



Scale: 5" / 100'
Measured Depth Log

Well Name Davis 1N-9H-G266

Location Sec. 4 T2N R66W

State Colorado

County Weld

Country USA

Rig Number Ensign 153

API Number 05123465060000

AFE # 16191032

Geographic Region Rockies

Field Wattenberg

Spud Date 7/12/2018

Drilling Completed 7/16/2018

Surface Coordinates Lat/Long: 40.154345/-104.777964

SHL: Sec: 9 Twp: 2N 66W
Footage: 1995 FSL 1443 FEL

Bottom Hole Coordinates Proposed BHL:
Sec: 4 Twp: 2N 66W
Footages: 460 FNL 453 FWL

Ground Elevation 4,917'

K.B. Elevation 4,940'

Logged Interval 6,500' MD **To** 15,075' MD

Total Depth 15,075' MD

Formation NIO C Chalk

Type of Drilling Fluid Synthetic Oil Based Mud

Operator

Company Crestone Peak Resources

Address 370 17th Street #2170
Denver, CO 80202



CRESTONE PEAK
RESOURCES

Geologist

Name John Ready

Company Crestone Peak Resources

Address 370 17th Street #2170
Denver, CO 80202



Zone Color Coding

Oil	Condensate	Gas
Note	Core	Pressure
Error	Water	Seal

Other

Loggers: Byron Pitulski / Heather Davis / Mark Gross

Services Provided: 2-Man Mudlogging / Geosteering

Equipment: ML-526

Contractor: Reservoir Group
6360 West Sam Houston Pkwy N
Houston, Texas, 77041

Job #: 1406RK1807

Start Date 7/12/2018

Release Date: 7/17/2018

Rock Types

UNKNOWN
ANHYDRITE
GYPSUM
SALT
SIDERITE or LIMONITE
LIMESTONE

DOLOMITE
CHERT
COAL
MARLSTONE
CHALK
SHALE

SHALE GRAY
SHALE COLORED
SILTSTONE
SANDSTONE
CONGLOMERATE
BRECCIA

TILL
BENTONITE
TUFF
IGNEOUS
METAMORPHIC
CEMENT

Accessories

Fossils

ALGAE
AMPHIPORA
BELEMNITE
BIOCLASTIC
BRACHIOPOD
BRYOZOA
CEPHALOPOD
CORAL
CRINOID
ECHINOID
FISH

F FOSSIL

GASTROPOD
OOLITE
OSTRACOD
PELECYPOD
PELLET
PISOLITE
PLANT REMAINS
PLANT SPORES
SCAPHOPOD
STROMATOPOROID

Minerals

- ARGILLACEOUS

ARGILLITE GRAIN
BENTONITE
BITUMENOUS SUBSTANCE
BRECCIA FRAGMENTS
CALCAREOUS
CARBONACEOUS FLAKES
CHTDK
CHTLT
COAL - THIN BEDS
DOLOMITIC
FELDSPAR
FERRUGINOUS PELLET

- GLAUCONITE

GYPSIFEROUS
HEAVY MINERAL
KAOLIN
MARLSTONE
MINERAL CRYSTALS
NODULES
PHOSPHATE PELLETS
PYRITE
SALT CAST
SANDY
SILICEOUS
SILTY

Stringer

ANHYDRITE STRINGER
BENTONITE STRINGER
COAL STRINGER
DOLOMITE STRINGER
GYPSUM STRINGER
LIMESTONE STRINGER
MARLSTONE (CALC) STRG
MARLSTONE (DOL) STRG
SANDSTONE STRINGER
SHALE STRINGER
SILTSTONE STRINGER

FORMATION

FORAMINIFERA

ANHYDRITIC

FERRUGINOUS FEELE

FERRUGINOUS

GIETT

TUFFACEOUS

SLISTONE STRINGER

Other Symbols

Oil Show

DEAD

EVEN

QUESTIONABLE

SPOTTED STAINING

Porosity

E EARTHY

F FENESTRAL

F FRACTURE

X INTERCRYSTALLINE

Q INTEROOLITIC

M MOLDIC

O ORGANIC

P PINPOINT

V VUGGY

Engineering

BIT

CASING

CONNECTION (LEFT)

CONNECTION (RIGHT)

CONNECTION GAS

CORE - LOST

CORE - RECOVERED

DST INTERVAL

FAULT

FORMATION TOP

GAS SHOW

MN DEPTH MN DEPTH

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

REVERSE FAULT

SIDEWALL CORE (LEFT)

SIDEWALL CORE (RIGHT)

SLIDE

SURVEY

TRIP GAS

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

Rounding

ANGULAR

ROUNDED

SUBANG

SUBRND

Textures

BOUNDSTONE

CHALKY

CRYPTOXLN

E EARTHY

F FINELYXLN

GRAINSTONE

L LITHOGRAPHIC

MX MICROXLN

MS MUDSTONE

PS PACKSTONE

WS WACKESTONE

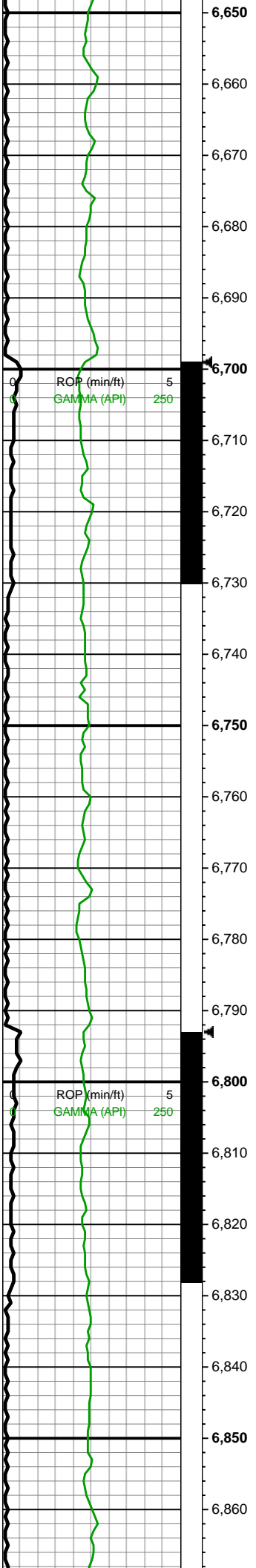
Sorting

M MODERATE

P POOR

W WELL

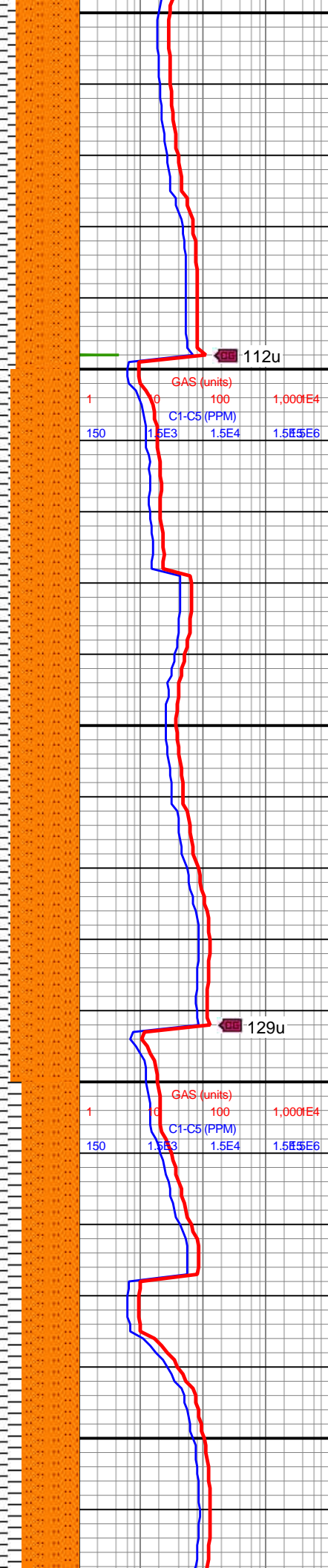
[illegible]



MD: 6,733'
INC: 30.54°
AZM: 260.69°
TVD: 6,038.2'
VS: 882.76'

WOB: 28klbs
RPM: 0
SPM: 202
SPP: 4,358psi

MW IN: 9.6+
VIS IN: 53
MW OUT: 9.6
VIS OUT: 47
MD: 6,827'
INC: 30.37°
AZM: 258.14°
TVD: 6,119.23'
VS: 895.77'

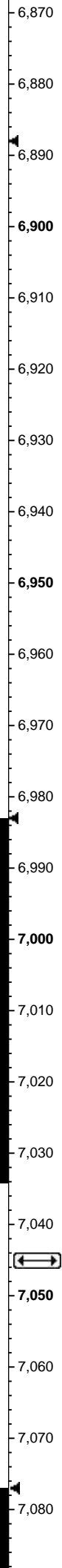
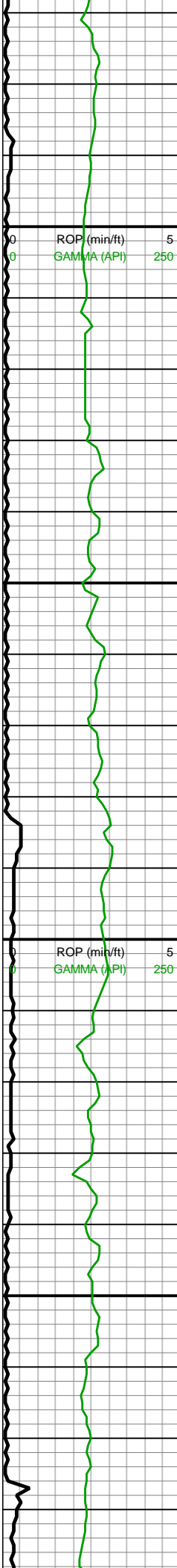


6600-6700 SLTST (55%):
dk gy-med gy, blkyl-sb tab
ctngs, slty-sl abrsv tex,
frm; SLTY SH (45%):
predy lt gy, med
gy-gyshbn, frm-sl brit, sb
plty-sb blkyl, micmica, v
thnly lam, tr diss mic
pyr, non calc



6700-6800 SLTST (60%):
dk gy-med gy, blkyl-sb tab
ctngs, frm, slty-sl abrsv
tex, non-sl calc; SLTY SH
(40%): predy lt gy, med
gy-gyshbn, frm-sl brit, sb
plty-sb blkyl, micmica, v
thnly lam, tr diss pyr,
non calc





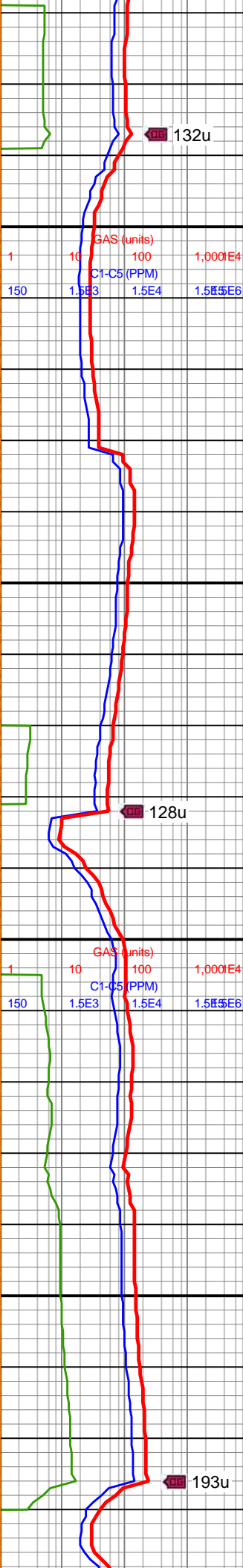
MD: 6,922'
INC: 26.02°
AZM: 254.54°
TVD: 6,202.95'
VS: 905.78'

WOB: 32klbs
RPM: 0
SPM: 200
SPP: 4,549psi

MD: 7,017'
INC: 26.59°
AZM: 257.53°
TVD: 6,288.11'
VS: 914.88'

Tepee Buttes
7045'MD/6313'TVD

MW IN: 9.7
VIS IN: 52
MW OUT: 9.6+
VIS OUT: 48

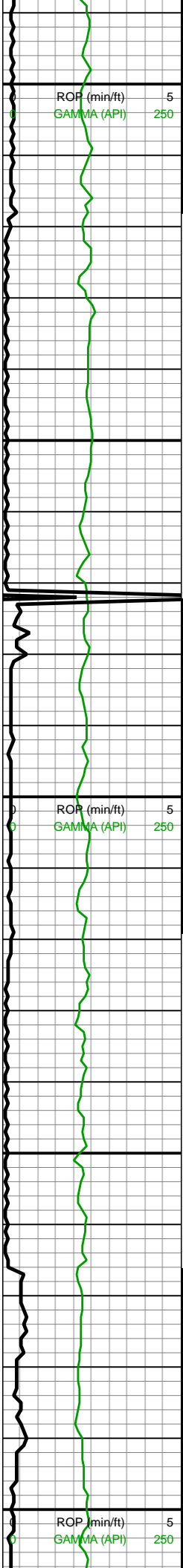


6800-6900 SLTY SH
(50%): predy lt gy, med
gy-gyshbn, frm-sl brit, sb
plty-sb blk, micmica, v
thnly lam, tr diss mic
pyr, non calc; SLTST
(50%): dk gy-med gy,
blk-sb tab ctngs, frm,
sly-sl abrsv tex, wk calc

6900-7000 SLTY SH
(55%): med gy-gyshbn,
frm-sl brit, sb plty-sb blk,
micmica, v f lam, non
calc; SLTST (45%): dk
gy-med gy, blk-sb tab
ctngs, frm, sly-sl abrsv
tex, wk calc

7000-7100 SLTY SH
(60%): med gy-gyshbn,
frm-sl brit, sb plty-sb blk,
micmica, v f lam, tr diss
mic pyr, non calc; SLTST
(40%): dk gy-med gy, blk-sb
tab ctngs, frm, sly-sl abrsv
tex, wk calc





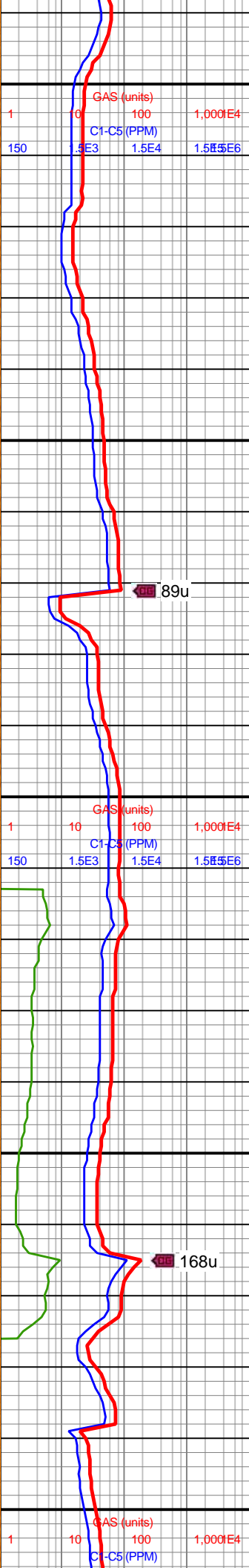
MD: 7,111'
INC: 27.99°
AZM: 263.07°
TVD: 6,371.66'
VS: 927.32'

MW IN: 9.7+
VIS IN: 48
MW OUT: 9.7
VIS OUT: 47

WOB: 29klbs
RPM: 0
SPM: 201
SPP: 4,595psi

MD: 7,205'
INC: 27.2°
AZM: 262.89°
TVD: 6,454.97'
VS: 941.79'

MD: 7,299'
INC: 28.21°
AZM: 260.25°
TVD: 6,538.19'
VS: 955.28'

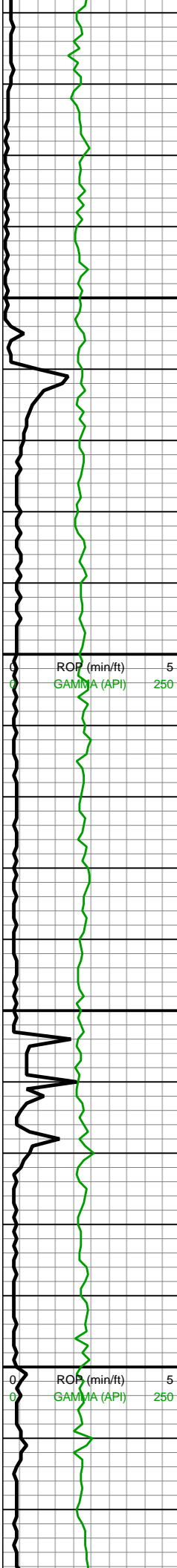


mic pyr, non calc; SLTST
(40%): dk gy-med gy,
blky-sb tab ctngs, frm,
silty-sl abrsv tex, sl calc

7100-7200 SLTY SH
(55%): med gy-gyshbn,
frm-sl brit, sb plty-sb blky,
micmica, v f lam, tr diss
mic pyr, non calc; SLTST
(45%): dk gy-med gy, frm,
blky-sb tab ctngs, silty-sl
abrsv tex, sl calc

7200-7300 SLTY SH
(60%): med gy-gyshbn,
frm-sl brit, sb plty-sb blky,
micmica, v f lam, tr diss
mic pyr, wk calc; SLTST
(40%): dk gy-med gy, frm,
blky-sb tab ctngs, sl
abrsv-silty tex, sl calc





Note:
Troubleshoot
Top Drive

KOP
7,360' MD

MW IN: 9.8+
VIS IN: 59
MW OUT: 9.8
VIS OUT: 52

MD: 7,394'
INC: 30.98°
AZM: 267.02°
TVD: 6,620.81'
VS: 971.46'

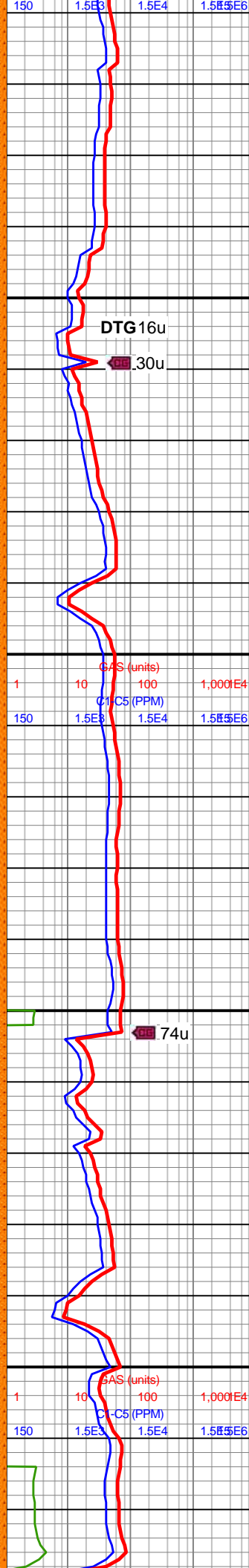
WOB: 34.8klbs
RPM: 0
SPM: 186
SPP: 4,045psi

MD: 7,441'
INC: 34.41°
AZM: 276.42°
TVD: 6,660.39'
VS: 983.49'

MW IN: 9.8+
VIS IN: 57
MW OUT: 9.8+
VIS OUT: 52

MD: 7,488'
INC: 33.57°
AZM: 284.16°
TVD: 6,699.37'
VS: 999.15'

