



EMPIRICA
The Surface Logging Company

Scale: 5" / 100'
Measured Depth Log

Well Name Rancho Water Valley #11

Location Sec. 4, T5N-R67W

State Colorado

Country USA

API Number 05-123-36428-0000

Region Windor

Spud Date 2/27/2013

County Weld

Rig Number Cade 24

Field Wattenberg

Drilling Completed TBD

Surface Coordinates 460' FEL 660' FSL of Sec. 4 T5N-R67W of Weld Co. Colorado

Bottom Hole Coordinates 855.32' N, -4.374.93' W FROM SURFACE
LOCATION OR 655' FSL, 460' FWL,
Sec. 4, T5N, R67W.
Weld Co. Colorado

Ground Elevation 4,775

K.B. Elevation 4,793

Logged Interval 6,590

To 11,412

Total Depth 11,412

Formation Shannon-Codell Sandstone Target

Type of Drilling Fluid Fresh Water

Company Tekton Energy

Address 640 Plaza Drive,
Highlands Ranch

Name Dan Scott (Lead

Company Empirica

PO Box 6005
Edmond, OK 730
405-340-5545

Cores
Equipment
Comments

2 Mar
Start l
OBM
Relea
Drillin

Operator

Suite 290
1, CO 80129

Geologist

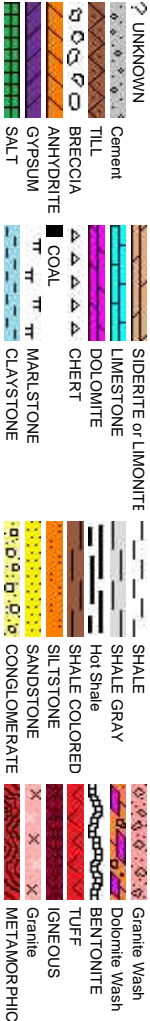
), Dominic Pitre (Second)

83-6005

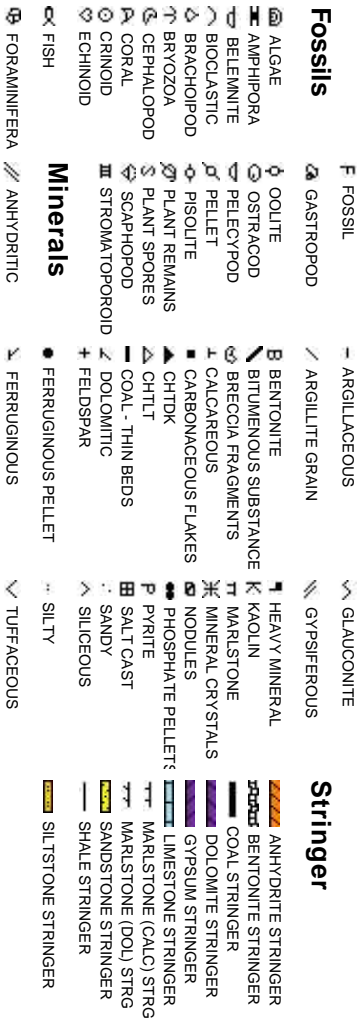
Other

Logging Service
Logging Date:3/4/2013
start date:N/A
sed Logging Date: TBD
g Contractor: Cade 24

Rock Types



Accessories



Oil

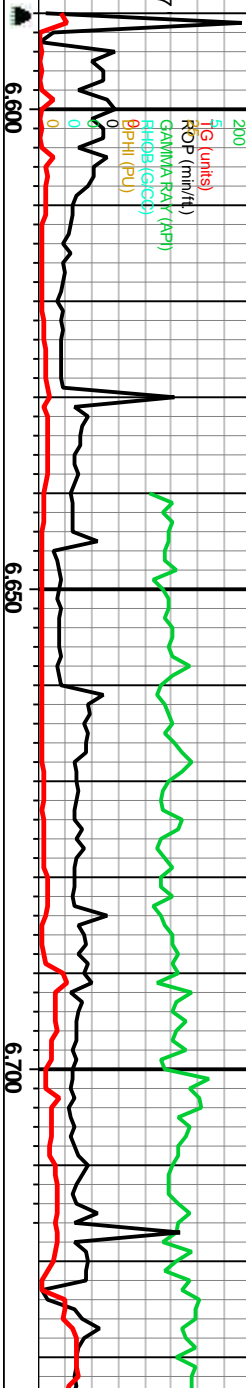
- DE/
- EV
- QU
- SP
- Por
- EA
- FEN
- FRA
- INT
- INT

Other Symbols

Show		MOLDIC		DST INTERVAL		WIRELINE TESTED - LEFT		E EARTHY
		ORGANIC		FAULT		WIRELINE TESTED - RT		FX FINELYXLN
		PINPOINT		FORMATION TOP				GS GRAINSTONE
		VUGGY		GAS SHOW				L LITHOGRAPHIC
Engineering								
Positivity		BIT		NORMAL FAULT		ANGULAR		
		Casing Shoe		OIL SHOW		ROUNDED		
		CONNECTION (LEFT)		OVERTURNED STRATA		SUBANG		
		CONNECTION (RIGHT)		REVERSE FAULT		SUBRND		
RTHY		SIDEWALL CORE (LEFT)						
		SIDEWALL CORE (RIGHT)						
	Textures							
STRUCTURE		CONNECTION GAS		SLIDE		BOUNDSTONE		
		CORE - LOST		SURVEY		CHALKY		
		CORE - RECOVERED		TRIPP GAS		CRYPTOXLN		
	Sorting							
EROLUTIC								

ROP,GAS,GAMMA
TG
ROF
GAMMA RAY
RHOE
DPH

Bit #: 3
Type: GX-03
Size: 8.75
Depth In: 6,590
Depth Out: 7,467
Jets: 3x20
S/N: 5222118

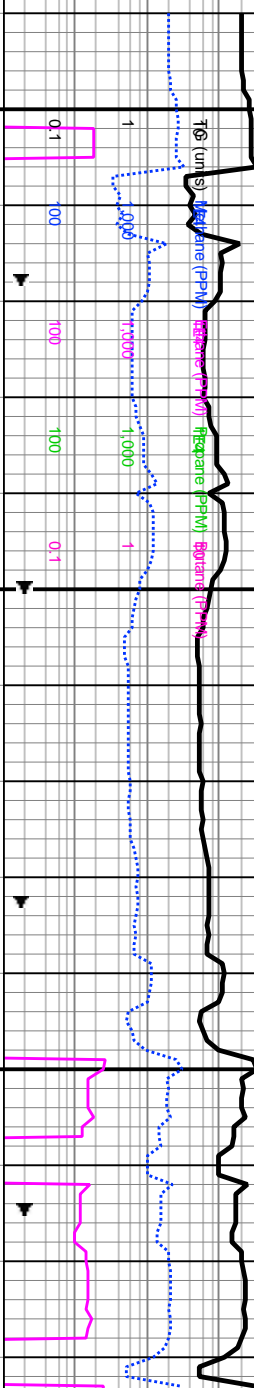


Depth Labels

Slide/Rotate

Total Gas & Chromatograph

TG
Methane
Ethane
Propane
Butane



6400

6400

Well Bore
TVD

6560 - 6590 SLTST: med
gy- dk gy, sft- frm, ip sl hd-
hd, sb ang- sb blk, ip
ply, v arg, sme micnica,
rr pyr, occ grdg to SH, pos
yel diff cut

6590 - 6620 SLTY SH:
med gy- dk gy, sft- frm,
occ sl hd, sb ang- sb
blk- ply, v arg, pos yel
diff cut

6620 - 6650 SLTY SH:
med gy- dk gy, sft- frm,
occ sl hd, sb ang- sb
blk- ply, v arg, pos yel
diff cut

6650 - 6680 SLTY SH:
med gy- dk gy, sft- frm,
occ sl hd, sb ang- sb
blk- ply, v arg, pos yel
diff cut

6680 - 6710 SLTY SH:
med gy- dk gy, sft- frm,
occ sl hd, sb ang- sb
blk- ply, v arg, pos yel
diff cut

6710 - 6740 SLTY S
med gy- dk gy, sft- fr
occ sl hd, sb ang- sb
blk- ply, v arg, pos
diff cut

Tie In:

MD: 6,545'
TVD: 6,470.05'
Inclination: 0.9°
Azimuth: 346.2°
VS: 79.28'

DS @ 6,670'

MD: 6,634'
TVD: 6,559.02'
Inclination: 2.2°
Azimuth: 286.3°
VS: 81.28'

MD: 6,665'
TVD: 6,589.98'
Inclination: 4.5°
Azimuth: 272.7°
VS: 82.22'

MD: 6,697'
TVD: 6,621.82'
Inclination: 7°
Azimuth: 273.6°
VS: 85.4'

MD: 6,729'
TVD: 6,653.82'
Inclination: 8.5°
Azimuth: 273.6°
VS: 88.4'

