



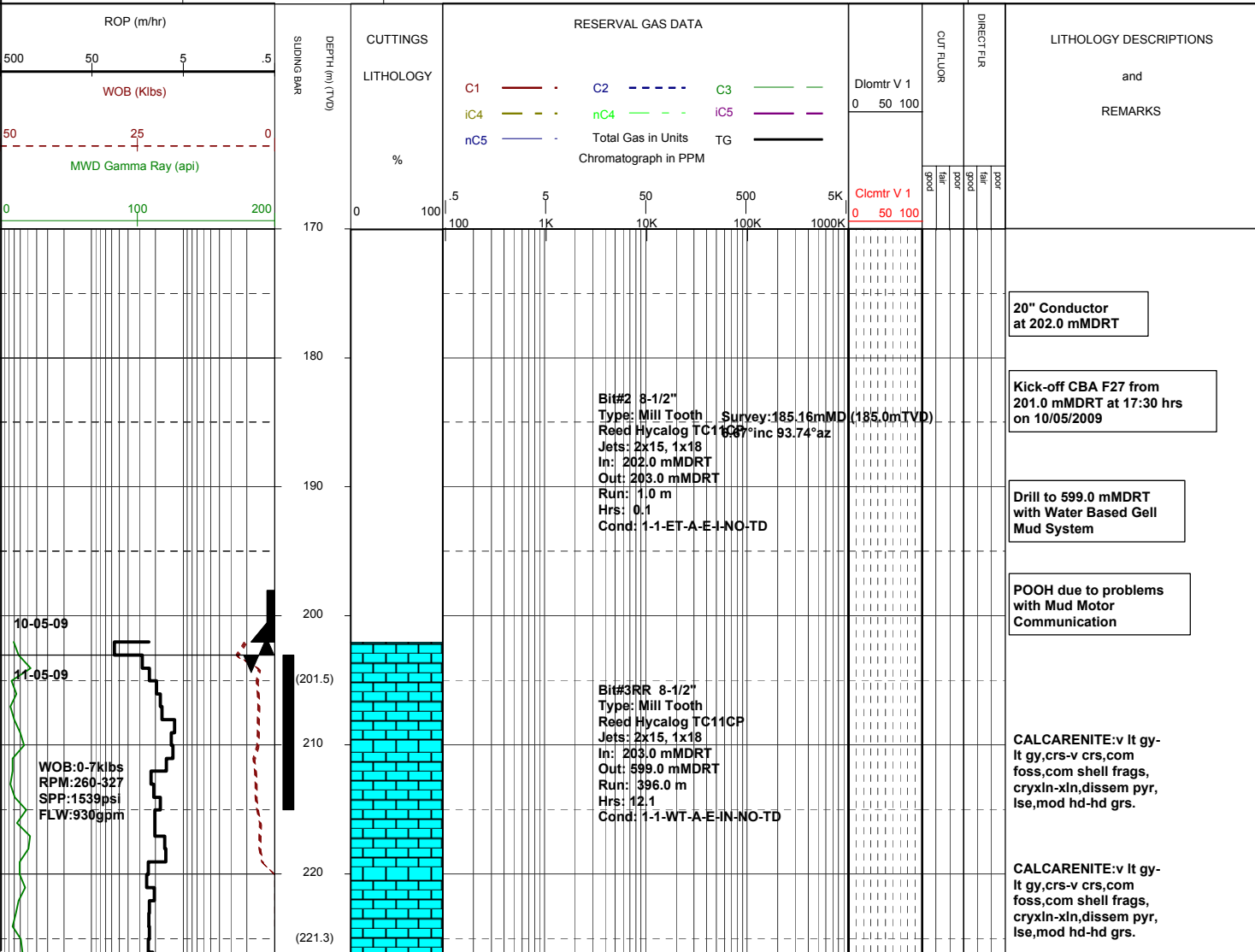
MASTERLOG

Cobia F27



GENERAL	SURFACE POSITION	HOLE / CASING INFO	DATE / DEPTH	ENGINEERS
Country : AUSTRALIA	Longitude :148°18'32.907" E	8-1/2" Hole to mMDRT	Kick off Date: 10/05/2009	Mark Smith
Permit : VIC / L5	Latitude : 38°26'57.469" S		Total Depth Date:	Gareth Munro
Field : COBIA	MGA Co-ord X :614236.56 mE	9-5/8" Casing to mMDRT	Total Depth: mMDRT	Colin Chadwick
Basin : GIPPSLAND	MGA Co-ord Y : 5743521.03 mN	10-3/4" Surface Csg at mMDRT	True Vertical Depth: mTVDRT	Phil Rady
Well Type :DEVELOPMENT	RT to MSL : 41.0 m	7" Production Csg at mMDRT	Log Scale : 1/ 500	Adam Sullivan
Rig Name : Nabors 175	RT to Sea Bed : 120.0 m			Kepa O'Reilly

ABBREVIATIONS		LITHOLOGY LEGEND				ENGINEERING LEGEND			
MW	Mud Weight	WOB	Weight on Bit (Klbs)	Claystone	Marl	Bryozoa	Glauconite	Casing shoe	RFT
FV	Funnel Viscosity	RPM	Rotations Per Min	Siltstone	Limestone	Radiolariae	Pyrite	Casing Top	MDT
PV	Plastic Viscosity	FLW	Flow Rate (gpm)	Fine sandstone	Dolomite	Echinoids		Survey	Mud gain
YP	Yield Point	SPP	Pump Pressure (psi)	Shale	Coal-lignite	Foraminiferae		Sidewall core	Mud loss
O/W	Oil/Water Ratio	RR	Re-Run Bit	Conglomerate	Volcanic cinder, tuff	Cement		Core	Sliding Bar
WPS	Aq. Phase Salinity	TG	Trip Gas						
HPHT	Fluid Loss	CG	Connection Gas						
Cl	Chlorides	BG	Background Gas						
Incl	Inclination	DGP	Drilled Gas Peak						
Az	Azimuth	MM	Mud Motor						



MW:9.00
FV:51
PV:4
YP:30
O/W:-
HTHP:-
WPS:-

230

240

(241.2)

250

260

(261.1)

270

280

(280.9)

290

300

(300.7)

310

320

(320.2)

330

340

(339.6)

350

360

WOB:0.7klbs
RPM:260-327
SPP:1539psi
FLW:930gpm

Survey:278.28mMD (277.5mTVD)
6.82°inc 73.36°az

Survey:304.27mMD (303.2mTVD)
10.74°inc 48.62°az

Survey:337.13mMD (335.2mTVD)
15.60°inc 31.40°az

CALCARENITE:v lt gy-
lt gy,crs-v crs,tr vf,
abdt foss,abdt shell
frags,cryxln-xln,lse,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,com
foss,com shell frags,tr
liths,xln,lse-uncons,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

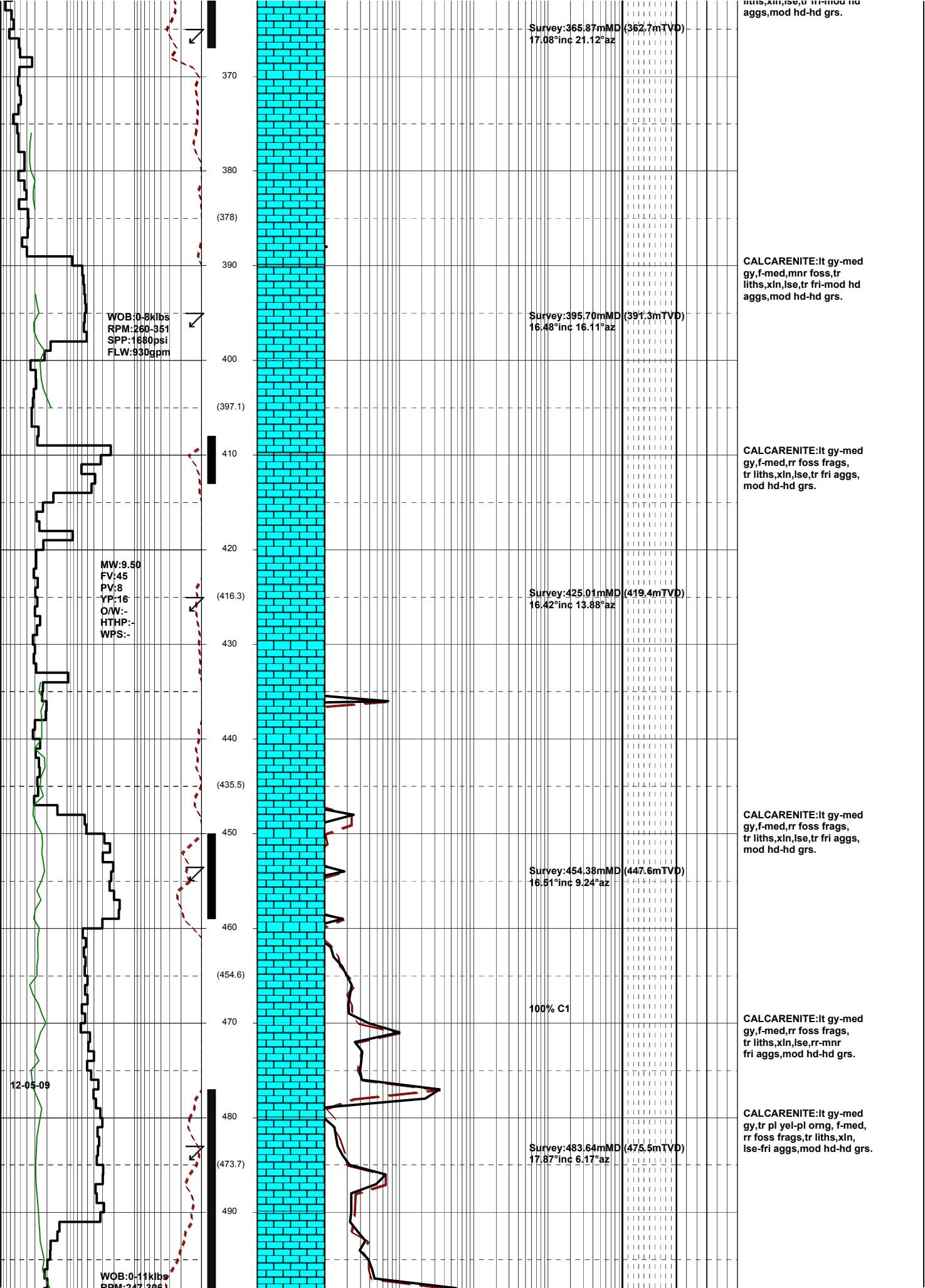
CALCARENITE:lt gy-med
lt gy,f-med,rr crs,mnr
foss,mnr shell frags,tr
liths,xln,lse-fri,aggs,
mod hd-hd grs.

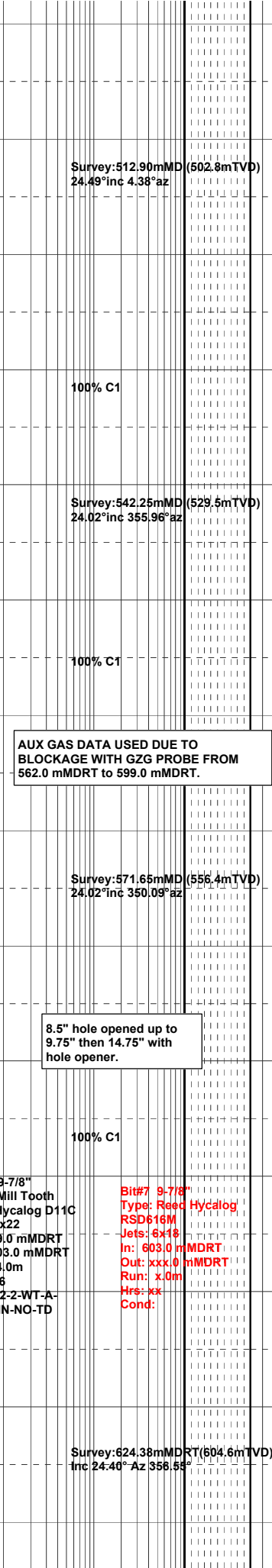
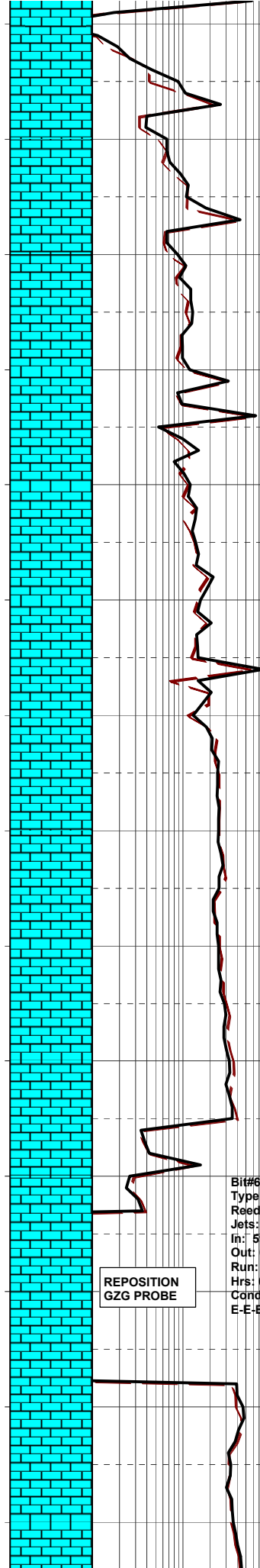
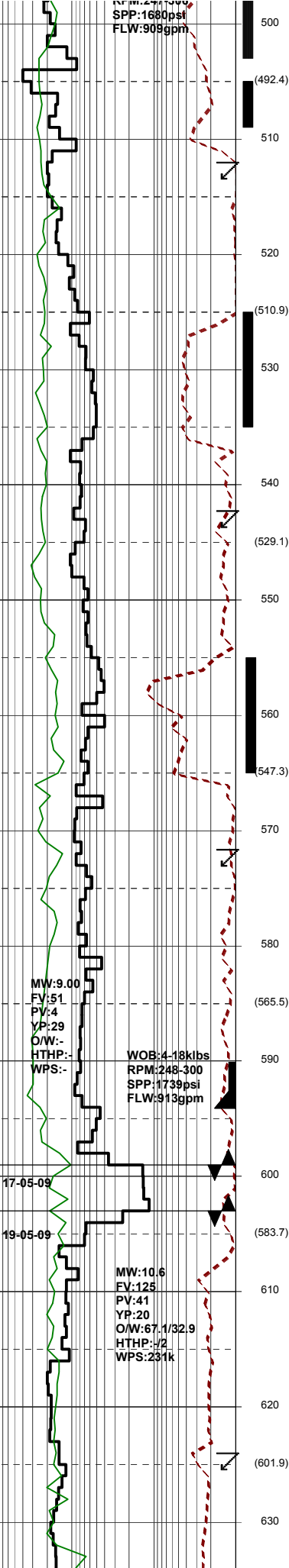
CALCARENITE:lt gy-med
gy,f-med,mnr foss,tr
liths,xln,lse,tr fri-mod hd
aggs,mod hd-hd grs.