Mitten Marker 2

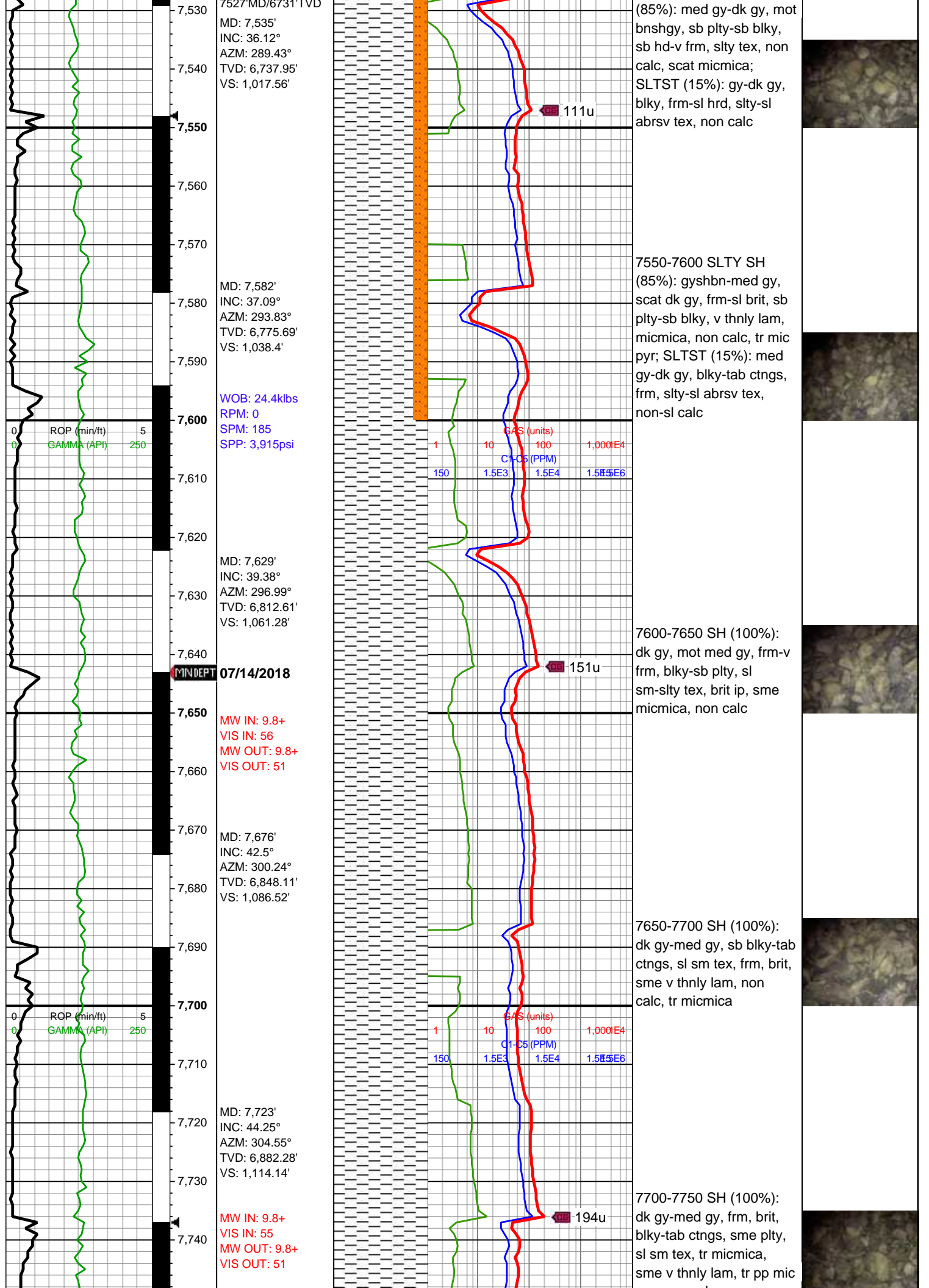


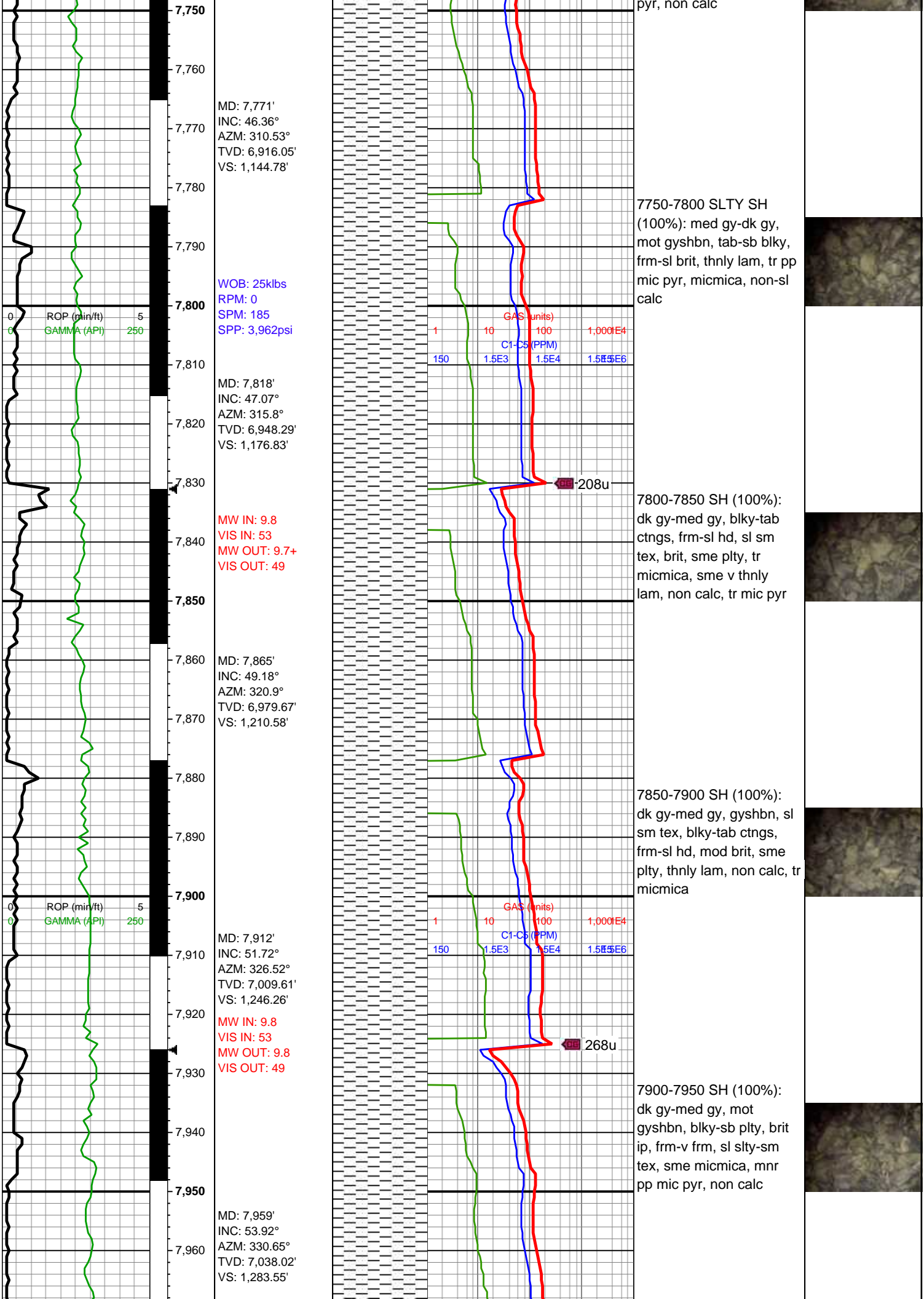
7300-7400 SLTY SH
(75%): med gy-gyshbn,
frm-sl brit, sb plty-sb blk,
vf lam, micmica, wk calc,
tr diss mic pyr; SLTST
(25%): dk gy-med gy, sl
abrsv-slt tex, frm, blk-sb
tab ctngs, sl calc

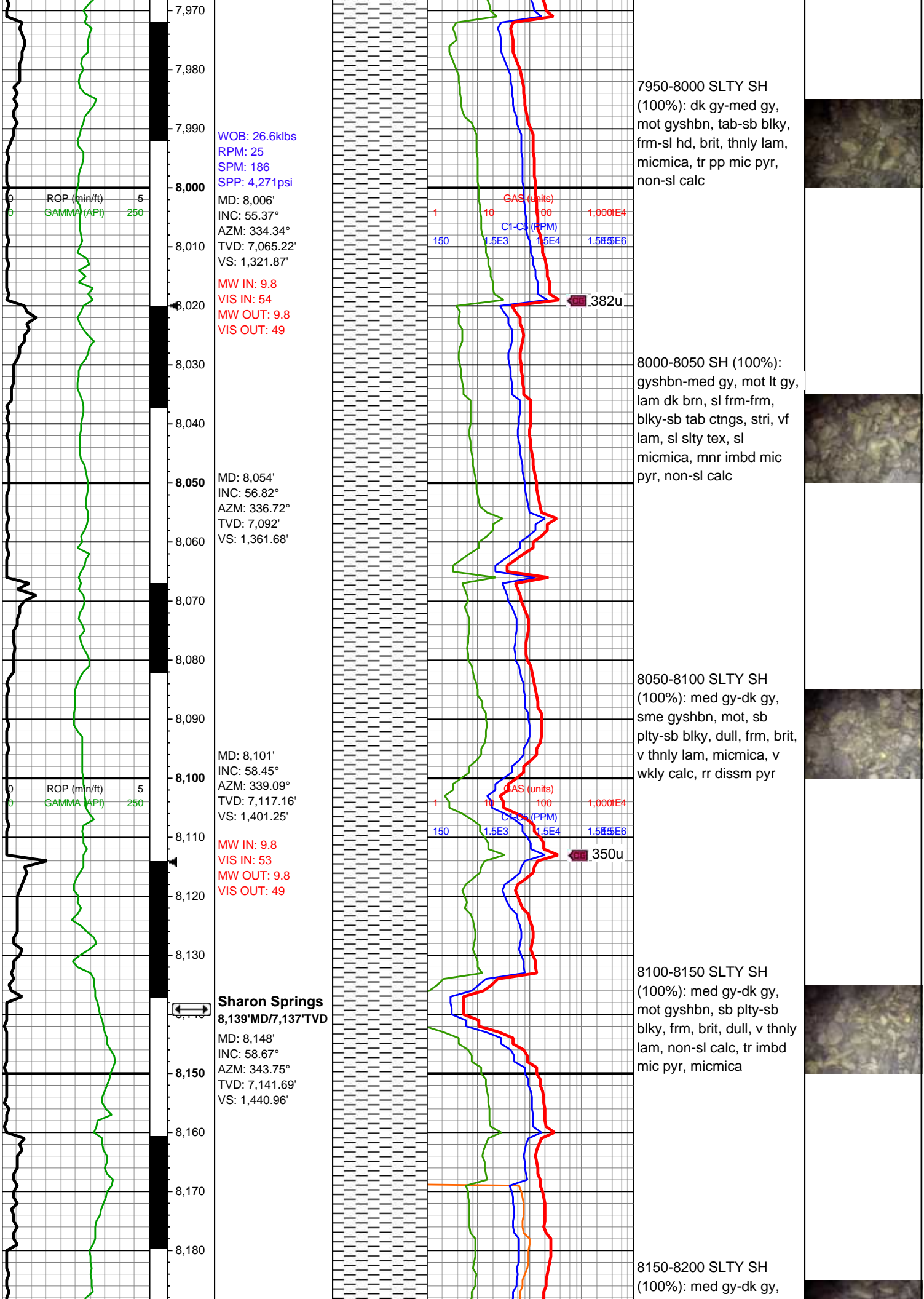
7400-7450 SLTY SH
(70%): med gy-gyshbn,
sb plty-sb blk, frm-sl brit,
micmica, vf lam, non
calc, tr diss mic pyr;
SLTST (30%): dk gy-med
gy, slty-sl abrsv tex,
blk-sb tab ctngs, frm, sl
calc

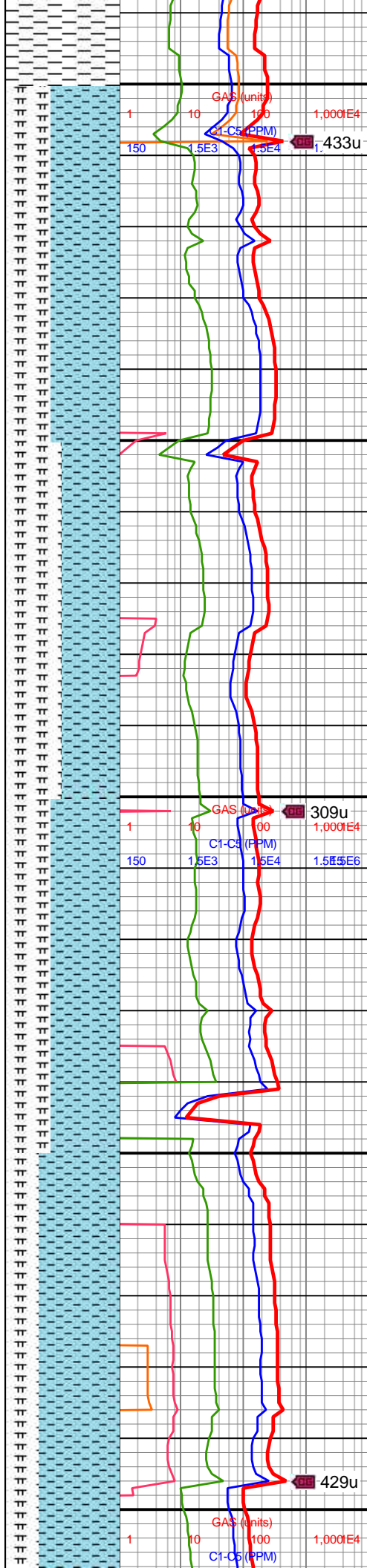
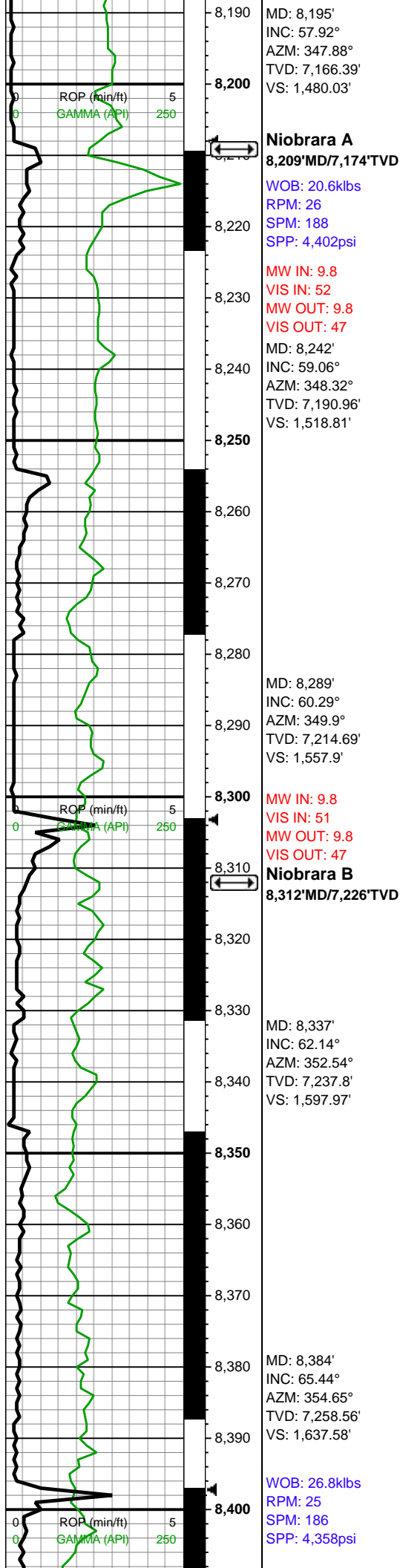
7450-7500 SLTY SH
(70%): med gy-gyshbn,
sb plty-sb blk, frm-sl brit,
vf lam, micmica, tr mic
pyr, non calc; SLTST
(30%): dk gy-med gy, frm,
slty-sl abrsv tex, blk-sb
tab ctngs, sl calc

7500-7550 SLTY SH









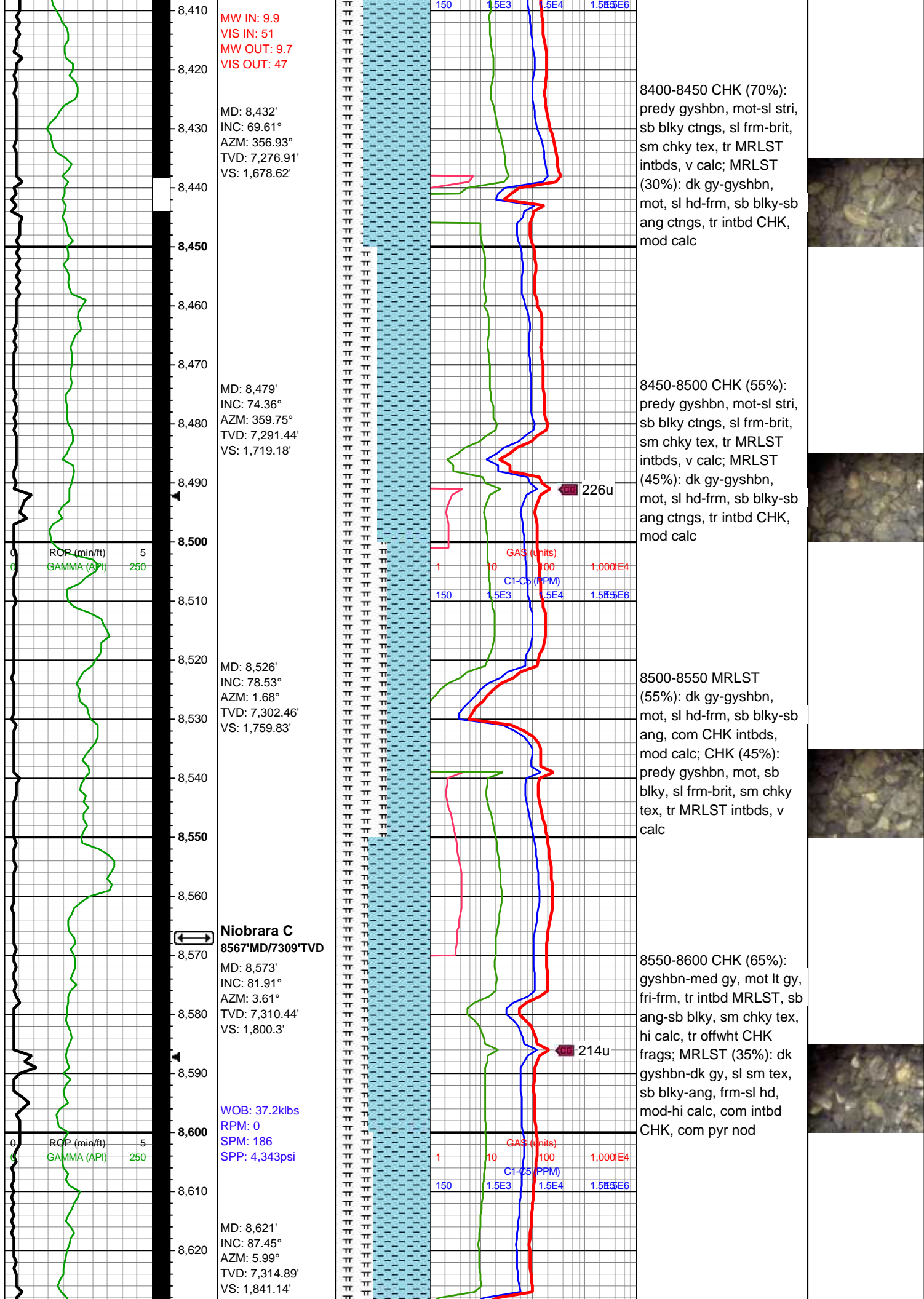
mot gyshbn, sb plty-sb
blky, frm, brit, dull, v thnly
lam, non-sl calc, tr imbd
mic pyr, micmica

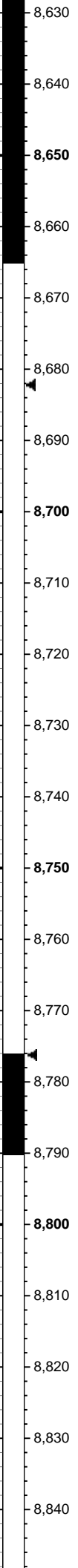
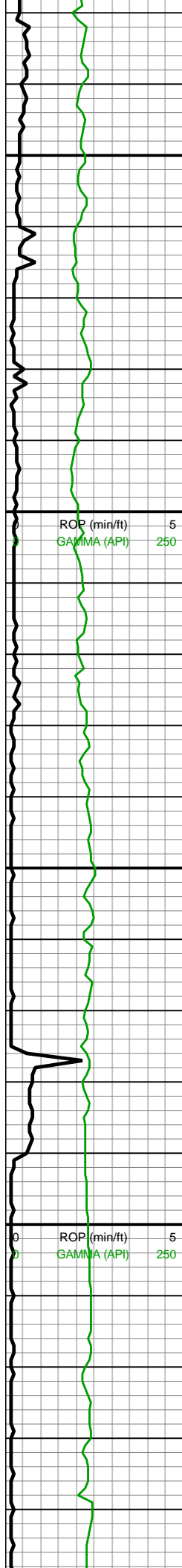
8200-8250 CHK (60%):
predy gyshbn, mot-sl stri,
sb blky, sl frm-brit, tr
MRLST incl, sm chky tex,
v calc; MRLST (40%): dk
gy-gyshbn, mot, sl
hd-frm, sb blky-sb ang, tr
intbd CHK, mod calc

