



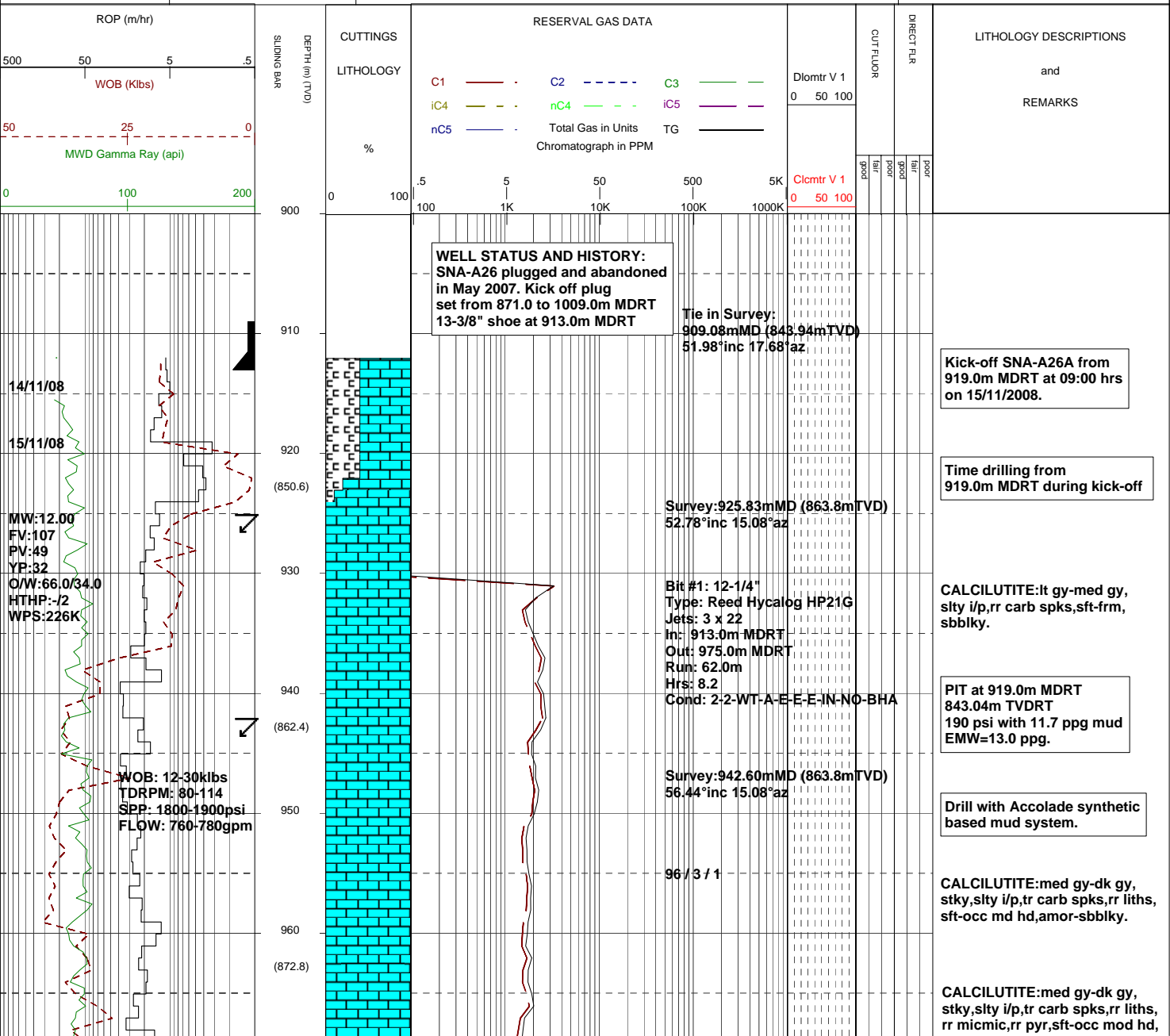
# MASTERLOG

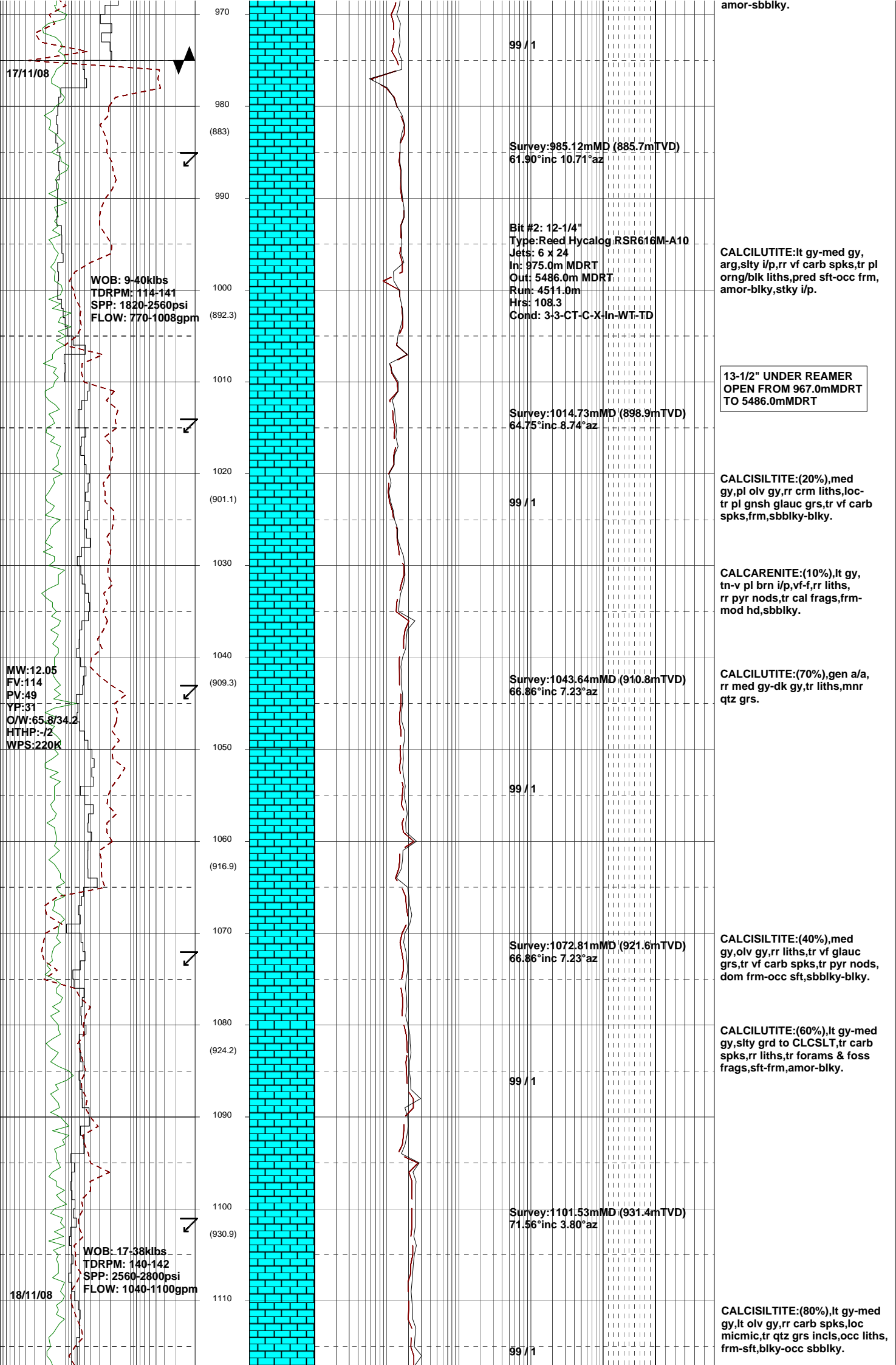
## Snapper A26A

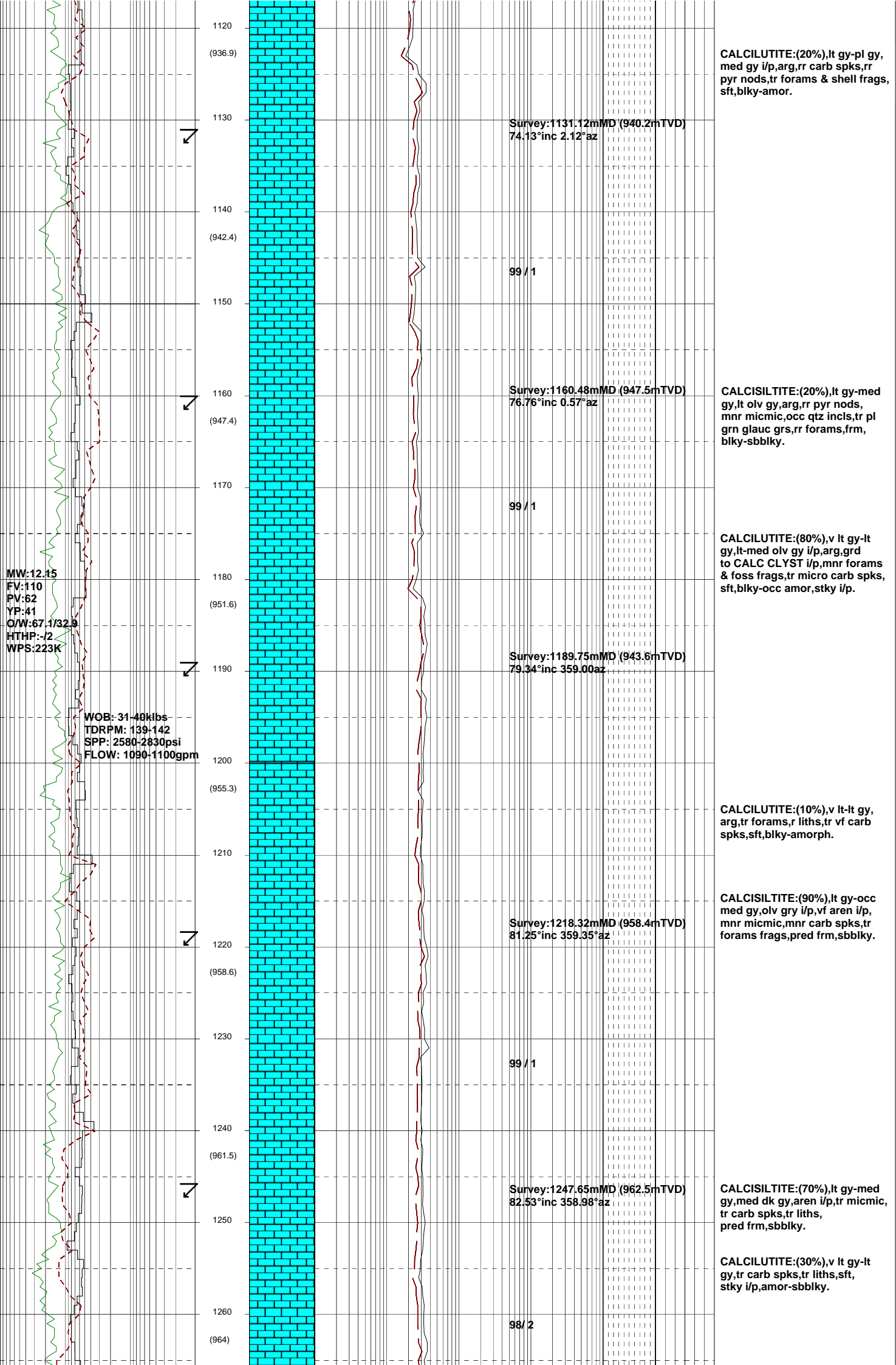


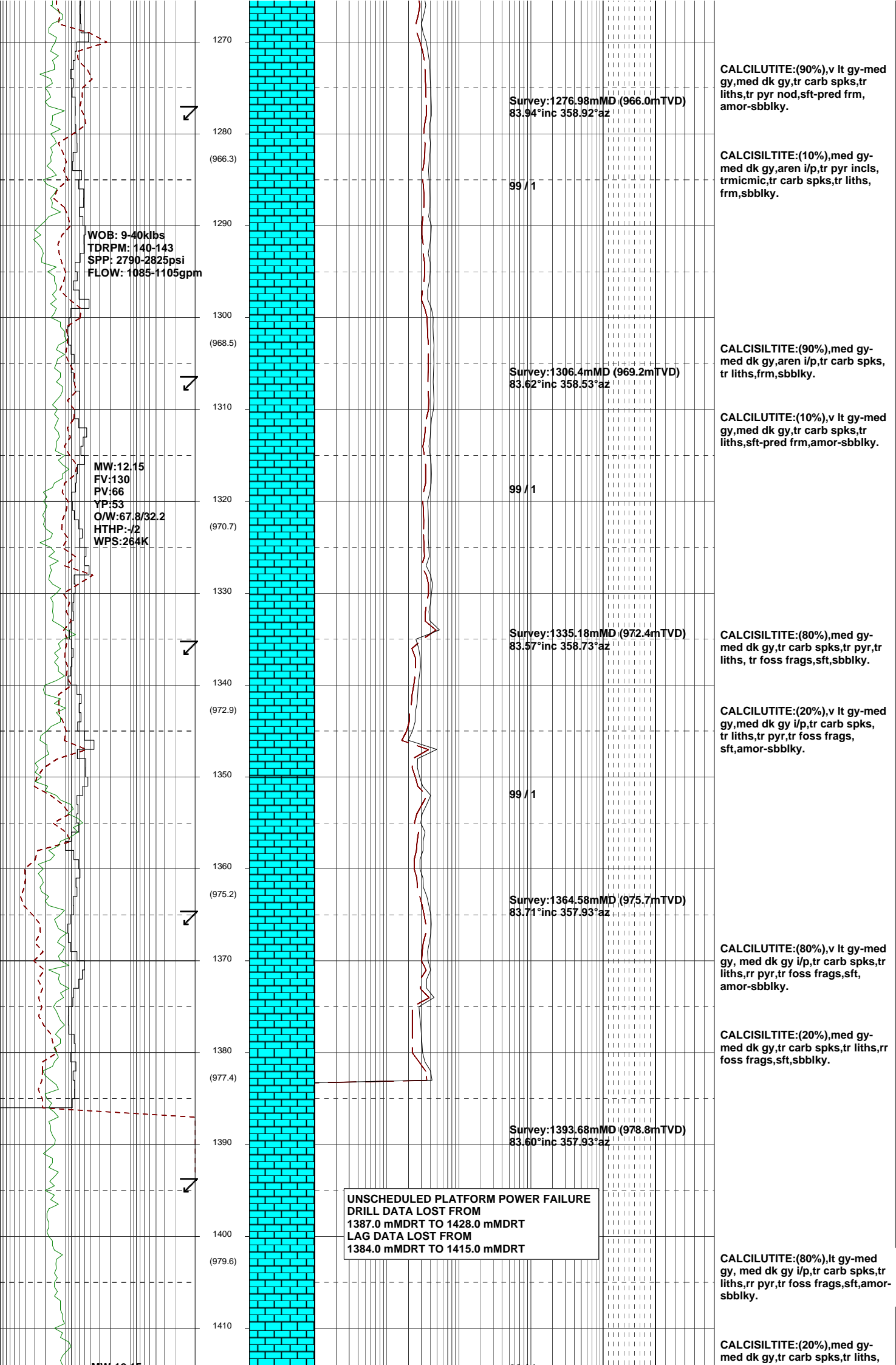
GENERAL	SURFACE POSITION	HOLE / CASING INFO	DATE / DEPTH	ENGINEERS
Country : AUSTRALIA	Longitude :148°01'31.906" E	12-1/4"x13-1/2" Hole to 5486.0m MDRT	Kick off Date: 15/11/2008	Mark Smith
Permit : VIC / L10	Latitude : 38°11'37.774" S	9-1/2" Hole to	Total Depth Data:	Michael Andrews
Field : MOONFISH	MGA Co-ord X :589802.39 mE	13-3/8" Surface Csg at 913.0m MDRT	Total Depth:	Phil Rady
Basin : GIPPSLAND	MGA Co-ord Y : 5772182.25 mN	10-3/4" Csg Shoe at 5482.9m MDRT	True Vertical Depth:	Colin Chadwick
Well Type :DEVELOPMENT	RT to MSL : 41.68 m	7" Csg Shoe at	Log Scale : 1/ 500	Daniel Dennis
Rig Name : Nabors 175	RT to Sea Bed : 96.68 m	7" Liner Lap at		Craig Eberhards
				Gareth Munro

ABBREVIATIONS	ENGINEERING LEGEND																																								
<table style="width: 100%;"> <tr> <td>MW Mud Weight</td> <td>WOB</td> </tr> <tr> <td>FV Funnel Viscosity</td> <td>RPM Rotations Per Min</td> </tr> <tr> <td>PV Plastic Viscosity</td> <td>FLW Flow Rate (gpm)</td> </tr> <tr> <td>YP Yield Point</td> <td>SPP Pump Pressure (psi)</td> </tr> <tr> <td>OW Oil/Water Ratio</td> <td>RR Re-Run Bit</td> </tr> <tr> <td>WPS Aq. Phase Salinity</td> <td>TG Trip Gas</td> </tr> <tr> <td>HPHT Fluid Loss</td> <td>CG Connection Gas</td> </tr> <tr> <td>Cl Chlorides</td> <td>BG</td> </tr> <tr> <td>Incl Inclination</td> <td>DGP</td> </tr> <tr> <td>Az Azimuth</td> <td>MM</td> </tr> </table>	MW Mud Weight	WOB	FV Funnel Viscosity	RPM Rotations Per Min	PV Plastic Viscosity	FLW Flow Rate (gpm)	YP Yield Point	SPP Pump Pressure (psi)	OW Oil/Water Ratio	RR Re-Run Bit	WPS Aq. Phase Salinity	TG Trip Gas	HPHT Fluid Loss	CG Connection Gas	Cl Chlorides	BG	Incl Inclination	DGP	Az Azimuth	MM	<table style="width: 100%;"> <tr> <td> Claystone</td> <td> Marl</td> <td> Bryozoa</td> <td> Glauconite</td> </tr> <tr> <td> Siltstone</td> <td> Limestone</td> <td> Radiolariae</td> <td> Pyrite</td> </tr> <tr> <td> Sandstone</td> <td> Dolomite</td> <td> Echinoids</td> <td></td> </tr> <tr> <td> Shale</td> <td> Coal</td> <td> Foraminiferae</td> <td></td> </tr> <tr> <td> Conglomerate</td> <td> Volcanic</td> <td> Cement</td> <td></td> </tr> </table>	Claystone	Marl	Bryozoa	Glauconite	Siltstone	Limestone	Radiolariae	Pyrite	Sandstone	Dolomite	Echinoids		Shale	Coal	Foraminiferae		Conglomerate	Volcanic	Cement	
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1270  
1280  
(966.3)  
1290  
1300  
(968.5)  
1310  
1320  
(970.7)  
1330  
1340  
(972.9)  
1350  
1360  
(975.2)  
1370  
1380  
(977.4)  
1390  
1400  
(979.6)  
1410

WOB: 9-40kibs  
TDRPM: 140-143  
SPP: 2790-2825psi  
FLOW: 1085-1105gpm

MW: 12.15  
FV: 130  
PV: 66  
YP: 53  
O/W: 67.8/32.2  
HTHP: -/2  
WPS: 264K

Survey: 1276.98mMD (966.0mTVD)  
83.94°inc 358.92°az

99 / 1

Survey: 1306.4mMD (969.2mTVD)  
83.62°inc 358.53°az

99 / 1

Survey: 1335.18mMD (972.4mTVD)  
83.57°inc 358.73°az

99 / 1

Survey: 1364.58mMD (975.7mTVD)  
83.71°inc 357.93°az

Survey: 1393.68mMD (978.8mTVD)  
83.60°inc 357.93°az

**UNSCHEDULED PLATFORM POWER FAILURE  
DRILL DATA LOST FROM  
1387.0 mMDRT TO 1428.0 mMDRT  
LAG DATA LOST FROM  
1384.0 mMDRT TO 1415.0 mMDRT**

**CALCILUTITE:(90%),v lt gy-med gy,med dk gy,tr carb spks,tr liths,tr pyr nod,sft-pred frm, amor-sbblky.**

**CALCISILTITE:(10%),med gy-med dk gy,aren i/p,tr pyr incl, trmicmic,tr carb spks,tr liths, frm,sbblky.**

**CALCISILTITE:(90%),med gy-med dk gy,aren i/p,tr carb spks, tr liths,frm,sbblky.**

**CALCILUTITE:(10%),v lt gy-med gy,med dk gy,tr carb spks,tr liths,sft-pred frm,amor-sbblky.**

**CALCISILTITE:(80%),med gy-med dk gy,tr carb spks,tr pyr,tr liths, tr foss frags,sft,sbblky.**

**CALCILUTITE:(20%),v lt gy-med gy,med dk gy i/p,tr carb spks, tr liths,tr pyr,tr foss frags, sft,amor-sbblky.**

**CALCILUTITE:(80%),v lt gy-med gy, med dk gy i/p,tr carb spks,tr liths,rr pyr,tr foss frags,sft, amor-sbblky.**

**CALCISILTITE:(20%),med gy-med dk gy,tr carb spks,tr liths,rr foss frags,sft,sbblky.**

**CALCILUTITE:(80%),lt gy-med gy, med dk gy i/p,tr carb spks,tr liths,rr pyr,tr foss frags,sft,amor-sbblky.**

**CALCISILTITE:(20%),med gy-med dk gy,tr carb spks,tr liths,**

MW:12.15  
FV:123  
PV:68  
YP:52  
OW:66.7/33.3  
HTHP:-/2  
WPS:249K

(981.8)

99 / 1  
Survey:1423.26mMD (982.2mTVD)  
83.48°inc 357.72°az

rr foss frags,sft,sbblky.  
CALCILUTITE:(90%),lt gy-med  
gy,med dk gy i/p,slty i/p,tr  
carb spks,tr liths,rr pyr,rr foss  
frags,sft,amor-sbblky.

UNDESCHEDULATED PLATFORM POWER FAILURE  
DRILL DATA LOST FROM  
1434.0 mMDRT TO 1442.0 mMDRT  
LAG DATA LOST FROM  
1420.0 mMDRT TO 1442.0 mMDRT

1430

CALCISILTITE:(10%),med gy-  
med dk gy,tr carb spks,tr liths,  
sft,sbblky.

1440

(984.1)

Survey:1451.95mMD (985.46mTVD)  
83.51°inc 357.71°az

CALCILUTITE:(10%),lt gy-med  
gy,med dk gy i/p,slty i/p,tr  
carb spks,tr liths,rr pyr,rr foss  
frags,sft,amor-sbblky.

UNDESCHEDULATED PLATFORM POWER FAILURE  
DRILL DATA LOST FROM  
1451.0 mMDRT TO 1472.0 mMDRT  
LAG DATA LOST FROM  
1449.0 mMDRT TO 1468.0 mMDRT

1460

(986.3)

CALCISILTITE:(90%),med gy-  
med dk gy,tr carb spks,tr  
liths,sft,sbblky.

1470

99 / 1

CALCISILTITE:(90%),med gy-  
med dk gy,tr carb spks,tr liths,  
tr pyr,sft,sbblky.

1480

(988.5)

Survey:1481.51mMD (988.7mTVD)  
83.91°inc 357.91°az

CALCILUTITE:(10%),lt gy-med  
gy,med dk gy i/p,slty i/p,tr carb  
spks,tr liths,rr pyr,sft,amor-  
sbblky.

WOB: 26-35klbs  
TDRPM: 120-141  
SPP: 2865-3110psi  
FLOW: 1100-1115gpm

1500

(990.7)

CALCISILTITE:(90%),med gy-  
med dk gy,tr-rr carb spks,tr  
liths,tr pyr,sft,tr lse qtz grs,  
frm-mod hd,sbblky.