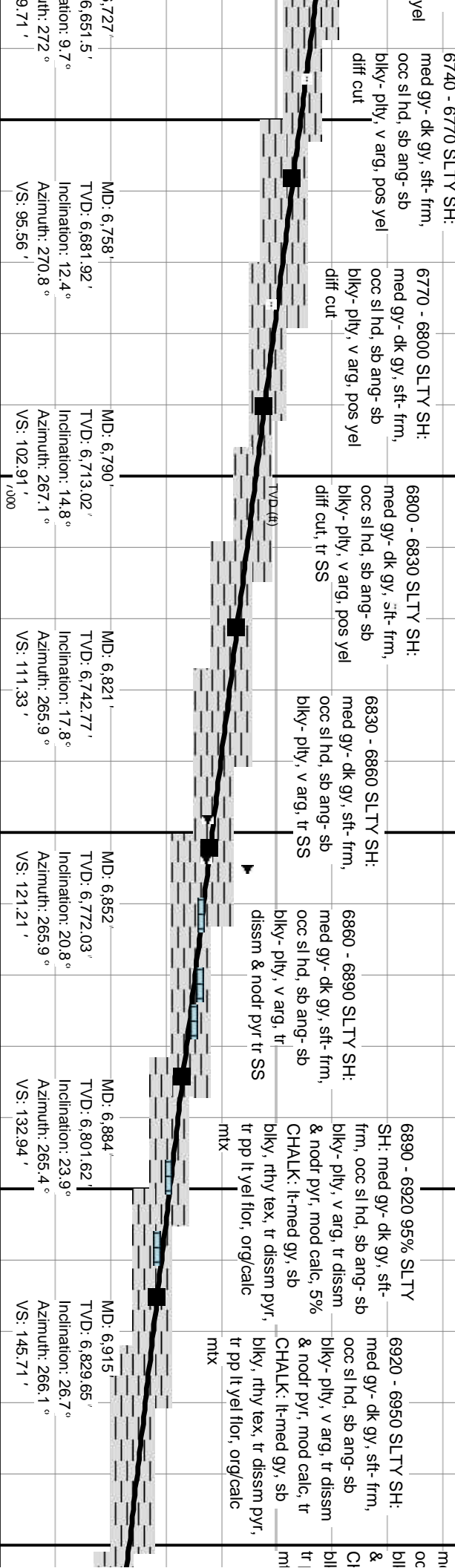
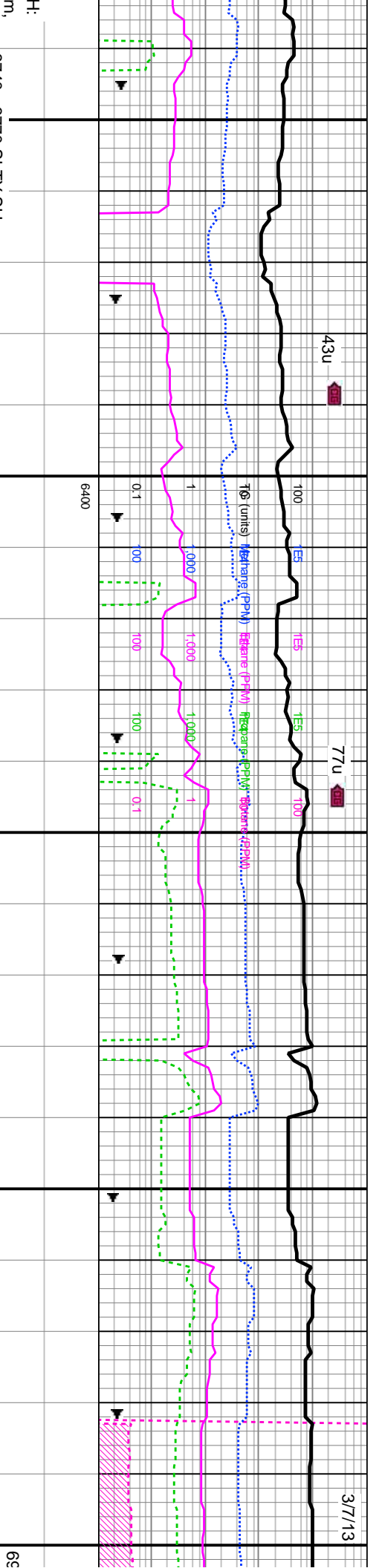
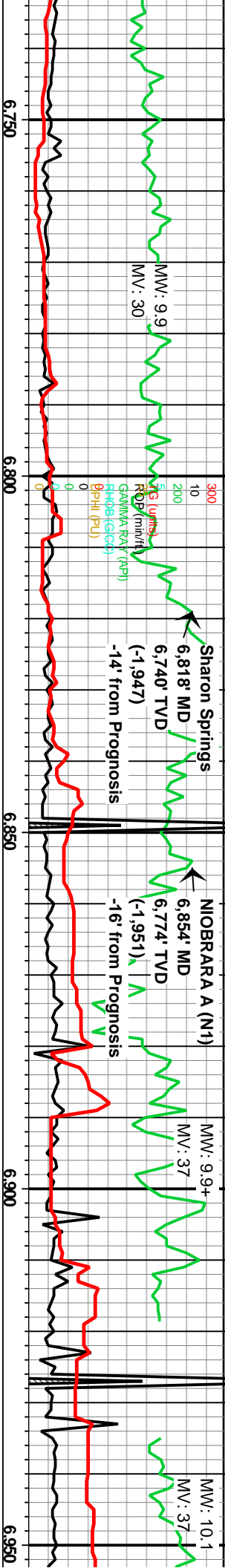
% Porosity

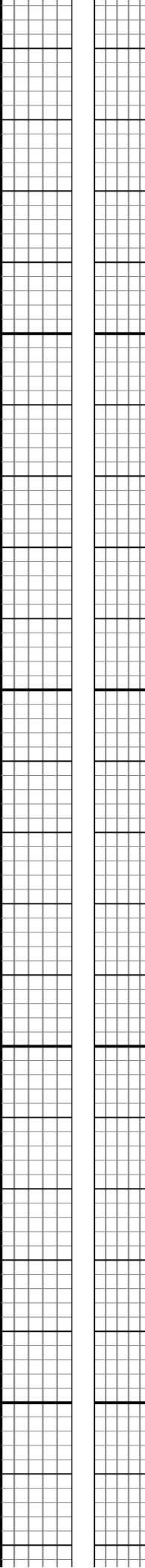
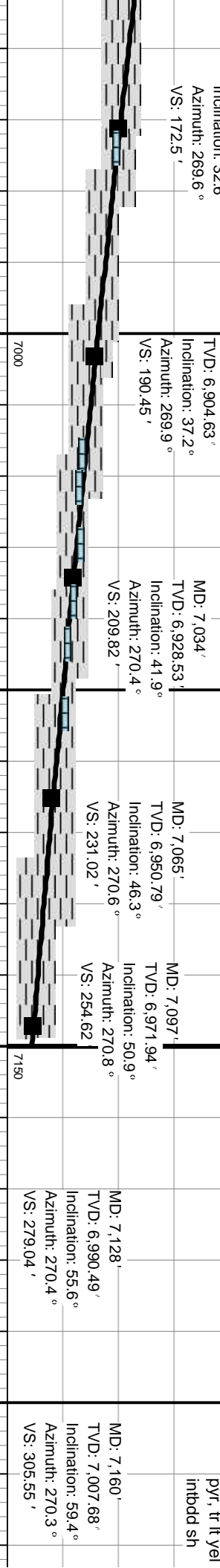
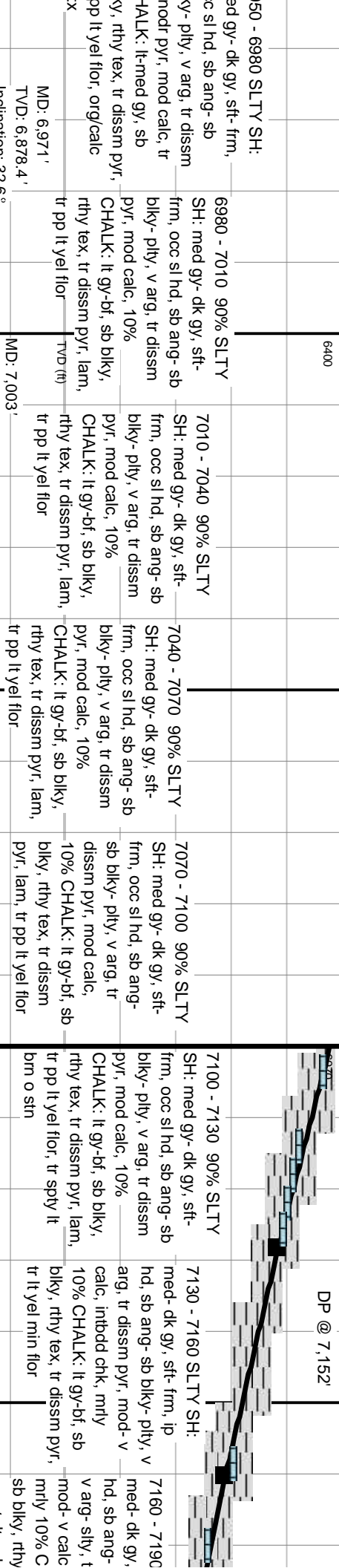
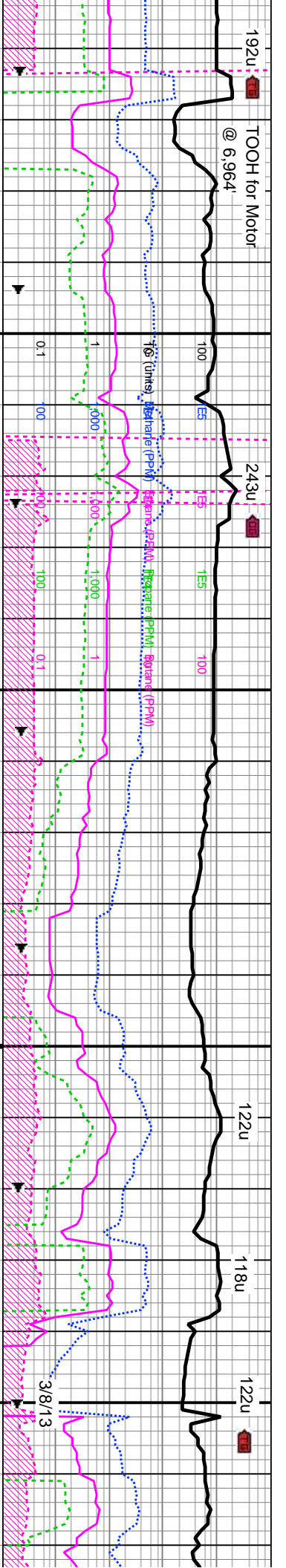
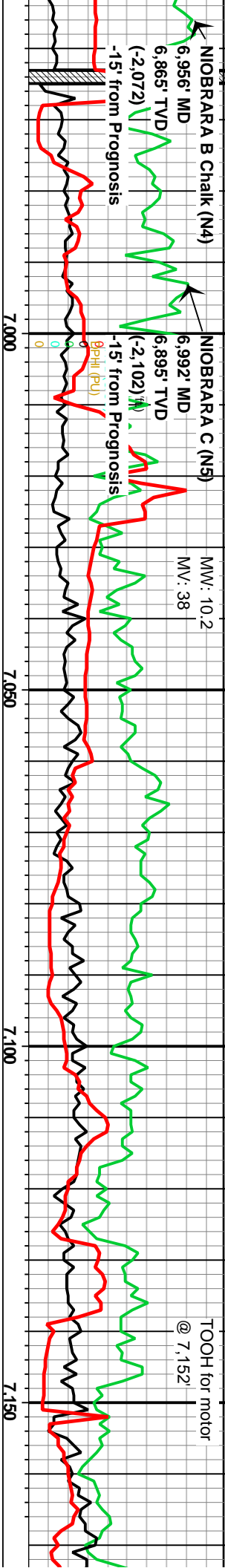
30
24
18
12
6

