SIMON PETROLEUM TECHNOLOGY **WELL:** 33/9-8

Print:	Units:	Top	Bottom	Scale	TD
2266 K	[✓ M] F	375	3090	1/500	3085

Length: 28 FT **Initials:** JPK

DIGITAL WIRELINE LOGS PACKAGE
1993
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SIMON PETROLEUM TECHNOLOGY

COMPLETION LOG

Mb.101.1

ENCLOSURE 1

Pd1-U

MOBIL EXPLORATION NORWAY INC.

WELL 33/9-8

WILDCAT

FINAL COMPOSITE LOG

CO-ORDINATES: 61°26'17.44".N
01°55'04,87"E

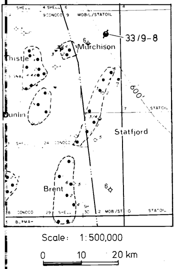
ELEVATION: KB+25,5m **SEA FLOOR**-265m

TOTAL DEPTH: 3085m (KB)

RIG: Deep Sea Saga

SPUD DATE: 11 NOVEMBER 1976 **RIG RELEASE:** 21 FEBRUARY 1977

WELL STATUS: DISCOVERY WELL, P&A



Scale: 1:500,000
0 10 20 km

LITHOLOGY SYMBOLS

CONGLOMERATE
SANDSTONE
SILTSTONE
CLAY
SHALE
COAL
LIGNITE
PEAT
MARL
CHALK
LIMESTONE
DOLOMITE
ANHYDRITE
GYPSUM
SALT
METAMORPHIC
PYROCLASTIC
INTRUSIVE

