MASTERLOG
TNA A3A

GENERAL

Country : AUSTRALIA
Permit : VIC L9
Field : Tuna
Basin : GIPPSLAND
Well Type : DEVELOPMENT
Rig Name : NABORS 453

POSITION

Local Co-ord X : 4.27 mE
Local Co-ord Y : 0.14 mN
MGA Co-ord X : 624341.44 mE
MGA Co-ord Y : 5774409.61 mN
RT to MSL : 31.32 m
RT to Sea Bed : 90.72 m

HOLE / CASING INFO

8-1/2" Hole to 2262 m
13-3/8" Surface Csg at 635 m
9 5/8" Whipstock set at 1217.7 m
7" Liner Lap at 1097 m
7" Production Csg at 2261 m

DATE / DEPTH

Kick Off Date : 07/02/2005
Total Depth Date : 11/02/2005
Total Depth : 2262.0 m
True Vertical Depth : 2105.2 m
Log Scale : 1/ 200

ENGINEERS

Mark Smith
V.B. Jagarlamudi
Gedeon Doczy
Steve Oades

ABBREVIATIONS

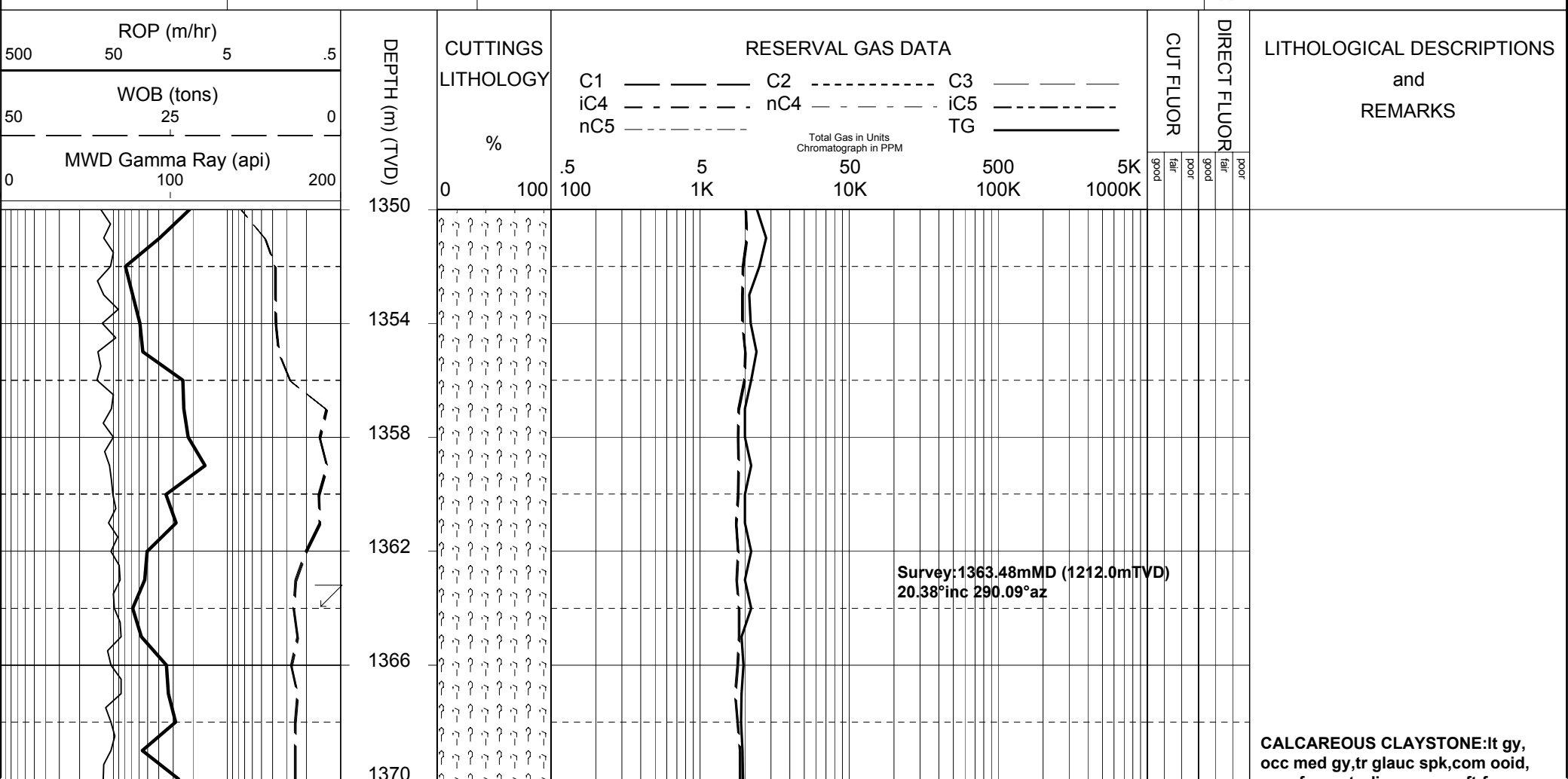
MW	Mud Weight	WOB	Weight on Bit (klbs)
FV	Funnel Viscosity	RPM	Rotations Per Min
PV	Plastic Viscosity	FLW	Flow Rate (gpm)
YP	Yield Point	SPP	Pump Pressure (psi)
Gel	Gel Strength	RR	Re-Run Bit
WL	Water Loss	TG	Trip Gas
KCl	Potassium Chloride	CG	Connection Gas
Cl	Chlorides	BG	Background Gas
Incl	Inclination	DGP	Drilled Gas Peak
Az	Azimuth	MM	Mud Motor

LITHOLOGY LEGEND

CLAYSTONE, MARL, BRYOZOA, CARB FRAGMENT
SILTSTONE, LIMESTONE, RADIOLARITES, QUARTZITE
SST: F - V FINE, DOLOMITE, ECHINOIDS, INTRUSIVES
SST: MEDIUM, CHERT, CORALS, GLAUCONITE
SST: COARSE, CONGLOMERATE, FORAMINIFERA, PYRITE
SHALE, COAL, LITHIC FRAGMENT, CEMENT

ENGINEERING LEGEND

CASING SHOE, WIRELINE LOGS
LINER HANGER, MDT POINTS:
BIT CHANGE, PRESSURE ONLY
DEVIA. SURVEY, SAMPLE
SWC UNRECOV, SEAL FAILURE
SIDEWALL CORE, TIGHT
CORE



com foram,tr dissem pyr,sft-frm,
amor-sbblky.

1374

1378

1382

1386

1390
(1237.2)

CALCAREOUS CLAYSTONE:lt gy-
med gy,occ olv gn gy,rr foss,tr
tr micmic,dissem pyr,sft-mod hd,
disp,amor-sbblky.

Survey:1392.54mMD (1239.6mTVD)
16.76°inc 290.56°az

1394

1398

WOB:0-20
TDRPM:0-110
MMRPM:172
SPP:1960
FLOW:595

94 / 3 / 1 / 1 / 1

1402

1406

1410
(1256.4)

1414

1418

MW:9.80
FV:69
PV:24
YP:45
Gel:11/15
pH:9.0
Cl:46k
KCl:26.0

Survey:1421.10mMD (1267.14mTVD)
13.52°inc 295.99°az

1422

1426

1430
(1275.8)

1434

1438

CALCAREOUS CLAYSTONE:lt gy-gy,
med dk gy,tr ooid,tr foram,
tr micmic,tr dissem pyr,tr glauc,
sft-mod hd,sbblky-blky.