CALCARENITE:lt gy-med
gy,f-med,mnr foss,tr
liths,xln,lse,tr fri-mod hd
aggs,mod hd-hd grs.

CALCARENITE:lt gy-med
gy,f-med,mnr foss,tr
liths,xln,lse,tr fri-mod hd
aggs,mod hd-hd grs.

CALCARENITE:lt gy-med
gy,f-med,mnr foss,tr
liths,xln,lse,tr fri-mod hd
aggs,mod hd-hd grs.





AUX GAS DATA USED DUE TO BLOCKAGE WITH GZG PROBE FROM 562.0 mMDRT to 599.0 mMDRT.

8.5" hole opened up to 9.75" then 14.75" with hole opener.

REPOSITION GZG PROBE

Bit#6 9-7/8"
 Type: Mill Tooth
 Reed Hycalog D11C
 Jets: 3x22
 In: 599.0 mMDRT
 Out: 603.0 mMDRT
 Run: 4.0m
 Hrs: 0.6
 Cond: 2-2-WT-A-E-E-E-IN-NO-TD

Bit#7 9-7/8"
 Type: Reed Hycalog
 RSD616M
 Jets: 6x18
 In: 603.0 mMDRT
 Out: xxx.0 mMDRT
 Run: x.0m
 Hrs: xx
 Cond:

CALCARENITE:lt gy-med gy, tr pl yel-pl orgn, f-med, rr foss frags, tr liths, xln, lse-fri aggs, mod hd-hd grs.

CALCARENITE:lt gy-med lt gy, lt olv gy, f-med, mnr foss frags, tr liths, tr glauc grs, xln, lse, rr fri aggs, mod hd-hd grs.

CALCARENITE:lt gy-med lt gy, lt olv gy, f-med, mnr foss frags, tr liths, tr glauc grs, xln, lse, rr fri aggs, mod hd-hd grs.

CALCARENITE:lt gy-med lt gy, lt olv gy, f-med, com foss frags, tr liths, tr glauc grs, xln, lse, rr fri aggs, mod hd-hd grs.

CALCARENITE:med lt gy-lt olv gy, mnr foss, abdt shell frags, lse-fri, aggs, mod hd-hd grs.

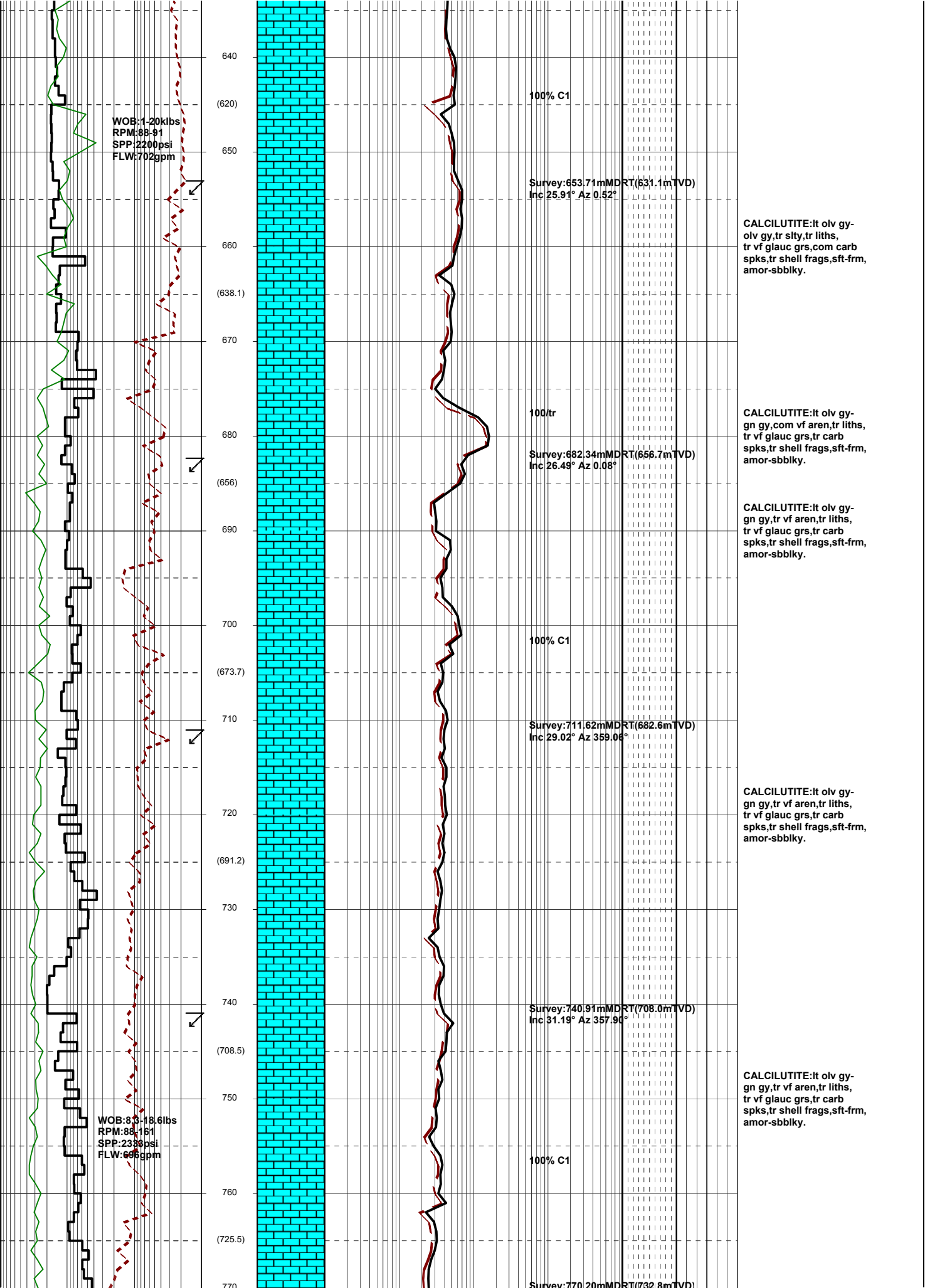
POOH to run hole opener.

10.75" casing set at 594.1 mMDRT

PIT at 603.0 mMDRT
 585.0 mTVDRT
 268psi with 8.5ppg mud
 EMW = 13.2ppg

Drill with NAF Accolade Mud System

CALCULITITE:lt olv gy-olv gy, sity, tr liths, tr glauc grs, sft frm, amor-sbbkly.



WOB: 1-20klbs
 RPM: 88-91
 SPP: 2200psi
 FLW: 702gpm

WOB: 83-18.6lbs
 RPM: 88-151
 SPP: 2333psi
 FLW: 696gpm

100% C1

Survey: 653.71mMDRT(631.1mTVD)
 Inc 25.91° Az 0.52°

100/tr

Survey: 682.34mMDRT(656.7mTVD)
 Inc 26.49° Az 0.08°

100% C1

Survey: 711.62mMDRT(682.6mTVD)
 Inc 29.02° Az 359.06°

Survey: 740.91mMDRT(708.0mTVD)
 Inc 31.19° Az 357.90°

100% C1

Survey: 770.20mMDRT(732.8mTVD)

CALCILUTITE: It olv gy-olv gy, tr slty, tr liths, tr vf glauc grs, com carb spks, tr shell frags, sft frm, amor-sbbiky.

CALCILUTITE: It olv gy-gn gy, com vf aren, tr liths, tr vf glauc grs, tr carb spks, tr shell frags, sft frm, amor-sbbiky.

CALCILUTITE: It olv gy-gn gy, tr vf aren, tr liths, tr vf glauc grs, tr carb spks, tr shell frags, sft frm, amor-sbbiky.

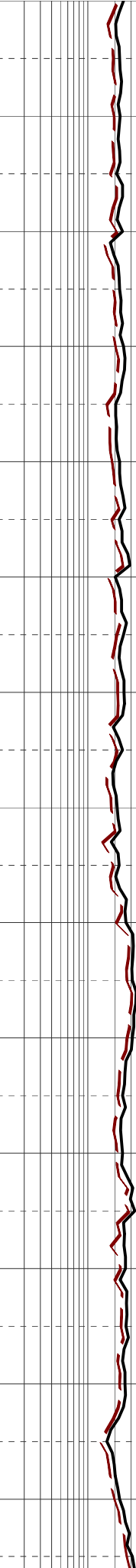
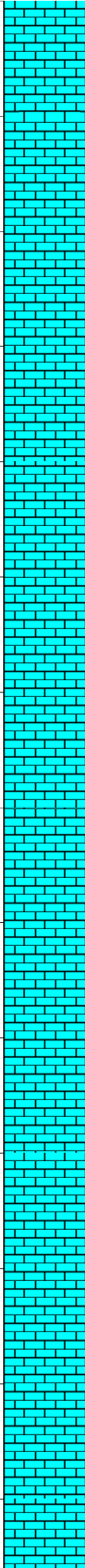
CALCILUTITE: It olv gy-gn gy, tr vf aren, tr liths, tr vf glauc grs, tr carb spks, tr shell frags, sft frm, amor-sbbiky.

CALCILUTITE: It olv gy-gn gy, tr vf aren, tr liths, tr vf glauc grs, tr carb spks, tr shell frags, sft frm, amor-sbbiky.

MW:10.9
FV:123
PV:50
YP:24
O/W:64.6/35.4
HTHP:-/2
WPS:205k

WOB:14.34klbs
RPM:120-161
SPP:2459psi
FLW:693gpm

770
780
(742.3)
790
800
(758.9)
810
820
(775.4)
830
840
(791.6)
850
860
(807.6)
870
880
(823.3)
890
900
(838.7)



Inc 32.66° Az 358.22°

Survey:798.90mMDRT(756.8mTVD)
Inc 32.03° Az 358.33°

100% C1

Survey:828.36mMDRT(781.0mTVD)
Inc 35.33° Az 358.55°

Survey:857.58mMDRT(804.6mTVD)
Inc 37.47° Az 356.55°

100% C1

Survey:886.78mMDRT(827.4mTVD)
Inc 39.39° Az 355.70°

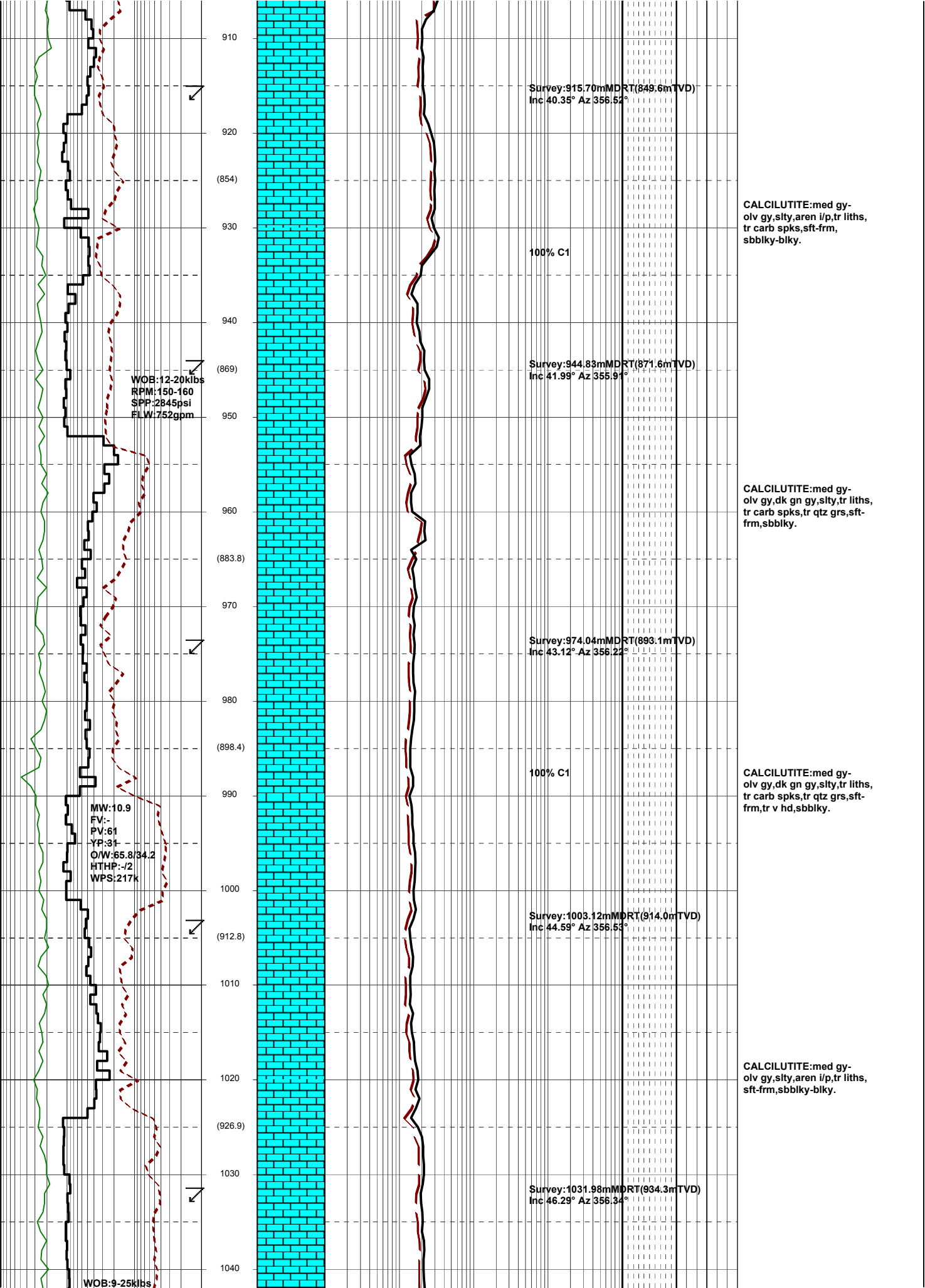
CALCILUTITE:It olv gy-
olv gy,silty,rr vf aren,
tr liths,tr carb spks,
sft-frm,amor-sbbkly.