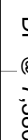
Porosity Type

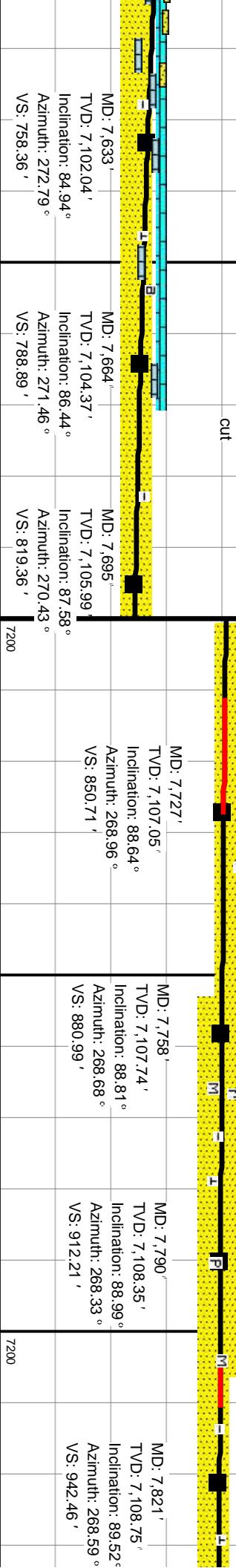
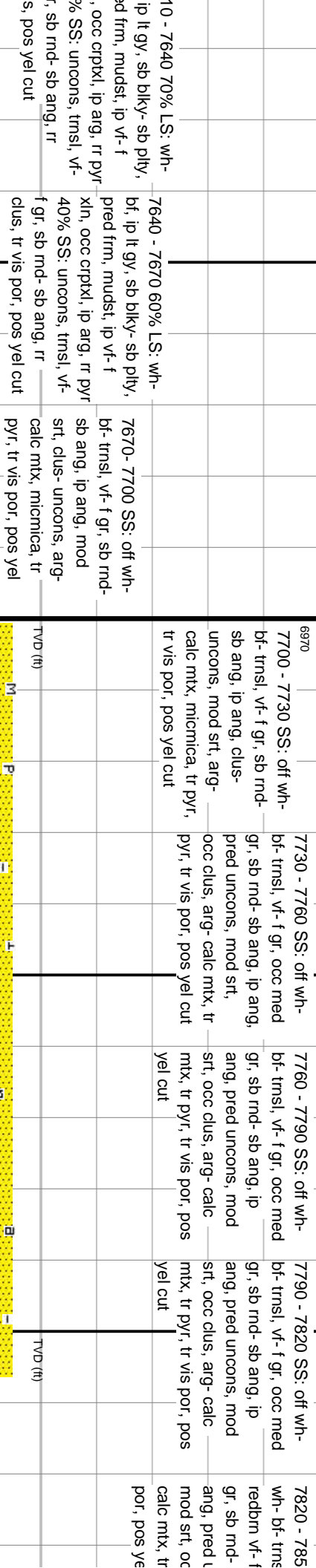
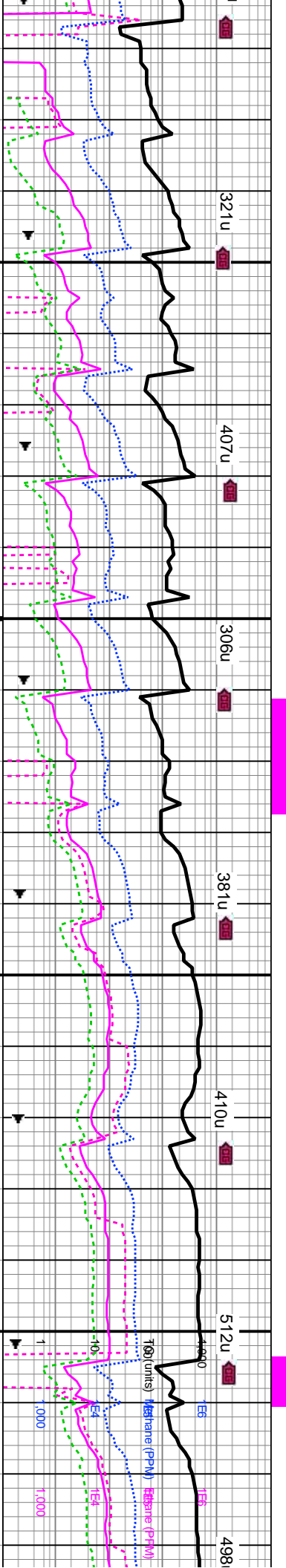
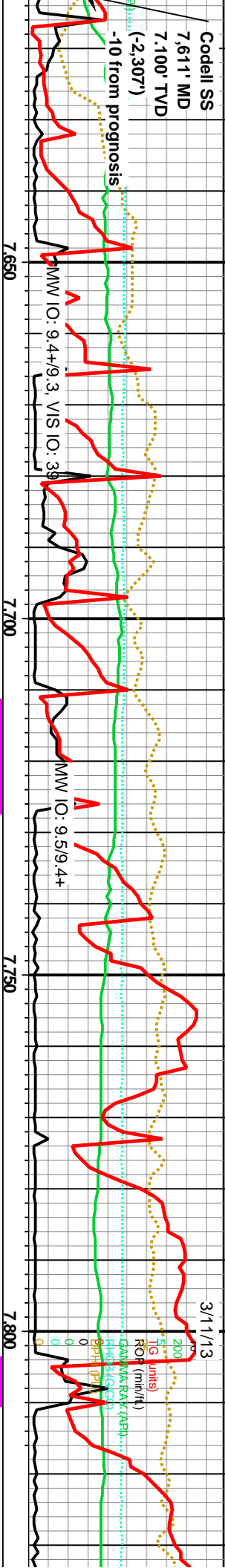
Oil Show