8250-8300 MRLST
(50%): dk gy-gyshbn,
mot, sl hd-frm, sb blky-sb
ang, tr intbd CHK, mod
calc, comm pyr nod; CHK
(50%): predy gyshbn,
mot-sl stri, sb blky, sl
frm-brit, tr MRLST incl,
sm chky tex, v calc

8300-8350 CHK (60%):
predy gyshbn, mot-sl stri,
sb blky, sl frm-brit, sm
chky tex, v calc; MRLST
(40%): dk gy-gyshbn,
mot, sl hd-frm, sb blky-sb
ang, tr intbd CHK, mod
calc

8350-8400 CHK (70%):
predy gyshbn, mot-sl stri,
sb blky ctngs, sl frm-brit,
sm chky tex, tr MRLST
intbds, v calc; MRLST
(30%): dk gy-gyshbn,
mot, sl hd-frm, sb blky-sb
ang ctngs, tr intbd CHK,
mod calc





**Curve Landed
@ 8,665' MD**

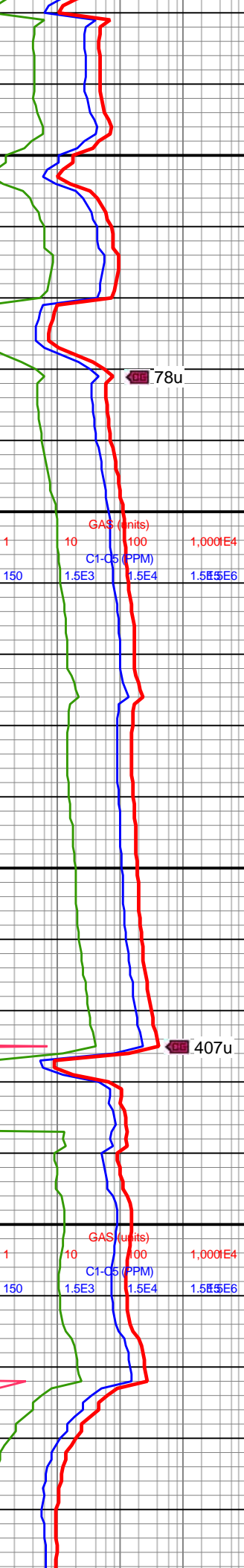
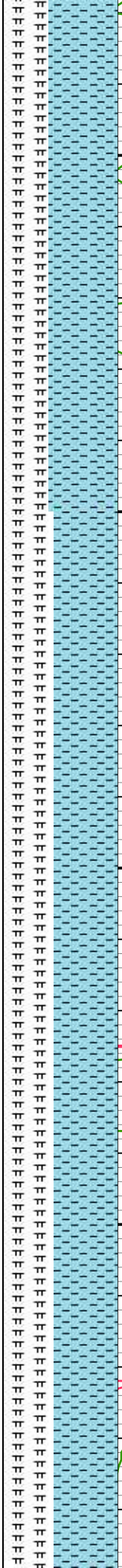
MD: 8,668'
INC: 92.59°
AZM: 8.18°
TVD: 7,314.87'
VS: 1,880.32'

MD: 8,715'
INC: 93.03°
AZM: 7.3°
TVD: 7,312.57'
VS: 1,919.15'

MW IN: 9.9
VIS IN: 51
MW OUT: 9.9
VIS OUT: 47

WOB: 33klbs
RPM: 59
SPM: 201
SPP: 5,170psi

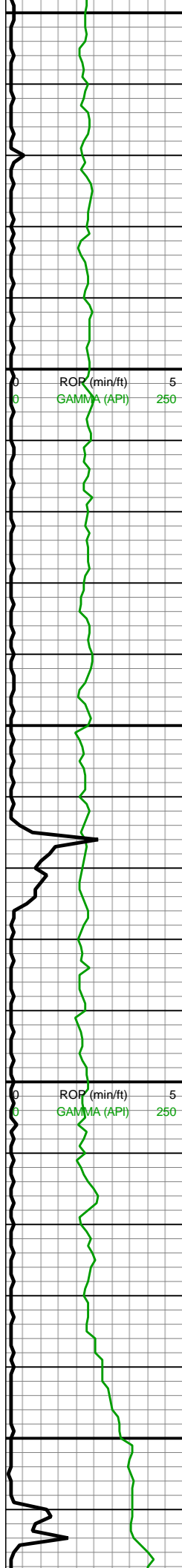
MD: 8,809'
INC: 91.41°
AZM: 4.14°
TVD: 7,308.93'
VS: 1,998.67'



8600-8700 CHK (60%):
gyshbn-med gy, mot lt gy,
fri-frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, tr offwht CHK
frags; MRLST (40%): dk
gyshbn-dk gy, sl sm tex,
sb blk-ang, frm-sl hd,
mod-hi calc, com intbd
CHK, com pyr nod

8700-8800 CHK (55%):
gyshbn-med gy, mot lt gy,
fri-frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, tr offwht CHK
frags; MRLST (45%): dk
gyshbn-dk gy, sl sm tex,
sb blk-ang, frm-sl hd,
mod-hi calc, com intbd
CHK, com pyr nod





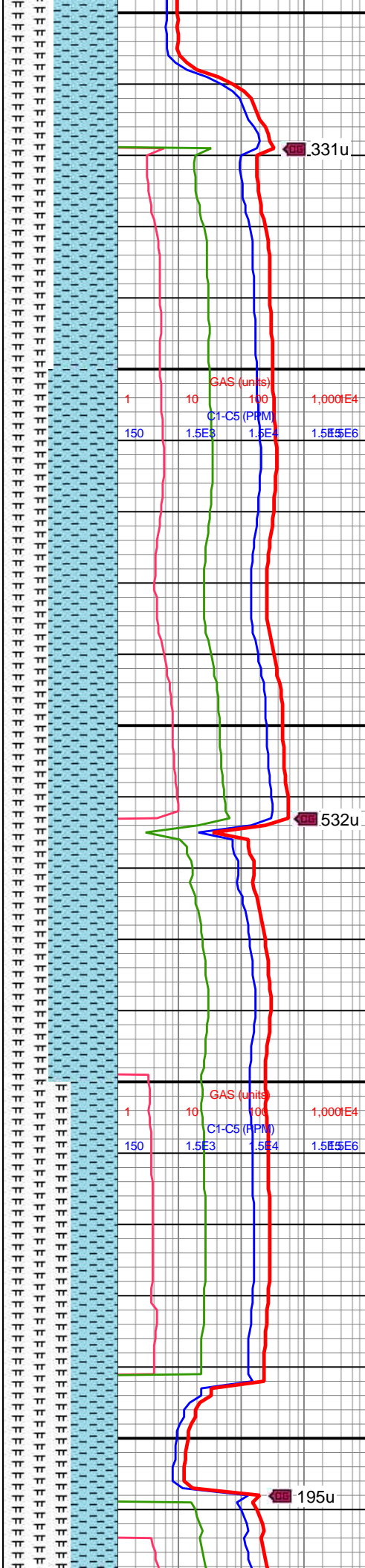
8,850
8,860
8,870
8,880
8,890
8,900
8,910
8,920
8,930
8,940
8,950
8,960
8,970
8,980
8,990
9,000
9,010
9,020
9,030
9,040
9,050
9,060

MD: 8,904'
INC: 90.97°
AZM: 4.4°
TVD: 7,306.95'
VS: 2,080.34'

MW IN: 9.9
VIS IN: 53
MW OUT: 9.9
VIS OUT: 48

MD: 8,998'
INC: 90.13°
AZM: 0.71°
TVD: 7,306.05'
VS: 2,162.54'
WOB: 35.5klbs
RPM: 60
SPM: 202
SPP: 5,234psi

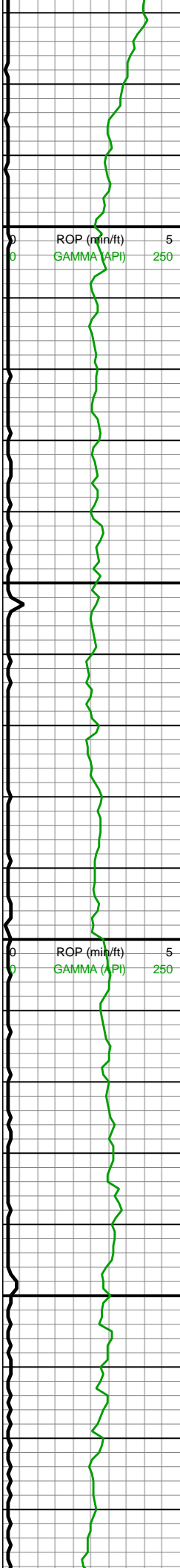
MW IN: 10
VIS IN: 50
MW OUT: 9.9
VIS OUT: 47



8800-8900 CHK (55%):
gyshbn-med gy, mot lt gy,
fri frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, tr offwht CHK
frags; MRLST (45%): dk
gyshbn-dk gy, sl sm tex,
sb blk-ang, frm-sl hd,
mod-hi calc, com intbd
CHK, com pyr nod

8900-9000 CHK (60%):
gyshbn-med gy, mot lt gy,
fri frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, occ offwht CHK
frags; MRLST (40%): dk
gyshbn-dk gy, sl sm tex,
sb blk-ang, frm-sl hd,
mod-hi calc, com intbd
CHK, com pyr nod

9000-9100 MRLST



9,070
9,080
9,090
9,100
9,110
9,120
9,130
9,140
9,150
9,160
9,170
9,180
9,190
9,200
9,210
9,220
9,230
9,240
9,250
9,260
9,270
9,280

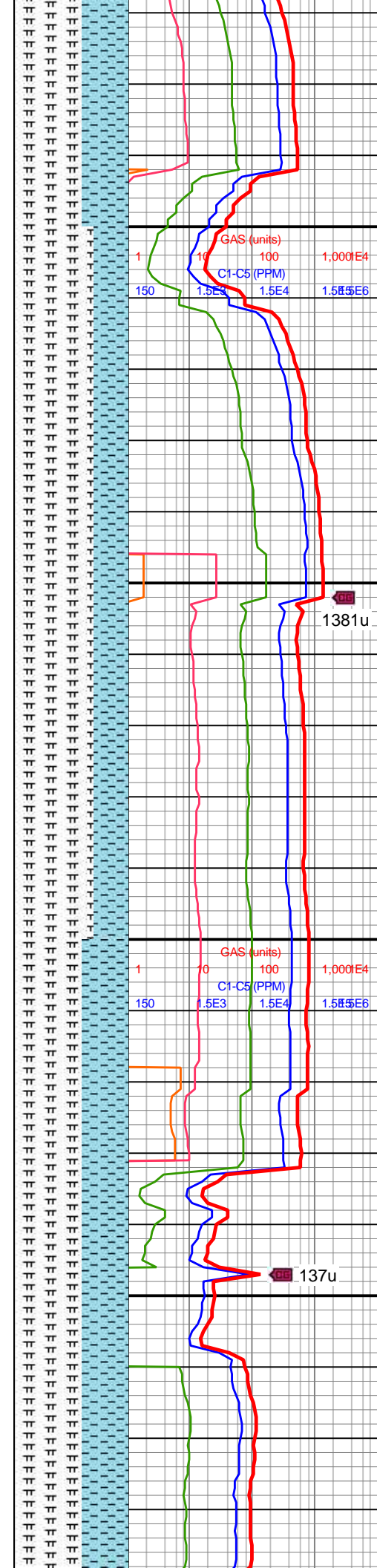
MD: 9,093'
INC: 91.27°
AZM: 1.06°
TVD: 7,304.89'
VS: 2,246.94'

MD: 9,187'
INC: 91.27°
AZM: 1.24°
TVD: 7,302.81'
VS: 2,330.24'

WOB: 35.1klbs
RPM: 60
SPM: 201
SPP: 5,211psi

MW IN: 10
VIS IN: 53
MW OUT: 9.9
VIS OUT: 48

MD: 9,282'
INC: 91.01°
AZM: 0.71°
TVD: 7,300.92'
VS: 2,414.56'

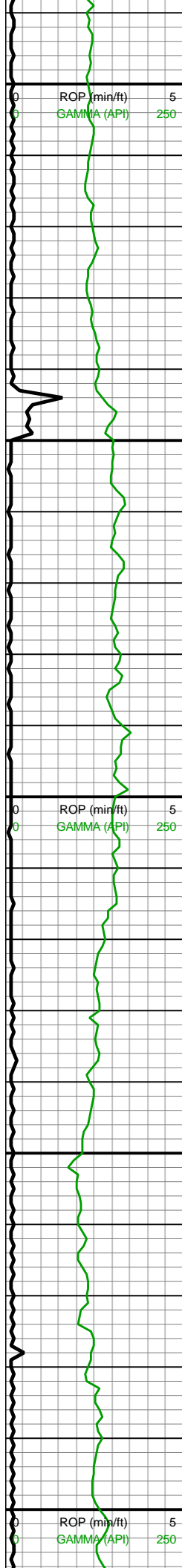


(60%): dk gyshbn-dk gy,
sl sm tex, sb blk-ang,
frm-sl hd, mod-hi calc,
com intbd CHK, com pyr
nod; CHK (40%):
gyshbn-med gy, mot lt gy,
fri-frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, tr offwht CHK
frags

9100-9200 MRLST
(70%): dk gyshbn-dk gy,
sl sm tex, sb blk-ang,
frm-sl hd, mod-hi calc,
com intbd CHK, com pp
pyr; CHK (30%):
gyshbn-med gy, mot lt gy,
fri-frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, occ offwht CHK
frags

9200-9300 MRLST
(60%): dk gyshbn-dk gy,
sl sm tex, sb blk-ang,
frm-sl hd, mod-hi calc,
com intbd CHK, com pp
pyr; CHK (40%):
gyshbn-med gy, mot lt gy,





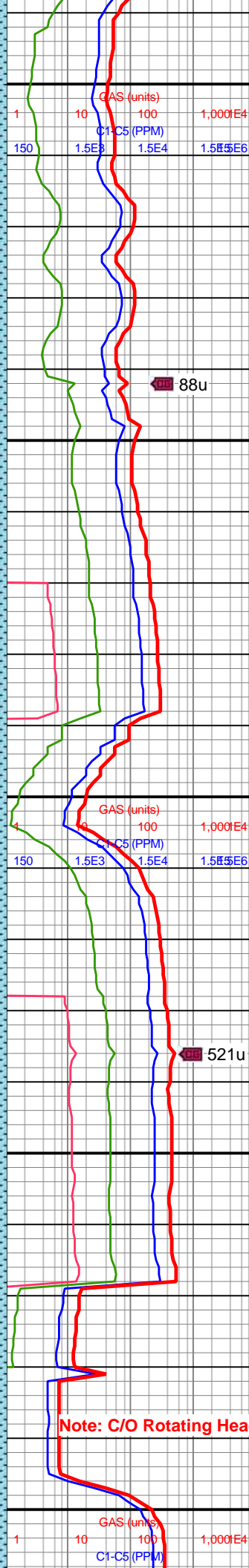
9,290
9,300
9,310
9,320
9,330
9,340
9,350
9,360
9,370
9,380
9,390
9,400
9,410
9,420
9,430
9,440
9,450
9,460
9,470
9,480
9,490
9,500

MD: 9,376'
INC: 91.93°
AZM: 0.62°
TVD: 7,298.51'
VS: 2,498.22'

WOB: 35klbs
RPM: 60
SPM: 201
SPP: 5,289psi

MD: 9,471'
INC: 91.63°
AZM: 359.75°
TVD: 7,295.56'
VS: 2,583.11'

MW IN: 10
VIS IN: 52
MW OUT: 9.9
VIS OUT: 47



88u

521u

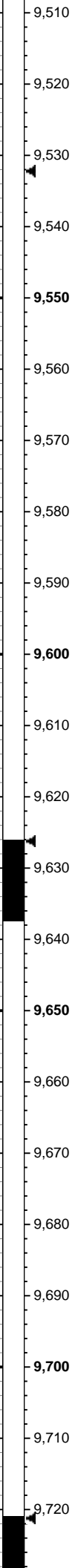
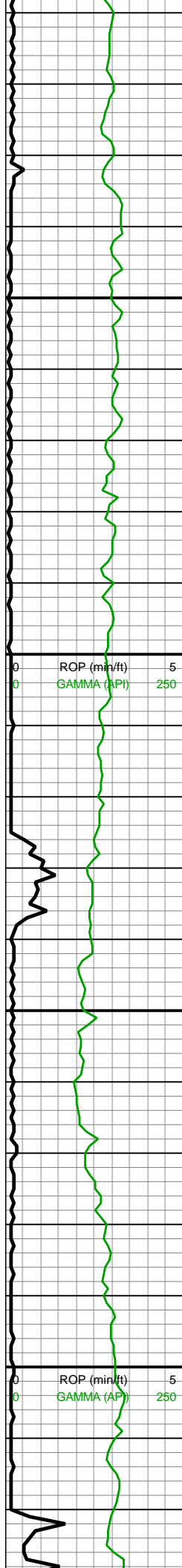
Note: C/O Rotating Head

fri-frm, tr intbd MRLST, sb
ang-sb blk, sm chky tex,
hi calc, occ offwht CHK
frags

9300-9400 MRLST
(50%): predydk gy, sl sm
tex, sb blk-ang, frm-sl
hd, mod-hi calc, tr intbd
CHK, abnt pp pyr and pyr
nod; CHK (50%): med-dk
gy, fri-frm, tr intbd MRLST,
sb ang-sb blk, sm chky
tex, hi calc, rr offwht CHK
frags

9400-9500 MRLST
(55%): dk gy-med gy,
frm-sl hd, sl sm-rgh tex,
sb blk-ang ctngs, mntr
intbd CHK, tr mic pyrc cls,
mod calc; CHK (45%):
gyshbn-med gy, mot lt gy,
sb blk-sb ang ctngs, sl
frm, tr intbd MRLST, sm
chky tex, hi calc



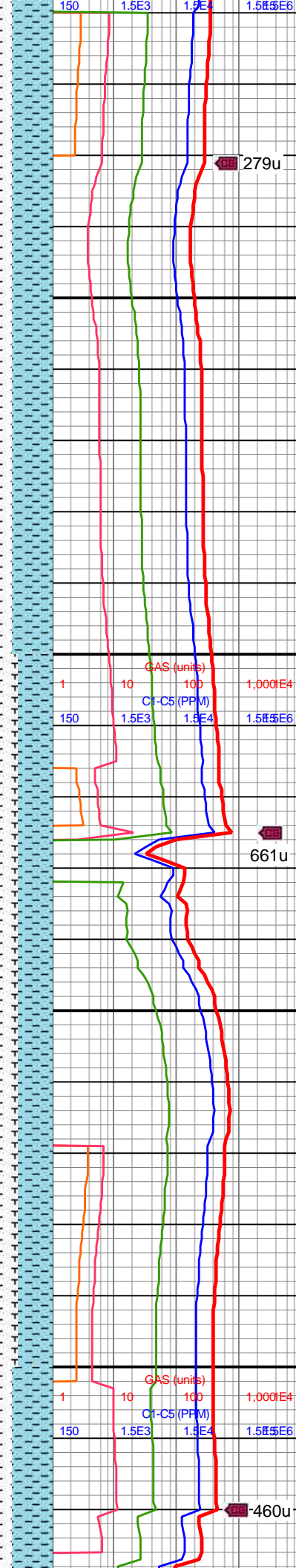


MD: 9,566'
INC: 91.06°
AZM: 2.65°
TVD: 7,293.33'
VS: 2,667.24'

