MASTERLOG
WEST TUNA W-3

GENERAL
Country : AUSTRALIA
Permit : VIC-L4
Field : WEST TUNA
Basin : GIPPSLAND
Well Type : DEVELOPMENT
Rig Name : ISDL-453

POSITION
Local Co-ord X : 4.00 mE
Local Co-ord Y : 0.00 mN
AMG Co-ord X : 621,486.68 mE
AMG Co-ord Y : 5,771,796.83 mN
RT to MSL : 34.69 m
RT to Sea Bed : 95.69 m

HOLE / CASING INFO
20" Hole to 170 m
12-1/4" Hole to 833 m
8-1/2" Hole to 2565 m
16" Conductor @ 166.5 m
9-5/8" Surface casing @ 830 m
7" Production casing @ 2559.8 m

DATE / DEPTH
Spud Date : 25-09-2001
Total Depth Date : 07-10-2001
Total Depth : 2565 m
True Vertical Depth : 1448.91 m
Log Scale : 1/ 500
Depth From (m): 90 To: 2580

ENGINEERS
Mark Smith
Matt Boyd
Paul McGilveray

ABBREVIATIONS

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

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

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

RATE OF PENETRATION
metres/hour
500 50 5 .5

DEPTH (m) (TVD)
90 100 110 (110) 120 130 (130) 140

CUTTINGS LITHOLOGY
%
0 100

TOTAL GAS & CHROMATOGRAPH DATA
C1 — — C2 - - - - C3 — - —
iC4 — — nC4 - - - - iC5 — - —
nC5 — — TG ——
Total Gas in Units
Chromatograph in Percent
.5 5 50 500 5K
.01 .1 1 10 100

CUT FLUOR
good fair poor

DIRECT FLUOR
good fair poor

CALCIMETRY
%
CALCITE
DOLOMITE
0 100

LITHOLOGICAL DESCRIPTIONS and REMARKS

Bit #1: 20"
Smith SDGHC
Jets: 3x20
In: 96m
Out: 170m
Run: 74m
Hrs:2.99
Cond: 1-1-WT-A-EEE-I-NO-TD

WOB:0-3 klbs
RPM:50-60
SPP:420-720 psi
FLW:270-355 gpm

WEST TUNA W-3 SPUDDED @ 00:30 HRS ON 25-09-2001

ALL RETURNS TO SEA FLOOR

150 (150)

160

16" Conductor Set @ 166.5 metres

170 (170)

MW:8.8
FV:37
PV:1
pH:9.0

180

Bit #2: 12.25"
Reed Hycalog
DS195
Jets: 5x18
In: 170m
Out: 833m
Run: 663m
Hrs: 23.2
Cond: 0-1-CT-
S-X-I-NO-TC

190 (190)

1.16°inc
334.67°az

NIL GAS

200

1.56°inc
327.68°az

210 (210)

WOB:0-3 klbs
RPM:0-40
MM RPM:90
SPP:725 psi
FLW:565 gpm

220

230 (230)

3.96°inc
319.94°az

240

250 (249.9)

260

7.78°inc
317.99°az

270 (269.7)

WOB:0-5 klbs
RPM:0-50
MM RPM:97
SPP:890 psi
FLW:610 gpm

280

290 (289.4)