1510

Survey:1510.51mMD (991.8mTVD)  
83.63°inc 358.20°az

CALCILUTITE:(10%),lt gy-med  
gy,med dk gy i/p,tr carb spks,  
tr liths,sft,amor-sbblky.

1520

(992.9)

99 / 1

CALCISILTITE:med gy,lt olv  
gy,med-dk gy i/p,rr carb spks,  
tr wh calc liths,sft-frm,  
sbblky-loc sbfiss.

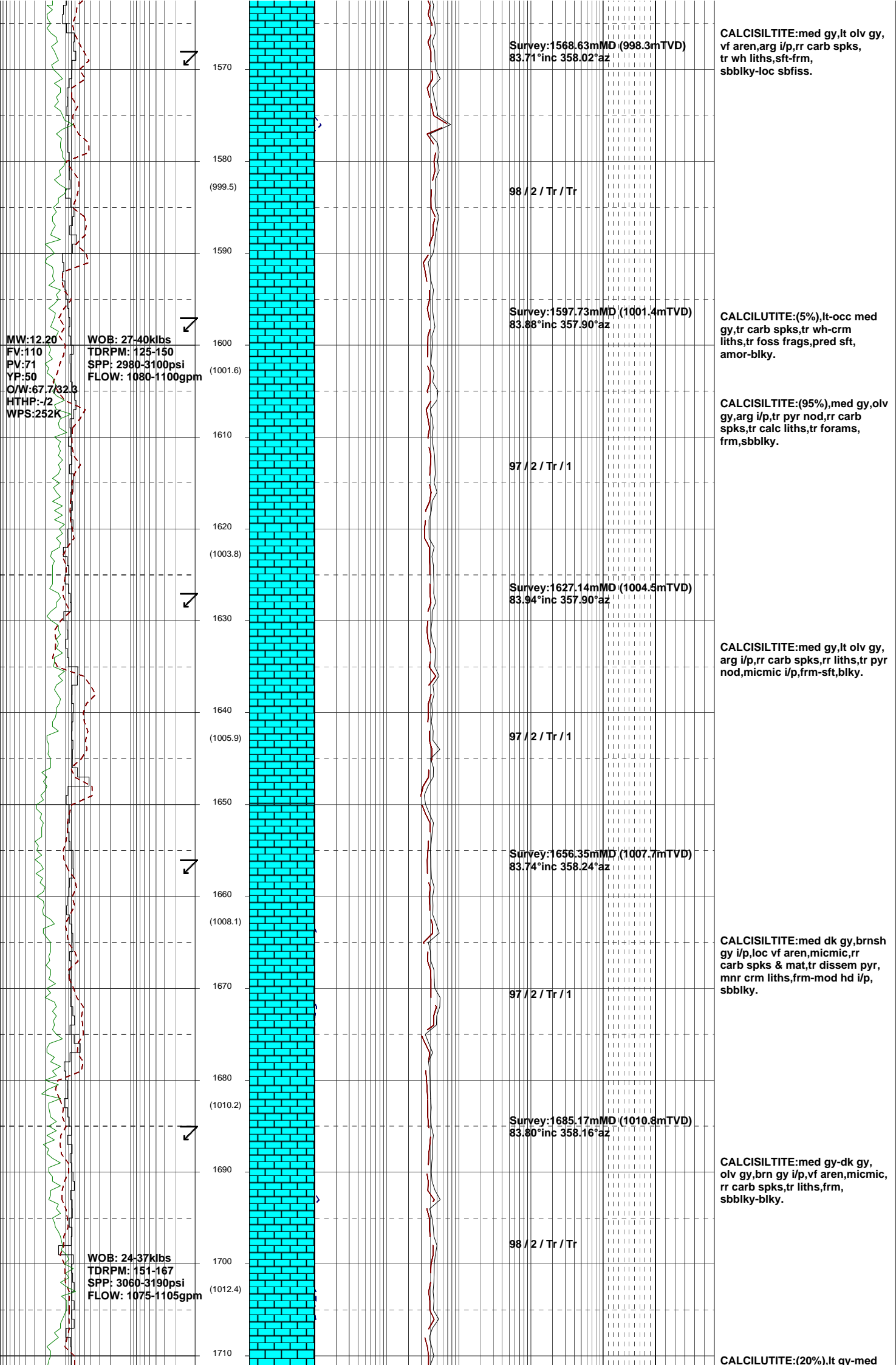
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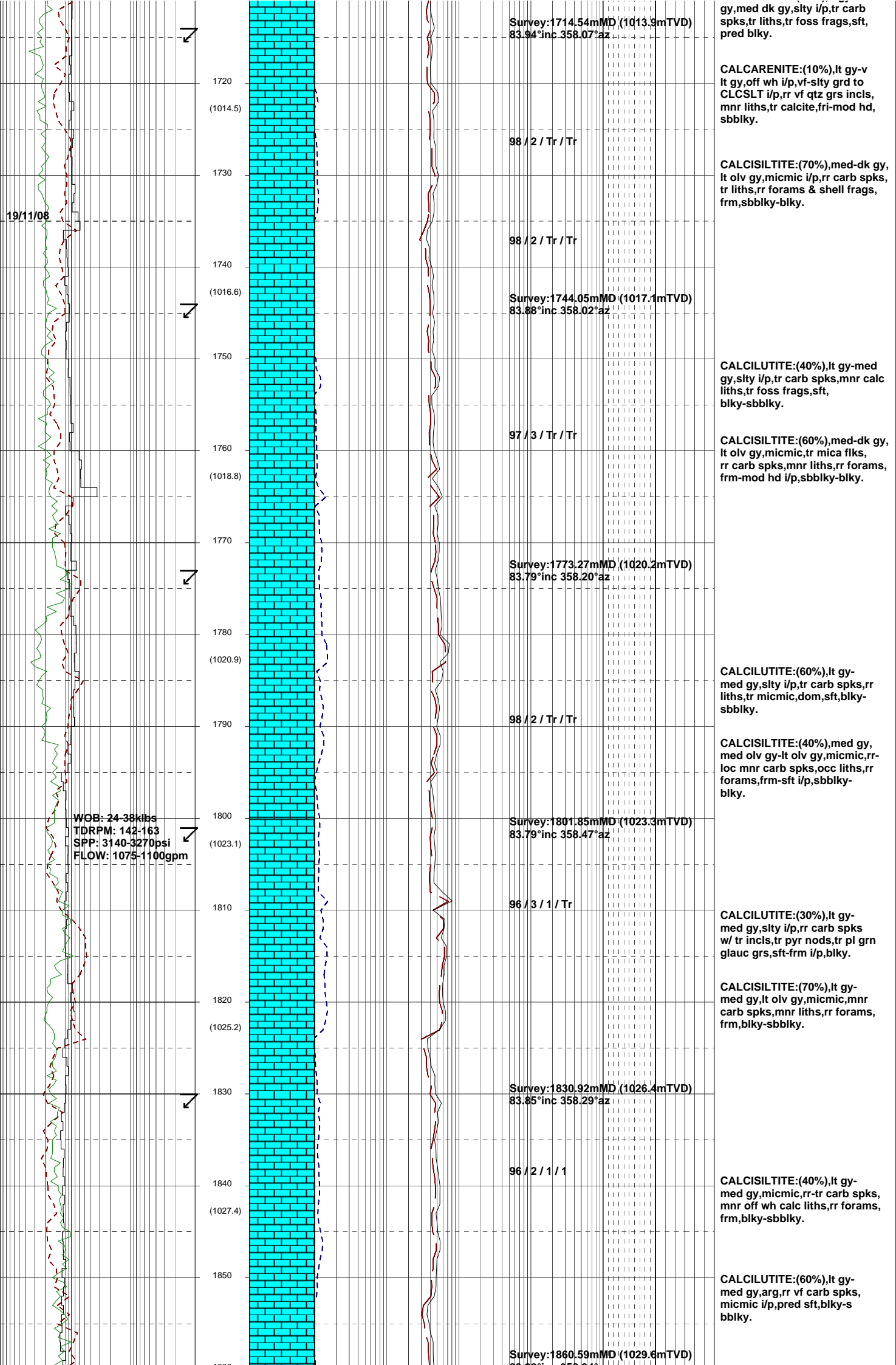
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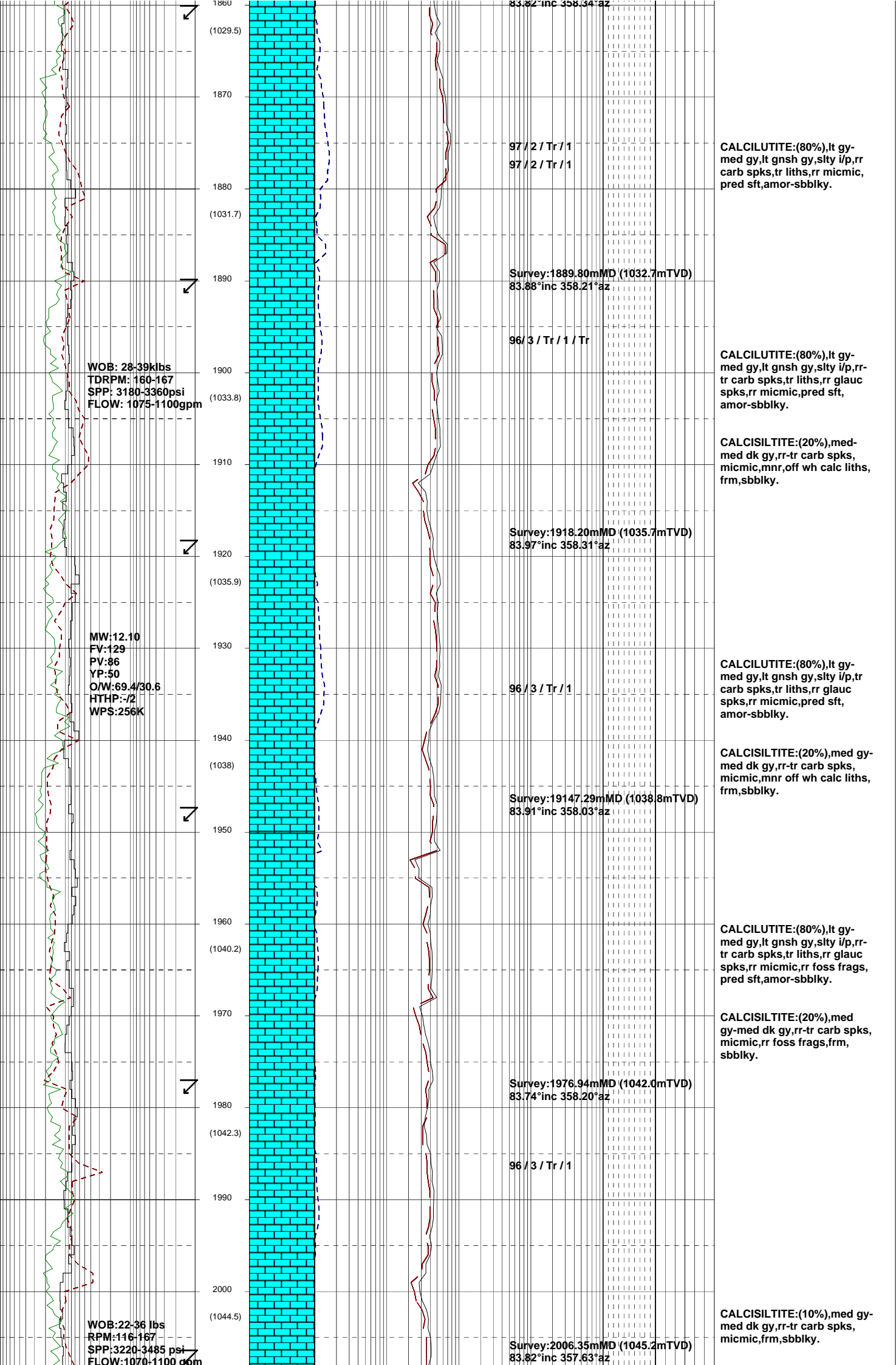
Survey:1539.79mMD (995.1mTVD)  
83.65°inc 357.99°az

98 / 2 / Tr / Tr

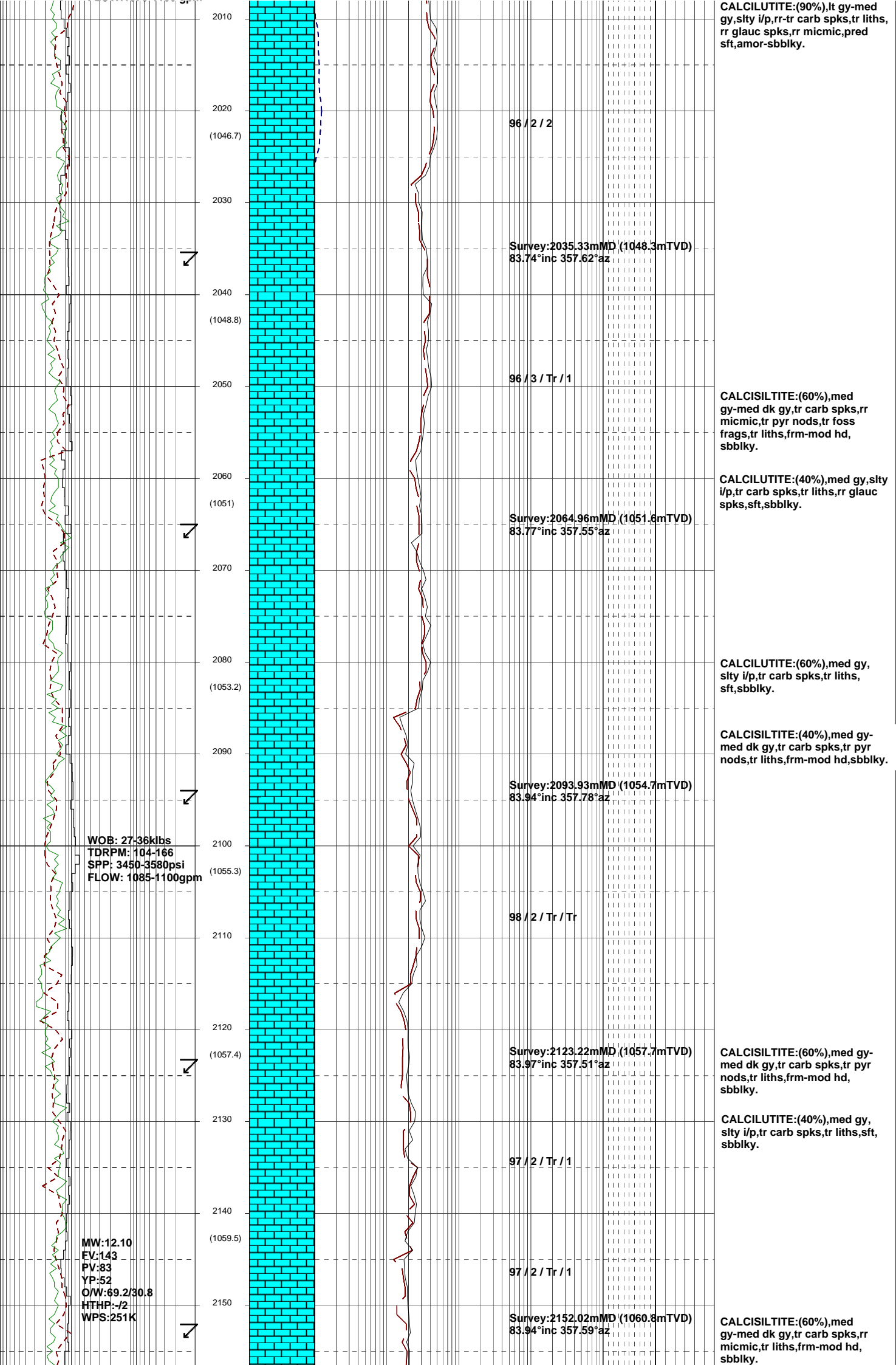
1560











2010  
(1046.7)  
2020  
2030  
2040  
(1048.8)  
2050  
2060  
(1051)  
2070  
2080  
(1053.2)  
2090  
2100  
(1055.3)  
2110  
2120  
(1057.4)  
2130  
2140  
(1059.5)  
2150

96 / 2 / 2

Survey:2035.33mMD (1048.3mTVD)  
83.74°inc 357.62°az

96 / 3 / Tr / 1

Survey:2064.96mMD (1051.6mTVD)  
83.77°inc 357.55°az

Survey:2093.93mMD (1054.7mTVD)  
83.94°inc 357.78°az

98 / 2 / Tr / Tr

Survey:2123.22mMD (1057.7mTVD)  
83.97°inc 357.51°az

97 / 2 / Tr / 1

97 / 2 / Tr / 1

Survey:2152.02mMD (1060.8mTVD)  
83.94°inc 357.59°az

CALCILUTITE:(90%),lt gy-med gy,silty i/p,rr-tr carb spks,tr liths, rr glauc spks,rr micmic,pred sft,amor-sbbkly.

CALCISILTITE:(60%),med gy-med dk gy,tr carb spks,rr micmic,tr pyr nods,tr foss frags,tr liths,frm-mod hd, sbbkly.

CALCILUTITE:(40%),med gy,silty i/p,tr carb spks,tr liths,rr glauc spks,sft,sbbkly.

CALCILUTITE:(60%),med gy, silty i/p,tr carb spks,tr liths, sft,sbbkly.

CALCISILTITE:(40%),med gy-med dk gy,tr carb spks,tr pyr nods,tr liths,frm-mod hd,sbbkly.

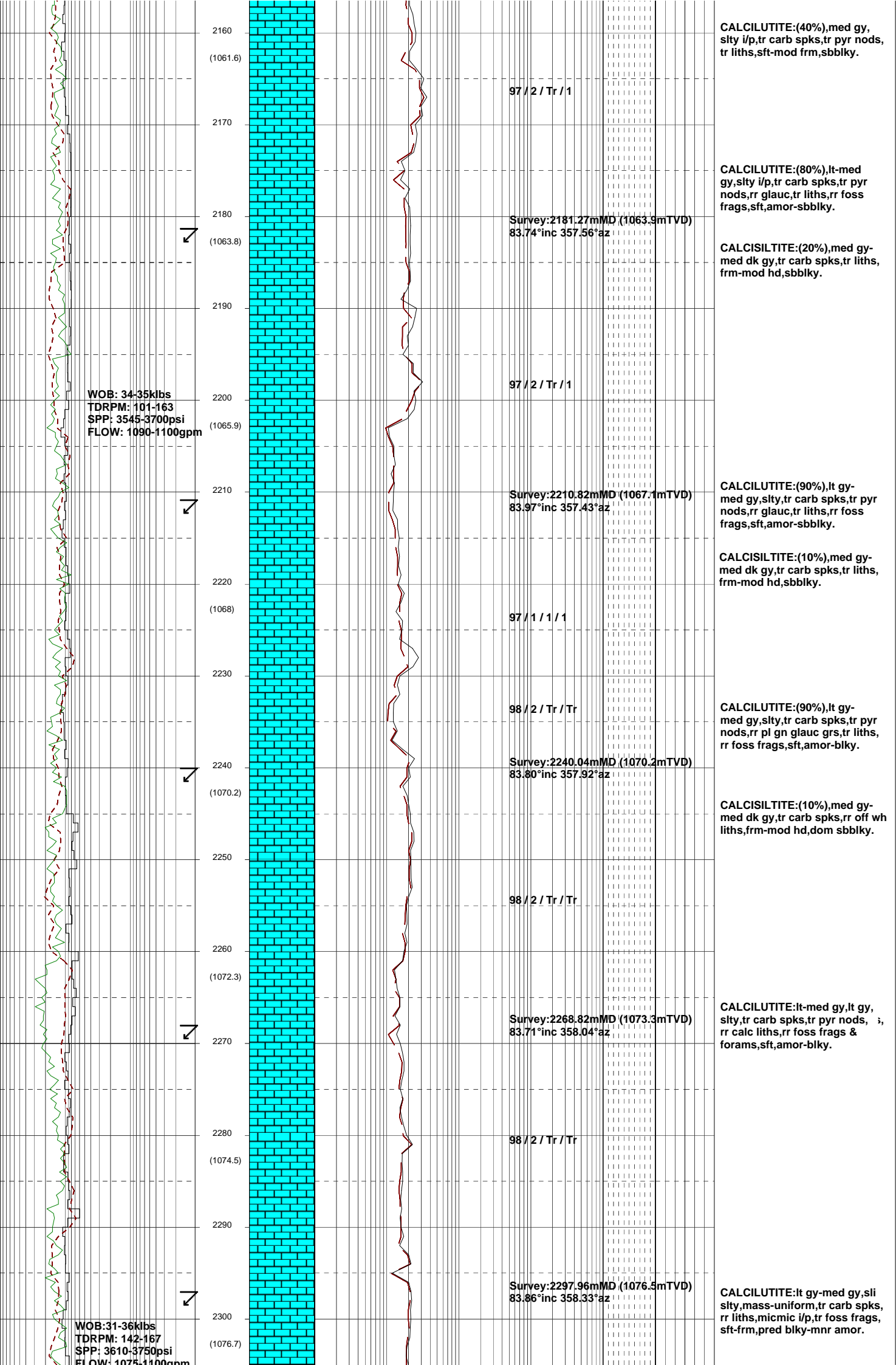
CALCISILTITE:(60%),med gy-med dk gy,tr carb spks,tr pyr nods,tr liths,frm-mod hd, sbbkly.

CALCILUTITE:(40%),med gy, silty i/p,tr carb spks,tr liths,sft, sbbkly.

CALCISILTITE:(60%),med gy-med dk gy,tr carb spks,rr micmic,tr liths,frm-mod hd, sbbkly.

WOB: 27-36klbs  
TDRPM: 104-166  
SPP: 3450-3580psi  
FLOW: 1085-1100gpm

MW:12.10  
EV:143  
PV:83  
YP:52  
O/W:69.2/30.8  
HTHP:-/2  
WPS:251K



2160  
(1061.6)  
2170  
2180  
(1063.8)  
2190  
2200  
(1065.9)  
2210  
2220  
(1068)  
2230  
2240  
(1070.2)  
2250  
2260  
(1072.3)  
2270  
2280  
(1074.5)  
2290  
2300  
(1076.7)

WOB: 34-35klbs  
TDRPM: 101-163  
SPP: 3545-3700psi  
FLOW: 1090-1100gpm

WOB: 31-36klbs  
TDRPM: 142-167  
SPP: 3610-3750psi  
FLOW: 1075-1100gpm

97 / 2 / Tr / 1

Survey: 2181.27m MD (1063.3m TVD)  
83.74° inc 357.56° az

97 / 2 / Tr / 1

Survey: 2210.82m MD (1067.1m TVD)  
83.97° inc 357.43° az

97 / 1 / 1 / 1

98 / 2 / Tr / Tr

Survey: 2240.04m MD (1070.2m TVD)  
83.80° inc 357.92° az

98 / 2 / Tr / Tr

Survey: 2268.82m MD (1073.3m TVD)  
83.71° inc 358.04° az

98 / 2 / Tr / Tr

Survey: 2297.96m MD (1076.5m TVD)  
83.86° inc 358.33° az

CALCILUTITE:(40%),med gy, slty i/p, tr carb spks, tr pyr nods, tr liths, sft-mod frm, sbblky.

CALCILUTITE:(80%),lt-med gy, slty i/p, tr carb spks, tr pyr nods, rr glauc, tr liths, rr foss frags, sft, amor-sbblky.

CALCISILTITE:(20%),med gy-med dk gy, tr carb spks, tr liths, frm-mod hd, sbblky.

CALCILUTITE:(90%),lt gy-med gy, slty, tr carb spks, tr pyr nods, rr glauc, tr liths, rr foss frags, sft, amor-sbblky.