M = MICACEOUS
◇ = CALCITE CRYSTALS
G = GLAUCONTIC
♦ = FELDSPAR
P PYRITIC
FOSSILS

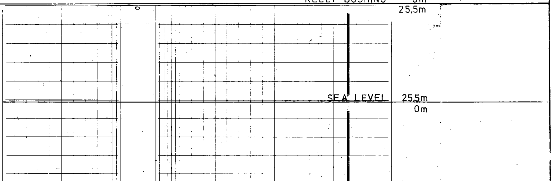
SIDE WALL CORES
◁ REC
◀ REC W SHOW

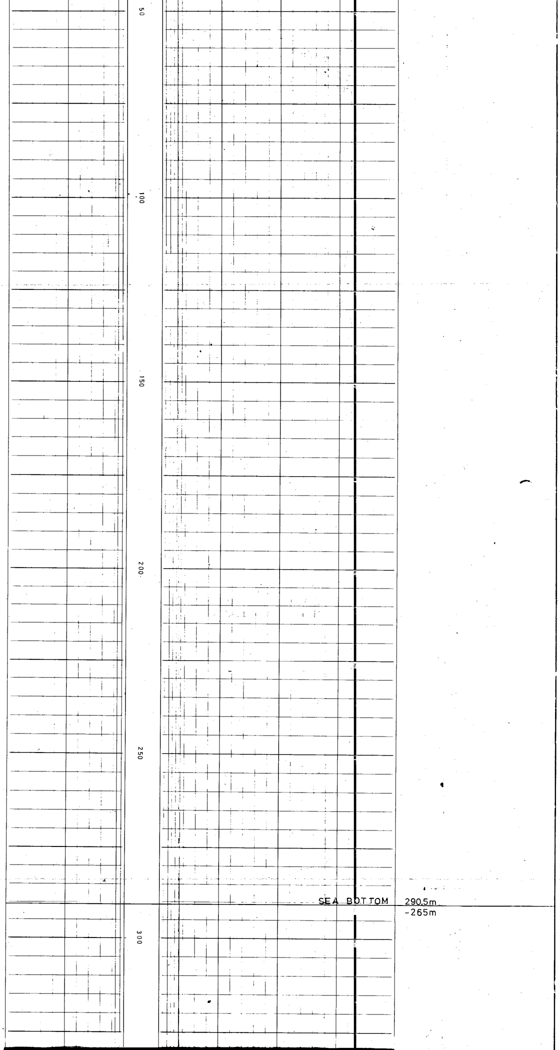
CORES
2560
2600

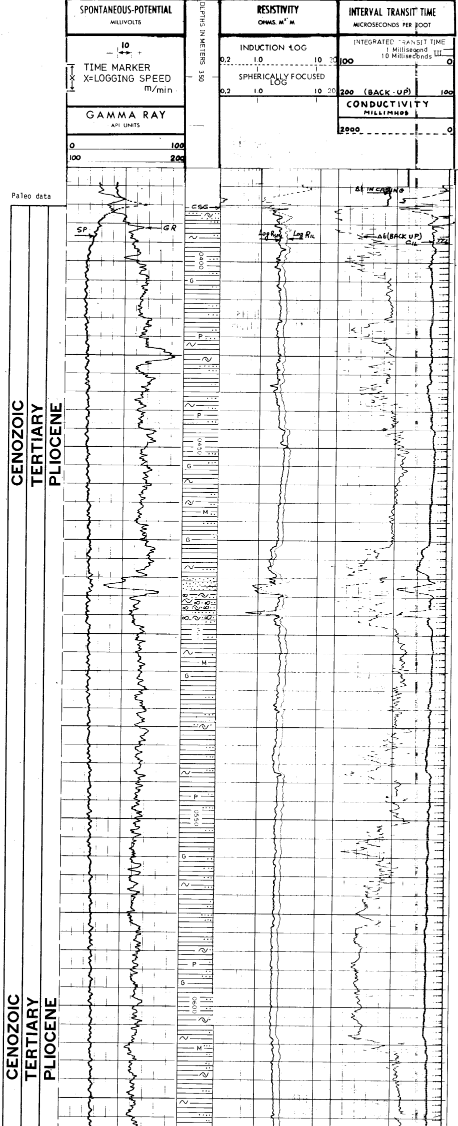
D.S.T.
2550 m

FIT
8820 1

CASING SHOE
20 AT 616 m







(L)=log pick

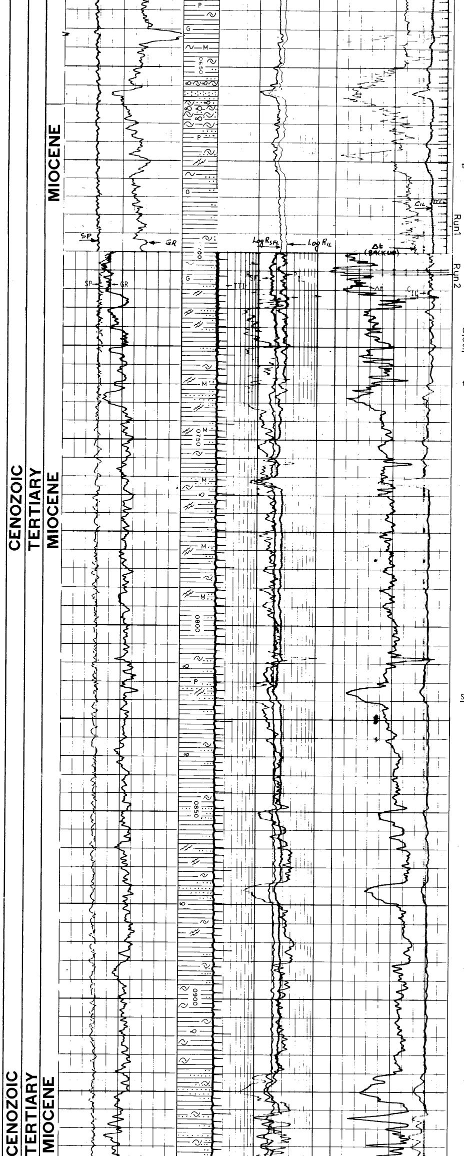
Clay: sdy,lt gy,intbdd

Sand: clr,c,rng fn-v c,M,SA,tr
pyr,hornblende,glauc,lse,fr por,
minor

Marl: wh,firm-hd,foss

tr Clay: wh,firm,(kaolin)