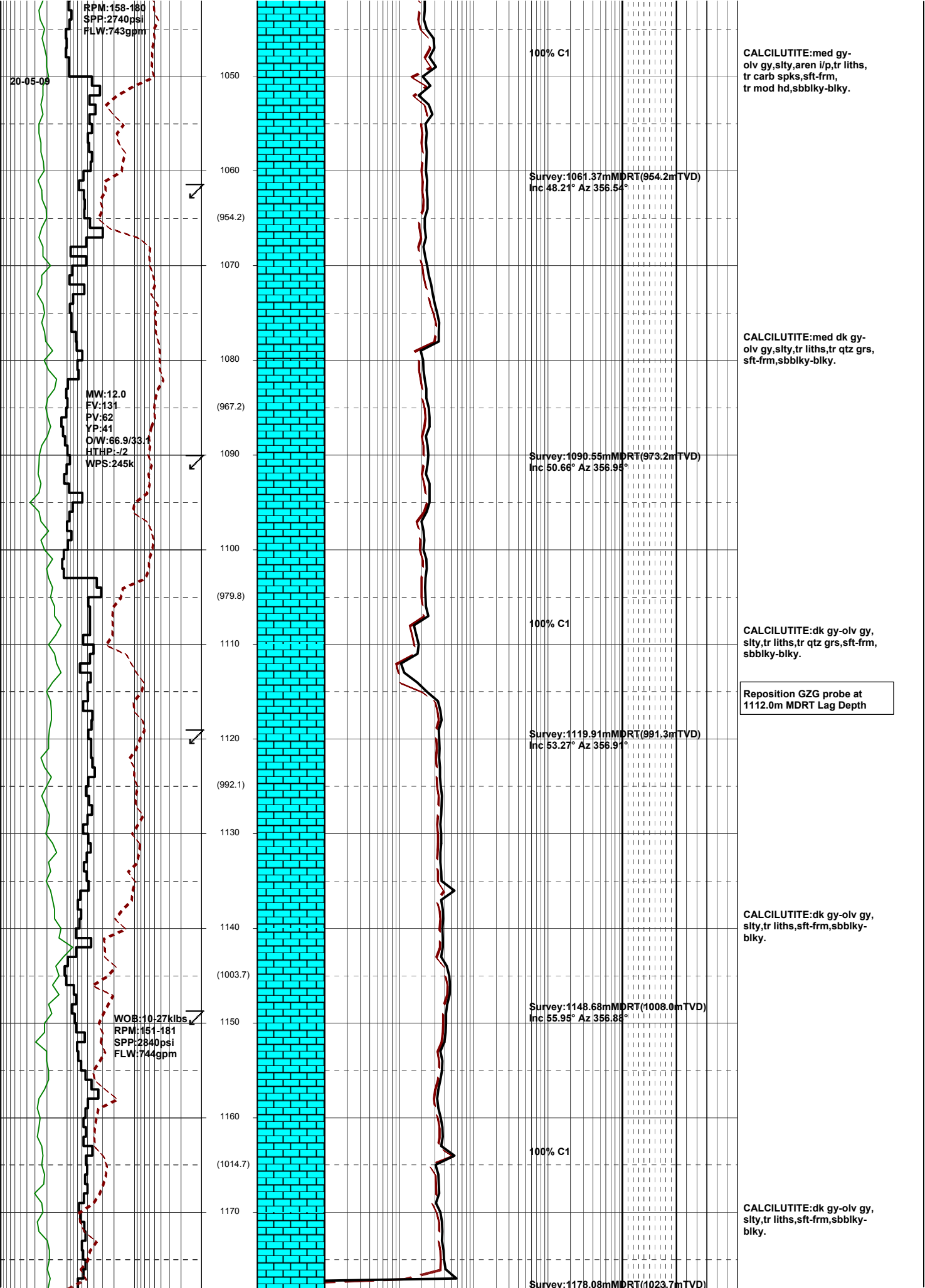
CALCILUTITE:It olv gy-
olv gy,silty,occ vf aren,
tr liths,tr carb spks,
sft-frm,rr mod hd,sbbkly,
rr blkly.

CALCILUTITE:It olv gy-
olv gy,tr vf aren,tr vf
qtz grs,tr liths,tr carb
spks,sft-frm,rr mod hd,
sbbkly,rr blkly.

CALCILUTITE:It olv gy-
olv gy,tr vf aren,tr vf
qtz grs,tr liths,tr carb
spks,sft-frm,rr mod hd,
sbbkly,rr blkly.

CALCILUTITE:med gy-olv gy,
silty,tr vf aren,tr vf qtz grs,tr
liths,tr carb spks,sft-frm,
sbbkly-blkly.





RPM:158-180
SPP:2740psi
FLW:743gpm

20-05-09

1050
1060
(954.2)
1070
1080
(967.2)
1090
1100
(979.8)
1110
1120
(992.1)
1130
1140
(1003.7)
1150
1160
(1014.7)
1170

MW:12.0
EV:131
PV:62
YP:41
O/W:66.9/33.1
HTHP:1/2
WPS:245k

WOB:10-27klbs
RPM:151-181
SPP:2840psi
FLW:744gpm

100% C1

Survey:1061.37mMDRT(954.2mTVD)
Inc 48.21° Az 356.54°

Survey:1090.55mMDRT(973.2mTVD)
Inc 50.66° Az 356.98°

100% C1

Survey:1119.91mMDRT(991.9mTVD)
Inc 53.27° Az 356.91°

Survey:1148.68mMDRT(1008.0mTVD)
Inc 55.95° Az 356.88°

100% C1

Survey:1178.08mMDRT(1023.7mTVD)

CALCILUTITE:med gy-olv gy,silty,aren i/p,tr liths, tr carb spks,sft-frm, tr mod hd,sbbkly-blky.

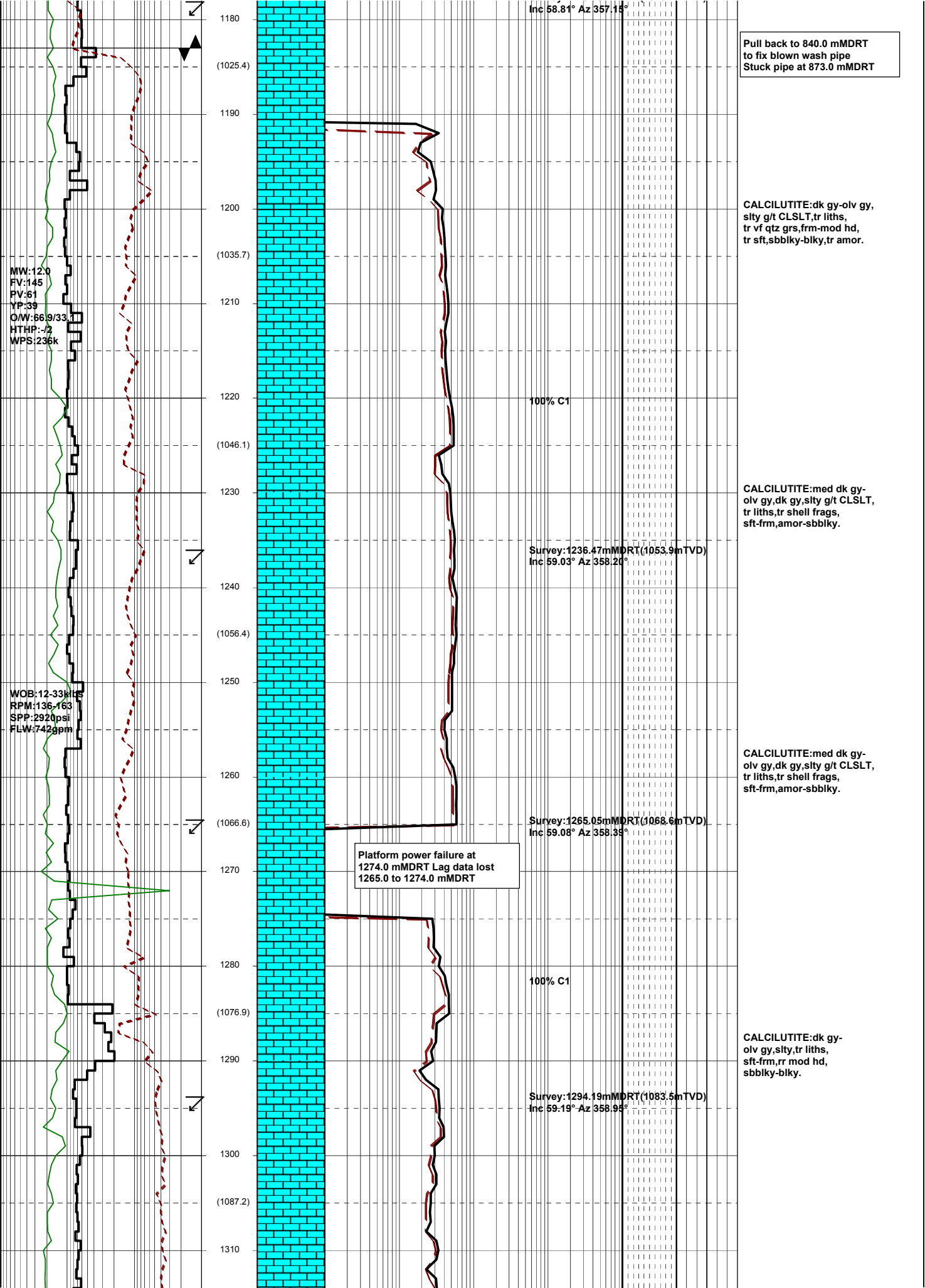
CALCILUTITE:med dk gy-olv gy,silty,tr liths,tr qtz grs, sft-frm,sbbkly-blky.

CALCILUTITE:dk gy-olv gy, slty, tr liths, tr qtz grs, sft-frm, sbbkly-blky.

Reposition GZG probe at 1112.0m MDRT Lag Depth

CALCILUTITE:dk gy-olv gy, slty, tr liths, sft-frm, sbbkly-blky.

CALCILUTITE:dk gy-olv gy, slty, tr liths, sft-frm, sbbkly-blky.



1180
(1025.4)
1190
1200
(1035.7)
1210
1220
(1046.1)
1230
1240
(1056.4)
1250
1260
(1066.6)
1270
1280
(1076.9)
1290
1300
(1087.2)
1310

Inc 58.81° Az 357.13°

100% C1

Survey: 1236.47mMDRT (1053.9mTVD)
Inc 59.03° Az 358.20°

Survey: 1265.05mMDRT (1068.6mTVD)
Inc 59.08° Az 358.39°

100% C1

Survey: 1294.19mMDRT (1083.5mTVD)
Inc 59.19° Az 358.95°

Pull back to 840.0 mMDRT
to fix blown wash pipe
Stuck pipe at 873.0 mMDRT

CALCILUTITE: dk gy-olv gy,
silty g/t CLSLT, tr liths,
tr vf qtz grs, frm-mod hd,
tr sft, sbbiky-blky, tr amor.

CALCILUTITE: med dk gy-
olv gy, dk gy, silty g/t CLSLT,
tr liths, tr shell frags,
sft-frm, amor-sbbiky.

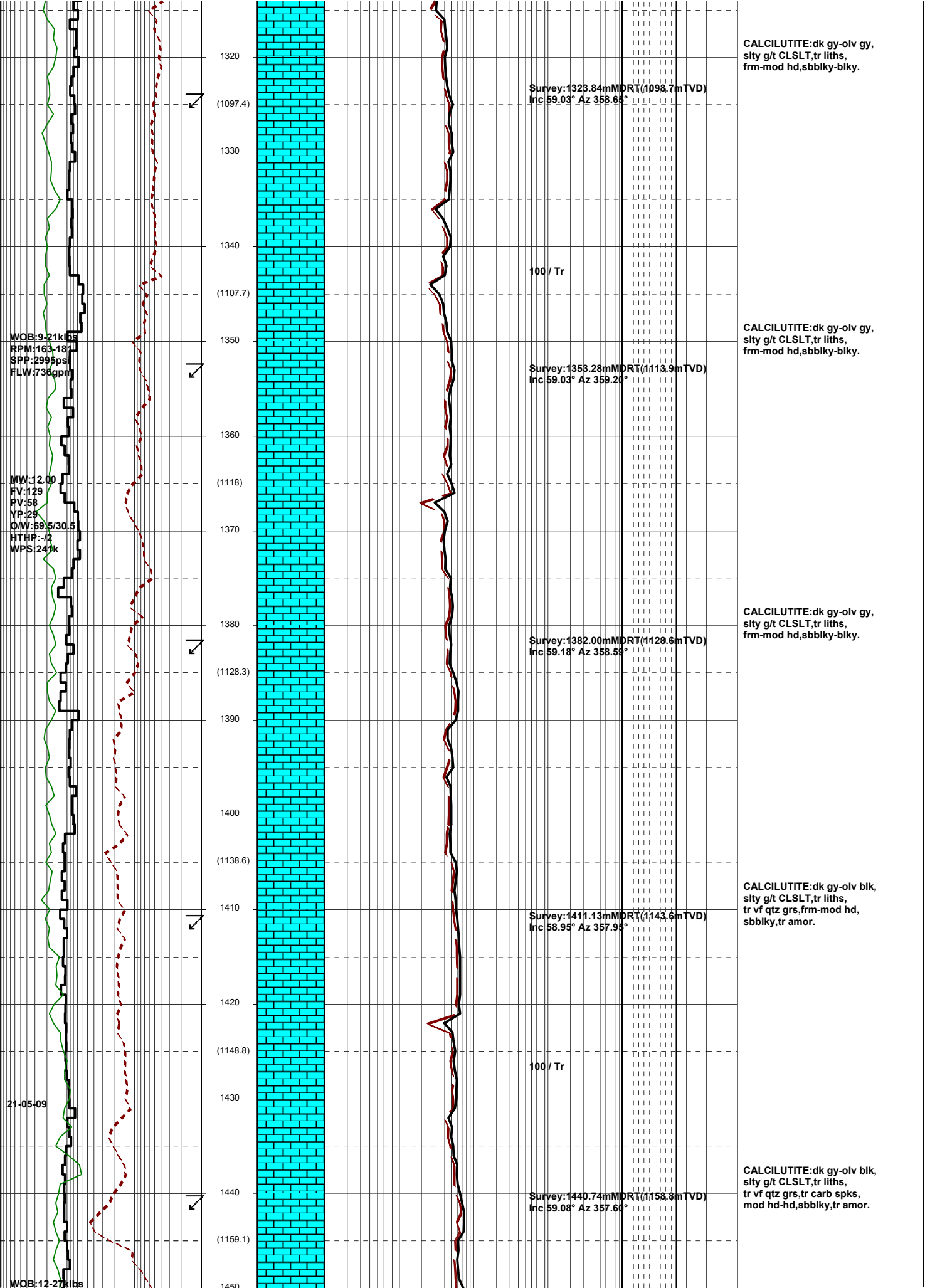
CALCILUTITE: med dk gy-
olv gy, dk gy, silty g/t CLSLT,
tr liths, tr shell frags,
sft-frm, amor-sbbiky.