10.49°inc
320.62°az

NIL GAS

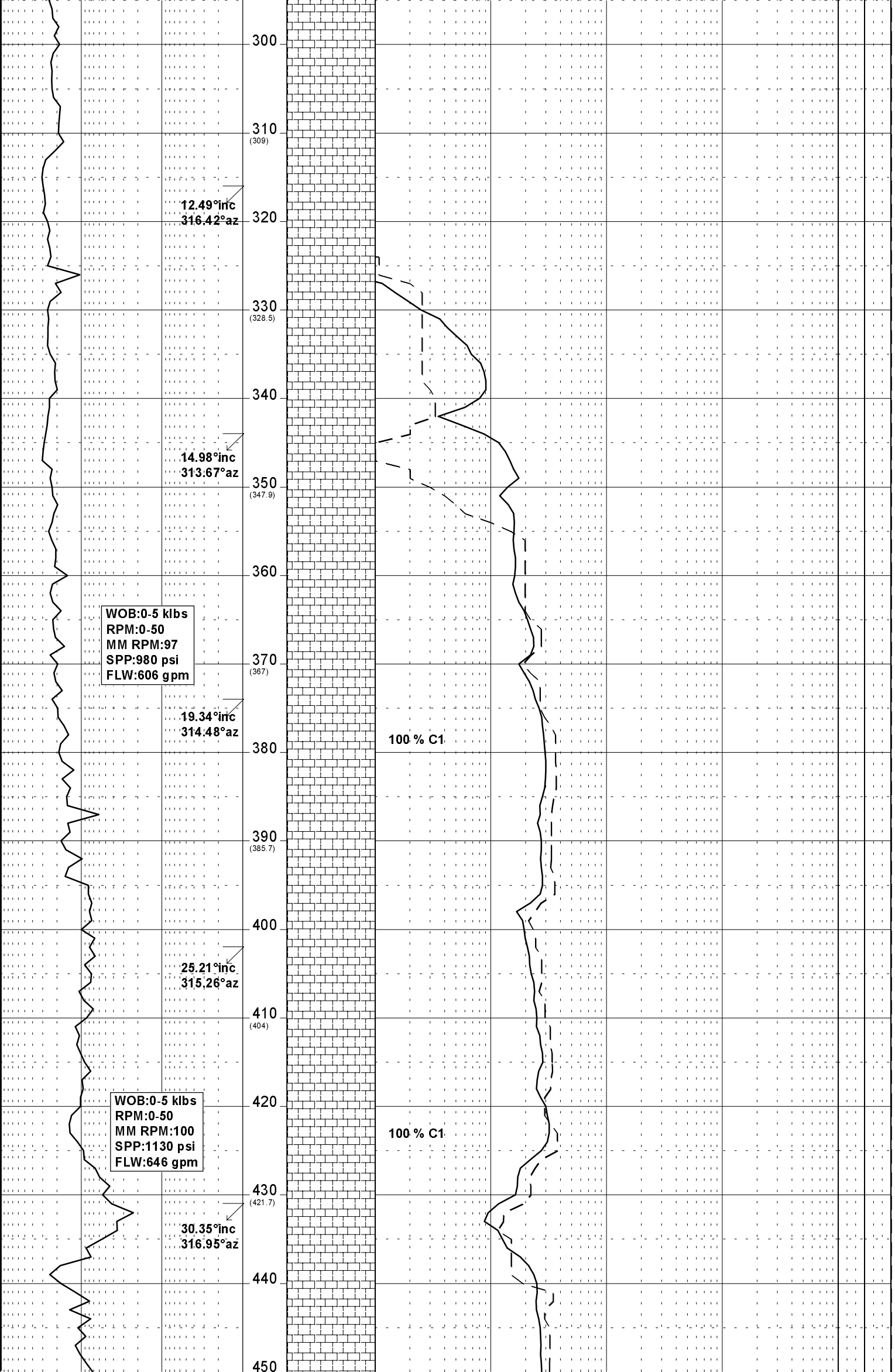
NO H2S or CO2 DETECTED

AQUAGEL/SEAWATER
MUD SYSTEM

CALCARENITE:v lt gy,lt olv gy,
yelsh gy,f-v crs,dom f,abdt foss
frag,foram,shell frag,occ med-
crs qtz & lith grn,fri-lse,gd
inf & vis por,no fluor.

CALCARENITE:v lt gy,lt olv gy,
yelsh gy,f,rr crs,tr arg,abdt
foss frag,foram,rr shell frag,
fri,gd vis por,no fluor.