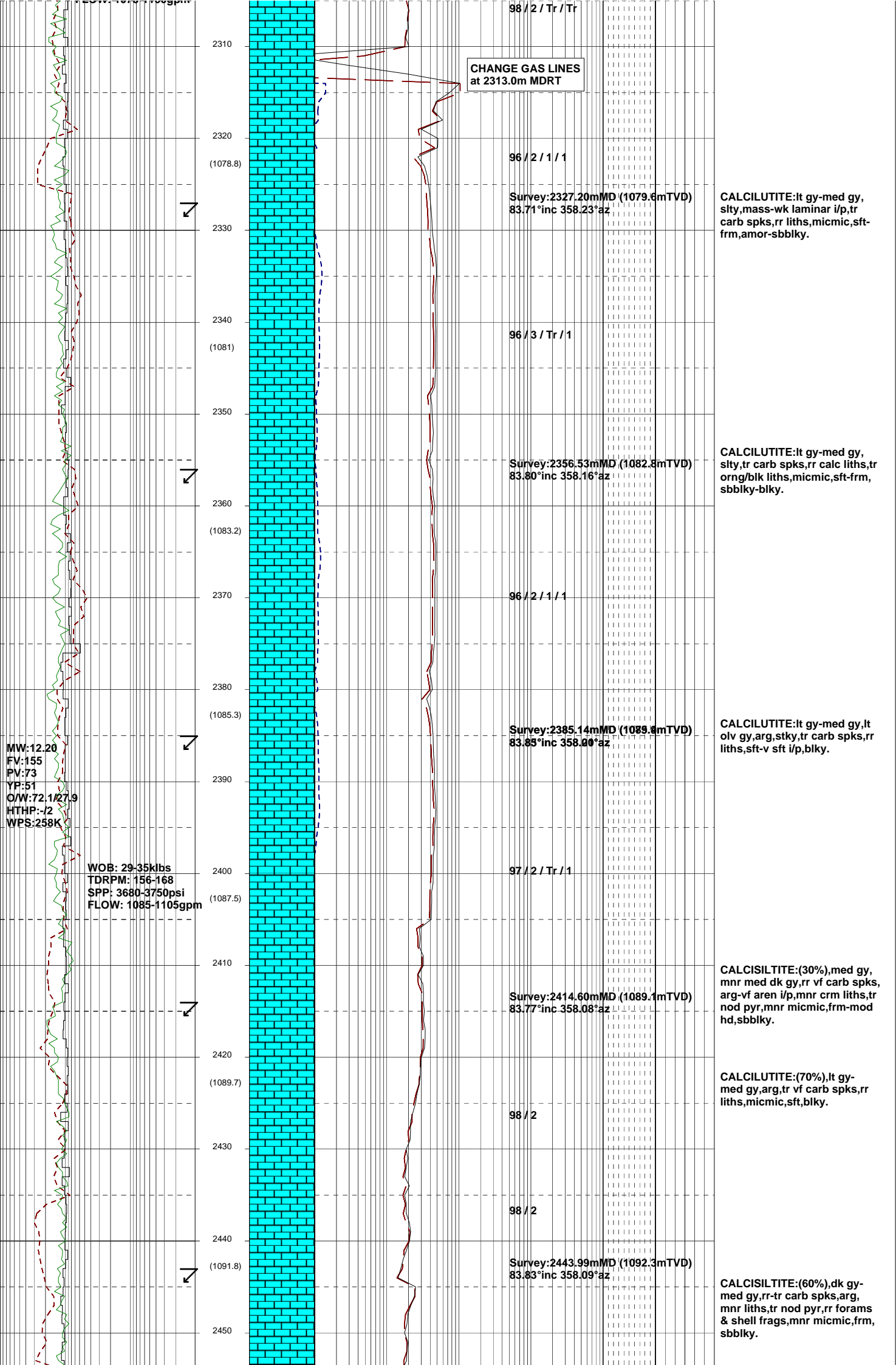
CALCISILTITE:(10%),med gy-med dk gy, tr carb spks, tr liths, frm-mod hd, sbblky.

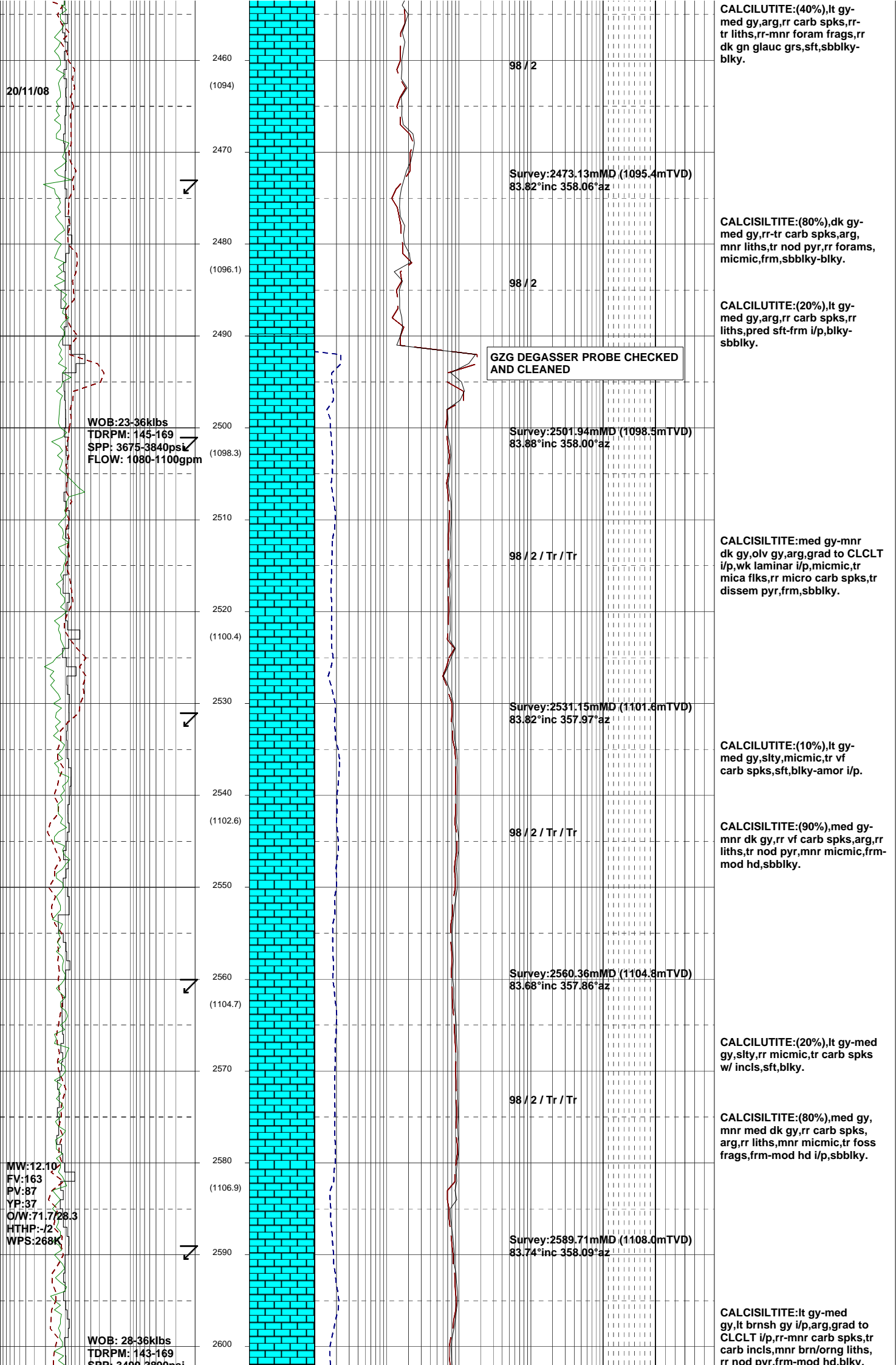
CALCILUTITE:(90%),lt gy-med gy, slty, tr carb spks, tr pyr nods, rr pl gn glauc grs, tr liths, rr foss frags, sft, amor-blky.

CALCISILTITE:(10%),med gy-med dk gy, tr carb spks, rr off wh liths, frm-mod hd, dom sbblky.

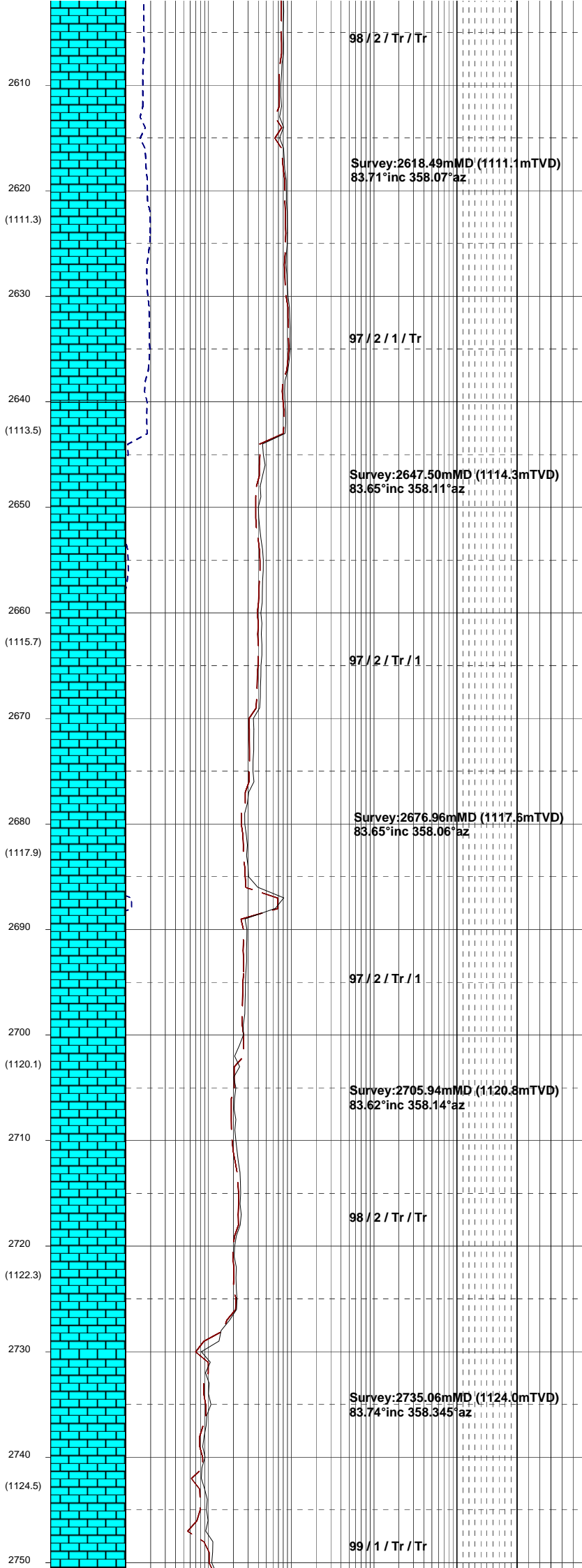
CALCILUTITE:lt-med gy, lt gy, slty, tr carb spks, tr pyr nods, rr calc liths, rr foss frags & forams, sft, amor-blky.

CALCILUTITE:lt gy-med gy, sli slty, mass-uniform, tr carb spks, rr liths, micmic i/p, tr foss frags, sft-frm, pred blky-mnr amor.





SPP: 3450-3650psi  
FLOW: 1030-1100gpm



**CALCILUTITE:(60%),lt gy,  
med lt gy,tr carb spks,tr liths,  
rr foss frags,sft,sbbiky.**

**CALCISILTITE:(40%),med gy,  
med dk gy i/p,arg i/p,mnr carb  
spks,frm-mod hd,sbbiky.**

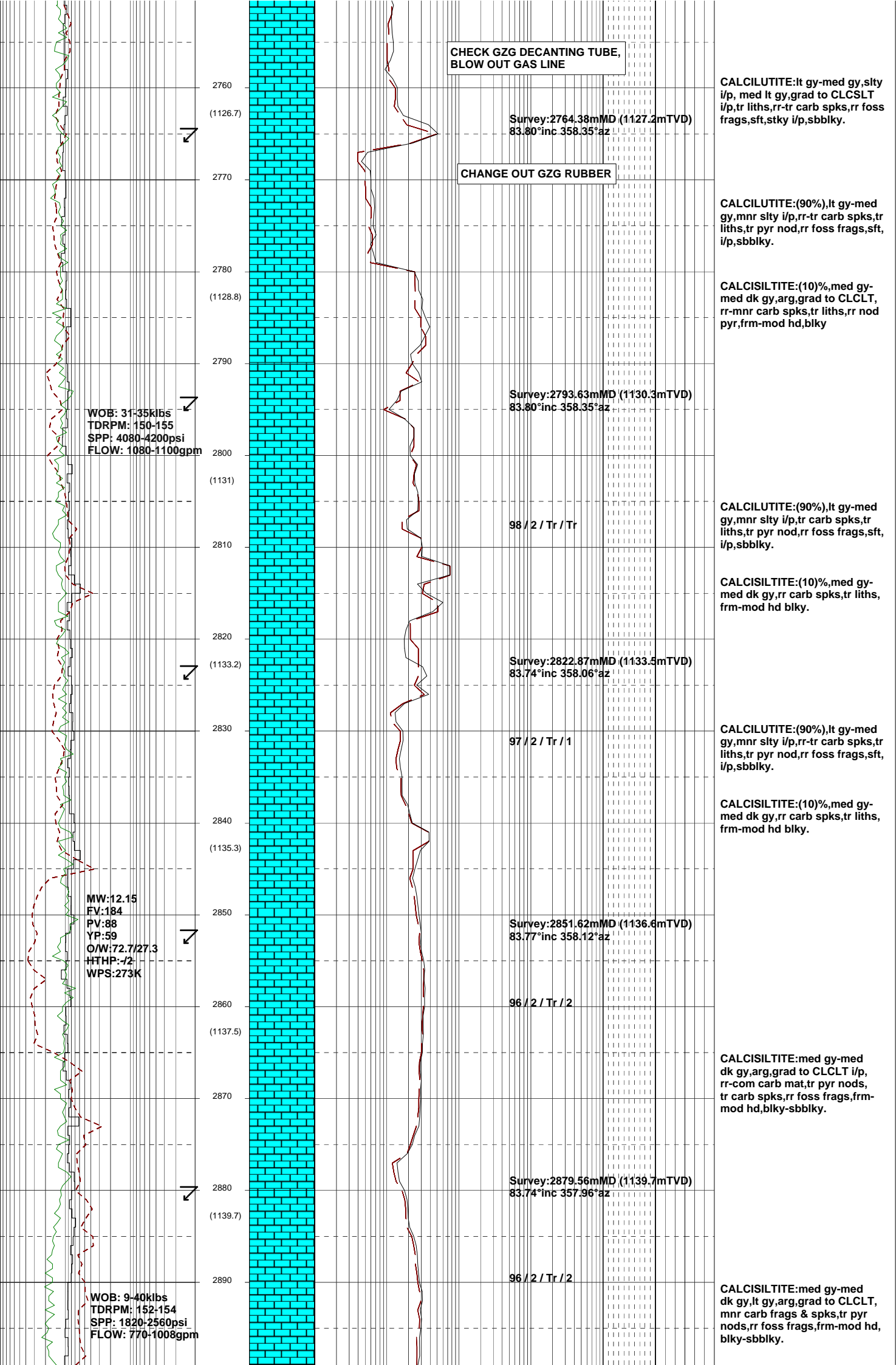
**CALCISILTITE:med gy-med  
dk gy, arg,grad to CLCLT i/p,  
rr carb spks,tr liths,rr nod pyr,  
frm-mod hd,blky**

**CALCILUTITE:lt gy-med gy,  
tr slty i/p,rr-tr carb spks,tr  
liths,rr foss frags,sft,stky i/p,  
sbbiky.**

**CALCILUTITE:lt gy-med gy,  
slty i/p, med lt gy,rr-tr carb  
spks,tr liths,rr foss frags,sft,  
stky i/p,sbbiky.**

**CALCILUTITE:lt gy-med gy,  
slty i/p, med lt gy,rr-tr carb  
spks,tr liths,rr foss frags,sft,  
stky i/p,sbbiky.**

WOB:28-44 klbs  
RPM:100-150  
SPP:3800-4100psi  
FLOW:1080-1100gpm



2760  
(1126.7)

CHECK GZG DECANTING TUBE,  
BLOW OUT GAS LINE

Survey:2764.38mMD (1127.2mTVD)  
83.80°inc 358.35°az

CALCILUTITE:lt gy-med gy,silty  
i/p, med lt gy,grad to CLCSLT  
i/p,tr liths,rr-tr carb spks,rr foss  
frags,sft,stkly i/p,sbblky.

2770

CHANGE OUT GZG RUBBER

CALCILUTITE:(90%),lt gy-med  
gy,mnr silty i/p,rr-tr carb spks,tr  
liths,tr pyr nod,rr foss frags,sft,  
i/p,sbblky.

2780  
(1128.8)

CALCISILTITE:(10%),med gy-  
med dk gy,arg,grad to CLCLT,  
rr-mnr carb spks,tr liths,rr nod  
pyr,frm-mod hd,blky

2790

Survey:2793.63mMD (1130.3mTVD)  
83.80°inc 358.35°az

WOB: 31-35klbs  
TDRPM: 150-155  
SPP: 4080-4200psi  
FLOW: 1080-1100gpm

CALCILUTITE:(90%),lt gy-med  
gy,mnr silty i/p,tr carb spks,tr  
liths,tr pyr nod,rr foss frags,sft,  
i/p,sbblky.

2800  
(1131)

98 / 2 / Tr / Tr

CALCISILTITE:(10%),med gy-  
med dk gy,rr carb spks,tr liths,  
frm-mod hd blky.

2820

Survey:2822.87mMD (1133.5mTVD)  
83.74°inc 358.06°az

CALCILUTITE:(90%),lt gy-med  
gy,mnr silty i/p,rr-tr carb spks,tr  
liths,tr pyr nod,rr foss frags,sft,  
i/p,sbblky.

2830  
(1133.2)

97 / 2 / Tr / 1

CALCISILTITE:(10%),med gy-  
med dk gy,rr carb spks,tr liths,  
frm-mod hd blky.

2840  
(1135.3)

MW:12.15  
FV:184  
PV:88  
YP:59  
O/W:72.7/27.3  
HTHP:-/2  
WPS:273K

Survey:2851.62mMD (1136.6mTVD)  
83.77°inc 358.12°az

CALCISILTITE:med gy-med  
dk gy,arg,grad to CLCLT i/p,  
rr-com carb mat,tr pyr nodes,  
tr carb spks,rr foss frags,frm-  
mod hd,blky-sbblky.

2850  
(1137.5)

96 / 2 / Tr / 2

2870

Survey:2879.56mMD (1139.7mTVD)  
83.74°inc 357.96°az

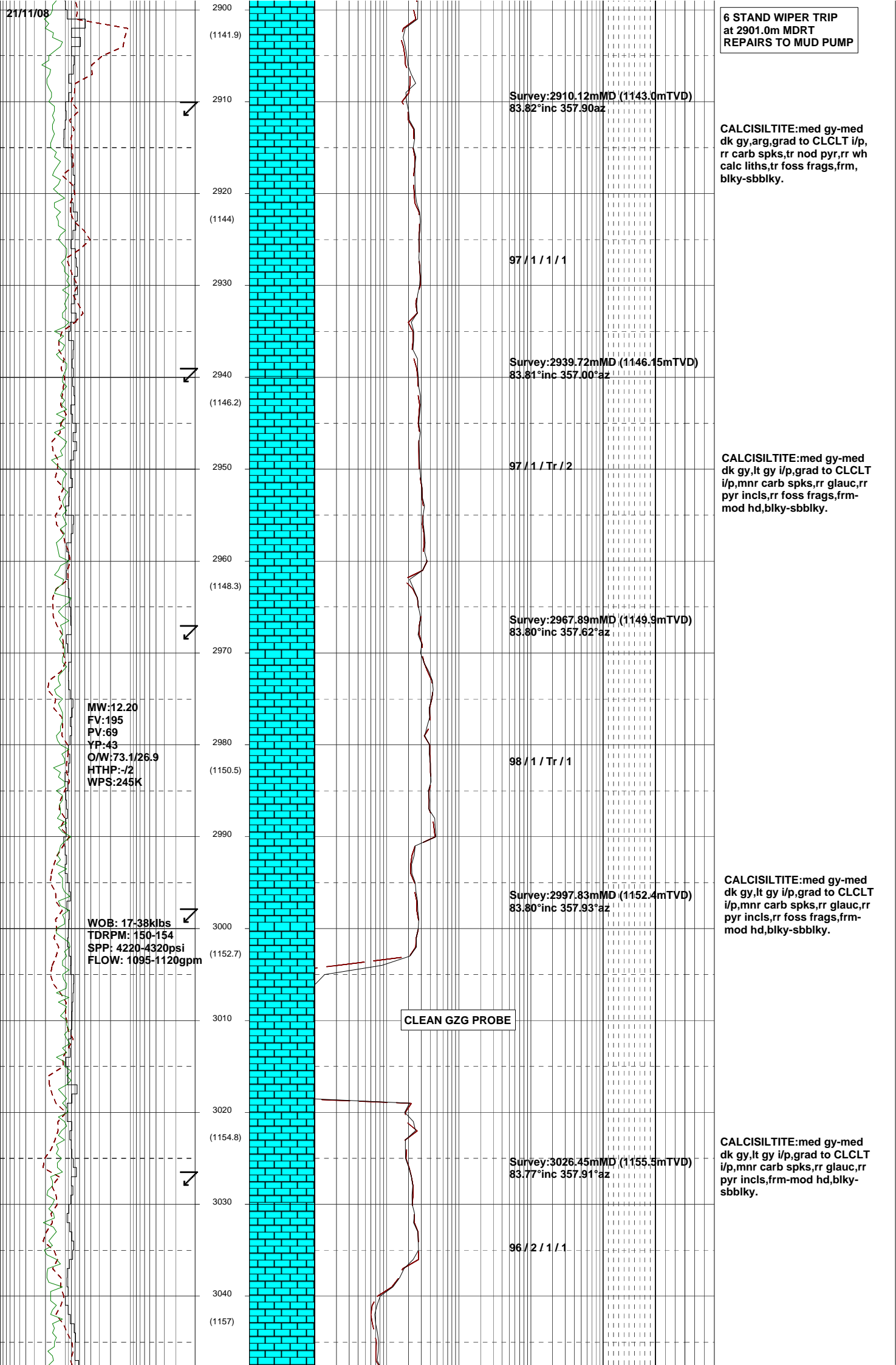
CALCISILTITE:med gy-med  
dk gy,lt gy,arg,grad to CLCLT,  
mnr carb frags & spks,tr pyr  
nodes,rr foss frags,frm-mod hd,  
blky-sbblky.