WOB: 36.3klbs
RPM: 60
SPM: 202
SPP: 5,468psi

MD: 9,660'
INC: 90.35°
AZM: 4.4°
TVD: 7,292.17'
VS: 2,748.68'

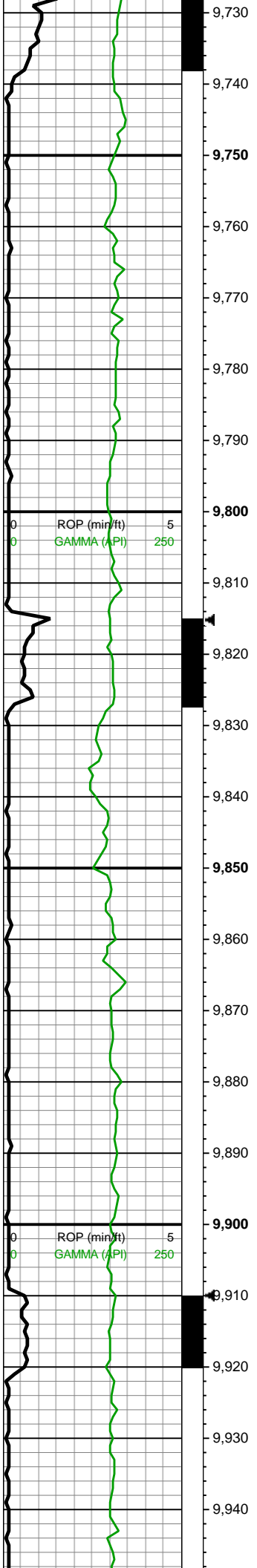
MW IN: 10.0+
VIS IN: 53
MW OUT: 10.0+
VIS OUT: 48



9500-9600 MRLST
(65%): dk gy-med gy,
mot, sl hd-frm, sb blk-
ang ctngs, tr CHK intbds,
mod calc; CHK (35%):
predy gyshbn, mot, sb
blk ctngs, sl frm-brit, sm
chky tex, com free CHK
frags, v calc, tr pp mic pyr

9600-9700 MRLST
(70%): dk gy, med gy-dk
gyshbn, mot, sl hd-frm,
sb blk-ang ctngs, tr
CHK intbds, tr mic pyr,
mod calc; CHK (30%):
med gy-gyshbn, mot, sm
chky tex, sb blk ctngs, sl
frm-brit, tr MRLST intbds,
v calc





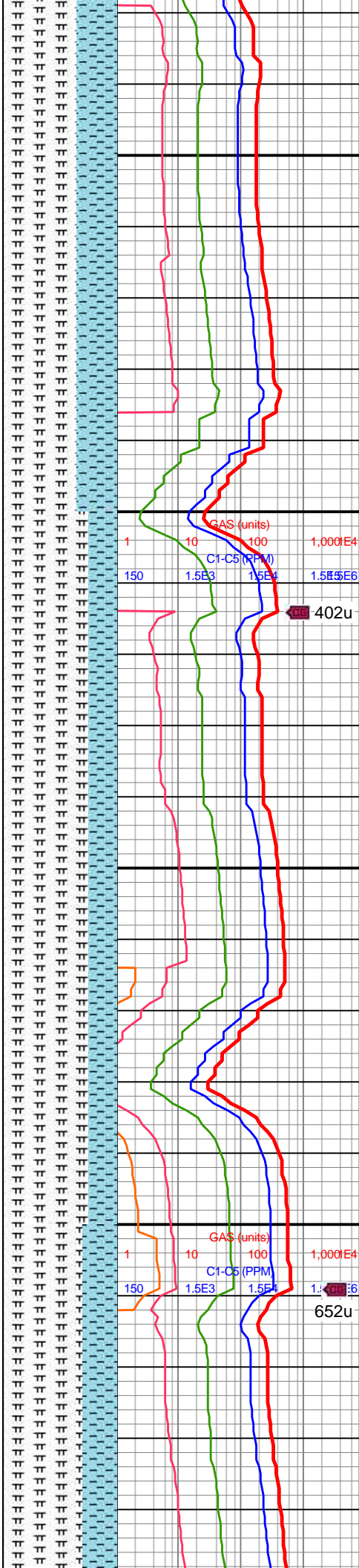
MD: 9,755'
INC: 88.81°
AZM: 3°
TVD: 7,292.87'
VS: 2,830.83'

WOB: 34.6klbs
RPM: 59
SPM: 200
SPP: 5,345psi

MD: 9,849'
INC: 89.25°
AZM: 0.18°
TVD: 7,294.46'
VS: 2,913.8'

MW IN: 10
VIS IN: 52
MW OUT: 10.0+
VIS OUT: 48

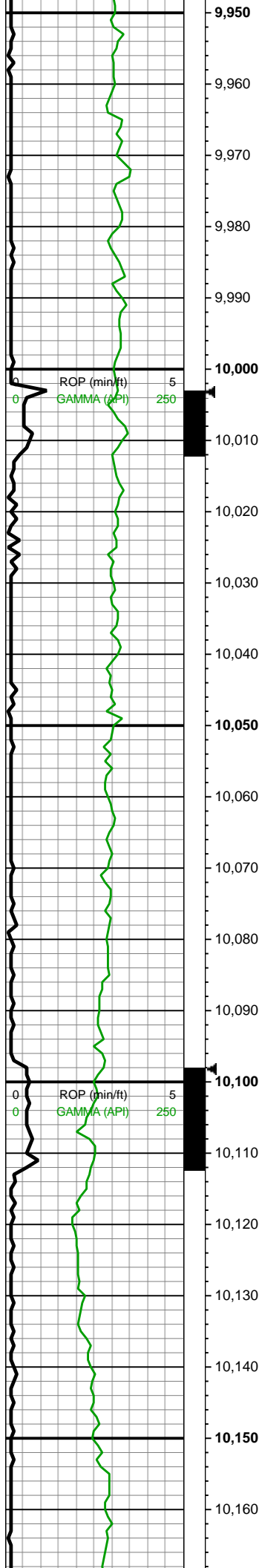
MD: 9,943'
INC: 90.35°
AZM: 359.57°
TVD: 7,294.78'
VS: 2,922.22'



9700-9800 MRLST
(65%): dk gy-med gy, mot
gyshbn, sb blkyl-sb ang
ctngs, sl hd-frm, tr CHK
intbds, mod calc; CHK
(35%): med gy, gyshbn,
mot, sl frm-brit, sm chky
tex, sb blkyl ctngs, tr
MRLST intbds, v calc

9800-9900 MRLST
(75%): dk gy-med gy,
frm-sl hd, sl sm tex, sb
blkyl-ang ctngs, mnr intbd
CHK, mod-hi calc; CHK
(25%): gyshbn-med gy,
fri-frm, tab-sb blkyl ctngs,
sm chky tex, mnr crm
CHK frags, hi calc





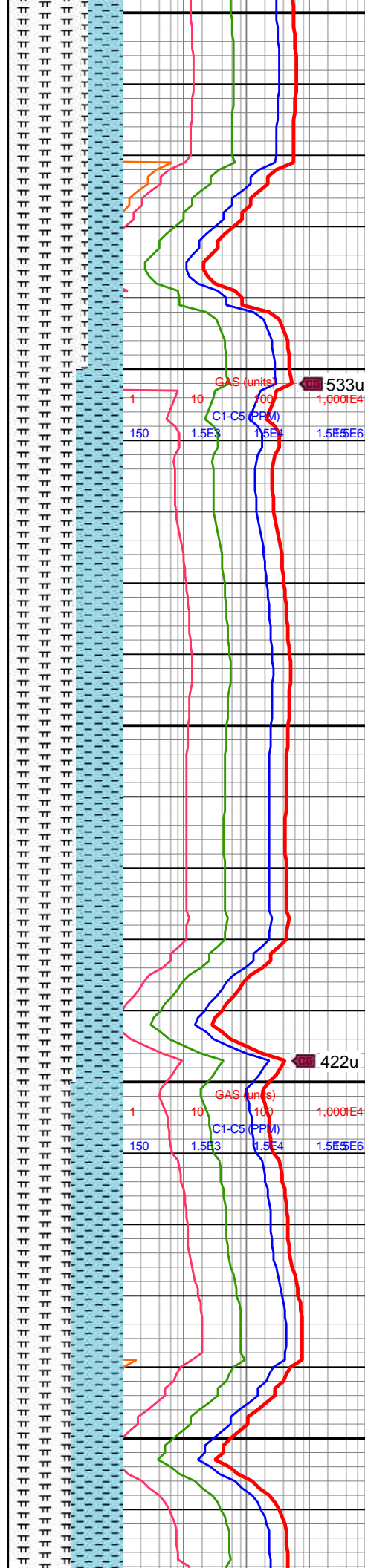
VS: 2,998.06

WOB: 33.2klbs
RPM: 60
SPM: 200
SPP: 5,343psi

MD: 10,037'
INC: 90.44°
AZM: 359.13°
TVD: 7,294.14'
VS: 3,082.7'

MW IN: 10.0+
VIS IN: 52
MW OUT: 10.0+
VIS OUT: 48

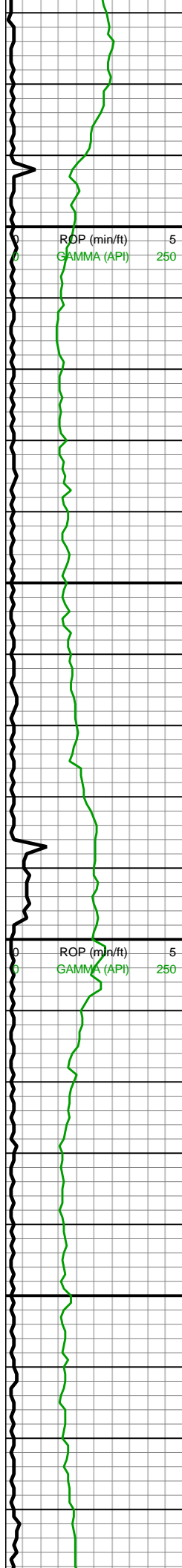
MD: 10,131'
INC: 92.33°
AZM: 359.13°
TVD: 7,291.86'
VS: 3,167.47'



9900-10000 MRLST
(70%): dk gyshbn-dk gy,
frm-sl hd, sb blk-ang
ctngs, sl sm tex, mnr
intbd CHK, mod-hi calc;
CHK (30%): gyshbn-med
gy, mot lt gy, fri-frm, sb
ang-sb blk-ctngs, sm
chky tex, tr free crm CHK,
v calc

10000-10100 MRLST
(60%): dk gy-med gy, mot
v dk gy, sb blk-sb ang
ctngs, sl hd-frm, tr intbd
CHK, mod calc; CHK
(40%): med gy-gyshbn,
mot, sm chky tex, sb blk-
ctngs, sl frm, brit, tr
MRLST lamn, hi calc





10,170
10,180
10,190
10,200
10,210
10,220
10,230
10,240
10,250
10,260
10,270
10,280
10,290
10,300
10,310
10,320
10,330
10,340
10,350
10,360
10,370
10,380

WOB: 33.9klbs
RPM: 59
SPM: 200
SPP: 5,428psi

MD: 10,227'
INC: 91.8°
AZM: 358.51°
TVD: 7,288.41'
VS: 3,254.24'

MW IN: 10.0+
VIS IN: 52
MW OUT: 10.0+
VIS OUT: 47

MD: 10,321'
INC: 92.29°
AZM: 359.13°
TVD: 7,285.05'
VS: 3,339.21'



1 10 100 1,000E4
150 1.5E3 1.5E4 1.5E5E6

1 10 100 1,000E4
150 1.5E3 1.5E4 1.5E5E6

10100-10200 MRLST
(55%): dk gy-v dk gy, mot
med gy, sl hd-frm, sb
blky-sb tab ctngs, mod
calc, tr intbd CHK; CHK
(45%): med gy, sb blky
ctngs, sm chky tex, brit, sl
frm, mot, tr free CHK
frags, hi calc

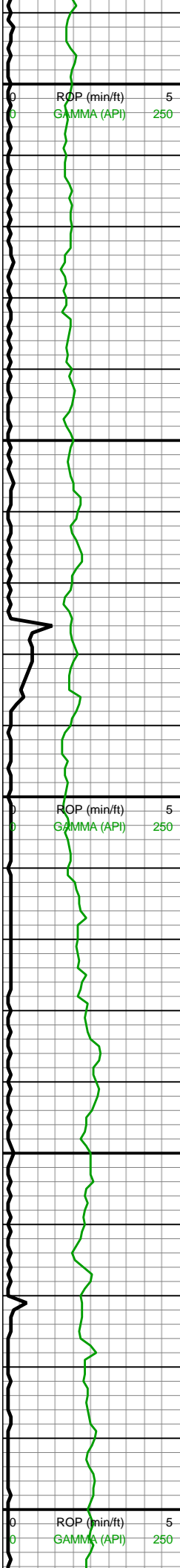


10200-10300 CHK
(65%): gyshbn-med gy,
mot, tab-sb blky ctngs,
fri-frm, sm chky tex, mnr
intbd MRLST, hi calc, mnr
free CHK frags; MRLST
(35%): dk gy-med gy, sl
sm tex, frm-sl hd, sb
blky-ang ctngs, com intbd
CHK, mod-hi calc



10300-10400 CHK
(60%): gyshbn-med gy,
mot, sl frm, sm chky tex,
tab-sb blky ctngs, mnr
crm CHK frags, mnr intbd
MRLST, hi calc; MRLST
(40%): dk gy-med gy, sl
sm tex, frm-sl hd, sb
blky-ang ctngs, com intbd
CHK, mod-hi calc





10,390
10,400
10,410
10,420
10,430
10,440
10,450
10,460
10,470
10,480
10,490
10,500
10,510
10,520
10,530
10,540
10,550
10,560
10,570
10,580
10,590
10,600

WOB: 34.2klbs
RPM: 60
SPM: 198
SPP: 5,432psi

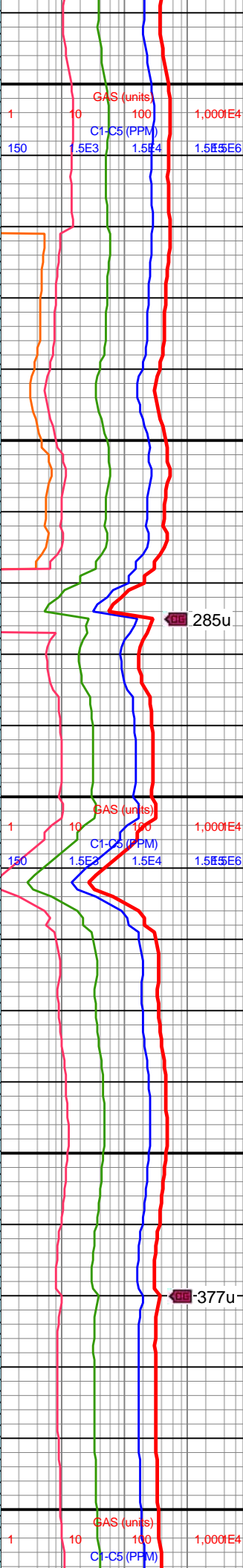
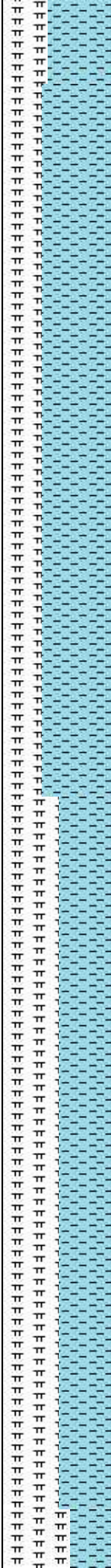
MD: 10,416'
INC: 91.58°
AZM: 359.04°
TVD: 7,281.84'
VS: 3,424.89'

MW IN: 10.1
VIS IN: 57
MW OUT: 10.0+
VIS OUT: 51

MD: 10,510'
INC: 92.46°
AZM: 0.1°
TVD: 7,278.53'
VS: 3,509.33'

WOB: 30.9klbs
RPM: 60
SPM: 195
SPP: 5,409psi

MD: 10,604'
INC: 91.63°
AZM: 359.66°

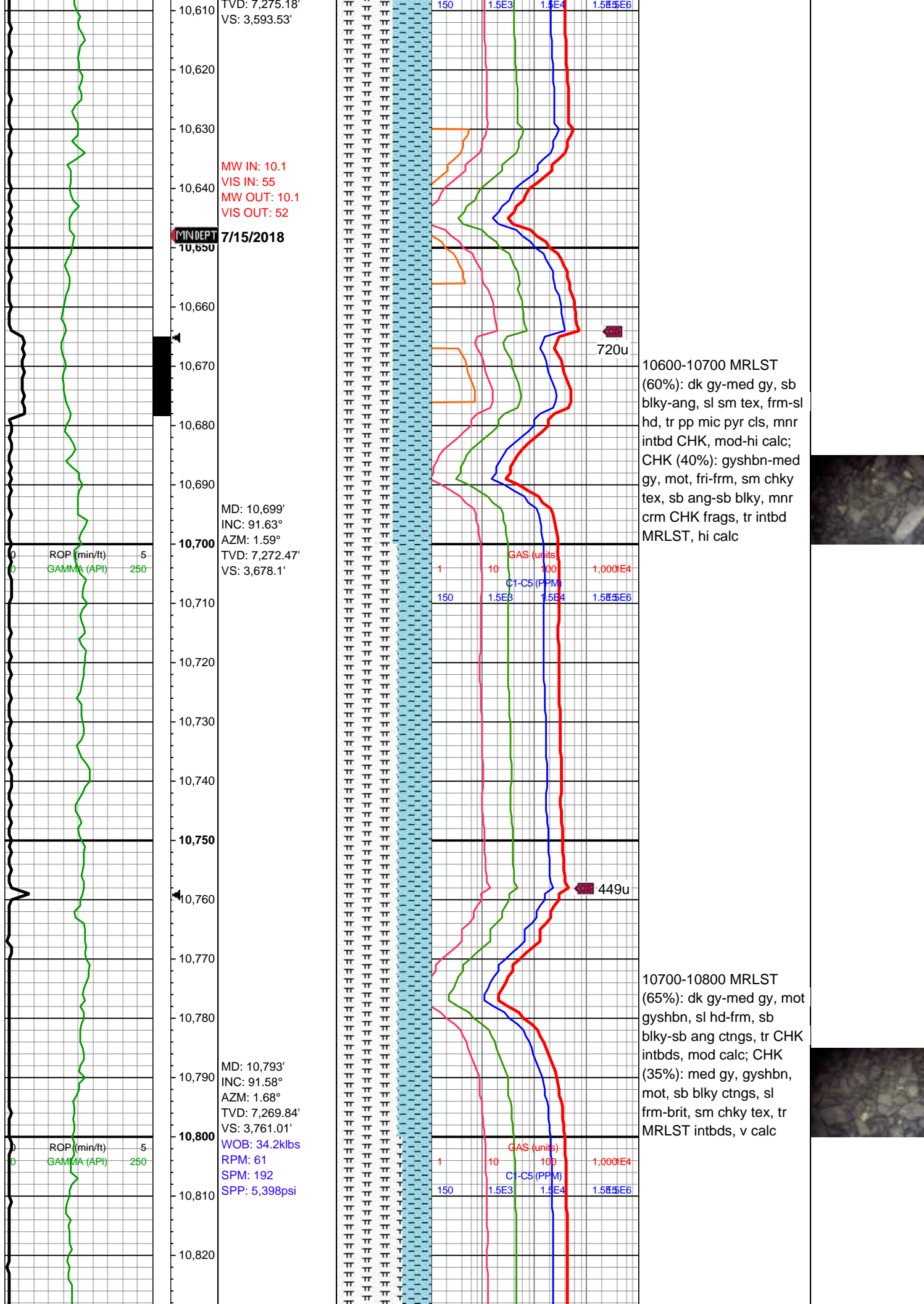


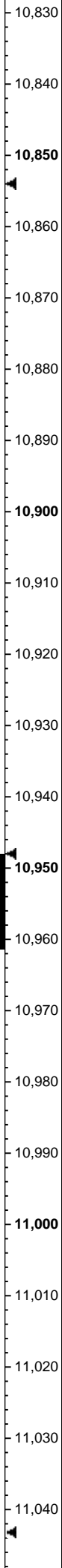
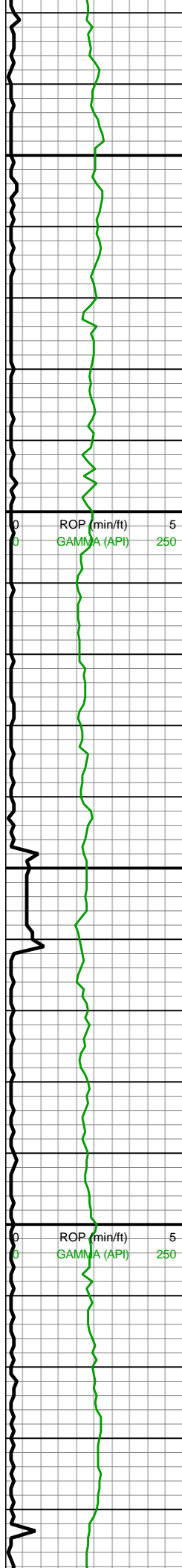
sm tex, sb blk-ang
ctngs, frm-sl hd, mod
calc, mn intbd CHK