1442

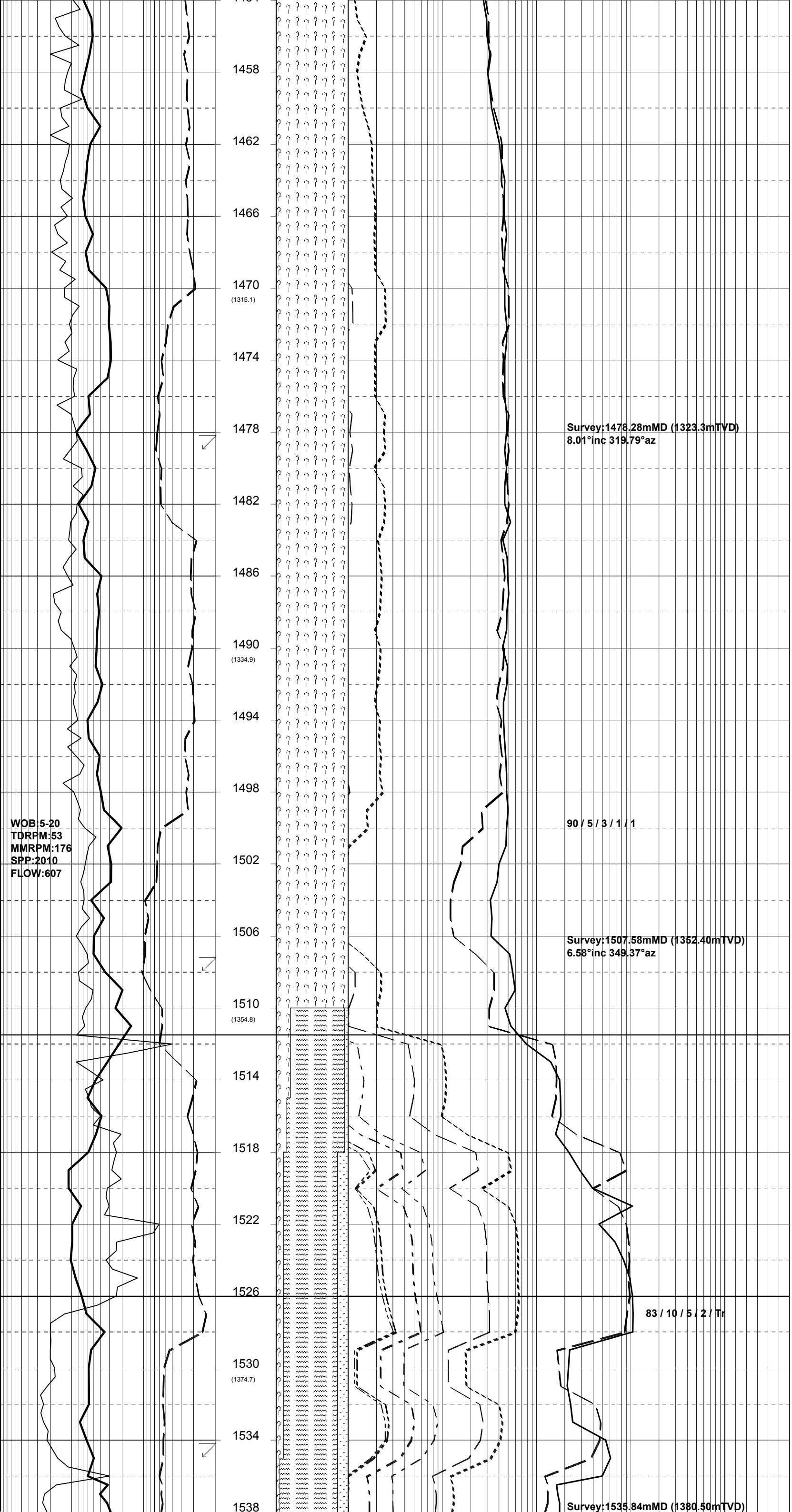
1446

Survey:1449.53mMD (1294.9mTVD)
10.68°inc 305.99°az

1450
(1295.4)

1454

96 / 1 / 1 / 1 / 1



CALCAREOUS CLAYSTONE:mod lt gy-med gy,tr ooids,tr nod pyr,tr micmic,tr dissem pyr,tr glauc,tr carb spk,sft-mod hd,sbblky-blky.

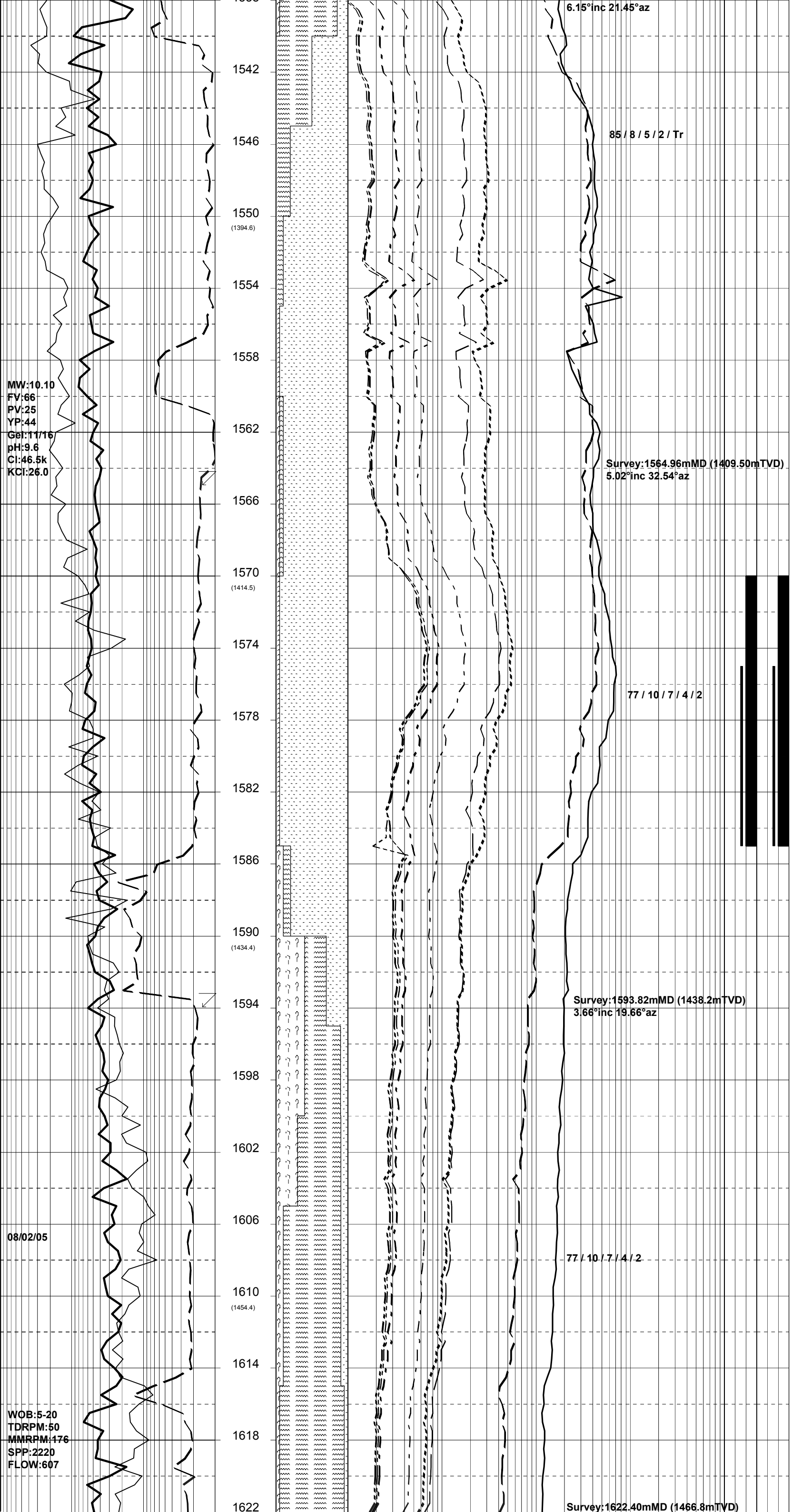
Top of Latrobe/M-105
1511.5mMDRT 1356.3mTVDRT
(1325.0mTVDSS)

