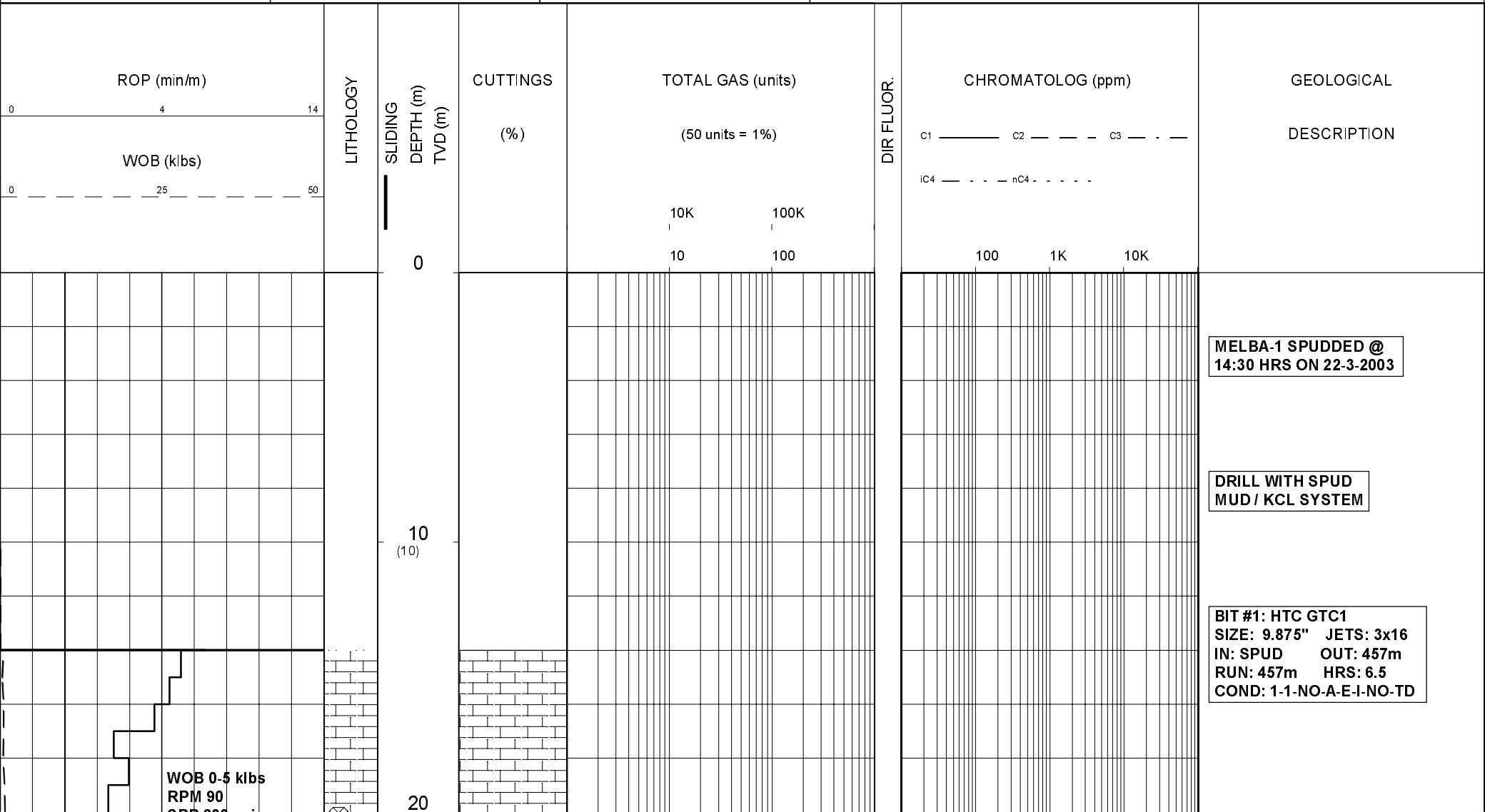


Field : MELBA	Rotary table : 76.35m	Rig : CENTURY-11	Open Hole: 9.875" 457m	Cased Hole: 7.625" 456m	Loggers : David Adderley
Block: PEP-154	Ground level : 71.15m	Spud date : 22-03-2003	6.75" 1668m		Stan Willson
State : VICTORIA	GDA 94 Co-ordinates :	TD date : 28-03-2003			
Country : AUSTRALIA	Lat. : 38° 28' 16.58" S (PRELIM.)	Total depth : 1668m (1640.35mTVD)			
Scale : 1/ 200	Long. : 142° 49' 24.36" E (PRELIM.)	Final status : P & A			

LITHOLOGY	ACCESSORIES	DRILLING DATA	ABBREVIATIONS
Conglomerate Coarse Sandstone Med Sandstone Fine Sandstone VF Sandstone Siltstone Carb. Siltstone Calc. Siltstone Clay Limestone Dolomite Coal Anhydrite Gypsum Igneous Volcanic Metamorphic Cement	Pyrite Siderite Glauconite Feldspar Mica Ferrous Chert Calcareous Dolomitic Carbonaceous Lithoclast Breccia Foraminifera Corals Inoceramus Bryozoa Plant remains Fossils	Casing Shoe Bit Trip Wiper Trip Core DST Deviation Survey MUD DATA MW - Mud Weight (lb/gal) FV - Funnel Viscosity (s/qt) PV - Plastic Viscosity (cps) YP - Yield Point (lb/100ftsq) Gel - Gel Strength (10sec) WL - Water Loss (cc/30min) pH - Acidity / Alkalinity Ck - Cake (32nd/inch) Sol - Solids (% vol) Cl - Chlorides (mg/l)	BOPD - Barrels of Oil Per Day BWPD - Barrels of Water Per Day CG - Connection Gas CO - Circulate Out COND - Condensate c/c - Crush Cut DST - Drill Stem Test FLOW - Flow Rate (gal/min) GCM - Gas Cut Mud GCW - Gas Cut Water GTS - Gas To Surface INJ - Injection of Mist (bbls/hr) LCM - Lost Circulation Material MMCFD - Million Cubic Feet / Day NGTS - No Gas To Surface NOTS - No Oil To Surface NR - No Returns OCM - Oil Cut Mud OG - Over Gauge OH - Open Hole OTS - Oil To Surface Q - Flow Rate REC - Recovery Rmf - Resistivity mud filtrate ROP - Rate Of Penetration RPM - Revolutions Per Minute RTSTM - Rate Too Small To Measure Rw - Resistivity water r/r - Ring Residue SCFM - Standard Cubic Ft/Min (air) SGCM - Slightly Gas Cut Mud SPM - Strokes Per Minute SPP - Stand Pipe Pressure SWC - Side-Wall Core TG - Trip Gas WOB - Weight On Bit



SPP 200 psi
FLOW 170 gpm

(15.01)

NO GAS

Survey @ 23m: 1.00° 352°T

30
(30)

LIMESTONE: off wh, pl yel, aren,
abdt coral & foss frags, ooids,
lse, wk calc cmt, fri, gd vis por,
no fluor.

40
(40)

WOB 0-5 klbs
RPM 90
SPP 650 psi
FLOW 480 gpm

50
(50)

SANDSTONE: cr, trnsl, crs, w srt,
rnd, cn lse qtz gr & lith frags,
glauc, gd inf por, no fluor.

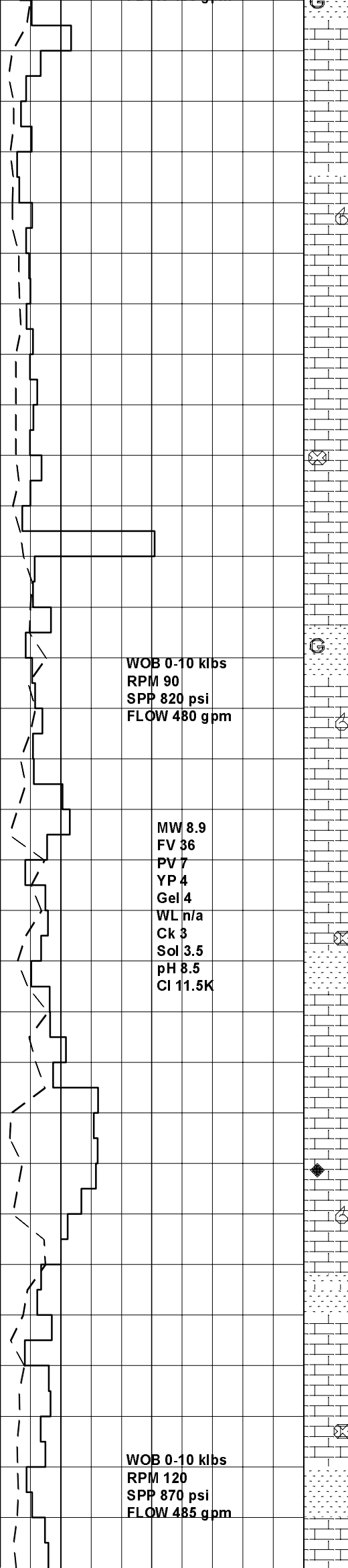
60
(59.99)

70
(69.99)

NO GAS

80
(79.99)

WOB 0-10 klbs
RPM 90
SPP 760 psi
FLOW 480 gpm



WOB 0-10 klbs
RPM 90
SPP 820 psi
FLOW 480 gpm

MW 8.9
FV 36
PV 7
YP 4
Gel 4
WL n/a
Ck 3
Sol 3.5
pH 8.5
CI 11.5K

WOB 0-10 klbs
RPM 120
SPP 870 psi
FLOW 485 gpm

90
(89.99)

100
(99.99)

110
(109.99)

120
(119.99)

130
(129.99)

140
(139.99)

NO GAS

10K 100K

10 100

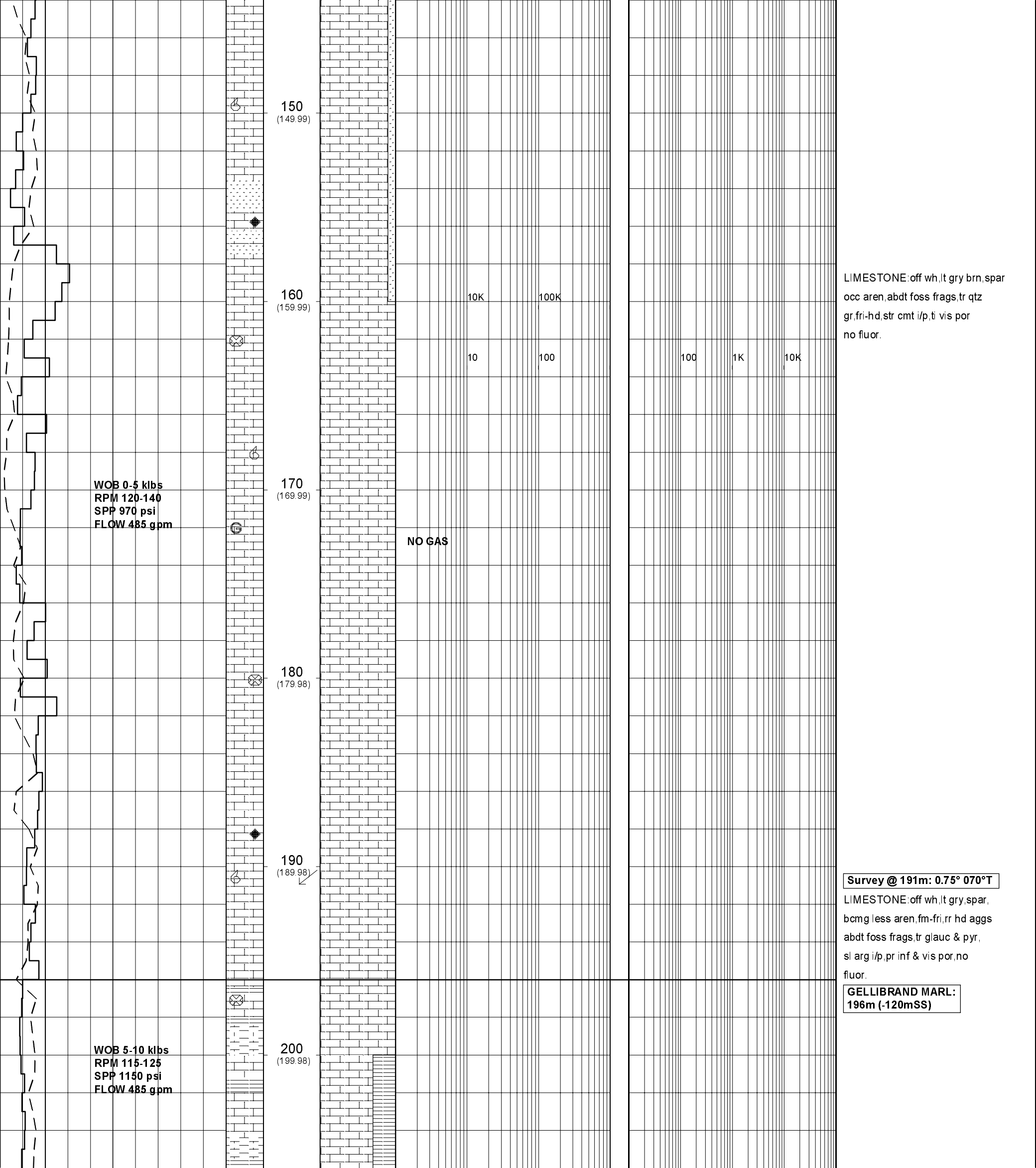
100 1K 10K

NO GAS

LIMESTONE: wh, off wh, lt bn, aren,
abdt coral & foss frags, shell
frags, dom lse, occ fri aggs, tr
qtz gr, gd inf por, no fluor.

Survey @ 98m: 0.75° 005°T

SANDSTONE: clr, trnsl, med-crs gr,
w srt, rnd, lse qtz gr & lith
frags, occ wk calc cmt, gd inf por
no fluor.