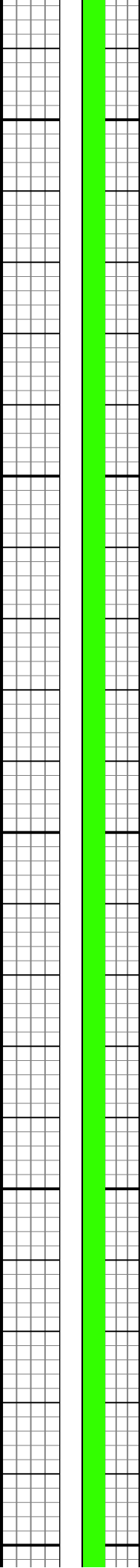
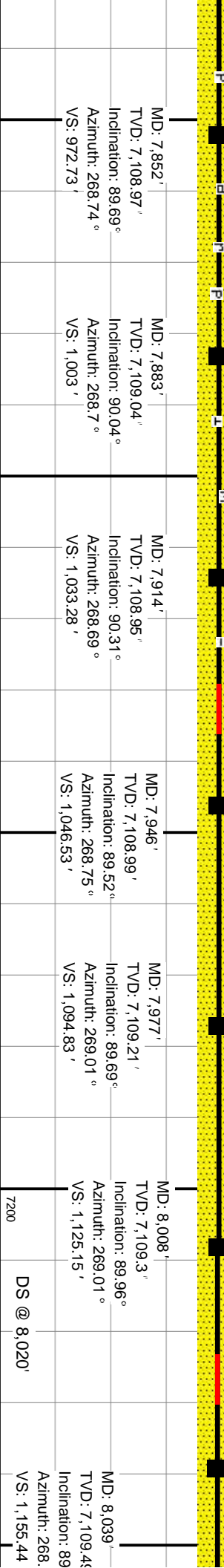
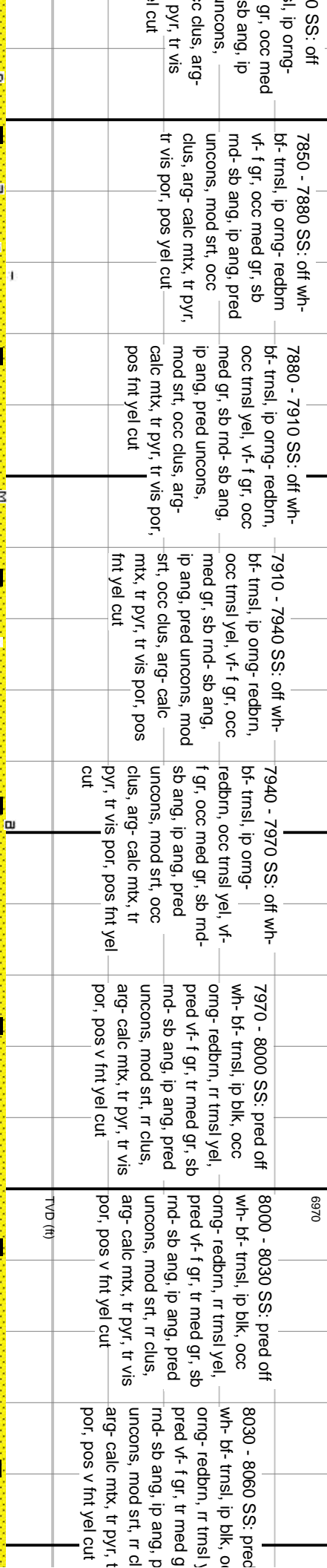
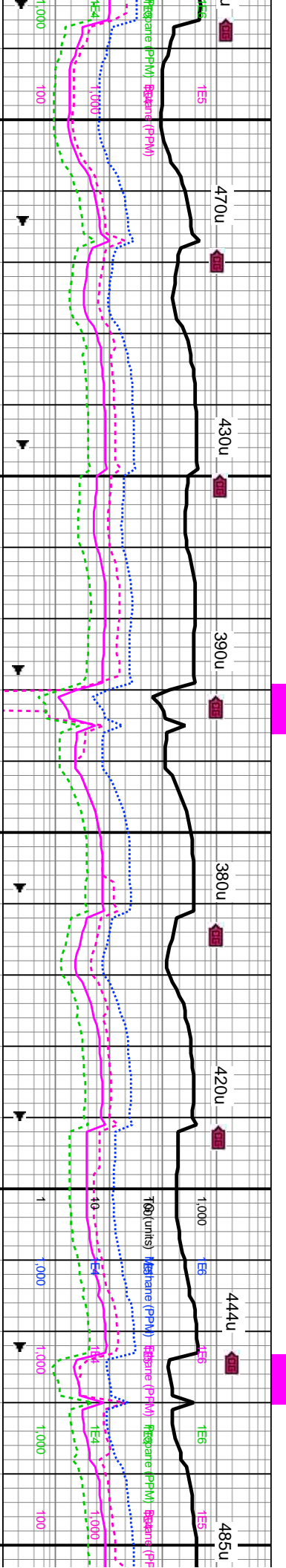
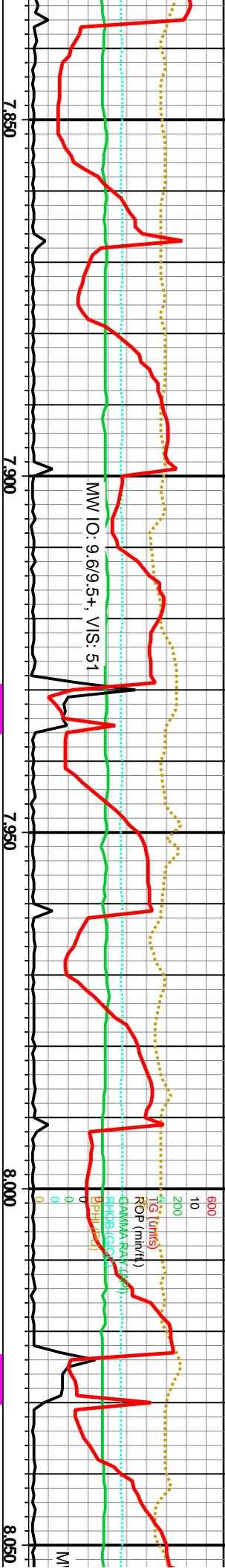
E
G
FR
P
TR

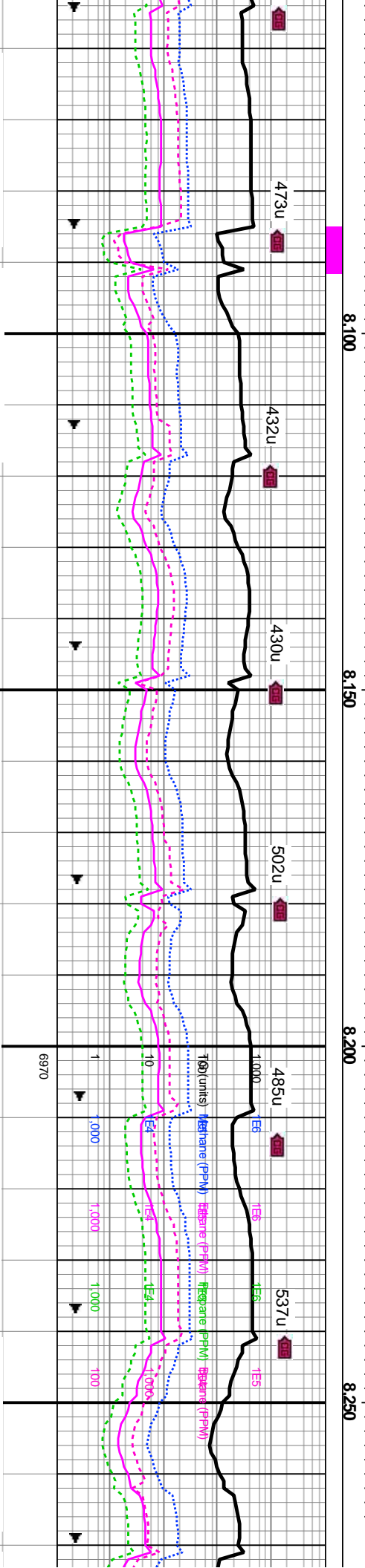
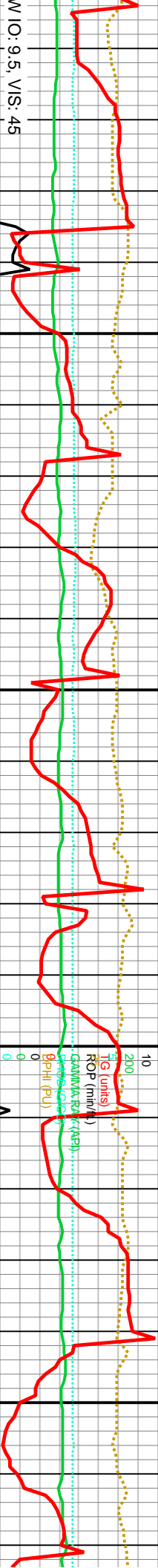