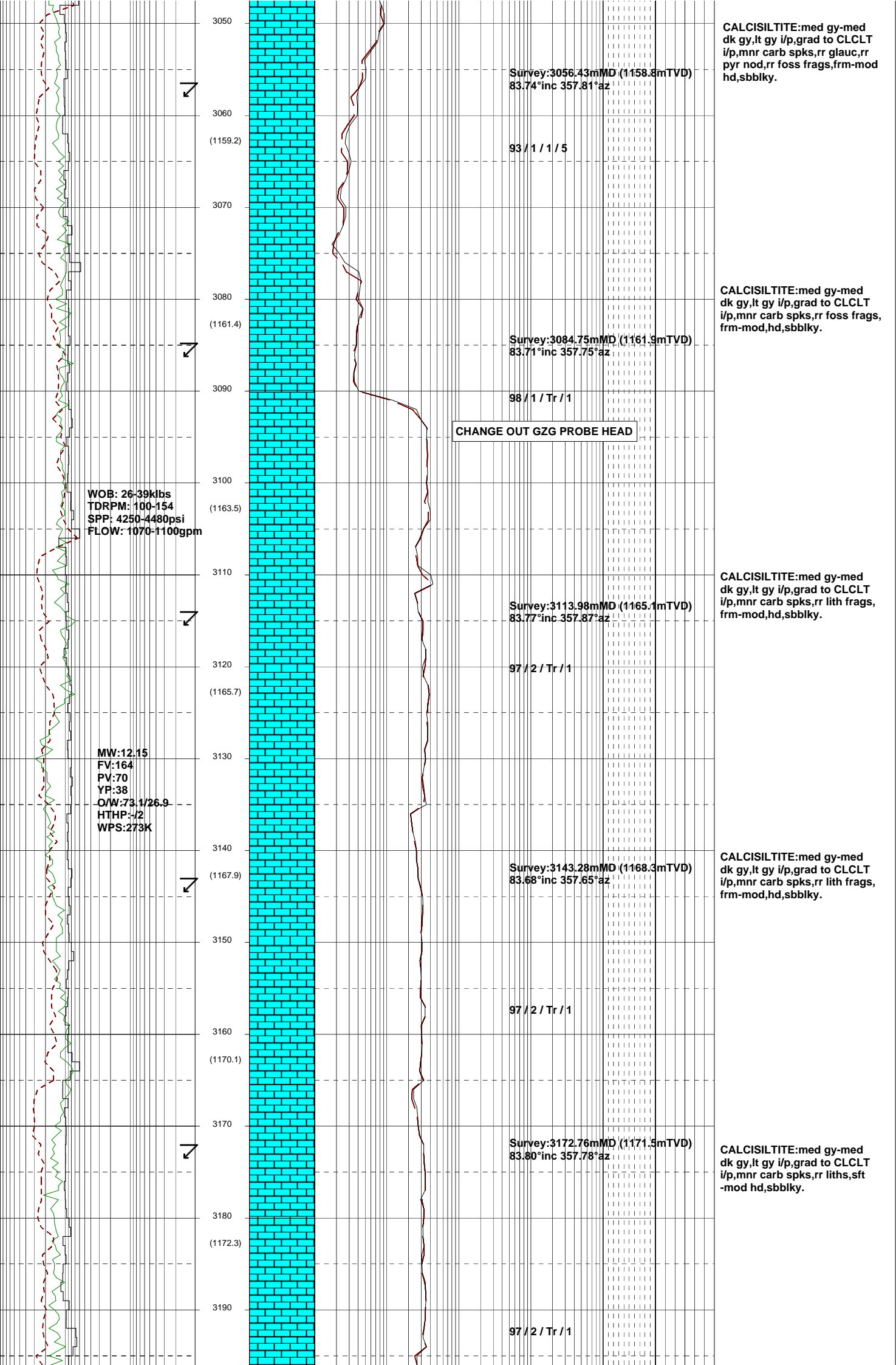
2880  
(1139.7)

96 / 2 / Tr / 2

2890

WOB: 9-40klbs  
TDRPM: 152-154  
SPP: 1820-2560psi  
FLOW: 770-1008gpm







WOB: 28-40klbs  
TDRPM: 107-154  
SPP: 4404-4521psi  
FLOW: 1080-1095gpm

3200  
(1174.5)

Survey:3201.21mMD (1174.6mTVD)  
83.65°inc 357.50°az

CALCISILTITE:med gy-med  
dk gy,lt gy i/p,grad to CLCLT  
i/p,mnr carb spks,rr liths,frm  
-mod hd,sbblky.

3210

97 / 1 / 1 / 1

3220  
(1176.6)

Survey:3230.78mMD (1177.8mTVD)  
83.77°inc 357.85°az

CALCISILTITE:med gy-med  
dk gy,lt gy i/p,grad to CLCLT  
i/p,mnr carb spks,rr liths,frm  
-mod hd,sbblky.

3240  
(1178.8)

97 / 1 / 1 / 1

MW:12.20  
FV:151  
PV:81  
YP:42  
O/W:72.7/27.3  
HTHP:-/2  
WPS:273K

3250

Survey:3260.24mMD (1181.1mTVD)  
83.74°inc 357.89°az

CALCISILTITE:med gy-med  
dk gy,lt gy i/p,grad to CLCLT  
i/p,mnr carb spks,rr lith frags,  
frm-mod,hd,sbblky.

3260  
(1181)

97 / 2 / Tr / 1

3270

Survey:3289.18mMD (1181.0mTVD)  
83.68°inc 357.88°az

CALCISILTITE:med gy-med  
dk gy,lt gy i/p,grad to CLCLT  
i/p,mnr carb spks,rr lith frags,  
frm-mod,hd,sbblky.

3290  
(1183.2)

97 / 2 / Tr / 1

WOB: 28-42klbs  
TDRPM: 109-155  
SPP: 4432-4580psi  
FLOW: 1075-1110gpm

3300  
(1185.4)

Survey:3318.13mMD (1187.4mTVD)  
83.68°inc 358.45°az

CALCISILTITE:med gy-med  
dk gy,lt gy i/p,grad to CLCLT  
i/p,rr carb spks,rr liths,mnr-loc  
micmic,frm-md,hod,sbblky.

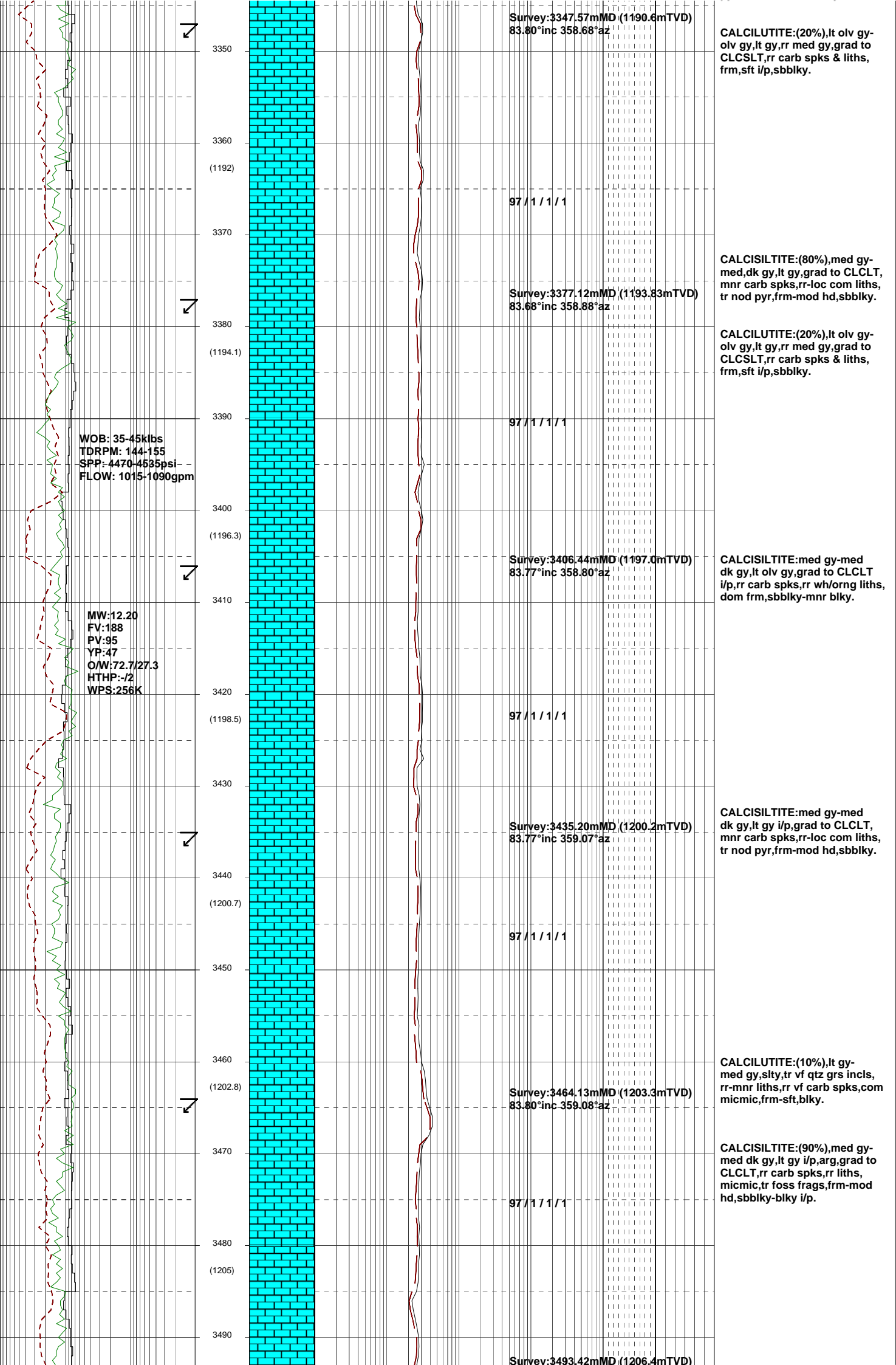
3320  
(1187.6)

97 / 1 / 1 / 1

3330

3340  
(1189.8)

CALCISILTITE:(80%),med gy-  
med dk gy,lt gy,grad to CLCLT,  
mnr carb spks,rr liths,tr nod  
pyr,frm-mod hd,sbblky



Survey: 3347.57m MD (1190.6mTVD)  
83.80°inc 358.68°az

CALCILUTITE:(20%),lt olv gy-olv gy,lt gy,rr med gy,grad to CLCSLT,rr carb spks & liths, frm,sft i/p,sbbiky.

3350

3360

(1192)

97 / 1 / 1 / 1

3370

Survey: 3377.12m MD (1193.83mTVD)  
83.68°inc 358.88°az

CALCISILTITE:(80%),med gy-med dk gy,lt gy,grad to CLCLT,mnr carb spks,rr-loc com liths, tr nod pyr,frm-mod hd,sbbiky.

3380

(1194.1)

97 / 1 / 1 / 1

WOB: 35-45klbs  
TDRPM: 144-155  
SPP: 4470-4535psi  
FLOW: 1015-1090gpm

3390

3400

(1196.3)

Survey: 3406.44m MD (1197.0mTVD)  
83.77°inc 358.80°az

CALCISILTITE:med gy-med dk gy,lt olv gy,grad to CLCLT i/p,rr carb spks,rr wh/orng liths, dom frm,sbbiky-mnr blkly.

3410

MW:12.20  
FV:188  
PV:95  
YP:47  
O/W:72.7/27.3  
HTHP:-/2  
WPS:256K

3420

(1198.5)

97 / 1 / 1 / 1

3430

Survey: 3435.20m MD (1200.2mTVD)  
83.77°inc 359.07°az

CALCISILTITE:med gy-med dk gy,lt gy i/p,grad to CLCLT,mnr carb spks,rr-loc com liths, tr nod pyr,frm-mod hd,sbbiky.

3440

(1200.7)

97 / 1 / 1 / 1

3450

3460

(1202.8)

Survey: 3464.13m MD (1203.3mTVD)  
83.80°inc 359.08°az

CALCILUTITE:(10%),lt gy-med gy,silty,tr vf qtz grs incls, rr-mnr liths,rr vf carb spks,com micmic,frm-sft,blkly.

3470

CALCISILTITE:(90%),med gy-med dk gy,lt gy i/p,arg,grad to CLCLT,rr carb spks,rr liths, micmic,tr foss frags,frm-mod hd,sbbiky-blky i/p.

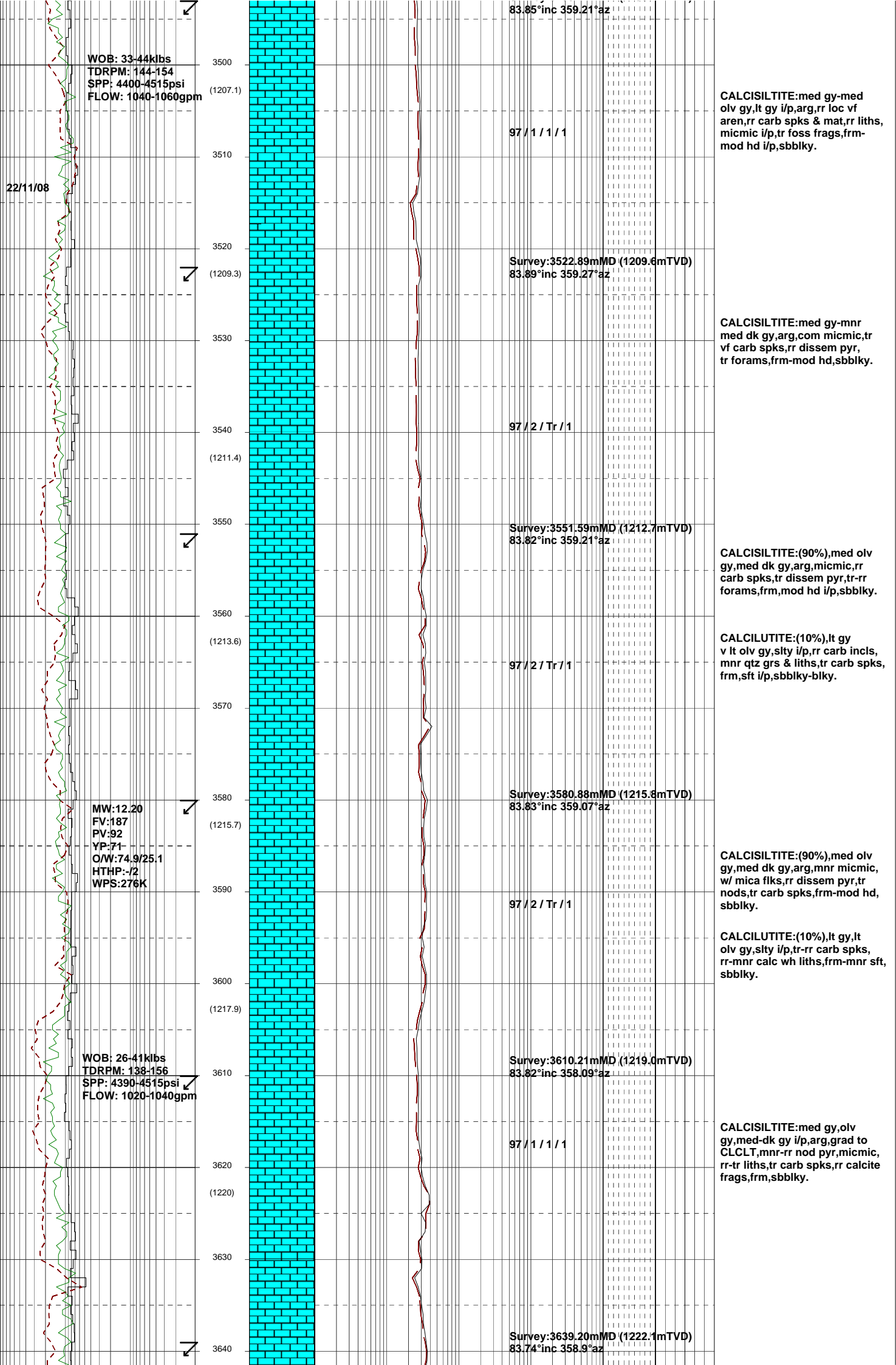
97 / 1 / 1 / 1

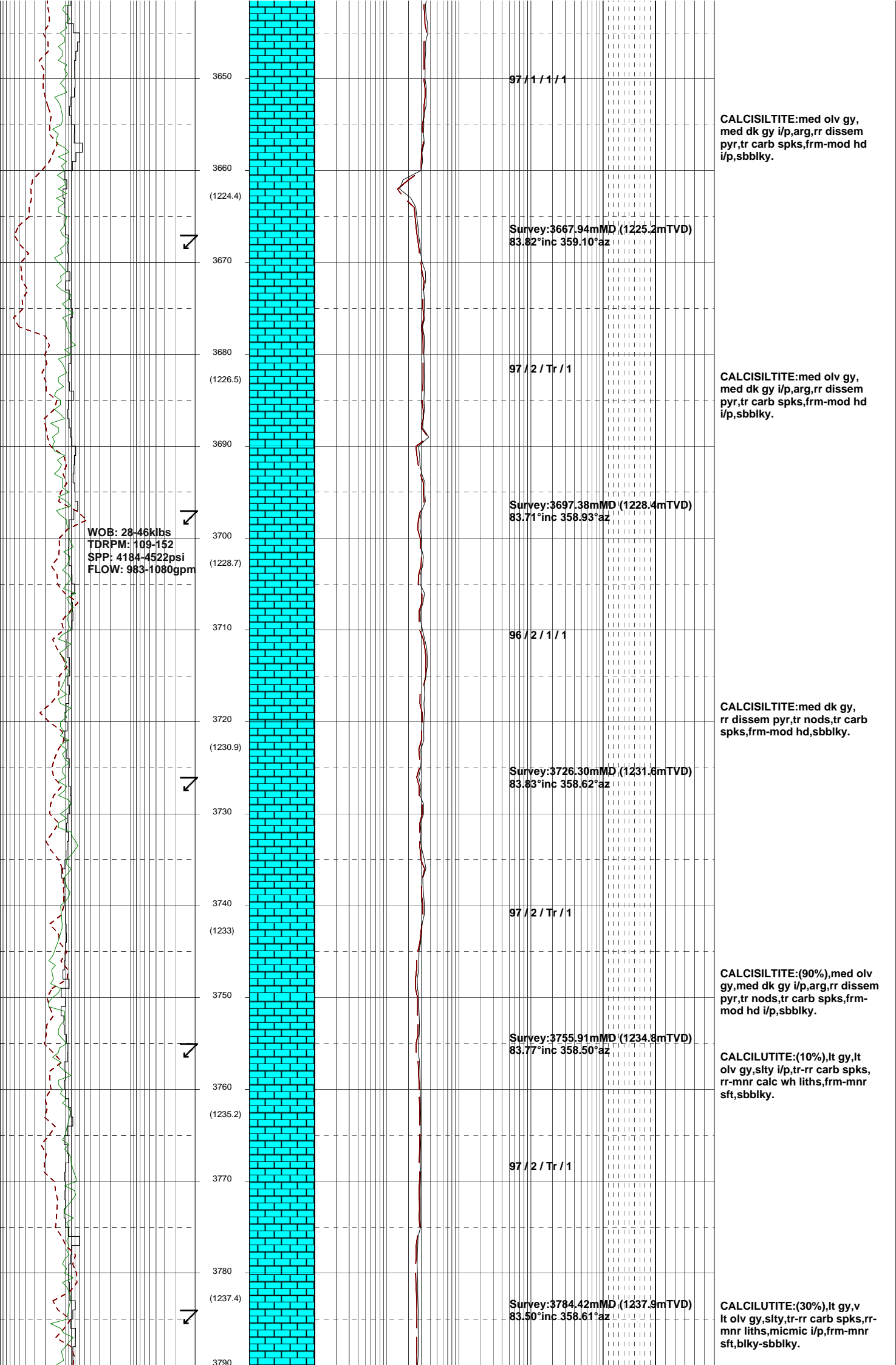
3480

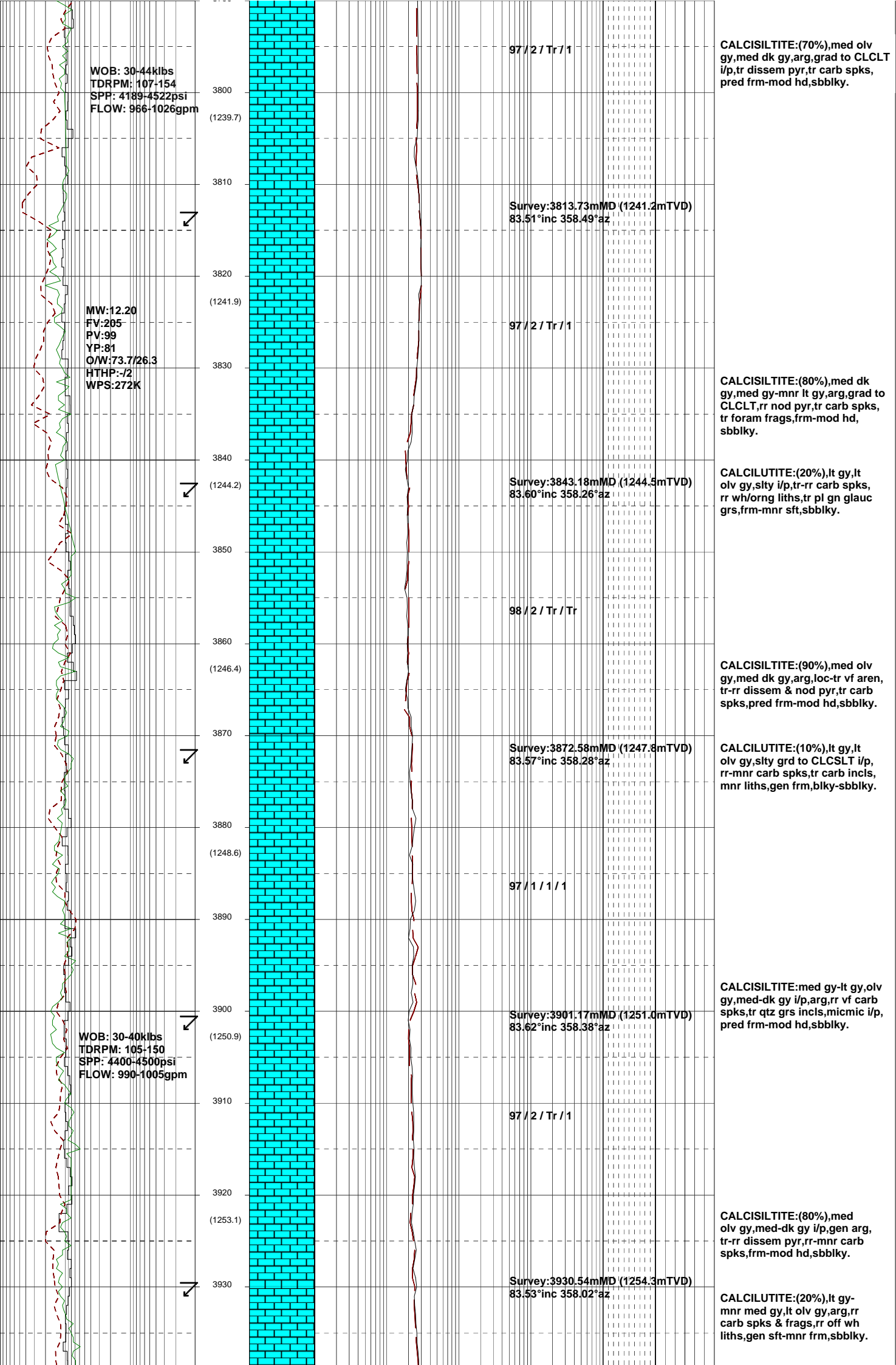
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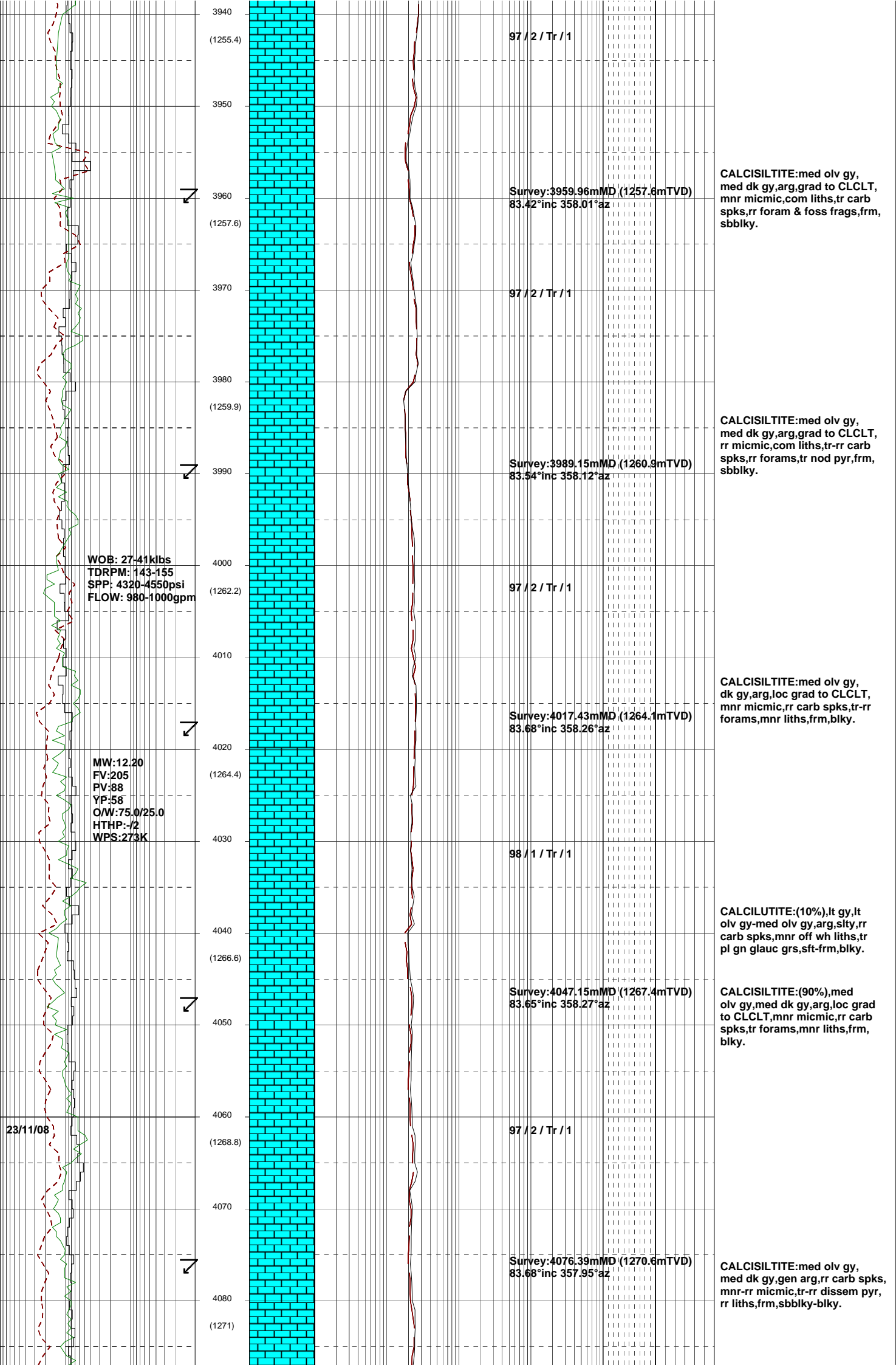
3490