150
(149.99)

160
(159.99)

170
(169.99)

180
(179.98)

190
(189.98)

200
(199.98)

WOB 0-5 klbs
RPM 120-140
SPP 970 psi
FLOW 485 gpm

WOB 5-10 klbs
RPM 115-125
SPP 1150 psi
FLOW 485 gpm

NO GAS

10K 100K

10 100

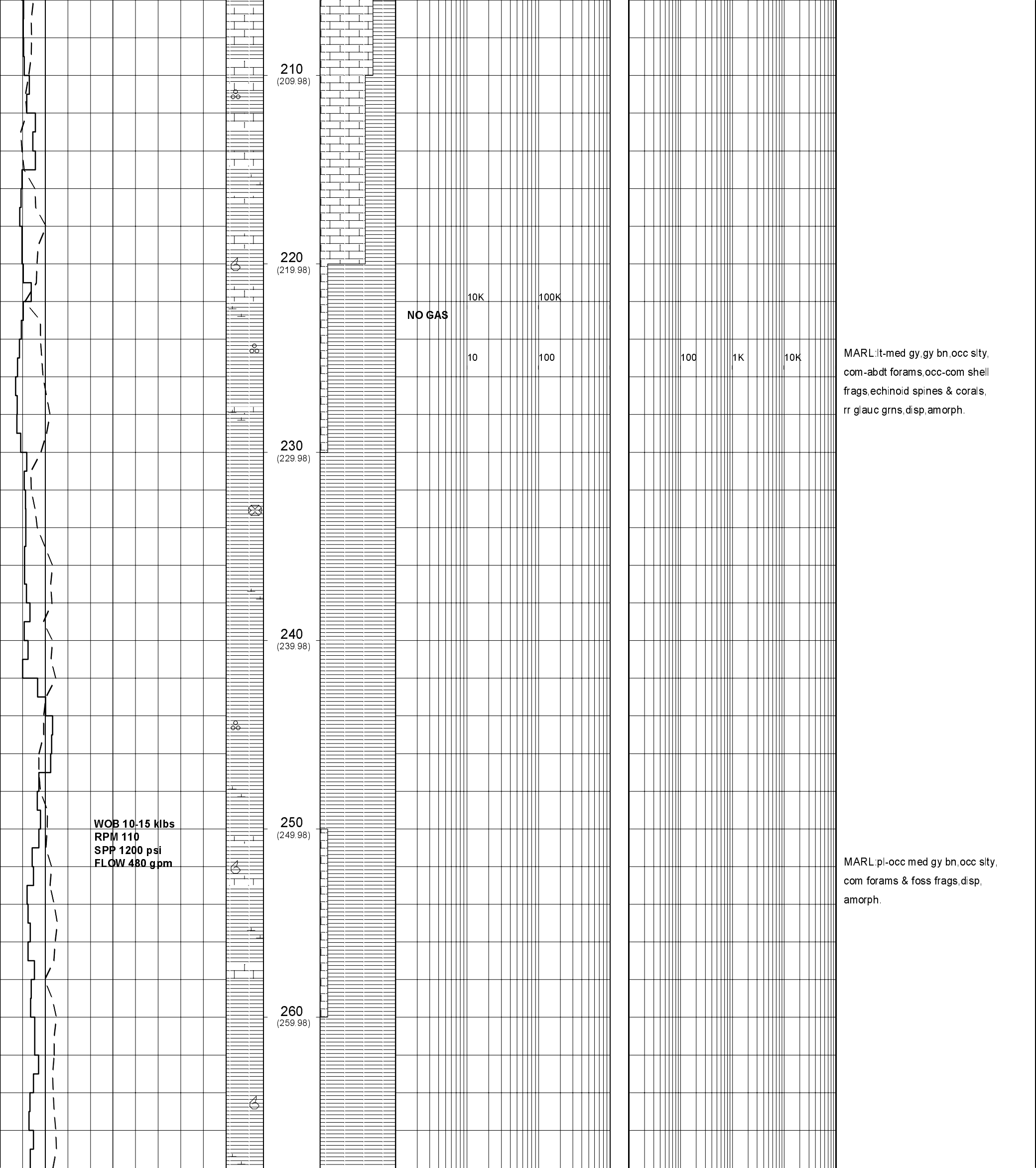
100 1K 10K

LIMESTONE: off wh, lt gry brn, spar
occ aren, abdt foss frags, tr qtz
gr, fri-hd, str cmt i/p, ti vis por
no fluor.

Survey @ 191m: 0.75° 070°T

LIMESTONE: off wh, lt gry, spar,
bcmg less aren, fm-fri, rr hd aggs
abdt foss frags, tr glauc & pyr,
sl arg i/p, pr inf & vis por, no
fluor.

GELLIBRAND MARL:
196m (-120mSS)



210
(209.98)

220
(219.98)

230
(229.98)

240
(239.98)

250
(249.98)

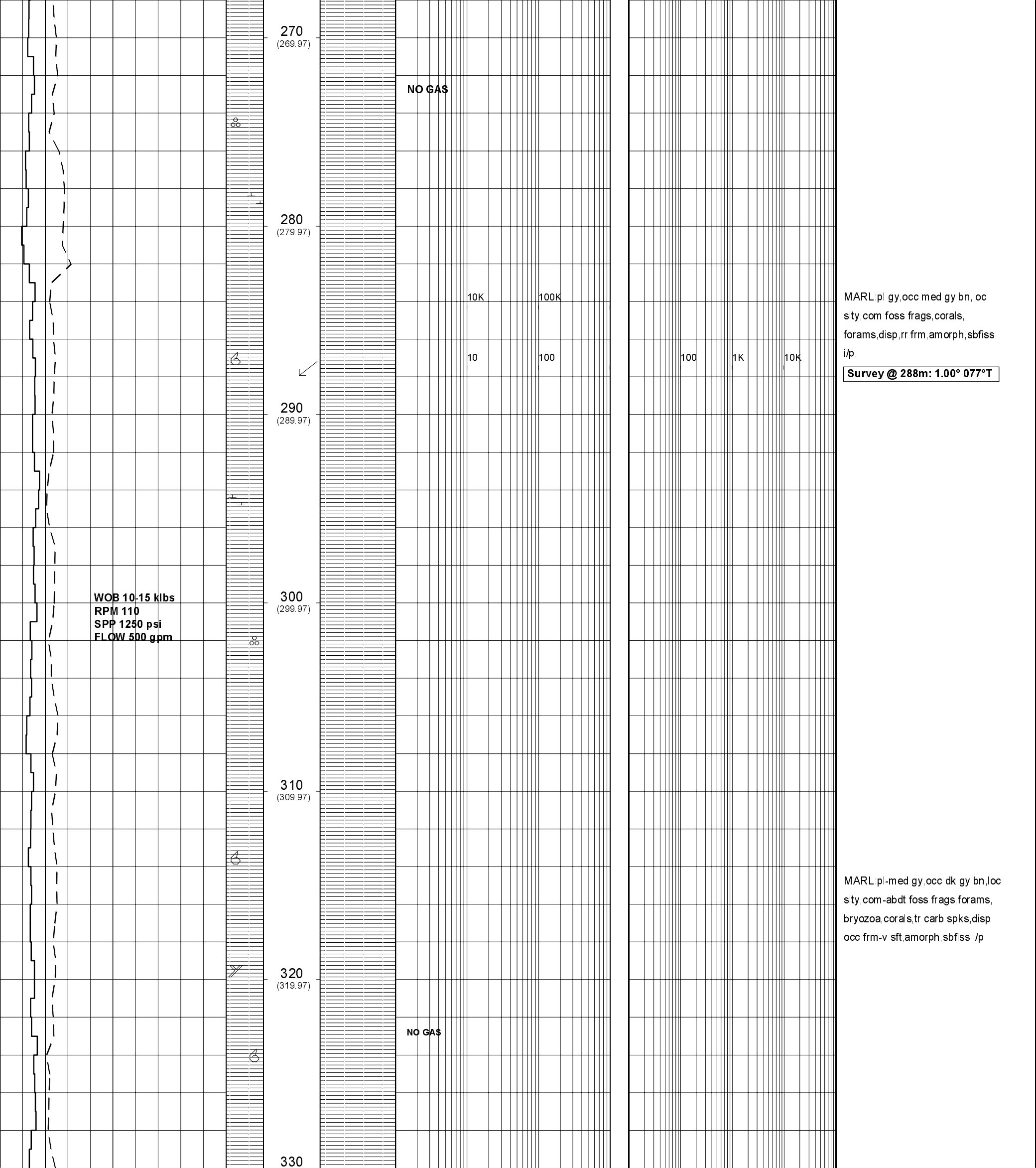
260
(259.98)

WOB 10-15 klbs
RPM 110
SPP 1200 psi
FLOW 480 gpm

NO GAS
10K 100K
10 100
100 1K 10K

MARL:lt-med gy,gy bn,occ sity,
com-abdt forams,occ-com shell
frags,echinoid spines & corals,
rr glauc grns,disp,amorph.

MARL:pl-occ med gy bn,occ sity,
com forams & foss frags,disp,
amorph.



270
(269.97)

NO GAS

280
(279.97)

10K

100K

MARL:pl gy,occ med gy bn,loc
sity,com foss frags,corals,
forams,disp,rr frm,amorph,sbfiss
i/p.

↳

↙

10

100

100

1K

10K

Survey @ 288m: 1.00° 077°T

290
(289.97)

**WOB 10-15 klbs
RPM 110
SPP 1250 psi
FLOW 500 gpm**

300
(299.97)

310
(309.97)

MARL:pl-med gy,occ dk gy bn,loc
sity,com-abdt foss frags,forams,
bryozoa,corals,tr carb spks,disp
occ frm-v sft,amorph,sbfiss i/p

↳

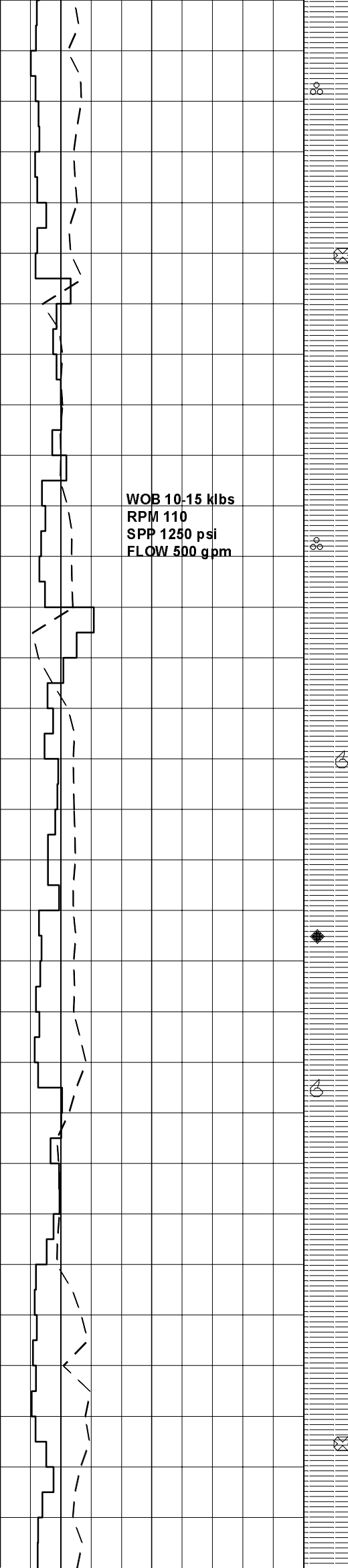
320
(319.97)

NO GAS

↘

↳

330



WOB 10-15 klbs
 RPM 110
 SPP 1250 psi
 FLOW 500 gpm

340
 (339.97)

350
 (349.97)

360
 (359.97)

370
 (369.97)

380
 (379.97)

390
 (389.97)

10K 100K

10 100

100 1K 10K

NO GAS

MARL:pl-med gy,gy bn,loc sity,
 occ carb spks,com-abdt foss
 frags,foram,corals,echinoid
 spines,disp-sft,occ frm,amorph,
 sbfiss-sbblky.

MARL:med-dk gy,occ pl gy,occ
 carb spks,com foss frags,corals,
 forams,occ pyr nods,frm-sft,
 sbfiss-pred sbblky.

Survey @ 375m: 0.25° 280°T

WOB 10-15 klbs
RPM 120
SPP 1300 psi
FLOW 480 gpm

400
(399.97)

410
(409.97)

420
(419.97)

430
(429.97)

440
(439.97)

450
(449.97)

NO GAS

10K

100K

10

100

100

1K

10K

MARL: med-dk gy bn, pl gy, loc sily
rr carb spks, abdt foss frags,
corals, bryozoa, echinoid spines,
forams, worm burrows, v sft frm,
disp i/p, sbbiky-sbfiss, amorph
i/p.

MARL: pl-med gy, pl gy bn, med-dk
bn, tr carb spks, abdt foss frags,
forams, echinoid spines, shell
frags, frm-disp, sbbiky-sbfiss,
amorph.

WOB 10-15 klbs
RPM 120
SPP 1300 psi
FLOW 480 gpm

9.625" CASING SHOE
SET @ 455.75m

BIT #2: HTC STR09
SIZE: 6.75" JETS:3x16
IN: 457m OUT: 1184m
RUN: 727m HRS: 22.2
COND: 2-4-BT-G2-E-3/8-ER-HRS

L.O.T. @ 460m: EMW = 16.1 ppg

460
(459.97)

470
(469.97)

480
(479.97)

490
(489.97)

500
(499.97)

510
(509.97)

MW 8.55
FV 30
PV 2
YP 2
Gel 1
WL n/a
Ck 1
Sol 0.3
pH 9.0
Cl 21K

WOB 8-10 klbs
RPM 60
SPP 850 psi
FLOW 253 gpm

10K 100K

NO GAS

10 100 100 1K 10K

MARL:pl gy,occ med-dk gy,tr loc
carb spks,occ-com foss frags,
forams,disp,rr frm,amorph,rr
sbfiss.