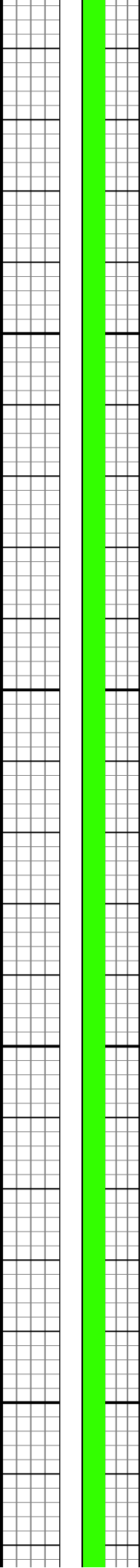


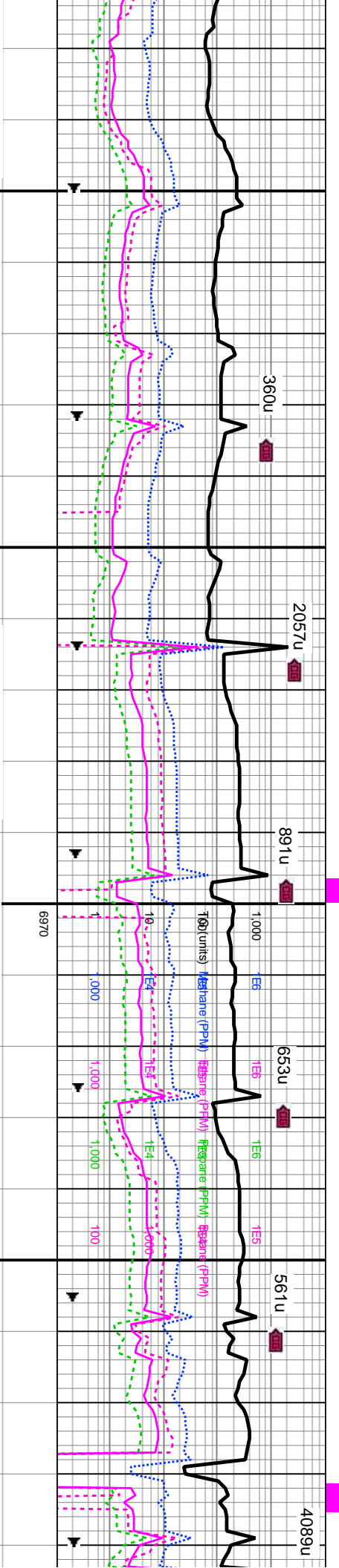


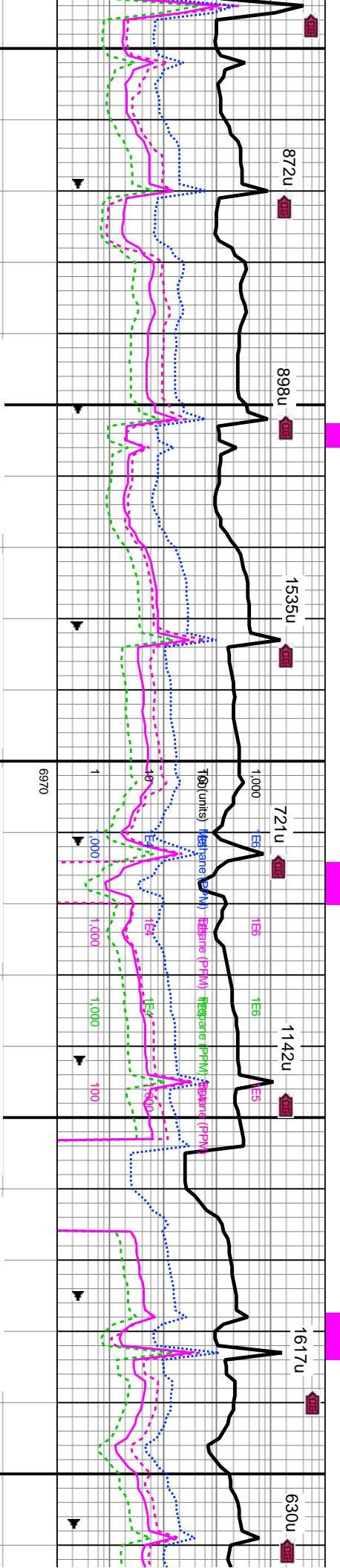
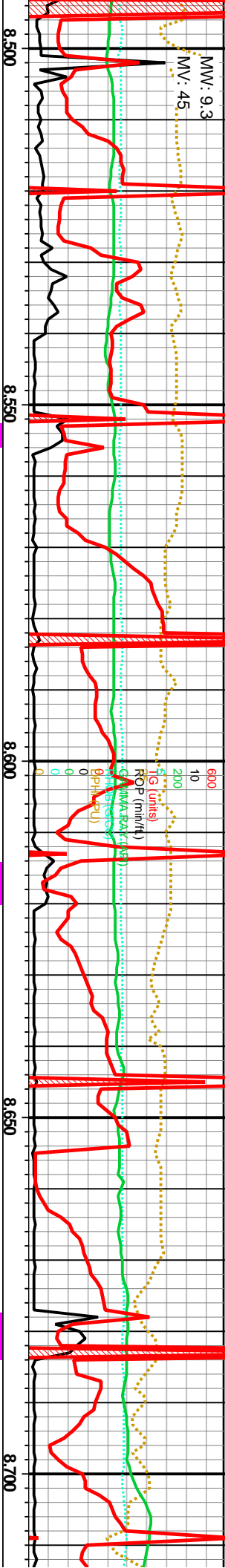


8060 - 8090 SS: pred off	8090 - 8120 SS: pred off	8120 - 8150 SS: pred off	8150 - 8180 SS: pred off	8180 - 8210 SS: pred off	8210 - 8240 SS: pred off	8240 - 8270 SS: pred off
wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ	wh- bf- trnsl, ip blk, occ
org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,	org- redbrn, rr tmsl yel,
pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb
rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred
uncons, mod srt, rr clus,	uncons, mod srt, rr clus,	uncons, mod srt, rr clus,	uncons, mod srt, rr clus,	uncons, mod srt, rr clus,	uncons, mod srt, rr clus,	uncons, mod srt, rr clus,
arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis
por, pos v fnt yel cut	por, pos v fnt yel cut	por, pos v fnt yel cut	por, pos v fnt yel cut	por, pos v fnt yel cut	por, pos v fnt yel cut	por, pos v fnt yel cut

MD: 8,070'	MD: 8,101'	MD: 8,132'	MD: 8,164'	MD: 8,194'	MD: 8,225'	MD: 8,256'
TVD: 7,109.85'	TVD: 7,110.54'	TVD: 7,111.47'	TVD: 7,112.3'	TVD: 7,113.04'	TVD: 7,113.68'	TVD: 7,114.15'
Inclination: 89.34°	Inclination: 88.11°	Inclination: 88.46°	Inclination: 88.55°	Inclination: 88.64°	Inclination: 88.99°	Inclination: 89.25°
Azimuth: 269°	Azimuth: 268.7°	Azimuth: 269.62°	Azimuth: 269.73°	Azimuth: 269.44°	Azimuth: 269.15°	Azimuth: 269.35°
VS: 1,186.73'	VS: 1,216.01'	VS: 1,246.33'	VS: 1,277.68'	VS: 1,307.07'	VS: 1,337.4'	VS: 1,367.74'

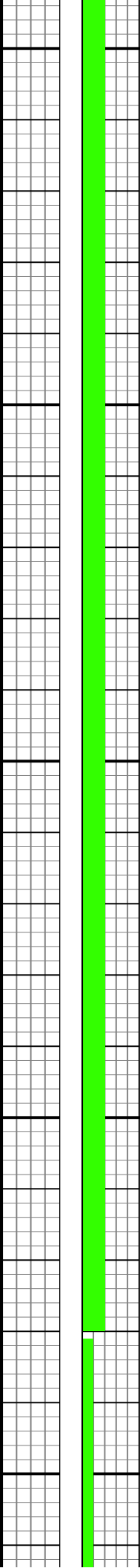


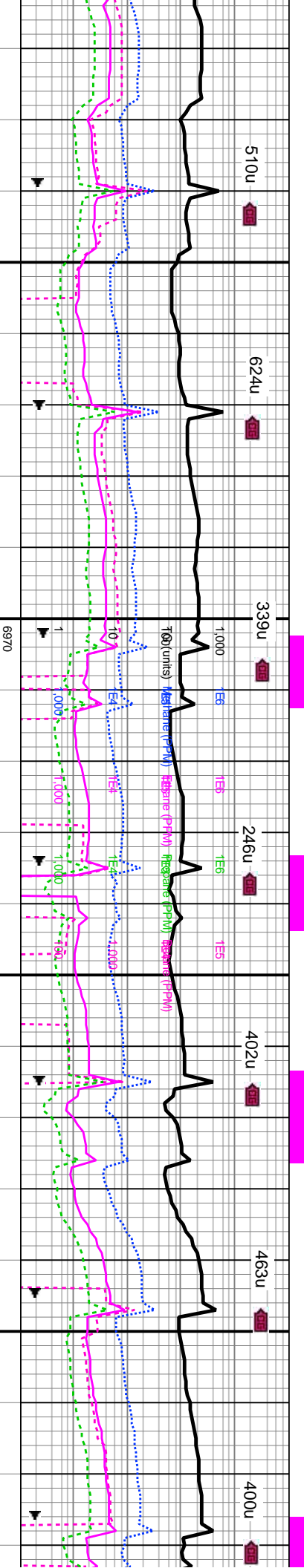


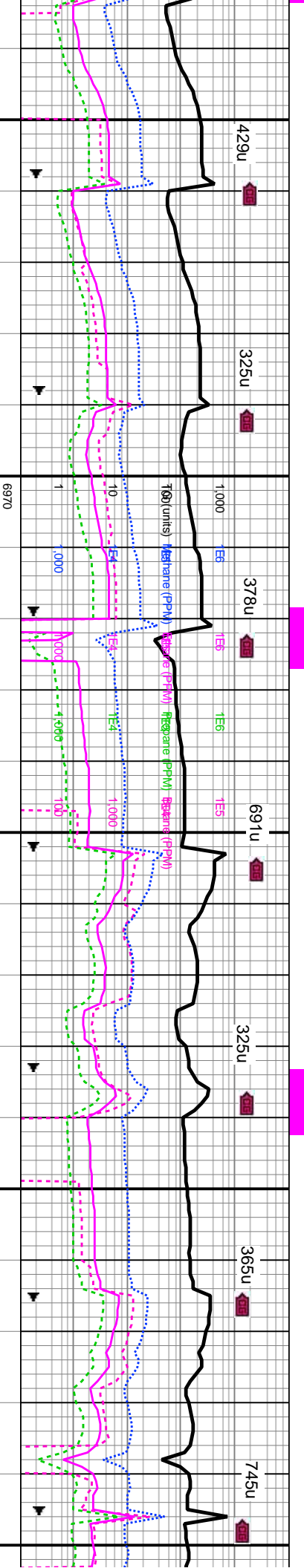
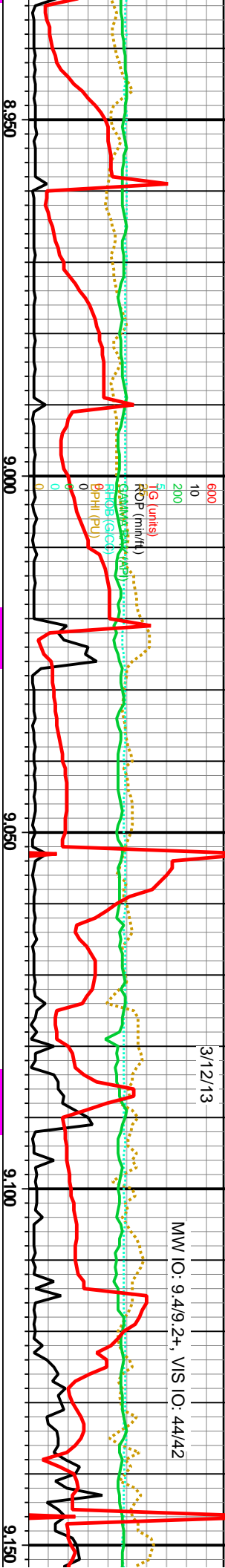


