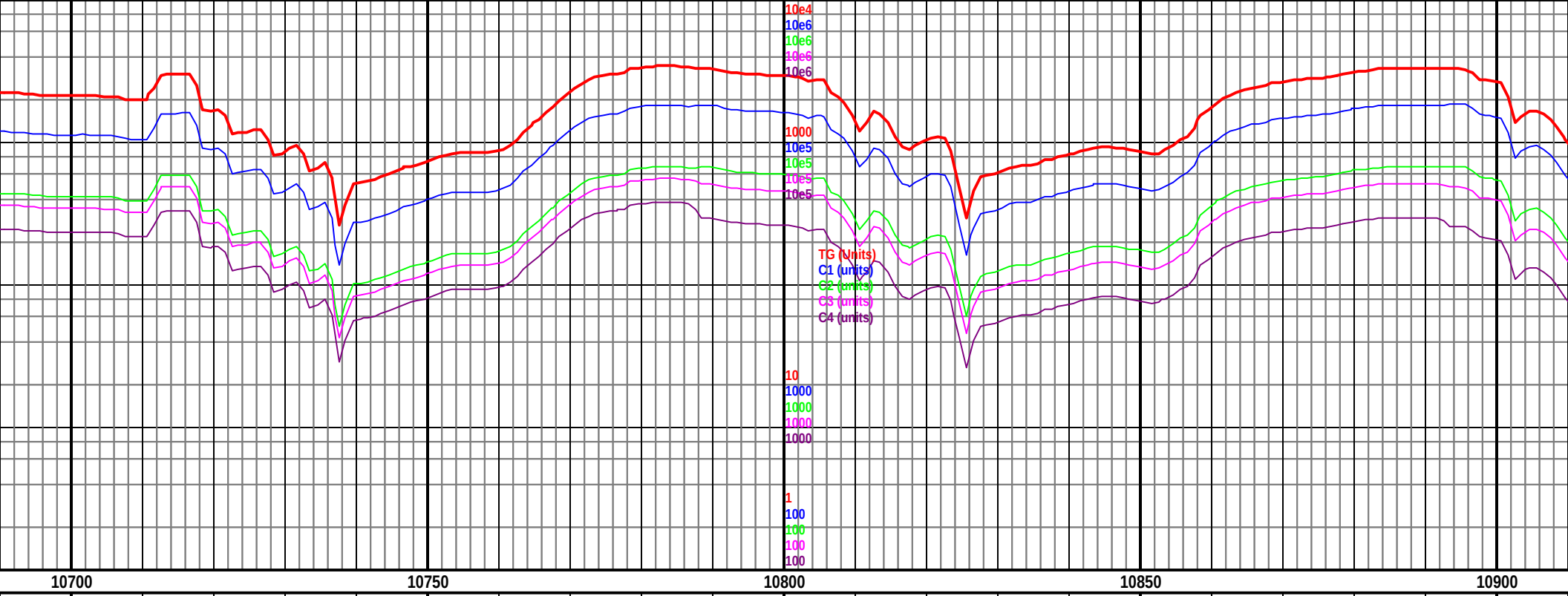
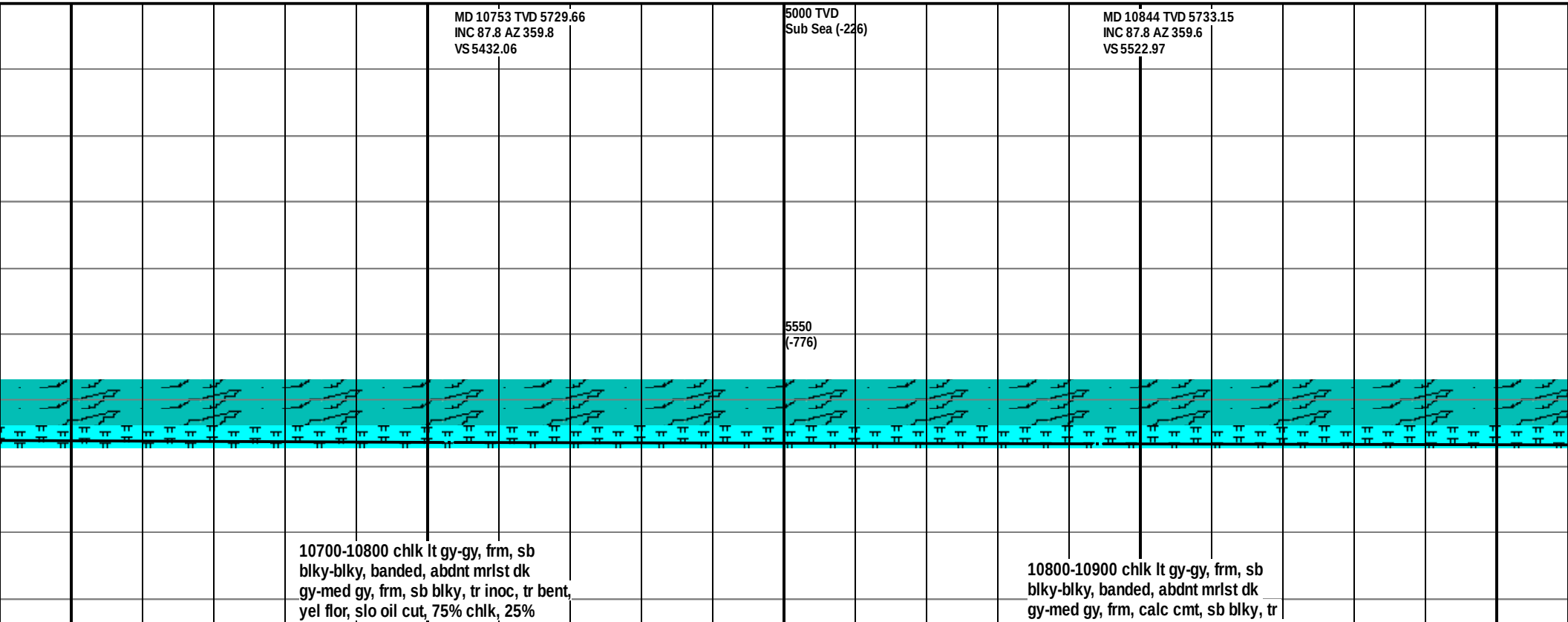
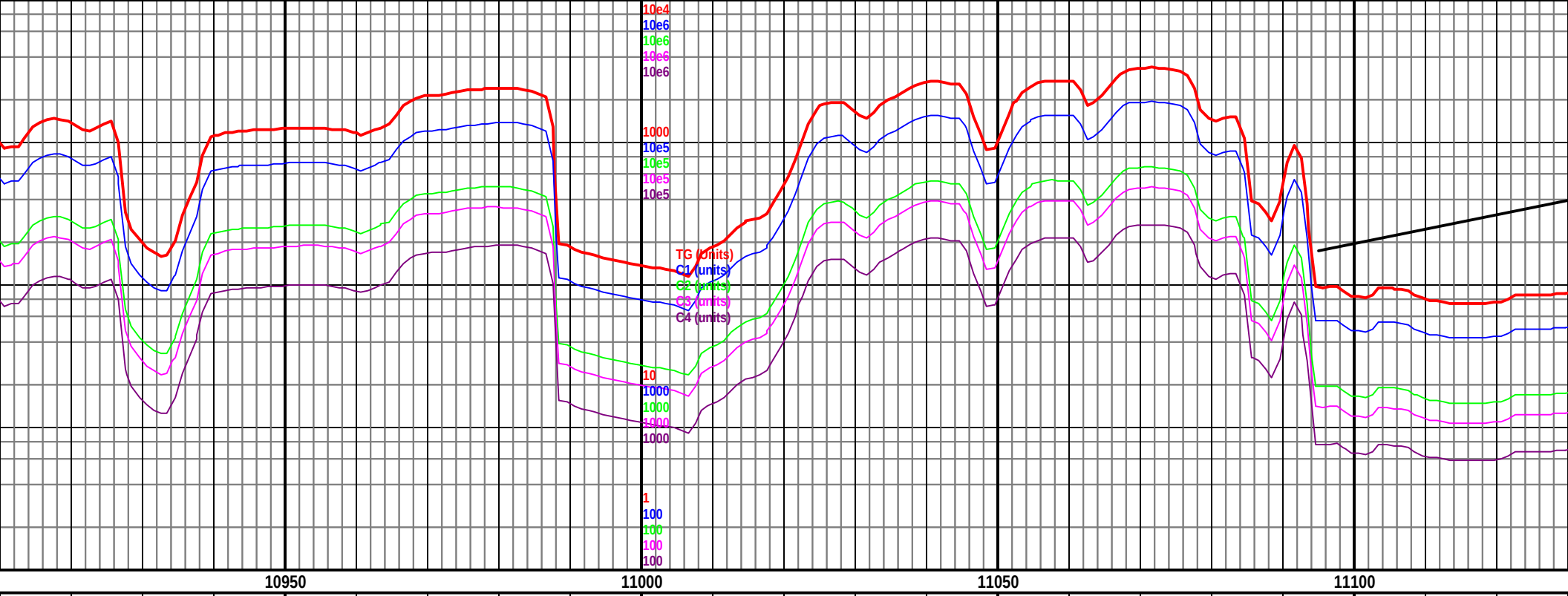
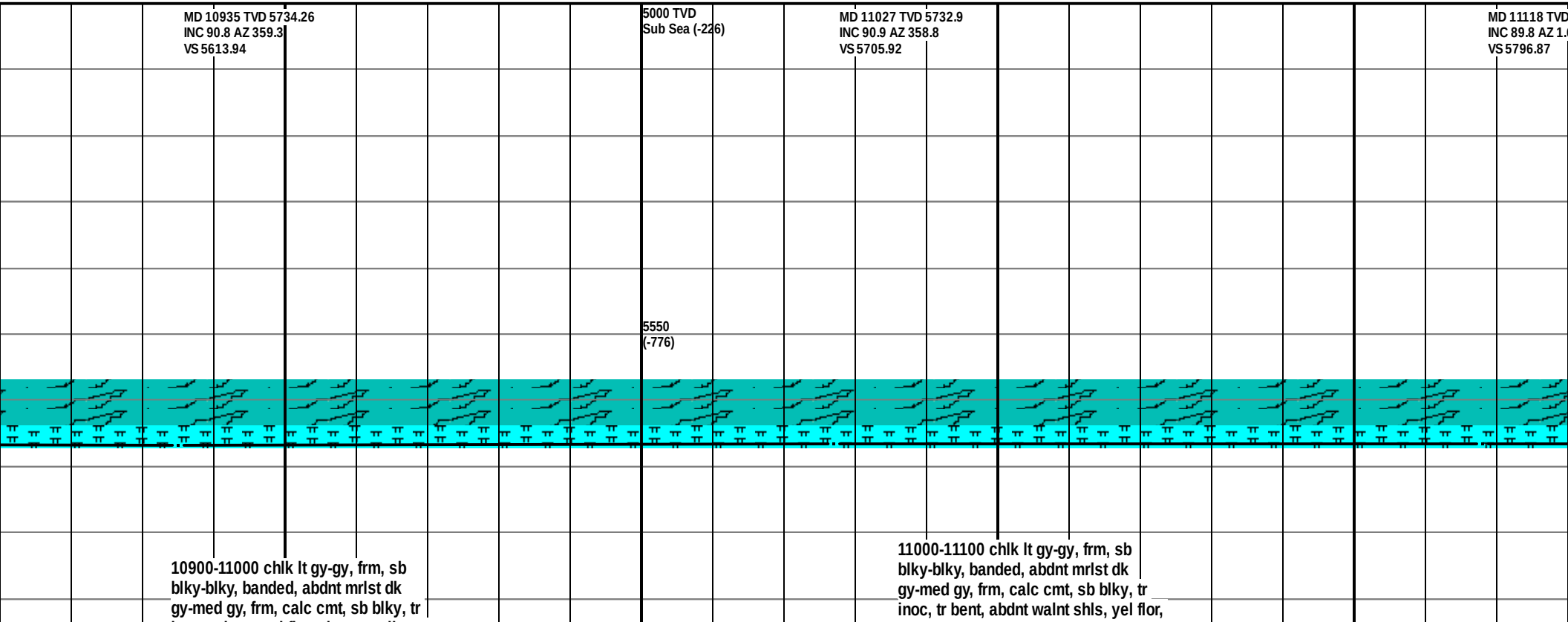
100
100
100
10500
10550
10600
10650