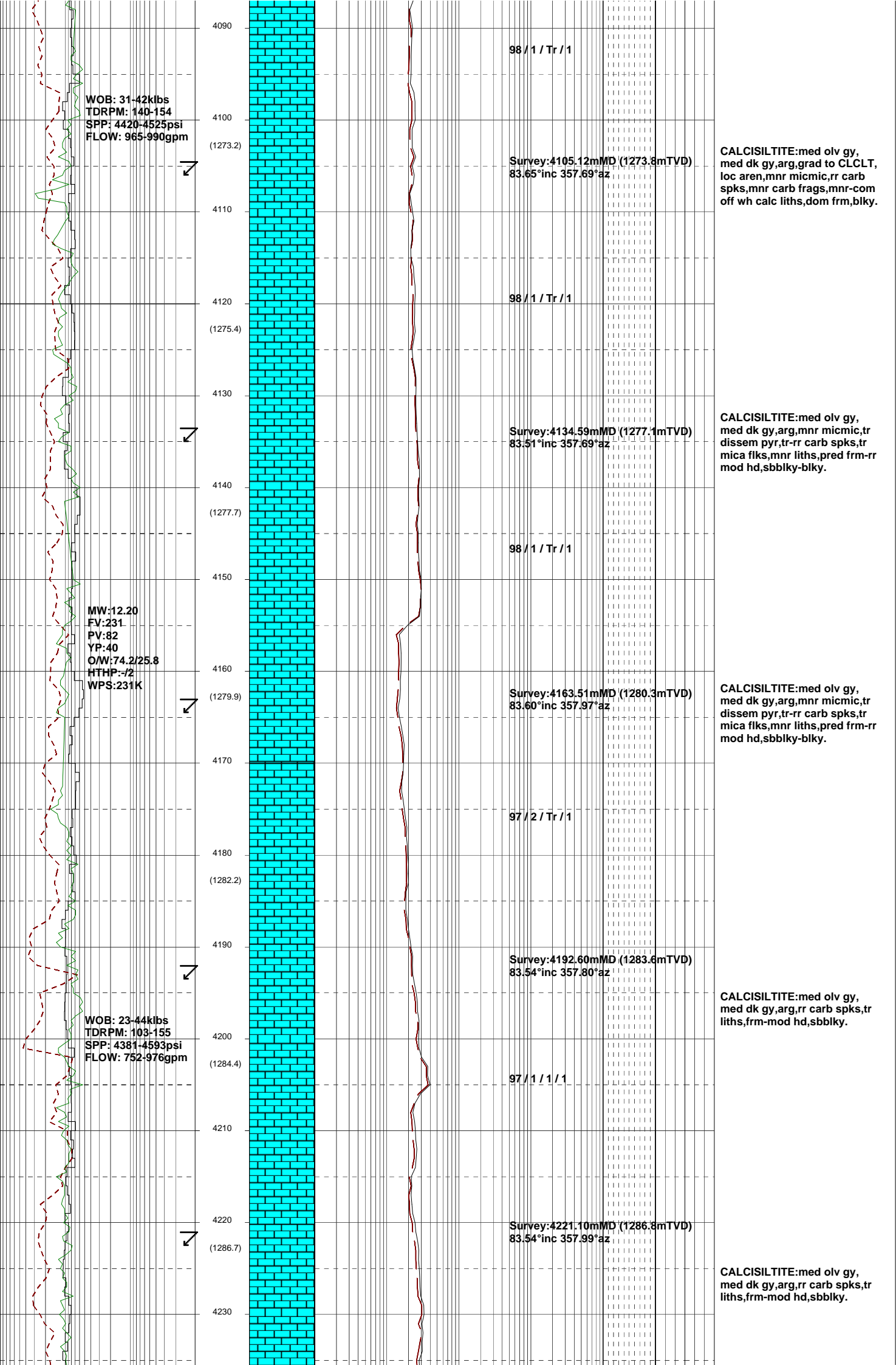
Survey: 3493.42m MD (1206.4mTVD)











WOB: 31-42klbs  
 TDRPM: 140-154  
 SPP: 4420-4525psi  
 FLOW: 965-990gpm



98 / 1 / Tr / 1

Survey: 4105.12m MD (1273.8m TVD)  
 83.65° inc 357.69° az

CALCISILTITE: med olv gy,  
 med dk gy, arg, grad to CLCLT,  
 loc aren, mnr micmic, rr carb  
 spks, mnr carb frags, mnr-com  
 off wh calc liths, dom frm, blkly.

(1273.2)

98 / 1 / Tr / 1



Survey: 4134.59m MD (1277.1m TVD)  
 83.51° inc 357.69° az

CALCISILTITE: med olv gy,  
 med dk gy, arg, mnr micmic, tr  
 dissem pyr, tr-rr carb spks, tr  
 mica flks, mnr liths, pred frm-rr  
 mod hd, sbblkly-blky.

(1275.4)

98 / 1 / Tr / 1

(1277.7)

MW: 12.20  
 FV: 231  
 PV: 82  
 YP: 40  
 O/W: 74.2/25.8  
 HTHP: -2  
 WPS: 231K



Survey: 4163.51m MD (1280.3m TVD)  
 83.60° inc 357.97° az

CALCISILTITE: med olv gy,  
 med dk gy, arg, mnr micmic, tr  
 dissem pyr, tr-rr carb spks, tr  
 mica flks, mnr liths, pred frm-rr  
 mod hd, sbblkly-blky.

(1279.9)

97 / 2 / Tr / 1

(1282.2)



Survey: 4192.60m MD (1283.6m TVD)  
 83.54° inc 357.80° az

CALCISILTITE: med olv gy,  
 med dk gy, arg, rr carb spks, tr  
 liths, frm-mod hd, sbblkly.

WOB: 23-44klbs  
 TDRPM: 103-155  
 SPP: 4381-4593psi  
 FLOW: 752-976gpm

(1284.4)

97 / 1 / 1 / 1

(1286.7)

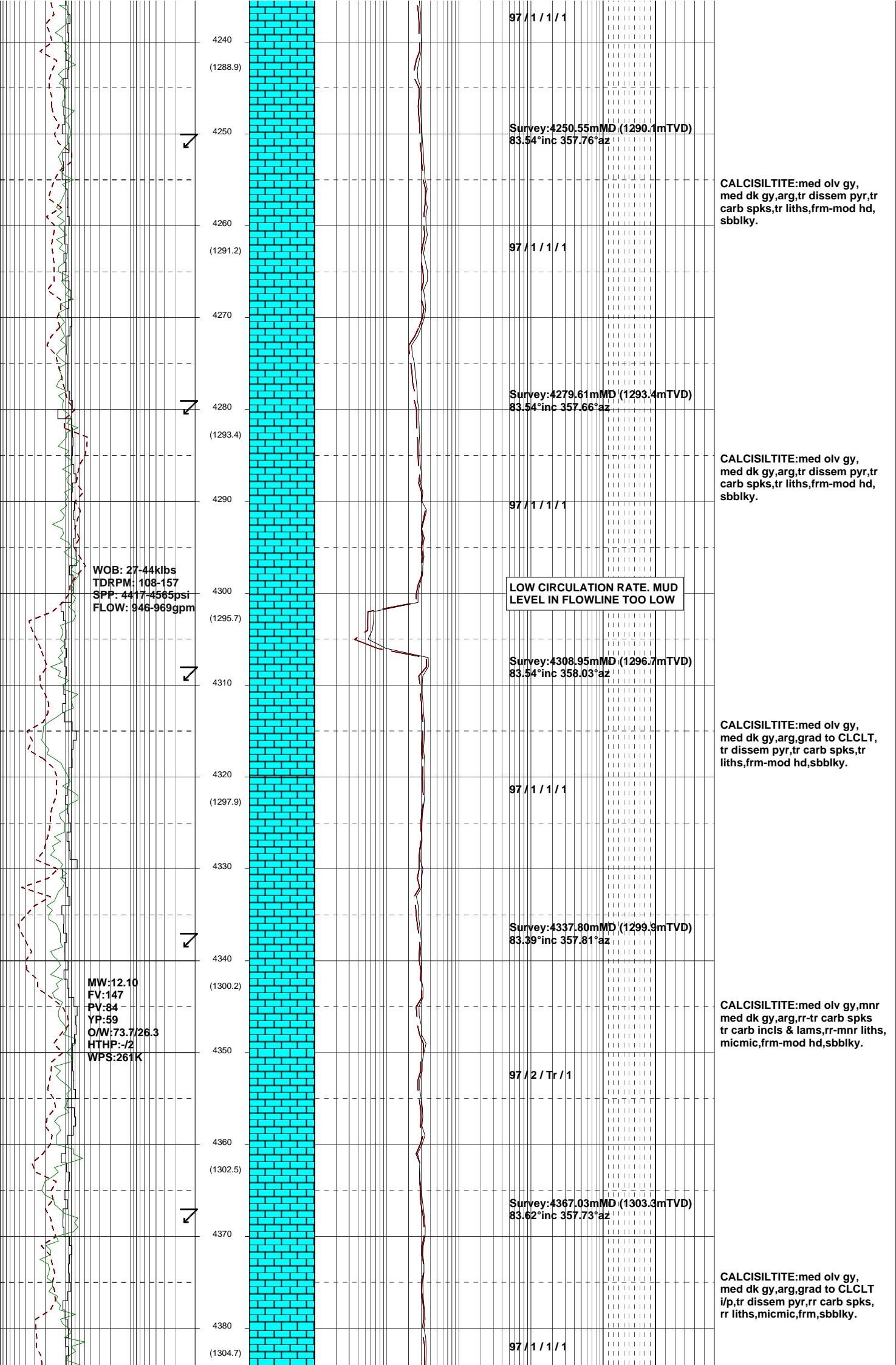


Survey: 4221.10m MD (1286.8m TVD)  
 83.54° inc 357.99° az

CALCISILTITE: med olv gy,  
 med dk gy, arg, rr carb spks, tr  
 liths, frm-mod hd, sbblkly.

(1288.7)

(1286.7)



4240

(1288.9)

97 / 1 / 1 / 1

Survey: 4250.55m MD (1290.1m TVD)  
83.54° inc 357.76° az

CALCISILTITE: med olv gy,  
med dk gy, arg, tr disseminated pyr, tr  
carb spks, tr liths, frm-mod hd,  
sbblyk.

4250

4260

(1291.2)

97 / 1 / 1 / 1

Survey: 4279.61m MD (1293.4m TVD)  
83.54° inc 357.66° az

CALCISILTITE: med olv gy,  
med dk gy, arg, tr disseminated pyr, tr  
carb spks, tr liths, frm-mod hd,  
sbblyk.

4280

(1293.4)

97 / 1 / 1 / 1

WOB: 27-44klbs  
TDRPM: 108-157  
SPP: 4417-4565psi  
FLOW: 946-969gpm

LOW CIRCULATION RATE. MUD  
LEVEL IN FLOWLINE TOO LOW

4300

(1295.7)

Survey: 4308.95m MD (1296.7m TVD)  
83.54° inc 358.03° az

CALCISILTITE: med olv gy,  
med dk gy, arg, grad to CLCLT,  
tr disseminated pyr, tr carb spks, tr  
liths, frm-mod hd, sbblyk.

4310

4320

(1297.9)

97 / 1 / 1 / 1

Survey: 4337.80m MD (1299.9m TVD)  
83.39° inc 357.81° az

CALCISILTITE: med olv gy, mnr  
med dk gy, arg, rr-tr carb spks  
tr carb incl & lams, rr-mnr liths,  
micmic, frm-mod hd, sbblyk.

4340

(1300.2)

97 / 2 / Tr / 1

MW: 12.10  
FV: 147  
PV: 84  
YP: 59  
O/W: 73.7/26.3  
HTHP: -/2  
WPS: 261K

4350

4360

(1302.5)

Survey: 4367.03m MD (1303.3m TVD)  
83.62° inc 357.73° az

CALCISILTITE: med olv gy,  
med dk gy, arg, grad to CLCLT  
i/p, tr disseminated pyr, rr carb spks,  
rr liths, micmic, frm, sbblyk.

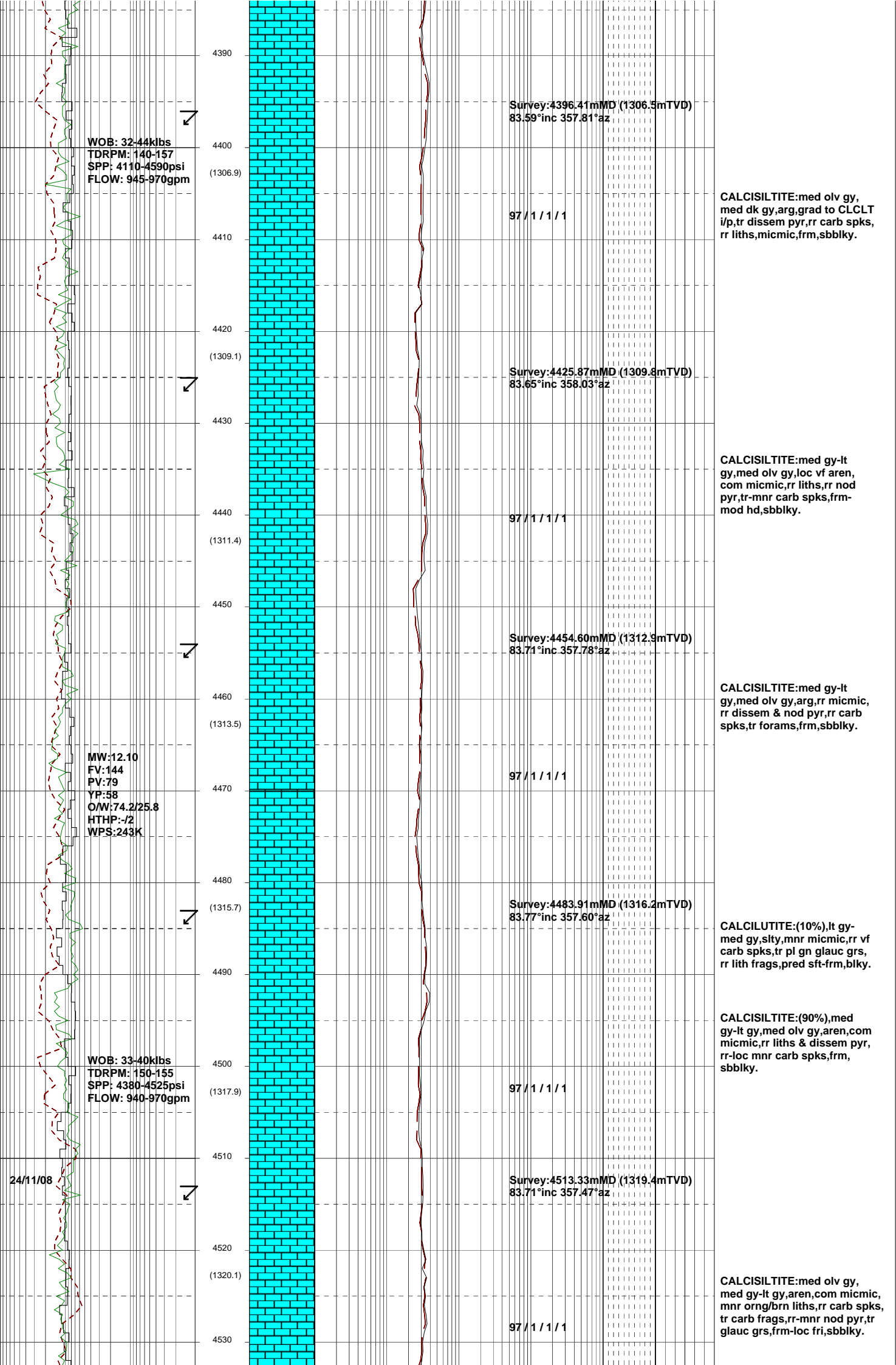
4370

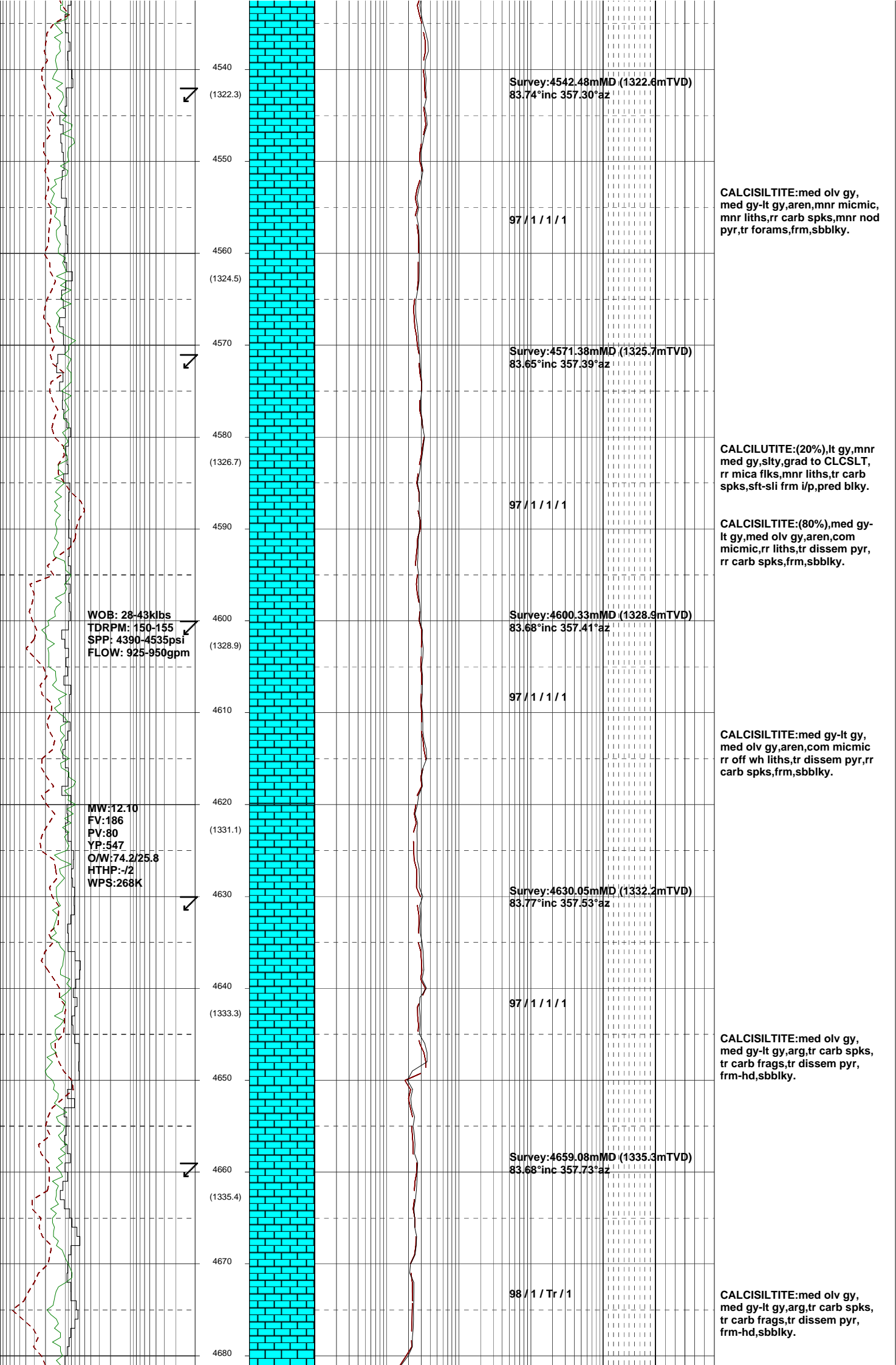
4380

(1304.7)

97 / 1 / 1 / 1







WOB: 28-43klbs  
TDRPM: 150-155  
SPP: 4390-4535psi  
FLOW: 925-950gpm

MW: 12.10  
FV: 186  
PV: 80  
YP: 547  
OMW: 74.2/25.8  
HTHP: -/2  
WPS: 268K

CALCISILTITE: med olv gy, med gy-lt gy, aren, mnr micmic, mnr liths, rr carb spks, mnr nod pyr, tr forams, frm, sbblky.

CALCILUTITE: (20%), lt gy, mnr med gy, slty, grad to CLCSLT, rr mica flks, mnr liths, tr carb spks, sft-sli frm i/p, pred blk.