SS; pred off	SS; pred off	SS; pred off	SS; pred off	SS; pred off	SS; pred off	SS; pred off
wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ	wh- bl- trns, ip blk, occ
omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,	omg- redbrn, rr trns, yel,
pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb	pred vf- f gr, tr med gr, sb
rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred
uncons, mod str, rr clus,	uncons, mod str, rr clus,	uncons, mod str, rr clus,	uncons, mod str, rr clus,	uncons, mod str, rr clus,	uncons, mod str, rr clus,	uncons, mod str, rr clus,
arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis	arg- calc mtx, tr pyr, tr vis
por, pos v fnt yel cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut

MD: 8,506'	MD: 8,537'	MD: 8,569'	MD: 8,601'	MD: 8,632'	MD: 8,663'	MD: 8,695'
TVD: 7,114.93'	TVD: 7,115.07'	TVD: 7,115.22'	TVD: 7,115.44'	TVD: 7,115.87'	TVD: 7,116.51'	TVD: 7,117.27'
Inclination: 89.6°	Inclination: 89.87°	Inclination: 89.6°	Inclination: 89.6°	Inclination: 88.81°	Inclination: 88.81°	Inclination: 88.5°
Azimuth: 269.26°	Azimuth: 269.5°	Azimuth: 270.46°	Azimuth: 270.33°	Azimuth: 270.12°	Azimuth: 270.35°	Azimuth: 270.73°
VS: 1,612.34'	VS: 1,642.69'	VS: 1,674.09'	VS: 1,705.53'	VS: 1,735.97'	VS: 1,766.4'	VS: 1,797.85'
					DP @ 8,690'	

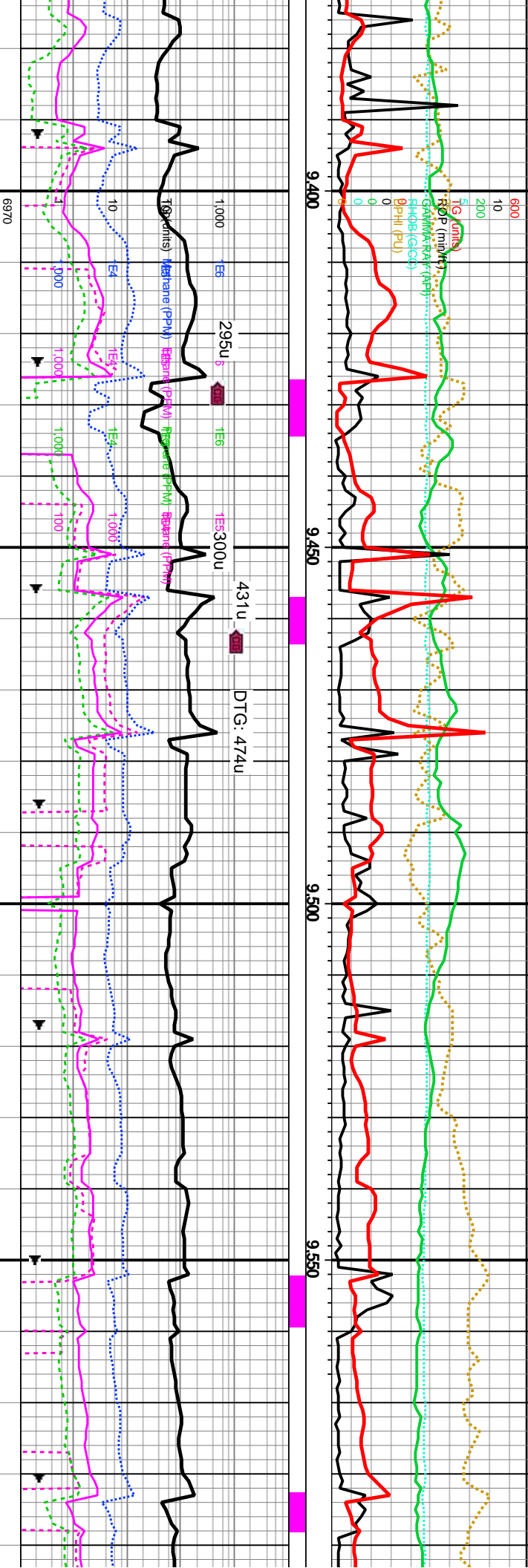


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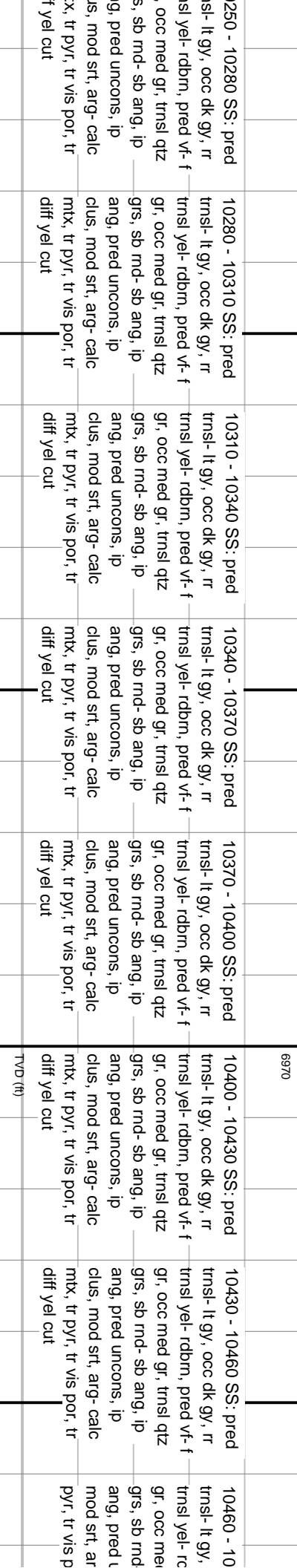
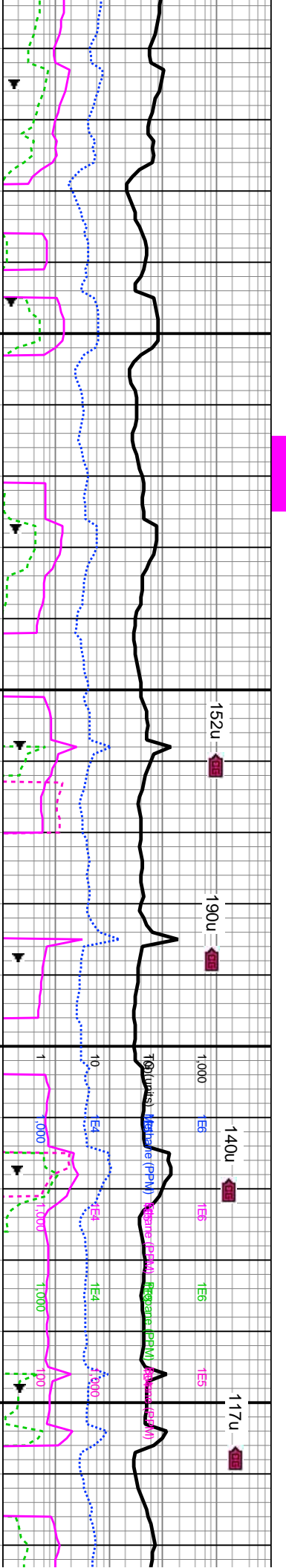
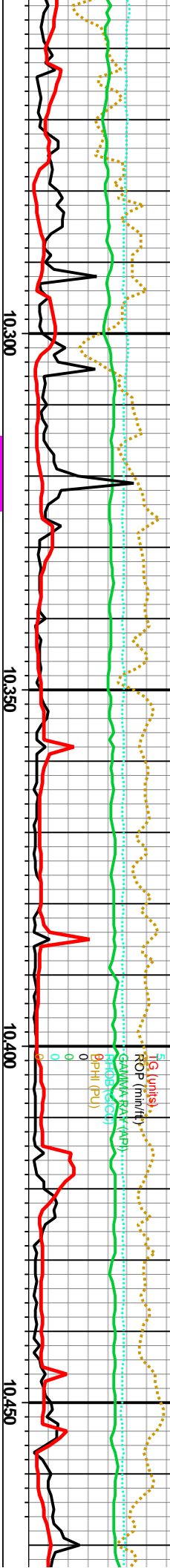