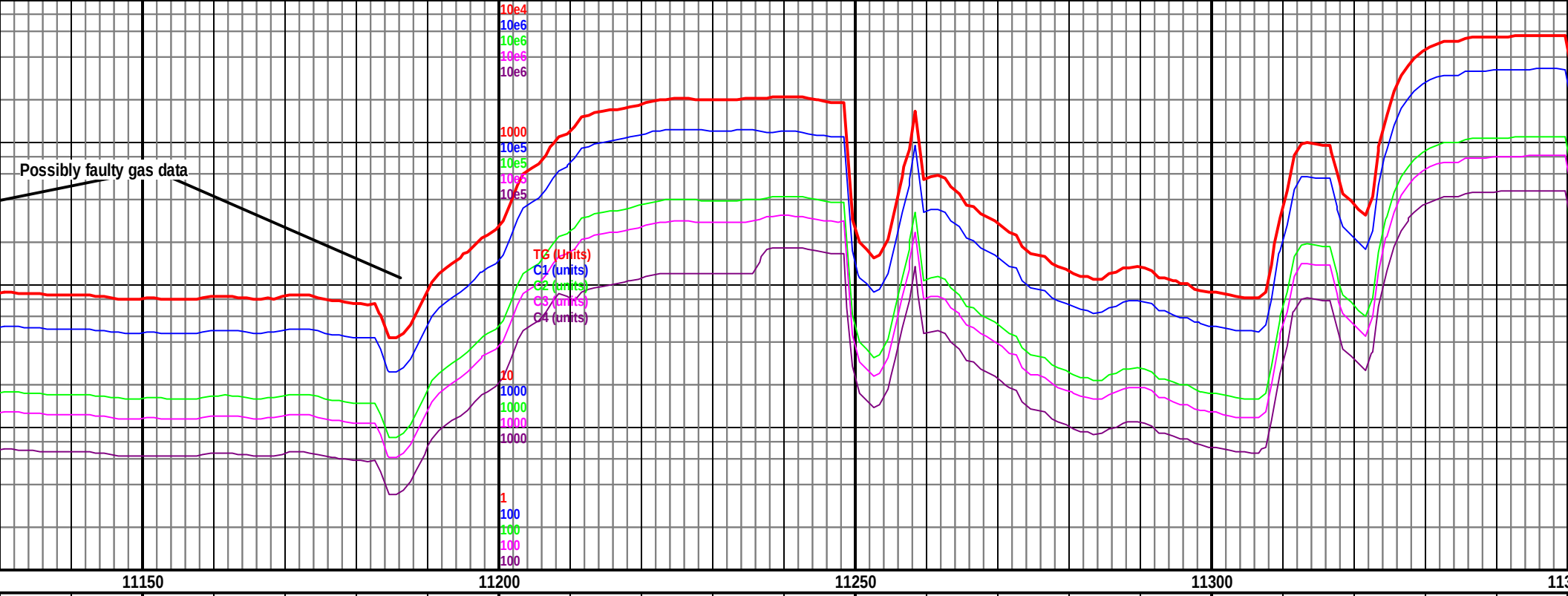

MD 10478 TVD 5716.46
INC 87.7 AZ 1.1
VS 5157.58
MD 10569 TVD 5720.59
INC 87.1 AZ 1
VS 5248.39
5000 TVD
Sub Sea (-226)
MD 10661 TVD 5725.4
INC 86.9 AZ 0.3
VS 5340.19
5550
(-776)
B
B
m, sb
st dk
banded, tr
chlk, 30%
10500-10600 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, sb blky, occ banded, tr inoc, yel flor, slo oil cut, 60% chlk, 40%
10600-10700 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, sb blky, occ banded, abdnt inoc, tr bent, yel flor, slo oil cut,

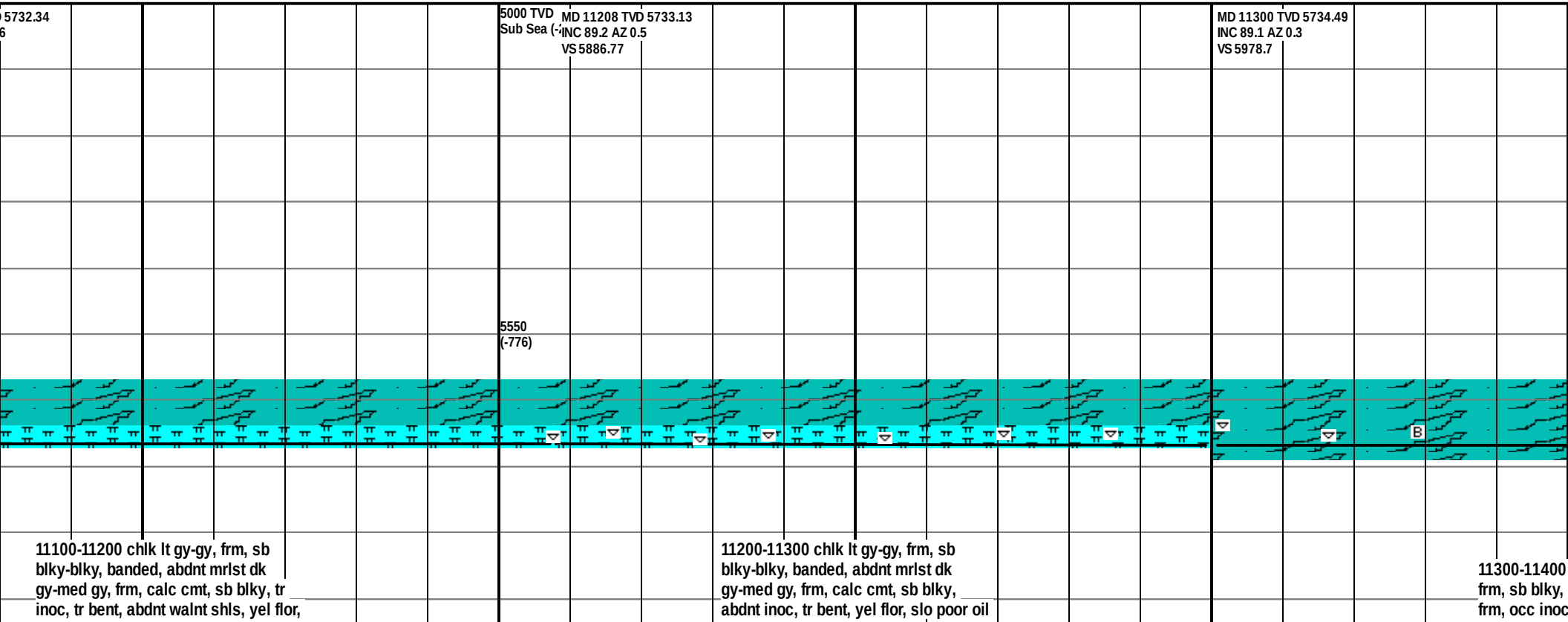

10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
10700
10750
10800
10850
10900

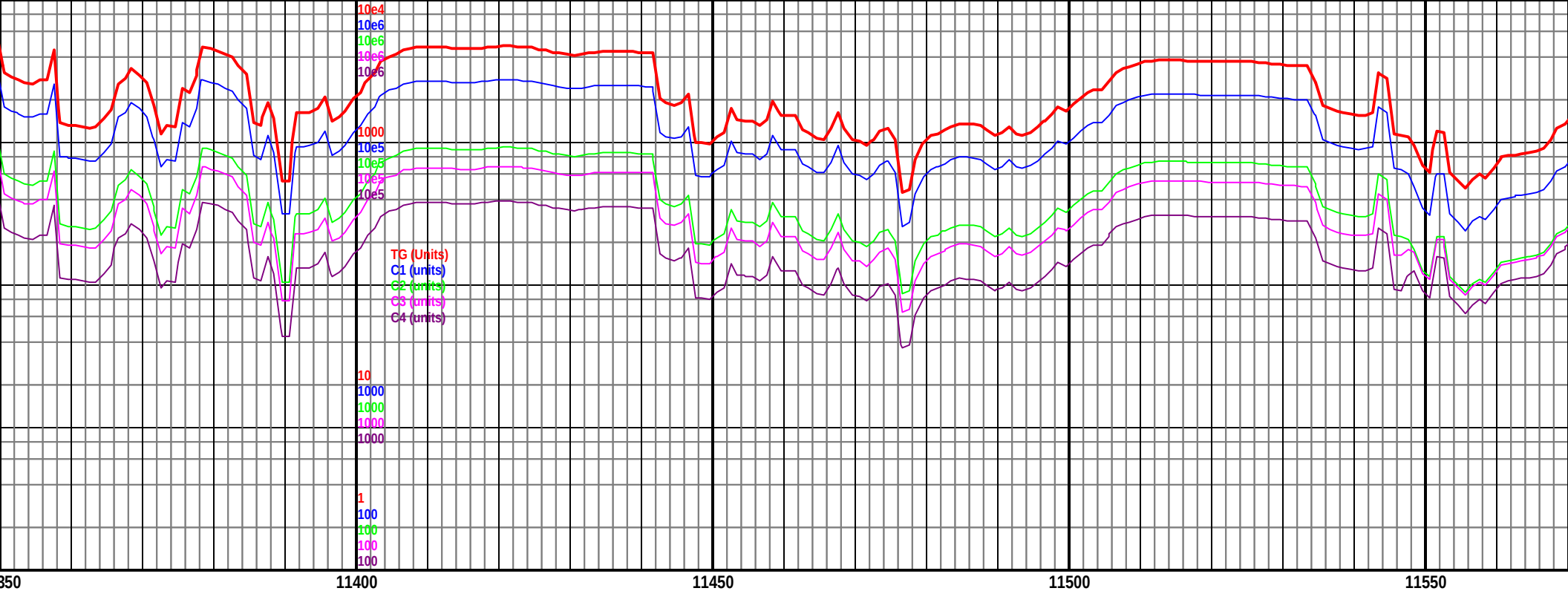

MD 10753 TVD 5729.66
INC 87.8 AZ 359.8
VS 5432.06
5000 TVD
Sub Sea (-226)
MD 10844 TVD 5733.15
INC 87.8 AZ 359.6
VS 5522.97
5550
(-776)
10700-10800 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, sb blky, tr inoc, tr bent, yel flor, slo oil cut, 75% chlk, 25%
10800-10900 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, calc cmt, sb blky, tr