MARL:pl-med gy,occ dk gy,rr carb
spks & liths,occ-com foss frags,
disp,sft-frm i/p,amorph,sbblky-
sbfiss.

Survey @ 507.3m: 0.25° 17.9°T

CLIFTON FORMATION:
509mRT (-433mSS)

LIMESTONE:pl-med org,dk org,dk
bn,micr,com FeO stng,com foss

replac, pell, cryptxln, mod hd-hd.

Survey @ 521m: 0.38° 20.47°T

SANDSTONE: off wh, pl org, pl bn,
med-crs, occ v crs, mod srt, sr-rnd
occ sa, wk calc cmt, com Fe stng,
lse, fr-gd inf por, no fluor.

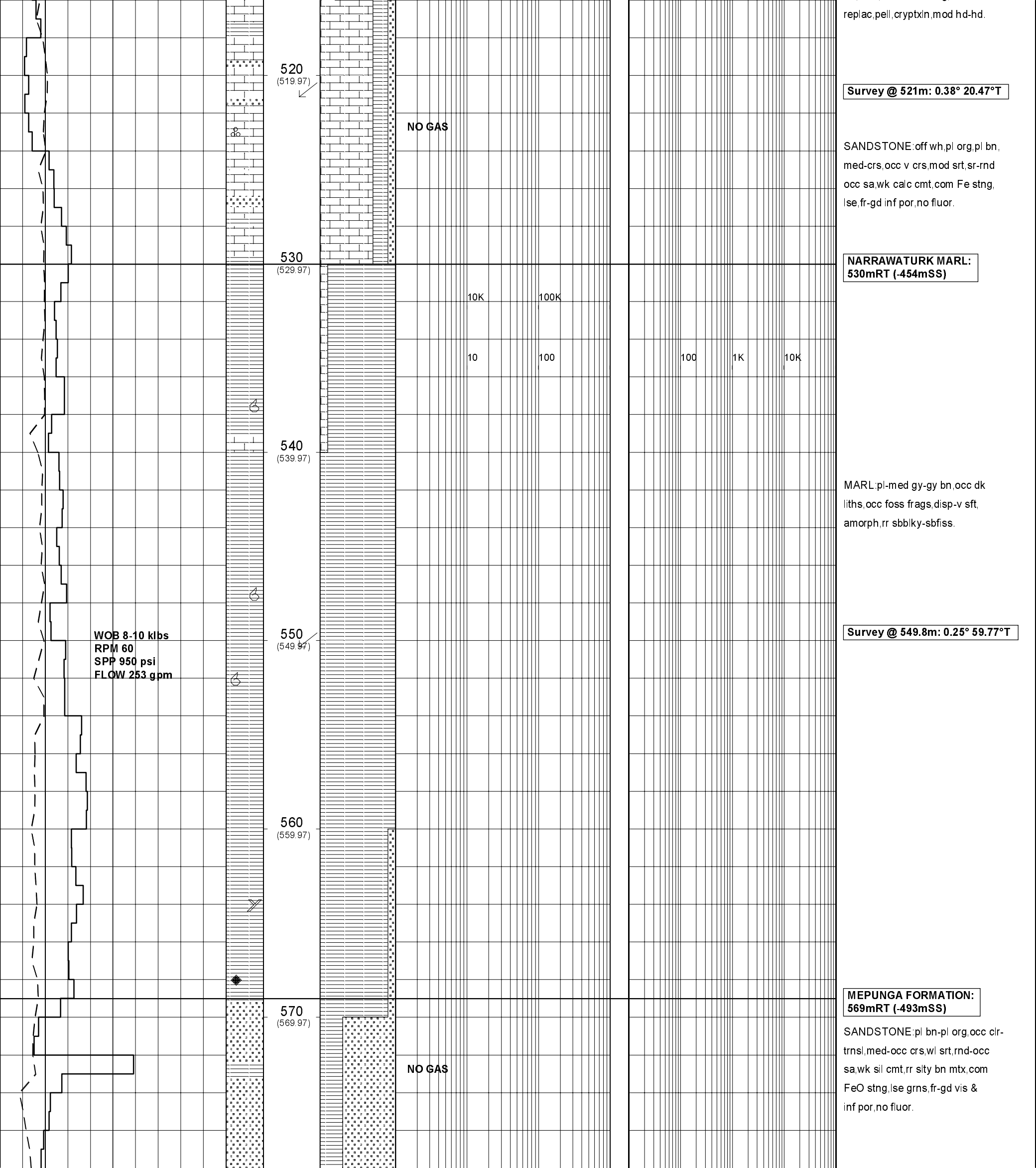
**NARRAWATURK MARL:
530mRT (-454mSS)**

MARL: pl-med gy-gy bn, occ dk
liths, occ foss frags, disp-v sft,
amorph, rr sbbky-sbfiss.

Survey @ 549.8m: 0.25° 59.77°T

**MEPUNGA FORMATION:
569mRT (-493mSS)**

SANDSTONE: pl bn-pl org, occ clr-
trns, med-occ crs, wl srt, rnd-occ
sa, wk sil cmt, rr sity bn mtz, com
FeO stng, lse grns, fr-gd vis &
inf por, no fluor.



Survey @ 578.8m: 0.37° 32.26°T

580
(579.97)

590
(589.97)

600
(599.97)

610
(609.97)

620
(619.96)

630
(629.96)

640

WOB 8-10 klbs
RPM 60
SPP 1000 psi
FLOW 254 gpm

10K

100K

10

100

100

1K

10K

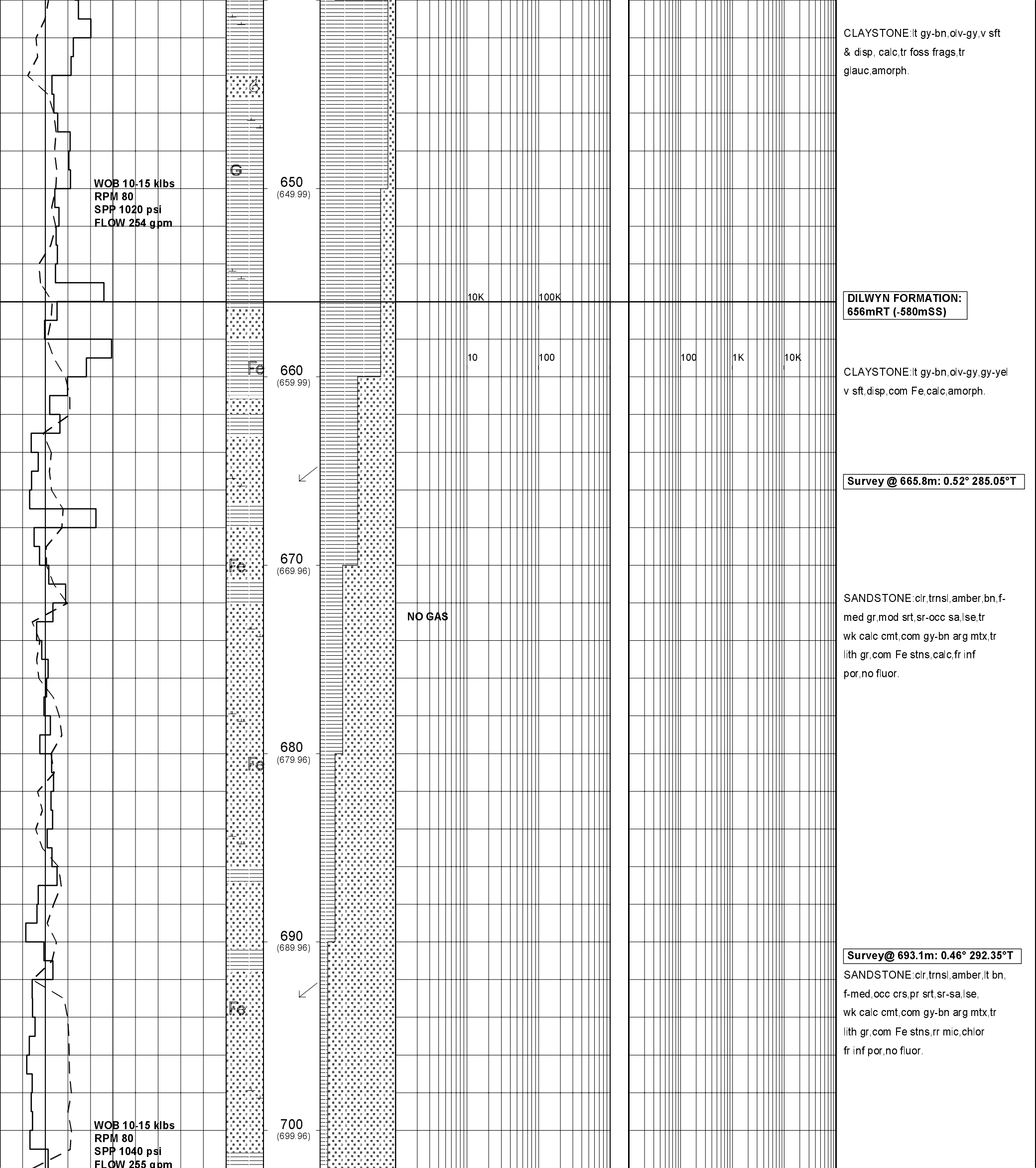
NO GAS

Survey @ 608.2m: 0.37° 277.41°T

SANDSTONE: cl, trnsl, v lt bn, f-
med gr, w srt, sr-sa, ch & lse, occ
gy-bn arg mtx, tr calc gr, com Fe
& carb stns, gd inf por, no fluor

SANDSTONE: cl, trnsl, lt bn, f-dom
med gr, mod w srt, sa-sr, gen lse,
com arg mtx, sl calc, rr foss frag
fr inf por, no fluor.

Survey @ 637.5m: 0.24° 285.50°T



CLAYSTONE:lt gy-bn,dlv-gy,v sft
& disp, calc,tr foss frags,tr
glauc.amorph.

WOB 10-15 klbs
RPM 80
SPP 1020 psi
FLOW 254 gpm

G 650
(649.99)

10K 100K

**DILWYN FORMATION:
656mRT (-580mSS)**

Fe 660
(659.99)

10 100 100 1K 10K

CLAYSTONE:lt gy-bn,dlv-gy,gy-yel
v sft,disp,com Fe,calc.amorph.

Survey @ 665.8m: 0.52° 285.05°T

Fe 670
(669.96)

NO GAS

SANDSTONE:clr,trnsl,amber,bn,f-
med gr,mod srt,sr-occ sa,lse,tr
wk calc cmt,com gy-bn arg mtx,tr
lith gr,com Fe stns,calc,fr inf
por,no fluor.

Fe 680
(679.96)

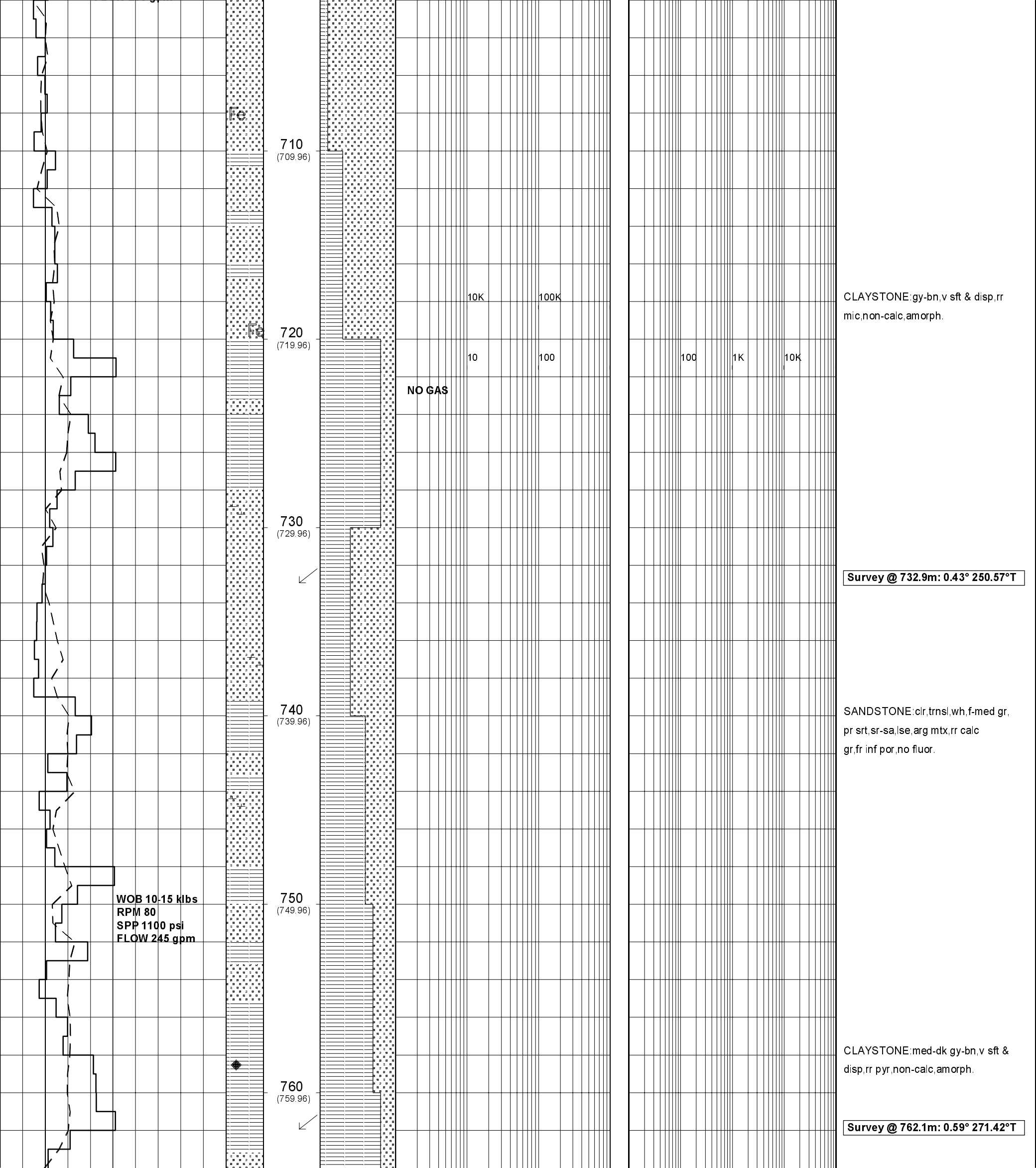
Fe 690
(689.96)