10400-10500 CHK
(65%): gyshbn-med gy,
mot lt gy, chky tex, sl frm,
mod fis, tab-blky ctngs, tr
pp mic pyr, hi calc;
MRLST (35%): med gy-dk
gy, dk gyshbn, sb blk-ang
ctngs, frm-sl hd, brit, tr
chky incl, mod calc

10500-10600 CHK
(50%): gyshbn-med gy,
mot, fri-frm, sb tab-sb
blk-ang ctngs, sm chky tex,
mn intbd MRLST, hi calc;
MRLST (50%): dk gy-med
gy, sl sm tex, frm-sl hd,
sb blk-ang ctngs, mn
intbd CHK, mod-hi calc





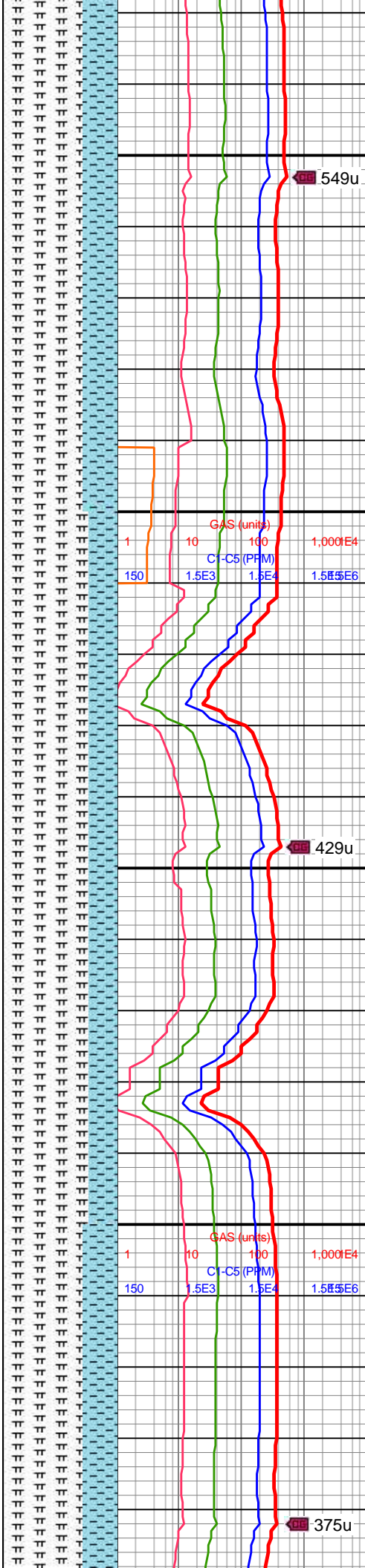


MD: 10,887'
INC: 91.36°
AZM: 0.8°
TVD: 7,267.43'
VS: 3,844.24'

MW IN: 10.1
VIS IN: 54
MW OUT: 10.1
VIS OUT: 52

MD: 10,982'
INC: 90.97°
AZM: 1.77°
TVD: 7,265.5'
VS: 3,928.32'

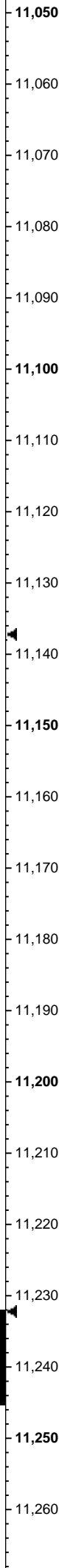
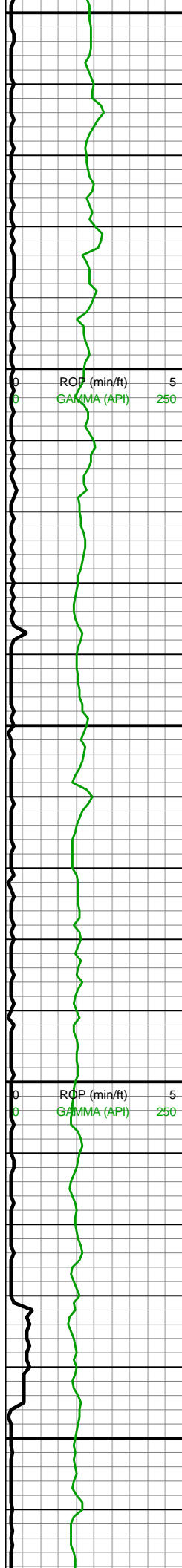
WOB: 34.2klbs
RPM: 60
SPM: 192
SPP: 5,440psi



10800-10900 MRLST
(70%): dk gyshbn-dk gy,
sb blk-ang ctngs, frm-sl
hd, sl sm tex, mod calc,
mnr intbd CHK; CHK
(30%): gyshbn-med gy,
mot lt gy, sm chky tex,
fri-frm, sb ang-sb blk, tr
free crm CHK, v calc

10900-11000 MRLST
(75%): dk gy-med gy, sl
sm tex, sb blk-ang
ctngs, frm-sl hd, mnr
intbd CHK, mod-hi calc;
CHK (25%): gyshbn-med
gy, tab-sb blk ctngs, sm
chky tex, fri-frm, mnr crm
CHK frags, v calc





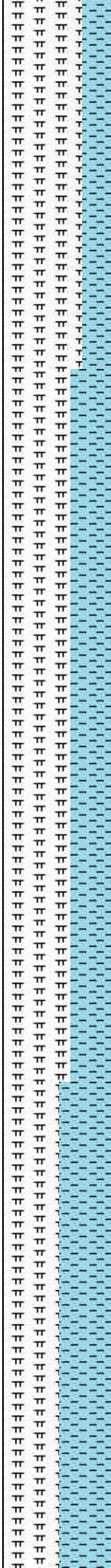
MD: 11,076'
INC: 90.57°
AZM: 1.42°
TVD: 7,264.23'
VS: 4,011.29'

MW IN: 10.2
VIS IN: 54
MW OUT: 10.1+
VIS OUT: 52

MD: 11,171'
INC: 90.4°
AZM: 0.71°
TVD: 7,263.43'
VS: 4,095.55'

WOB: 33.1klbs
RPM: 60
SPM: 192
SPP: 5,475psi

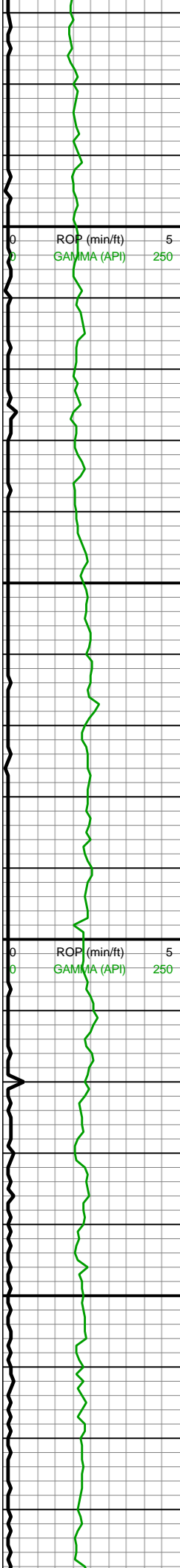
MD: 11,265'
INC: 89.78°
AZM: 3.17°
TVD: 7,263.28'



11000-11100 MRLST
(70%): dk gy-med gy,
blky-tab ctngs, frm-sl hd,
sl sm tex, mnr intbd CHK,
mod calc; CHK (30%):
gyshbn-med gy, mot,
fri-frm, sb ang-sb blky,
sm chky tex, tr free crm
CHK, hi calc

10600-10700 MRLST
(60%): dk gy-med gy,
mot, frm-sl hd, sb
blky-tab, sl sm tex, tr mic
pyr, mnr intbd CHK, mod
calc; CHK (40%):
gyshbn-med gy, mot, sm
chky tex, fri-frm, tab-sb
blky, tr intbd MRLST, hi
calc, mnr crm CHK frags





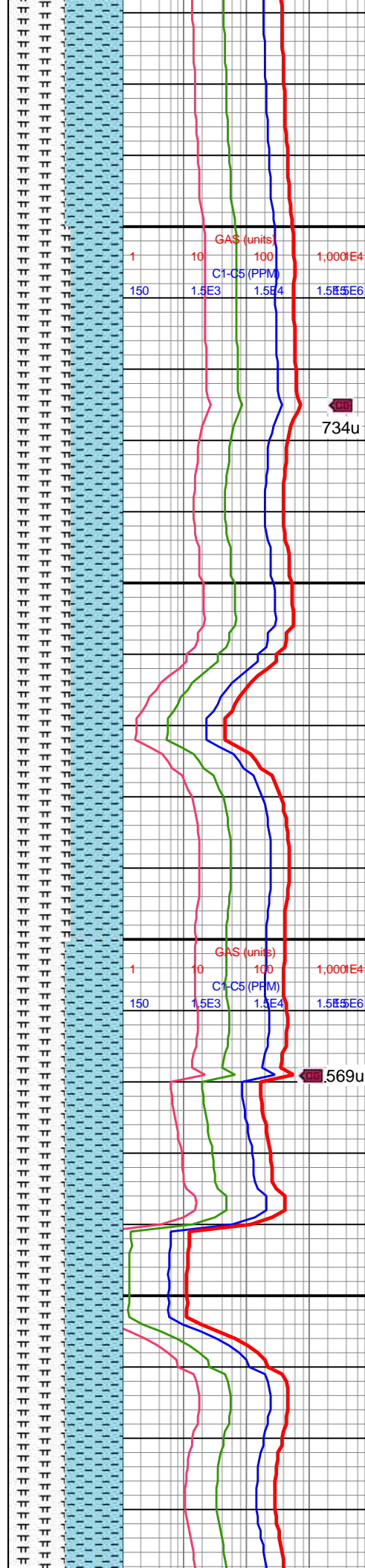
VD: 7,263.26'
VS: 4,178.26'

MW IN: 10.2
VIS IN: 56
MW OUT: 10.2
VIS OUT: 53

MD: 11,360'
INC: 89.43°
AZM: 2.47°
TVD: 7,263.94'
VS: 4,261.14'

WOB: 35.4klbs
RPM: 60
SPM: 191
SPP: 5,497psi

MD: 11,454'
INC: 89.17°
AZM: 2.47°
TVD: 7,265.09'
VS: 4,343.43'

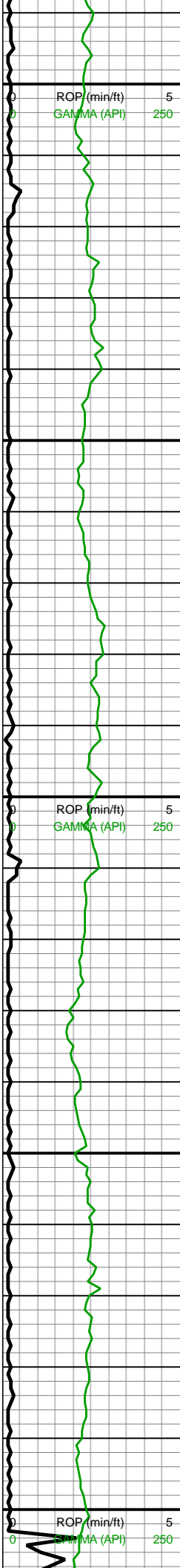


11200-11300 MRLST
(50%): dk gy-med gy, sl
sm-rgh tex, frm-sl hd, sb
blky-ang ctngs, mntr intbd
CHK, mod calc, tr mic
pyrc cls; CHK (50%):
gyshbn-med gy, mot, sb
blky-sb tab, sl frm, sm
chky tex, hi calc, tr intbd
MRLST

11300-11400 MRLST
(55%): dk gy-v dk gy, mot
med gy, sb blky-sb tab, sl
hd-frm, tr intbd CHK, mod
calc; CHK (45%): med gy,
mot, sb blky ctngs, sm
chky tex, brit, sl frm, tr free
CHK frags, hi calc

11400-11500 MRLST
(50%): dk gy-v dk gy, mot
med gy, sb blky-sb tab, sl
hd-frm, tr intbd CHK, mod
calc, occ pyr nod; CHK





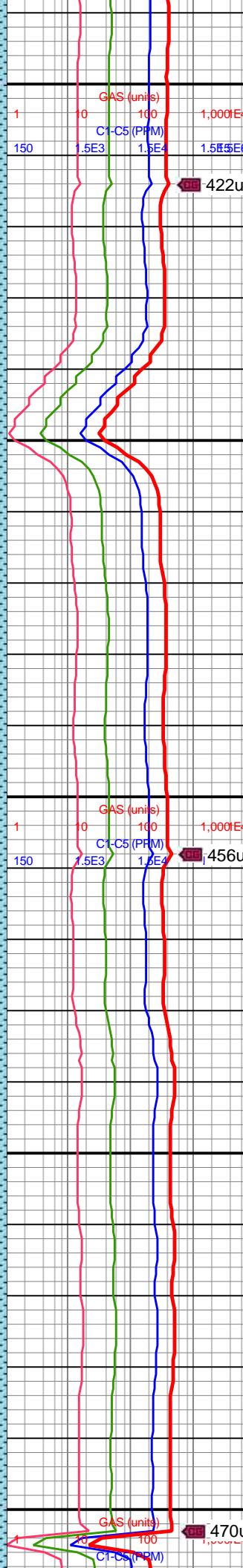
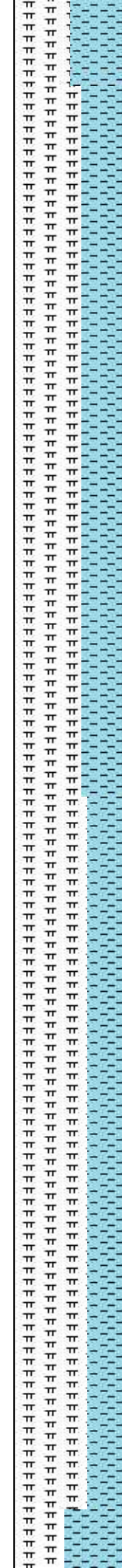
11,490
11,500
11,510
11,520
11,530
11,540
11,550
11,560
11,570
11,580
11,590
11,600
11,610
11,620
11,630
11,640
11,650
11,660
11,670
11,680
11,690
11,700

MD: 11,548'
INC: 88.37°
AZM: 1.68°
TVD: 7,267.1'
VS: 4,426.01'

WOB: 32.3klbs
RPM: 59
SPM: 189
SPP: 5,360psi

MW IN: 10.1+
VIS IN: 54
MW OUT: 10.2
VIS OUT: 53

MD: 11,643'
INC: 87.94°
AZM: 1.59°
TVD: 7,270.16'
VS: 4,509.8'

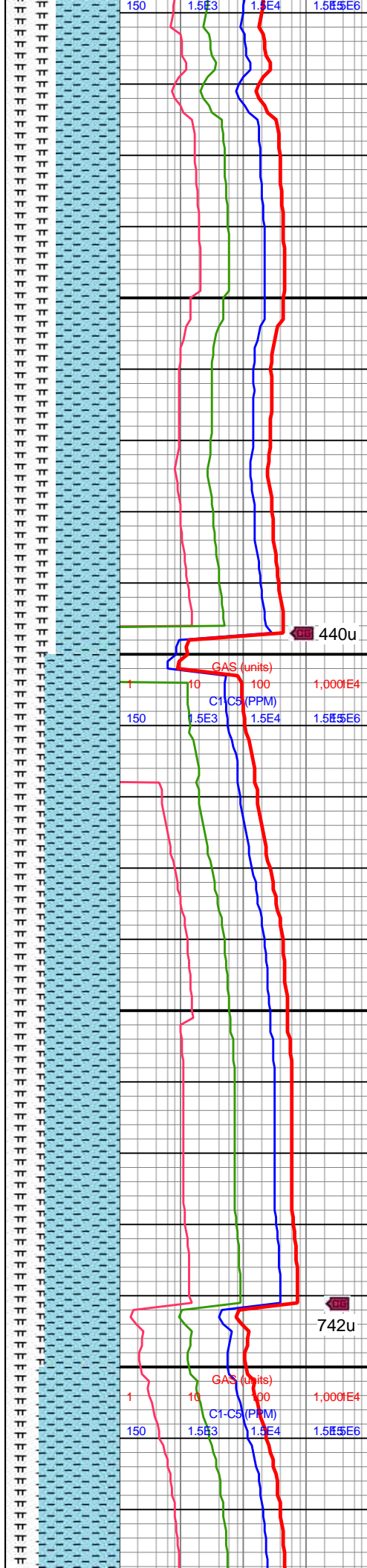
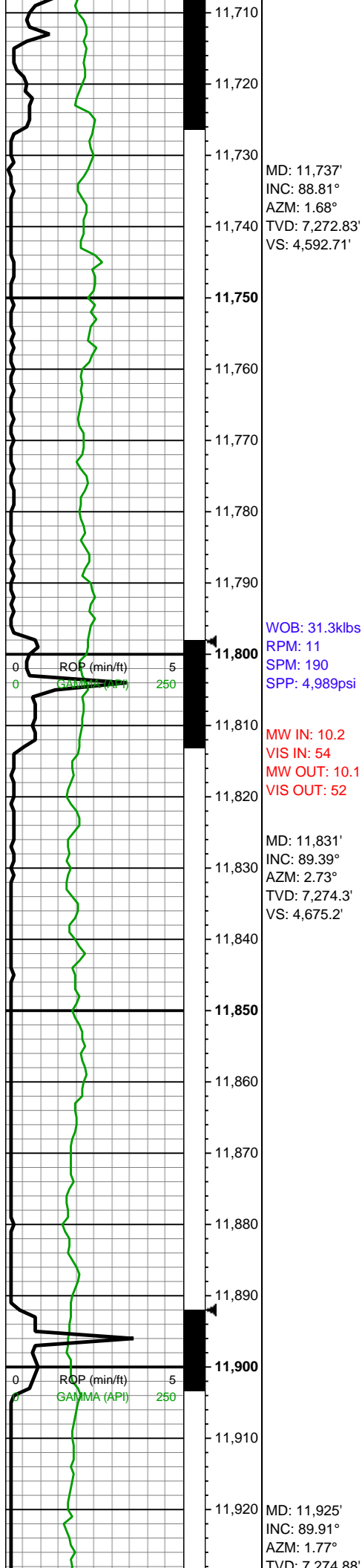


(50%): med gy, mot, sb
blky, sm chky tex, brit, sl
frm, tr free CHK frags, hi
calc

11500-11600 MRLST
(60%): dk gy-v dk gy, mot
med gy, sb blky-sb tab, sl
hd-frm, tr intbd CHK, mod
calc, occ pyr nod; CHK
(40%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, tr free CHK frags, hi
calc