Sand: clr,fn,M,SA,lse,fr por,
no show

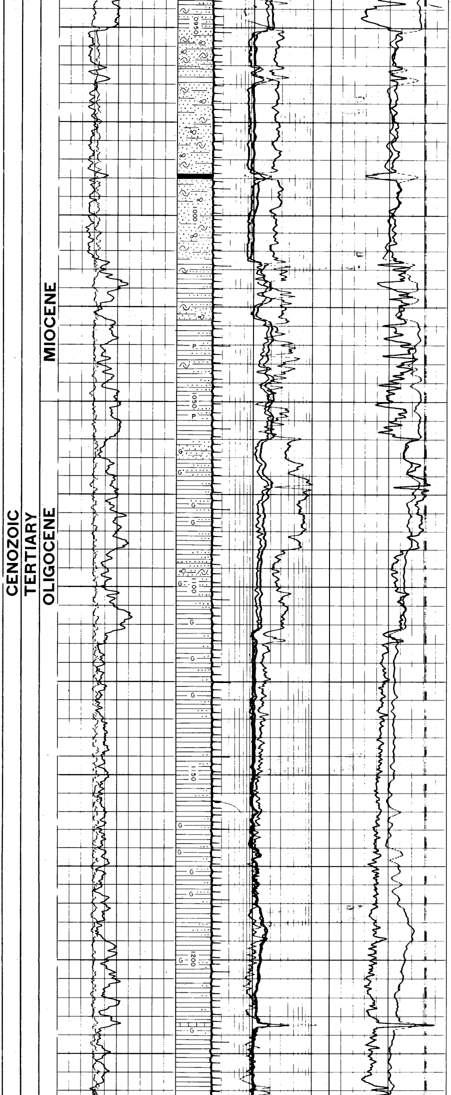


tr Chlorite Schist

Clay: slty,aren,gy,mmic,sft,
occ sl calc,foss,intbdd
Sand: clr,fn,M,SA,fr por

tr Gneiss: qtzitic,w/Chlorite
Schist

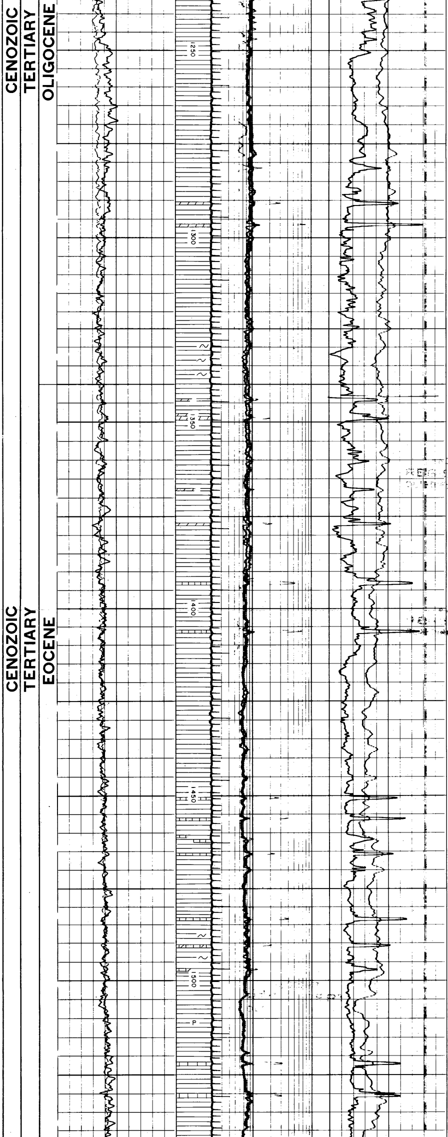
Sand a.a.,occ grn,smoky,blk,
pink



Sand: clr,occ blk grn,m,W,SR,
fr por, intbdd
Clay: slty,gy,sft,occ firm,occ
sl calc,foss