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
10950
11000
11050
11100


MD 10935 TVD 5734.26
INC 90.8 AZ 359.3
VS 5613.94
5000 TVD
Sub Sea (-226)
MD 11027 TVD 5732.9
INC 90.9 AZ 358.8
VS 5705.92
MD 11118 TVD
INC 89.8 AZ 1.
VS 5796.87
5550
(-776)
10900-11000 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, calc cmt, sb blky, tr
11000-11100 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, calc cmt, sb blky, tr inoc, tr bent, abdnt walnt shls, yel flor,


Possibly faulty gas data
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
10
1000
1000
1000
1000
1
100
100
100
100
11150
11200
11250
11300


5732.34
6
5000 TVD
Sub Sea (-
MD 11208 TVD 5733.13
INC 89.2 AZ 0.5
VS 5886.77
MD 11300 TVD 5734.49
INC 89.1 AZ 0.3
VS 5978.7
5550
(-776)
11100-11200 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, calc cmt, sb blky, tr inoc, tr bent, abdnt walnt shls, yel flor,
11200-11300 chlk lt gy-gy, frm, sb blky-blky, banded, abdnt mrlst dk gy-med gy, frm, calc cmt, sb blky, abdnt inoc, tr bent, yel flor, slo poor oil
11300-11400
frm, sb blky,
frm, occ inoc



350 11400 11450 11500 11550

MD 11390 TVD 5735.67
INC 89.4 AZ 2.4
VS 6068.57

Sea (-226)

MD 11482 TVD 5737.68
INC 88.1 AZ 3.4
VS 6160.27

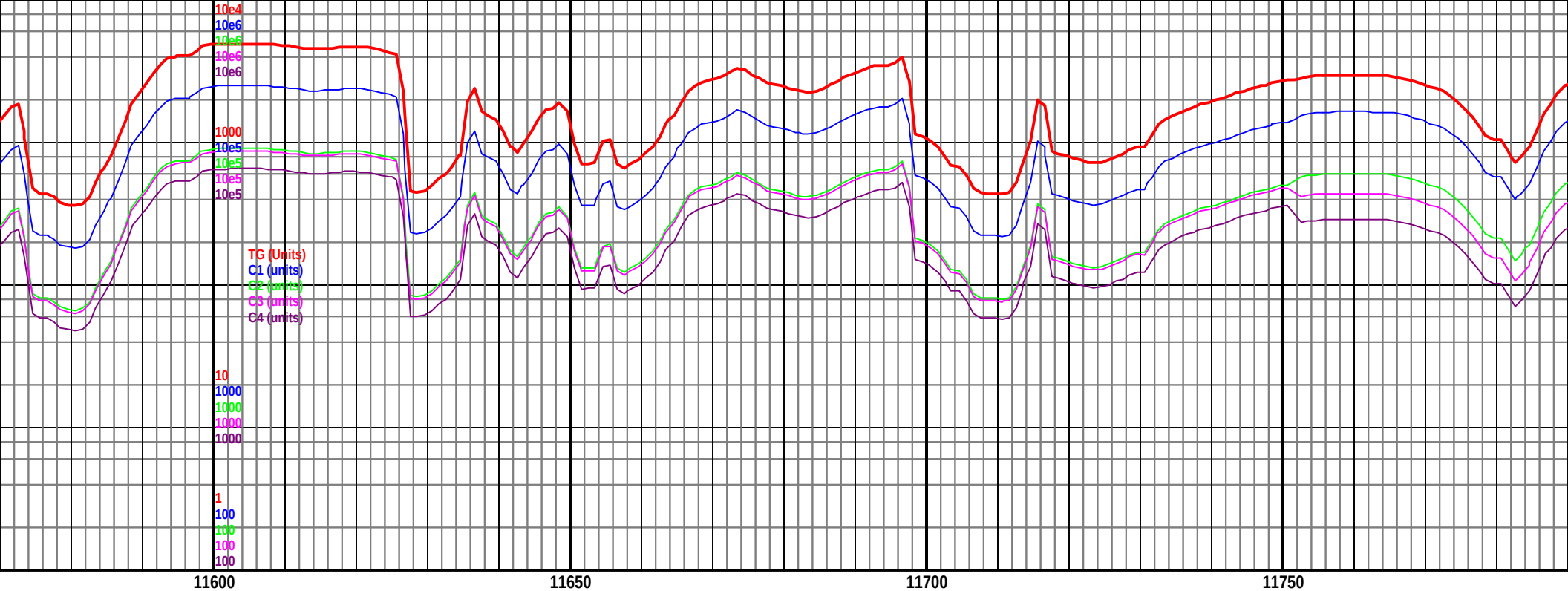
5550
(-776)

