[redacted] [redacted]

AMOCO

COMPOSITE WELL LOG 1:500

DATUM REFERENCE : Measured Depth

WELL: 2/8-16 S

API NO. : 975770363700

OPERATOR : AMOCO NORWAY OIL
COUNTRY : NORWAY
AREA : Valhall Field
LICENSE : 006
BLOCK : 2/8
NPD PERMIT NO : L-874
GROUP INTEREST (PERCENT) : Amoco Norway (28.1%) Elf Norge (17.7%) Amerada Hess (28.1%) Enterprise (28.1%)

GEOGRAPHICAL COORDINATES
LAT : 56 16' 41.39" N UTM : 524479.7 X
LONG : 3 23' 43.19" E 6237247.8 Y

TARGET COORDINATES
LAT : 56 16' 40.73" N UTM : 524487.05 X
LONG : 3 23' 43.61" E 6237227.74 Y

BOTTOM HOLE COORDINATES
LAT : 56 16' 45.66" N UTM : 525796.01 X
LONG : 3 24' 59.77" E 6237386.76 Y

K.B. ELEV. : 43.5 m
TOTAL DEPTH : 3139 m
WATER DEPTH : 69.1 m
BOTTOM HOLE FM : Late Eocene

PRE-SPUD CLASSIFICATION : Horiz. Oil Prod.
DATE ON LOCATION : 8th Feb 1997
SPUD DATE : 8th Feb 1997
DATE T.D. REACHED : 13th Mar 96
COMPLETION DATE : 16th Mar 1997
RIG RELEASE DATE : 16th Mar 1997
WELL STATUS : Oil Producer
WELL CLASSIFICATION : Failed Oil Producer

RIG : Valhall DP
DRILLING CONTRACTOR : Transocean Drilling
W/L - LOGGING CONTRACTOR : Atlas Wireline Services
MWD - LOGGING CONTRACTOR : Baker Huges INTEQ
MUD-LOGGING CONTRACTOR : Baker Huges INTEQ

WELLSITE GEOLOGISTS :
Pete Heavey
Derek Moss

COMPILED BY:
Peter Heavey
Elisabeth Hegle

CASING RECORD

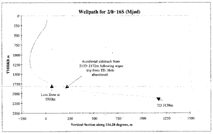
CASING RECORD

20" CSG SHOE AT 376 M MD 369 M TVDBRT -325.5M TVDSS
16 CSG SHOE AT 1429 M MD 1364 M TVDBRT -1320.5M TVDSS

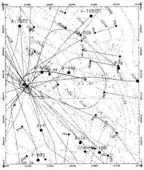
MUD DATA

ANCOVERT FROM SURFACE CASING TO MD 1437
NOVAPLUS SOBM TO TD

WELL PROFILE



WELL LOCATION MAP



LOGS RUN

MWD / FEMWD, Wireline and Pipe-conveyed Logs run

DATE (1997)	RUN #	LOG SUITE & HOLE SIZE	LOGGED INTERVAL M MD (GR)
2/8-16 S (MJØD)			
7-11/Feb	1	INTEQ DIR - 16 HOLE	379-1475
24/Feb-2/Mar	2	INTEQ DGPSF (DIR-GR-PRES) 8.5 HOLE	1429-2013
10-14/Mar	3	INTEQ DGPSF (DIR-GR-PRES) 8.5 HOLE	2013-3125

LITHOLOGICAL SYMBOLS

- Conglomerate, general
- Sedimentary breccia
- Sandstone
- Siltstone
- Claystone
- Shale
- Hot shale
- Chalk
- Chalk Siliceous
- Chalk Clayey (low por)
- Limestone
- Marl
- Dolomite
- Salt, general
- Halite
- Gypsum
- Anhydrite
- Coal, general
- Plutonic rock
- Gypsum/Anhydrite unspecified
- Limestone, dolomitic
- Dolomite, calcareous
- Metamorphic rock, general
- Tuff
- Volcanic rock, general
- Silicic plutonic rock

ACCESSORY SYMBOLS

- mottling
- Bed contact
- Bryozoa
- [illegible]
- Carbonaceous
- Claystone clasts
- Concretions in general
- Calcite concretion
- Dolomite concretion
- Siderite concretion
- Calcite filled fracture
- Calcite cement
- Dolomite/ankerite cement
- Siderite cement
- Quartz cement
- [illegible] cement
- Illite cement
- Smectite cement
- Chlorite cement
- Chamosite
- Discontinuous laminae
- Foraminifera
- Fracture
- Glauconite
- Halite pseudomorph
- Kaolinite
- Laminae, parallel
- [illegible]
- Mica
- Nodules
- Ooid
- Phosphorite
- Plants
- Pyrite
- Rubble
- Shell debris
- Siderite
- Spicules
- Slickenside
- [illegible]
- Calcareous
- Pyrite concretion
- Calcite laminar
- Pseudo-breccia frocs
- silty
- SANDy
- CHERT
- Ash Traces