Clay: brn-gy,firm,w/intbdd
minor
Sand a.a.,abd glauc & pyr

Claystone: brn-gy,subfiss,firm



Claystone: gy,grn,tan,subfiss, firm

Claystone: rd-brn,gy,subfiss,firm

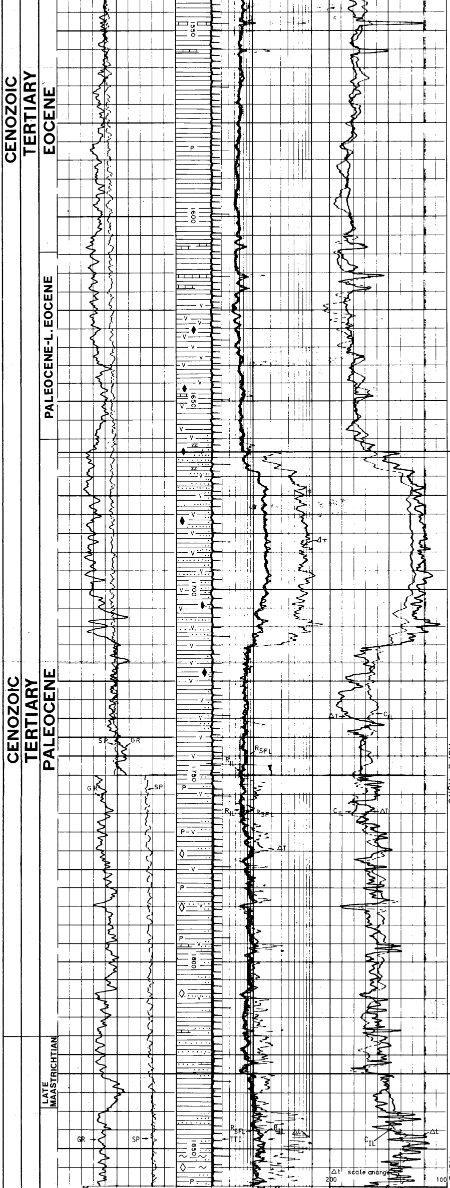
Dololutite: brn-rd,v hd

Claystone: gy,grn,mic,subfiss,firm

Claystone: rd-brn,gy,mic,subfiss, firm

Calcilutite: gy,cream,firm,occ hd

Dololutite: cream,lt tan,dense,v hd



Claystone: gy,grn,mic,subfiss,firm

Claystone: rd-brn,gy,mic,subfiss, firm

tr Calcilutite: gy,cream,hd,occ firm

Claystone: tuf,brick rd,dk gy, mottled w/wh occ A specks,prob wthrd fp,subfiss,firm

1663,5 m

TOP PALEOCENE (L) -1638 m

Claystone a.a.,tr golden flor,wh slow strmy cut

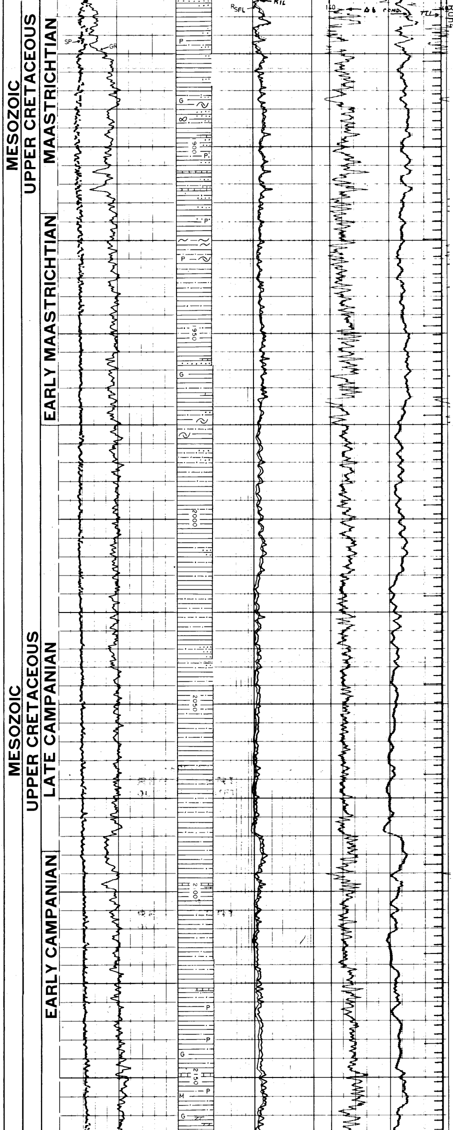
Sand: strgs,clr,fn,v fn-m,M,A, fr-pr por

Claystone: vgt col,occ calc,sub-fiss,firm,w/minor Sand a.a.