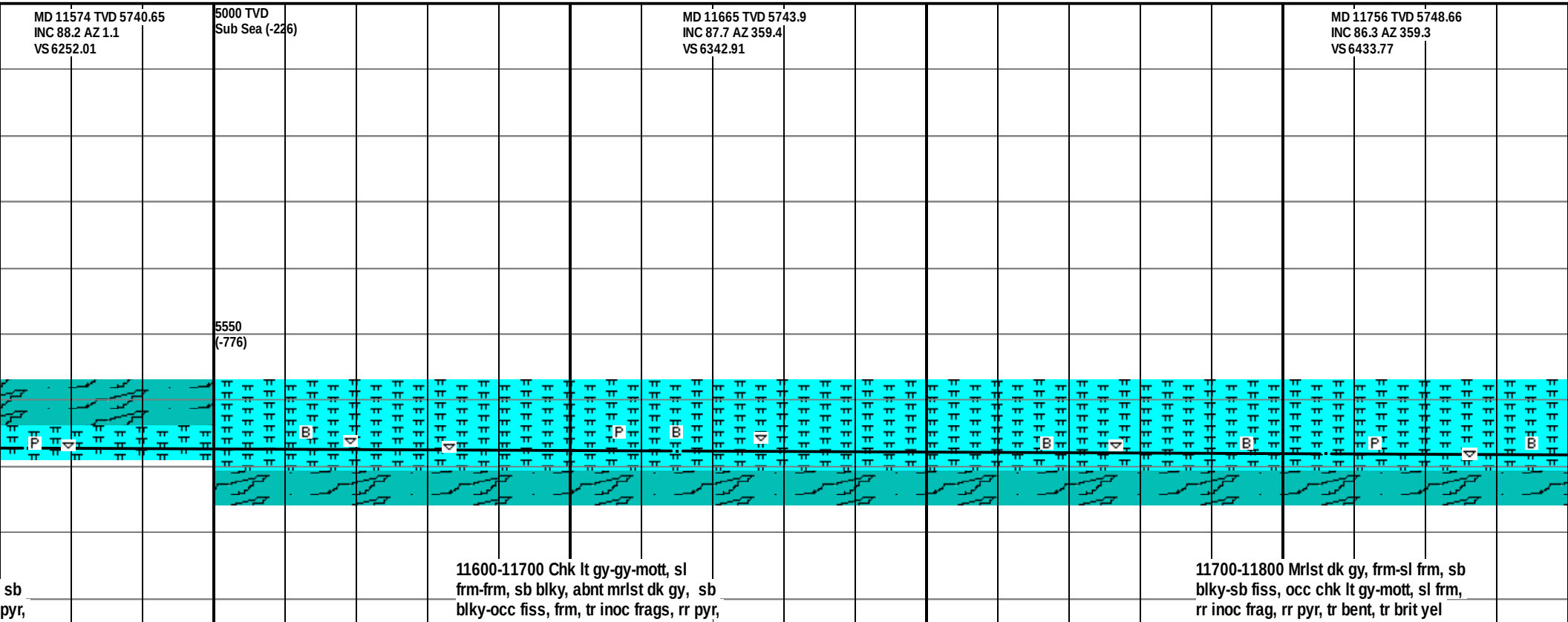
B B P B P P

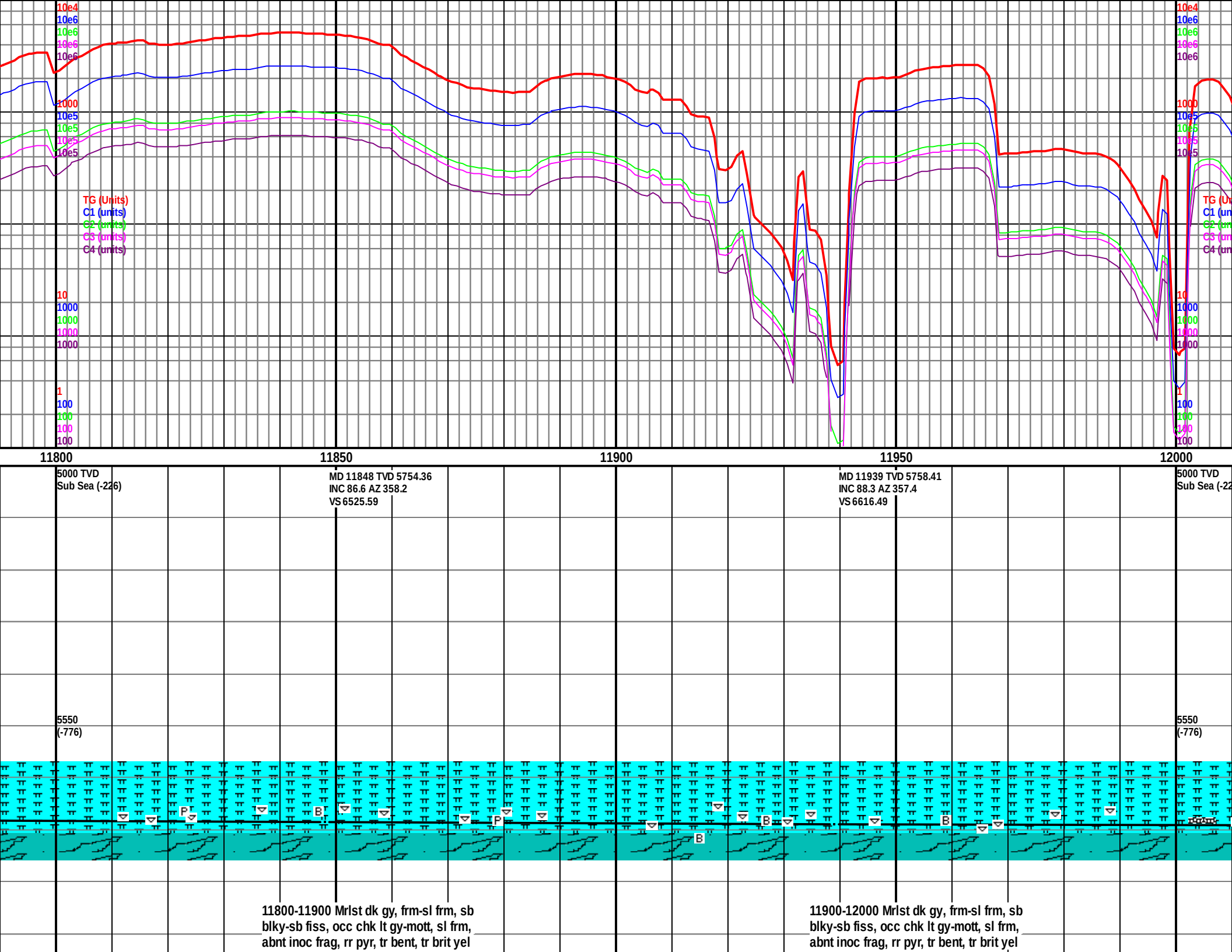
Chk lt gy-mott, banded,
occ mrlst dk gy-med gy,
frag, occ bent, brit yel

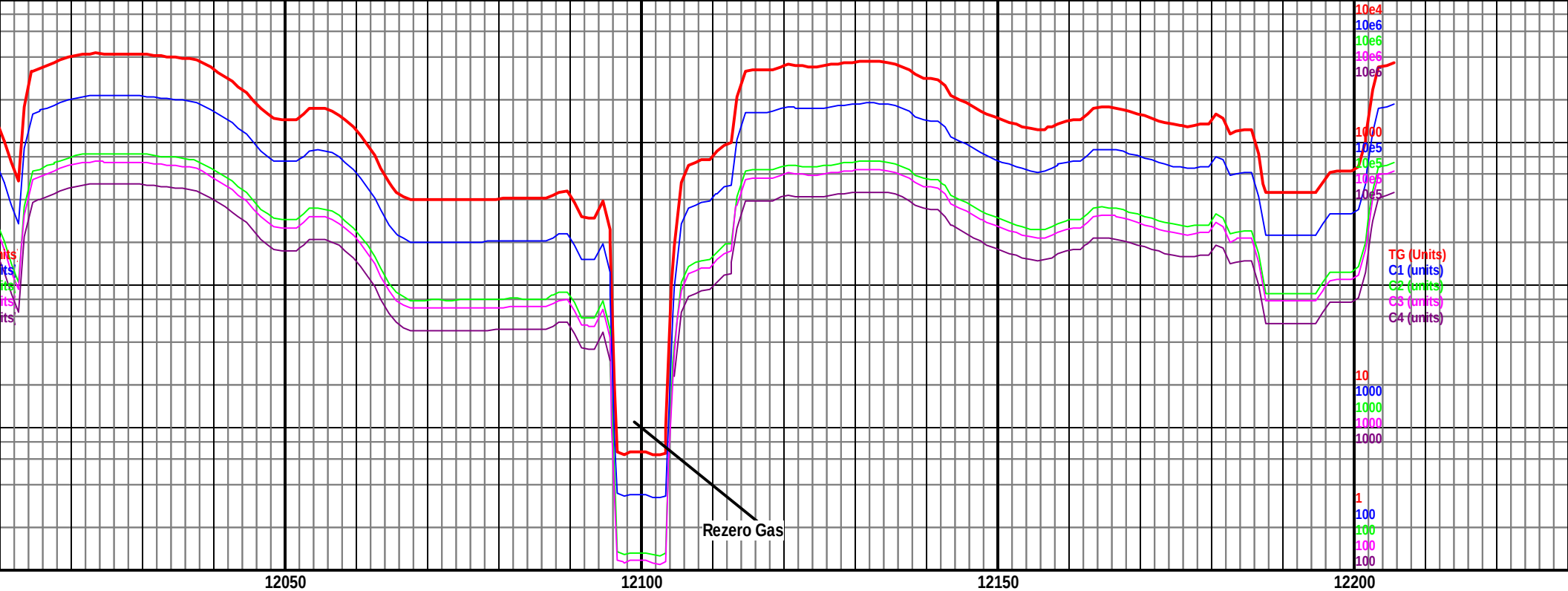
11400-11500 Mrlst dk-med gy, frm, sb blky, occ chk lt gy, sl frm, sb blky, rr inoc frag, rr pyr, occ bent, tr brit yel