OPERATIONAL SYMBOLS

CASING
- SHOE
- TOP OF LINER

CEMENT PLUG

WIRELINE FORMATION TESTS
- FLUID
- PRESSURE
- FAILED

PERFORATED INTERVAL

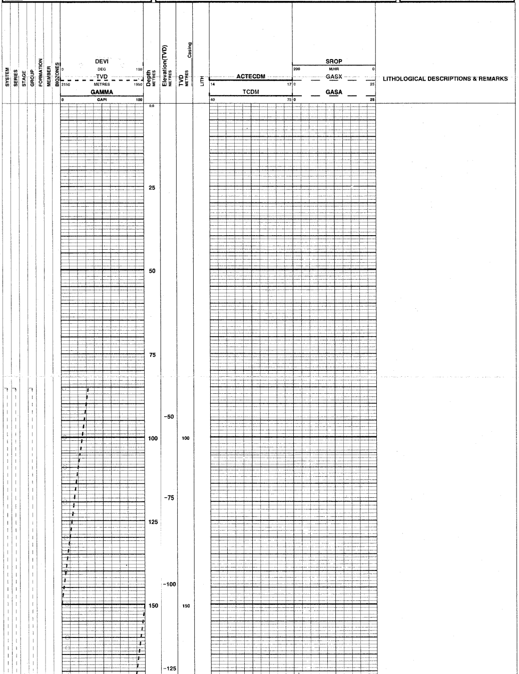
DRILL STEM TEST
- DST INTERVAL

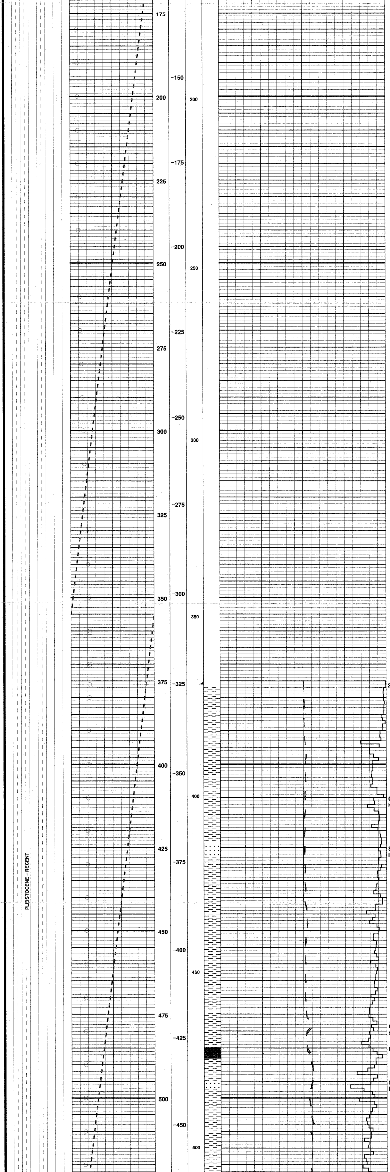
SIDEWALL CORES
- RECOVERED
- NOT RECOVERED

CORES
- RECOVERED
- NO RECOVERY

OIL SHOWS
- GOOD
- MODERATE
- FAIR

DIPS
- > 0.6 RESOLUTION
- AZIMUTH
- 0.3–0.6 RESOLUTION





20" Casing at 376 m MD

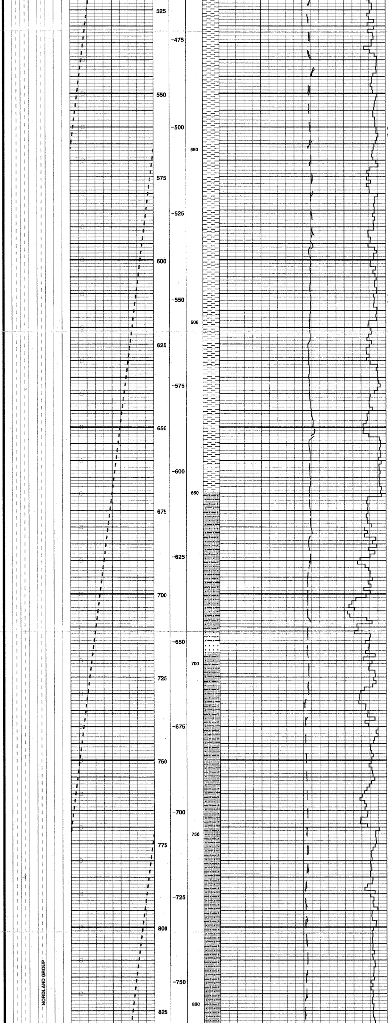
CLST: m gy-m dk gy, occ blk spk, frm-mod hd, sbblky-blky,n calc,Tr Ls

SST:Qtz,clr-trnsl,trnsp,f-vf,rndd,w srtd lse-wk calc cmtd,Tr Ls

CLST:m dk gy-olv gy,occ m lt gy-m gy,frm sbblky-blky,non-sl calc,grdng Sltst

LS:yelsh gy-lt bnsh gy,micxln,md hd,arg,

SST:Qtz,clr-trnsl,trnsp,f-vf,rndd,wl srt lse-pr calc cmtd,Tr Ls