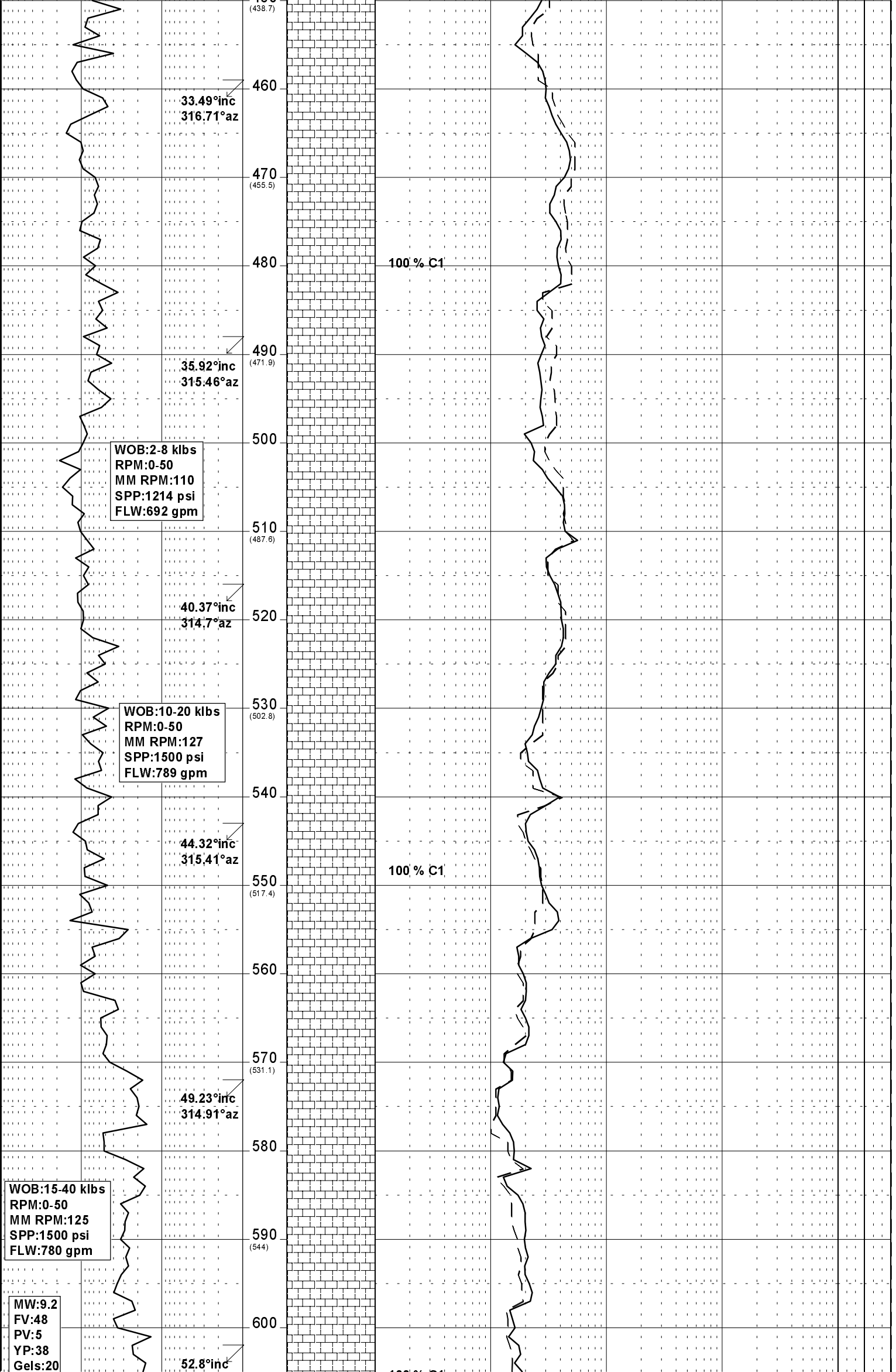
CALCARENITE:v lt gy-lt olv gy,
yelsh gy,f,tr arg,abdt foss frag
foram,ooid,tr glauc,lse-fri,fr-
gd inf & vis por,no fluor.



CALCARENITE:lt gy,lt olv gy,f-dom med,occ crs,arg i/p,com foss frag,fri-mod hd i/p,pr-fr vis por,no fluor.

CALCARENITE:lt olv gy-lt gy,f-med,arg i/p,com foss frag,frm, fri-mod hd i/p,occ lse,pr-fr vis & inf por,no fluor.

CALCARENITE:lt olv gy-lt gy,off wh,f-med,tr crs,com arg i/p,com foss & frags,tr lith,fri-mod hd, pr vis por,no fluor.



CALCARENITE:lt gy,olv gy,trnsl/ off wh,f-crs,com foss frag,tr glauc,com arg i/p-slty,fri-mod hd,pr vis por,no fluor.

CALCARENITE:lt olv gy,gy gn,f-occ med,com arg-lut,com ooid & foss frag,tr glauc,fri-mod hd, pr vis por,no fluor.

CALCARENITE:lt gy-lt olv gy, yelsh gy,f,g/t clslt i/p,com v arg,com foss frag,foram,ooid,tr-rr pyr,fri-mod hd,vpr vis por, no fluor.

pH:8.0

315.62°az

610
(556.3)

620

WOB:15-40 klbs
RPM:0-50
MM RPM:125
SPP:1575 psi
FLW:780 gpm

630
(568.1)

55.11°inc
315.76°az

640

29-09-2001

650
(579.3)

660

57.33°inc
315.85°az

670
(590.2)

100 % C1

680

WOB:15-40 klbs
RPM:0-55
MM RPM:125
SPP:1550 psi
FLW:785 gpm

58.77°inc
315.93°az

690
(600.8)

700

710
(611)

720

60.23°inc
315.77°az

730
(620.9)

MW:9.4
FV:49
PV:1
YP:0
pH:9.5

100 % C1

740

61.99°inc
314.68°az

750
(630.5)

760

CALCARENITE:lt gy-lt olv gy, yelsh gy,vf-f,g/t clslt,com v arg,com foss,foram,ooid,tr pyr, tr spar calcite,tr glauc,fri-com mod hd,vpr vis por,no fluor.

CALCARENITE:lt gy-olv gy,off wh-yel,f-med,com arg,com foss,rr pyr,g/t clslt,fri-mod hd,vpr vis por,no fluor.