CALCILUTITE: dk gy-
olv gy, silty, tr liths,
sft-frm, rr mod hd,
sbbiky-blky.

MW: 12.0
FV: 145
PV: 61
YP: 39
O/W: 66.9/33.1
HTHP: -/2
WPS: 236k

WOB: 12.33kN
RPM: 136-163
SPP: 2920psi
FLW: 742gpm

Platform power failure at
1274.0 mMDRT Lag data lost
1265.0 to 1274.0 mMDRT



WOB: 9-21 klbs
 RPM: 163-187
 SPP: 299 psi
 FLW: 738 gpm

MW: 12.00
 FV: 129
 PV: 58
 YP: 25
 O/W: 69.5/30.5
 HTHP: -/2
 WPS: 24%k

21-05-09

WOB: 12-27 klbs

1320
 (1097.4)
 1330
 1340
 (1107.7)
 1350
 1360
 (1118)
 1370
 1380
 (1128.3)
 1390
 1400
 (1138.6)
 1410
 1420
 (1148.8)
 1430
 1440
 (1159.1)
 1450

Survey: 1323.84mMDRT (1098.7mTVD)
 Inc 59.03° Az 358.65°

100 / Tr

Survey: 1353.28mMDRT (1113.9mTVD)
 Inc 59.03° Az 359.20°

Survey: 1382.00mMDRT (1128.6mTVD)
 Inc 59.18° Az 358.55°

Survey: 1411.13mMDRT (1143.6mTVD)
 Inc 58.95° Az 357.95°

100 / Tr

Survey: 1440.74mMDRT (1158.8mTVD)
 Inc 59.08° Az 357.60°

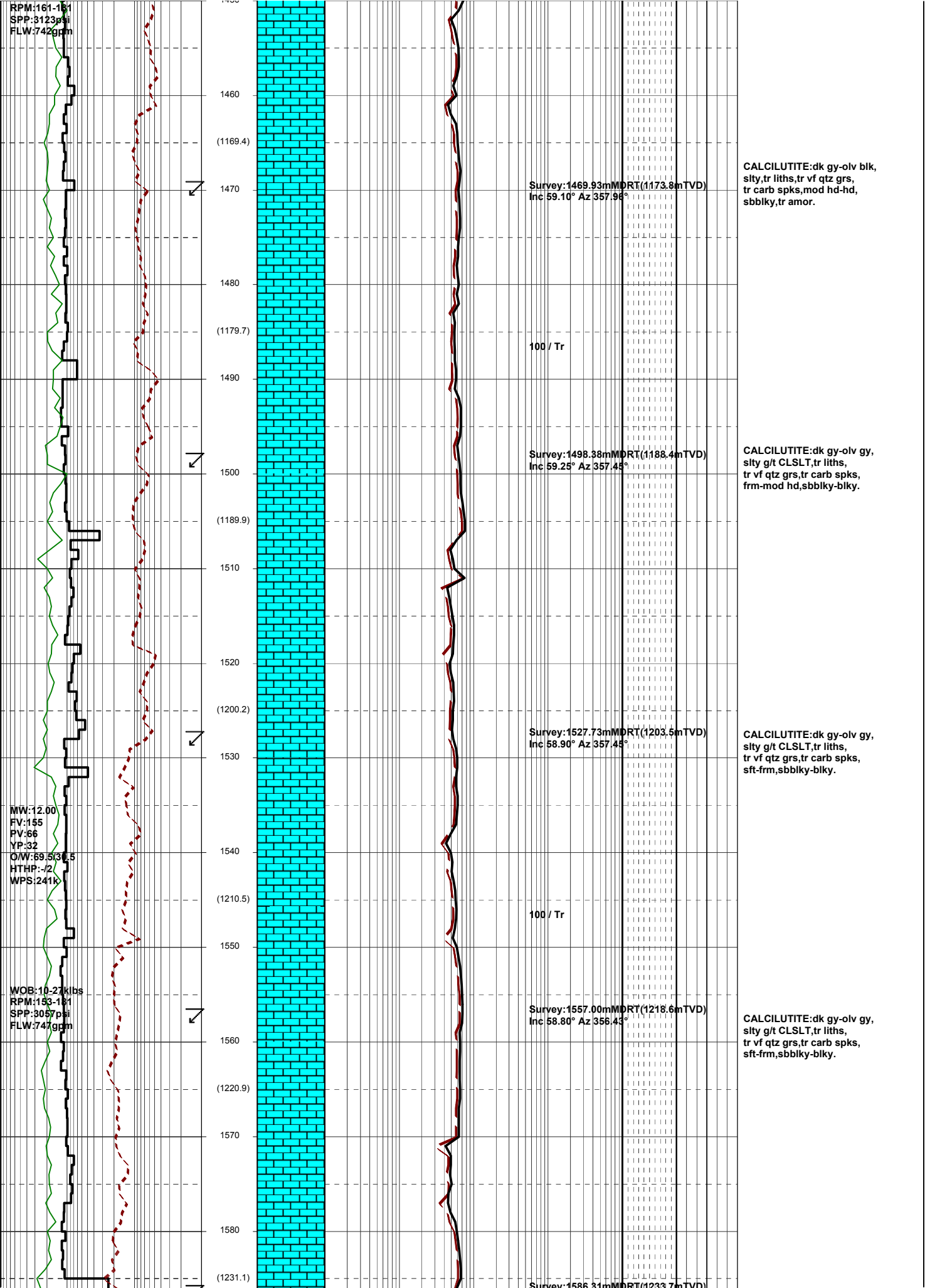
CALCILUTITE: dk gy-olv gy,
 sily g/t CLSLT, tr liths,
 frm-mod hd, sbbly-blky.

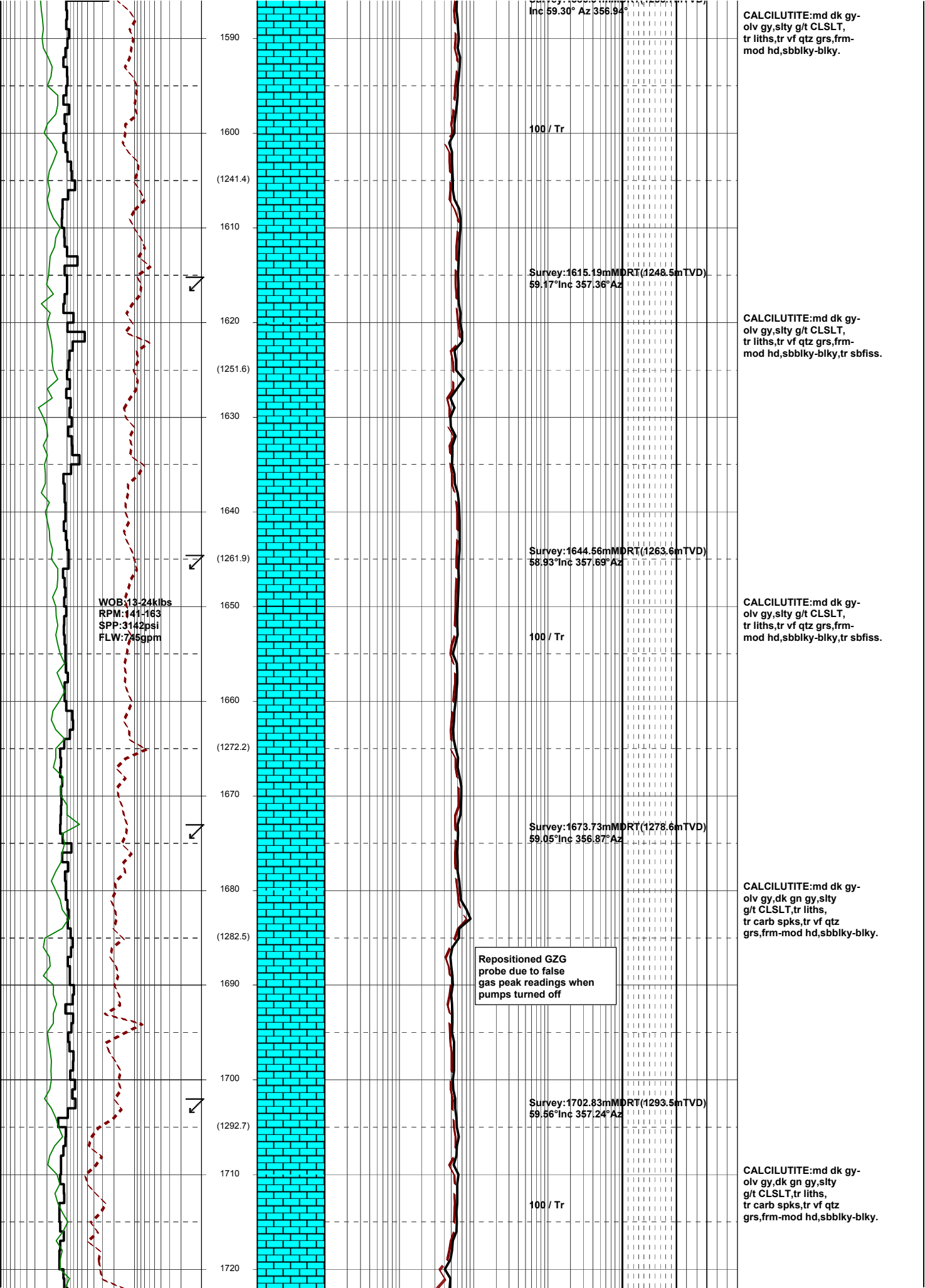
CALCILUTITE: dk gy-olv gy,
 sily g/t CLSLT, tr liths,
 frm-mod hd, sbbly-blky.

CALCILUTITE: dk gy-olv gy,
 sily g/t CLSLT, tr liths,
 frm-mod hd, sbbly-blky.

CALCILUTITE: dk gy-olv blk,
 sily g/t CLSLT, tr liths,
 tr vf qtz grs, frm-mod hd,
 sbbly, tr amor.

CALCILUTITE: dk gy-olv blk,
 sily g/t CLSLT, tr liths,
 tr vf qtz grs, tr carb spks,
 mod hd-hd, sbbly, tr amor.





WOB:13-24kbs
 RPM:141-163
 SPP:3142psi
 FLW:745gpm

Repositioned GZG probe due to false gas peak readings when pumps turned off

CALCILUTITE:md dk gy-olv gy,slty g/t CLSLT, tr liths,tr vf qtz grs,frm-mod hd,sbblky-blky.

CALCILUTITE:md dk gy-olv gy,slty g/t CLSLT, tr liths,tr vf qtz grs,frm-mod hd,sbblky-blky, tr sbfiss.

CALCILUTITE:md dk gy-olv gy,slty g/t CLSLT, tr liths,tr vf qtz grs,frm-mod hd,sbblky-blky, tr sbfiss.

CALCILUTITE:md dk gy-olv gy,dk gn gy,slty g/t CLSLT,tr liths, tr carb spks,tr vf qtz grs,frm-mod hd,sbblky-blky.

CALCILUTITE:md dk gy-olv gy,dk gn gy,slty g/t CLSLT,tr liths, tr carb spks,tr vf qtz grs,frm-mod hd,sbblky-blky.