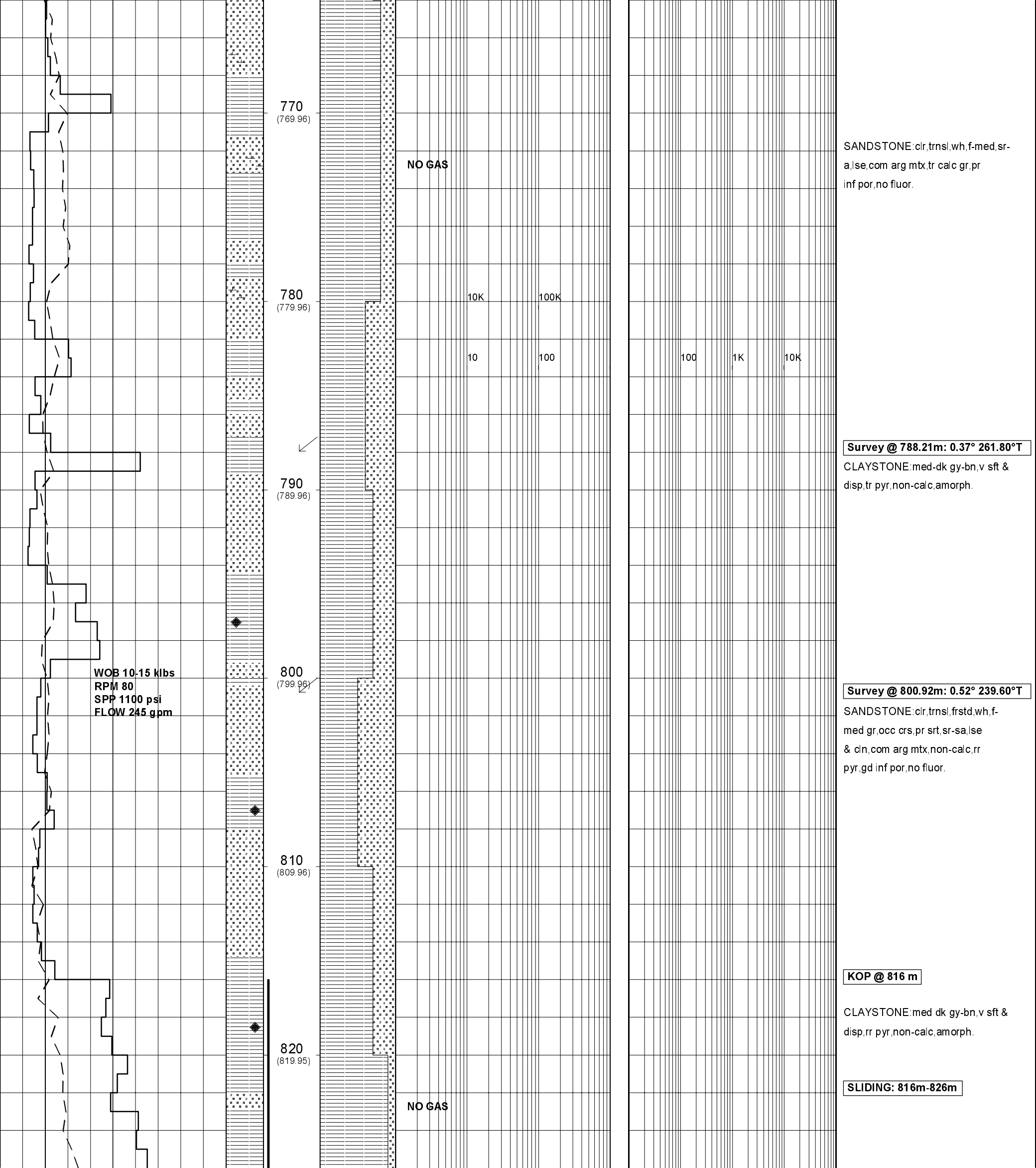
Survey@ 693.1m: 0.46° 292.35°T

SANDSTONE:clr,trnsl,amber,lt bn,
f-med,occ crs,pr srt,sr-sa,lse,
wk calc cmt,com gy-bn arg mtx,tr
lith gr,com Fe stns,rr mic,chlor
fr inf por,no fluor.

WOB 10-15 klbs
RPM 80
SPP 1040 psi
FLOW 255 gpm

700
(699.96)





770
(769.96)

NO GAS

SANDSTONE:clr, trnsl, wh, f-med, sr-a, lse, com arg mtx, tr calc gr, pr inf por, no fluor.

780
(779.96)

10K

100K

10

100

100

1K

10K

Survey @ 788.21m: 0.37° 261.80°T

CLAYSTONE: med-dk gy-bn, v sft & disp, tr pyr, non-calc, amorph.

790
(789.96)

Survey @ 800.92m: 0.52° 239.60°T

SANDSTONE: clr, trnsl, frstd, wh, f-med gr, occ crs, pr srt, sr-sa, lse & cln, com arg mtx, non-calc, rr pyr, gd inf por, no fluor.

800
(799.96)

KOP @ 816 m

CLAYSTONE: med dk gy-bn, v sft & disp, rr pyr, non-calc, amorph.

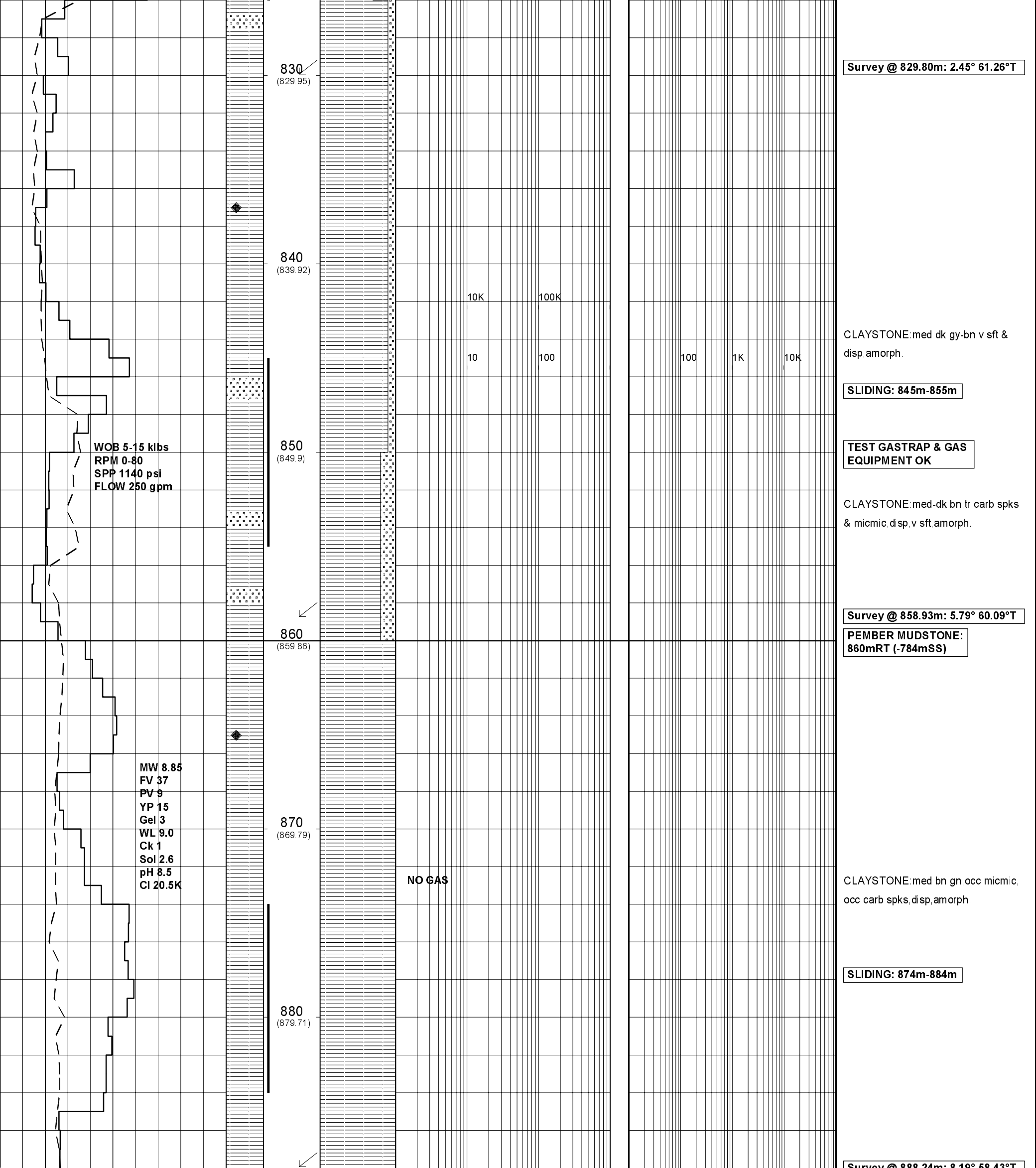
810
(809.96)

SLIDING: 816m-826m

820
(819.95)

NO GAS

WOB 10-15 klbs
RPM 80
SPP 1100 psi
FLOW 245 gpm



Survey @ 829.80m: 2.45° 61.26°T

830
(829.95)

840
(839.92)

10K 100K

10 100 100 1K 10K

CLAYSTONE: med dk gy-bn, v sft & disp, amorph.

SLIDING: 845m-855m

TEST GASTRAP & GAS EQUIPMENT OK

CLAYSTONE: med-dk bn, tr carb spks & micmic, disp, v sft, amorph.

Survey @ 858.93m: 5.79° 60.09°T

850
(849.9)

PEMBER MUDSTONE:
860mRT (-784mSS)

860
(859.86)

CLAYSTONE: med bn gn, occ micmic, occ carb spks, disp, amorph.

870
(869.79)

NO GAS

SLIDING: 874m-884m

880
(879.71)

Survey @ 888.24m: 8.19° 58.43°T

WOB 5-15 klbs
RPM 0-80
SPP 1140 psi
FLOW 250 gpm

MW 8.85
FV 37
PV 9
YP 15
Gel 3
WL 9.0
Ck 1
Sol 2.6
pH 8.5
CI 20.5K

CLAYSTONE: med bn, micmic, occ carb spks, rr pyr nods, disp, amorph.

890
(889.63)

WOB 15 klbs
RPM 0-50
SPP 1200 psi
FLOW 250 gpm

900
(899.49)

10K 100K

PEBBLE POINT FORMATION:
905mRT (-829mSS)

10 100 100 1K 10K

SLIDING: 903m-913m

910
(909.35)

SANDSTONE: pl org bn, off wh, dr-trnsl, med-occ v crs, mod-pr srt, sa-sr, wk sil cmt, rr pl bn slty mtz, rr pyr nods, gen lse ch grns fr-occ gd inf & vis por, no fluor

920
(919.08)

NO GAS

Survey @ 917.41m: 11.01° 62.7°T

930
(928.79)

PAARATTE FORMATION:
929mRT (-852mSS)

CLAYSTONE: med bn gy, micmic, loc carb spks, disp, amorph.

940
(938.48)

SLIDING: 932m-942m

950

Survey @ 947.12m: 13.58° 55.19°T

WOB 15 klbs

RPM 0-50
SPP 1200 psi
FLOW 250 gpm

WOB 15 klbs
RPM 0-50
SPP 1200 psi
FLOW 250 gpm

960
(957.71)

970
(967.82)

980
(977.44)

990
(986.99)

1000
(996.43)

1010
(1006.61)