770
(639.6)

63.93°inc
313.87°az

780

WOB:15-36 klbs
RPM:0-60
MM RPM:125
SPP:1600 psi
FLW:786 gpm

790
(648.5)

100 / TR

800

63.2°inc
313.43°az

810
(657.5)

820

830
(666.5)

840

MW:9.0
FV:45
PV:11
YP:14
Gel:4/7
W/L:4.4
pH:10.5
Cl:48k

850
(675.6)

62.85°inc
313.46°az

860

Bit #3RR: 8.5"
Geodiamond
S75BHPX
Jets: 7x14
In: 838m
Out: 2565m
Run: 1727m
Hrs: 39.76
Cond: 4-7-WT-A
-X-IN-LT-TD

100 % C1

870
(684.6)

880

64.29°inc
313.84°az

890
(693.4)

WOB:10-25 klbs
RPM:0-120
MM RPM:175
SPP:1350 psi
FLW:610 gpm

900

910
(702.2)

63.73°inc
314.55°az

CALCARENITE:lt gy,yel-trnsl-off
wh,f-med,tr foss-ooid & foram,
fri-mod hd,v pr por,no fluor.

Total Depth 12-1/4" Phase @ 833m

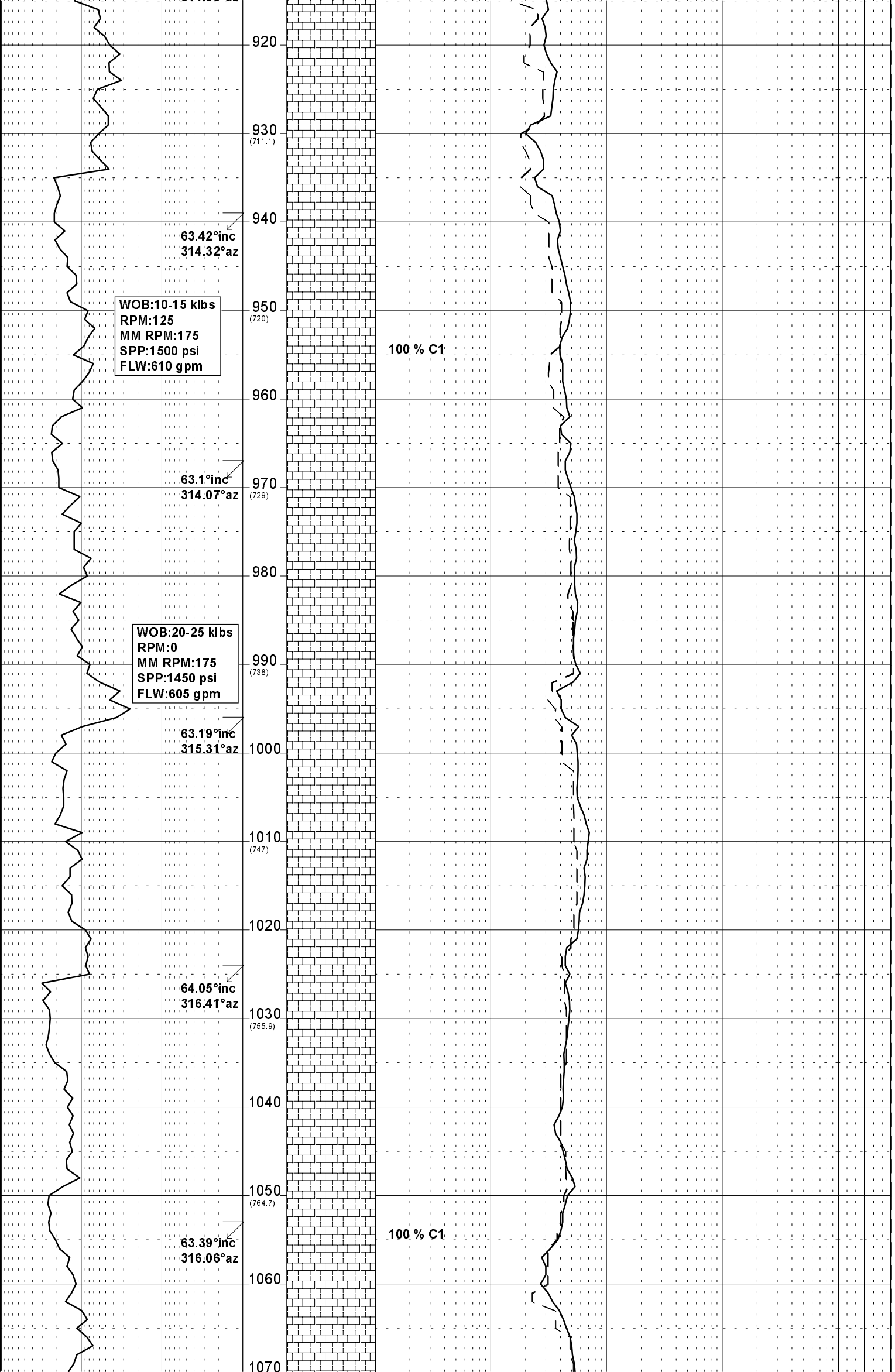
9-5/8" Casing Shoe @ 830m

**DRILL OUT WITH ROTARY BHA,
TRIP FOR STEERABLE RAB/ADN**

PIT @ 838m: EMW = 12.5 ppg

**DRILL WITH KCL/PHPA
POLYMER MUD SYSTEM**

CALCILUTITE:lt gy-lt olv gy,com
v arg,tr foram,tr ooid,tr spar
calcite grn,tr carb spk,sft,
amor-sbblky.



CALCILUTITE:lt gy-lt olv gy,com v arg,tr foram,tr ooid,tr spar calcite,tr carb spk,tr-rr dissem pyr,v sft-sft,amor-rr sbblky.

CALCILUTITE:lt gy-lt olv gy,com v arg,tr spar calcite grn,tr carb spk,tr foss frag,v sft-sft, rr frm,amor-sbblky.

CALCILUTITE:v lt gy-lt olv gy, com v arg,tr foram,tr ooid,tr dissem & nod pyr,rr spar calcite grn,tr carb spk,v sft-sft,occ frm,amor-sbblky.

(773.7)

1080

62.62°inc
315.75°az

WOB:15-25 klbs
RPM:0-125
MM RPM:175
SPP:1650 psi
FLW:605 gpm

1090
(782.8)

1100

1110
(792)

62.75°inc
316.33°az

1120

1130
(801.1)

1140

63.35°inc
316.59°az

100 % C1

1150
(810.1)

1160

1170
(819)

64.06°inc
316.95°az

1180

WOB:20-30 klbs
RPM:0-125
MM RPM:175