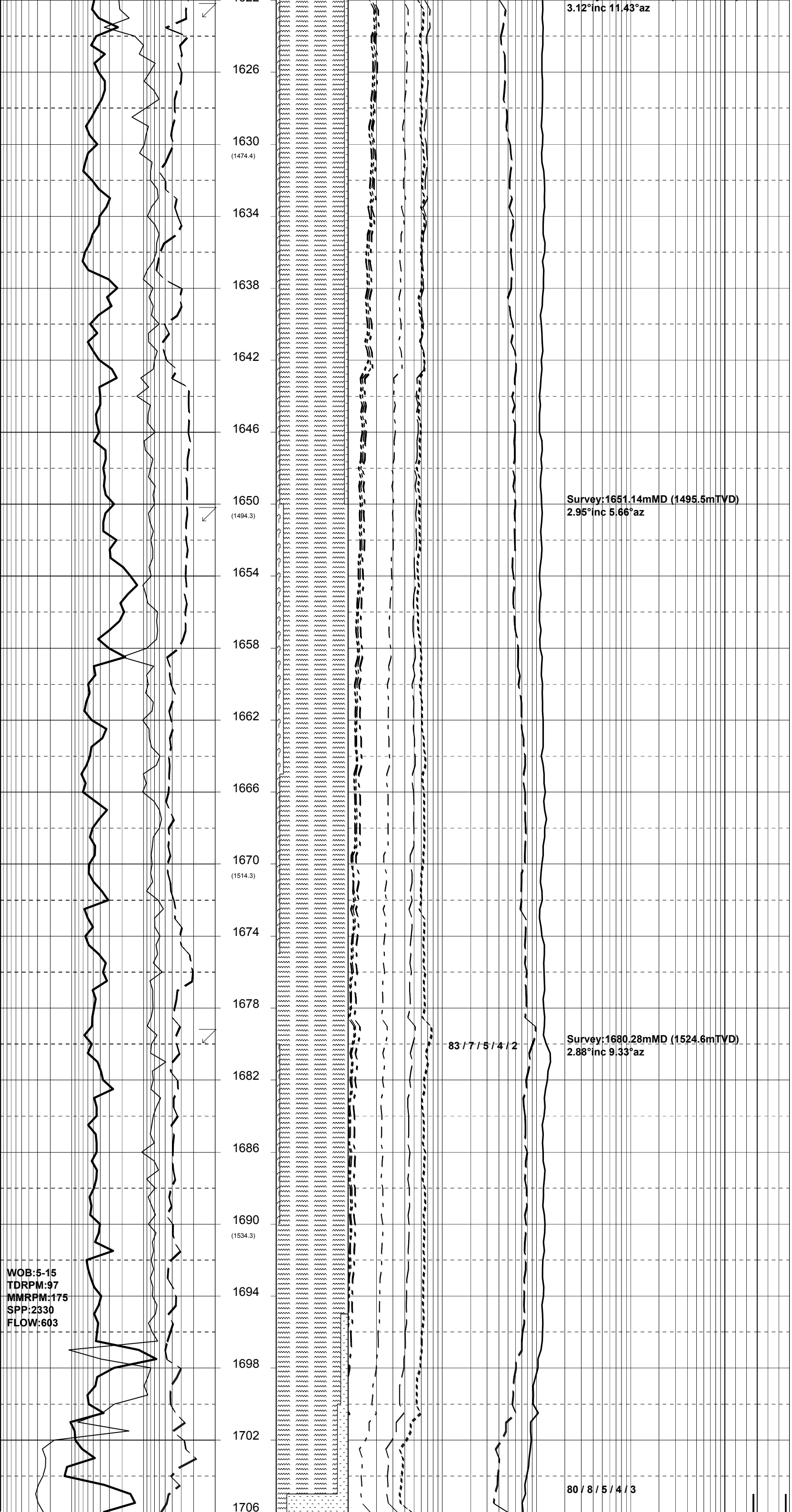
CLAYSTONE:gy,gy-yel.tr glauc, sft,amor,disp.

SILTSTONE:pa rd bn-lt bn, aren g/t vf SST,tr micmic, 10% calc,sft-frm,sbblky.

TCC Top of M-1
1526.1mMDRT 1370.8mTVDRT
(1339.5mTVDSS)

SANDSTONE:gy-lt gy,occ trnsl, crs-v crs,dom v crs,sa-sr,com fract qtz grn,mod wl srt, tr pyr cmt,tr glauc,tr nod pyr, hd,uncons,gd-exc vis por, no fluor.


6.15°inc 21.45°az
1542
1546
1550
(1394.6)
1554
1558
1562
1566
1570
(1414.5)
1574
1578
1582
1586
1590
(1434.4)
1594
1598
1602
1606
1610
(1454.4)
1614
1618
1622
INCREASE
MUD WEIGHT
9.9ppg to 10.1 ppg
85 / 8 / 5 / 2 / Tr
MW:10.10
FV:66
PV:25
YP:44
Gel:11/16
pH:9.6
Cl:46.5k
KCl:26.0
SANDSTONE:trnsl,trnsp,med-v crs,
occ gran fract qtz,sa-sr,tr pyr
cmt,rr nod pyr,rr glauc,tr micmic,
dom lse v gd vis & inf por,
no fluor.
Survey:1564.96mMD (1409.50mTVD)
5.02°inc 32.54°az
SANDSTONE:trnsl,occ trnsp,
med-v crs,dom crs,sa-sr,mod
wl srt,tr dissem pyr,tr glauc,
lse,hd,gd inf & vis por.
77 / 10 / 7 / 4 / 2
FLUORESCENCE:1570m-1575m
20% dll,pale yel/gn,ptchy
dir fluor,v slw bleeding
dir cut,thk ring res.
FLUORESCENCE:1575m-1585m
40% mod bri-bri, evn yel/gn
dir fluor,mod rapid blooming
dir cut,thick evn res ring.
Survey:1593.82mMD (1438.2mTVD)
3.66°inc 19.66°az
SANDSTONE:trnsl,occ trnsp,
med-v crs,dom crs,sa-sr,mod
wl srt,tr dissem pyr,tr glauc,
lse,hd,gd inf & vis por,
no fluor.
08/02/05
77 / 10 / 7 / 4 / 2
SILTSTONE:pa bn-mod bn,aren
g/t vf SST,tr micmic,tr dissem
pyr,sft-frm,mod hd,amor.
CLAYSTONE:lt bluish gy-bluish gy,
g/t slty i/p,mod hd,sbblky.
WOB:5-20
TDRPM:50
MMRPM:176
SPP:2220
FLOW:607
Survey:1622.40mMD (1466.8mTVD)



CLAYSTONE:olv gy-med gy, g/t slty i/p,tr nod pyr, frm,occ disp,sbblky-amor.