MW:12.00
EV:140
PV:67
YP:30
O/W:70.0/30.0
HTHP:-/2
WPS:235k

WOB:19.5-36.4klbs
RPM:157-163
SPP:3264psi
FLW:745gpm

WOB:29.2-42.8klbs
RPM:158-161
SPP:3275psi
FLW:748gpm

1730
1740
(1313.2)
1750
1760
(1323.5)
1770
1780
(1333.8)
1790
1800
(1344.1)
1810
1820
(1354.4)
1830
1840
(1364.6)
1850

Survey:1731.58mMDRT(1308.2mTVD)
58.96°Inc 356.95°Az

Survey:1760.80mMDRT(1323.2mTVD)
59.01°Inc 357.63°Az

Survey:1790.05mMDRT(1338.3mTVD)
58.83°Inc 357.77°Az

Survey:1819.40mMDRT(1353.4mTVD)
59.28°Inc 357.08°Az

Survey:1848.12mMDRT(1368.1mTVD)
59.27°Inc 357.85°Az

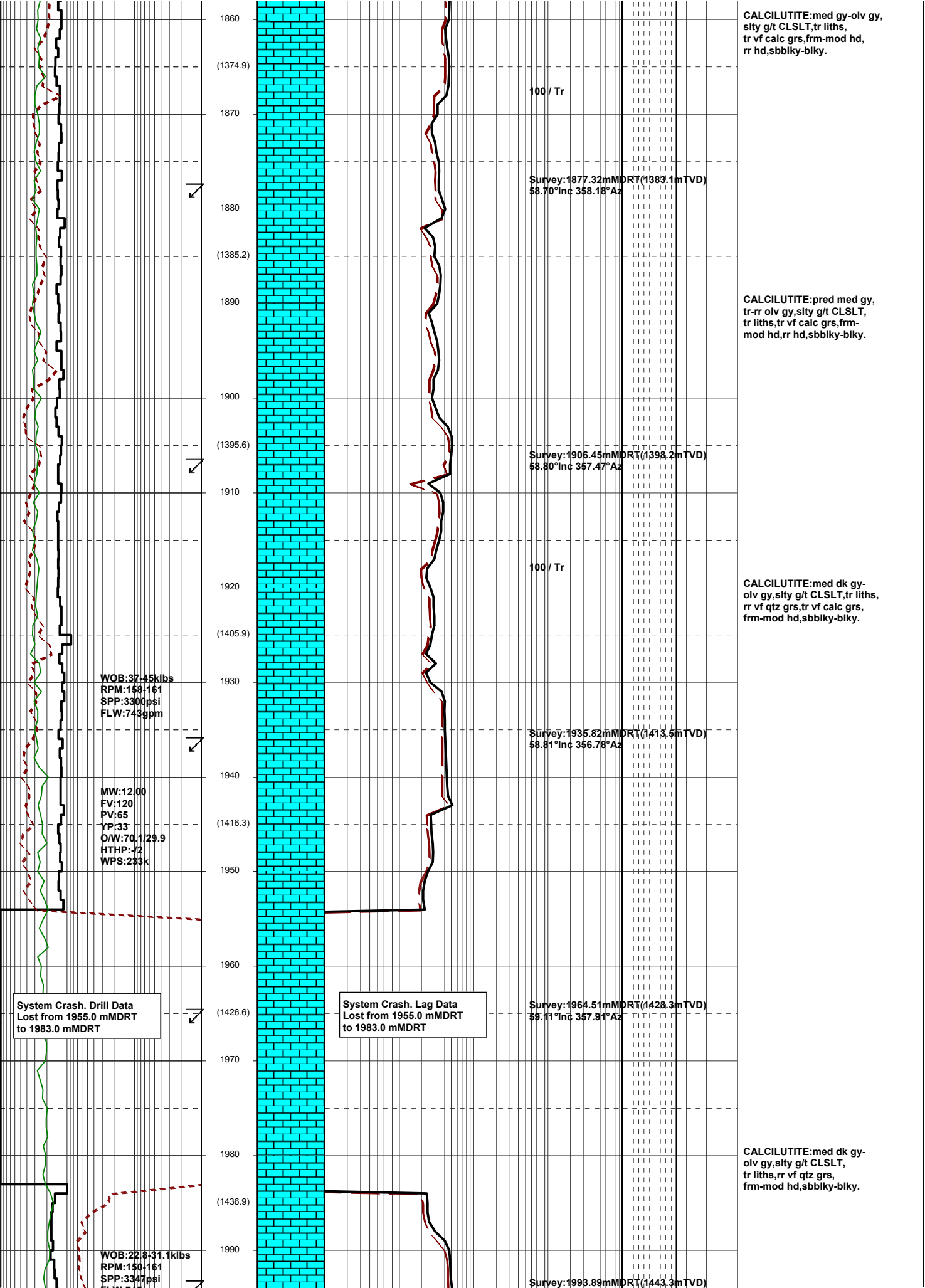
CALCILUTITE:med gy-olv gy,
silty g/t CLSLT,tr liths,
tr f qtz grs,rr f calc grs,
sft-frm,amor-sbbkly,rr blkly.

CALCILUTITE:med gy-olv gy,
silty g/t CLSLT,tr liths,
tr vf qtz grs,tr vf calc grs,
sft-frm,amor-sbbkly,rr blkly.

CALCILUTITE:med gy-olv gy,
silty g/t CLSLT,tr liths,
tr vf calc grs,tr vf calc grs,
sft-frm,amor-sbbkly,rr blkly.

CALCILUTITE:med gy-olv gy,
silty g/t CLSLT,tr liths,
tr vf calc grs,frm-mod hd,
rr hd,sbbkly-blky.

100 / Tr



1860

(1374.9)

1870

1880

(1385.2)

1890

1900

(1395.6)

1910

1920

(1405.9)

1930

1940

(1416.3)

1950

1960

(1426.6)

1970

1980

(1436.9)

1990

100 / Tr

Survey: 1877.32mMDRT(1383.1mTVD)
58.70°Inc 358.18°Az

Survey: 1906.45mMDRT(1398.2mTVD)
58.80°Inc 357.47°Az

100 / Tr

Survey: 1935.82mMDRT(1413.5mTVD)
58.81°Inc 356.78°Az

Survey: 1964.51mMDRT(1428.3mTVD)
59.11°Inc 357.91°Az

Survey: 1993.89mMDRT(1443.3mTVD)

WOB:37.45klbs
RPM:158-161
SPP:3300psi
FLW:743gpm

MW:12.00
FV:120
PV:65
YP:33
O/W:70.1/29.9
HTHP:-72
WPS:233k

System Crash. Drill Data
Lost from 1955.0 mMDRT
to 1983.0 mMDRT

System Crash. Lag Data
Lost from 1955.0 mMDRT
to 1983.0 mMDRT

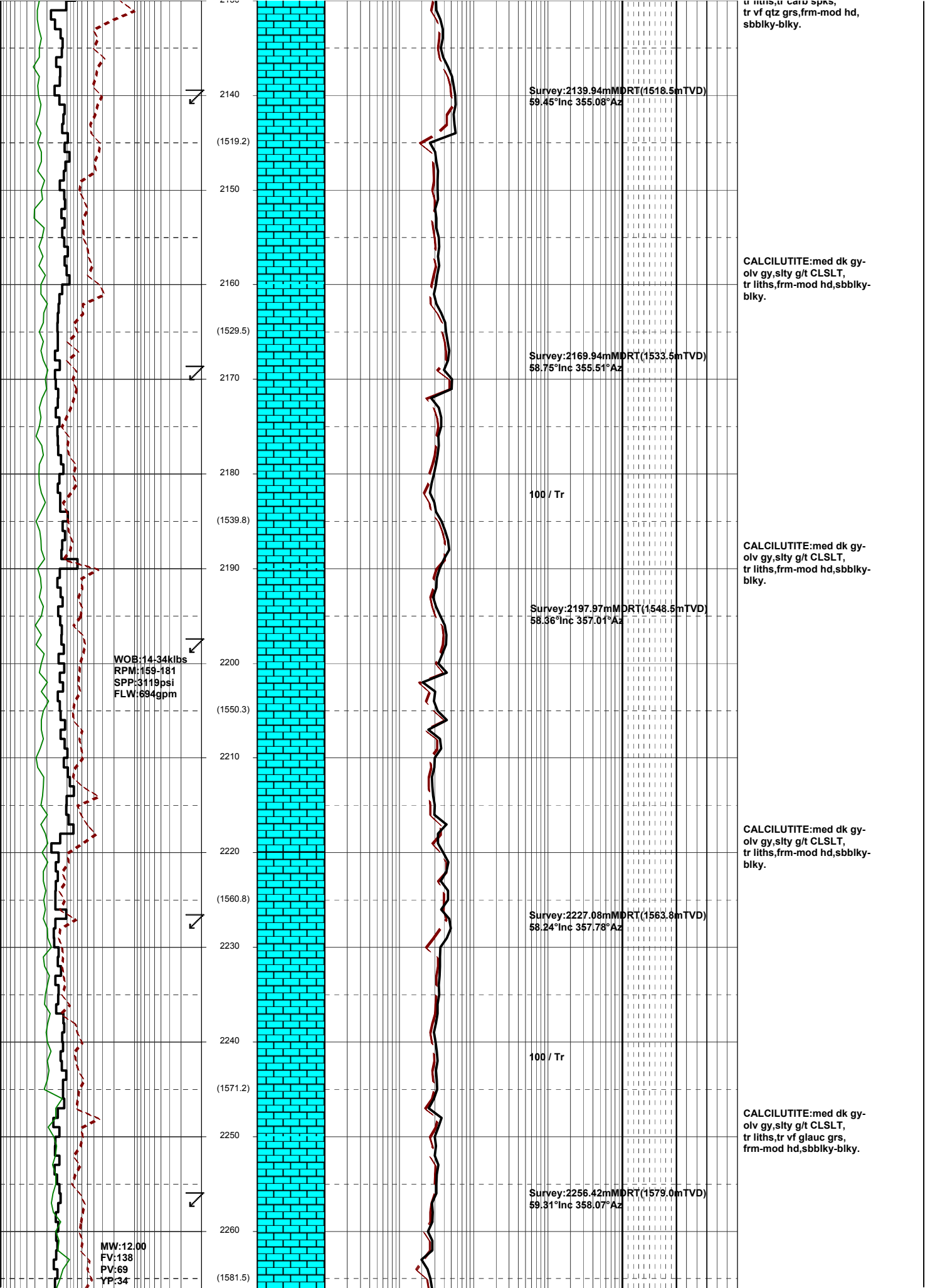
WOB:22.8-31.1klbs
RPM:150-161
SPP:3347psi

CALCILUTITE: med gy-olv gy,
sity g/t CLSLT, tr liths,
tr vf calc grs, frm-mod hd,
rr hd, sbbiky-blky.

CALCILUTITE: pred med gy,
tr-rr olv gy, sity g/t CLSLT,
tr liths, tr vf calc grs, frm-
mod hd, rr hd, sbbiky-blky.

CALCILUTITE: med dk gy-
olv gy, sity g/t CLSLT, tr liths,
rr vf qtz grs, tr vf calc grs,
frm-mod hd, sbbiky-blky.

CALCILUTITE: med dk gy-
olv gy, sity g/t CLSLT,
tr liths, rr vf qtz grs,
frm-mod hd, sbbiky-blky.



O/W:69.9/30.1
HTHP:-/2
WPS:239k

22-05-09

WOB:21.36klbs
RPM:155-162
SPP:3516psi
FLW:742gpm

WOB:24.36klbs
RPM:157-162
SPP:3483psi
FLW:736gpm

2270
2280
(1591.6)
2290
2300
(1601.8)
2310
2320
(1612)
2330
2340
(1622.4)
2350
2360
(1632.9)
2370
2380
(1643.3)
2390
2400

Survey:2285.89mMDRT(1593.9mTVD)
59.93°Inc 357.33°Az

100 / Tr

Survey:2314.74mMDRT(1608.6mTVD)
59.04°Inc 356.44°Az

Survey:2344.01mMDRT(1623.8mTVD)
58.29°Inc 356.56°Az

100 / Tr

Survey:2373.42mMDRT(1639.2mTVD)
58.43°Inc 357.23°Az

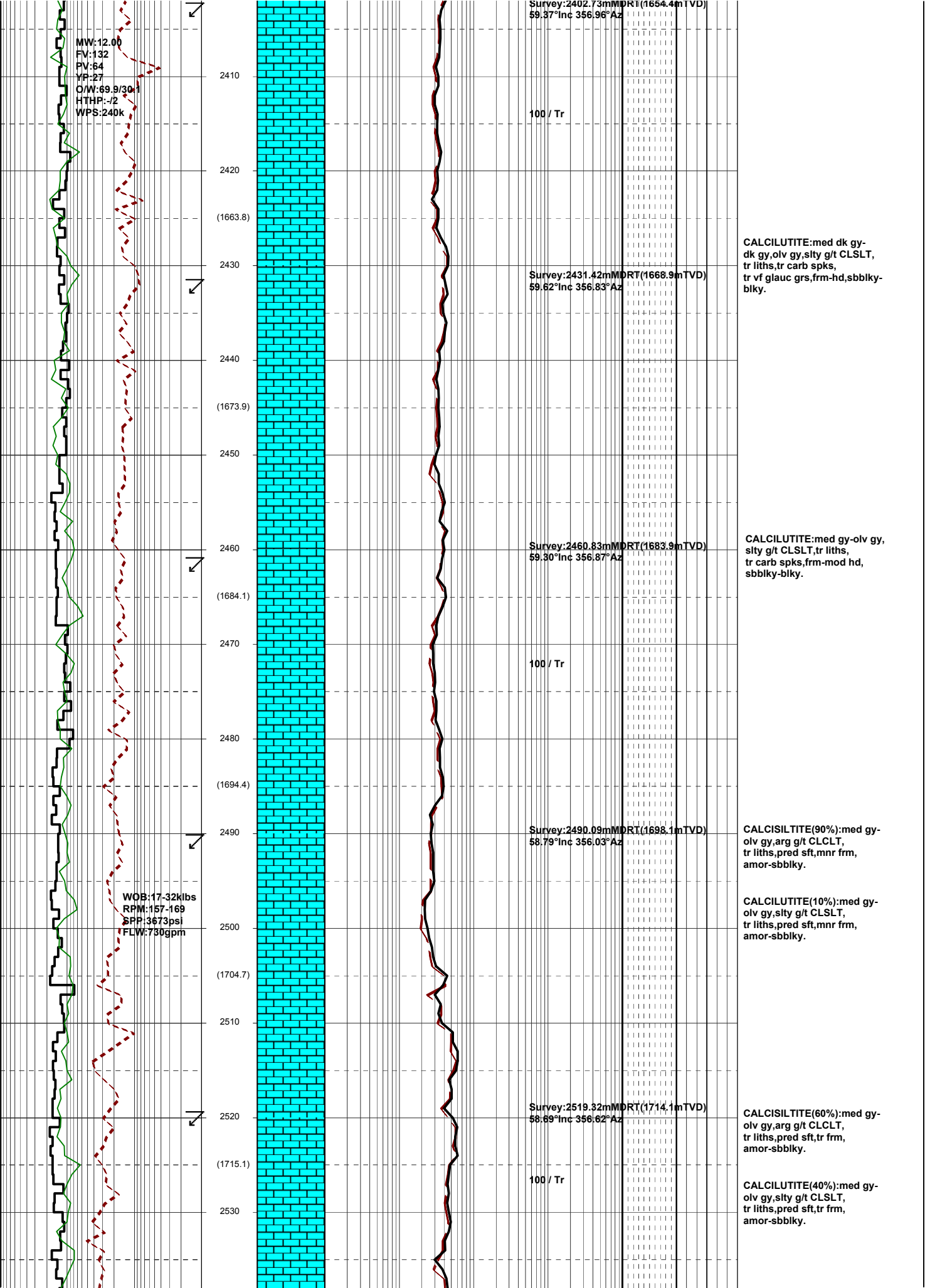
CALCILUTITE:dk gy-olv gy,
sity g/t CLSLT,tr liths,
tr vf calc grs,tr vf glauc grs,
frm-mod hd,sbbly-blky.