SPP:1750 psi
FLW:605 gpm

1190
(827.8)

1200

63.50°inc
317.16°az

100 % C1

1210
(836.6)

1220

CALCILUTITE:v lt gy-lt olv gy,
com v arg,g/t CALC CLYST,tr ooid
tr foram,tr dissem & nod pyr,rr
spar & micr calcite grn,tr carb
spk,sft-occ frm,amor-com sbblky

CALCILUTITE:v lt gy-lt olv gy,
com v arg,g/t CALC CLYST,tr ooid
tr foram,tr carb spk,tr spar
calcite grn,tr dissem & nod pyr,
sft-occ frm,amor-sbblky.

CALCILUTITE:v lt gy-lt olv gy,
com v arg,tr foram,tr ooid,tr
dissem & nod pyr,tr carb spk,
tr spar calcite grn,sft-occ frm,
amor-sbblky.

63.92°inc
317.04°az

1230
(845.5)

1240

1250
(854.3)

63.66°inc
316.89°az

1260

WOB:10-20 klbs
RPM:0-122
MM RPM:179
SPP:1810 psi
FLW:615 gpm

1270
(863.3)

1280

62.81°inc
317.05°az

1290
(872.3)

100 % C1

1300

1310
(881.2)

63.06°inc
317.97°az

1320

MW:9.8
FV:76
PV:26
YP:48
Gel:10/18
WL:3.0
pH:8.6
Cl:48.5k

1330
(890.1)

1340

63.50°inc
317.78°az

1350
(898.9)

WOB:10-20 klbs
RPM:0-125
MM RPM:180
SPP:1750 psi
FLW:605 gpm

1360

100 % C1

1370
(907.9)

05-10-2001

63.25°inc
317.19°az

1380

CALCILUTITE:lt gy-ly olv gy,v arg,g/t Calc Clst i/p,tr slty i/p,tr ooid,rr nod pyr,rr carb spk,sft-v sft,occ frm,amor-sbblky.

CALCILUTITE:lt gy-lt olv gy,pl gy bn,v arg,rr slty,g/t Calc Clst i/p,tr ooid,tr carb spk,v sft,amor-sbblky.

1390
(916.9)
1400
63.98°inc
317.28°az
1410
(926)
1420
1430
(935.1)
62.99°inc
317.11°az
100 % C1
1440
WOB:15 klbs
RPM:0-120
MM RPM:179
SPP:2020 psi
FLW:610 gpm
1450
(944.1)
63.61°inc
316.97°az
1460
1470
(953)
1480
63.39°inc
316.35°az
1490
(962)
1500
1510
(971.1)
99 / 1
62.48°inc
316.26°az
1520
1530
(980.2)

CALCILUTITE:lt gy-lt olv gy,arg,
tr slty,rr spar calc,rr carb spk
v sft,occ frm,sbblky-amor.