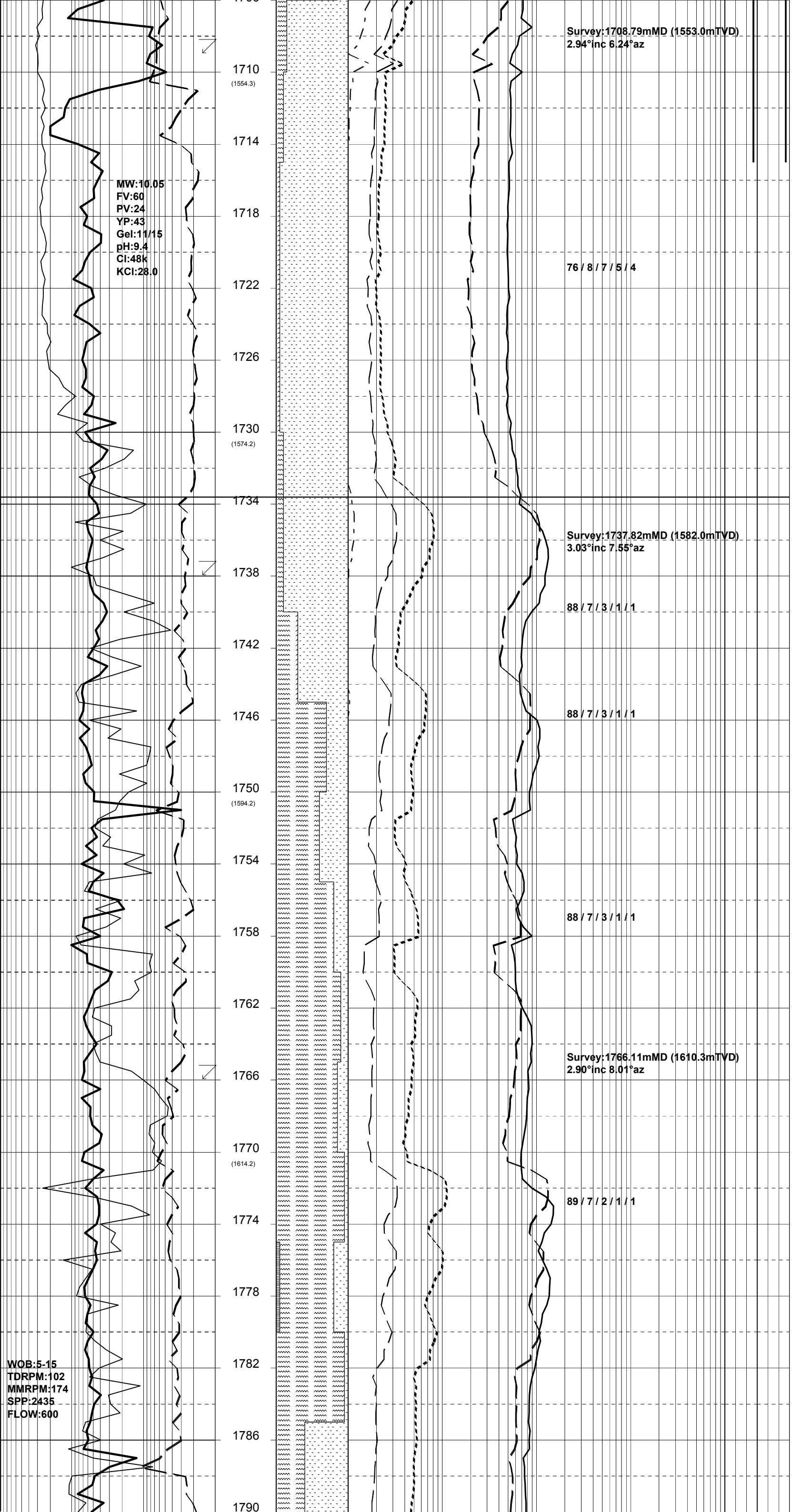
SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,sft-frm,mod hd,amor.

CLAYSTONE:lt bluish gy-bluish gy, lt blu,slty i/p,tr glauc, mod hd,sbblky.

SILTSTONE:lt bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,sft-frm,mod hd,amor.

SANDSTONE:clr-trnsl,occ mlky wh, crs-v crs,dom v crs,mod wl srt, sa-sr,com fract qtz grn, tr pyr cmt,com nod pyr,lse,hd, gd inf por.

FLUORESCENCE:1695m-1700m
Tr mod bri gnsh/yel,pnpt
dir fluor,v slow blooming
dir cut,no ring res.



FLUORESCENCE:1705m-1715m
5-10% dll gnsh/yel,ptchy
dir fluor,f/bit crushed rock fluor,
v slw bldg dir cut,thin rng res.

SANDSTONE:clr-trnsl,med-occ v crs,
dom med,mod wl srt,sa-dom sr,
tr pyr cmt,tr nod pyr,lse,hd,
bit crushed rock flour,gd inf por.

SILTSTONE:5% a/a
5% gysh bn-dsky bn,com blk,
carb lam,tr micmic,sft-frm,
sbblky.

COAL:blk,sbvit,brit,com nod pyr,
sbblky,ang,occ slty,g/t CARB SLTST.

Base of TFC
1733.6mMDRT 1577.8mTVDRT
(1546.5mTVDSS)

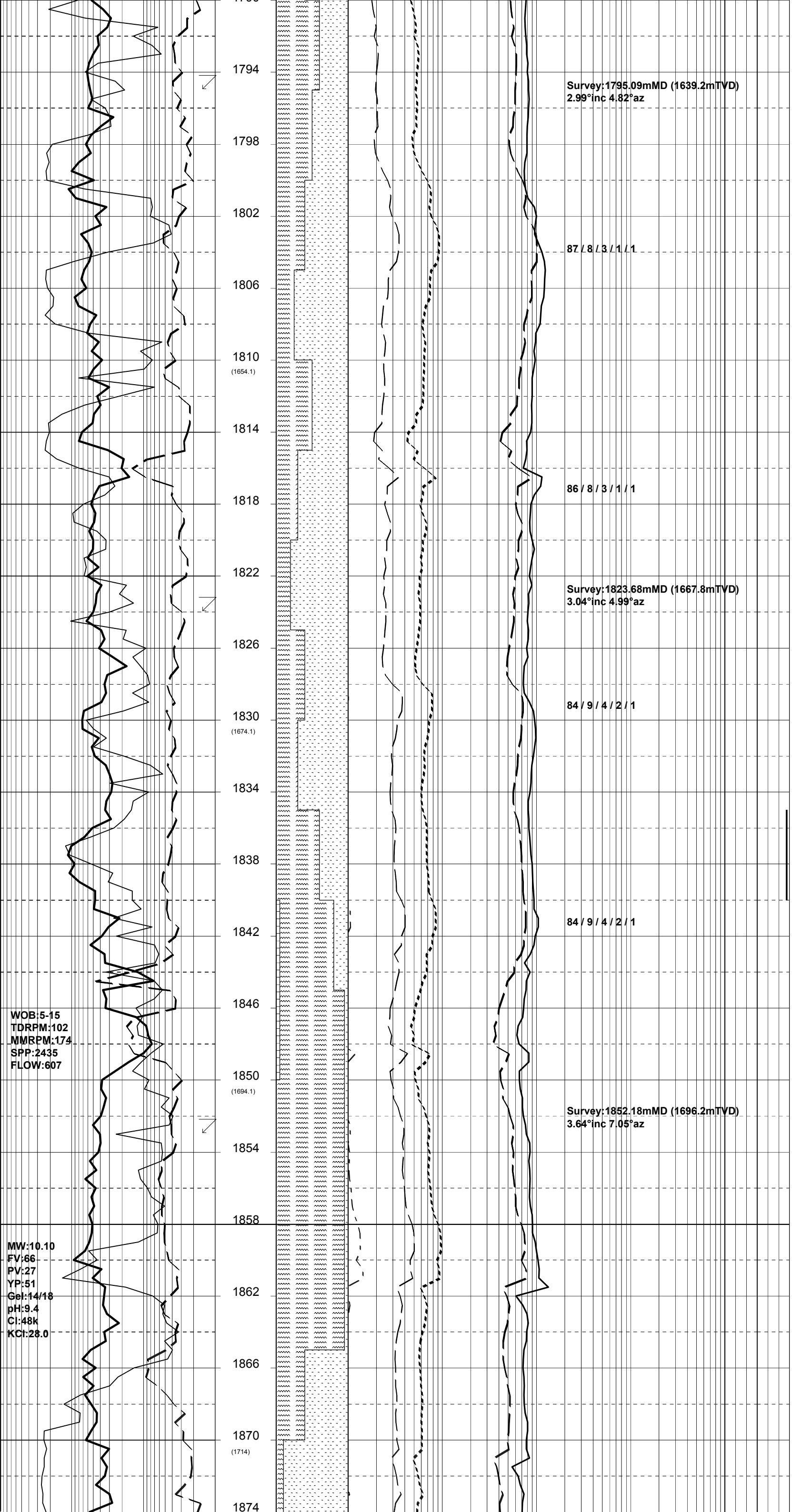
SILTSTONE:5% a/a,aren
5% a/a,carb.