NO GAS

10K

100K

10

100

100

1K

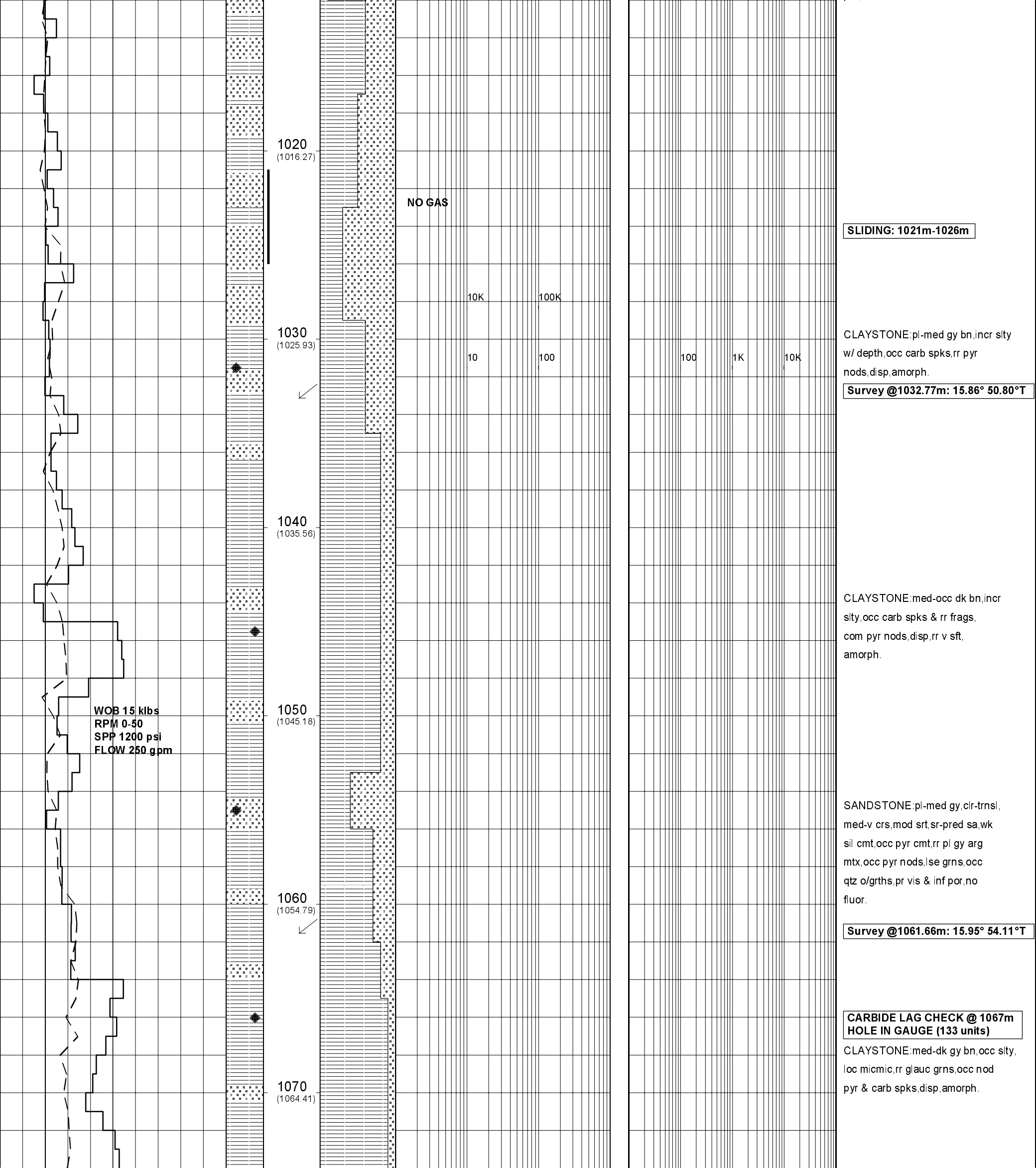
10K

SLIDING: 963m-968m

SANDSTONE: off wh-pl gy, cir-v pl
bn i/p, med-pred crs, mod wl srt,
sa-sr, wk sil cmt, rr pl gy arg
mtx, occ dk stng, occ qtz o/grths,
lse, cln grns, pr-pred fr inf &
vis por, no fluor.

Survey @1003.94m: 14.02° 53.87°T

SANDSTONE: pl-med gy, off wh, cir-
trnsl, f-crs, occ v crs, pr srt, sa-
rr rnd, wk sil cmt, occ pyr cmt,
occ pl gy slty mtx, occ pyr nods,
occ qtz o/grths, gen lse cln grns
rr mod hd, pr-occ fr inf & vis
por, no fluor.



1020
(1016.27)

NO GAS

SLIDING: 1021m-1026m

10K

100K

1030
(1025.93)

10

100

100

1K

10K

CLAYSTONE: pl-med gy bn, incr sity w/ depth, occ carb spks, rr pyr nods, disp, amorph.

Survey @1032.77m: 15.86° 50.80°T

1040
(1035.56)

CLAYSTONE: med-occ dk bn, incr sity, occ carb spks & rr frags, com pyr nods, disp, rr v sft, amorph.

WOB 15 klbs
RPM 0-50
SPP 1200 psi
FLOW 250 gpm

1050
(1045.18)

SANDSTONE: pl-med gy, clr-trnsl, med-v crs, mod srt, sr-pred sa, wk sil cmt, occ pyr cmt, rr pl gy arg mtx, occ pyr nods, lse grns, occ qtz o/grths, pr vis & inf por, no fluor.

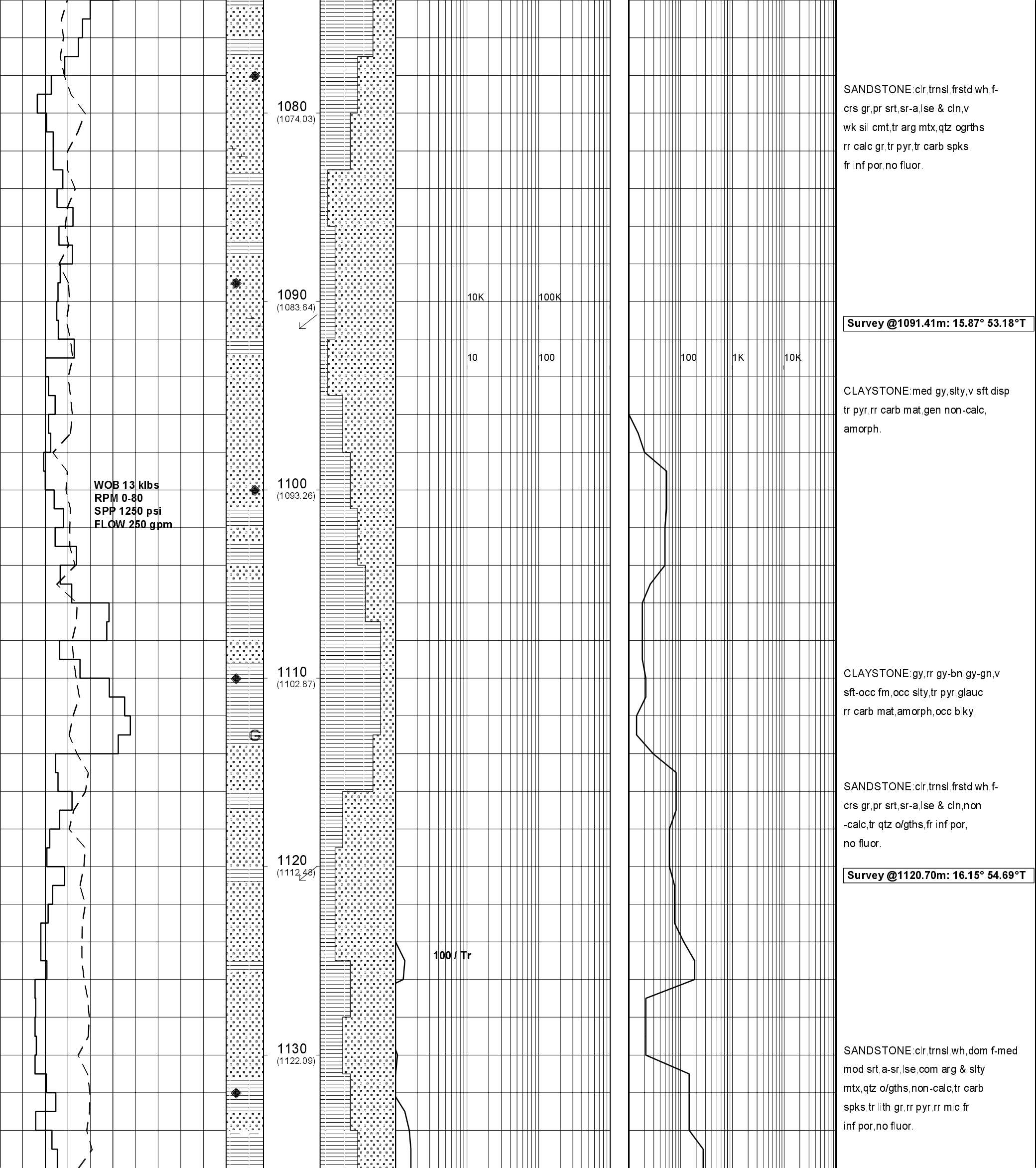
1060
(1054.79)

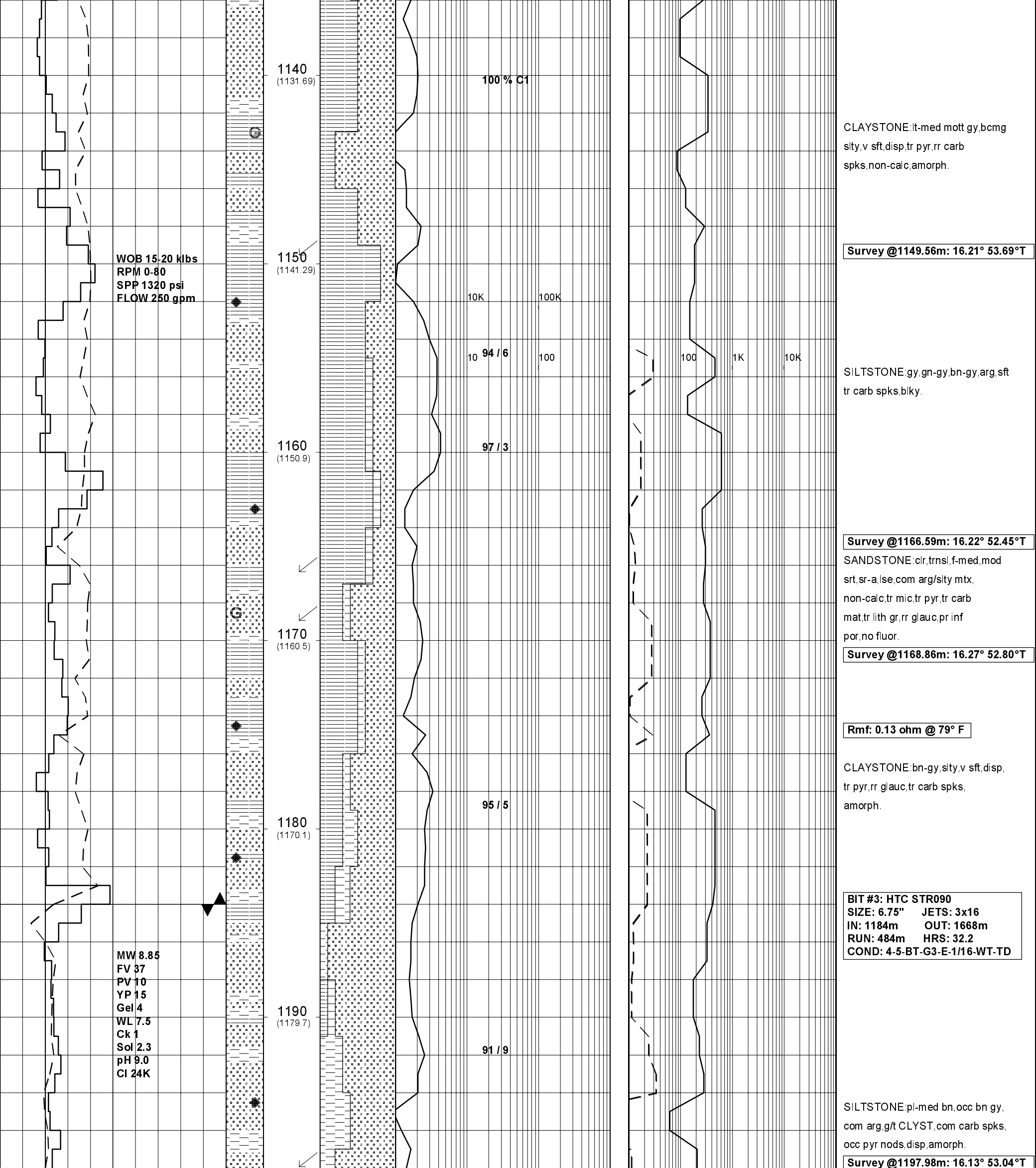
Survey @1061.66m: 15.95° 54.11°T

CARBIDE LAG CHECK @ 1067m HOLE IN GAUGE (133 units)

1070
(1064.41)

CLAYSTONE: med-dk gy bn, occ sity, loc micmic, rr glauc grns, occ nod pyr & carb spks, disp, amorph.





1140
(1131.69)

100 % C1

CLAYSTONE:lt-med mott gy,bcmg
sity,v sft,disp,tr pyr,rr carb
spks,non-calc,amorph.

WOB 15-20 klbs
RPM 0-80
SPP 1320 psi
FLOW 250 gpm

1150
(1141.29)

10K 100K

Survey @1149.56m: 16.21° 53.69°T

10 94 / 6 100

SILTSTONE:gy,gn-gy,bn-gy,arg,sft
tr carb spks,blk.

1160
(1150.9)

97 / 3

Survey @1166.59m: 16.22° 52.45°T

SANDSTONE:clr,trnsl,f-med,mod
srt,sr-a,lse,com arg/sity mtx,
non-calc,tr mic,tr pyr,tr carb
mat,tr lith gr,rr glauc,pr inf
por,no fluor.

1170
(1160.5)

Survey @1168.86m: 16.27° 52.80°T

Rmf: 0.13 ohm @ 79° F

1180
(1170.1)

95 / 5

CLAYSTONE:bn-gy,sity,v sft,disp,
tr pyr,rr glauc,tr carb spks,
amorph.

MW 8.85
FV 37
PV 10
YP 15
Gel 4
WL 7.5
Ck 1
Sol 2.3
pH 9.0
Cl 24K

1190
(1179.7)

91 / 9

BIT #3: HTC STR090
SIZE: 6.75" JETS: 3x16
IN: 1184m OUT: 1668m
RUN: 484m HRS: 32.2
COND: 4-5-BT-G3-E-1/16-WT-TD

SILTSTONE:pl-med bn,occ bn gy,
com arg,g/t CLYST,com carb spks,
occ pyr nods,disp,amorph.