tr Calcite: wh,mod hd xls

1830 m

TOP UPPER CRETACEOUS (L) -1804,5 m



Claystone: slty,gy,carb,pyr,occ calc,mmic,firm,blky,minor
Sandstone: clr,lt rd,tan,m,grdg crse, M,SA,sil cmtd, mic,pyr,hd,v pr por, no show

Biocalcirudite: tan,hd

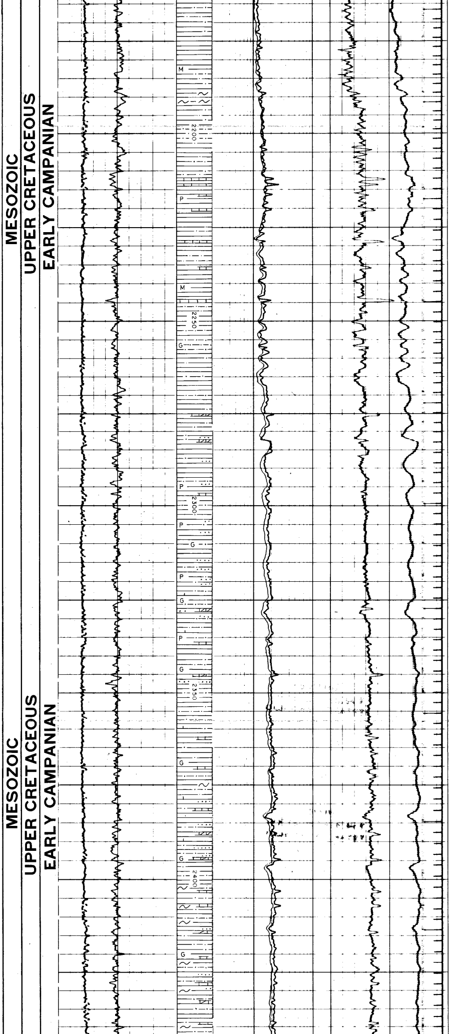
Siltstone: sdy,clr,lt brn,M,fr por, no show

Claystone: rd,sft,stcky

Claystone: occ slty,gy,firm

Calcilutite: wh,tan,firm

Dololutite: sdy,brn gy,hd



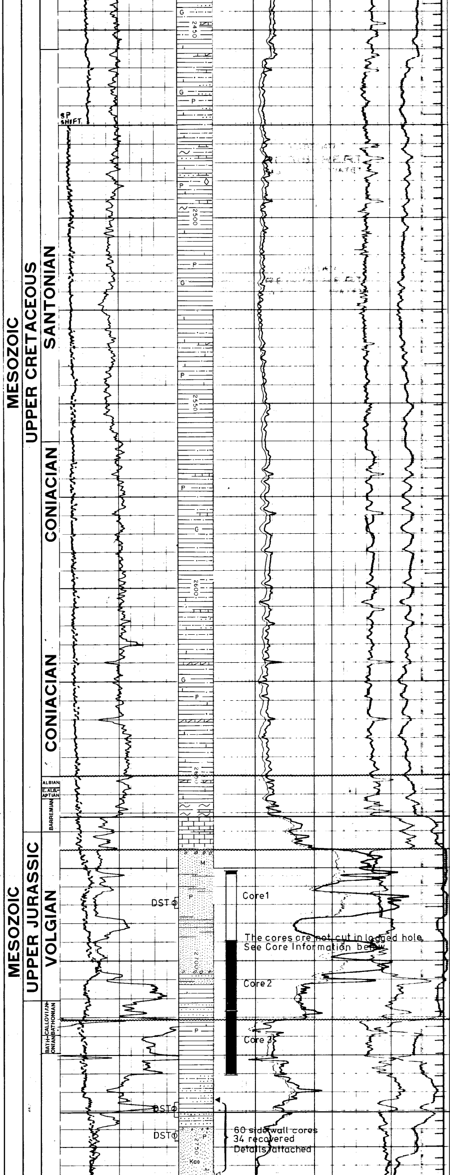
Siltstone: arg,gy,calc,mic,U,SR, pr por,no show

Calcirudite: wh,ang,hd

Siltstone: lt gy,wh,v calc,mod hd, occ grdg Sandstone

Claystone: sl slty,gy,occ grn gy, subfiss,sft-firm

Sandstone: strgs,lt gy,v fn,grdg sltst,glauc,calc cmt,ptly arg mtx, pr por,no show