CALCILUTITE:lt gy,lt olv gy,arg
tr slty i/p,tr dissem pyr,rr
carb spk,v sft,frm i/p,sbblky-
amor.

CALCILUTITE:lt gy-lt olv gy,com
arg,tr slty i/p,tr dissem pyr,tr
carb spk,tr foram,tr ooid,tr
spar calcite,v sft-sft,occ frm,
occ amor-dom sbblky.

1540

63.04°inc
316.0°az

1550
(989.3)

WOB:15-30 klbs
RPM:0-120
MM RPM:179
SPP:2250 psi
FLW:610 gpm

1560

1570
(998.3)

99 / 1

63.48°inc
315.31°az

1580

1590
(1007.3)

1600

63.52°inc
315.54°az

1610
(1016.2)

1620

1630
(1025)

64.0°inc
315.69°az

99 / 1

1640

WOB:20-30 klbs
RPM:0-122
MM RPM:179
SPP:2350 psi
FLW:610 gpm

1650
(1033.9)

1660

63.4°inc
315.24°az

1670
(1042.8)

1680

1690

MARL:lt gy,lt olv gy,occ med gy,
arg,tr slty i/p,tr carb & lith
spk,tr dissem pyr,tr ooid,sft-
frm,occ amor,sbblky.

MARL:lt gy-lt olv gy,med gy,
arg,tr slty i/p,tr carb,tr nod
& dissem pyr,tr ooid,sft-occ frm
amor i/p,sbblky.

MARL:lt gy-lt olv gy,med gy,
arg,occ slty i/p,tr carb spk i/p
tr-rr dissem & nod pyr,tr ooid,
sft-rr frm,amor i/p,sbblky.

62.51°inc
315.42°az
(1051.9)
1700
1710
(1061.1)
99 / 1
62.63°inc
315.52°az
1720
WOB:20-35 klbs
RPM:0-122
MM RPM:179
SPP:2450 psi
FLW:610 gpm
1730
(1070.3)
1740
62.79°inc
315.23°az
1750
(1079.5)
1760
1770
(1088.6)
63.1°inc
315.39°az
1780
WOB:20-35 klbs
RPM:0-122
MM RPM:179
SPP:2500 psi
FLW:610 gpm
1790
(1097.6)
99 / 1
1800
63.4°inc
316.16°az
1810
(1106.6)
1820
1830
(1115.5)
63.69°inc
316.25°az
1840

MARL:lt olv gy,lt-med gy,arg,
tr slty i/p,tr dissem & nod pyr,
tr-rr ooid,tr carb spk i/p,sft-
rr frm,amor i/p,sbblky.

MARL:lt olv gy,lt-med gy,arg,tr
slty i/p,tr dissem & nod pyr,tr
ooid,loc tr carb spk,sft-occ frm
sbblky.

MARL:lt olv gy,lt-med gy,arg,loc
tr slty i/p,rr-mnr ooid,tr
dissem & nod pyr,loc tr carb spk
tr foram,sft-occ frm,sbblky.

1850
(1124.5)
1860
62.81°inc
316.05°az
1870
(1133.5)
1880
1890
(1142.5)
63.50°inc
316.28°az
1900
1910
(1151.5)
98 / 2
1920
63.63°inc
316.70°az
1930
(1160.4)
WOB:10-20 klbs
RPM:0-122
MM RPM:179
SPP:2600 psi
FLW:613 gpm
1940
1950
(1169.4)
62.92°inc
316.89°az
1960
1970
(1178.4)
1980
63.32°inc
316.51°az
98 / 2
1990
(1187.4)
WOB:15 klbs
RPM:0-122
2000

MARL:lt olv gy,occ med gy,arg,rr ooid,tr nod pyr,occ carb spk,sft -frm,sbblky.

CLAYSTONE:lt olv gy-lt gy,calc, mnr ooid,rr nod pyr,occ spar calc,frm,com sft,sbblky-blky.

CLAYSTONE:lt olv gy-occ med gy, lt gy i/p,calc,tr ooid,tr nod py pyr,frm,occ sft,sbblky-blky.

MM RPM:177
SPP:2770 psi
FLW:614 gpm

63.59°inc
316.58°az

2010
(1196.4)

MW:10.2
FV:83
PV:29
YP:51
Gel:11/20
WL:3.2
pH:8.2
Cl:47.5k

2020

2030
(1205.3)

06-10-2001

63.53°inc
315.83°az

2040

98 / 2

2050
(1214.2)

2060

63.15°inc
315.30°az

2070
(1223.2)

WOB:10-15 klbs
RPM:0-120
MM RPM:176
SPP:2800 psi
FLW:607 gpm

2080

99 / 1

2090
(1232.2)

63.44°inc
315.31°az

2100

2110
(1241.2)

2120

63.02°inc
315.12°az

2130
(1250.2)

2140

2150
(1259.2)

CLAYSTONE:lt gy-lt bn gy,med dk gy i/p,calc,tr slty i/p,tr ooid, tr-loc com dissem pyr,tr carb spk,frm-com sft,sbblky.