11500-11600 Chk lt gy-gy-mott, sl frm-frm, sb blky, abnt mrlst dk gy, blky-occ fiss, frm, tr inoc frags, rr


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
11600
11650
11700
11750


MD 11574 TVD 5740.65
INC 88.2 AZ 1.1
VS 6252.01
5000 TVD
Sub Sea (-226)
MD 11665 TVD 5743.9
INC 87.7 AZ 359.4
VS 6342.91
MD 11756 TVD 5748.66
INC 86.3 AZ 359.3
VS 6433.77
5550
(-776)
P
B
P
B
P
B
B
P
B
sb
pyr,
11600-11700 Chk lt gy-gy-mott, sl frm-frm, sb blky, abnt mrlst dk gy, sb blky-occ fiss, frm, tr inoc frags, rr pyr,
11700-11800 Mrlst dk gy, frm-sl frm, sb blky-sb fiss, occ chk lt gy-mott, sl frm, rr inoc frag, rr pyr, tr bent, tr brit yel


TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
11800
11850
11900
11950
12000
5000 TVD
Sub Sea (-226)
MD 11848 TVD 5754.36
INC 86.6 AZ 358.2
VS 6525.59
MD 11939 TVD 5758.41
INC 88.3 AZ 357.4
VS 6616.49
5550
(-776)
11800-11900 Mrlst dk gy, frm-sl frm, sb blky-sb fiss, occ chk lt gy-mott, sl frm, abnt inoc frag, rr pyr, tr bent, tr brit yel
11900-12000 Mrlst dk gy, frm-sl frm, sb blky-sb fiss, occ chk lt gy-mott, sl frm, abnt inoc frag, rr pyr, tr bent, tr brit yel