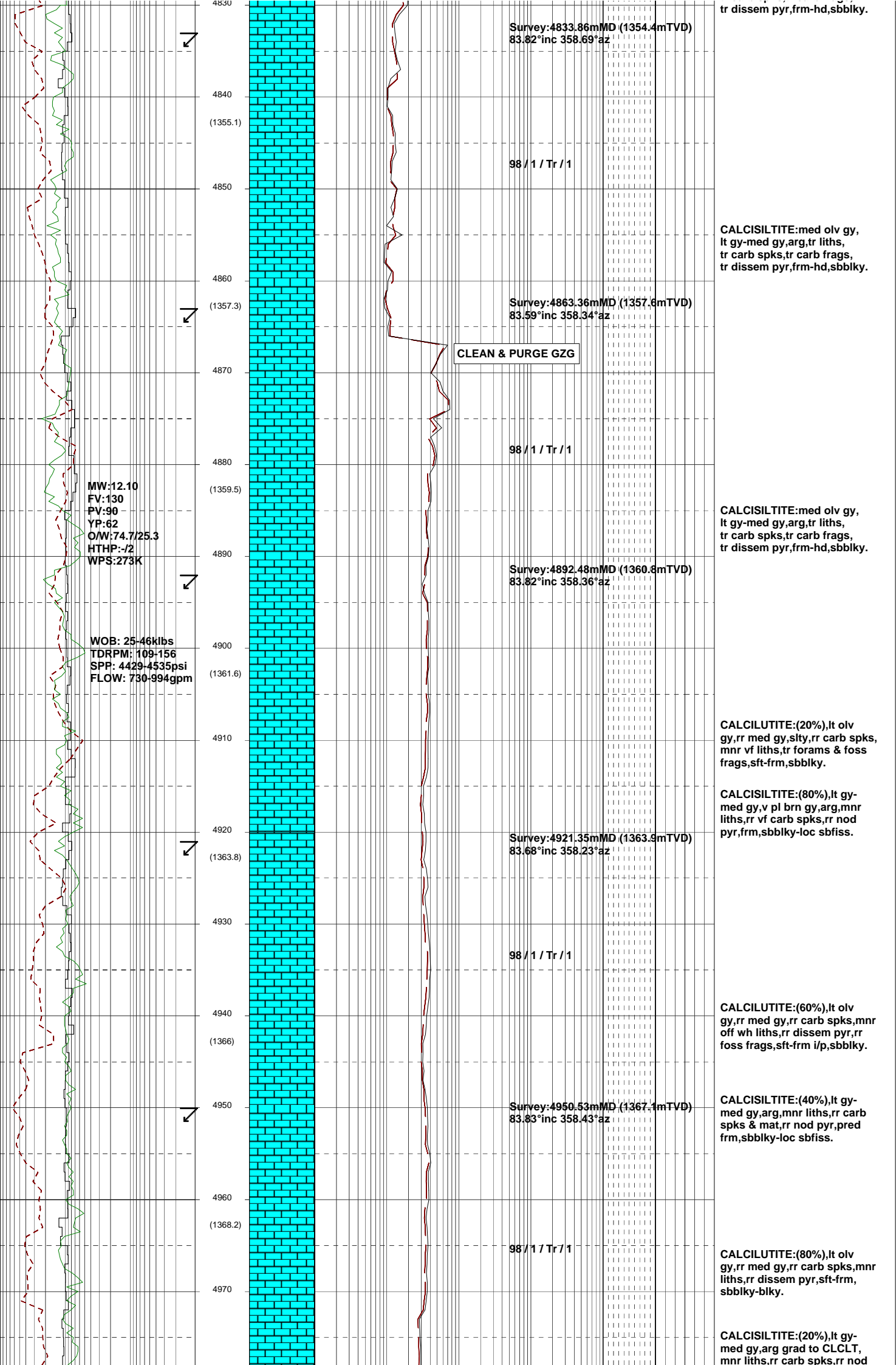
CALCISILTITE: (80%), med gy-lt gy, med olv gy, aren, com micmic, rr liths, tr dissem pyr, rr carb spks, frm, sbblky.

CALCISILTITE: med gy-lt gy, med olv gy, aren, com micmic, rr off wh liths, tr dissem pyr, rr carb spks, frm, sbblky.

CALCISILTITE: med olv gy, med gy-lt gy, arg, tr carb spks, tr carb frags, tr dissem pyr, frm-hd, sbblky.

CALCISILTITE: med olv gy, med gy-lt gy, arg, tr carb spks, tr carb frags, tr dissem pyr, frm-hd, sbblky.





tr disse pyr,frm-hd,sbbkly.

Survey:4833.86mMD (1354.4mTVD)  
83.82°inc 358.69°az

98 / 1 / Tr / 1

CALCISILTITE:med olv gy,  
lt gy-med gy,arg,tr liths,  
tr carb spks,tr carb frags,  
tr disse pyr,frm-hd,sbbkly.

Survey:4863.36mMD (1357.6mTVD)  
83.59°inc 358.34°az

CLEAN & PURGE GZG

98 / 1 / Tr / 1

CALCISILTITE:med olv gy,  
lt gy-med gy,arg,tr liths,  
tr carb spks,tr carb frags,  
tr disse pyr,frm-hd,sbbkly.

Survey:4892.48mMD (1360.8mTVD)  
83.82°inc 358.36°az

MW:12.10  
FV:130  
PV:90  
YP:62  
OW:74.7/25.3  
HTHP:-72  
WPS:273K

WOB: 25-46klbs  
TDRPM: 109-156  
SPP: 4429-4535psi  
FLOW: 730-994gpm

CALCILUTITE:(20%),lt olv  
gy,rr med gy,slty,rr carb spks,  
mnr vf liths,tr forams & foss  
frags,sft-frm,sbbkly.

CALCISILTITE:(80%),lt gy-  
med gy,v pl brn gy,arg,mnr  
liths,rr vf carb spks,rr nod  
pyr,frm,sbbkly-loc sbfiss.

Survey:4921.35mMD (1363.9mTVD)  
83.68°inc 358.23°az

98 / 1 / Tr / 1

CALCILUTITE:(60%),lt olv  
gy,rr med gy,rr carb spks,mnr  
off wh liths,rr disse pyr,rr  
foss frags,sft-frm i/p,sbbkly.

Survey:4950.53mMD (1367.1mTVD)  
83.83°inc 358.43°az

CALCISILTITE:(40%),lt gy-  
med gy,arg,mnr liths,rr carb  
spks & mat,rr nod pyr,pred  
frm,sbbkly-loc sbfiss.

98 / 1 / Tr / 1

CALCILUTITE:(80%),lt olv  
gy,rr med gy,rr carb spks,mnr  
liths,rr disse pyr,sft-frm,  
sbbkly-blky.

CALCISILTITE:(20%),lt gy-  
med gy,arg grad to CLCLT,  
mnr liths,rr carb spks,rr nod

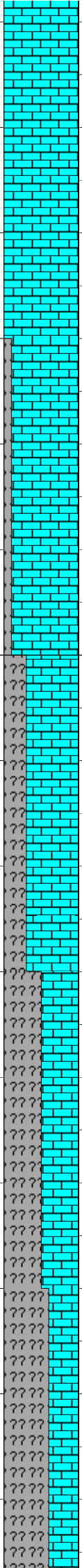
MW:12.10  
FV:133  
PV:73  
YP:29  
O/W:73.8/26.2  
HTHP:-/2  
WPS:256K

WOB: 29-47klbs  
TDRPM: 145-157  
SPP: 4460-4590psi  
FLOW: 915-925gpm

WOB: 31-42klbs  
TDRPM: 145-155  
SPP: 4410-4530psi  
FLOW: 900-920gpm

25/11/08

4980  
(1370.4)  
4990  
5000  
(1372.5)  
5010  
(1374.7)  
5020  
(1374.7)  
5030  
5040  
(1376.9)  
5050  
5060  
(1379.1)  
5070  
(1381.4)  
5080  
5090  
5100  
(1383.6)  
5110  
5120  
(1385.8)



Survey:4980.12mMD (1370.4mTVD)  
83.65°inc 358.43°az

97 / 1 / 1 / 1

Survey:5009.46mMD (1373.6mTVD)  
83.77°inc 358.91°az

97 / 2 / Tr / 1

Survey:5037.97mMD (1376.7mTVD)  
83.65°inc 359.12°az

Top of Lakes Entrance  
5040mMDRT (1377.1mTVDRT)  
(-1335.4mTVDSS)

97 / 1 / 1 / 1

Survey:5067.57mMD (1379.9mTVD)  
83.65°inc 359.35°az

97 / 2 / Tr / 1

Survey:5096.52mMD (1383.2mTVD)  
83.60°inc 359.56°az

96 / 2 / 1 / 1

Survey:5126.20mMD (1386.5mTVD)

pyr,pred frm,sbbiky.

CALCILUTITE:(100%),lt olv gy,rr med dk gy,rr carb spks, rr liths,rr dissem pyr,sft-frm, sbbiky-blky.

CALCISILTITE:(Tr),lt gy-med gy,arg,com grad to CLCLT, rr liths,rr carb spks,frm-sft, sbbiky.

CALCILUTITE:lt olv gy,rr med dk gy,rr-tr carb spks,rr wh liths,rr nod pyr,sft-frm, sbbiky-blky.

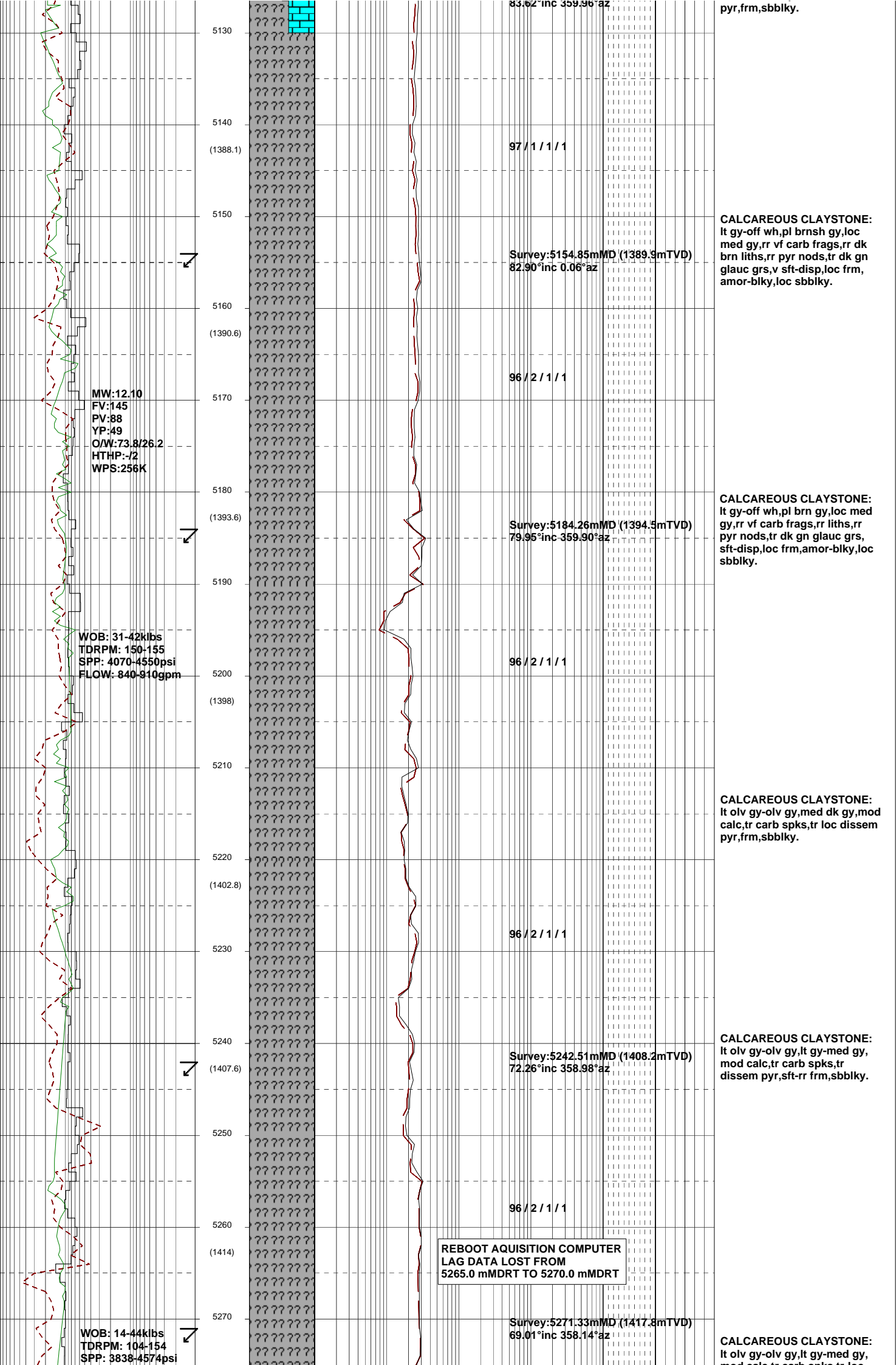
CALCAREOUS CLAYSTONE: med dk gy,olv gy,mod calc,rr-tr carb spks,tr off wh liths,sft-sli frm i/p,sbbiky.

CALCILUTITE:lt olv gy,med dk gy,arg,rr-tr carb spks & frags,tr vf glauc grs,rr liths, sft-frm,sbbiky-blky.

CALCAREOUS CLAYSTONE: lt olv gy-olv gy,med dk gy,mod calc,tr carb spks,pred frm-mnr sft,blky-sbbiky.

CALCILUTITE:lt olv gy,med dk gy,arg,rr carb spks,rr off wh liths,frm-mnr sft,sbbiky.

CALCAREOUS CLAYSTONE: lt olv gy-olv gy,med dk gy,mod calc,tr carb spks,tr loc dissem



83.62°inc 359.96°az

pyr,frm,sbbkly.

5130

5140

(1388.1)

97 / 1 / 1 / 1

5150

Survey:5154.85mMD (1389.9mTVD)  
82.90°inc 0.06°az

**CALCAREOUS CLAYSTONE:**  
lt gy-off wh,pl brnsh gy,loc med gy,rr vf carb frags,rr dk brn liths,rr pyr nods,tr dk gn glauc grs,v sft-disp,loc frm, amor-blky,loc sbbkly.

5160

(1390.6)

96 / 2 / 1 / 1

MW:12.10  
FV:145  
PV:88  
YP:49  
O/W:73.8/26.2  
HTHP:-/2  
WPS:256K

5170

5180

(1393.6)

Survey:5184.26mMD (1394.5mTVD)  
79.95°inc 359.90°az

**CALCAREOUS CLAYSTONE:**  
lt gy-off wh,pl brn gy,loc med gy,rr vf carb frags,rr liths,rr pyr nods,tr dk gn glauc grs, sft-disp,loc frm,amor-blky,loc sbbkly.

5190

5200

(1398)

96 / 2 / 1 / 1

WOB: 31-42kibs  
TDRPM: 150-155  
SPP: 4070-4550psi  
FLOW: 840-910gpm

5210

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy,med dk gy,mod calc,tr carb spks,tr loc dissem pyr,frm,sbbkly.

5220

(1402.8)

96 / 2 / 1 / 1

5230

5240

(1407.6)

Survey:5242.51mMD (1408.2mTVD)  
72.26°inc 358.98°az

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy,lt gy-med gy, mod calc,tr carb spks,tr dissem pyr,sft-rr frm,sbbkly.

5250

5260

(1414)

96 / 2 / 1 / 1

REBOOT AQUISITION COMPUTER  
LAG DATA LOST FROM  
5265.0 mMDRT TO 5270.0 mMDRT

5270

Survey:5271.33mMD (1417.8mTVD)  
69.01°inc 358.14°az

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy,lt gy-med gy, mod calc,tr carb spks,loc frm, amor-blky,loc sbbkly.

WOB: 14-44kibs  
TDRPM: 104-154  
SPP: 3838-4574psi

mod calc, tr carb spks, tr-loc  
mnr disseminated pyr, tr lt gy liths,  
sft-rr frm, sbbly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy, rr med dk gy,  
mod calc, tr carb spks, tr dk  
org liths, tr disseminated pyr, sft-  
frm i/p, sbbly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy, rr med dk gy,  
mod calc, tr carb spks & frags,  
tr liths, rr nod pyr, tr disseminated  
pyr, sft-frm i/p, sbbly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-olv gy, med dk gy, rr lt  
brnsh gy, mod calc, mnr carb  
frags & incls, rr liths, mnr-loc  
com nod pyr, sft, sbbly.

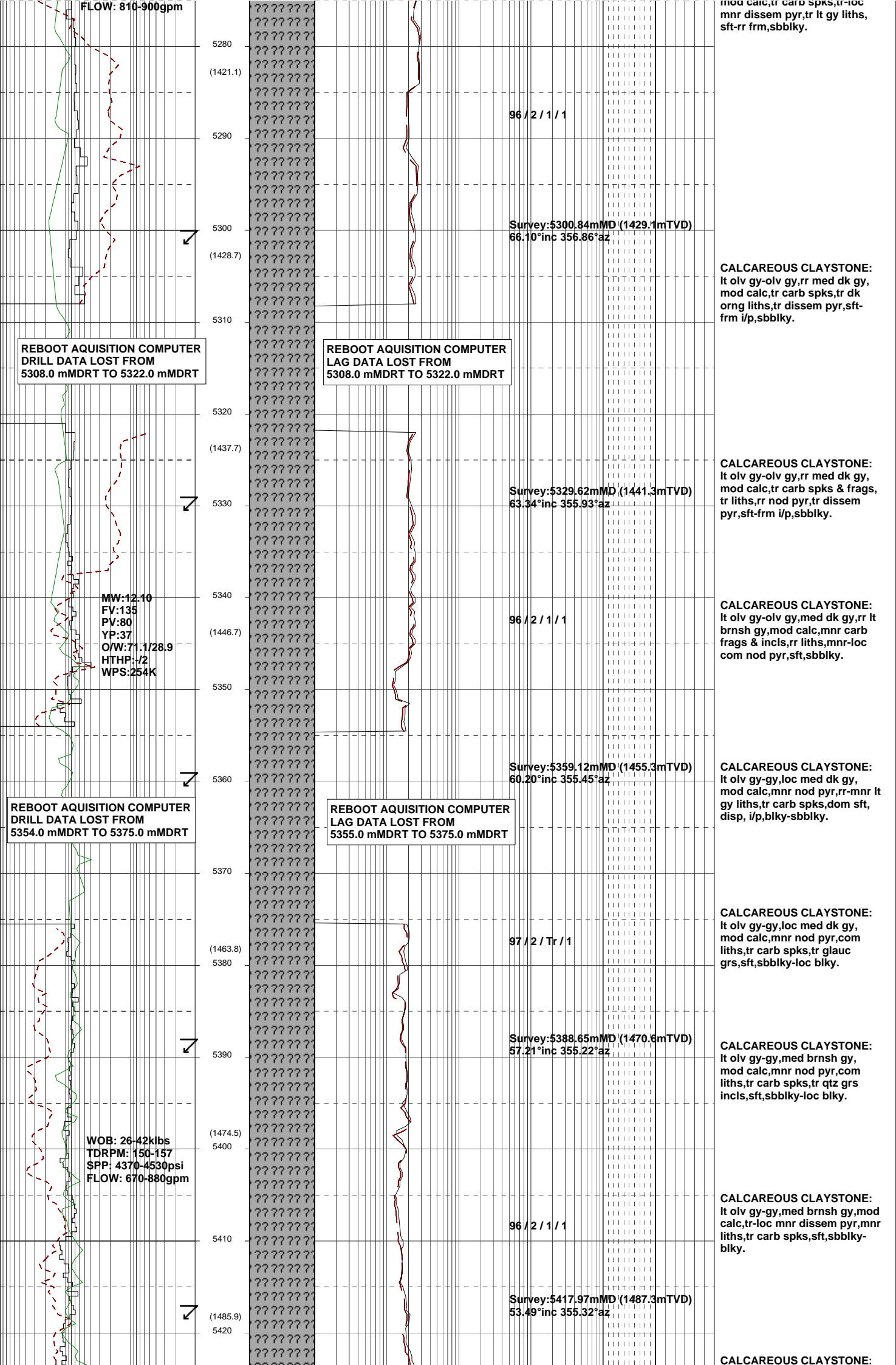
**CALCAREOUS CLAYSTONE:**  
lt olv gy-gy, loc med dk gy,  
mod calc, mnr nod pyr, rr-mnr lt  
gy liths, tr carb spks, dom sft,  
disp, i/p, bly-sbbly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-gy, loc med dk gy,  
mod calc, mnr nod pyr, com  
liths, tr carb spks, tr glauc  
grs, sft, sbbly-loc bly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-gy, med brnsh gy,  
mod calc, mnr nod pyr, com  
liths, tr carb spks, tr qtz grs  
incls, sft, sbbly-loc bly.

**CALCAREOUS CLAYSTONE:**  
lt olv gy-gy, med brnsh gy, mod  
calc, tr-loc mnr disseminated pyr, mnr  
liths, tr carb spks, sft, sbbly-  
bly.

**CALCAREOUS CLAYSTONE:**



FLOW: 810-900gpm

5280  
(1421.1)  
5290  
5300  
(1428.7)  
5310  
5320  
(1437.7)  
5330  
5340  
(1446.7)  
5350  
5360  
5370  
(1463.8)  
5380  
5390  
(1474.5)  
5400  
5410  
(1485.9)  
5420

96 / 2 / 1 / 1

Survey: 5300.84m MD (1429.1m TVD)  
66.10° inc 356.86° az

Survey: 5329.62m MD (1441.3m TVD)  
63.34° inc 355.93° az

96 / 2 / 1 / 1

Survey: 5359.12m MD (1455.3m TVD)  
60.20° inc 355.45° az

97 / 2 / Tr / 1

Survey: 5388.65m MD (1470.6m TVD)  
57.21° inc 355.22° az

96 / 2 / 1 / 1

Survey: 5417.97m MD (1487.3m TVD)  
53.49° inc 355.32° az

REBOOT ACQUISITION COMPUTER  
DRILL DATA LOST FROM  
5308.0 mMDRT TO 5322.0 mMDRT

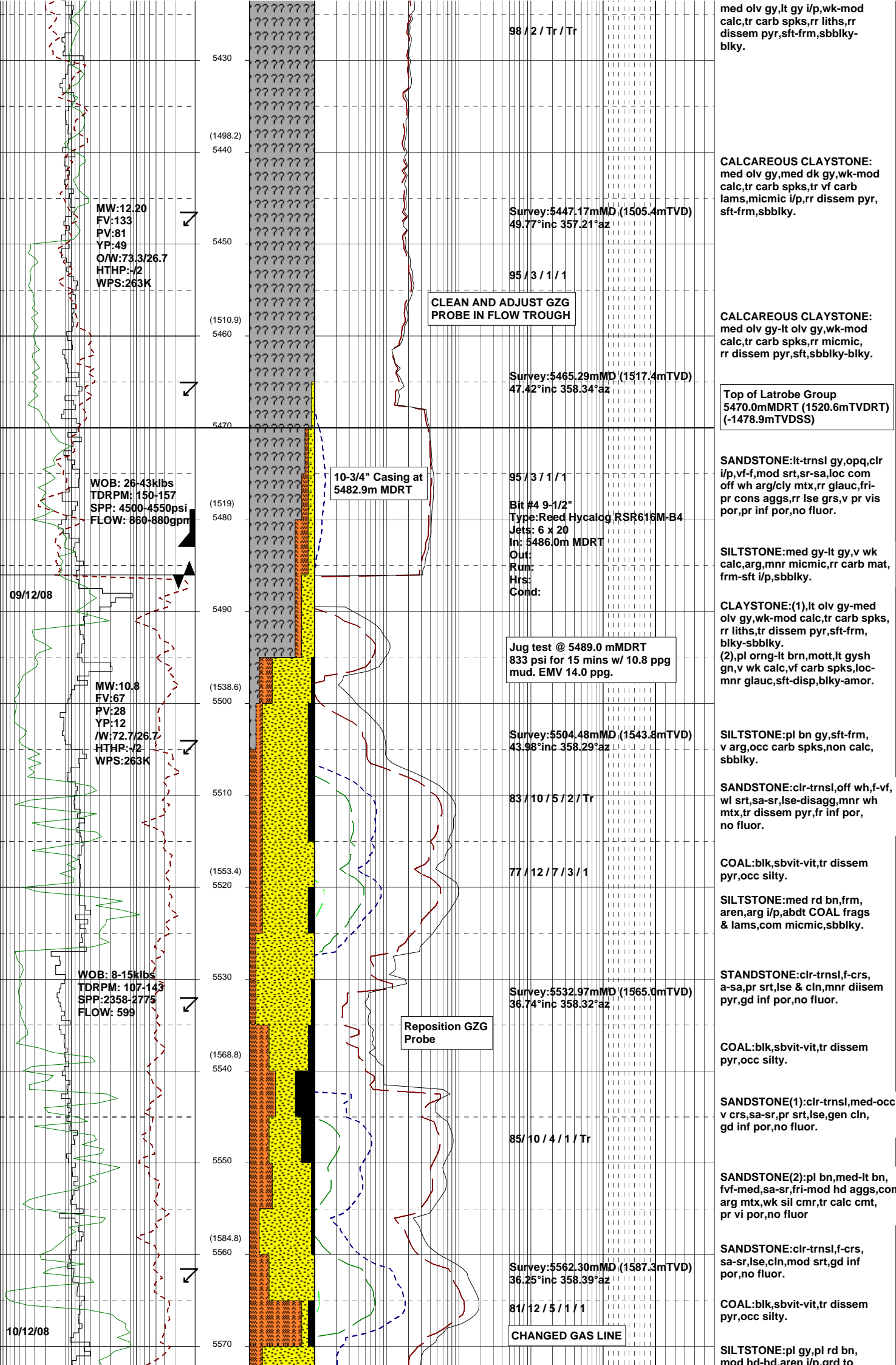
REBOOT ACQUISITION COMPUTER  
LAG DATA LOST FROM  
5308.0 mMDRT TO 5322.0 mMDRT

MW: 12.10  
FV: 135  
PV: 80  
YP: 37  
O/W: 71.1/28.9  
HTHP: .72  
WPS: 254K

REBOOT ACQUISITION COMPUTER  
DRILL DATA LOST FROM  
5354.0 mMDRT TO 5375.0 mMDRT

REBOOT ACQUISITION COMPUTER  
LAG DATA LOST FROM  
5355.0 mMDRT TO 5375.0 mMDRT

WOB: 26-42kbs  
TDRPM: 150-157  
SPP: 4370-4530psi  
FLOW: 670-880gpm



MW:12.20  
 FV:133  
 PV:81  
 YP:49  
 O/W:73.3/26.7  
 HTHP:-/2  
 WPS:263K

WOB: 26-43klbs  
 TDRPM: 150-157  
 SPP: 4500-4550psi  
 FLOW: 860-880gpm

MW:10.8  
 FV:67  
 PV:28  
 YP:12  
 I/W:72.7/26.7  
 HTHP:-/2  
 WPS:263K

WOB: 8-15klbs  
 TDRPM: 107-143  
 SPP:2358-2775  
 FLOW: 599

98 / 2 / Tr / Tr

Survey:5447.17mMD (1505.4mTVD)  
 49.77°inc 357.21°az

95 / 3 / 1 / 1

CLEAN AND ADJUST GZG  
 PROBE IN FLOW TROUGH

Survey:5465.29mMD (1517.4mTVD)  
 47.42°inc 358.34°az

10-3/4" Casing at  
 5482.9m MDRT

95 / 3 / 1 / 1

Bit #4 9-1/2"  
 Type:Reed Hycalog RSR616M-B4  
 Jets: 6 x 20  
 In: 5486.0m MDRT  
 Out:  
 Run:  
 Hrs:  
 Cond:

Jug test @ 5489.0 mMDRT  
 833 psi for 15 mins w/ 10.8 ppg  
 mud. EMV 14.0 ppg.