Survey @1197.98m: 16.13° 53.04°T

WOB 10-13 klbs
RPM 0-80
SPP 1350 psi
FLOW 250 gpm

1200
(1189.31)

97 / 3

1210
(1198.91)

10K

100K

10

100

100

1K

10K

100% C1

1220
(1208.52)

SKULL CREEK MUDSTONE:
1222mRT; 1212mTVDRT
(-1136mTVDSS)

Survey @1226.99m: 16.23° 53.85°T

1230
(1218.12)

96 / 4

1240
(1227.71)

98 / 2

WOB 8-10 klbs
RPM 70-80
SPP 1000-1450 psi
FLOW 250-280 gpm

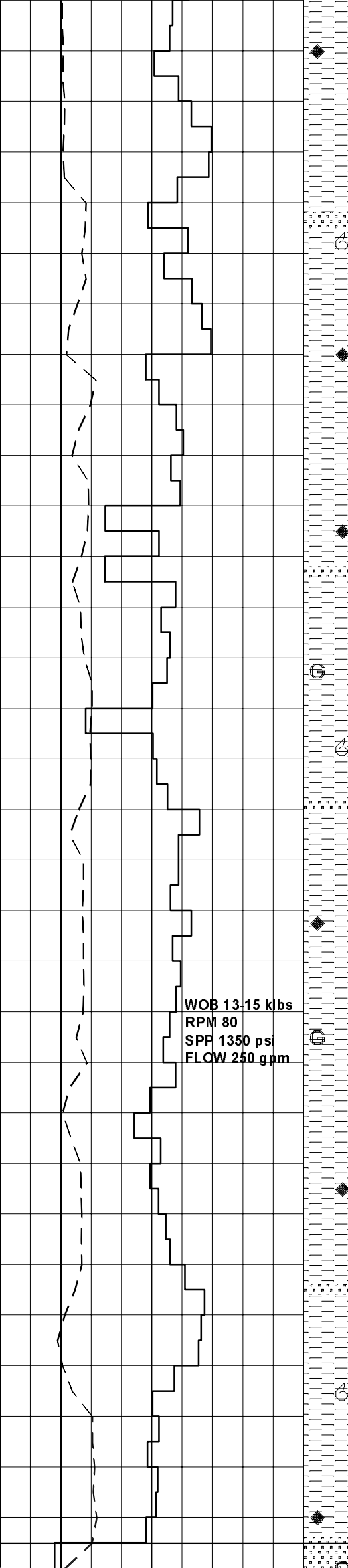
1250
(1237.3)

91 / 5 / 3 / 1

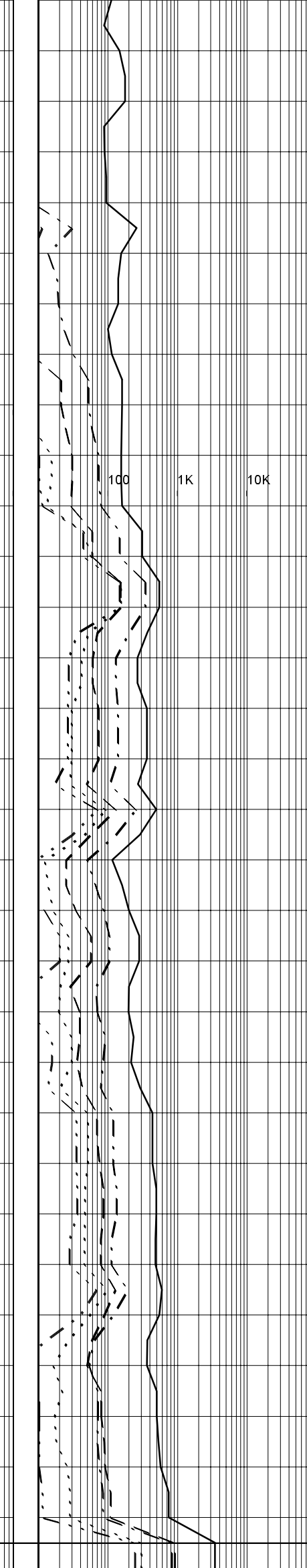
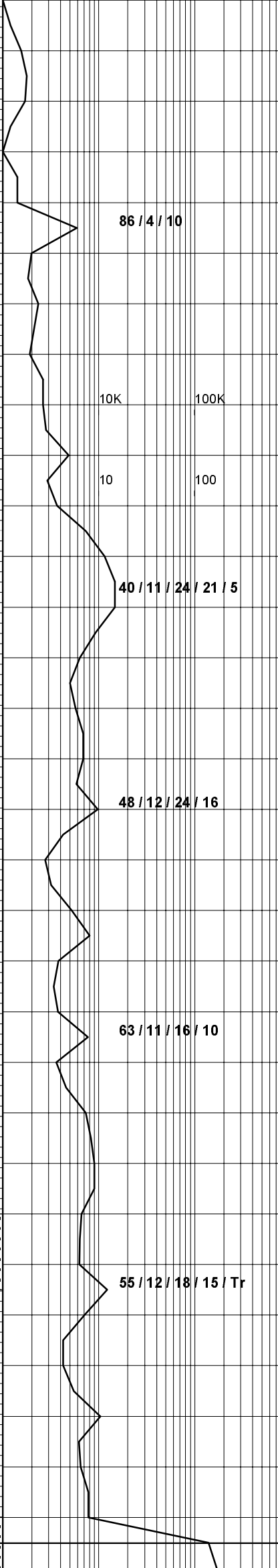
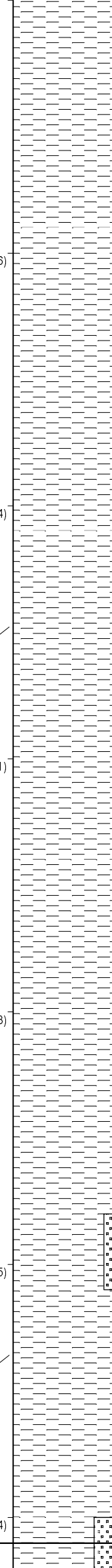
SILTSTONE:pl bn gy,occ pl gn,arg
i/p,occ pyr nods,rr dissem pyr,
occ glauc grns,occ carb spks &
loc micmic,disp,rr v sft,amorph

Survey @1256.12m: 16.68° 54.90°T

1260



1270 (1256.46)
1280 (1266.04)
1290 (1275.61)
1300 (1285.18)
1310 (1294.75)
1320 (1304.34)



SILTSTONE:pl-med bn gy,pl-med bn
rr loc aren,occ glauc grns,occ
carb spks & micmic,occ pyr nods,
disp,amorph.

SILTSTONE:lt-med gy,bn-gy,occ gn
-gy,arg,g/t CLYST,v sft,occ sft-
fm,tr pyr,tr carb spks,rr foss,
rr glauc,disp,amorph.

Survey @1285.43m: 16.74° 55.16°T

SILTSTONE:lt-med gy,rr gn-gy,arg
g/t CLYST,v sft & disp,tr pyr,tr
carb spks,rr foss,rr glauc,gen
amorph,rr blk.

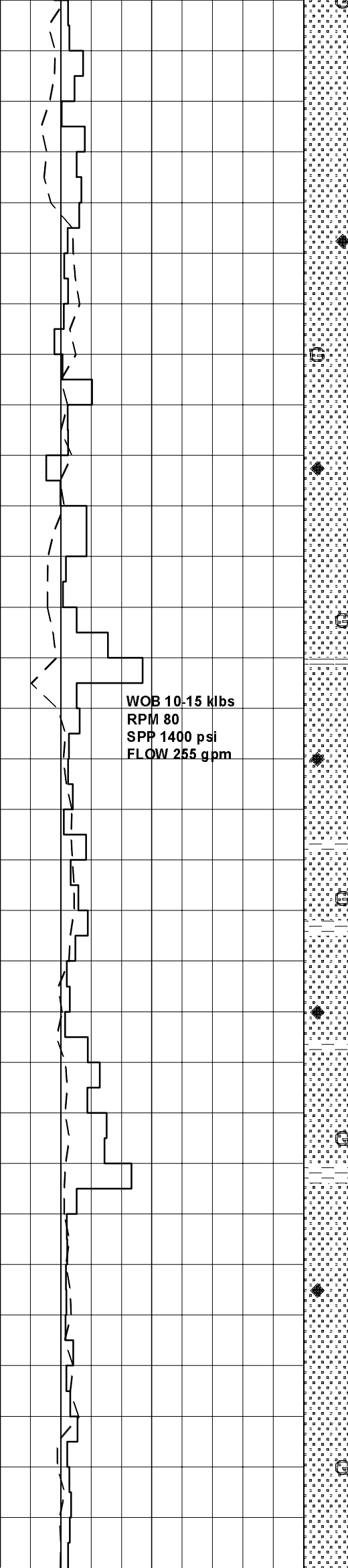
SILTSTONE:med gy,arg,g/t CLYST,v
sft,disp,tr pyr,rr carb spks,rr
glauc,rr foss,tr f-med gr qtz,
occ sft,blk,gen amorph.

Survey @1314.41m: 17.01° 55.95°T

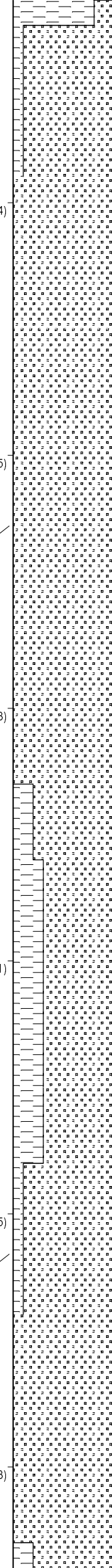
NULLAWARRE FORMATION:
1321mRT; 1305mTVDRT

(-1229m TVDSS)

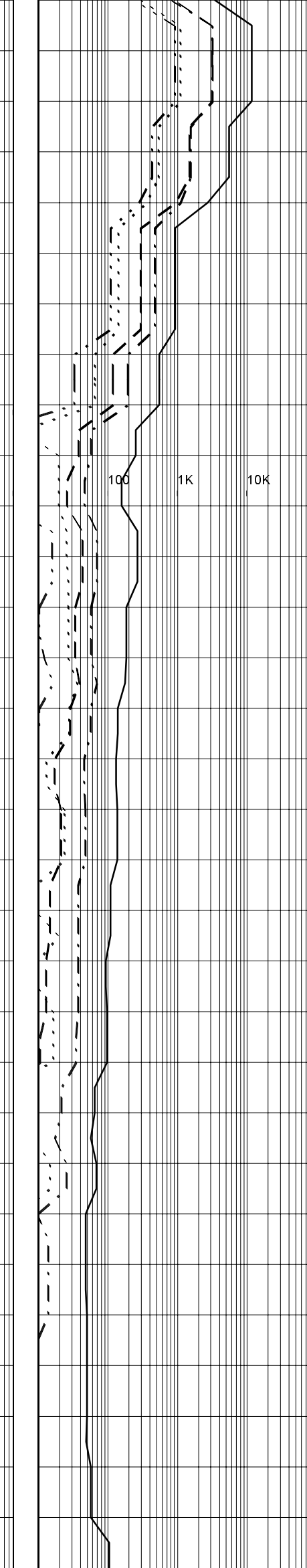
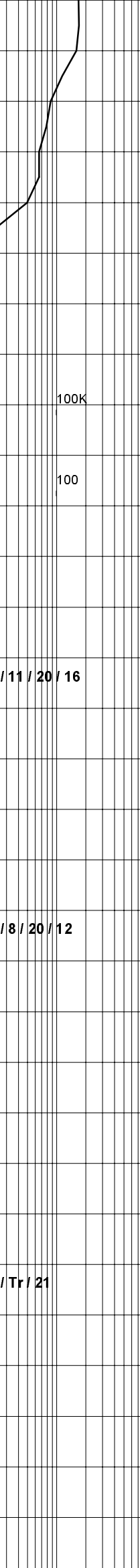
SANDSTONE: cir, trnsl, gn, f-med gr, mod srt, sr-sa, lse, wk sil cmt, com sity/arg mtx, com glauc, tr lith gr, tr pyr, tr carb spks, fr inf por, no fluor.



1330 (1313.94)
1340 (1323.55)
1350 (1333.18)
1360 (1342.81)
1370 (1352.45)
1380 (1362.08)



58 / 16 / 15 / 9 / 2
45 / 14 / 23 / 12 / 6
53 / 11 / 20 / 16
60 / 8 / 20 / 12
79 / Tr / 21



Survey @1343.41m: 15.29° 50.90°T

SANDSTONE: cir, trnsl, pl or, gn, f-med, mod srt, sr-sa, lse, com arg/sity mtx, com glauc, tr pyr, tr lith gr, occ fri aggs, fr inf por, no fluor.

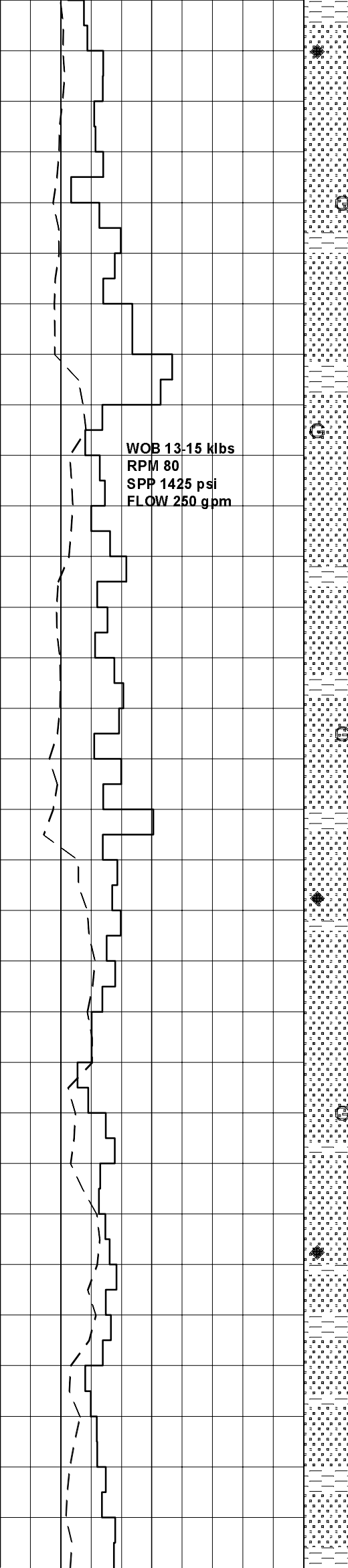
SANDSTONE: cir, trnsl, pl or, gn, f-med, mod srt, lse, occ fri aggs, wk sil cmt, abdt gn-gy arg/glauc mtx com glauc, tr pyr, carb spks, fr inf por, no fluor.