CLST:dk gy,occ m gy,sft-frm,sbblky-blky,
sl calc,grds Sltst i/p,Tr Ls

CLST:dk gy,occ m dk gy,sft-frm-mod hd,sl
calc,sbblky-blky,grds Sltst i/p,Tr Ls

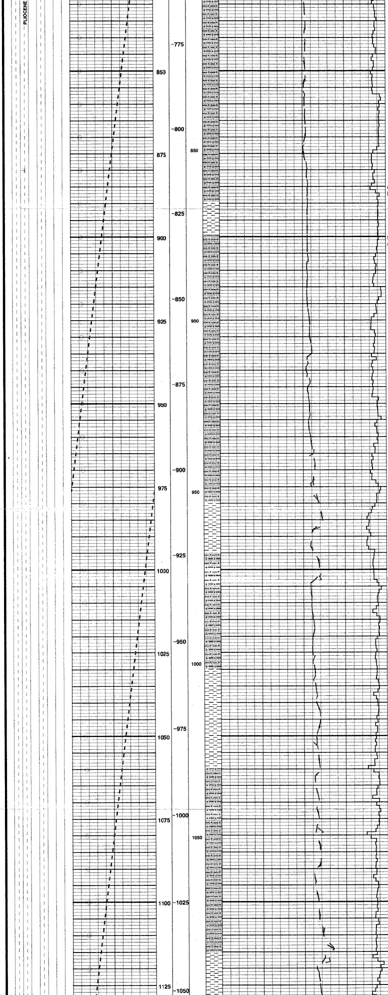
CLST:dk gy-gysh blk,sft-frm,sbblky-blky,
non calc,v slty,grds Sltst,Tr Sst

SLTST:dk gy,frm,occ sft-frm,sbblky-blky,
arg,calc,sdy,Tr Sst

SST:Qtz,clr-trnsl,trnsp,f-vf,rndd,w srt,
lse-pr calc cmt,Tr Ls

CLST:m dk gy,m lt gy,sft-frm,sbbly-blky,
occ sl calc,v slty,Tr Sst

SLTST:m dk gy,sft-frm,sbblky,sl calc,arg
Tr Sst



CLST:olv gy-m dk gy,frm-mod hd,sbblky-blky,sl calc,sl slty i/p

SLTST:olv blk,occ dk gy,frm,sbblky-blky,mod calc,mod sdy i/p,Tr Ls

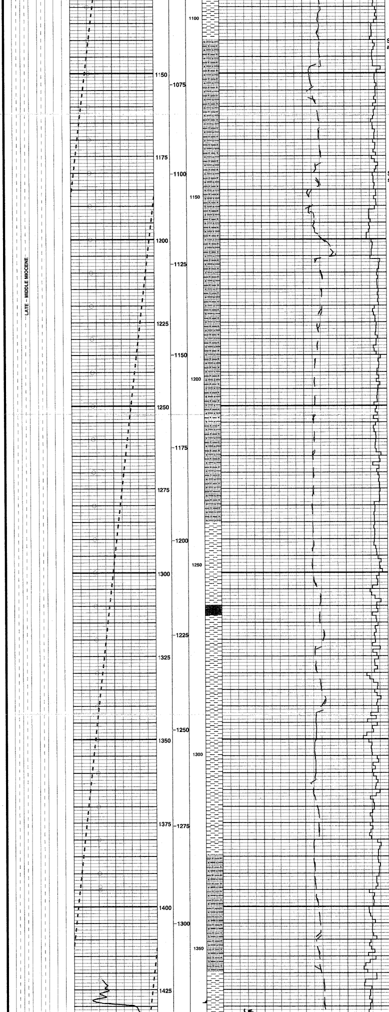
CLST:olv gry-m dk gy,sft-frm,sbblky-blky sl calc,sl slty i/p