Survey:5504.48mMD (1543.8mTVD)  
 43.98°inc 358.29°az

83 / 10 / 5 / 2 / Tr

77 / 12 / 7 / 3 / 1

Survey:5532.97mMD (1565.0mTVD)  
 36.74°inc 358.32°az

Reposition GZG  
 Probe

85 / 10 / 4 / 1 / Tr

Survey:5562.30mMD (1587.3mTVD)  
 36.25°inc 358.39°az

81 / 12 / 5 / 1 / 1

CHANGED GAS LINE

med olv gy,lt gy i/p,wk-mod  
 calc,tr carb spks,rr liths,rr  
 dissem pyr,sft frm,sbbkly-  
 blkly.

CALCREOUS CLAYSTONE:  
 med olv gy,med dk gy,wk-mod  
 calc,tr carb spks,tr vf carb  
 lams,micmic i/p,rr dissem pyr,  
 sft frm,sbbkly.

CALCREOUS CLAYSTONE:  
 med olv gy-lt olv gy,wk-mod  
 calc,tr carb spks,rr micmic,  
 rr dissem pyr,sft,sbbkly-blky.

Top of Latrobe Group  
 5470.0mMDRT (1520.6mTVDRT)  
 (-1478.9mTVDSS)

SANDSTONE:lt-trnsl gy,opq,clr  
 i/p,vf-f,mod srt,sr-sa,loc com  
 off wh arg/clay mtz,rr glauc,fr-  
 pr cons aggs,rr lse grs,v pr vis  
 por,pr inf por,no fluor.

SILTSTONE:med gy-lt gy,v wk  
 calc,arg,mnr micmic,rr carb mat,  
 frm-sft i/p,sbbkly.

CLAYSTONE:(1),lt olv gy-med  
 olv gy,wk-mod calc,tr carb spks,  
 rr liths,tr dissem pyr,sft frm,  
 blkly-sbbkly.  
 (2),pl org-lt brn,mott,lt gys  
 gn,v wk calc,vf carb spks,loc-  
 mnr glauc,sft-disp,blkly-amor.

SILTSTONE:pl bn gy,sft frm,  
 v arg,occ carb spks,non calc,  
 sbbkly.

SANDSTONE:clr-trnsl,off wh,f-vf,  
 wl srt,sa-sr,lse-disagg,mnr wh  
 mtz,tr dissem pyr,fr inf por,  
 no fluor.

COAL:blk,sbvit-vit,tr dissem  
 pyr,occ silty.

SILTSTONE:med rd bn,frm,  
 aren,arg i/p,abdt COAL frags  
 & lams,com micmic,sbbkly.

STANDSTONE:clr-trnsl,f-crs,  
 a-sa,pr srt,lse & cln,mnr diisem  
 pyr,gd inf por,no fluor.

COAL:blk,sbvit-vit,tr dissem  
 pyr,occ silty.

SANDSTONE(1):clr-trnsl,med-occ  
 v crs,sa-sr,pr srt,lse,gen cln,  
 gd inf por,no fluor.

SANDSTONE(2):pl bn,med-lt bn,  
 fvf-med,sa-sr,fr-mod hd aggs,com  
 arg mtz,wk sil cmr,tr calc cmt,  
 pr vi por,no fluor

SANDSTONE:clr-trnsl,f-crs,  
 sa-sr,lse,cln,mod srt,gd inf  
 por,no fluor.

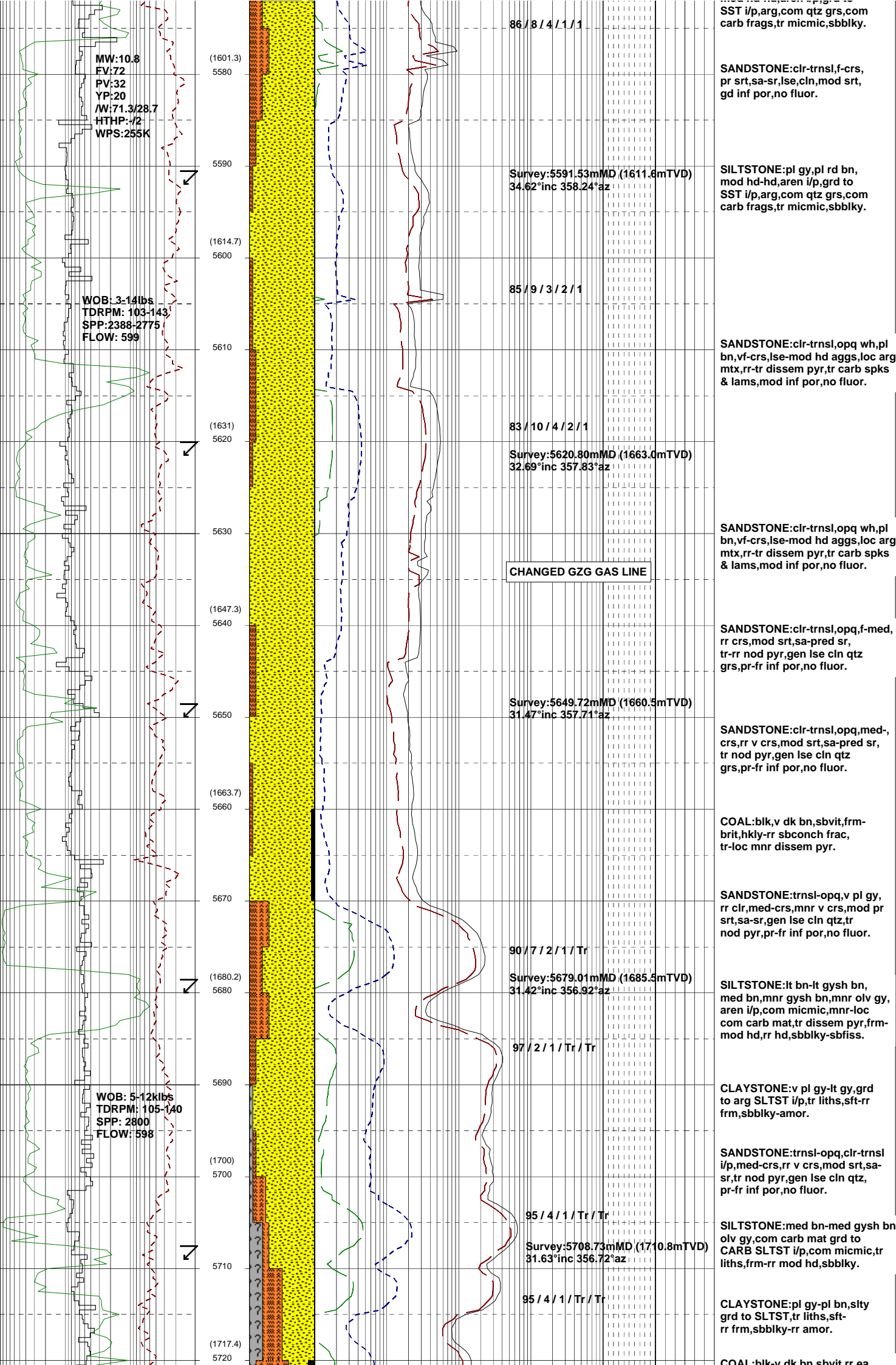
COAL:blk,sbvit-vit,tr dissem  
 pyr,occ silty.

SILTSTONE:pl gy,pl rd bn,  
 mod hd-hd aren i/n ord to

09/12/08

10/12/08





MW: 10.8  
 FV: 72  
 PV: 32  
 YP: 20  
 IW: 71.3/28.7  
 HTHP: -72  
 WPS: 255K

WOB: 3-14lbs  
 TDRPM: 103-143  
 SPP: 2388-2775  
 FLOW: 599

WOB: 5-12kilbs  
 TDRPM: 105-140  
 SPP: 2800  
 FLOW: 598

86 / 8 / 4 / 1 / 1

Survey: 5591.53mMD (1611.6mTVD)  
 34.62°inc 358.24°az

85 / 9 / 3 / 2 / 1

Survey: 5620.80mMD (1663.0mTVD)  
 32.69°inc 357.83°az

CHANGED GZG GAS LINE

Survey: 5649.72mMD (1660.5mTVD)  
 31.47°inc 357.71°az

90 / 7 / 2 / 1 / Tr

Survey: 5679.01mMD (1685.5mTVD)  
 31.42°inc 356.92°az

97 / 2 / 1 / 1 / Tr / Tr

95 / 4 / 1 / 1 / Tr / Tr

Survey: 5708.73mMD (1710.8mTVD)  
 31.63°inc 356.72°az

95 / 4 / 1 / 1 / Tr / Tr

SST i/p, arg, com qtz grs, com carb frags, tr micmic, sbblyky.

SANDSTONE: clr-trnsl, f-crs, pr srt, sa-sr, lse, cln, mod srt, gd inf por, no fluor.

SILTSTONE: pl gy, pl rd bn, mod hd-hd, aren i/p, grd to SST i/p, arg, com qtz grs, com carb frags, tr micmic, sbblyky.

SANDSTONE: clr-trnsl, opq wh, pl bn, vf-crs, lse-mod hd aggs, loc arg mtz, rr-tr dissep pyr, tr carb spks & lams, mod inf por, no fluor.

SANDSTONE: clr-trnsl, opq wh, pl bn, vf-crs, lse-mod hd aggs, loc arg mtz, rr-tr dissep pyr, tr carb spks & lams, mod inf por, no fluor.

SANDSTONE: clr-trnsl, opq, f-med, rr crs, mod srt, sa-pred sr, tr-rr nod pyr, gen lse cln qtz grs, pr-fr inf por, no fluor.

SANDSTONE: clr-trnsl, opq, med-, crs, rr v crs, mod srt, sa-pred sr, tr nod pyr, gen lse cln qtz grs, pr-fr inf por, no fluor.

COAL: blk, v dk bn, sbvit, frm-bit, hkly-rr sbconch frac, tr-loc mntr dissep pyr.

SANDSTONE: trnsl-opq, v pl gy, rr clr, med-crs, mntr v crs, mod pr srt, sa-sr, gen lse cln qtz, tr nod pyr, pr-fr inf por, no fluor.

SILTSTONE: lt bn-lt gysh bn, med bn, mntr gysh bn, mntr olv gy, aren i/p, com micmic, mntr-loc com carb mat, tr dissep pyr, frm-mod hd, rr hd, sbblyky-sbfiess.

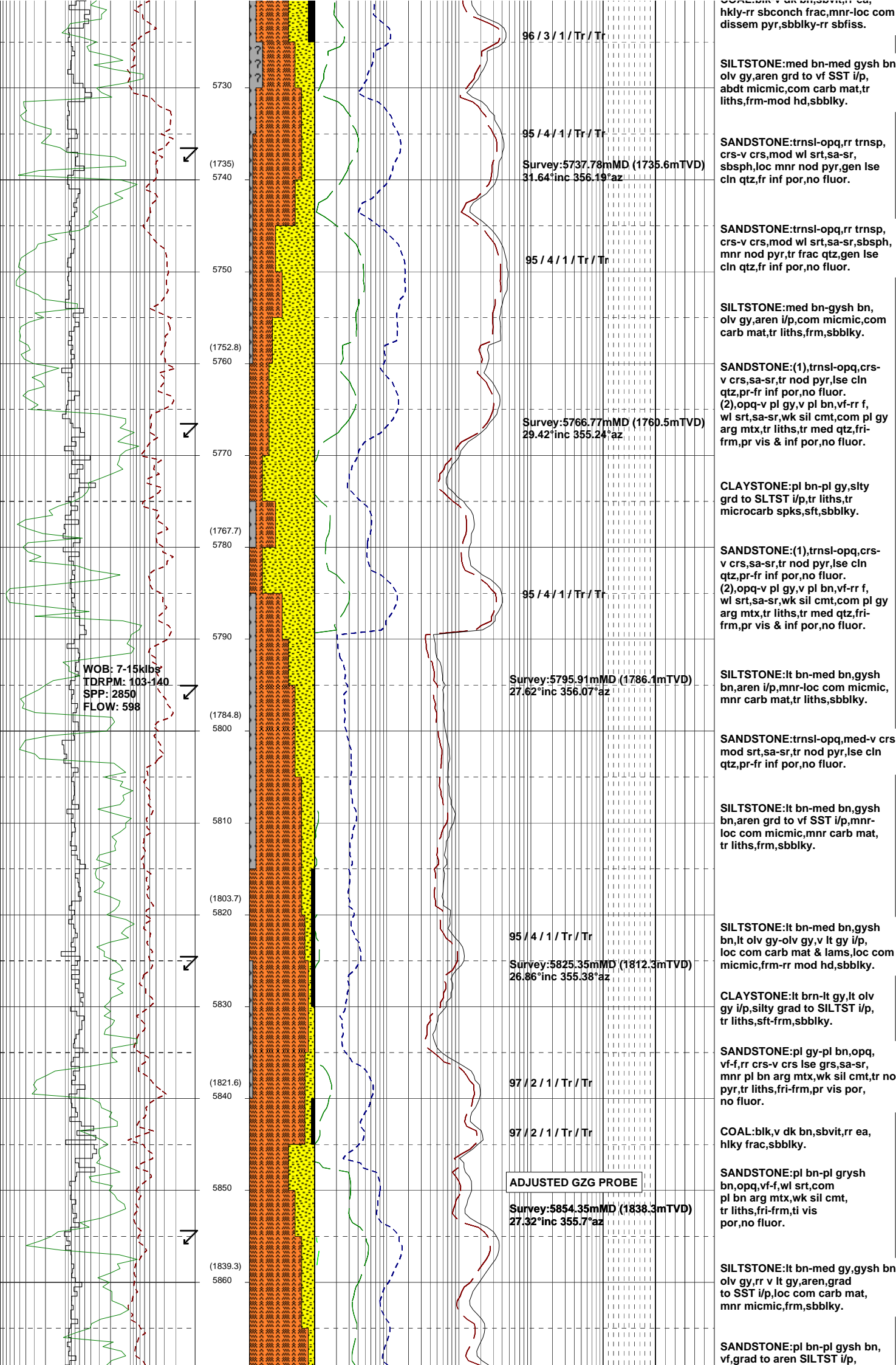
CLAYSTONE: v pl gy-lt gy, grd to arg SLTST i/p, tr liths, sft-rr frm, sbblyky-amor.

SANDSTONE: trnsl-opq, clr-trnsl i/p, med-crs, rr v crs, mod srt, sa-sr, tr nod pyr, gen lse cln qtz, pr-fr inf por, no fluor.

SILTSTONE: med bn-med gysh bn olv gy, com carb mat grd to CARB SLTST i/p, com micmic, tr liths, frm-rr mod hd, sbblyky.

CLAYSTONE: pl gy-pl bn, slty grd to SLTST, tr liths, sft-rr frm, sbblyky-rr amor.

COAL: blk, v dk bn, sbvit, rr ea



96 / 3 / 1 / Tr / Tr

5730

SILTSTONE: med bn-med gysh bn  
 olv gy, aren grd to vf SST i/p,  
 abdt micmic, com carb mat, tr  
 liths, frm-mod hd, sbbkly.

(1735)

95 / 4 / 1 / Tr / Tr

5740

Survey: 5737.78mMD (1735.6mTVD)  
 31.64°inc 356.19°az

SANDSTONE: trnsi-opq, rr trnsp,  
 crs-v crs, mod wl srt, sa-sr,  
 sbsph, loc mnr nod pyr, gen lse  
 cln qtz, fr inf por, no fluor.

95 / 4 / 1 / Tr / Tr

5750

SANDSTONE: trnsi-opq, rr trnsp,  
 crs-v crs, mod wl srt, sa-sr, sbsph  
 mnr nod pyr, tr frac qtz, gen lse  
 cln qtz, fr inf por, no fluor.

(1752.8)

95 / 4 / 1 / Tr / Tr

5760

SILTSTONE: med bn-gysh bn,  
 olv gy, aren i/p, com micmic, com  
 carb mat, tr liths, frm, sbbkly.

Survey: 5766.77mMD (1760.5mTVD)  
 29.42°inc 355.24°az

SANDSTONE: (1), trnsi-opq, crs-  
 v crs, sa-sr, tr nod pyr, lse cln  
 qtz, pr-fr inf por, no fluor.  
 (2), opq-v pl gy, v pl bn, vf-rr f,  
 wl srt, sa-sr, wk sil cmt, com pl gy  
 arg mtx, tr liths, tr med qtz, fri-  
 frm, pr vis & inf por, no fluor.

(1767.7)

95 / 4 / 1 / Tr / Tr

5780

CLAYSTONE: pl bn-pl gy, slty  
 grd to SLTST i/p, tr liths, tr  
 microcarb spks, sft, sbbkly.

SANDSTONE: (1), trnsi-opq, crs-  
 v crs, sa-sr, tr nod pyr, lse cln  
 qtz, pr-fr inf por, no fluor.  
 (2), opq-v pl gy, v pl bn, vf-rr f,  
 wl srt, sa-sr, wk sil cmt, com pl gy  
 arg mtx, tr liths, tr med qtz, fri-  
 frm, pr vis & inf por, no fluor.

Survey: 5795.91mMD (1786.1mTVD)  
 27.62°inc 356.07°az

SILTSTONE: lt bn-med bn, gysh  
 bn, aren i/p, mnr-loc com micmic,  
 mnr carb mat, tr liths, sbbkly.

(1784.8)

95 / 4 / 1 / Tr / Tr

5800

SANDSTONE: trnsi-opq, med-v crs  
 mod srt, sa-sr, tr nod pyr, lse cln  
 qtz, pr-fr inf por, no fluor.

SILTSTONE: lt bn-med bn, gysh  
 bn, aren grd to vf SST i/p, mnr-  
 loc com micmic, mnr carb mat,  
 tr liths, frm, sbbkly.

(1803.7)

95 / 4 / 1 / Tr / Tr

5820

SILTSTONE: lt bn-med bn, gysh  
 bn, lt olv gy-olv gy, v lt gy i/p,  
 loc com carb mat & lams, loc com  
 micmic, frm-rr mod hd, sbbkly.

CLAYSTONE: lt brn-lt gy, lt olv  
 gy i/p, silty grad to SILTST i/p,  
 tr liths, sft-frm, sbbkly.

Survey: 5825.35mMD (1812.3mTVD)  
 26.86°inc 355.38°az

(1821.6)

97 / 2 / 1 / Tr / Tr

5840

SANDSTONE: pl gy-pl bn, opq,  
 vf-f, rr crs-v crs lse grs, sa-sr,  
 mnr pl bn arg mtx, wk sil cmt, tr no  
 pyr, tr liths, fri-frm, pr vis por,  
 no fluor.

COAL: blk, v dk bn, sbvit, rr ea,  
 hky frac, sbbkly.

97 / 2 / 1 / Tr / Tr

5850

SANDSTONE: pl bn-pl grysh  
 bn, opq, vf-f, wl srt, com  
 pl bn arg mtx, wk sil cmt,  
 tr liths, fri-frm, ti vis  
 por, no fluor.