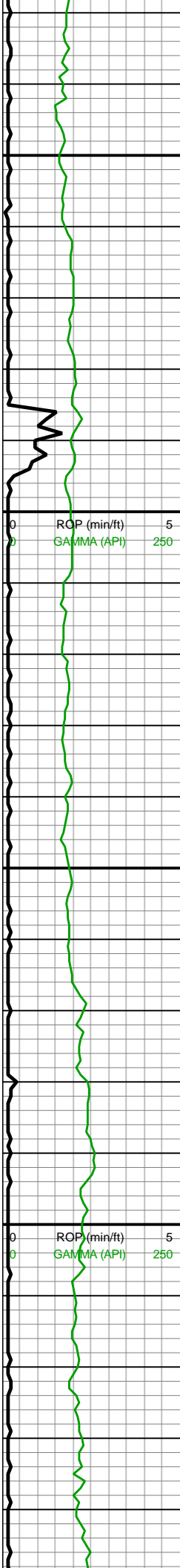
11600-11700 MRLST
(65%): dk gy-v dk gy, mot
med gy, sb blky-sb tab, sl
hd-frm, tr intbd CHK, mod
calc, occ pyr nod; CHK
(35%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, tr free CHK frags, hi
calc





11700-11800 CHK
(55%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, rr free CHK frags, hi
calc; MRLST (45%): dk
gy-v dk gy, mot med gy,
sb blky-sb tab, sl hd-frm,
tr intbd CHK, mod calc,
occ pyr nod

11800-11900 CHK
(65%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, rr free CHK frags, hi
calc; MRLST (35%): dk
gy-v dk gy, mot med gy,
sb blky-sb tab, sl hd-frm,
tr intbd CHK, mod calc,
occ pyr nod



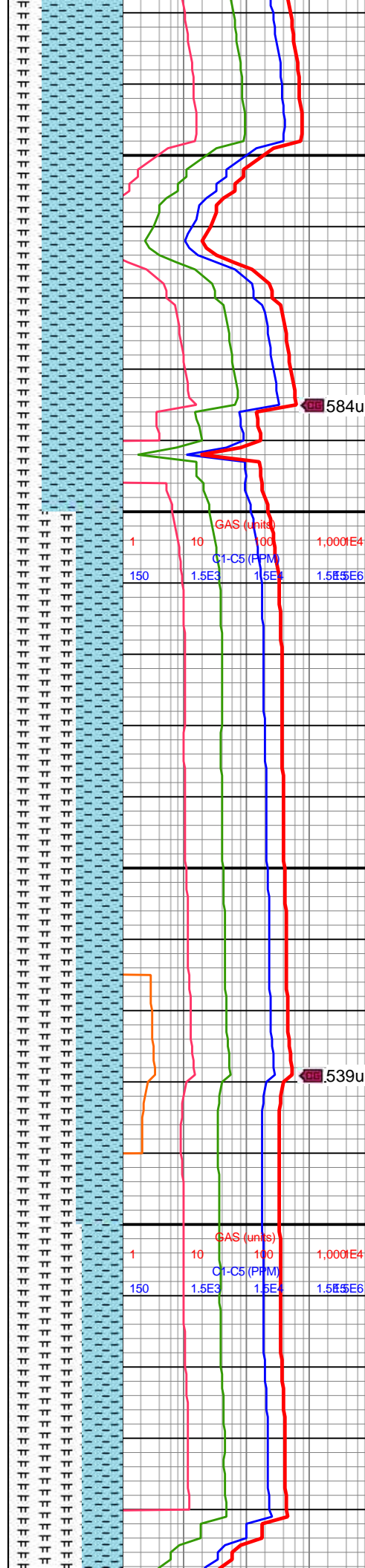
VD: 7,274.03'
VS: 4,757.67'

MW IN: 10.2
VIS IN: 57
MW OUT: 10.2
VIS OUT: 55

WOB: 30.6klbs
RPM: 59
SPM: 190
SPP: 5,325psi

MD: 12,019'
INC: 90.18°
AZM: 0.54°
TVD: 7,274.8'
VS: 4,840.98'

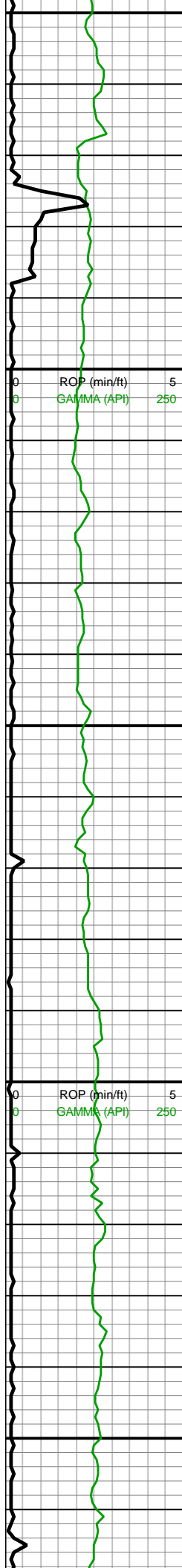
MD: 12,114'
INC: 89.91°
AZM: 0.71°
TVD: 7,274.73'
VS: 4,925.59'



11900-12000 CHK
(70%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, rr free CHK frags, hi
calc; MRLST (30%): dk
gy-v dk gy, mot med gy,
sb blky-sb tab, sl hd-frm,
tr intbd CHK, mod calc,
occ pyr nod

12000-12100 MRLST
(60%): dk gy-v dk gy, mot
med gy, sb blky-sb tab, sl
hd-frm, tr intbd CHK, mod
calc, occ pyr nod; CHK
(40%): predy med gy,
sme dk gyshbn, mot, sb
blky, sm chky tex, brit, sl
frm, tr free CHK frags, hi
calc





12,150
12,160
12,170
12,180
12,190
12,200
12,210
12,220
12,230
12,240
12,250
12,260
12,270
12,280
12,290
12,300
12,310
12,320
12,330
12,340
12,350
12,360

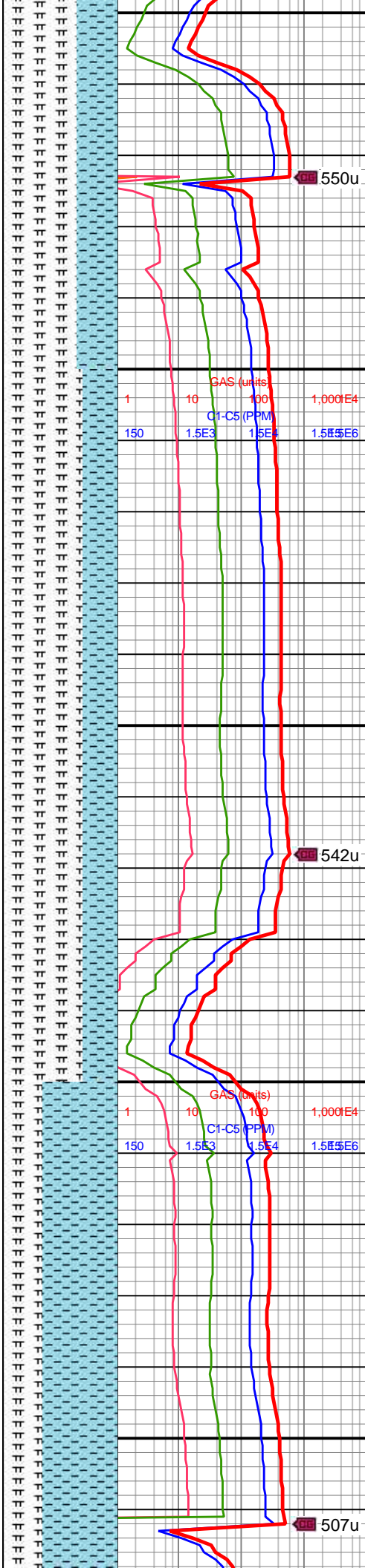
WOB: 34.4klbs
RPM: 60
SPM: 187
SPP: 5,426psi

MD: 12,208'
INC: 90.57°
AZM: 358.95°
TVD: 7,274.34'
VS: 5,009.88'

MW IN: 10.2
VIS IN: 51
MW OUT: 10.2
VIS OUT: 51

MD: 12,302'
INC: 90.48°
AZM: 358.69°
TVD: 7,273.48'
VS: 5,094.89'

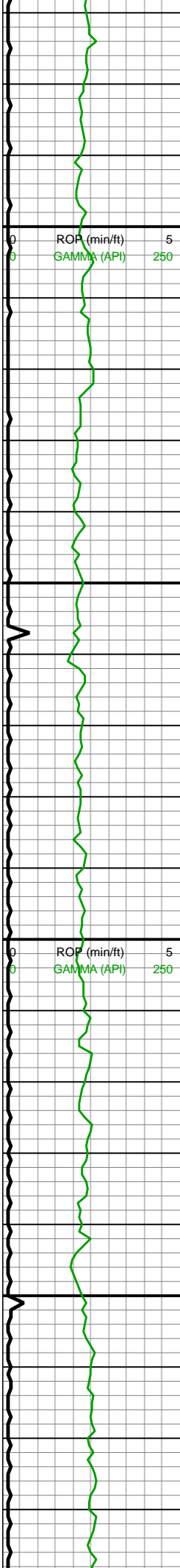
MW IN: 10.1



12100-12200 MRLST
(65%): dk gy-v dk gy, mot med gy, sb blk-y-sb tab, sl hd-frm, tr intbd CHK, mod calc, occ pyr nod; CHK (35%): predy med gy, sme dk gyshbn, mot, sb blk-y, sm chky tex, brit, sl frm, tr free CHK frags, hi calc

12200-12300 MRLST
(70%): dk gy-med gyshbn, mot med gy, sb blk-y-sb tab, sl hd-frm, occ intbd CHK, mod calc, tr pyr nod; CHK (30%): predy med gy, sme lt gyshbn, mot, sb blk-y, sm chky tex, brit, sl frm, tr free CHK frags, hi calc





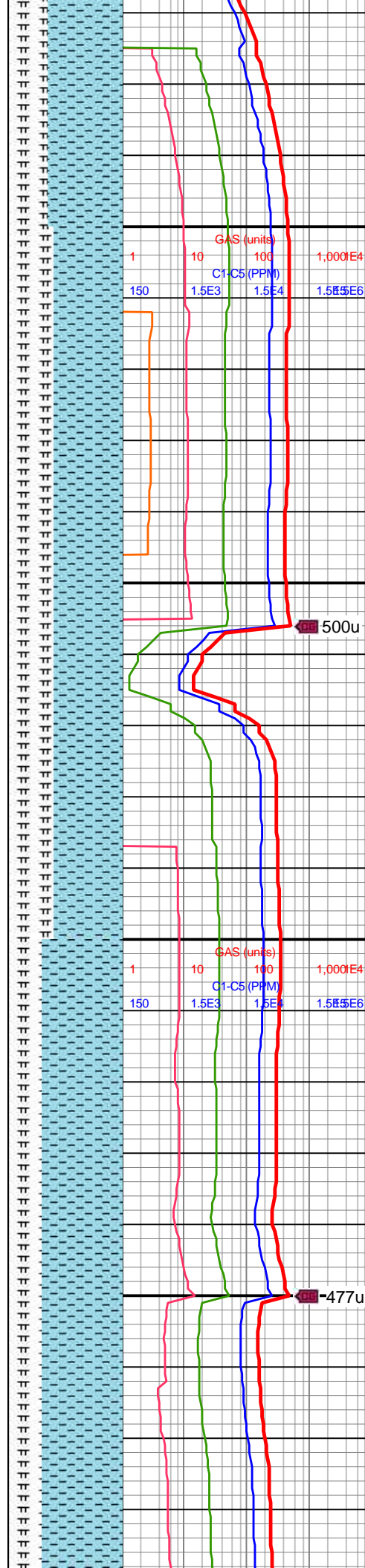
VIS IN: 54
MW OUT: 10
VIS OUT: 51

MD: 12,396'
INC: 90.26°
AZM: 359.04°
TVD: 7,272.87'
VS: 5,179.88'

WOB: 34.2klbs
RPM: 60
SPM: 186
SPP: 5,460psi

MD: 12,490'
INC: 90.09°
AZM: 359.66°
TVD: 7,272.58'
VS: 5,264.52'

MD: 12,585'
INC: 89.74°
AZM: 358.51°
TVD: 7,272.72'

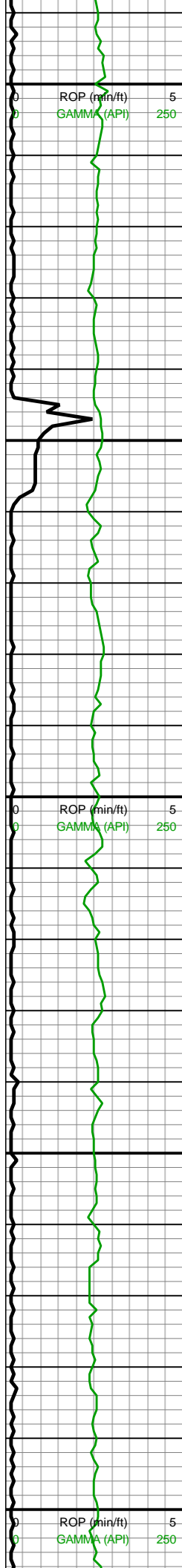


12300-12400 CHK
(65%): gyshbn-med gy,
mot, tab-sb blk, fri-frm,
sm chky tex, mn intbd
MRLST, hi calc, mn free
CHK frags; MRLST
(35%): dk gy-med gy, sl
sm tex, frm-sl hd, sb
blk-ang, com intbd CHK,
mod-hi calc

12400-12500 CHK
(60%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, mn crm
CHK frags; MRLST
(40%): dk gy-med gy,
mot, frm-sl hd, sb
blk-tab, sl sm tex, tr mic
pyr, mn intbd CHK, mod
calc

12500-12600 CHK
(70%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, mn crm
CHK frags; MRLST
(30%): dk gy-med gy,
mot, frm-sl hd, sb





VS: 5,350.26'

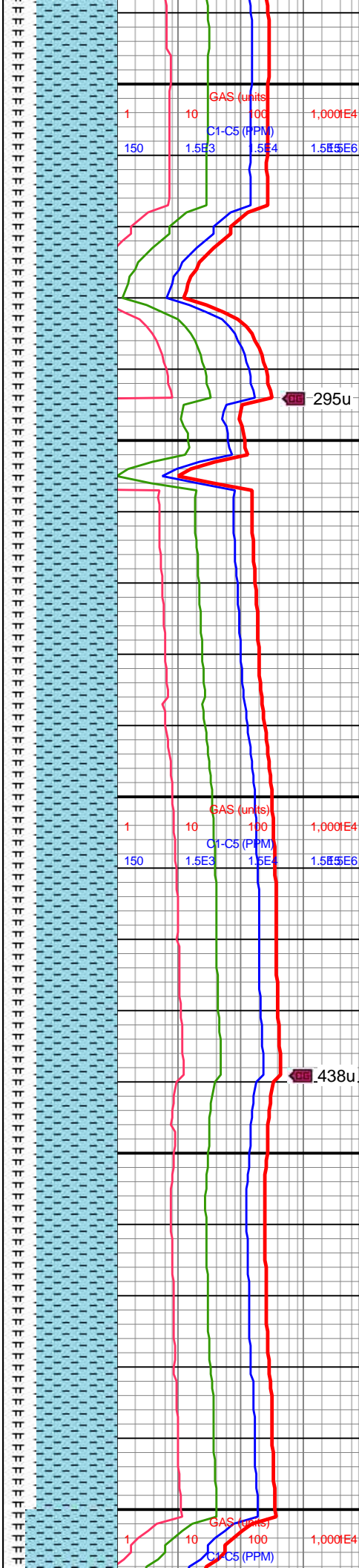
WOB: 35.1klbs
RPM: 60
SPM: 186
SPP: 5,567psi

MW IN: 10.2
VIS IN: 62
MW OUT: 10.2
VIS OUT: 52

MD: 12,680'
INC: 90.57°
AZM: 0.18°
TVD: 7,272.46'
VS: 5,435.8'

MD: 12,774'
INC: 89.74°
AZM: 359.83°
TVD: 7,272.21'
VS: 5,519.97'

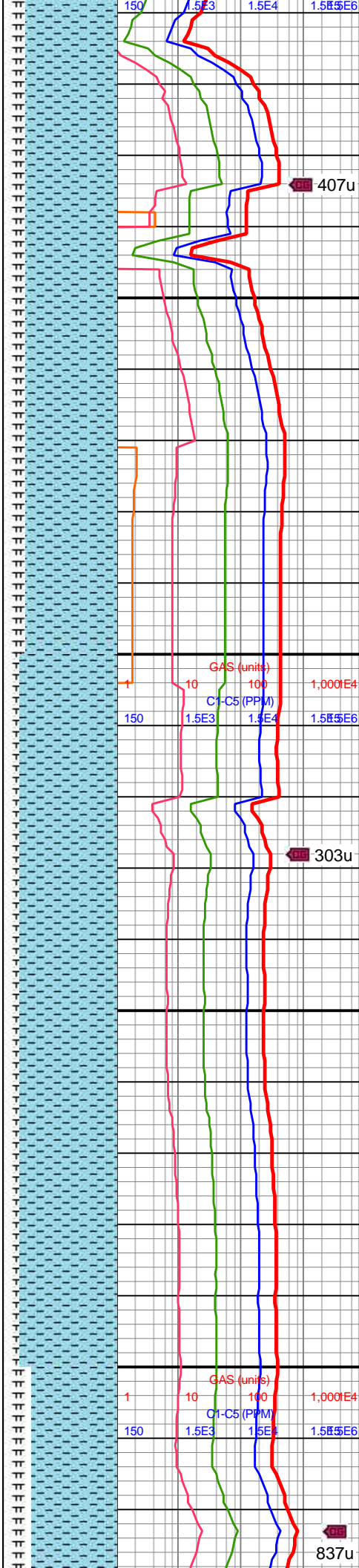
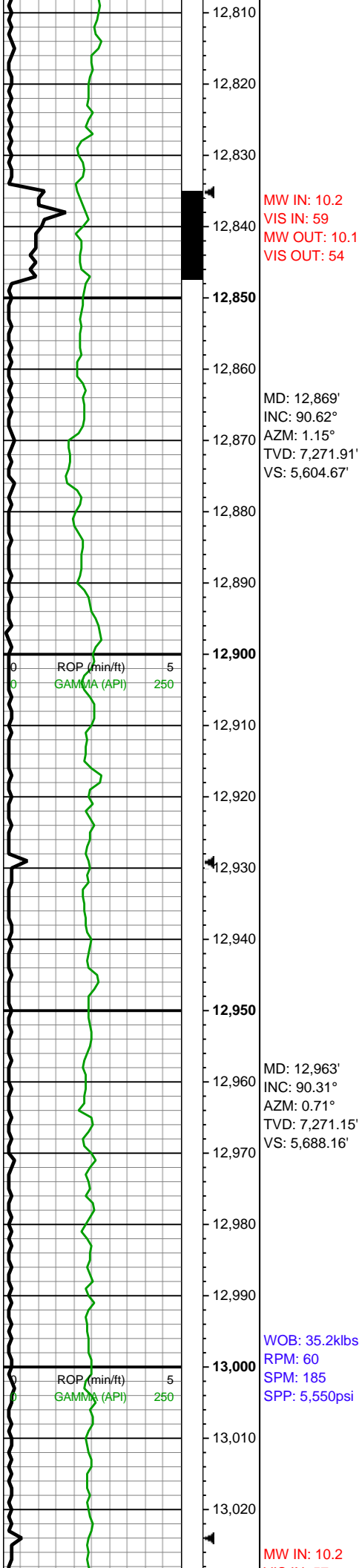
WOB: 34.7klbs
RPM: 60
SPM: 185
SPP: 5,531psi



mot, frm-sl hd, sb
blky-tab, sl sm tex, tr mic
pyr, mnr intbd CHK, mod
calc

12600-12700 CHK
(70%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blky, tr intbd
MRLST, hi calc, mnr crm
CHK frags; MRLST
(30%): dk gy-med gy,
mot, frm-sl hd, sb
blky-tab, sl sm tex, occ
mic pyr,occ pyr nod, mnr
intbd CHK, mod calc