Claystone: slty,lt gy-gy,sl calc, blky,firm,intbdd
Silt grdg Sand: clr,wh-gy,occ grn, M,SA,fr por,no show

2650 m

TOP LOWER CRETACEOUS -2624,5 m

Marl: rd,sticky,sft 2661 m

TOP BARREMIAN LIMESTONE -2635,5 m

Calcilutite: wh,firm-hd 2670 m

TOP U.JURASSIC SHALE/SAND -2644,5 m
Sand: clr,m,fn-c,occ pbly,M,SA, tr pyr,gd por,20-30% pale-bri yel flor,tr slow lt yel streaming cut

Claystone:sl slty,gy,occ sl calc, mmic,firm,blky,intbdd
Sand: clr,m,fn-c,M,SA, Show a.a.

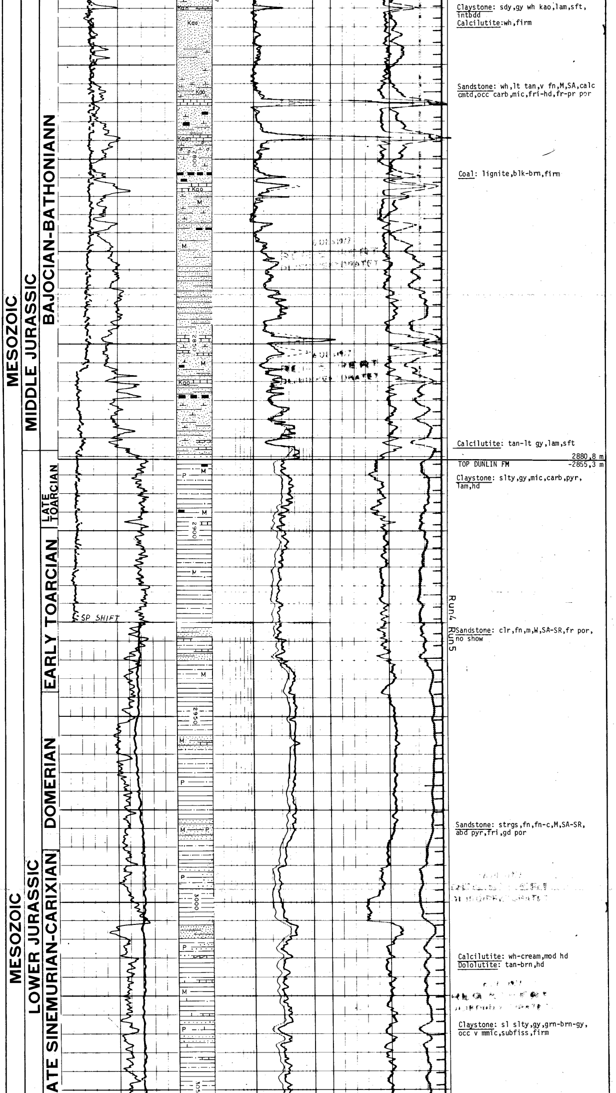
2715,8m

TOP M.JURASSIC COLD SHALE -2690,3m

Claystone:slty-sdy,dk gy-gy,mmic,intbdd
Sandstone:slty,arg,lt gy-lt brn,v fn, M,A,fri,fr por,oil odor,lt brn oil stn, bri yel flor,instant bl wh cut

2740,5m

TOP BRENT FM -2715m
Sandstone: lt gy-lt brn,fn,v fn-fn, M,A,kac mtx,tr pyr,mic,fr por
Good oil show: strong oil odor,lt brn stn,bri yel flor,instant bl wh cut
No show below 2752m