SLTST:olv blk-m dk gy,frm,sbblky-blky,n calc

CLST:m dk gy-olv gy,frm-occ sft,sbblky,sl calc,sl slty i/p

SLTST:olv blk-dk gy,sft,occ frm-hd,blky,occ sl calc

CLST:m dk gy-olv gy,sft-frm,sbblky-blky,sl calc



SLTST:bnsh blk,sft,occ frm-mod hd,blky,
arg,n calc

SLTST:bnsh blk,sft,frm-mod hd,sbblky,arg
sl-mod calc,grds Clst

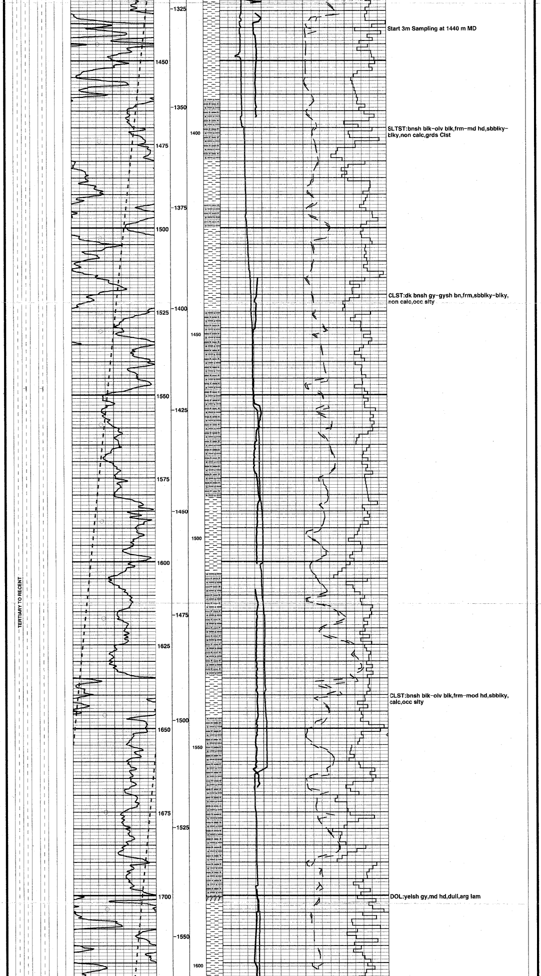
SLTST:bnsh blk-olv blk,sft-frm,occ mod
hd,sbblky-blky,non-sl calc,arg,grds Clst