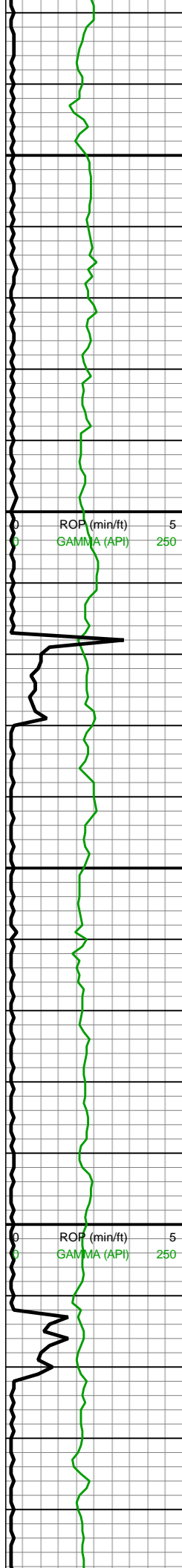
12700-12800 CHK
(70%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blky, tr intbd
MRLST, hi calc, mnr crm
CHK frags; MRLST
(30%): dk gy-med gy,
mot, frm-sl hd, sb
blky-tab, sl sm tex, occ
mic pyr,occ pyr nod, mnr
intbd CHK, mod calc



12800-12900 CHK
(80%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, scat crm
CHK frags; MRLST
(20%): dk gy-med gy,
mot, frm-sl hd, sb
blk-tab, sl sm tex, occ
mic pyr, occ pyr nod, tr
intbd CHK, mod calc

12900-13000 CHK
(85%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, scat crm
CHK frags; MRLST
(15%): dk gy-med gy,
mot, frm-sl hd, sb
blk-tab, sl sm tex, occ
mic pyr, occ pyr nod, tr
intbd CHK, mod calc





VIS IN: 57
MW OUT: 10.2
VIS OUT: 54

MD: 13,058'
INC: 89.69°
AZM: 0.45°
TVD: 7,271.15'
VS: 5,772.79'

ROP (min/ft) 5
GAMMA (API) 250

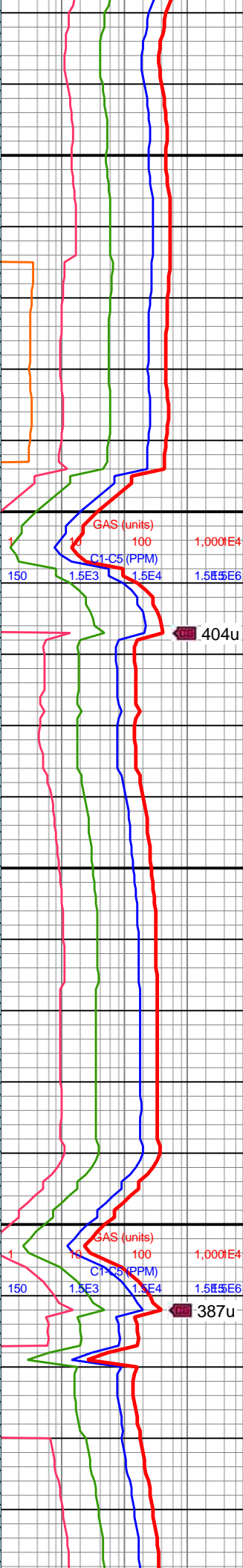
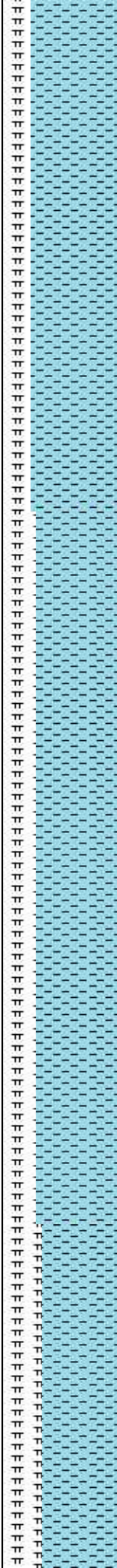
MD: 13,152'
INC: 90.44°
AZM: 0.98°
TVD: 7,271.04'
VS: 5,856.44'

MW IN: 10.2
VIS IN: 58
MW OUT: 10.2
VIS OUT: 52

WOB: 34.8klbs
RPM: 60
SPM: 184
SPP: 5,547psi

ROP (min/ft) 5
GAMMA (API) 250

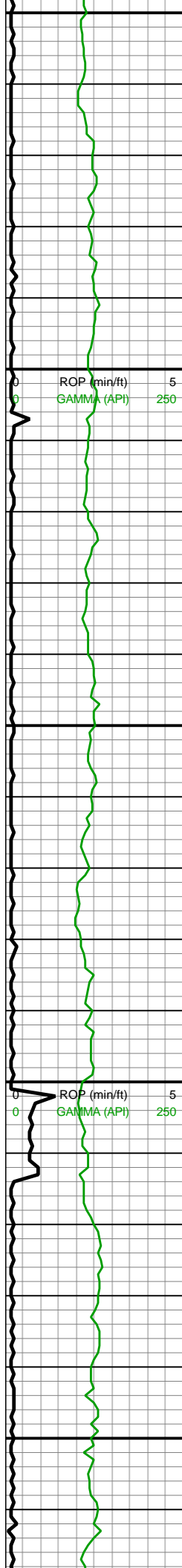
MD: 13,247'
INC: 91.27°
AZM: 1.94°



13000-13100 CHK
(75%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, scat crm
CHK frags; MRLST
(25%): dk gy-med gy,
mot, frm-sl hd, sb
blk-tab, sl sm tex, occ
mic pyr, occ pyr nod, tr
intbd CHK, mod calc

13100-13200 CHK
(70%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blk, tr intbd
MRLST, hi calc, tr crm
CHK frags; MRLST
(30%): dk gy-med gy,
mot, frm-sl hd, sb
blk-tab, sl sm tex, com
mic pyr, occ pyr nod, tr
intbd CHK, mod calc





13,250 TVD: 7,269.62'
VS: 5,940.39'

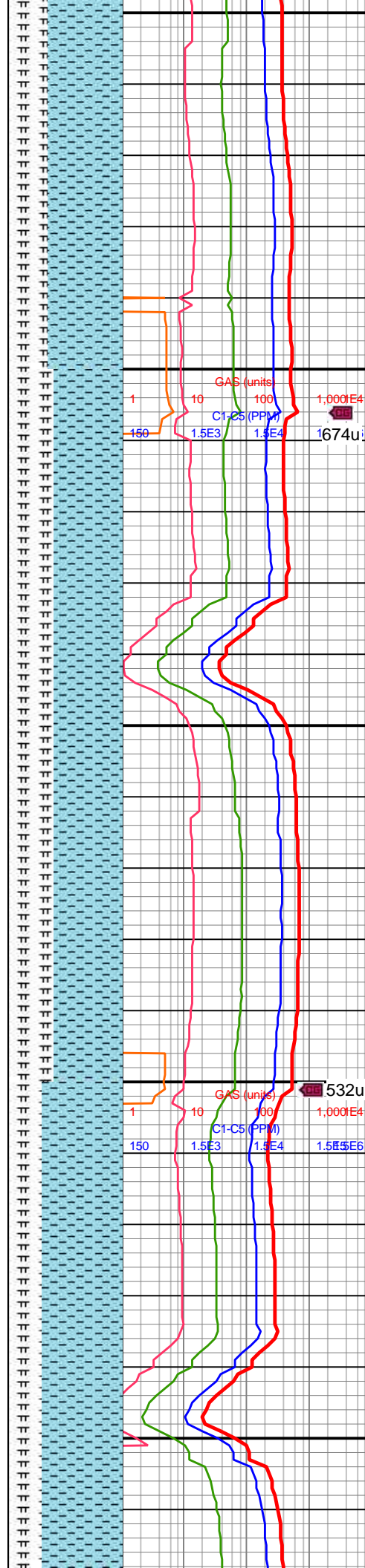
13,260
13,270
13,280
13,290
13,300
13,310
13,320
13,330
13,340
13,350
13,360
13,370
13,380
13,390
13,400
13,410
13,420
13,430
13,440
13,450
13,460

MW IN: 10.2
VIS IN: 57
MW OUT: 10.2+
VIS OUT: 52

MD: 13,341'
INC: 90.66°
AZM: 0.54°
TVD: 7,268.04'
VS: 6,023.63'

WOB: 35.1kbs
RPM: 60
SPM: 186
SPP: 5,663psi

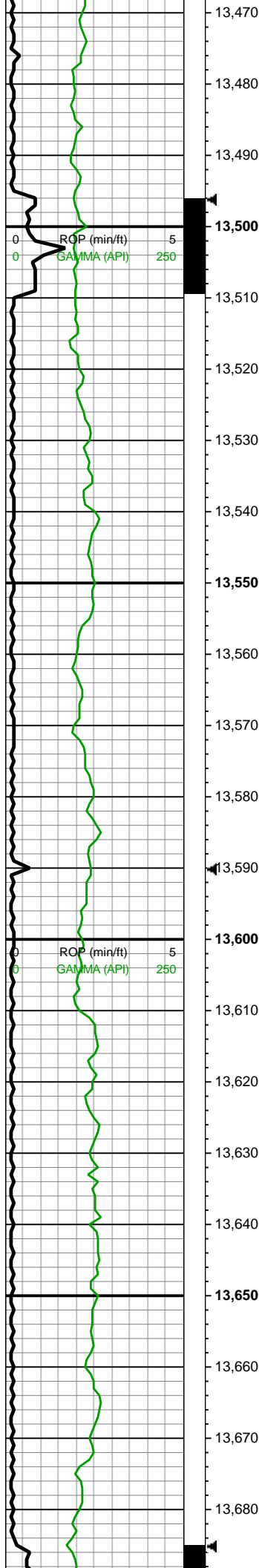
MD: 13,435'
INC: 89.82°
AZM: 2.29°
TVD: 7,267.65'
VS: 6,106.74'



13200-13300 CHK
(65%): gyshbn-med gy,
mot, fri-frm, sm chky tex,
sb ang-sb blkly ctngs, tr
intbd MRLST, mnr free
crm CHK, v calc; MRLST
(35%): dk gy-med gy, sl
sm tex, frm-sl hd, sb
blkly-ang ctngs, com intbd
CHK, mod-hi calc

13300-13400 CHK
(60%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
sb blkly-tab ctngs, hi calc,
tr intbd MRLST; MRLST
(40%): dk gy-med gy,
mot, sl sm-rgh tex, frm-sl
hd, sb blkly-tab ctngs,
sme intbd CHK, mnr
imbd mic pyr, tr pyrc nod,
calc





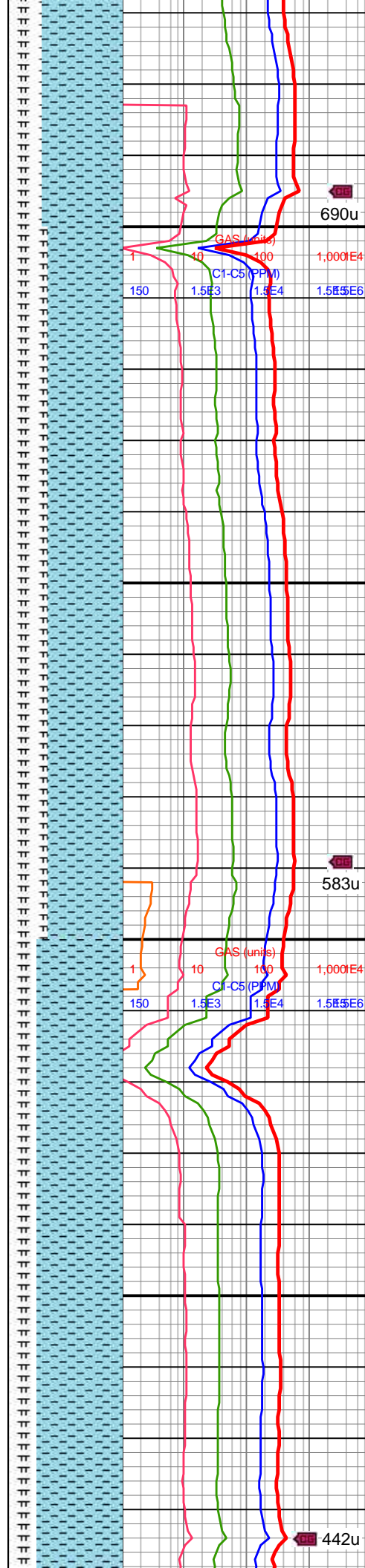
13,470
13,480
13,490
13,500
13,510
13,520
13,530
13,540
13,550
13,560
13,570
13,580
13,590
13,600
13,610
13,620
13,630
13,640
13,650
13,660
13,670
13,680

ROP (min/ft)
GAMMA (API)

MD: 13,530'
INC: 90.75°
AZM: 2.91°
TVD: 7,267.18'
VS: 6,189.8'

WOB: 32klbs
RPM: 60
SPM: 184
SPP: 5,513psi

MD: 13,624'
INC: 90.22°
AZM: 1.77°
TVD: 7,266.38'
VS: 6,272.19'



13400-13500 CHK
(70%): gyshbn-med gy,
mot, sm chky tex, fri-frm,
tab-sb blkcy ctngs, mnr
intbd MRLST, hi calc, mnr
crm CHK frags; MRLST
(30%): dk gyshbn-dk gy,
sl sm tex, sb blkcy-ang
ctngs, frm-sl hd, com
intbd CHK, mod calc

690u

GAS (units)
C1-C5 (PPM)

1,000E4
1.5E3
1.5E4
1.5E6

13500-13600 CHK
(65%): gyshbn-med gy,
tab-blky ctngs, fri-sl frm,
sm chky tex, sme free
crm CHK, mnr intbd
MRLST, v calc, mnr pyrc
cls/imbd mic pyr; MRLST
(35%): dk gy-v dk gy, sl
sm tex, frm-sl hd, sb
blkcy-ang ctngs, intbd
CHK, mod calc

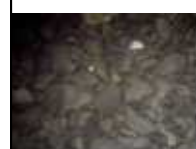
583u

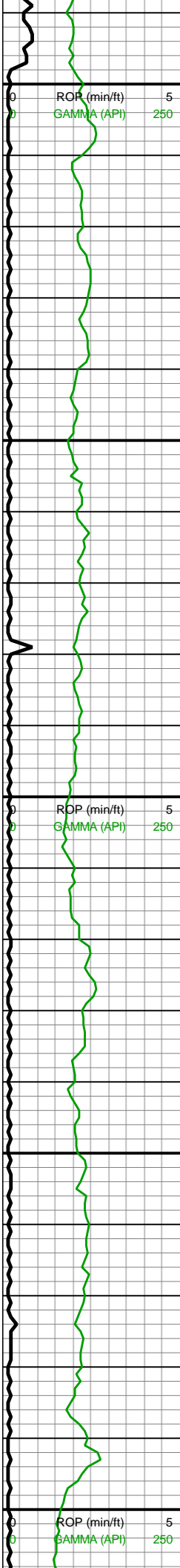
GAS (units)
C1-C5 (PPM)

1,000E4
1.5E3
1.5E4
1.5E6

13600-13700 CHK
(75%): gyshbn-med gy,
mot lt gy, fri-frm, crm indv
CHK frags, sb ang-sb
blkcy ctngs, sm chky tex,
mnr imbd pyr cls, v calc;
MRLST (25%): dk

442u





13,690
13,700
13,710
13,720
13,730
13,740
13,750
13,760
13,770
13,780
13,790
13,800
13,810
13,820
13,830
13,840
13,850
13,860
13,870
13,880
13,890
13,900

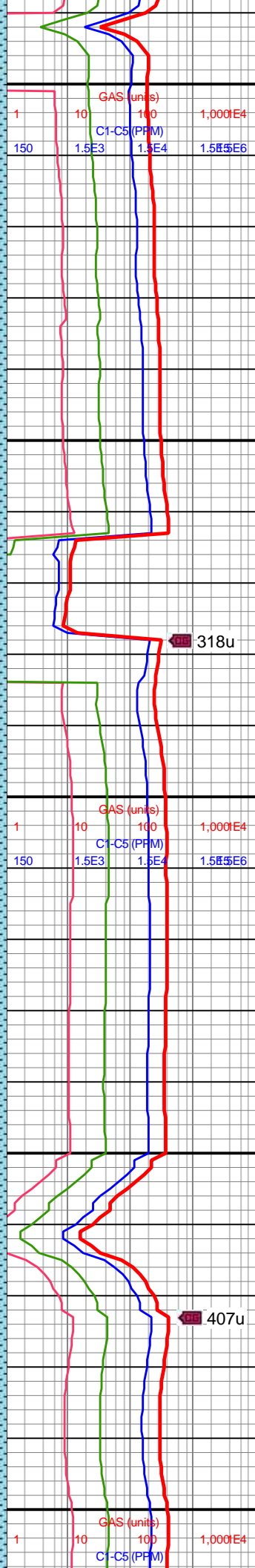
MW IN: 10.3
VIS IN: 56
MW OUT: 10.2+
VIS OUT: 52

MD: 13,719'
INC: 91.45°
AZM: 1.85°
TVD: 7,265'
VS: 6,355.88'

WOB: 36.6klbs
RPM: 60
SPM: 183
SPP: 5,597psi

MD: 13,813'
INC: 90.97°
AZM: 1.68°
TVD: 7,263.01'
VS: 6,438.7'

MD: 13,907'
INC: 90.53°
AZM: 1.06°

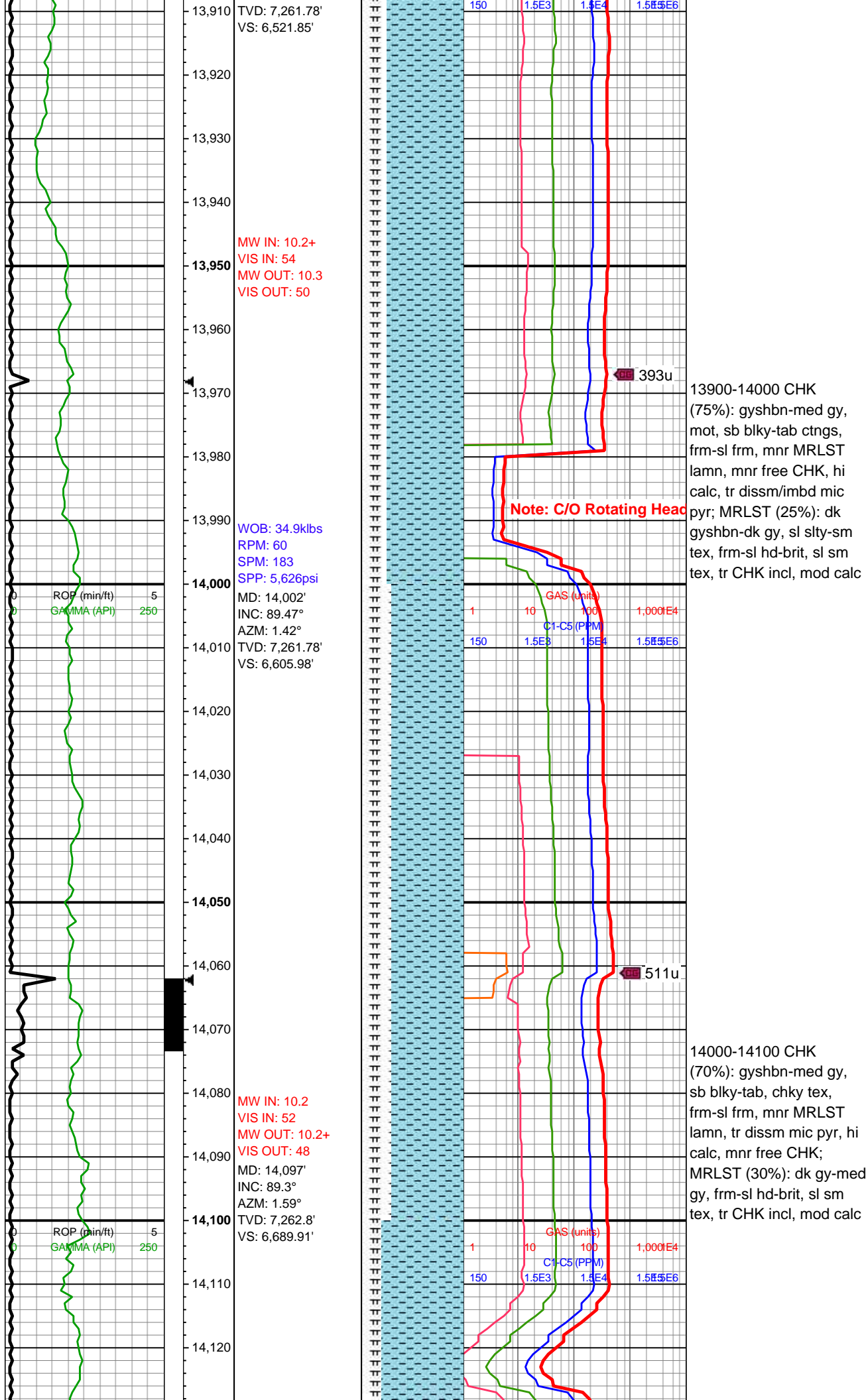


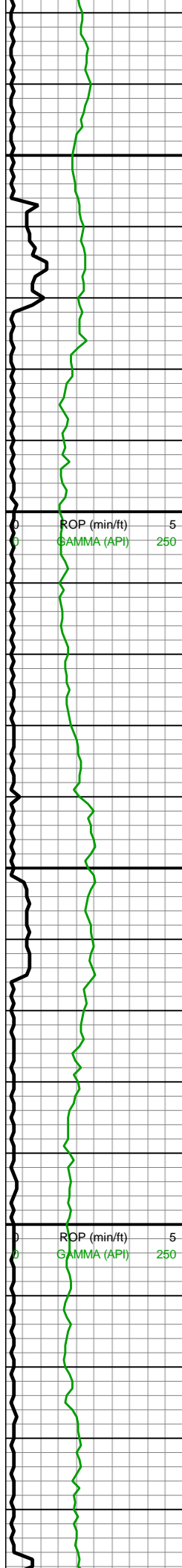
gyshbn-dk gy, sb
blky-ang ctngs, sl sm tex,
frm-sl hd, com intbd
CHK, mod-hi calc