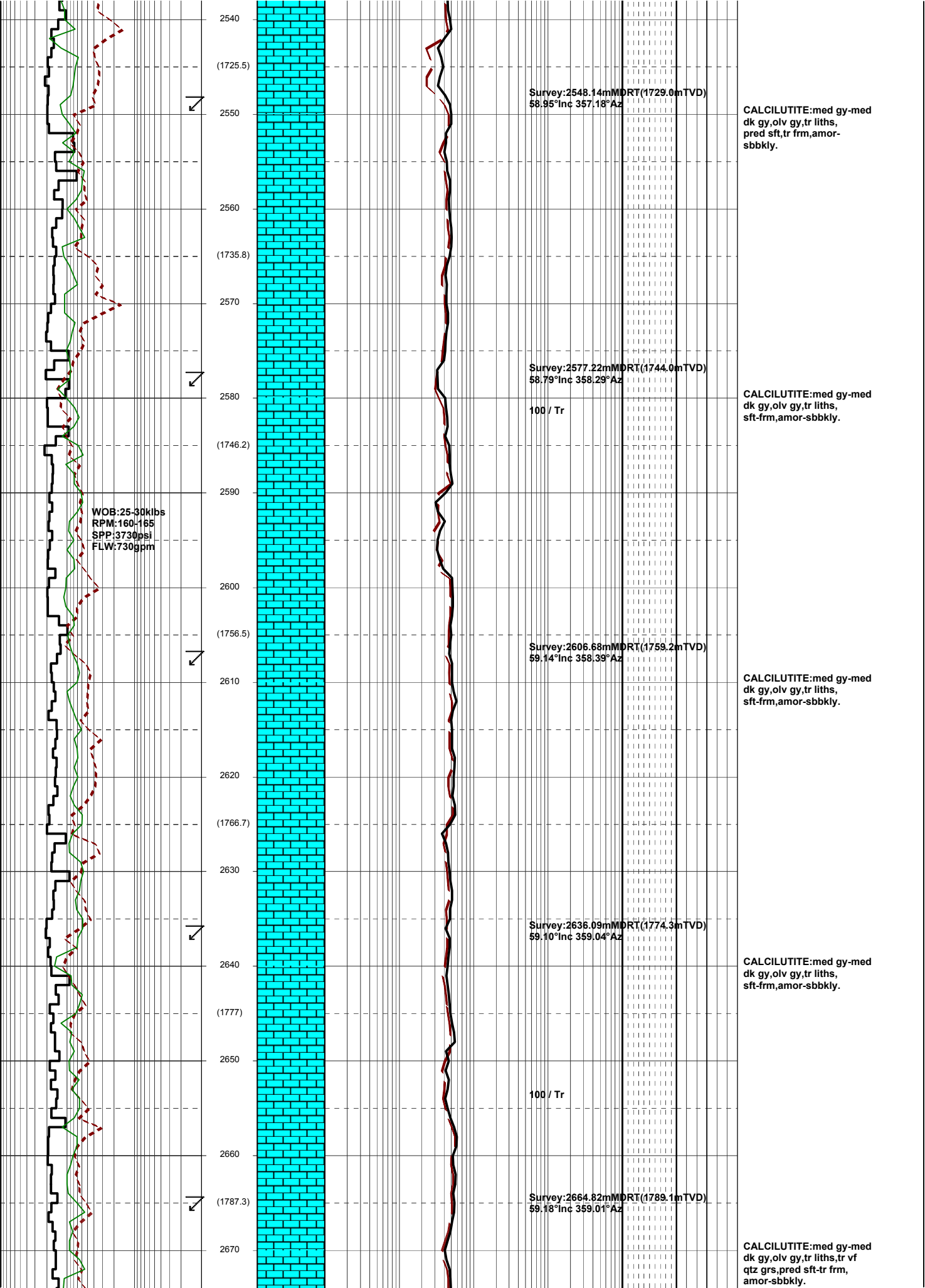
CALCILUTITE:dk gy-olv gy,
sity g/t CLSLT,tr liths,
tr vf calc grs,tr vf glauc grs,
frm-mod hd,sbbly-blky.

CALCILUTITE:dk gy-olv gy,
sity g/t CLSLT,tr liths,
tr vf calc grs,tr vf glauc grs,
frm-mod hd,sbbly-blky.

CALCILUTITE:med dk gy-
olv gy,sity g/t CLSLT,tr liths,
tr carb spks,tr vf calc grs,
frm-mod hd,sbbly.

CALCILUTITE:med dk gy-
olv gy,sity g/t CLSLT,tr liths,
tr carb spks,tr vf calc grs,
frm-mod hd,sbbly.





2540
(1725.5)
2550
(1735.8)
2560
2570
2580
(1746.2)
2590
2600
(1756.5)
2610
2620
(1766.7)
2630
2640
(1777)
2650
2660
(1787.3)
2670

Survey:2548.14mMDRT(1729.0mTVD)
58.95°Inc 357.18°Az

CALCILUTITE:med gy-med
dk gy,olv gy,tr liths,
pred sft,tr frm,amor-
sbbkly.

Survey:2577.22mMDRT(1744.0mTVD)
58.79°Inc 358.29°Az

100 / Tr

CALCILUTITE:med gy-med
dk gy,olv gy,tr liths,
sft-frm,amor-sbbkly.

Survey:2606.68mMDRT(1759.2mTVD)
59.14°Inc 358.39°Az

CALCILUTITE:med gy-med
dk gy,olv gy,tr liths,
sft-frm,amor-sbbkly.

Survey:2636.09mMDRT(1774.3mTVD)
59.10°Inc 359.04°Az

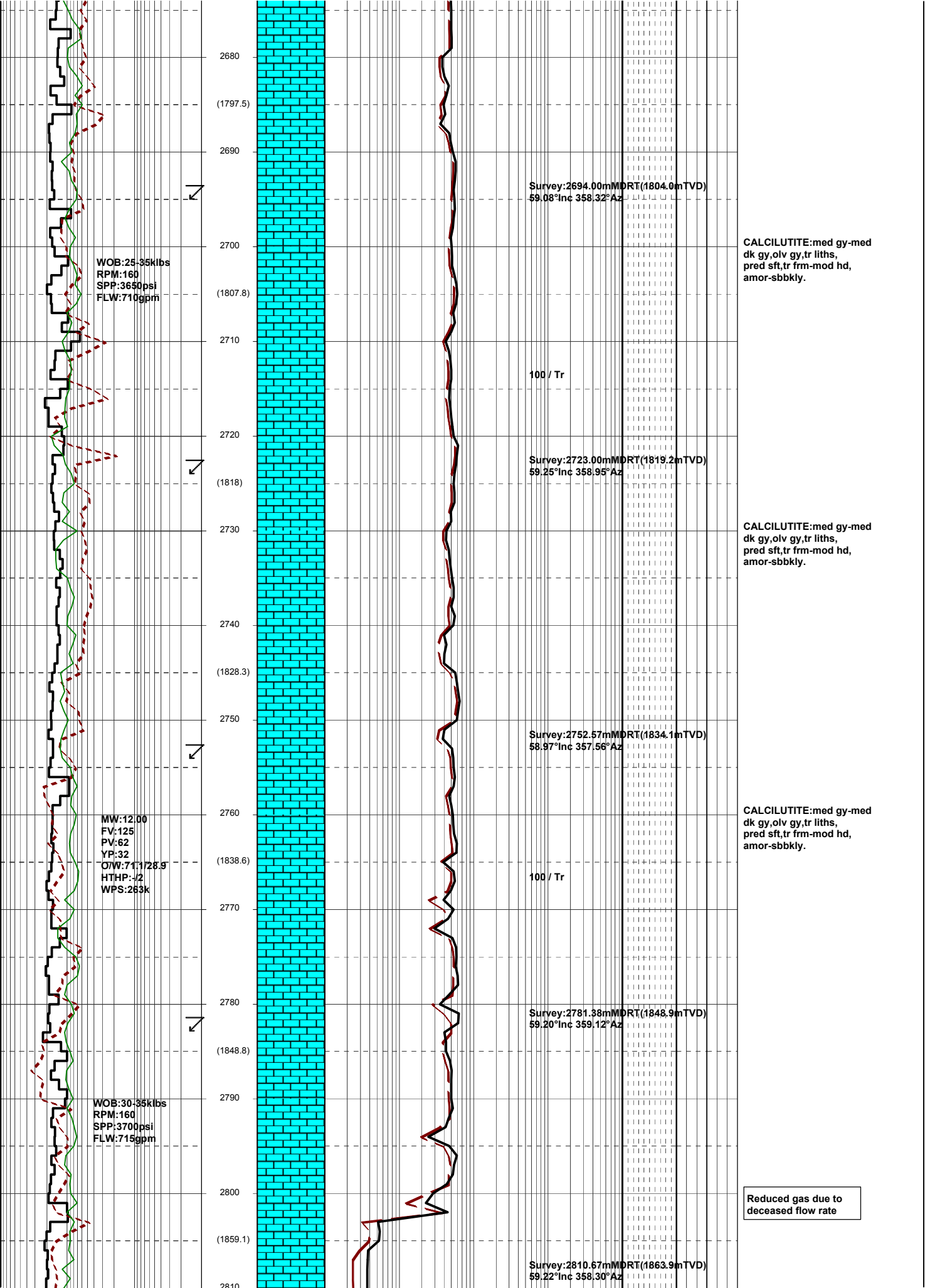
CALCILUTITE:med gy-med
dk gy,olv gy,tr liths,
sft-frm,amor-sbbkly.

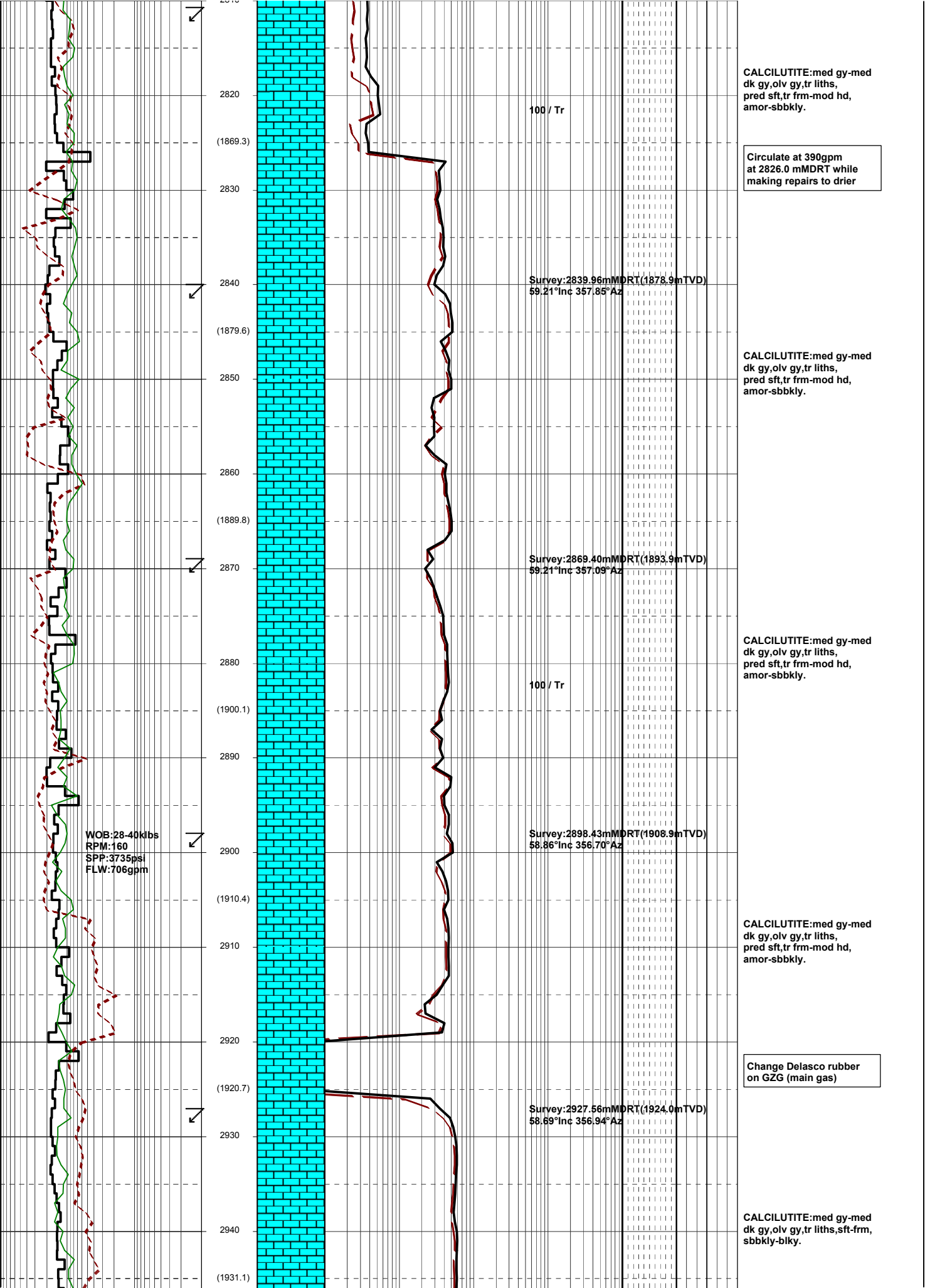
100 / Tr

Survey:2664.82mMDRT(1789.1mTVD)
59.18°Inc 359.01°Az

CALCILUTITE:med gy-med
dk gy,olv gy,tr liths,tr vf
qtz grs,pred sft-tr frm,
amor-sbbkly.