CLAYSTONE:lt gy-lt bn gy,occ med gy,calc,tr slty,occ nod pyr, mnr ooid,sft-frm,sbblky.

CLAYSTONE:lt gy-lt bn gy,occ lt gn gy,occ med gy,calc,tr slty, tr nod pyr,tr dissem glauc,mnr ooid,frm,sbblky.

63.48°inc
315.87°az

2160

2170
(1268.2)

WOB:11 klbs
RPM:0-120
MM RPM:177
SPP:2880 psi
FLW:610 gpm

2180

97 / 3

63.25°inc
315.88°az

2190
(1277.2)

2200

2210
(1286.3)

62.41°inc
316.08°az

2220

96 / 3 / 1

2230
(1295.5)

62.88°inc
316.11°az

2240

2250
(1304.7)

WOB:15-30 klbs
RPM:0-120
MM RPM:177
SPP:2800 psi
FLW:610 gpm

2260

62.47°inc
316.4°az

2270
(1313.9)

2280

2290
(1323.1)

62.67°inc
317.08°az

2300

95 / 4 / 1

WOB:10-30 klbs
RPM:0-122
MM RPM:179

2310

CLAYSTONE:lt gy-lt bn gy,lt gn gy i/p,calc,tr slty,tr nod pyr, tr dissem glauc,rr ooid,frm, sbblky-blky.

CLAYSTONE:lt gy-lt bl gy,lt gn gy,calc,tr slty,tr dissem & nod pyr,tr ooid,sft-frm,sbblky.

CLAYSTONE:lt-med gy,calc,loc, slty,tr dissem & nod pyr,tr ooid tr foss frag,sft-frm,sbblky.

SPP:2900 psi
FLW:620 gpm

(1332.2)

2320

63.57°inc
316.684°az

2330 (1341.2)

2340

94 / 4 / 2 / TR

2350 (1350.1)

63.78°inc
316.34°az

2360

97 / 3

WOB:15-20 klbs
RPM:0-122
MM RPM:179
SPP:2710 psi
FLW:612 gpm

2370 (1359)

07-10-2001

2380

MW:10.2
FV:78
PV:29
YP:41
Gel:10/18
WL:3.2
pH:8.6
Cl:47.2k

63.28°inc
315.45°az

2390 (1367.9)

2400

2410 (1377)

63.05°inc
315.66°az

2420

90 / 5 / 3 / 1 / 1

2430 (1386)

WOB:5-15 klbs
RPM:0-100
MM RPM:176
SPP:2840 psi
FLW:606 gpm

92 / 4 / 3 / 1 / TR

2440

62.78°inc
316.24°az

88 / 6 / 3 / 2 / 1

2450 (1395.2)

90 / 5 / 3 / 1 / 1

2460

CLAYSTONE:lt-med gy,lt bl gy,lt bn gy,calc,loc slty,tr dissem & nod pyr,tr ooid,tr foss frag,sft frm i/p,sbblky.

WIPER TRIP TO SHOE @ 2348m

CLAYSTONE:lt gy-med gy i/p,lt gn gy,calc,mnr nod pyr,ooid,frm, sbblky.

SILTSTONE:med gy,arg i/p,tr vf aren,calc,tr carb spk,tr dissem pyr,frm,sbblky-blky.