SANDSTONE:a/a.f-occ v crs,dom med,
com nod pyr,pr-fr inf por.

SILTSTONE:pa bn-mod bn,aren
g/t vf SST,tr micmic,tr dissem
pyr,sft-frm,mod hd,amor.

COAL:brnsh blk,blksh rd,erthy,
mod hd,sbblky,unevn fract,slty i/p,
g/t CARB SLTST.

SANDSTONE:clr-trnsl,f-occ v crs,
pr srt,sa-sr,tr micmic,tr pyr
& nod pyr,tr wh arg mtx,lse,
hd,pr-fr inf por,no fluor.



SANDSTONE:clr-trnsl,f-med,dom med, mod wl srt,sa-sr,tr wh arg mtx, tr dissem pyr & nod pyr,tr micmic, lse,hd,pr-fr inf por,no fluor.

SILTSTONE:45% aren, a/a
5% carb, a/a.

SANDSTONE:clr-trnsl,med-v crs, dom v crs,mod wl srt,sa-dom sr, occ fract qtz grn,tr micmic,tr dissem & pur cmt,com nod pyr,lse,hd, fr-gd inf por.no fluor.

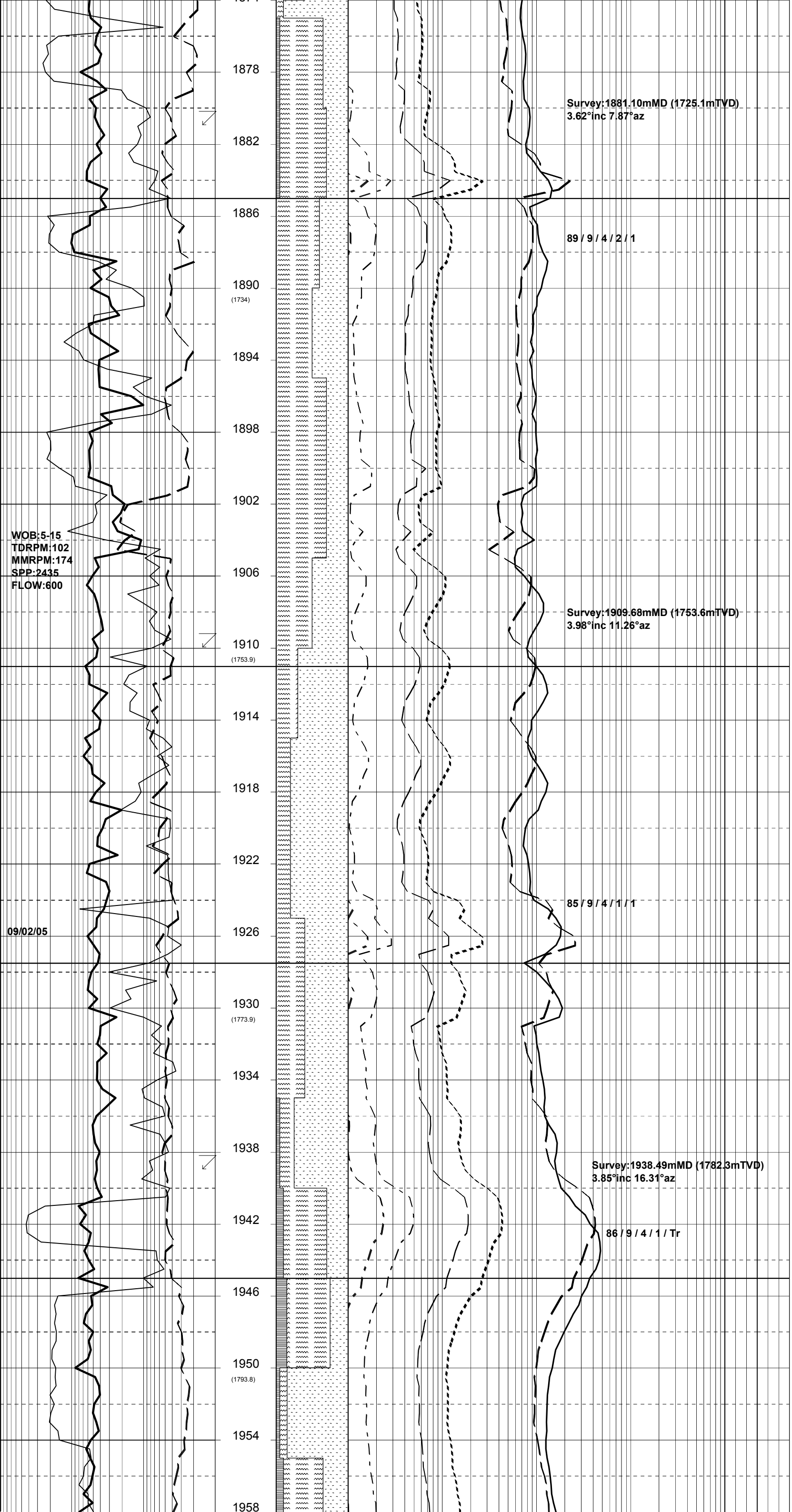
SANDSTONE:clr-trnsl,f-med dom med, mod wl srt,sa-sr,tr wh arg mtx, tr dissem pyr & nod pyr,tr micmic, lse,hd,pr-fr inf por