8960 - 8990 SS: pred gy- gy, occ trns, rr trns -l- rdbm, pred vf- f gr, sb -d- sb ang, ip ang, pred clus, mod srt, occ uncons, pred arg mtx, ip ic mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & cut, tr diffuse bl cut	8990 - 9020 SS: pred gy- dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	9020 - 9050 SS: pred gy- lt gy - dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse yel cut	9050 - 9080 SS: pred gy- lt gy - dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	9080 - 9110 SS: pred gy- lt gy - dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	9110 - 9140 SS: pred gy- lt gy - dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut	9140 - 9170 SS: pred gy- lt gy - dk gy, occ trns, rr trns yel- rdbm, pred vf- f gr, sb md- sb ang, ip ang, pred fri clus, mod srt, occ uncons, pred arg mtx, ip calc mtx, tr pyr, tr sh, tr vis por, pos v fnt yel diffuse & pp cut, tr diffuse bl cut
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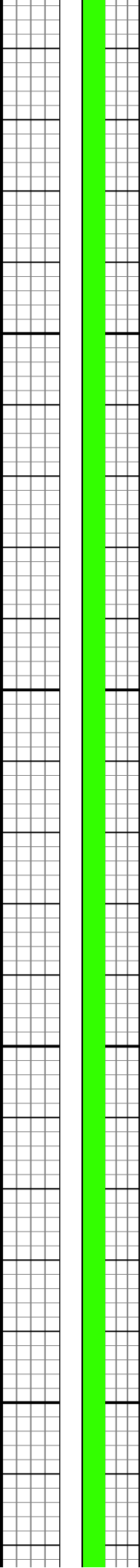
MD: 8.944' TVD: 7,122.43' Inclination: 90.31° Azimuth: 270.32° VS: 2,042.36'	MD: 8.975' TVD: 7,122.14' Inclination: 90.75° Azimuth: 270.99° VS: 2,072.84'	MD: 9.006' TVD: 7,121.76' Inclination: 90.66° Azimuth: 271.07° VS: 2,103.36'	MD: 9.037' TVD: 7,121.26' Inclination: 90.4° Azimuth: 271.54° VS: 2,164.44'	MD: 9.068' TVD: 7,121.26' Inclination: 90.4° Azimuth: 271.54° VS: 2,164.44'	MD: 9.100' TVD: 7,121.13' Inclination: 90.04° Azimuth: 270.72° VS: 2,195.95'	MD: 9.131' TVD: 7,121.02' Inclination: 90.4° Azimuth: 271.14° VS: 226.46'
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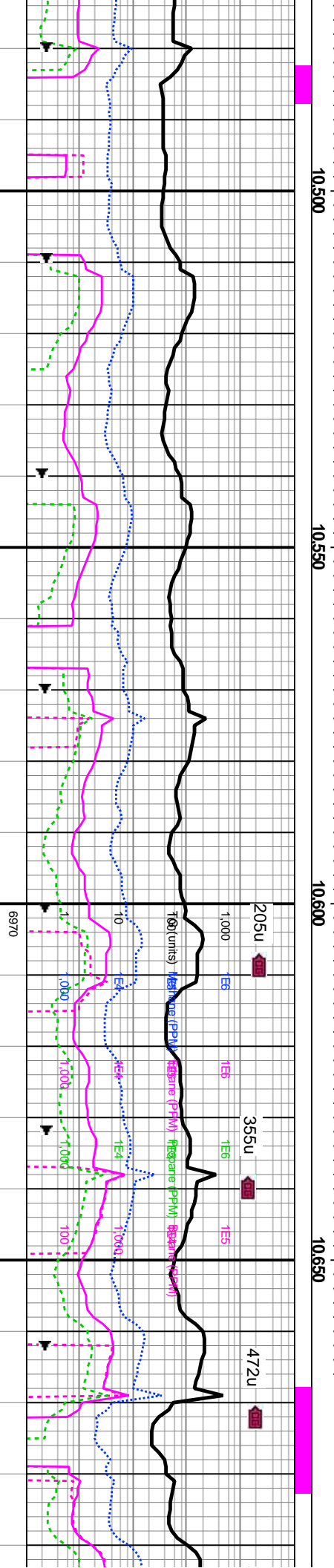
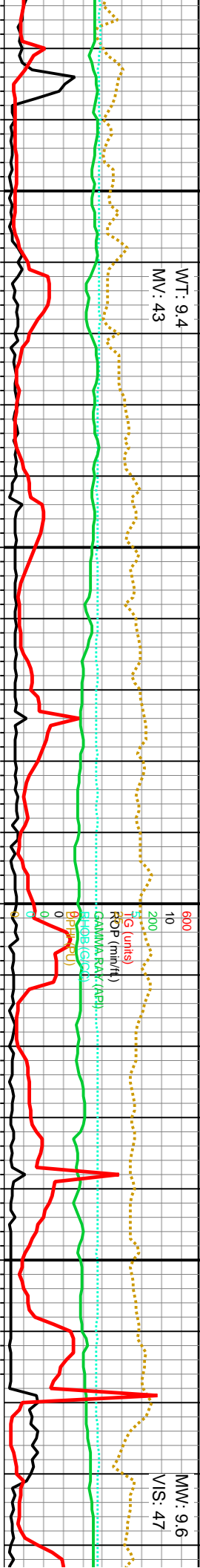


9400 - 9410 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9410 - 9440 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9440 - 9470 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9470 - 9500 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9500 - 9530 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9530 - 9560 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9560 - 9590 SS: pred gy-lt gy - dk gy, occ tnsl, rr
9380 - 9410 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9410 - 9440 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9440 - 9470 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9470 - 9500 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9500 - 9530 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9530 - 9560 SS: pred gy-lt gy - dk gy, occ tnsl, rr	9560 - 9590 SS: pred gy-lt gy - dk gy, occ tnsl, rr
tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f	tnsl yel- rdbm, pred vf- f
gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb	gr, tr med gr qtz grs, sb
rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred	rnd- sb ang, ip ang, pred
fri clus, mod srt, occ	fri clus, mod srt, occ	fri clus, mod srt, occ	fri clus, mod srt, occ	fri clus, mod srt, occ	fri clus, mod srt, occ	fri clus, mod srt, occ
uncons, pred arg mtx, ip	uncons, pred arg mtx, ip	uncons, pred arg mtx, ip	uncons, pred arg mtx, ip	uncons, pred arg mtx, ip	uncons, pred arg mtx, ip	uncons, pred arg mtx, ip
calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis	calc mtx, tr arg slst, tr vis
por, tr diffuse bl cut	por, tr diffuse bl cut	por, tr diffuse bl cut	por, tr diffuse bl cut	por, tr diffuse bl cut	por, tr diffuse bl cut	por, tr diffuse bl cut
MD: 9,380'	MD: 9,411'	MD: 9,442'	MD: 9,473'	MD: 9,504'	MD: 9,536'	MD: 9,567'
TVD: 7,116.79'	TVD: 7,115.86'	TVD: 7,115.08'	TVD: 7,114.48'	TVD: 7,113.82'	TVD: 7,113.01'	TVD: 7,112.27'
Inclination: 91.63°	Inclination: 91.8°	Inclination: 91.1°	Inclination: 91.1°	Inclination: 91.36°	Inclination: 91.54°	Inclination: 91.19°
Azimuth: 269.32°	Azimuth: 269.28°	Azimuth: 269.44°	Azimuth: 270.37°	Azimuth: 270.64°	Azimuth: 270.5°	Azimuth: 271.44°
VS: 2,470.66'	VS: 2,500.99'	VS: 2,531.33'	VS: 2,561.73'	VS: 2,592.19'	VS: 2,623.64'	VS: 2,654.15'