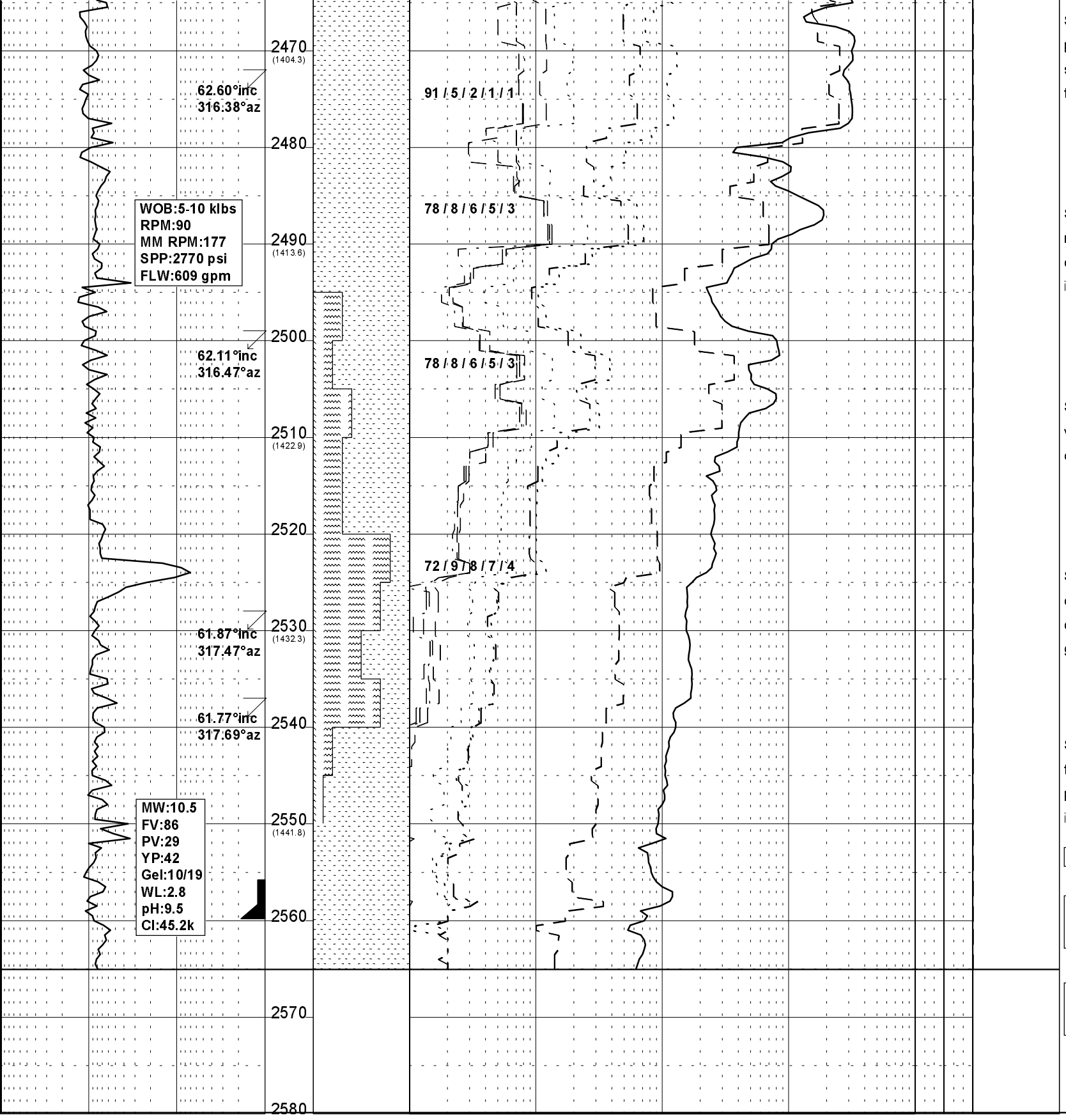
SILTSTONE:lt gy bn-med bn,arg,tr f aren,glauc,occ nod pyr,occ frm sbblky-amor.

CLAYSTONE:pl yel org-dk yel org, lt bn,mott gn gy,aren i/p,nod glauc,tr nod pyr,occ med qtz grn v sft,sbblky,amor.

SANDSTONE:trnsl-clr,occ opq,med-crs,pr srt,sa-sr,tr pl gy slty mtx,tr sil cmt,tr nod glauc,pred cln & lse,fr-gd info por,no fluor.

SANDSTONE:trnsl-clr,occ opq,crs, occ v crs,pr srt,sa-sr,tr sil cmt,occ pyr cmt,pred cln & lse, no fluor.

SILTSTONE:med bn-dk bn,occ bn blk,carb,frm,sbfiss-fiss.



SANDSTONE:clr-trnsl,opq,med-crs,
pred med,occ v crs,pr srt,sr,tr
sil cmt,rr pyr cmt,cln & lse,
fr-gd inf por,no fluor.

SANDSTONE:trnsl,opq,occ mlky,
med-crs,pr srt,sa-sr,mnr pyr cmt
occ nod pyr,pred cln,lse,v gd
inf por,no fluor.

SILTSTONE:lt-med bn,brn gy,lt gy
v arg,com carb,micmic,v sft-sft,
disp,amor.

SANDSTONE:clr-trnsl,opq,f-crs,
dom med-crs,pr srt,sa-sr,occ pyr
cmt,mnr arg mtx,tr-rr nod pyr,
gen cln,lse,gd inf por,no fluor

SANDSTONE:clr-trnsl,opq,rr mlky,
f-dom med-crs,pr srt,sa-sr,occ
pyr cmt,tr nod pyr,cln,lse,gd
inf por,no fluor.

7" Casing Shoe @ 2559.8m

Projected Survey @ 2565m
Incl: 61.54° Azm: 318.2°
TVD: 1448.91m

WEST TUNA W-3 REACHED TD
@ 2565mdRT (1448.91mTVDRT)
@ 10:00 HRS ON 07-10-2001