WOB:25-30kibs
RPM:160-165
SPP:3730psi
FLW:730gpm





CALCILUTITE:med gy-med dk gy,olv gy,tr liths, pred sft,tr frm-mod hd, amor-sbbkly.

Circulate at 390gpm at 2826.0 mMDRT while making repairs to drier

CALCILUTITE:med gy-med dk gy,olv gy,tr liths, pred sft,tr frm-mod hd, amor-sbbkly.

CALCILUTITE:med gy-med dk gy,olv gy,tr liths, pred sft,tr frm-mod hd, amor-sbbkly.

CALCILUTITE:med gy-med dk gy,olv gy,tr liths, pred sft,tr frm-mod hd, amor-sbbkly.

Change Delasco rubber on GZG (main gas)

CALCILUTITE:med gy-med dk gy,olv gy,tr liths,sft-frm, sbbkly-blky.

100 / Tr

Survey:2839.96mMDRT(1878.9mTVD)
59.21°Inc 357.85°Az

Survey:2869.40mMDRT(1893.9mTVD)
59.21°Inc 357.09°Az

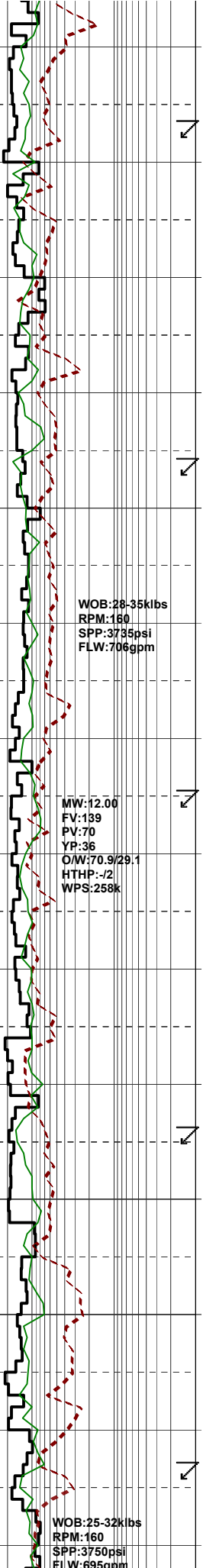
100 / Tr

Survey:2898.43mMDRT(1908.9mTVD)
58.86°Inc 356.70°Az

Survey:2927.56mMDRT(1924.0mTVD)
58.69°Inc 356.94°Az

WOB:28-40klbs
RPM:160
SPP:3735psi
FLW:706gpm

2810
2820
(1869.3)
2830
2840
(1879.6)
2850
2860
(1889.8)
2870
2880
(1900.1)
2890
2900
(1910.4)
2910
2920
(1920.7)
2930
2940
(1931.1)



2950
 (1941.4)
 2970
 (1951.7)
 2990
 (1962)
 3010
 (1972.3)
 3030
 (1982.7)
 3050
 (1993)
 3070
 3080

WOB:28-35klbs
 RPM:160
 SPP:3735psi
 FLW:706gpm

MW:12.00
 FV:139
 PV:70
 YP:36
 O/W:70.9/29.1
 HTHP:-/2
 WPS:258k

WOB:25-32klbs
 RPM:160
 SPP:3750psi
 FLW:695gpm

Survey:2956.93mMDRT(1939.1mTVD)
 59.11°Inc 357.54°Az

Survey:2986.29mMDRT(1954.3mTVD)
 58.88°Inc 358.37°Az

Survey:3015.08mMDRT(1969.1mTVD)
 58.97°Inc 357.63°Az

Survey:3044.22mMDRT(1984.2mTVD)
 58.86°Inc 357.81°Az

Survey:3073.36mMDRT(1999.2mTVD)
 59.17°Inc 358.00°Az

100 / Tr

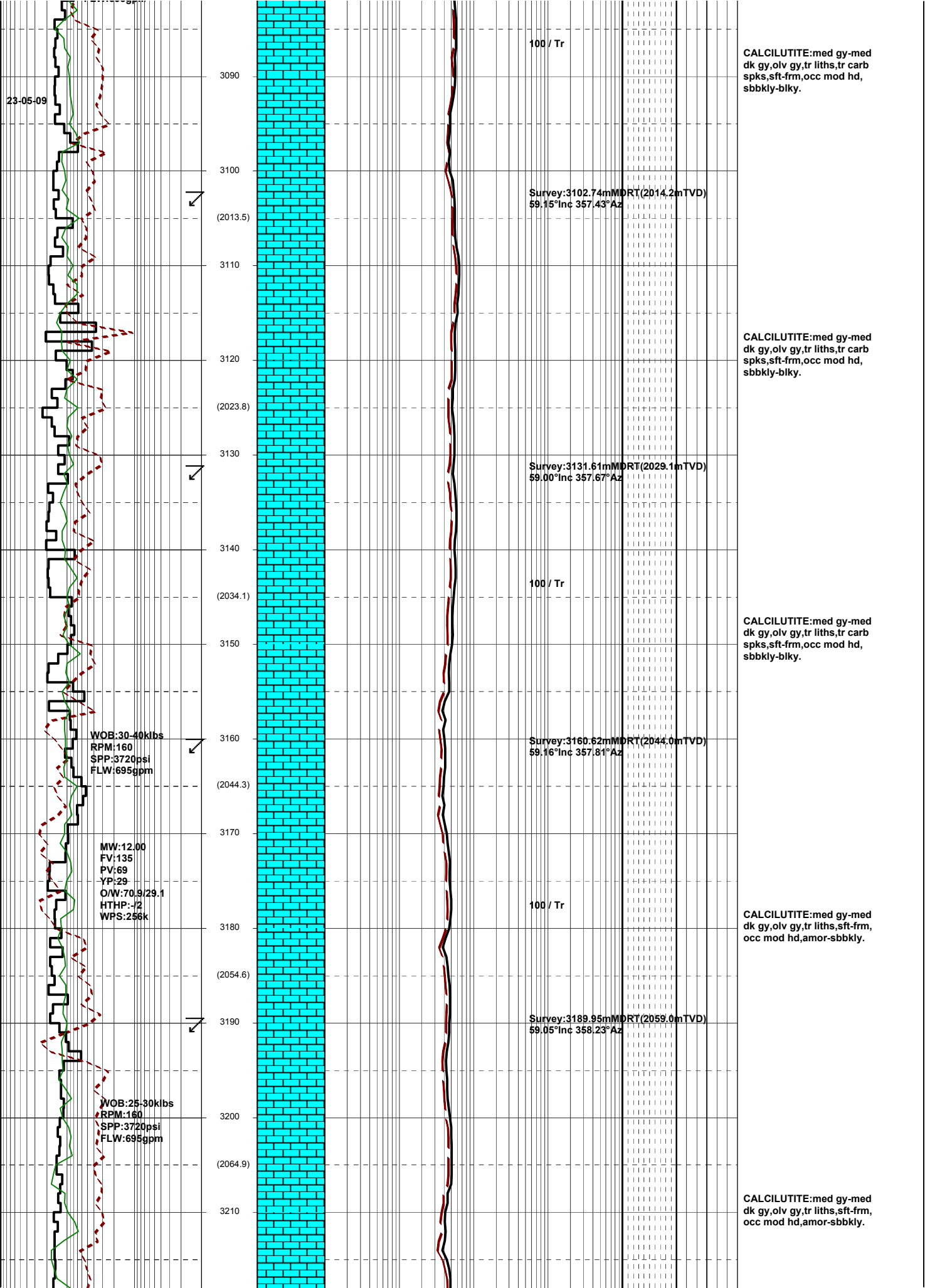
100 / Tr

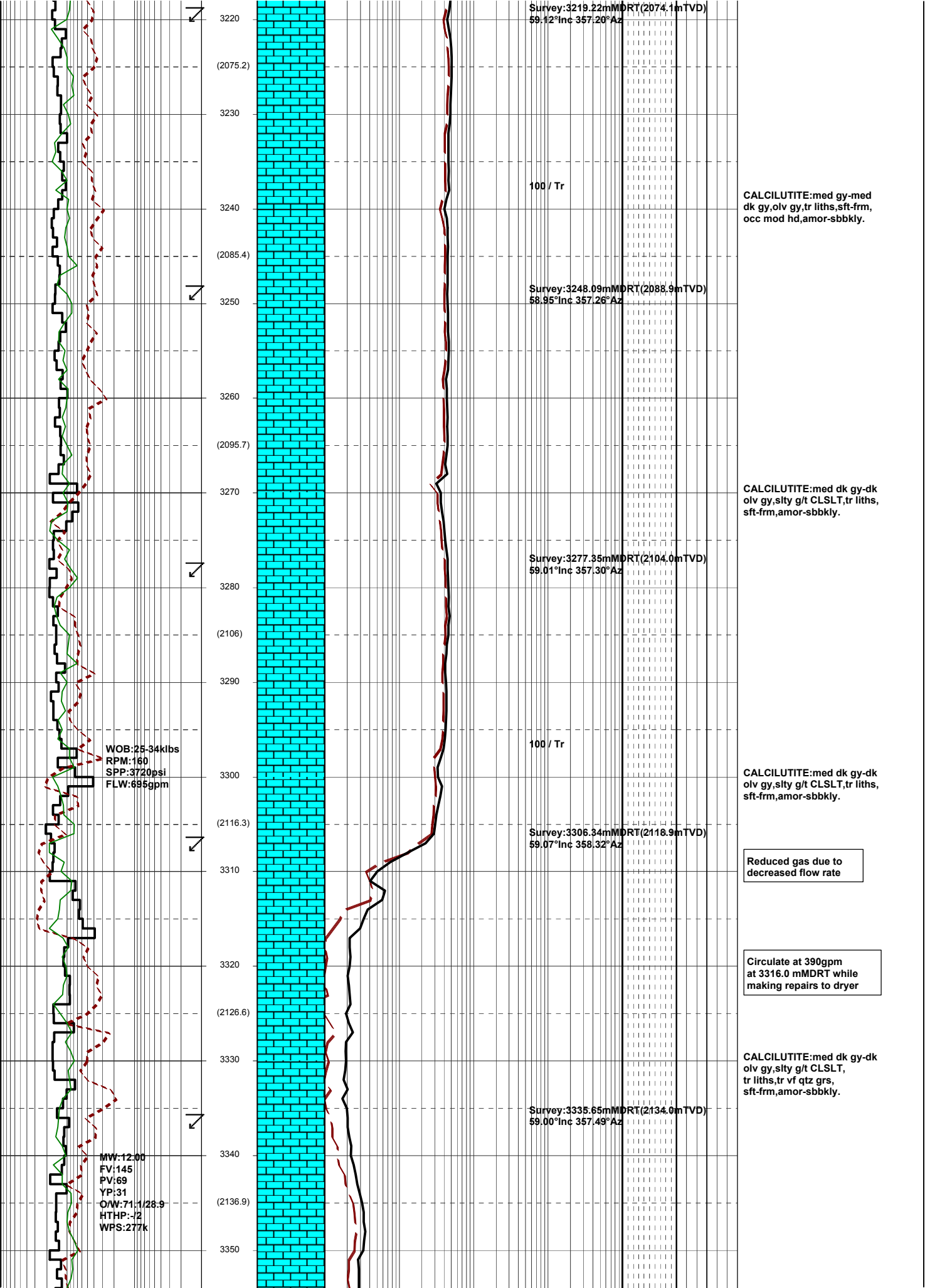
CALCILUTITE:med gy-med
 dk gy,olv gy,tr liths,com carb
 spks,sft frm,sbbkly-blky.

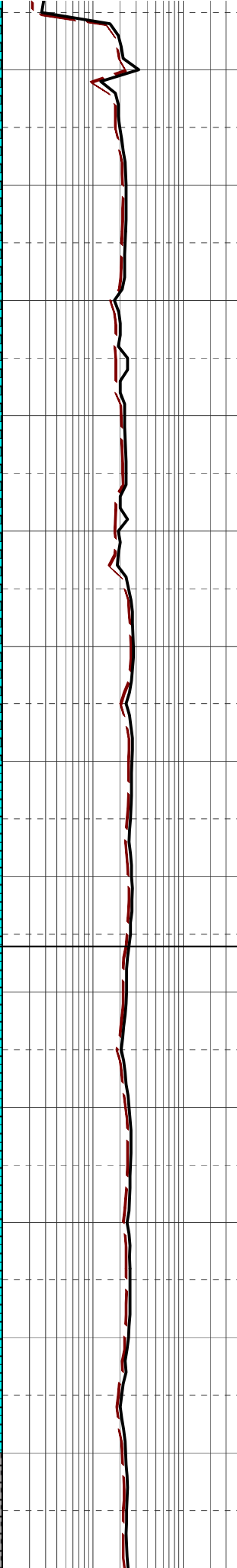
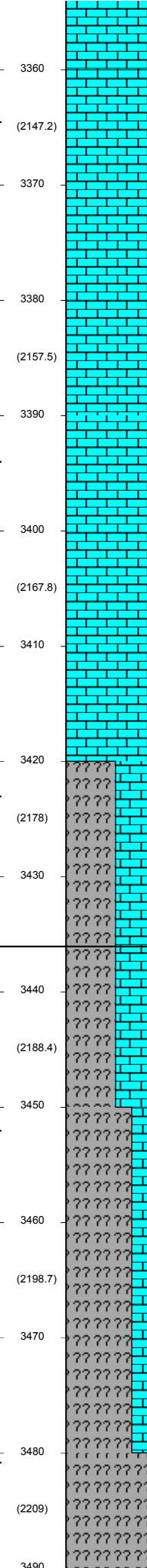
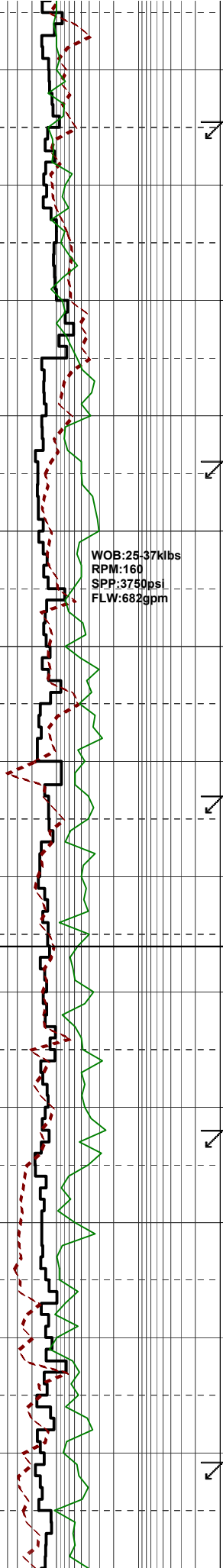
CALCILUTITE:med gy-med
 dk gy,olv gy,tr liths,rr carb
 spks,sft frm,sbbkly-blky.