Claystone: sdy,gy wh kao,lam,sft, intbdd
Calcilutite:wh,firm

Sandstone: wh,lt tan,v fn,M,SA,calc cmtd,occ carb,mic,fri-hd,fr-pr por

Coal: lignite,blk-brn,firm

Calcilutite: tan-lt gy,lam,sft

2880,8 m
TOP DUNLIN FM -2855,3 m

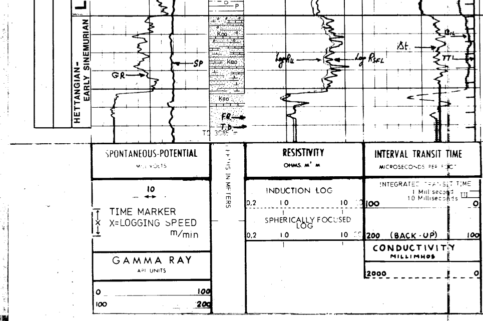
Claystone: slty,gy,mic,carb,pyr, lam,hd

Sandstone: clr,fn,m,W,SA-SR,fr por, no show

Sandstone: strgs,fn,fn-c,M,SA-SR, abd pyr,fri,gd por

Calcilutite: wh-cream,mod hd
Dololutite: tan-brn,hd

Claystone: sl slty,gy,grn-brn-gy, occ v mmic,subfiss,firm



3055 m

TOP STATFJORD FM -3029,5 m

Sandstone: clr,r pink,m,fn-c,U,SA, calc cmtd,tr sil cmt,tr kao mtx, tr pyr,hd,pr por,no show, intbdd
Calcilutite: wh,mod hd

Sandstone: clr r pink,m,fn-c,M,SA, tr calc cmt,abd kao mtx,tr pyr,app fri fr por,no show ,intbdd
Calcilutite: tan,v hd

SIDEWALL CORES 33/9-8

Run 1: Recovered 4 samples (2 misfires) Brent Formation and M.Jurassic Cold Shale
Run 2: Recovered 30 samples Brent Formation and M.Jurassic Cold Shale

Depth in Meters	Description
2737	Sandstone, argillaceous, greyish brown, very fine, grading siltsize, moderate sorted, angular, micaceous, friable, fair porosity Good oil show: light brown staining, 80% bright yellow fluorescence, instant bluish white cut, light brown residue
2737.3	Sandstone a.a. Good show a.a.
2737.6 (Run 1 & 2)	Sandstone, argillaceous, light greyish brown, very fine, grading siltsize, moderate sorted, angular, micaceous, carbonaceous, friable, fair porosity Good oil show: strong oil odor, light brown staining, 80% bright yellow fluorescence, instant bluish white cloudy cut, light brown residue
2738	Sandstone, argillaceous, greyish brown, very fine, well sorted, angular, micaceous, friable, fair porosity Good oil show: strong oil odor, light brown staining, 70% bright yellow fluorescence, instant bluish white cut, light brown residue
2738.3	Sandstone, very argillaceous, greyish brown, very fine, grading siltsize, moderate sorted, angular, micaceous, friable, poor to fair porosity Fair oil show: light brown staining, 30% bright yellow fluorescence, fast bluish white streamy cut, faint light brown residue
2738.6	Claystone, very sandy, silty, grey, micaceous, hard Very poor oil show: trace yellow fluorescence
2739	Sandstone, very argillaceous, greyish brown, very fine, grading siltsize, moderate sorted, angular, micaceous, friable, poor porosity Fair oil show: light brown staining, 40% bright yellow fluorescence, bluish white fast cloudy cut, trace light brown residue
2739.3	Claystone, sandy, silty, dark grey, very micaceous, laminated, firm, no show
2739.6	Claystone a.a.
2740	Sandstone, argillaceous, greyish brown, very fine, grading siltsize, moderate sorted, angular, micaceous, friable, fair porosity Good oil show: strong oil odor, light brown staining, 70% bright yellow fluorescence, instant bluish white cut, light brown residue
2740.3	Sandstone a.a. Good show a.a.
2740.6	Sandstone a.a. Good show a.a.
2741	Sandstone a.a. Good show a.a.
2741.3	Sandstone a.a. Good show a.a.
2741.6	Sandstone a.a. Good show a.a.
2742	Sandstone a.a. Good show a.a.
2744.5	Sandstone, light greyish brown, fine, ranging fine to coarse, moderate sorted, subangular, kaoline matrix, trace pyrite, friable, fair to good porosity Good oil show: light brown staining, 90% bright yellow fluorescence, instant bluish white cloudy cut, light brown residue
2745.5 (Run 2)	Sandstone a.a. Good show a.a.
2745.5 (Run 1)	Sandstone a.a. Good show a.a.
2746.5	Sandstone a.a. Good show a.a.
2747.5	Sandstone, light greyish brown, medium, ranging fine to coarse, moderate sorted, subangular, kaoline matrix, trace mica, friable, fair to good porosity Good show a.a.
2748.5	Sandstone a.a. Good show a.a.
2749.5	Sandstone, light greyish brown, very fine, grading fine, well sorted, angular, kaoline matrix, trace mica, friable, fair to good porosity Good show a.a.
2750.5	Sandstone, very argillaceous, grey, very fine, ranging very fine to medium, moderate sorted, angular, kaoline matrix, abundant mica, pyrite, friable, poor to fair porosity Very poor oil show: trace yellow fluorescence
2751.5	Sandstone, argillaceous, light greyish brown, fine, ranging very fine to medium, moderate sorted, subangular, kaoline matrix, trace mica, friable, fair porosity Fair oil show: light brown staining, 50% bright yellow fluorescence, instant bluish white cut, light brown residue
2752.5	Sandstone, slight argillaceous, light grey, very fine, well sorted, angular, kaoline matrix, trace mica, trace pyrite, friable, fair porosity, no show
2753.5	Sandstone, light grey, fine, ranging very fine to medium, moderate sorted, subangular, kaoline matrix, trace