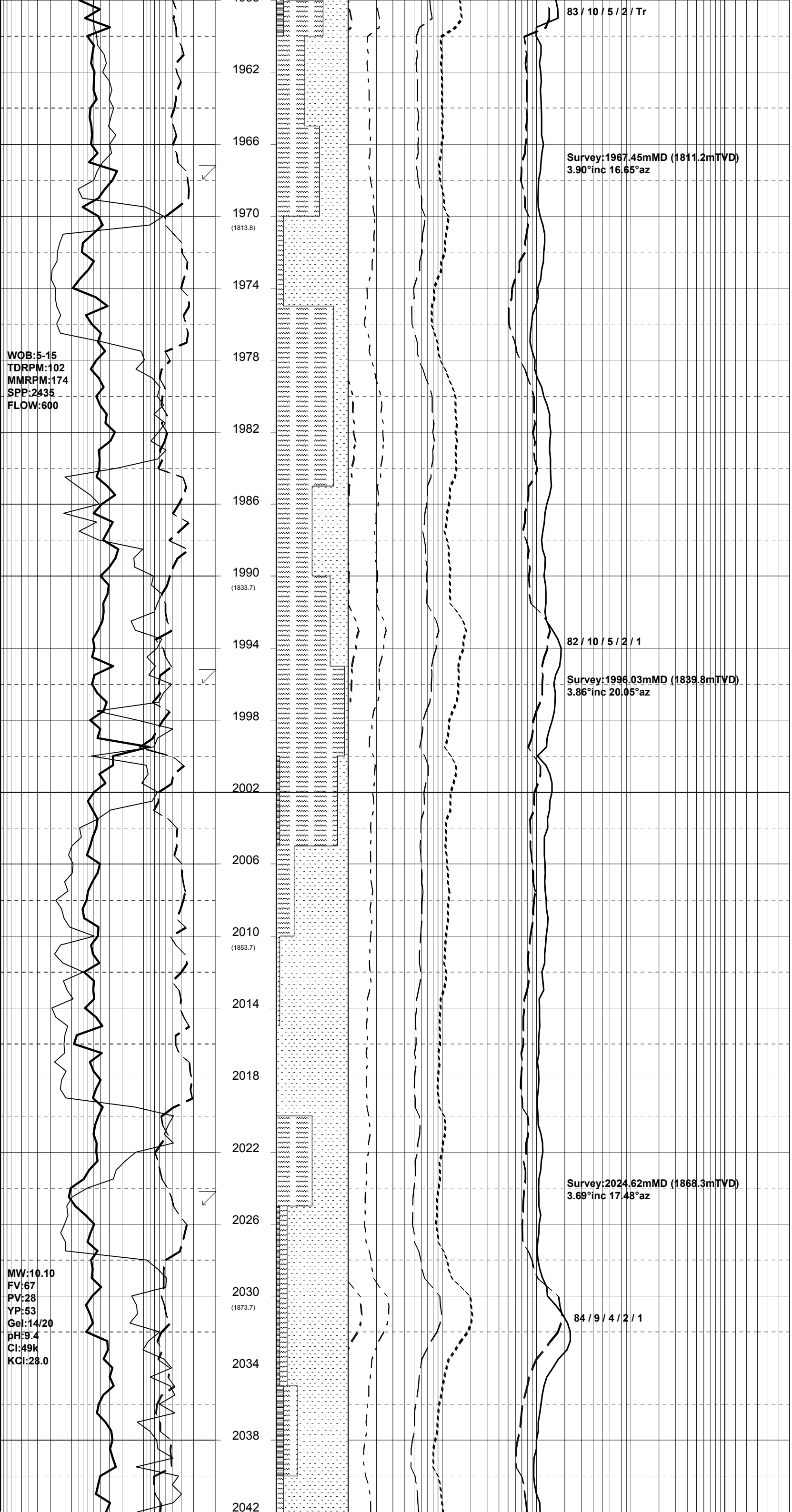
FLUORESCENCE:1835m-1840m trace mod bri pnpt,org/yel fluor,v slow blming dir cut,thn ring res.

SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,sft-frm,mod hd,amor.

Top of L-095
1858.4mMDRT 1702.4mTVDRT
(1671.1mTVDSS)

SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.


1878
1882
1886
1890
(1734)
1894
1898
1902
1906
1910
(1753.9)
1914
1918
1922
1926
1930
(1773.9)
1934
1938
1942
1946
1950
(1793.8)
1954
1958
WOB:5-15
TDRPM:102
MMRPM:174
SPP:2435
FLOW:600
09/02/05
Survey:1881.10mMD (1725.1mTVD)
3.62°inc 7.87°az
89 / 9 / 4 / 2 / 1
Survey:1909.68mMD (1753.6mTVD)
3.98°inc 11.26°az
85 / 9 / 4 / 1 / 1
Survey:1938.49mMD (1782.3mTVD)
3.85°inc 16.31°az
86 / 9 / 4 / 1 / Tr
SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.
Top of L-110
1884.6mMDRT 1728.6mTVDRT
(1697.3mTVDSS)
COAL:blk,sbvit,unevn fract,brit, mod hd,sbblky-sbfiss.
SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lam,sft-frm, frm i/p,sbblky-amor.
SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.
Top of L-150
1911.4mMDRT 1755.3mTVDRT
(1724mTVDSS)
SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.
SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.
Top of L-160
1927.5mMDRT 1771.4mTVDRT
(1740.1mTVDSS)
Top of L-200
1945.3mMDRT 1789.1mTVDRT
(1757.8mTVDSS)
COAL:blk,sbvit,unevn fract,brit, mod hd,sbblky-sbfiss.
SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lam,sft-frm, frm i/p,sbblky-amor.



SANDSTONE:clr-trnsl,vf-med,dom f, mod wl srt,sa-sr,tr micmic,tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.

SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lams,sft-frm, frm i/p,sbblky-amor.

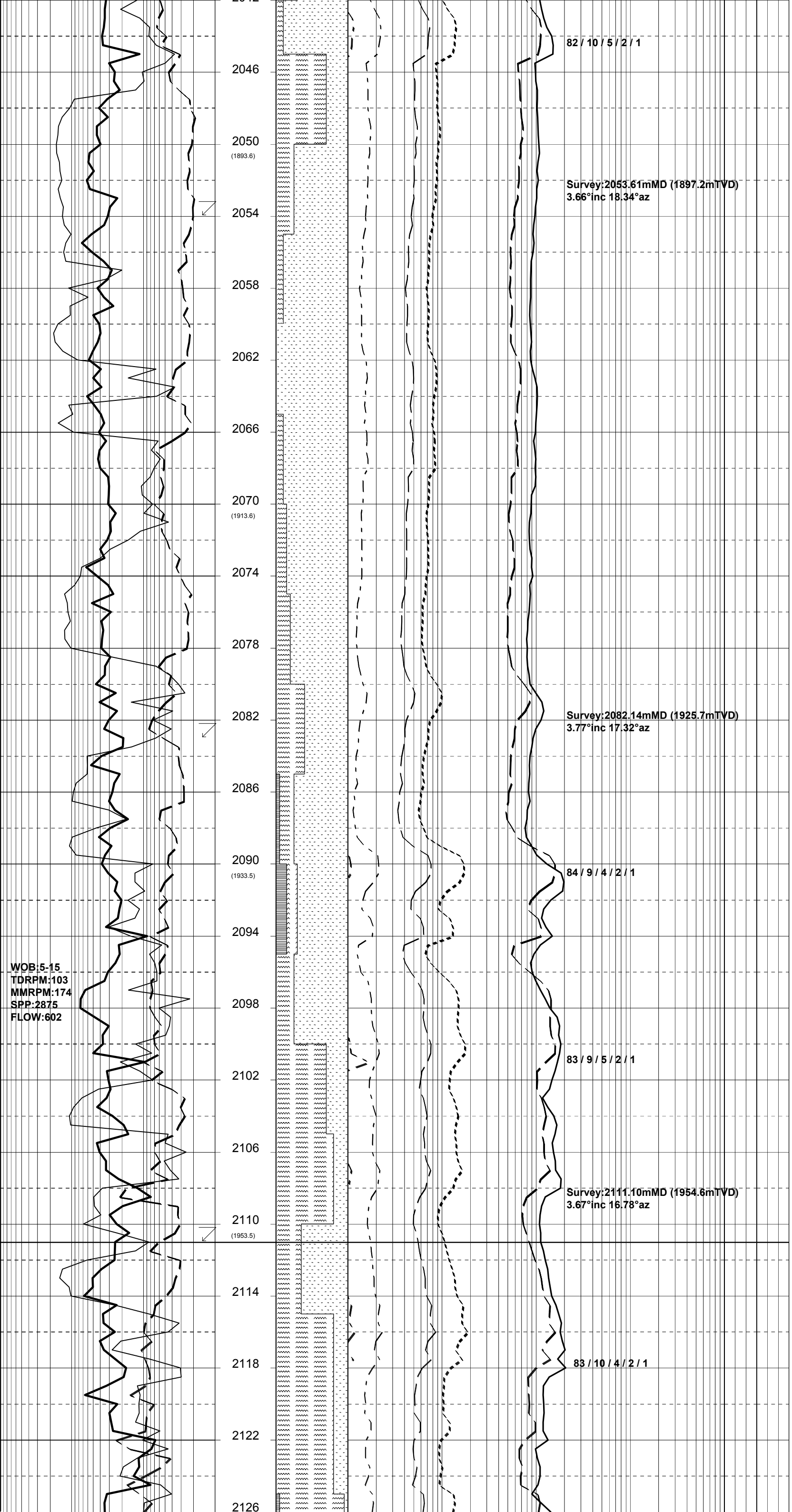
Top of L-400
2002.6mMDRT 1846.3mTVDRT
(1815mTVDSS)

COAL:brnsh-blk,erthy,mod hd,sbblky, slty,g/t CARB SLTST.