CALCILUTITE:med gy-med
 dk gy,olv gy,tr liths,tr carb
 spks,tr vf calc grns,sft frm,
 sbbkly-blky.

CALCILUTITE:med gy-med
 dk gy,olv gy,tr liths,tr carb
 spks,sft frm,occ mod hd,
 sbbkly-blky.







Survey: 3364.49mMDRT (2148.8mTVD)
 59.16°Inc 356.73°Az

100 / Tr

Survey: 3393.96mMDRT (2164.0mTVD)
 59.01°Inc 356.33°Az

99 / 1

Survey: 3423.08mMDRT (2179.0mTVD)
 59.01°Inc 356.74°Az

Lakes Entrance Fm:
 3436.0mMDRT 2184.7mTVDRT
 (-2143.7mTVDSS)

Survey: 3452.49mMDRT (2194.1mTVD)
 58.92°Inc 356.58°Az

99 / 1

Survey: 3481.30mMDRT (2209.0mTVD)
 59.03°Inc 357.76°Az

CALCILUTITE: It olv gy, med dk gy, slty g/t CLSLT, tr liths, tr vf qtz grs, pred sft, occ frm, amor-sbbiky.

CALCILUTITE: It olv gy, med dk gy, slty g/t CLSLT, tr liths, tr vf qtz grs, pred sft, occ frm, amor-sbbiky.

CALCILUTITE: It olv gy, med dk gy, slty g/t CLSLT, tr liths, tr vf qtz grs, pred sft, occ frm, amor-sbbiky.

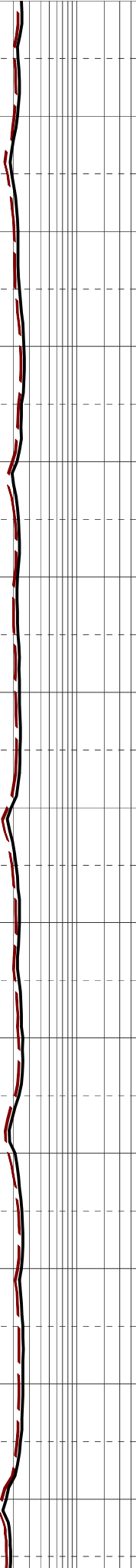
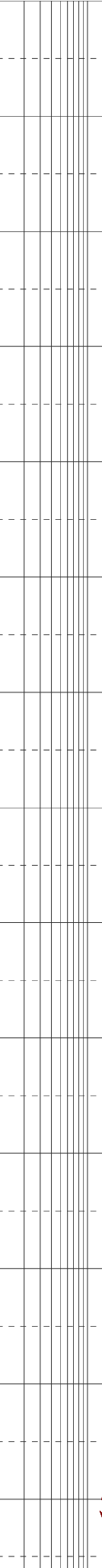
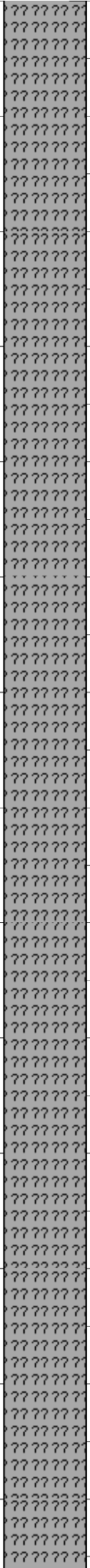
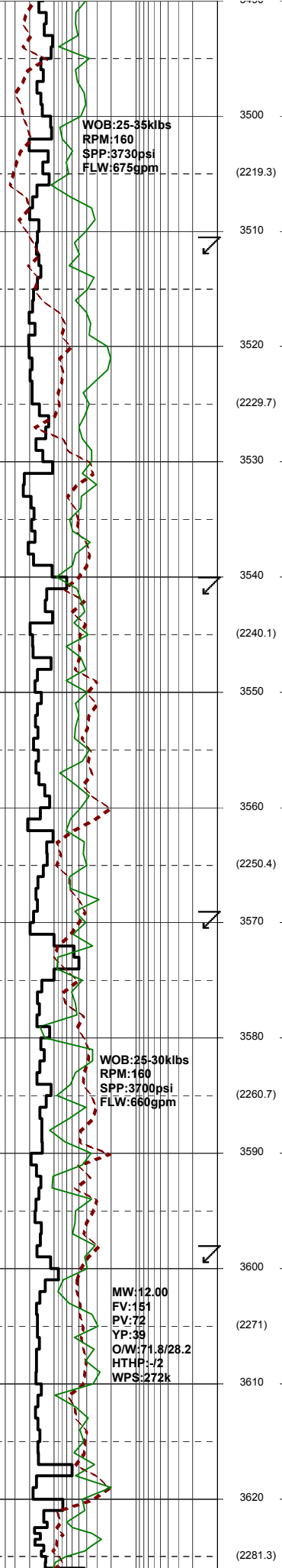
Lakes Entrance Fm:
 3436.0mMDRT 2184.7mTVDRT
 (-2143.7mTVDSS)

CALCILUTITE(40%): It olv gy, med dk gy, slty g/t CLSLT, tr liths, tr vf qtz grs, pred sft, occ frm, amor-sbbiky.

CALCAREOUS CLAYSTONE(60%): med lt gy-lt olv gy, abdt calc g/t CLCLT, tr liths, tr glauc cly, sft, amor-sbbiky.

CALCILUTITE(20%): It olv gy, med dk gy, slty g/t CLSLT, tr liths, tr vf qtz grs, pred sft, occ frm, amor-sbbiky.

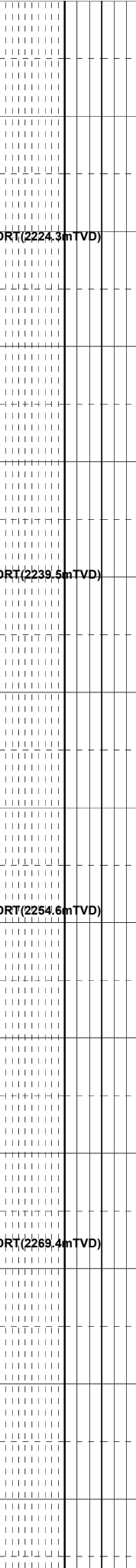
CALCAREOUS CLAYSTONE(80%): med lt gy-lt olv gy, abdt calc g/t CLCLT, tr liths, tr glauc cly, sft, amor-sbbiky.



99 / 1

99 / 1

98 / 2



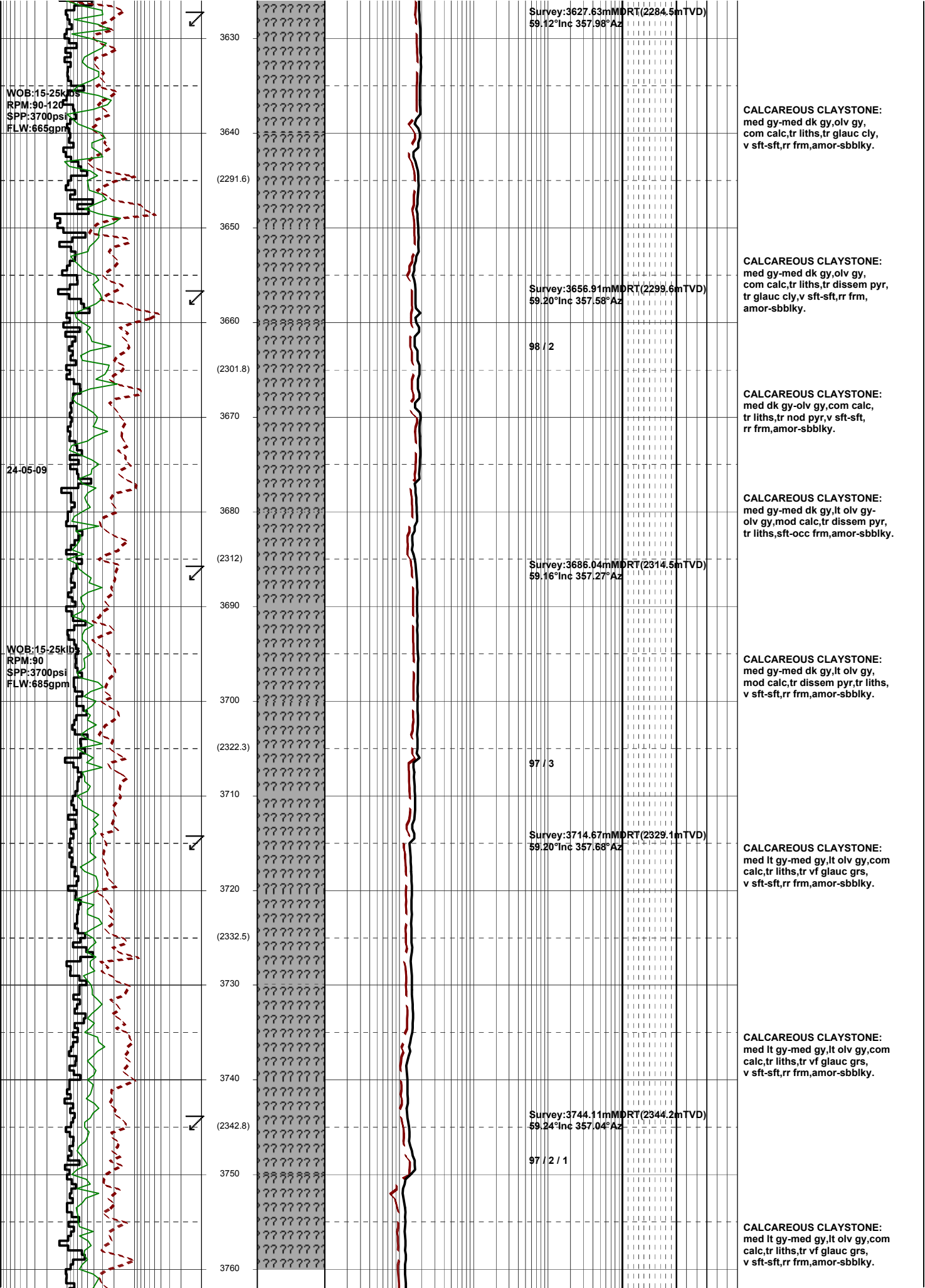
CALCAREOUS CLAYSTONE:
med lt gy-lt olv gy, abdt calc
g/t CLCLT, tr liths, tr glauc cly,
sft, amor-sbbkly.

CALCAREOUS CLAYSTONE:
med lt gy-lt olv gy, abdt calc
g/t CLCLT, tr liths, tr glauc cly,
sft, amor-sbbkly.

CALCAREOUS CLAYSTONE:
med lt gy-med gy, lt olv gy,
com calc, tr liths, tr glauc cly,
sft, amor-sbbkly.

CALCAREOUS CLAYSTONE:
med lt gy-med gy, lt olv gy,
com calc, tr liths, tr glauc cly,
sft-rr frm, amor-sbbkly.

CALCAREOUS CLAYSTONE:
med gy-med dk gy, olv gy,
com calc, tr liths, tr glauc cly,
v sft-sft, mor-sbbkly.



Survey:3627.63mMDRT(2284.5mTVD)
59.12°Inc 357.98°Az

WOB:15-25klbs
RPM:90-120
SPP:3700psi
FLW:665gpm

CALCAREOUS CLAYSTONE:
med gy-med dk gy, olv gy,
com calc, tr liths, tr glauc cly,
v sft-sft, rr frm, amor-sbblky.

Survey:3656.91mMDRT(2299.6mTVD)
59.20°Inc 357.58°Az

24-05-09

CALCAREOUS CLAYSTONE:
med gy-med dk gy, olv gy,
com calc, tr liths, tr dissem pyr,
tr glauc cly, v sft-sft, rr frm,
amor-sbblky.

98 / 2

CALCAREOUS CLAYSTONE:
med dk gy-olv gy, com calc,
tr liths, tr nod pyr, v sft-sft,
rr frm, amor-sbblky.

Survey:3686.04mMDRT(2314.5mTVD)
59.16°Inc 357.27°Az

CALCAREOUS CLAYSTONE:
med gy-med dk gy, lt olv gy-
olv gy, mod calc, tr dissem pyr,
tr liths, sft-occ frm, amor-sbblky.

97 / 3

CALCAREOUS CLAYSTONE:
med gy-med dk gy, lt olv gy,
mod calc, tr dissem pyr, tr liths,
v sft-sft, rr frm, amor-sbblky.

Survey:3714.67mMDRT(2329.1mTVD)
59.20°Inc 357.68°Az

CALCAREOUS CLAYSTONE:
med lt gy-med gy, lt olv gy, com
calc, tr liths, tr vf glauc grs,
v sft-sft, rr frm, amor-sbblky.

Survey:3744.11mMDRT(2344.2mTVD)
59.24°Inc 357.04°Az

CALCAREOUS CLAYSTONE:
med lt gy-med gy, lt olv gy, com
calc, tr liths, tr vf glauc grs,
v sft-sft, rr frm, amor-sbblky.

97 / 2 / 1

CALCAREOUS CLAYSTONE:
med lt gy-med gy, lt olv gy, com
calc, tr liths, tr vf glauc grs,
v sft-sft, rr frm, amor-sbblky.