10e4
10e6
10e6
10e6
10e5
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
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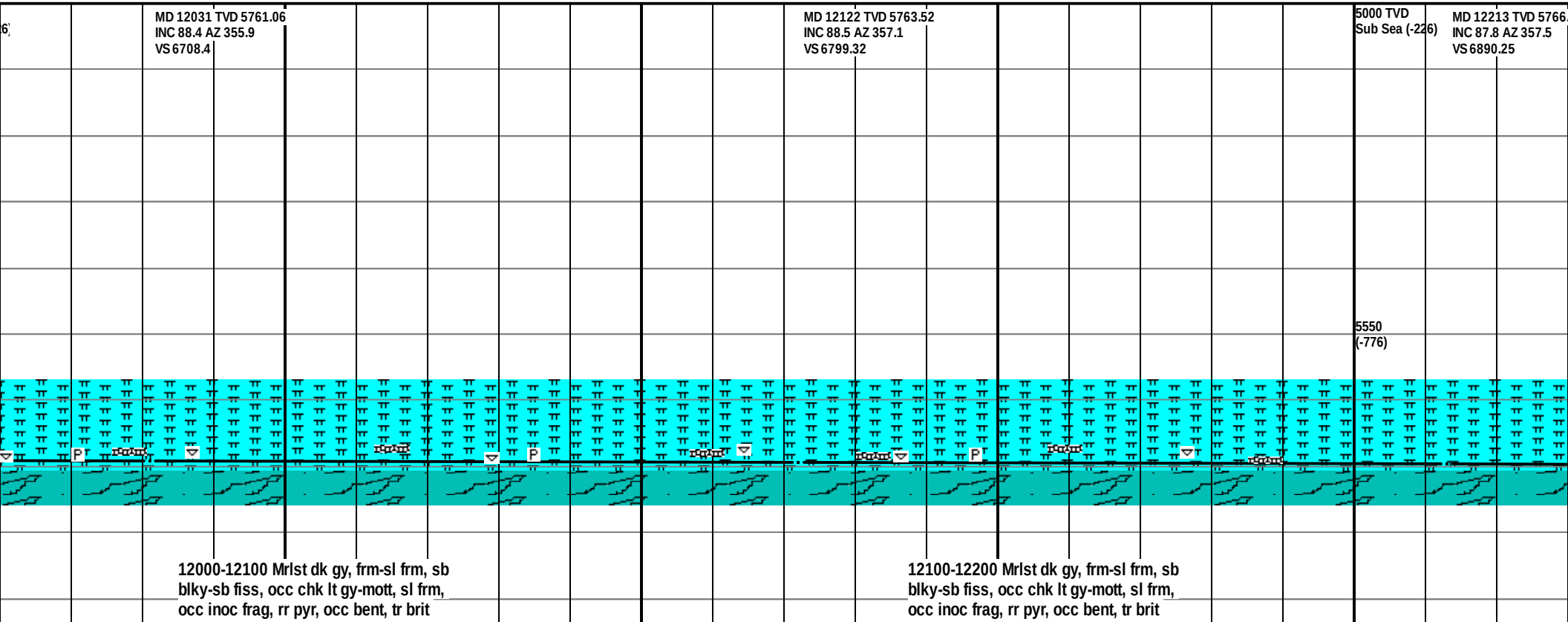
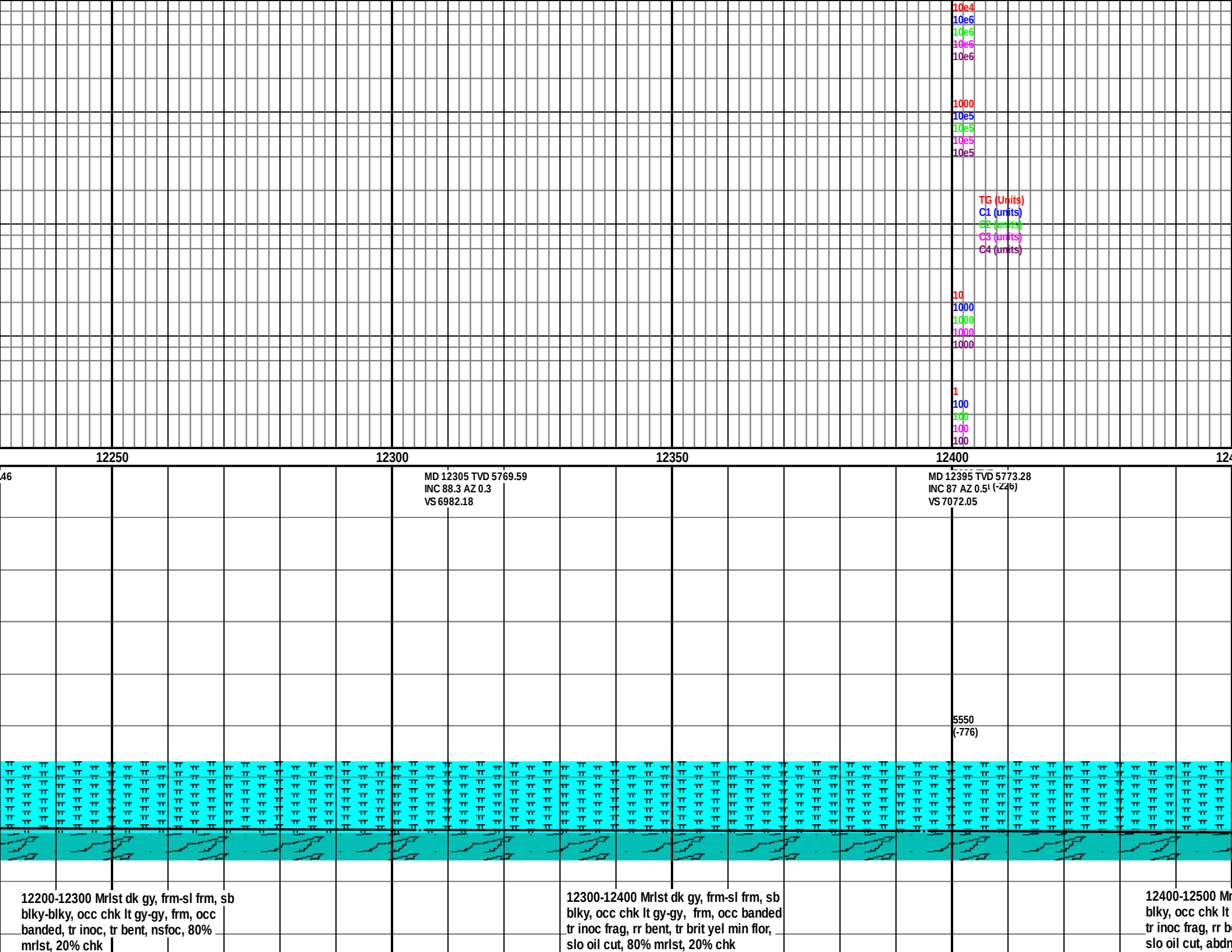