CLST:gnsh blk-olv blk,frm-mod hd,sbblky,
non calc,slty

LS:yelsh gy-lt bnsh gy,mod hd,blky,arg,
micxln

SLTST:bnsh blk-olv blk,sft-frm,sbblky,
non calc,v arg,grads Clst

16" Casing (Splitter) at 1429 m MD



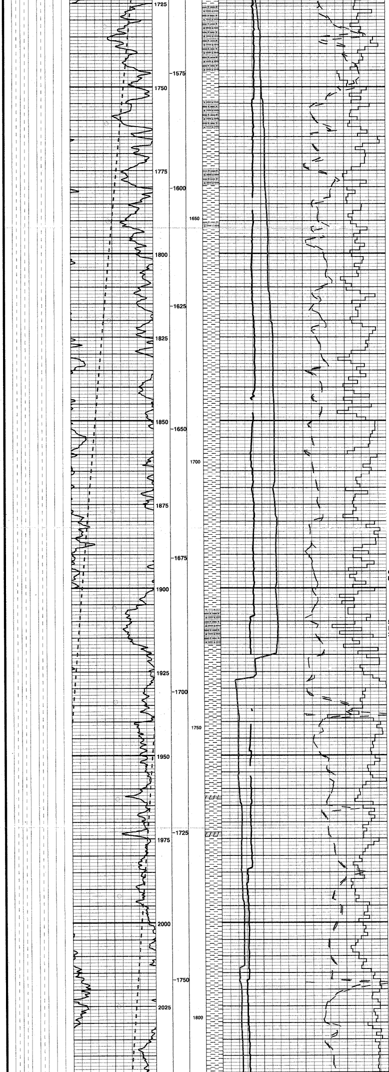
Start 3m Sampling at 1440 m MD

SLTST:bnsh blk-olv blk,frm-md hd,sbblky-blky,non calc,grds Clst

CLST:dk bnsh gy-gysh bn,frm,sbblky-blky,
non calc,occ slty

CLST:bnsh blk-olv blk,frm-mod hd,sbblky,
calc,occ slty

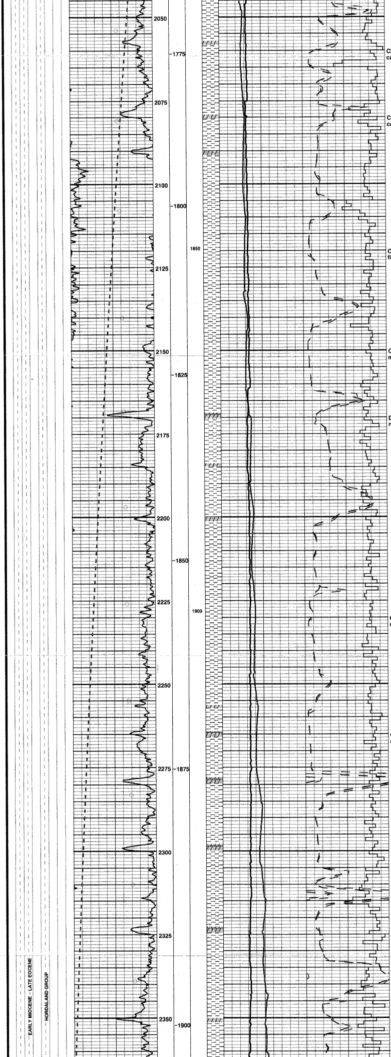
DOL:yelsh gy,md hd,dull,arg lam



CLST:bnsh blk-olv blk,frm-mod hd,sbblky-blky-sbfis,non calc,occ slty,Tr Dol

Serious mud losses at 1910 m MD.
Pump 3 LCM pills, 3 Cement Squeezes
3 Gunk Squeezes

CLST:dk gy,gnsh blk,frm-hd,brit,plty-blky,fis,sl calc



CLST:dk gy-grysh blk,frm-hd,blky,fis,non calc,slty,Tr Dol

CLST:olv blk-blk,frm-hd,blky,mod fis,sl calc,slty

CLST:olv blk-olv gy,bnsh blk,hd,brit,mod fis,pred blky,sl calc,slty,Tr Dol

CLST:olv blk,occ gnsh gy,hd,brit,blky, mod fis,sl calc,slty,Tr Dol,Tr Ls

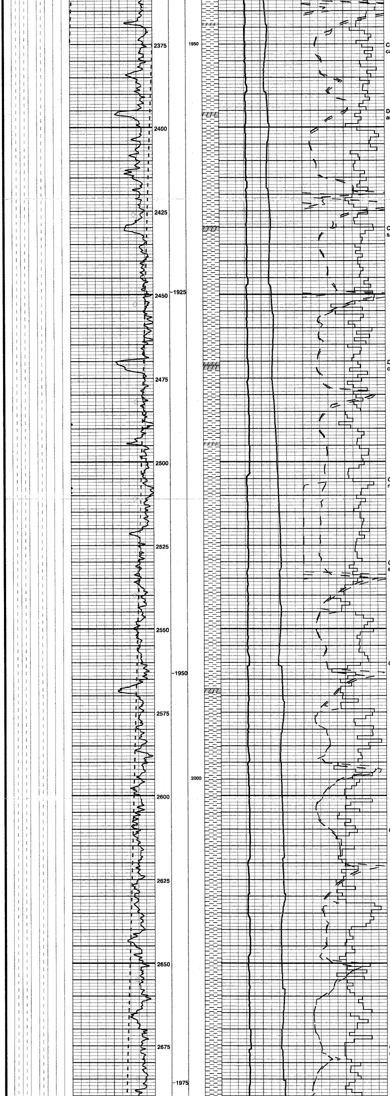
DOL:yelsh gy,occ dk strks,crmb,mod hd, mic-crpxln