SILTSTONE: gy-gn, arg, sft & disp, com glauc, tr pyr, amorph.

Survey @1372.49m: 15.70° 51.41°T

SANDSTONE: cir, trnsl, pl or, gn, f-med, mod srt, clin & lse, rr fri agg no mtx, wk sil cmt, tr glauc, tr pyr, gd inf por, no fluor.

WOB 10-15 klbs
RPM 80
SPP 1400 psi
FLOW 255 gpm



1390
(1371.72)

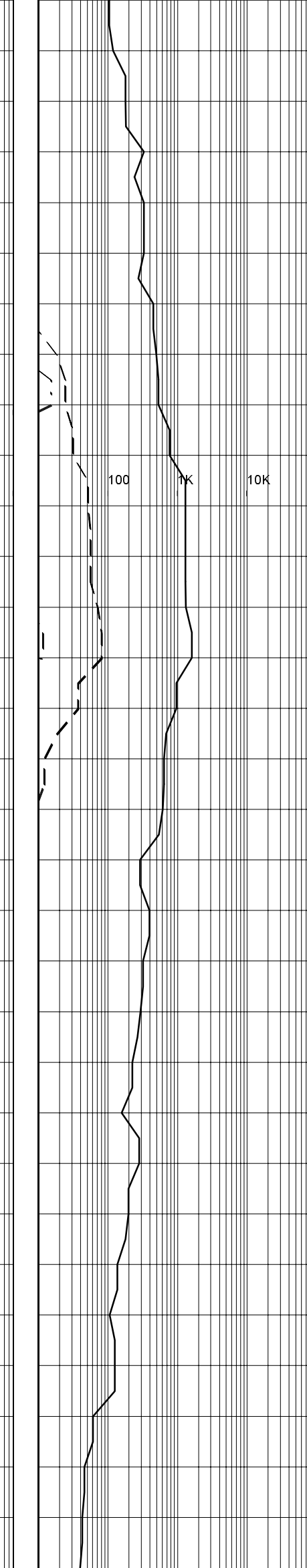
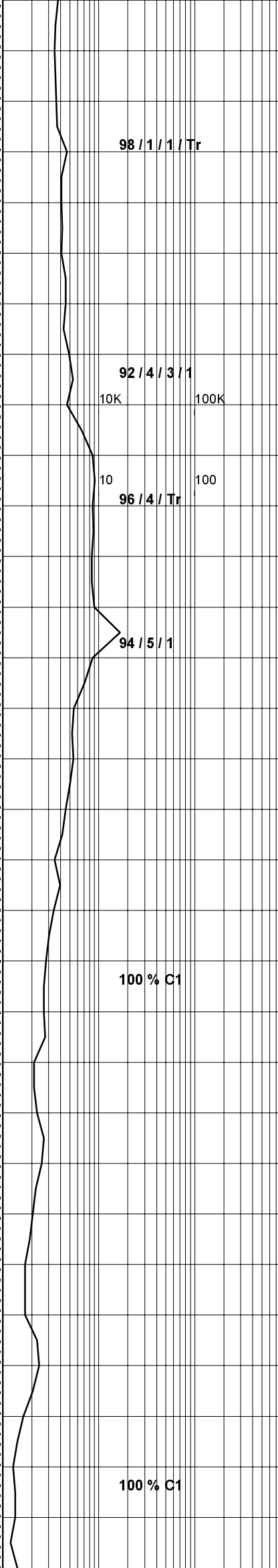
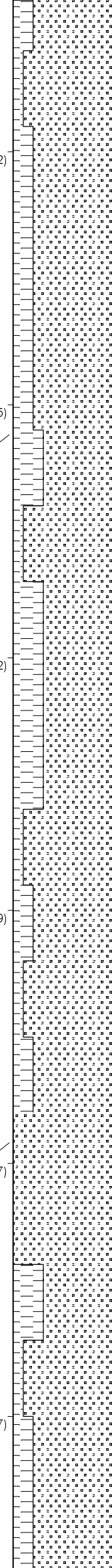
1400
(1381.35)

1410
(1391.02)

1420
(1400.69)

1430
(1410.37)

1440
(1420.07)



SILTSTONE: gy-gn, arg, v sft & disp
com glauc, tr pyr, rr carb spks,
amorph.

SANDSTONE: clr, trnsl, pl or, gn, f-
med, mod srt, sr-sa, lse, com arg/
sity/glauc mtx, wk sil cmt, rr fri
aggs, tr pyr, com glauc, tr carb
spks, fr inf por, no fluor.

Survey @1401.12m: 15.47° 49.44°T

SANDSTONE: clr, trnsl, pl or, f-med,
pr srt, sr-sa, lse, wk sil cmt, com
arg/sity mtx, com glauc, tr pyr, tr
carb spks, pr inf por, no fluor.

SILTSTONE: bn-gy, gn-gy, arg, tr
glauc, tr lith gr, tr carb spks,
sft & disp, amorph.

SANDSTONE: clr, trnsl, pl or, f-med
gr, pr srt, sr-sa, lse, occ fri-mod
hd aggs, wk sil cmt, com sity/arg
mtx, com glauc, tr carb spks, pr-fr
inf por, no fluor.

Survey @1430.12m: 13.85° 48.76°T

SILTSTONE: gy, bn, olv gy, arg, glauc
disp, sft, amorph.

SANDSTONE: clr-trnsl, bn-org, med-

WOB 14-15 klbs
RPM 80
SPP 1500 psi
FLOW 250 gpm

MW 8.9
FV 41
PV 8
YP 15
Gel 4
WL 7.5
Ck 1
Sol 2.9
pH 8.5
Cl 21.5K

WOB 14-15 klbs
RPM 80
SPP 1600 psi
FLOW 250 gpm

1450
(1429.77)

1460
(1439.48)

1470
(1449.18)

1480
(1458.88)

1490
(1468.57)

1500
(1478.26)

10K 100K
100% C1
10 100

100 1K 10K

100% C1

85 / 7 / 5 / 3

occ f,rr crs,mod wl srt,sa-occ
sr,wk sil cmt,abdt bn arg-slty
mtx,occ glauc grns,occ liths,lse
pr inf & vis por,no fluor.

Rmf: 0.15 ohm @ 75° F

SILTSTONE:pl bn org,g/t CLYST,
occ glauc incl,disp,amorph.

Survey @1459.33m: 14.07° 48.58°T

SANDSTONE:clr-trnsi,pl blu gy,f-
med,mod wl srt,sa-sr,occ wk sil
cmt,com pl blu gy arg mtx,occ
glauc grns,occ liths,lse,mod hd,
v pr vis por,pr inf por,no fluor

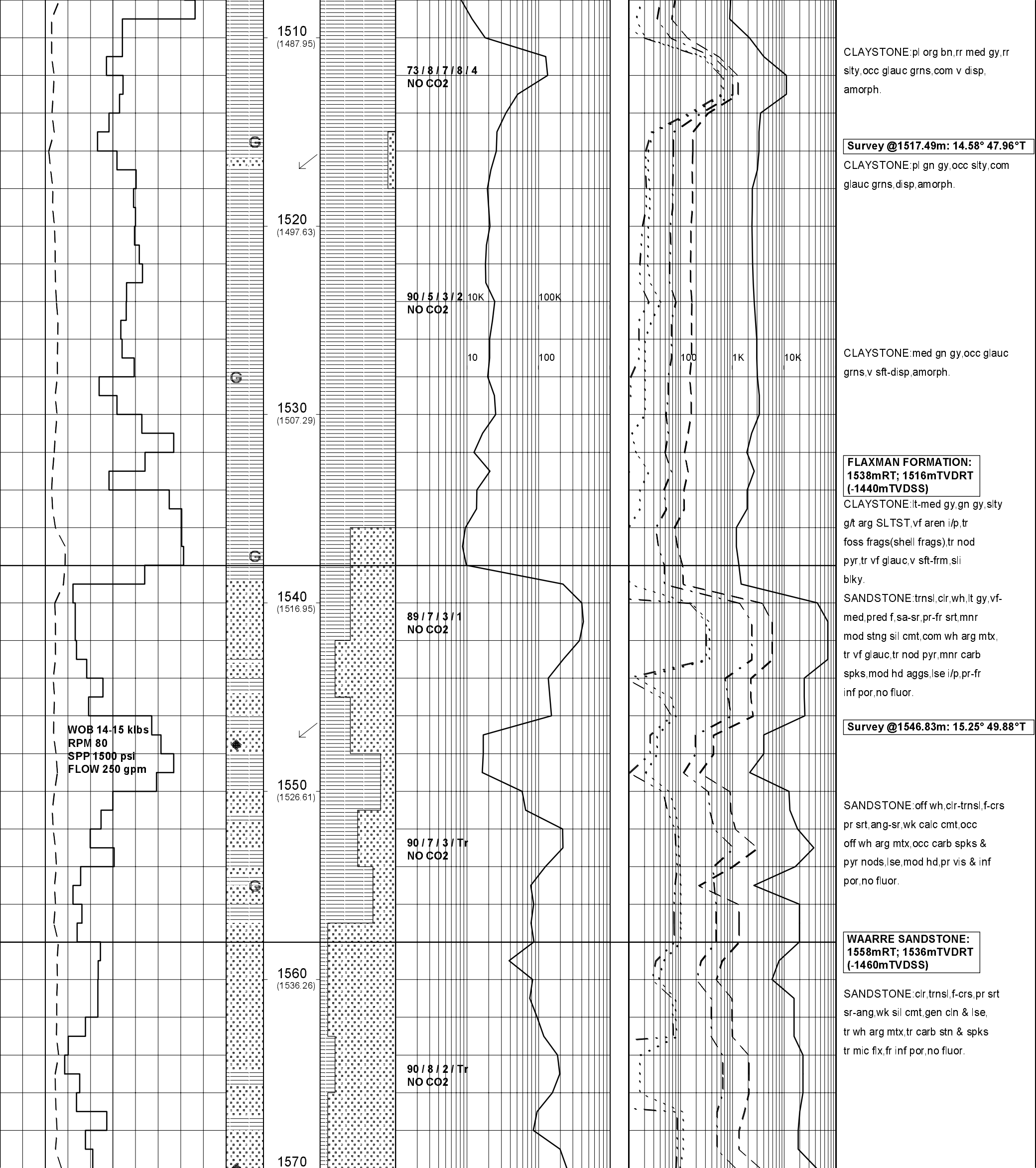
SILTSTONE:blu olv bn,occ pl bn
org,com arg,com liths & glauc
spks,disp,amorph.

BELFAST MUDSTONE:
1485mRT; 1464mTVDRT
(-1388mTVDSS)

CLAYSTONE:med-dk bn gy,rr slty,
rr glauc incl,disp,v sft,amorph

Survey @1488.39m: 14.15° 48.82°T

CLAYSTONE:med-dk gy,med gy bn
i/p,occ slty,com glauc grns,v
sft-disp,amopr,disp,occ sbbiky



1510
(1487.95)

73 / 8 / 7 / 8 / 4
NO CO2

CLAYSTONE: pl org bn, rr med gy, rr
sity, occ glauc grns, com v disp,
amorph.

Survey @1517.49m: 14.58° 47.96°T

CLAYSTONE: pl gn gy, occ sity, com
glauc grns, disp, amorph.

1520
(1497.63)

90 / 5 / 3 / 2
NO CO2

CLAYSTONE: med gn gy, occ glauc
grns, v sft-disp, amorph.

1530
(1507.29)

FLAXMAN FORMATION:
1538mRT; 1516mTVDRT
(-1440mTVDSS)

CLAYSTONE: lt-med gy, gn gy, sity
g/t arg SLTST, vf aren i/p, tr
foss frags(shell frags), tr nod
pyr, tr vf glauc, v sft-frn, sli
blky.

1540
(1516.95)

89 / 7 / 3 / 1
NO CO2

SANDSTONE: trnsi, clr, wh, lt gy, vf-
med, pred f sa-sr, pr-fr srt, mnr
mod stng sil cmt, com wh arg mtx,
tr vf glauc, tr nod pyr, mnr carb
spks, mod hd aggs, lse i/p, pr-fr
inf por, no fluor.

Survey @1546.83m: 15.25° 49.88°T

1550
(1526.61)

90 / 7 / 3 / Tr
NO CO2

SANDSTONE: off wh, clr-trnsi, f-crs
pr srt, ang-sr, wk calc cmt, occ
off wh arg mtx, occ carb spks &
pyr nods, lse, mod hd, pr vis & inf
por, no fluor.