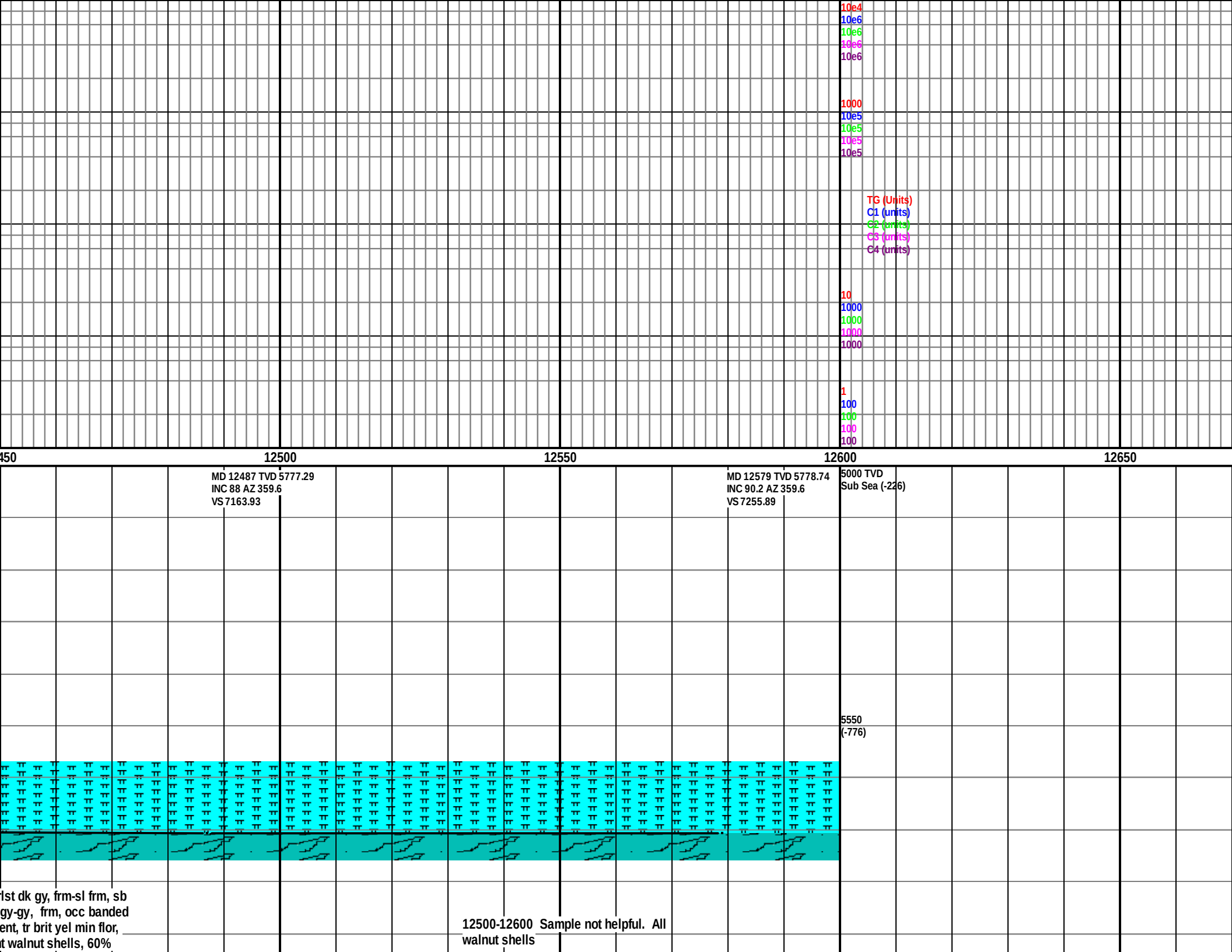
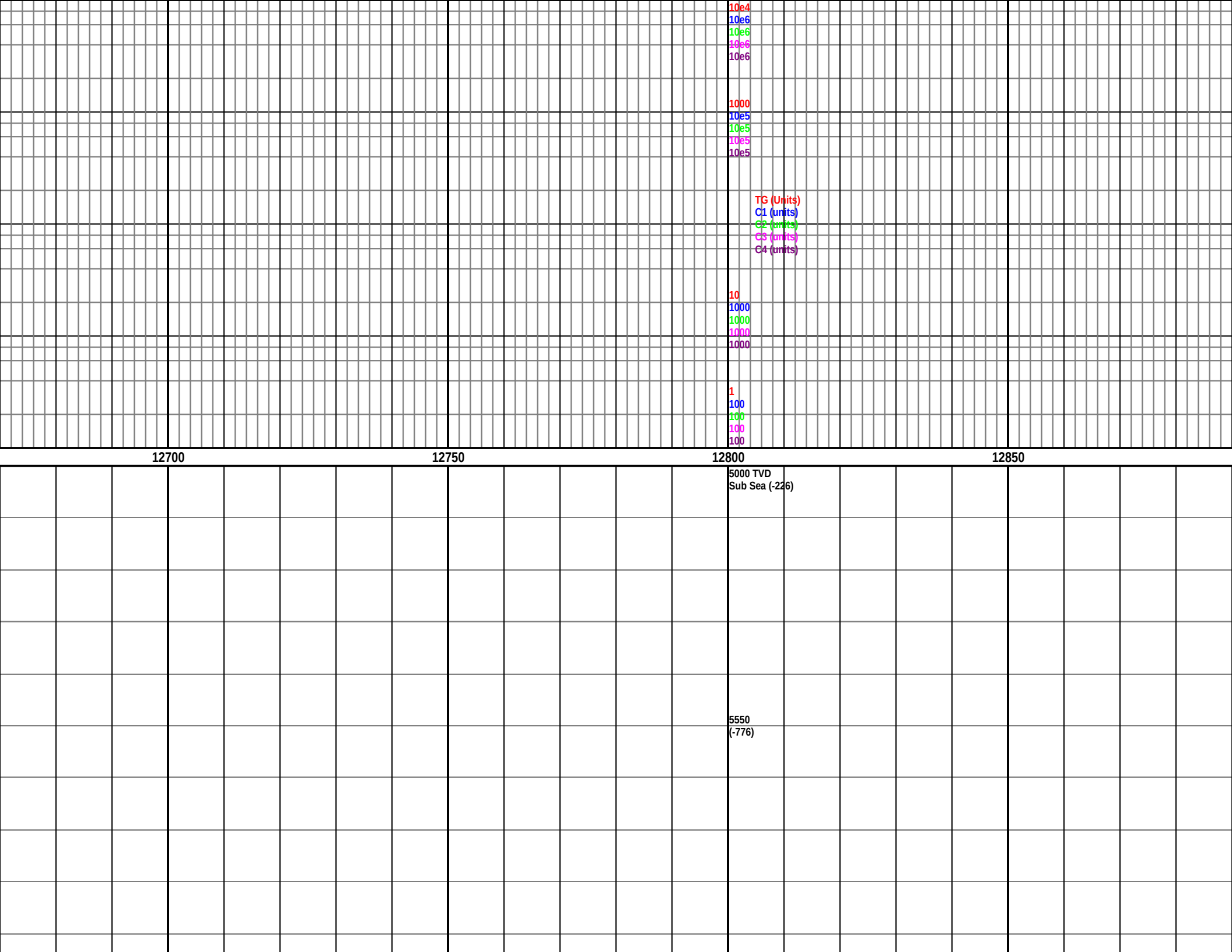
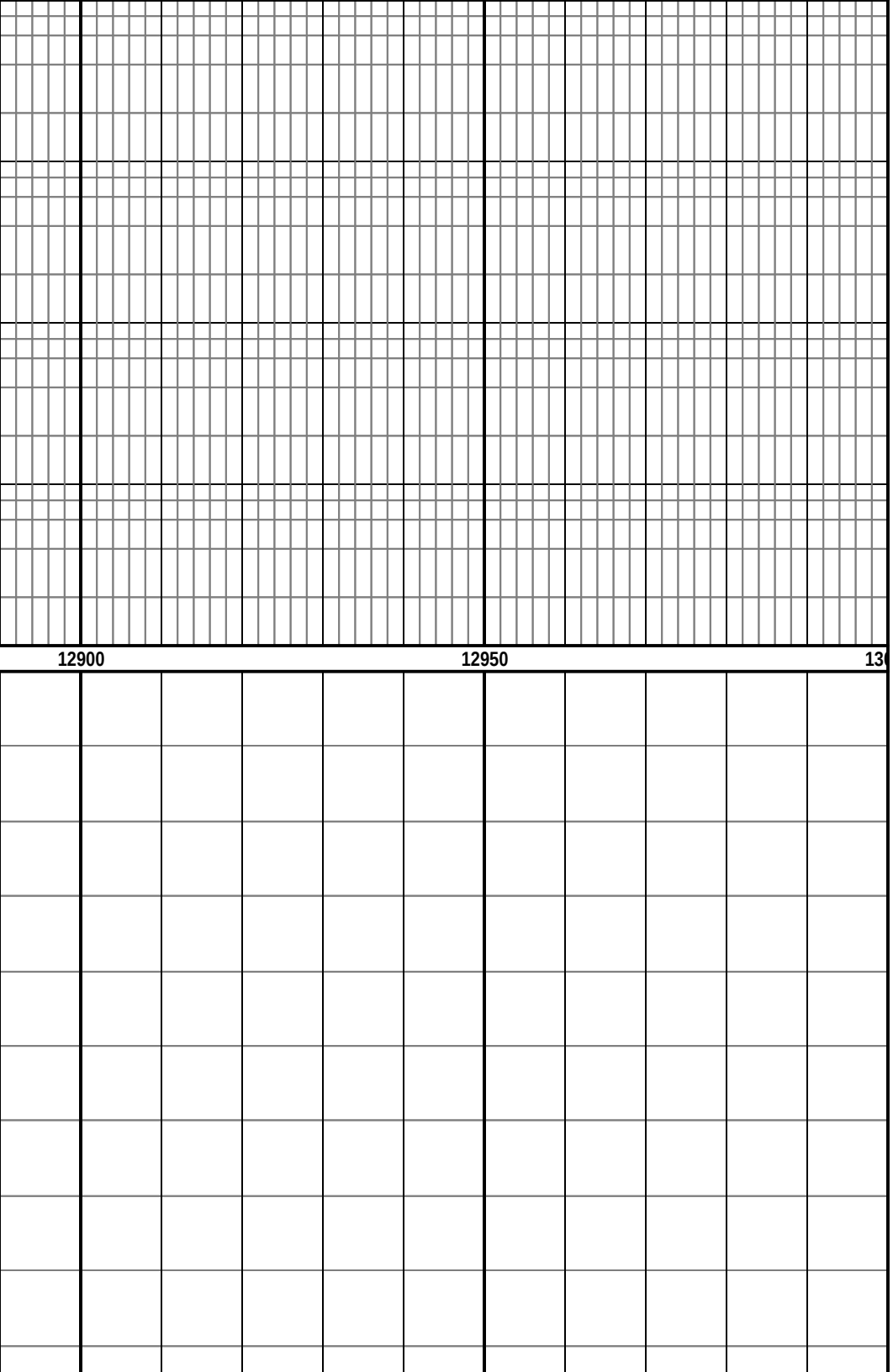
1000
1000
1000
1000
1
100
100
100
100
Rezero Gas
12050
12100
12150
12200