13700-13800 CHK
(70%): gyshbn-med gy,
mot lt gy, sb ang-sb blky
ctngs, sm chky tex,
fri-frm, mnrl intbd MRLST,
crm free CHK, v calc;
MRLST (30%): dk gy,
med gy, sb blky-tab
ctngs, frm-sl hd, sl sm
tex, com intbd CHK, mod
calc

13800-13900 CHK
(80%): med gy-gyshbn,
mot lt brn, sb blky-sb plty,
frm, med fis ctngs, mnrl
free CHK, mnrl MRLST
lamn, tr pp mic pyr cls, hi
calc; MRLST (20%): dk
gy-med gy, mot, frm-sl
hd, tab-sb blky, brit, mod
calc, tr CHK incl





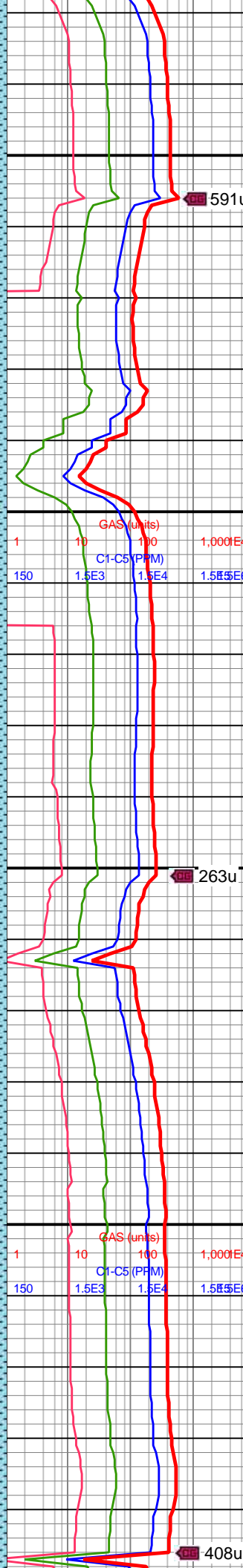


14,130
14,140
14,150
14,160
14,170
14,180
14,190
14,200
14,210
14,220
14,230
14,240
14,250
14,260
14,270
14,280
14,290
14,300
14,310
14,320
14,330
14,340

MD: 14,191'
INC: 90.22°
AZM: 1.33°
TVD: 7,263.19'
VS: 6,772.99'

WOB: 37.4klbs
RPM: 60
SPM: 185
SPP: 5,650psi

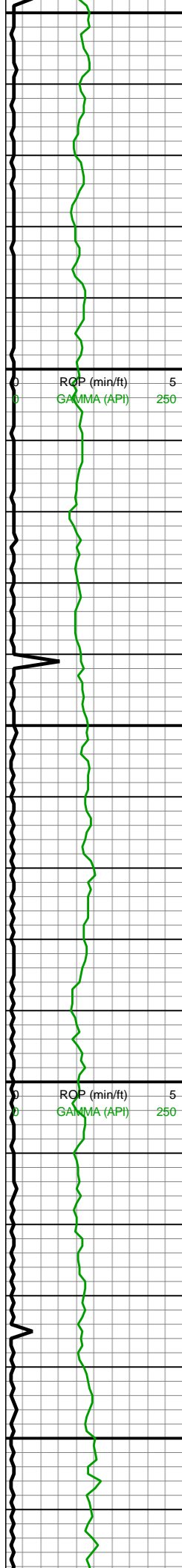
MD: 14,286'
INC: 91.23°
AZM: 2.47°
TVD: 7,261.99'
VS: 6,856.6'



14100-14200 CHK
(80%): gyshbn, med gy-lt
gy, mot, sm chky tex, sb
tab-blky ctngs, fri-frm,
mnr intbd MRLST, hi calc,
mnr scat crm CHK;
MRLST (20%): dk gy, dk
gyshbn, frm-sl hd, sb
blky-ang ctngs, sl sm tex,
com intbd CHK, mod calc

14200-14300 CHK
(70%): gyshbn-med gy,
sb blky-tab ctngs, frm-sl
frm, mnr MRLST lamn, tr
pp mic pyr, hi calc, mnr
free CHK; MRLST (30%):
dk gyshbn-dk gy, brit, sl
sm tex, blky-sb spl
ctngs, frm-sl hd, mod
calc, tr CHK incl





14,350
14,360
14,370
14,380
14,390
14,400
14,410
14,420
14,430
14,440
14,450
14,460
14,470
14,480
14,490
14,500
14,510
14,520
14,530
14,540
14,550
14,560

MW IN: 10.3
VIS IN: 52
MW OUT: 10.3
VIS OUT: 51

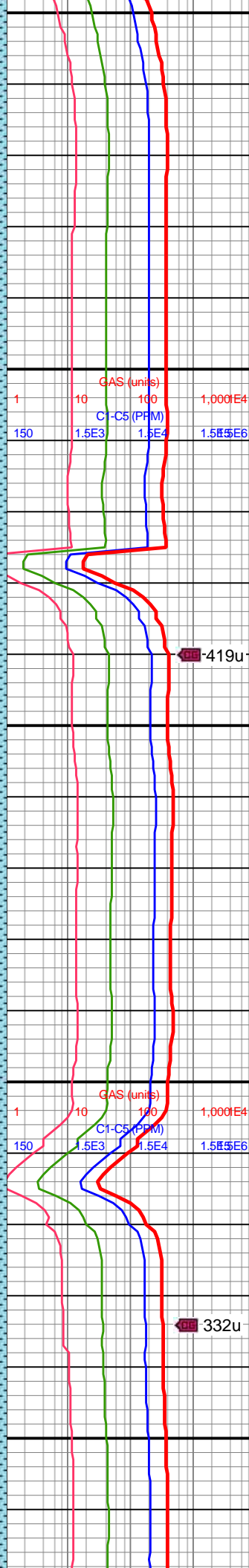
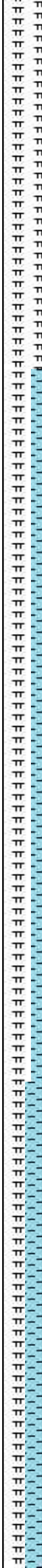
MD: 14,381'
INC: 90.4°
AZM: 1.77°
TVD: 7,260.64'
VS: 6,940.04'

MINDEPTH 07/16/2018

WOB: 34klbs
RPM: 59
SPM: 183
SPP: 5,589psi

MD: 14,474'
INC: 89.82°
AZM: 0.98°
TVD: 7,260.46'
VS: 7,022.3'

MD: 14,569'
INC: 89.43°



14300-14400 CHK
(65%): gyshbn-med gy,
sb blkyl-tab ctngs, frm-sl
frm, mnr MRLST lamn,
occ free CHK, tr pyr
nod/pp mic pyr, v calc;
MRLST (35%): dk gy-med
gy, frm-sl hd, blkyl-tab,
brit, sl sm tex, tr CHK incl,
mod calc

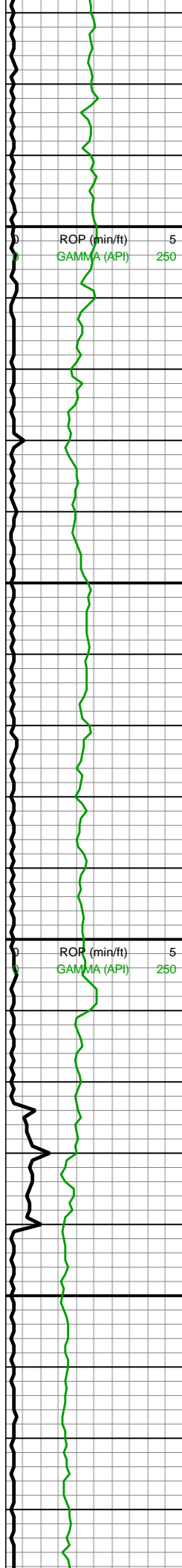


14400-14500 CHK
(75%): gyshbn-med gy,
sb blkyl-tab ctngs, frm-sl
frm, mnr MRLST lamn,
mnr pp mic pyr, mnr free
CHK, v calc; MRLST
(25%): dk gy-med gy,
tab-blkyl ctngs, sl sm tex,
frm-sl hd-brit, tr CHK incl,
mod calc



419u

332u

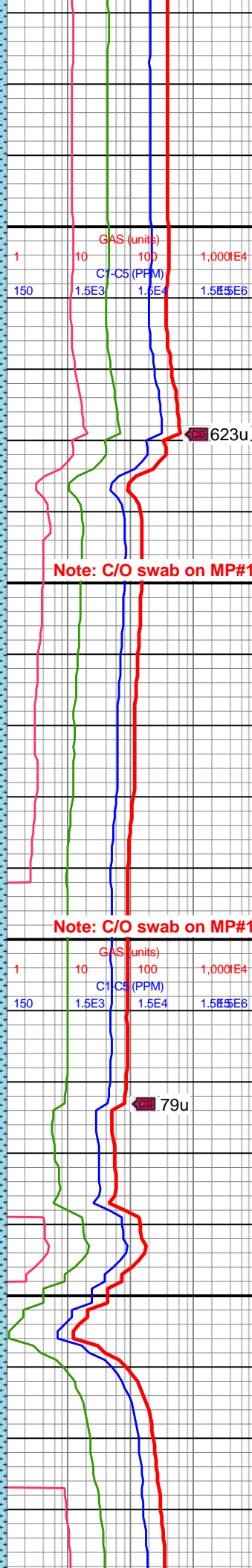
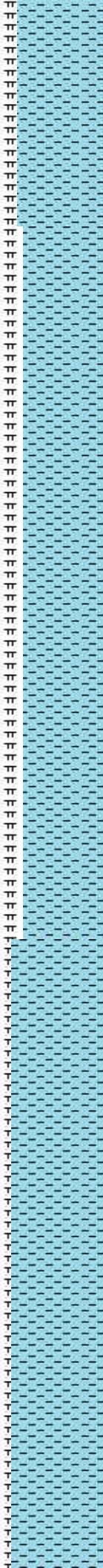


AZM: 1.24°
TVD: 7,261.08'
VS: 7,106.53'

WOB: 34.5klbs
RPM: 60
SPM: 183
SPP: 5,672psi

MD: 14,663'
INC: 89.64°
AZM: 1.42°
TVD: 7,261.85'
VS: 7,189.71'

MD: 14,758'
INC: 90.13°
AZM: 1.15°
TVD: 7,263.69'
VS: 7,273.79'

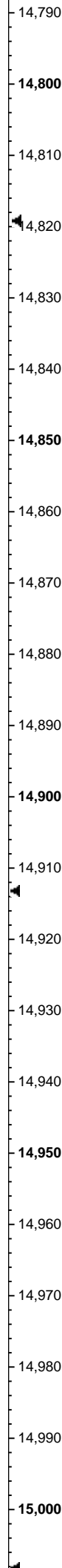
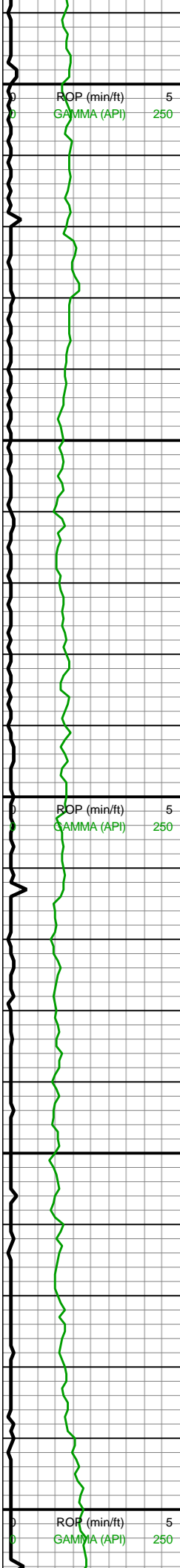


14500-14600 CHK
(80%): gyshbn-med gy,
chky-sl sm tex, frm-sl frm,
sb blkyl-tab ctngs, mnr
MRLST lamn, mnr imbd
mic pyr, mnr free CHK, v
calc; MRLST (20%): dk
gyshbn-dk gy, frm-sl
hd-brit, tab-sb blkyl, sl sm
tex, mod calc

14600-14700 CHK
(75%): gyshbn-med gy,
mot, sm chky tex, sb
ang-sb blkyl ctngs, fri-frm,
mnr intbd MRLST, mod
calc, crm indv CHK frags;
MRLST (25%): dk
gyshbn-dk gy, sl sm tex,
frm-sl hd, sb blkyl-ang
ctngs, com intbd CHK,
mod calc

14700-14800 CHK
(85%): gyshbn-med gy,
mot, fri-frm, sm chky tex,
sb ang-sb blkyl ctngs,
sme free crm CHK, mnr
intbd MRLST, hi calc;
MRLST (15%): dk gy,





WOB: 29.1klbs
RPM: 60
SPM: 182
SPP: 5,204psi

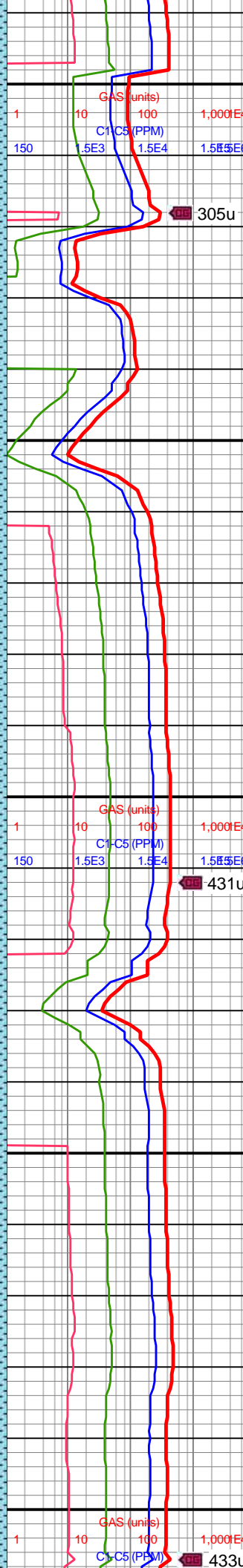
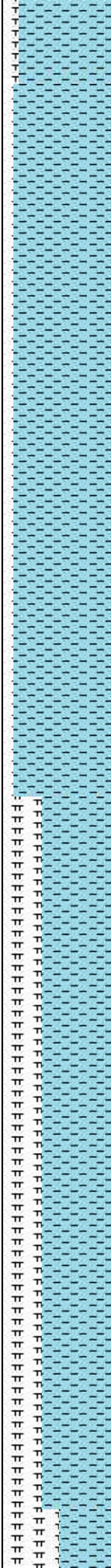
MD: 14,852'
INC: 89.34°
AZM: 0.89°
TVD: 7,264.12'
VS: 7,357.21'

MW IN: 10.3+
VIS IN: 53
MW OUT: 10.4
VIS OUT: 51

MD: 14,947'
INC: 88.77°
AZM: 0.45°
TVD: 7,265.69'
VS: 7,441.77'

WOB: 33.1klbs
RPM: 60
SPM: 184
SPP: 5,679psi

MW IN: 10.4
VIS IN: 52
MW OUT: 10.4

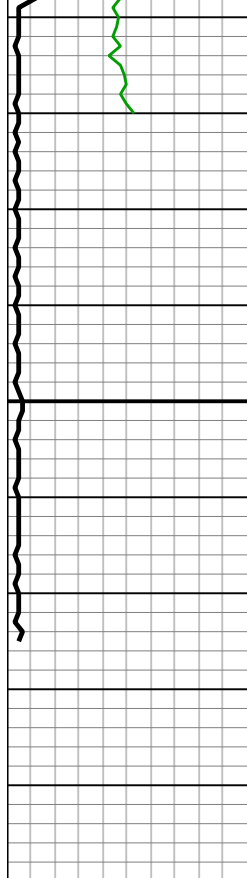


med gy-gyshbn, sl sm
tex, frm-sl hd, blk-ang
ctngs, com intbd CHK, tr
dissm mic pyr, v calc

14800-14900 CHK
(90%): gyshbn-lt gy, mot,
sm chky tex, tab-sb blk-ang
ctngs, fri-frm, mn-frm intbd
MRLST, sme free crm
CHK, hi calc; MRLST
(10%): dk gyshbn-dk gy,
sb blk-ang ctngs, sl sm
tex, frm-sl hd, tr mic pyr,
hi calc, com intbd CHK

14900-15000 CHK
(65%): gyshbn-med gy,
sb tab-sb blk-ang ctngs,
fri-frm, sm chky tex, sme
crm CHK, mn-frm intbd
MRLST, v calc; MRLST
(35%): dk gy-med gy, sl
sm tex, sb blk-ang
ctngs, frm-sl hd, intbd
CHK, mod calc



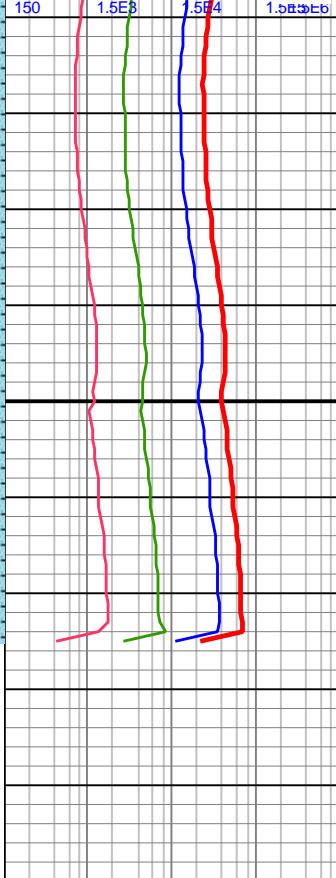
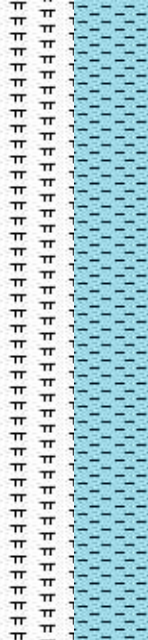


15,010
15,020
15,030
15,040
15,050
15,060
15,070
15,080
15,090
15,100

VIS OUT: 52
MD: 15,015'
INC: 88.24°
AZM: 359.83°
TVD: 7,267.46'
VS: 7,502.57'

MD: 15,075'
INC: 88.24°
AZM: 359.83°
TVD: 7,266.81'
VS: 7,556.37'

**Note: TD well at
15,075' MD
(7,267' TVD) on
7/16/2018**



15000-15075 CHK
(50%): gyshbn-med gy,
mot, sm chky tex, sl frm,
sb blk cy ctngs, brit, tr
MRLST lamn, v calc, tr
imbd/pp mic pyr; MRLST
(50%): dk gy-gyshbn,
mot, sl hd-frm, sb blk cy-sb
ang ctngs, mod calc, tr
intbd CHK