SANDSTONE:clr-trnsl,med-v crs, dom v crs,mod wl srt,sa-sr,tr micmic, tr dissem pyr,tr nod pyr,lse,hd, gd inf por,no fluor.

COAL:brnsh blk-blk,erthy,mod hd, sbblky,slty,g/t CARB SLTST.

SANDSTONE:clr-trnsl,med-v crs, dom crs,mod wl srt,sa-sr,tr micmic, tr dissem pyr,tr nod pyr,lse,hd, gd inf por,no fluor.



SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lam,sft-frm, frm i/p,sbblky-amor.

SANDSTONE:clr-trnsl,med-occ v crs, dom med,mod wl srt,sa-sr,tr micmic, tr dissem pyr,tr nod pyr,lse,hd, fr-gd inf por,no fluor.

SILTSTONE:pa bn-mod bn,occ blk bn, w/ carb lam,tr micmic,v aren i/p, g/t vf SST,occ g/t slty COAL.

SANDSTONE:clr-trnsl,med-v crs,dom crs,mod wl srt,sa-dom sr,tr micmic, tr pyr cmt,tr nod pyr,lse,hd, gd inf por,no fluor.

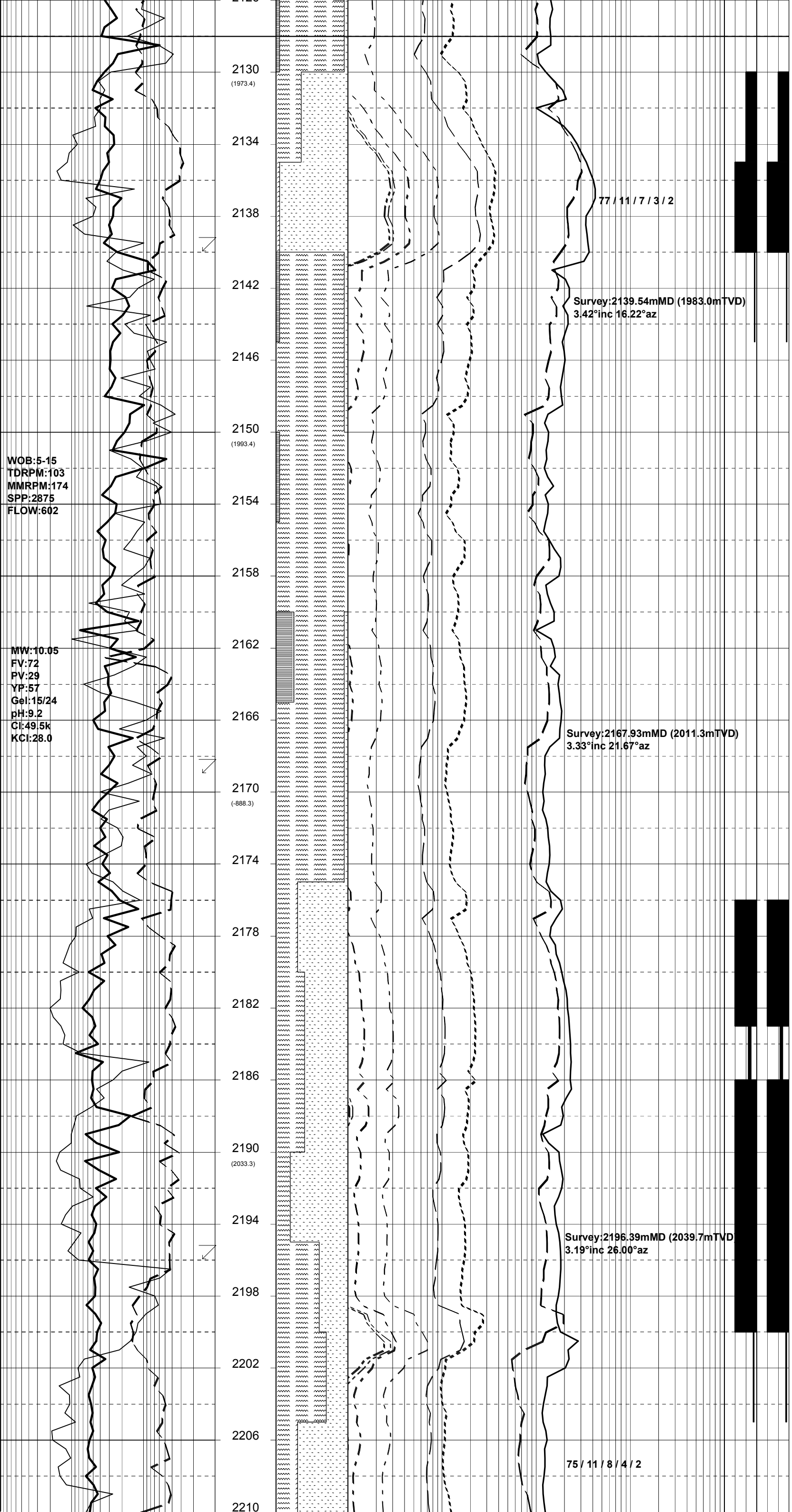
COAL:brnsh blk-blk,erthy,mod hd, sbblky,unevn fract,slty, g/t CARB SLTST.

FLUORESCENCE:2095m-2115m trace mod bri-bri pnpt,gnsh/yel fluor,v slow bleeding dir cut thick ring res.

SANDSTONE:clr-trnsl,vf-occ v crs, dom crs,pr srt,sa-dom sr,tr micmic, tr pyr cmt,com nod pyr,lse,hd, pr-fr inf por.

Top of T-055
2111.2mMDRT 1954.7mTVDRT
(1923.4mTVDSS)

SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lam,sft-frm, frm i/p,sbblky-amor.



Top of T-1 Upper
2128.2mMDRT 1971.7mTVDRT
(1940.4mTVDSS)

SANDSTONE:clr-trnsl,f-v crs,dom crs,
mod wl srt,sa-sr,dom sr,tr pyr cmt,
hd,lse,gd inf por

FLUORESCENCE:2130m-2135m
30% bri yel-gn evn fluor,
fast blooming dir cut,
v thk ring res.

FLUORESCENCE:2135m-2140m
70% bri yel-gn even fluor,fast
blooming dir cut,v thk ring res.

FLUORESCENCE:2140m-2145m
5% bri spotted yel-gn
fluor,slow bleeding dir
cut,thick res ring.

COAL:blk,bn blk,ea,mod hd,
sbblky,unevn,com pyr nod,
g/t CARB SLTST.