MD 12031 TVD 5761.06
INC 88.4 AZ 355.9
VS 6708.4
MD 12122 TVD 5763.52
INC 88.5 AZ 357.1
VS 6799.32
5000 TVD
Sub Sea (-226)
MD 12213 TVD 5766.
INC 87.8 AZ 357.5
VS 6890.25
5550
(-776)
12000-12100 Mrlst dk gy, frm-sl frm, sb blky-sb fiss, occ chk lt gy-mott, sl frm, occ inoc frag, rr pyr, occ bent, tr brit
12100-12200 Mrlst dk gy, frm-sl frm, sb blky-sb fiss, occ chk lt gy-mott, sl frm, occ inoc frag, rr pyr, occ bent, tr brit


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
12250
12300
12350
12400
MD 12305 TVD 5769.59
INC 88.3 AZ 0.3
VS 6982.18
MD 12395 TVD 5773.28
INC 87 AZ 0.5
VS 7072.05
5550
(-776)
12200-12300 Mrlst dk gy, frm-sl frm, sb blky-blky, occ chk lt gy-gy, frm, occ banded, tr inoc, tr bent, nsfoc, 80% mrlst, 20% chk
12300-12400 Mrlst dk gy, frm-sl frm, sb blky, occ chk lt gy-gy, frm, occ banded tr inoc frag, rr bent, tr brit yel min flor, slo oil cut, 80% mrlst, 20% chk


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
450
12500
12550
12600
12650
MD 12487 TVD 5777.29
INC 88 AZ 359.6
VS 7163.93
MD 12579 TVD 5778.74
INC 90.2 AZ 359.6
VS 7255.89
5000 TVD
Sub Sea (-226)
5550
(-776)
lst dk gy, frm-sl frm, sb
gy-gy, frm, occ banded
ent, tr brit yel min flor,
t walnut shells, 60%
12500-12600 Sample not helpful. All
walnut shells


10e4
10e6
10e6
10e6
10e6
1000
10e5
10e5
10e5
10e5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
10
1000
1000
1000
1000
1
100
100
100
100
12700
12750
12800
12850
5000 TVD
Sub Sea (-226)
5550
(-776)


12900
12950
13