CLST:olv blk,olv gy,hd,occ mod hd,blky-sbfis,sl calc, slty, Tr Dol

CLST:olv blk,hd,brit,blky-sbfis,non calc slty,Tr Dol

CLST:olv blk,frm-hd,brit,blky-sbfis,calc slty,Tr Ls,Tr Glauc

DOL:lt olv gy,olv blk spk,hd,ang-blky, mic-crpxln,arg,calc grds Ls



CLST:olv gy-olc blk,hd,blky-sbfis,non-sl calc,slty

DOL:pl yelsh bn,frm,amor-ang brk,micxln, arg,calc grds Ls

CLST:olv gry,olv blk,mod hd-hd,blky-sbfis,sl calc,slty,Tr Ls

DOL:dk gy-dk yelsh bn,mod hd,blky,mic-crpxln,arg,calc grds Ls

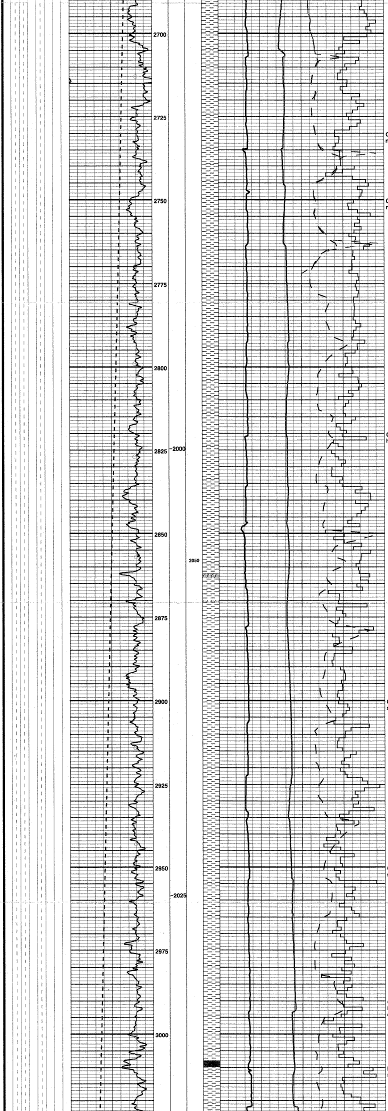
CLST:olv gy-olv blk,mod hd,blky-sbfis, non calc,slty

CLST:olc blk,sft-frm,occ mod hd,blky-sbfis,slty,sl calc,Tr Ls

CLST:gysh blk,mod hd,blky-sbfis,sl calc

CLST:olv blk,mod hd,blky-sbfis,sl calc

CLST:olv gy-gnsh gy,occ olv blk,hd,blky-sbfis,slty,sl calc,Tr Ls



CLST:olv gy-olv blk,hd,blky-sbfis,slty,
non-sl calc,Tr Glauc

CLST:olv gy-olv blk,hd,blky-sbfis,slty,
non calc

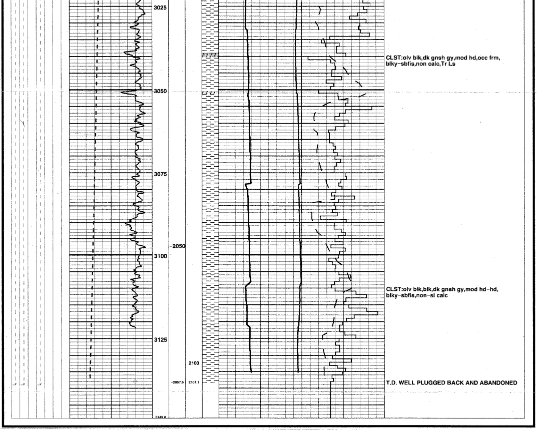
CLST:olv blk,bn blk,occ olv gy,frm-mod
hd,blky-sbfis,slty,non calc

CLST:olv blk,olv gy,mod hd,blky-sbfis,
slty,non-sl calc,Tr Dol

CLST:olv blk,olv gy,mod hd,blky-sbfis,
slty,non-sl calc,Tr Ls

CLST:olv gy,dk gnsh gy,olv blk,frm-mod
hd,occ hd,blky-sbfis,slty,non-sl calc,
occ calc,Tr Ls

LS:gnsh gy,dk yelsh bn,amor-blky,ang brk
mod hd,crmb,micxln,dol



CLST:olv blk,dk gnsh gy,mod hd,occ frm, blky-sbfis,non calc,Tr Ls

CLST:olv blk,blk,dk gnsh gy,mod hd-hd, blky-sbfis,non-sl calc

T.D. WELL PLUGGED BACK AND ABANDONED