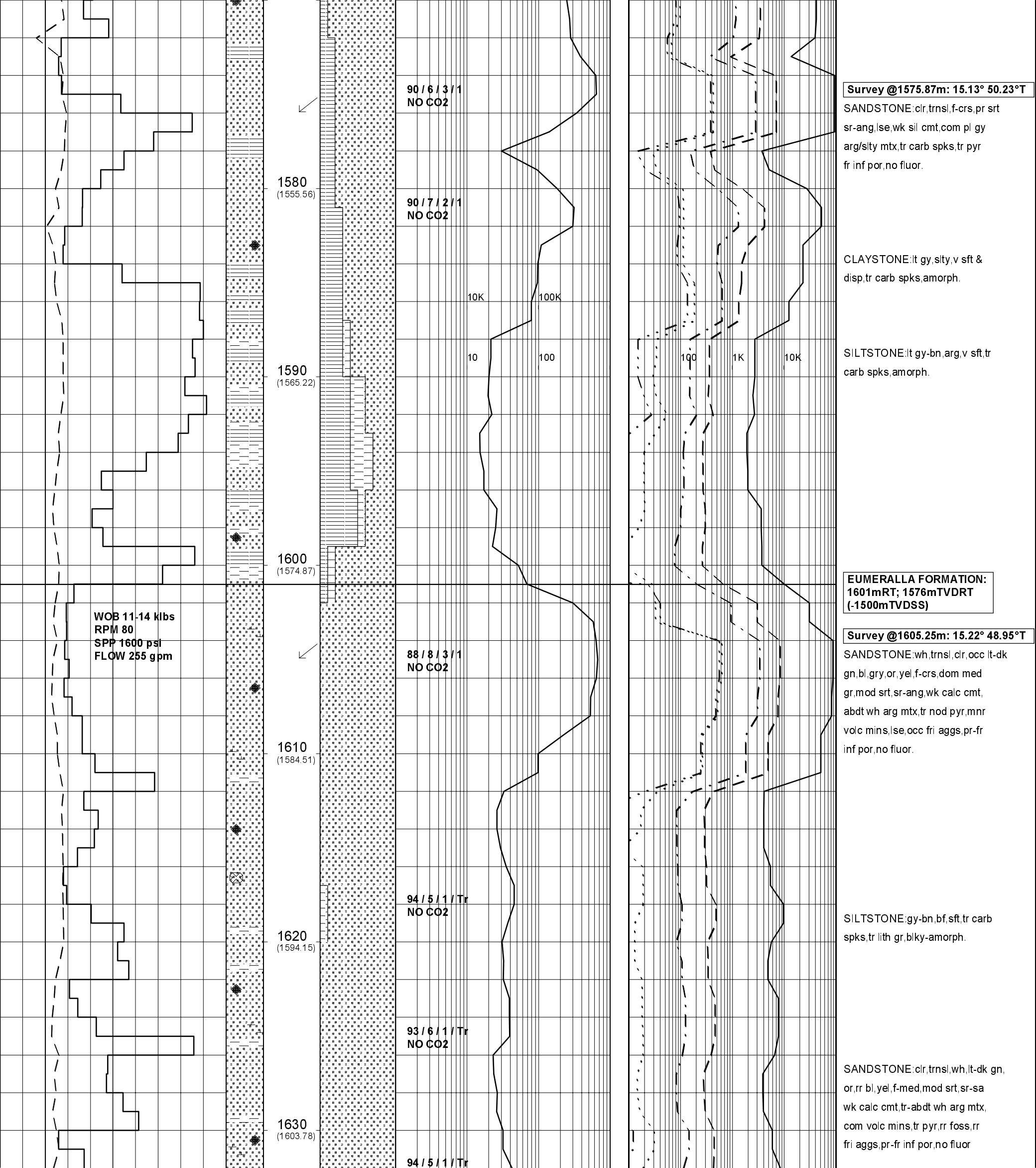
1560
(1536.26)

WAARRE SANDSTONE:
1558mRT; 1536mTVDRT
(-1460mTVDSS)

SANDSTONE: clr, trnsi, f-crs, pr srt
sr-ang, wk sil cmt, gen clin & lse,
tr wh arg mtx, tr carb stn & spks
tr mic fix, fr inf por, no fluor.

1570

90 / 8 / 2 / Tr
NO CO2



Survey @1575.87m: 15.13° 50.23°T

SANDSTONE: cl, trns, f-crs, pr srt
 sr-ang, lse, wk sil cmt, com pl gy
 arg/sity mtx, tr carb spks, tr pyr
 fr inf por, no fluor.

CLAYSTONE: lt gy, sity, v sft &
 disp, tr carb spks, amorph.

SILTSTONE: lt gy-bn, arg, v sft, tr
 carb spks, amorph.

**EUMERALLA FORMATION:
 1601mRT; 1576mTVDRT
 (-1500mTVDSS)**

Survey @1605.25m: 15.22° 48.95°T

SANDSTONE: wh, trns, cl, occ lt-dk
 gn, bl, gry, or, yel, f-crs, dom med
 gr, mod srt, sr-ang, wk calc cmt,
 abdt wh arg mtx, tr nod pyr, mnr
 volc mins, lse, occ fri aggs, pr-fr
 inf por, no fluor.

SILTSTONE: gy-bn, bf, sft, tr carb
 spks, tr lith gr, bky-amorph.

SANDSTONE: cl, trns, wh, lt-dk gn,
 or, rr bl, yel, f-med, mod srt, sr-sa
 wk calc cmt, tr-abdt wh arg mtx,
 com volc mins, tr pyr, rr foss, rr
 fri aggs, pr-fr inf por, no fluor

90/6/3/1
 NO CO2

90/7/2/1
 NO CO2

88/8/3/1
 NO CO2

94/5/1/Tr
 NO CO2

93/6/1/Tr
 NO CO2

94/5/1/Tr

1580
 (1555.56)

1590
 (1565.22)

1600
 (1574.87)

1610
 (1584.51)

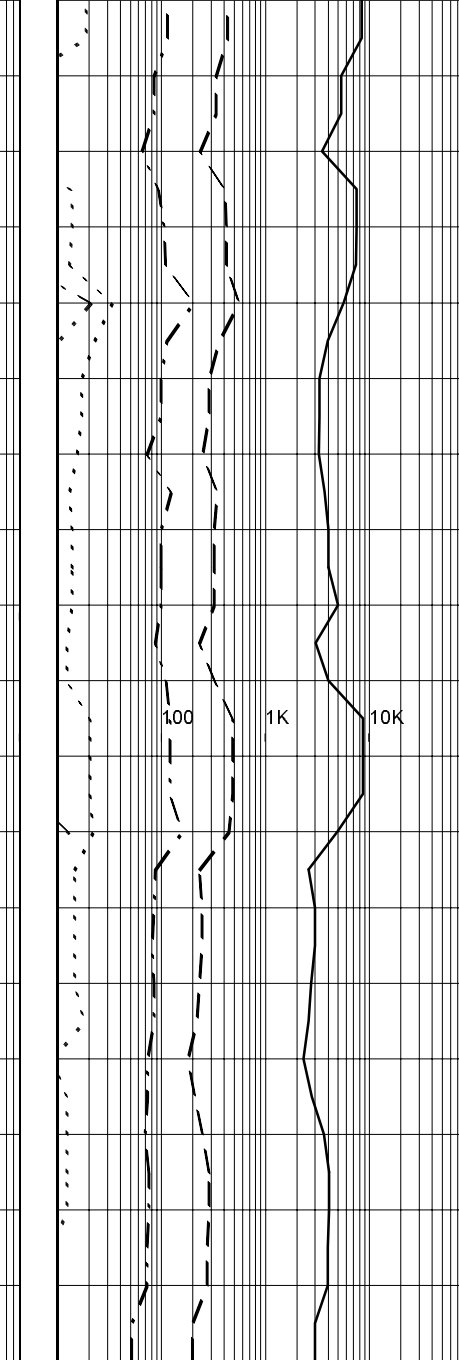
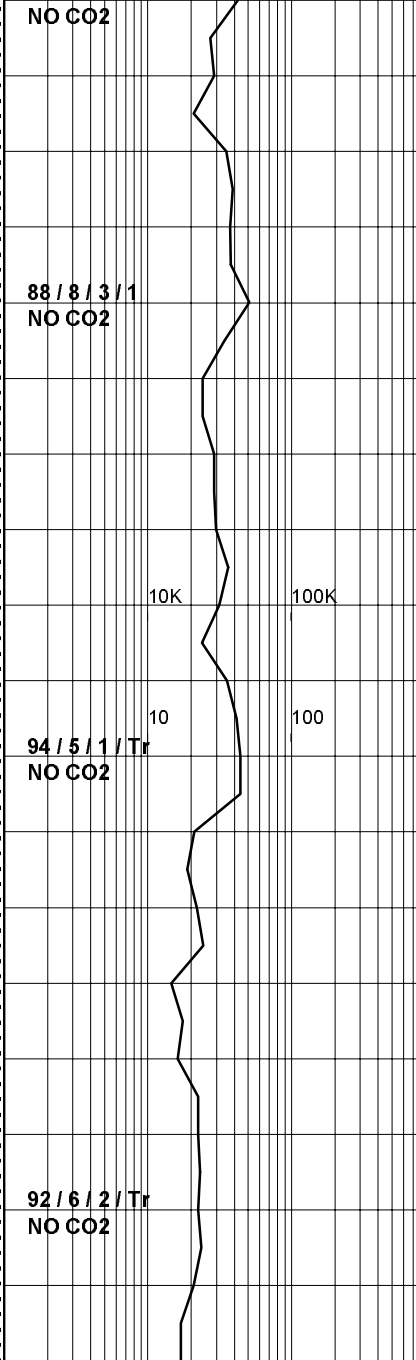
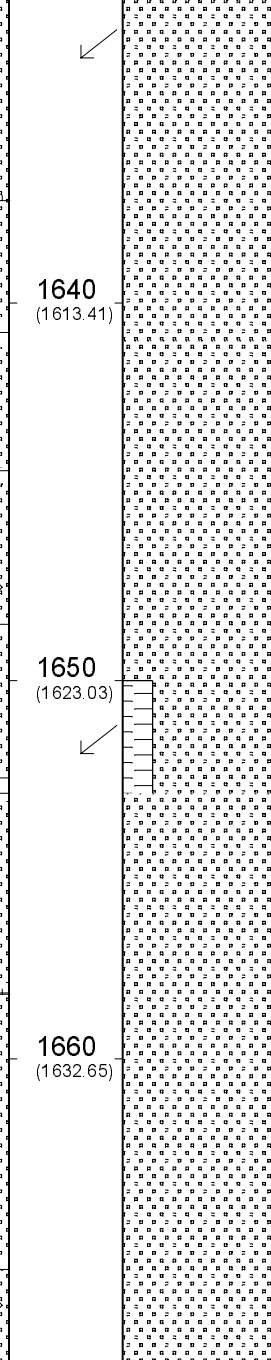
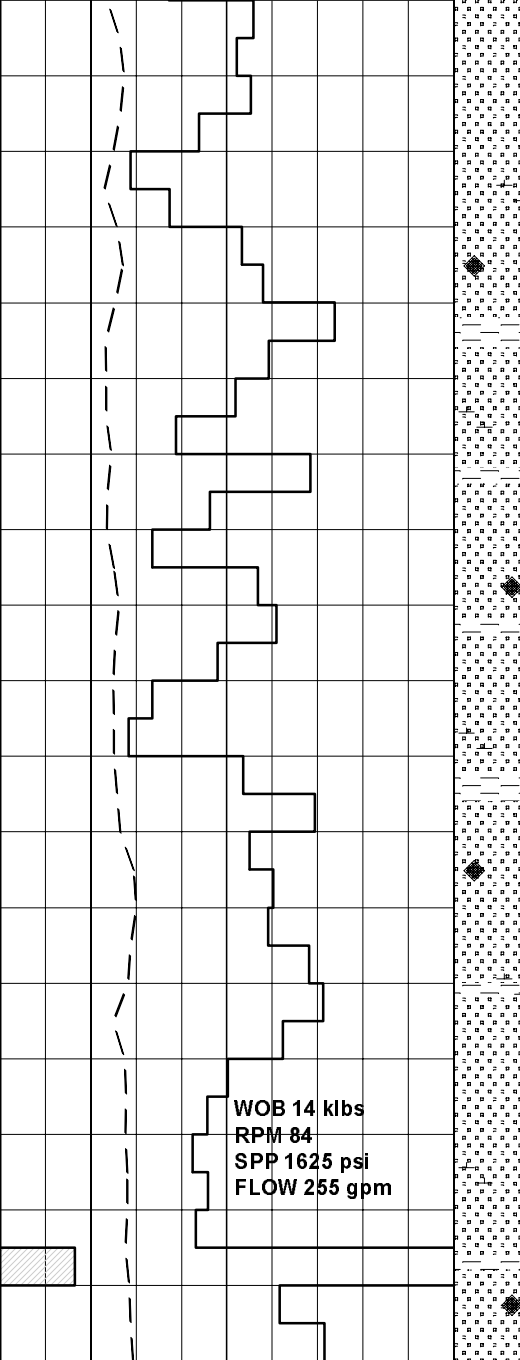
1620
 (1594.15)

1630
 (1603.78)

10K 100K
 10 100

100 1K 10K

WOB 11-14 klbs
 RPM 80
 SPP 1600 psi
 FLOW 255 gpm



Survey @1633.85m: 15.79° 50.05°T

SANDSTONE: cl, trns, wh, gn, gy, rr
rd, or, f-occ med, w srt, sr-sa, lse,
wk calc cmt, occ abdt wh arg mtx,
rr fri aggs, com volc min, tr pyr,
tr carb & rr coaly mat, rr mic
fix, pr-fr inf por, no fluor.

Survey @1652.03m: 15.86° 47.30°T

SILTSTONE: bn, gy-bn, bf, arg, carb
spks & strks, sft-fm, amorph-blky

Rmf: 0.14 ohm @ 74° F

SANDSTONE: cl, trns, wh, lt-dk gn,
occ gy, bl, rd, med-dom f gr, w srt,
sr-sa, lse, wk calc cmt, occ abdt
wh arg mtx, tr pyr, tr mic, com
volc min, pr-fr inf por, no fluor

1640
(1613.41)

1650
(1623.03)

1660
(1632.65)

1670

1680

NO CO2

88 / 8 / 3 / 1
NO CO2

10K 100K

10 100

94 / 5 / 1 / Tr
NO CO2

92 / 6 / 2 / Tr
NO CO2

100 1K 10K

**MELBA-1 REACHED TD @
21:30 HRS ON 28-03-2003**

**DRILLERS DEPTH: 1668m
LOGGERS DEPTH: 1668m**

**LOGS RUN:
RUN #1: PEX-DSI-NGT
RUN #2: CST**