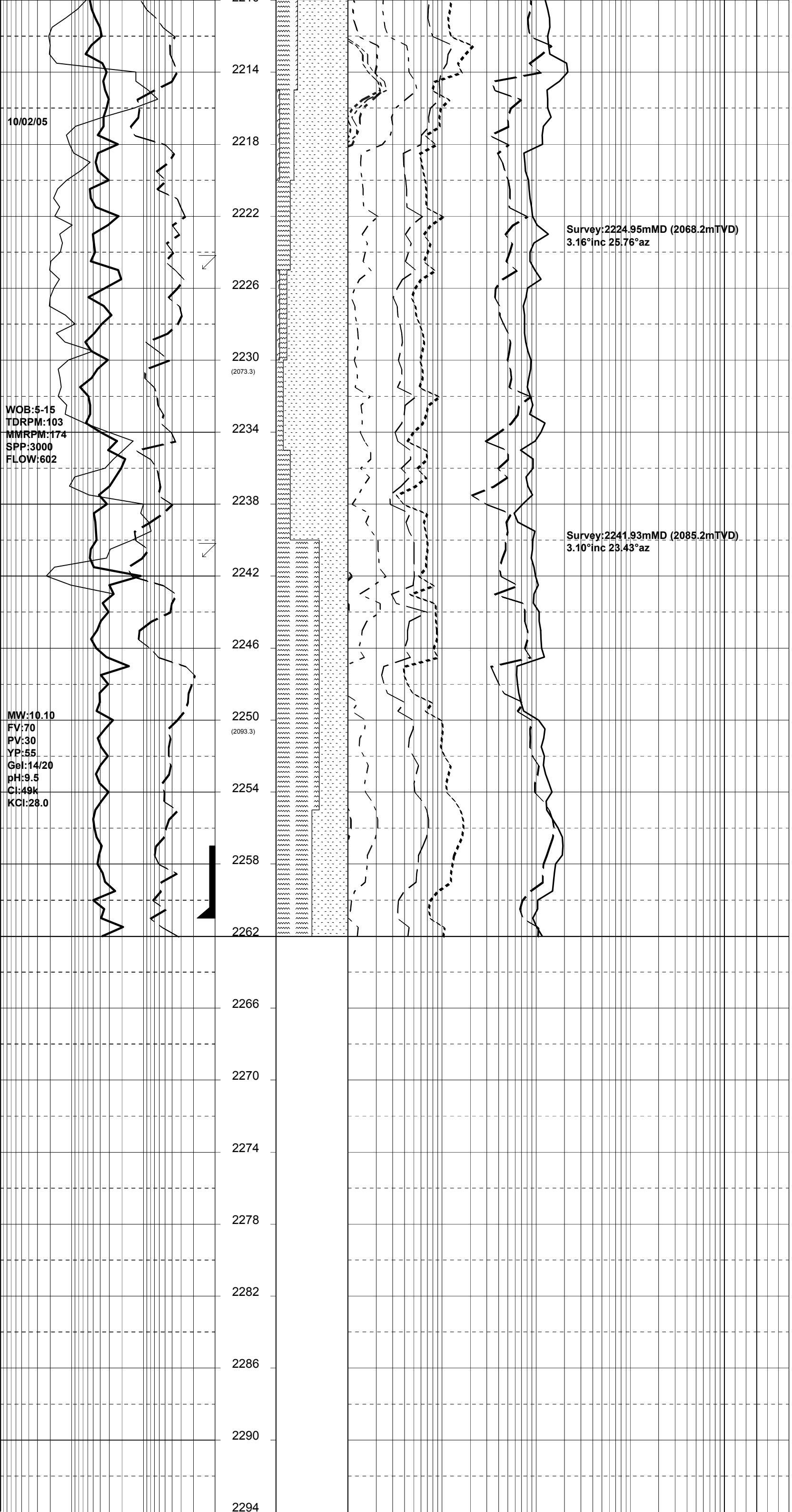
SILTSTONE:pa bn-mod bn,aren
g/t vf SST,tr micmic,tr dissem
pyr,com carb lam,sft-frm,
frm i/p,sbblky-amor.

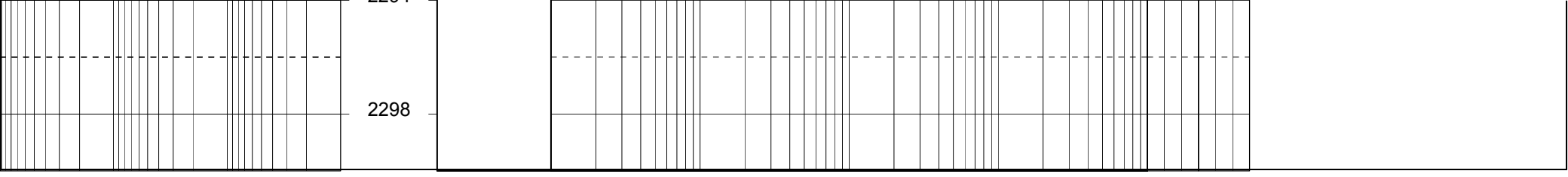
SANDSTONE:clr-trnsl,f-crs,dom
f-med,mod wl srt,sa-sr,dom sr,
tr pyr cmt,tr nod pyr,hd,dom
lse,fr-gd inf por.

FLUORESCENCE:2176m-2200m
20%-50% bri yel gn,
evn dir fluor,mod rapid
to fast dir cut,thick
res ring.

FLUORESCENCE:2200m-2205m
5% to trace,bri yel gn
ptchy dir fluor,slw
bleeding dir cut,
thk ring res.

SILTSTONE:pa bn-mod bn,aren
g/t vf SST,tr micmic,tr dissem
pyr,com carb lam,sft-frm,
frm i/p,sbblky-amor.


10/02/05
WOB:5-15
TDRPM:103
MMRPM:174
SPP:3000
FLOW:602
MW:10.10
FV:70
PV:30
YP:55
Gel:14/20
pH:9.5
Cl:49k
KCl:28.0
2214
2218
2222
2226
2230
(2073.3)
2234
2238
2242
2246
2250
(2093.3)
2254
2258
2262
2266
2270
2274
2278
2282
2286
2290
2294
Survey:2224.95mMD (2068.2mTVD)
3.16°inc 25.76°az
Survey:2241.93mMD (2085.2mTVD)
3.10°inc 23.43°az
SANDSTONE:clr-trnsl,f-crs,dom f-med,mod wl srt,sa-sr,dom sr, tr pyr cmt,tr nod pyr,hd,dom lse,fr-gd inf por,no fluor.
CLAYSTONE:pa blu-gy blu gy, tr micmic,tr glauc,mod hd, sbblky.
SANDSTONE:clr-trnsl,f-crs,dom f-med,mod wl srt,sa-sr,dom sr, tr pyr cmt,tr nod pyr,hd,dom lse,fr-gd inf por.
CLAYSTONE:pa blu-gy blu gn, tr micmic,tr glauc,mod hd, sbblky.
SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lam,sft-frm, frm i/p,sbblky-amor.
SANDSTONE:clr-trnsl,f-crs,dom f-med,mod wl srt,sa-sr,dom sr, tr pyr cmt,tr nod pyr,hd,dom lse,fr-gd inf por.
SILTSTONE:pa bn-mod bn,aren g/t vf SST,tr micmic,tr dissem pyr,com carb lams,sft-frm, frm i/p,sbblky-amor.
Tuna A3A Total Depth at 2262.0 mMDRT 2105.2 mTVDRT 03:15 hours on 11/02/2005
Run Reeves compact shuttle logging from 2259 m to 1430 m MCG-MDN-MPD-MDL-MSS-MAI
7" Production Casing at 2261 m Liner Lap at 1097 m


2298