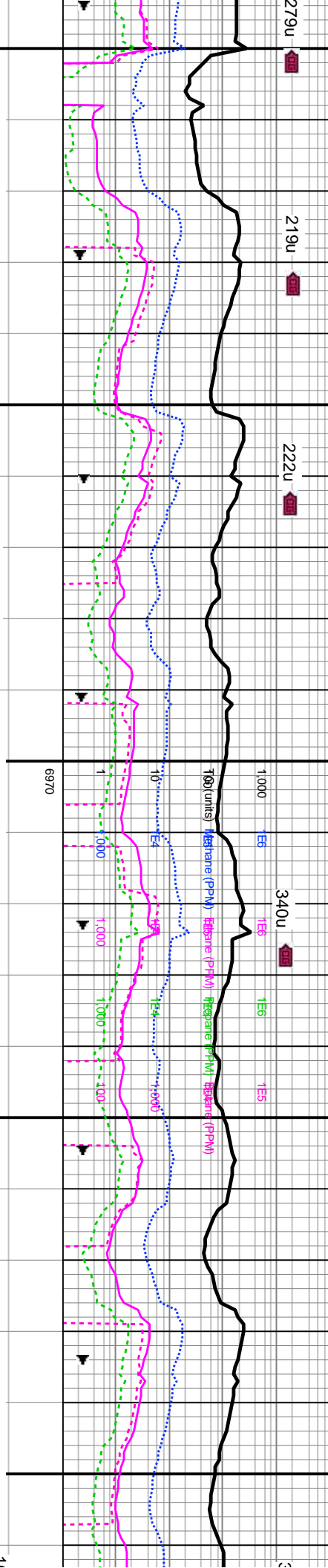
MD: 10,252' TVD: 7,103.9' Inclination: 89.43° Azimuth: 268.23° VS: 3,324.16'	MD: 10,282' TVD: 7,104.18' Inclination: 89.52° Azimuth: 268.15° VS: 3,353.4'	MD: 10,312' TVD: 7,104.38' Inclination: 89.69° Azimuth: 267.92° VS: 3,382.62'	MD: 10,343' TVD: 7,104.5' Inclination: 89.87° Azimuth: 268.18° VS: 3,412.81'	MD: 10,373' TVD: 7,104.53' Inclination: 90.04° Azimuth: 268.11° VS: 3,442.05'	MD: 10,404' TVD: 7,104.41' Inclination: 90.4° Azimuth: 268.13° VS: 3,472.25'	MD: 10,436' TVD: 7,104.09' Inclination: 90.75° Azimuth: 268.55° VS: 3,503.46' DP @ 10,450'	MD: 10,460' TVD: 7,104.09' Inclination: 90.75° Azimuth: 268.55° VS: 3,503.46'
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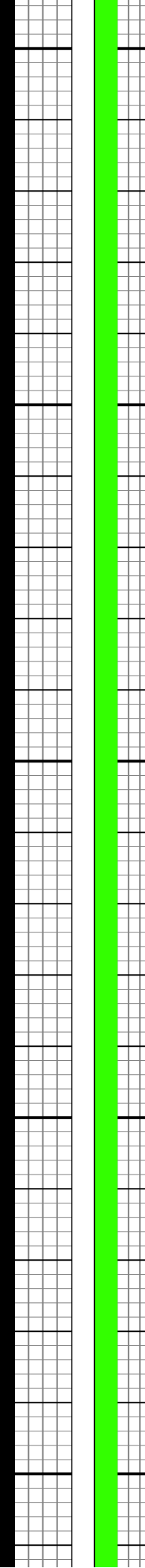
4940 SS: pred occ dk gy, rr dbm, pred vf- f d gr, trnsi qtz sb ang, ip calc mtx, tr diff yel cut	10490 - 10520 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10520 - 10550 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10550 - 10580 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10580 - 10610 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10610 10640 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10640 - 10670 SS: pred trnsi- lt gy, occ dk gy, rr trnsi yel- rdbm, pred vf- f gr, occ med gr, trnsi qtz grs, sb rnd- sb ang, ip ang, pred uncon, ip clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	10670 - 10700 SS: pred trnsi- lt gy, occ gy- blk, rr trnsi yel- rdbm, pred vf- f gr, o med gr, trnsi qtz grs, rnd- sb ang, ip ang, pred uncon, occ clu mod srt, arg- calc m tr pyr, tr vis por, tr di cut
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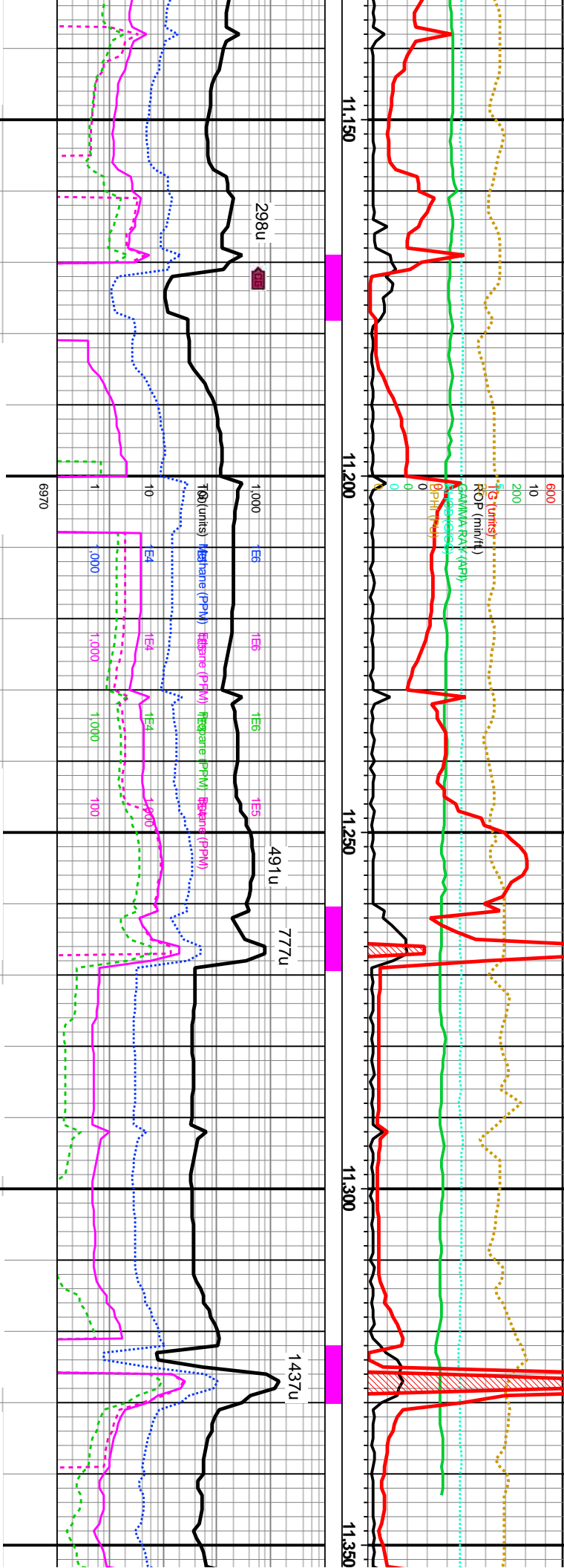
0.467' 7,103.82' Inclination: 90.22° Azimuth: 268.19° VS: 3,563.69'	MD: 10,498' TVD: 7,103.68' Inclination: 90.31° Azimuth: 268.85° VS: 3,563.94'	MD: 10,529' TVD: 7,103.56' Inclination: 90.13° Azimuth: 268.86° VS: 3,594.24'	MD: 10,561' TVD: 7,103.51' Inclination: 90.04° Azimuth: 268.43° VS: 3,625.48'	MD: 10,592' TVD: 7,103.32' Inclination: 90.66° Azimuth: 269.34° VS: 3,655.78'	MD: 10,623' TVD: 7,102.87' Inclination: 91.01° Azimuth: 269.63° VS: 3,686.14'	MD: 10,653' TVD: 7,102.3' Inclination: 91.19° Azimuth: 269.33° VS: 3,715.51'	MD: 10,6 TVD: 7.1 Inclination: Azimuth: VS: 3,74
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	10700 - 10730 SS: pred	10730 - 10760 SS: pred	10760 - 10790 SS: pred	10790 - 10820 SS: pred	10820 - 10850 SS: pred	10850 - 10880 SS: pred	10880 - 10910 SS: pred
tdk	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf-	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf-	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf- f gr,	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf- f gr, occ med gr, tmsl qtz	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf- f gr, occ med gr, tmsl qtz	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf- f gr, occ med gr, tmsl qtz	trns1-1t gy, occ dk gy- blk, tr tmsl yel- rdbm, pred vf-
cc	f gr, occ med gr, tmsl qtz	f gr, occ med gr, tmsl qtz	occ med gr, tmsl qtz	gr, occ med gr, tmsl qtz	f gr, occ med gr, tmsl qtz	occ med gr, tmsl qtz	f gr, occ med gr, tmsl qtz
sb	grs, sb rnd- sb ang, ip	grs, sb rnd- sb ang, ip	sb md- sb ang, ip ang,	grs, sb rnd- sb ang, ip	grs, sb md- sb ang, ip	rnd- sb ang, ip ang, pred	grs, sb md- sb ang, ip
ang, pred uncons, occ	ang, pred uncons, occ	ang, pred uncons, occ	pred uncons, occ clus,	ang, pred uncons, occ	ang, pred uncons, occ	ang, pred uncons, occ	ang, pred uncons, occ
s,	clus, mod srt, arg- calc	clus, mod srt, arg- calc	mod srt, arg- calc	clus, mod srt, arg- calc	clus, mod srt, arg- calc	arg- calc mtx, tr pyr, tr vis por,	clus, mod srt, arg- calc
X,	mtx, tr pyr, tr vis por, tr diff	mtx, tr pyr, tr vis por, tr diff	pyr, tr vis por, tr diff	mtx, tr pyr, tr vis por, tr diff	mtx, tr pyr, tr vis por, tr diff	tr diff yel cut	mtx, tr pyr, tr vis por, tr diff
f yel	yel cut	yel cut		yel cut	yel cut		yel cut

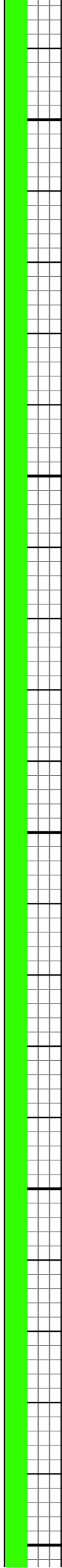
Station	MD: 10,716'	MD: 10,747'	MD: 10,779'	MD: 10,810'	MD: 10,841'	MD: 10,873'	MD: 10,905'
01.891	TVD: 7,101.92'	TVD: 7,102.11'	TVD: 7,102.33'	TVD: 7,102.52'	TVD: 7,102.59'	TVD: 7,102.66'	TVD: 7,1
n: 90.31°	Inclination: 89.6°	Inclination: 89.69°	Inclination: 89.52°	Inclination: 89.78°	Inclination: 89.96°	Inclination: 89.78°	Inclination:
268.64°	Azimuth: 268.76°	Azimuth: 268.75°	Azimuth: 268.17°	Azimuth: 268.33°	Azimuth: 268.44°	Azimuth: 267.62°	Azimuth:
5.82'	VS: 3,777.07'	VS: 3,807.35'	VS: 3,838.57'	VS: 3,868.79'	VS: 3,899.03'	VS: 3,930.2'	VS: 3,96
			7200				





11150 SS: pred occ dk gy- blk, rdbrn, pred vf- gr, trnsi qtz ang, ip concs, occ t, arg- calc vis por, tr diff	11150 - 11180 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11180 - 11210 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11210 - 11240 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11240 - 11270 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11270 - 11300 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11300 - 11330 SS: pred trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut	11330 - 11360 SS: p trnsi- lt gy, occ dk gy- blk, tr trnsi yel- rdbrn, pred vf- f gr, occ med gr, trnsi qtz grs, sb md- sb ang, ip ang, pred unconcs, occ clus, mod srt, arg- calc mtx, tr pyr, tr vis por, tr diff yel cut
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11,99' : 90.48° Azimuth: 269.65° VS: 4,203.91'	MD: 11,153' TVD: 7,101.73' Inclination: 90.48° Azimuth: 269.78° VS: 4,203.91'	MD: 11,183' TVD: 7,101.37' Inclination: 90.92° Azimuth: 270.09° VS: 4,233.34'	MD: 11,214' TVD: 7,101.08' Inclination: 90.13° Azimuth: 269.25° VS: 4,263.72'	MD: 11,245' TVD: 7,100.89' Inclination: 90.57° Azimuth: 269.41° VS: 4,294.06'	MD: 11,276' TVD: 7,100.71' Inclination: 90.13° Azimuth: 269.76° VS: 4,324.44'	MD: 11,308' TVD: 7,100.56' Inclination: 90.4° Azimuth: 269.47° VS: 4,355.79'
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[illegible]