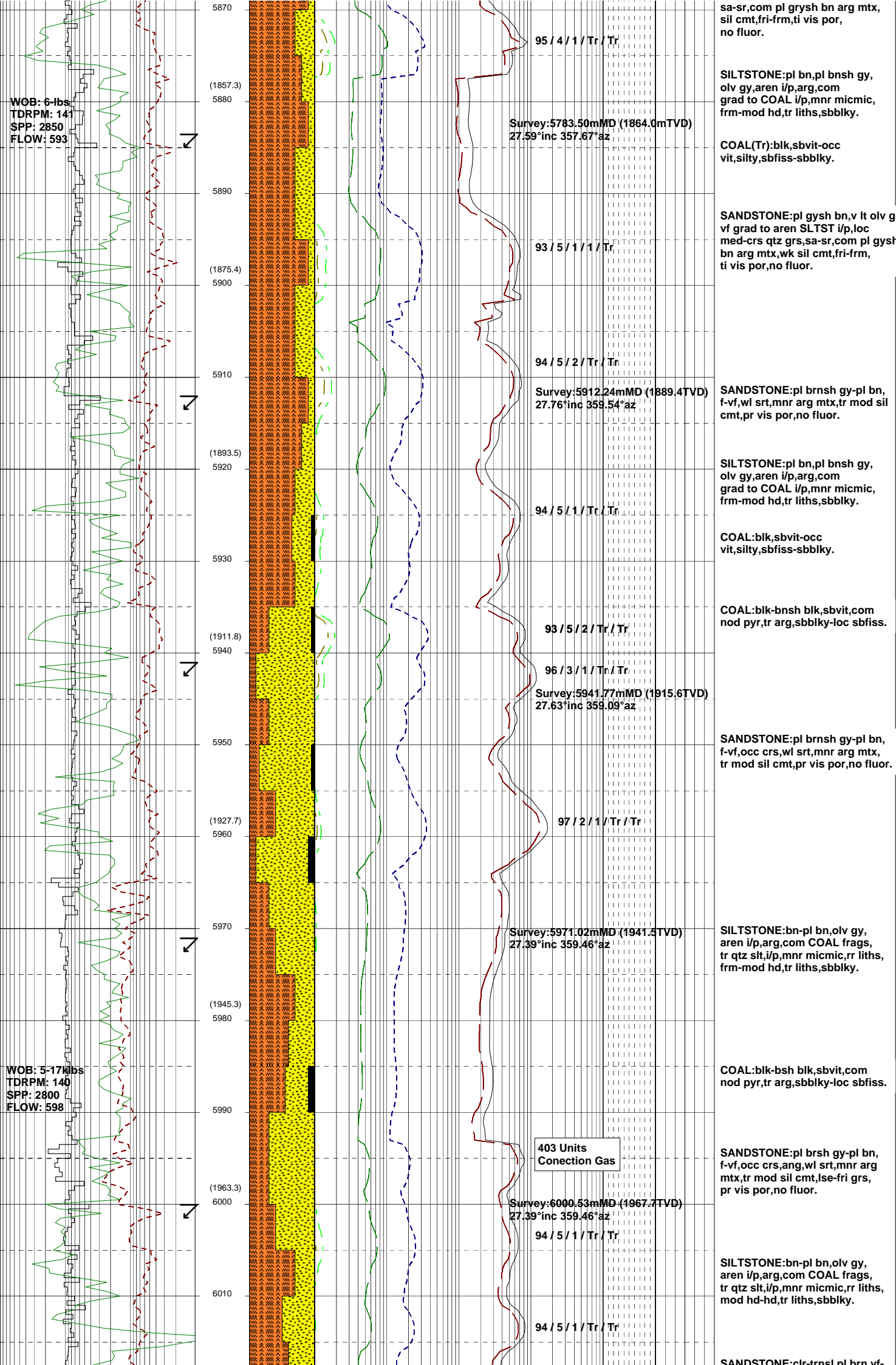
(1839.3)

97 / 2 / 1 / Tr / Tr

5860

SILTSTONE: lt bn-med gy, gysh bn  
 olv gy, rr v lt gy, aren, grad  
 to SST i/p, loc com carb mat,  
 mnr micmic, frm, sbbkly.

SANDSTONE: pl bn-pl gysh bn,  
 vf, grad to aren SILTST i/p,



WOB: 6-lbs  
TDRPM: 141  
SPP: 2850  
FLOW: 593

WOB: 5-17lbs  
TDRPM: 140  
SPP: 2800  
FLOW: 598

5870  
(1857.3)  
5880  
5890  
(1875.4)  
5900  
5910  
(1893.5)  
5920  
5930  
(1911.8)  
5940  
5950  
(1927.7)  
5960  
5970  
(1945.3)  
5980  
5990  
(1963.3)  
6000  
6010

95 / 4 / 1 / Tr / Tr

Survey: 5783.50mMD (1864.0mTVD)  
27.59°inc 357.67°az

93 / 5 / 1 / 1 / Tr

94 / 5 / 2 / Tr / Tr

Survey: 5912.24mMD (1889.4TVD)  
27.76°inc 359.54°az

94 / 5 / 1 / Tr / Tr

93 / 5 / 2 / Tr / Tr

96 / 3 / 1 / Tr / Tr

Survey: 5941.77mMD (1915.6TVD)  
27.63°inc 359.09°az

97 / 2 / 1 / Tr / Tr

Survey: 5971.02mMD (1941.3TVD)  
27.39°inc 359.46°az

403 Units  
Conection Gas

Survey: 6000.53mMD (1967.7TVD)  
27.39°inc 359.46°az

94 / 5 / 1 / Tr / Tr

94 / 5 / 1 / Tr / Tr

sa-sr,com pl grysh bn arg mtx,  
sil cmt,fri-frm,ti vis por,  
no fluor.

SILTSTONE:pl bn,pl bnsh gy,  
olv gy,aren i/p,arg,com  
grad to COAL i/p,mnr micmic,  
frm-mod hd,tr liths,sbbiky.

COAL(Tr):blk,svbit-occ  
vit,silty,sbfiss-sbbiky.

SANDSTONE:pl gysh bn,v lt olv g  
vf grad to aren SLTST i/p,loc  
med-crs qtz grs,sa-sr,com pl gysh  
bn arg mtx,wk sil cmt,fri-frm,  
ti vis por,no fluor.

SANDSTONE:pl brnsh gy-pl bn,  
f-vf,wl srt,mnr arg mtx,tr mod sil  
cmt,pr vis por,no fluor.

SILTSTONE:pl bn,pl bnsh gy,  
olv gy,aren i/p,arg,com  
grad to COAL i/p,mnr micmic,  
frm-mod hd,tr liths,sbbiky.

COAL:blk,svbit-occ  
vit,silty,sbfiss-sbbiky.

COAL:blk-bnsh blk,svbit,com  
nod pyr,tr arg,sbbiky-loc sfbfiss.

SANDSTONE:pl brnsh gy-pl bn,  
f-vf,occ crs,wl srt,mnr arg mtx,  
tr mod sil cmt,pr vis por,no fluor.

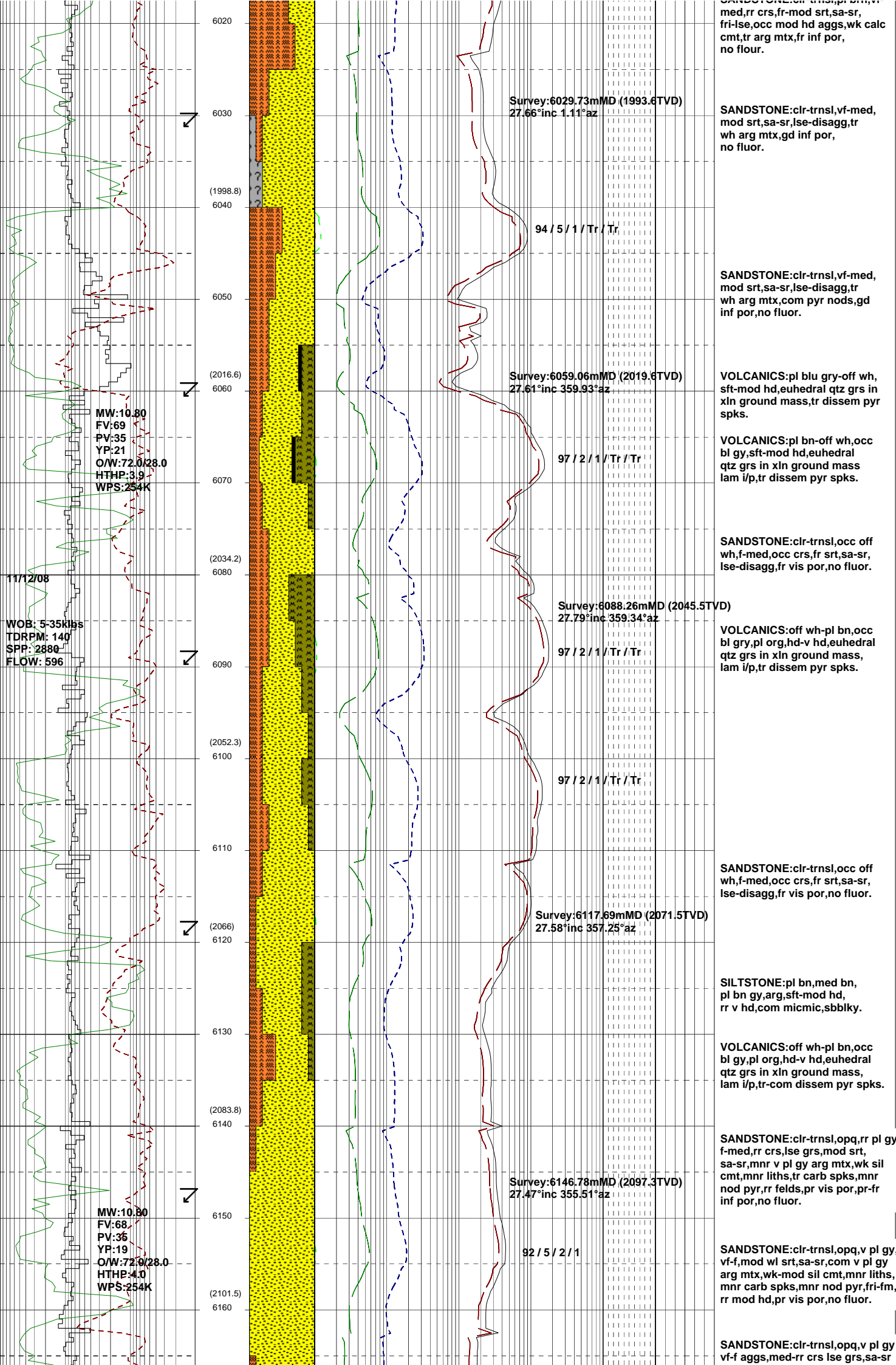
SILTSTONE:bn-pl bn,olv gy,  
aren i/p,arg,com COAL frags,  
tr qtz slt,i/p,mnr micmic,rr liths,  
frm-mod hd,tr liths,sbbiky.

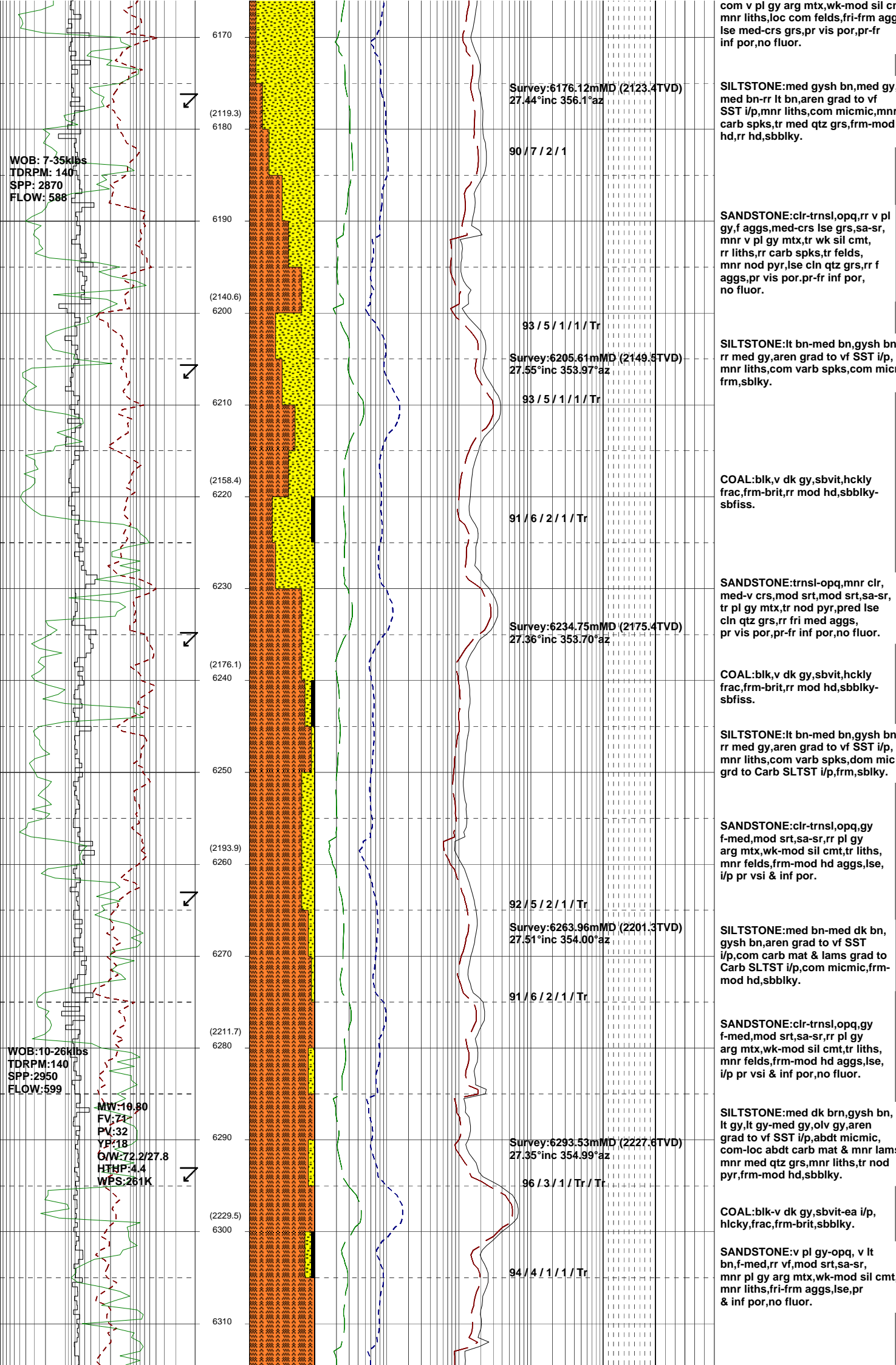
COAL:blk-bsh blk,svbit,com  
nod pyr,tr arg,sbbiky-loc sfbfiss.

SANDSTONE:pl brsh gy-pl bn,  
f-vf,occ crs,ang,wl srt,mnr arg  
mtx,tr mod sil cmt,lse-fri grs,  
pr vis por,no fluor.

SILTSTONE:bn-pl bn,olv gy,  
aren i/p,arg,com COAL frags,  
tr qtz slt,i/p,mnr micmic,rr liths,  
mod hd-hd,tr liths,sbbiky.

SANDSTONE:clr-trnspl pl brn vf





com v pl gy arg mtx,wk-mod sil cr  
 mnr liths,loc com felds,fri-frm aggs  
 lse med-crs grs,pr vis por,pr-fr  
 inf por,no fluor.

**SILTSTONE:**med gysh bn,med gy  
 med bn-rr lt bn,aren grad to vf  
 SST i/p,mnr liths,com micmic,mnr  
 carb spks,tr med qtz grs,frm-mod  
 hd,rr hd,sbbkly.

**SANDSTONE:**clr-trnsl,opq,rr v pl  
 gy,f aggs,med-crs lse grs,sa-sr,  
 mnr v pl gy mtx,tr wk sil cmt,  
 rr liths,rr carb spks,tr felds,  
 mnr nod pyr,lse cln qtz grs,rr f  
 aggs,pr vis por,pr-fr inf por,  
 no fluor.

**SILTSTONE:**lt bn-med bn,gysh bn  
 rr med gy,aren grad to vf SST i/p,  
 mnr liths,com varb spks,com mic  
 frm,sbkly.

**COAL:**blk,v dk gy,svbit,hckly  
 frac,frm-brit,rr mod hd,sbbkly-  
 sbfiss.

**SANDSTONE:**trnsl-opq,mnr clr,  
 med-v crs,mod srt,mod srt,sa-sr,  
 tr pl gy mtx,tr nod pyr,pred lse  
 cln qtz grs,rr fri med aggs,  
 pr vis por,pr-fr inf por,no fluor.

**COAL:**blk,v dk gy,svbit,hckly  
 frac,frm-brit,rr mod hd,sbbkly-  
 sbfiss.

**SILTSTONE:**lt bn-med bn,gysh bn  
 rr med gy,aren grad to vf SST i/p,  
 mnr liths,com varb spks,dm mic  
 grd to Carb SLTST i/p,frm,sbkly.

**SANDSTONE:**clr-trnsl,opq,gy  
 f-med,mod srt,sa-sr,rr pl gy  
 arg mtx,wk-mod sil cmt,tr liths,  
 mnr felds,frm-mod hd aggs,lse,  
 i/p pr vsi & inf por.

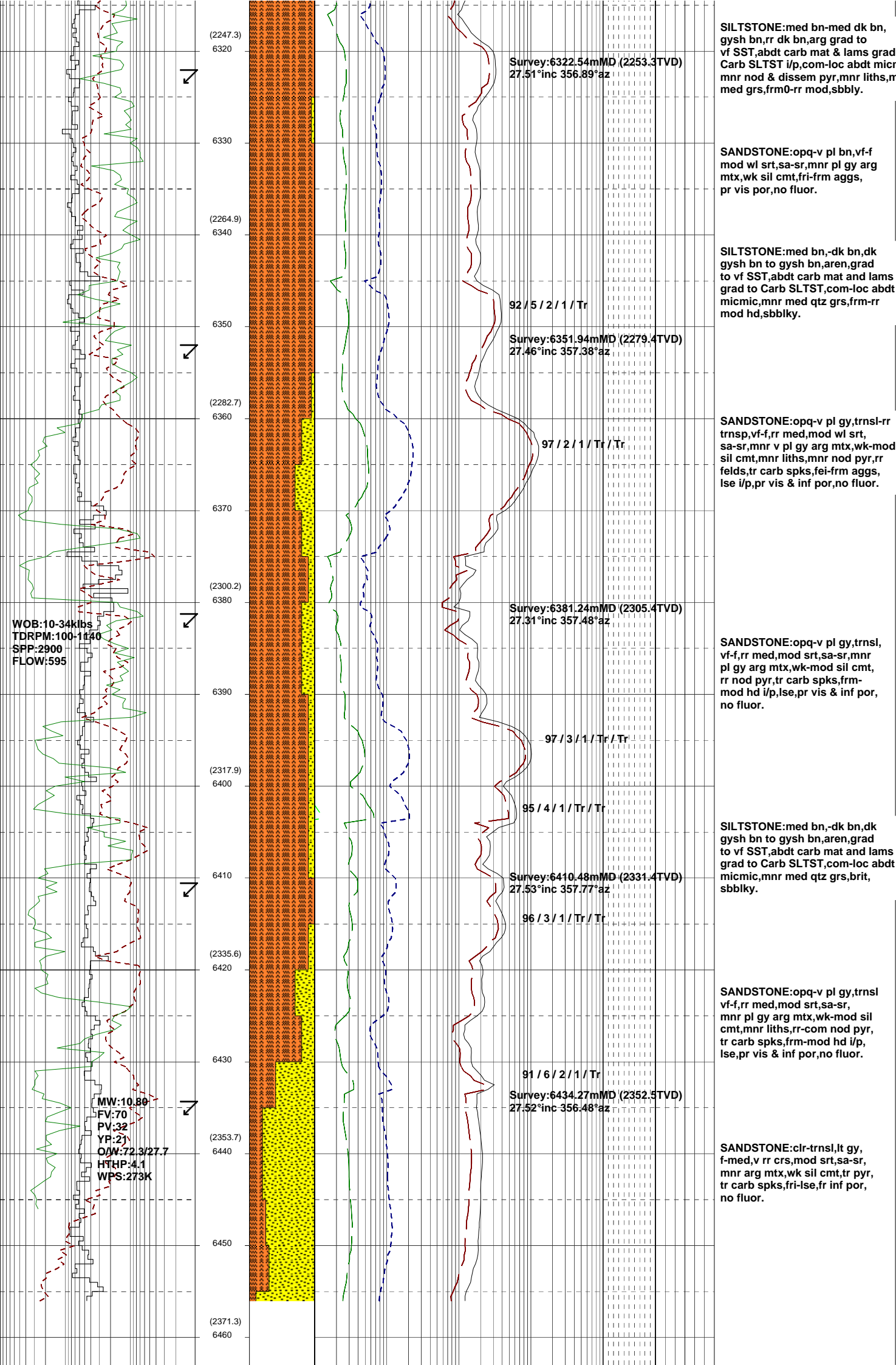
**SILTSTONE:**med bn-med dk bn,  
 gysh bn,aren grad to vf SST  
 i/p,com carb mat & lams grad to  
 Carb SLTST i/p,com micmic,frm-  
 mod hd,sbbkly.

**SANDSTONE:**clr-trnsl,opq,gy  
 f-med,mod srt,sa-sr,rr pl gy  
 arg mtx,wk-mod sil cmt,tr liths,  
 mnr felds,frm-mod hd aggs,lse,  
 i/p pr vsi & inf por,no fluor.

**SILTSTONE:**med dk brn,gysh bn,  
 lt gy,lt gy-med gy,olv gy,aren  
 grad to vf SST i/p,abdt micmic,  
 com-loc abdt carb mat & mnr lam:  
 mnr med qtz grs,mnr liths,tr nod  
 pyr,frm-mod hd,sbbkly.

**COAL:**blk-v dk gy,svbit-ea i/p,  
 hckly,frac,frm-brit,sbbkly.

**SANDSTONE:**v pl gy-opq, v lt  
 bn,f-med,rr vf,mod srt,sa-sr,  
 mnr pl gy arg mtx,wk-mod sil cmt  
 mnr liths,fri-frm aggs,lse,pr  
 & inf por,no fluor.



(2247.3)  
6320

6330

(2264.9)  
6340

6350

(2282.7)  
6360

6370

(2300.2)  
6380

6390

(2317.9)  
6400

6410

(2335.6)  
6420

6430

(2353.7)  
6440

6450

(2371.3)  
6460

Survey: 6322.54m MD (2253.3TVD)  
27.51° inc 356.89° az

92 / 5 / 2 / 1 / Tr

Survey: 6351.94m MD (2279.4TVD)  
27.46° inc 357.38° az

97 / 2 / 1 / Tr / Tr

Survey: 6381.24m MD (2305.4TVD)  
27.31° inc 357.48° az

97 / 3 / 1 / Tr / Tr

95 / 4 / 1 / Tr / Tr

Survey: 6410.48m MD (2331.4TVD)  
27.53° inc 357.77° az

96 / 3 / 1 / Tr / Tr

91 / 6 / 2 / 1 / Tr

Survey: 6434.27m MD (2352.5TVD)  
27.52° inc 356.48° az

WOB: 10-34kibs  
TDRPM: 100-1140  
SPP: 2900  
FLOW: 595

MW: 10.89  
FV: 70  
PV: 32  
YP: 21  
O/W: 72.3/27.7  
HTHP: 4.1  
WPS: 273K

SILTSTONE: med bn-med dk bn, gysh bn, rr dk bn, arg grad to vf SST, abdt carb mat & lams grad Carb SLTST i/p, com-loc abdt micr mnr nod & disse pyr, mnr liths, m med grs, frm0-rr mod, sbbly.

SANDSTONE: opq-v pl bn, vf-f mod wl srt, sa-sr, mnr pl gy arg mtx, wk sil cmt, fri-frm aggs, pr vis por, no fluor.

SILTSTONE: med bn, -dk bn, dk gysh bn to gysh bn, aren, grad to vf SST, abdt carb mat and lams grad to Carb SLTST, com-loc abdt micmic, mnr med qtz grs, frm-rr mod hd, sbbiky.

SANDSTONE: opq-v pl gy, trnsi-rr trnsf, vf-f, rr med, mod wl srt, sa-sr, mnr v pl gy arg mtx, wk-mod sil cmt, mnr liths, mnr nod pyr, rr felds, tr carb spks, fei-frm aggs, lse i/p, pr vis & inf por, no fluor.

SANDSTONE: opq-v pl gy, trnsi, vf-f, rr med, mod srt, sa-sr, mnr pl gy arg mtx, wk-mod sil cmt, rr nod pyr, tr carb spks, frm-mod hd i/p, lse, pr vis & inf por, no fluor.

SILTSTONE: med bn, -dk bn, dk gysh bn to gysh bn, aren, grad to vf SST, abdt carb mat and lams grad to Carb SLTST, com-loc abdt micmic, mnr med qtz grs, brit, sbbiky.

SANDSTONE: opq-v pl gy, trnsi vf-f, rr med, mod srt, sa-sr, mnr pl gy arg mtx, wk-mod sil cmt, mnr liths, rr-com nod pyr, tr carb spks, frm-mod hd i/p, lse, pr vis & inf por, no fluor.

SANDSTONE: clr-trnsi, lt gy, f-med, v rr crs, mod srt, sa-sr, mnr arg mtx, wk sil cmt, tr pyr, tr carb spks, fri-lse, fr inf por, no fluor.