mica, trace pyrite, friable, fair to good porosity, no show

2754.5 (Run 2)	Sandstone a.a. No show
2754.5 (Run 1)	Sandstone a.a. No show
2755.5	Sandstone a.a. No show
2756.5 (Run 2)	Sandstone a.a. No show
2756.5 (Run 1)	Sandstone a.a. No show
2757.5	Sandstone a.a. No show

33/9-8
DRILL STEM TEST DATA
(Times in Minutes, Pressure in P.S.I.)

No	Interval (m)	Total Flow Period	Recovery and Remarks	Max. Pressure FFP	FSIP	HH
DST 1	2745.5-2748.5 Brent Fm	360	6278 BWPD on ½" choke 13,000 ppm eq NaCl	4722	5842	6766
DST 2	2737 -2741.5 Brent& Cold Shale	600	6313 BOPD, 1162 MCFPD on 3/4" choke 37.4° API Gas gravity: 0.752 GOR: 184 cu.ft./bbl	3799.5	5824.7	6700
DST 3	2683 - 2686 U.J. Shale/Sand	570	12,558 BOPD 2851 MCFPD on 3/4" choke 38.1° API Gas Gravity: .757 GOR: 227 cu.ft./bbl	5387	5776	6612

CORE INFORMATION

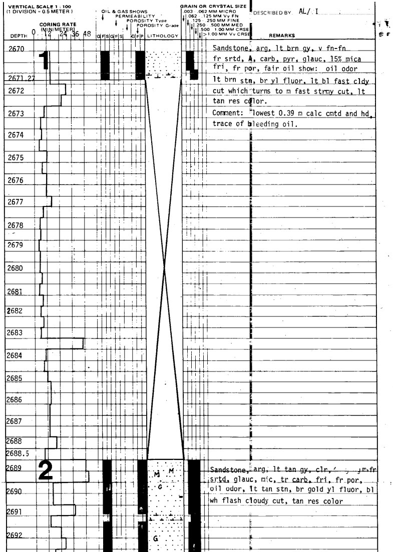
Original hole abandoned at 2974m with stuck pipe. Sidetracked at 2533m. At top Brent sidetracked hole 6m deeper than original hole. Cut 3 cores from 2670 to 2724,8m (54,8m). Depths as recorded in original hole: not adjusted to sidetracked hole.

Cut 3 cores from 2670 to 2724, 8m or 54.8m, (NB in original hole) recovered 36.73m (67%)

Core 1	2670 -2688.5	Recovered:	2670 -2671.27 (1.27m or 7%)
Core 2	2688.5-2706.8	Recovered:	2688.5-2706.26 (17.76m or 97%)
Core 3	2706.8-2724.8	Recovered:	2706.8-2724.5 (17.7m or 98%)

Mobil Exploration Norway Inc. GRAPHIC CORE LOG

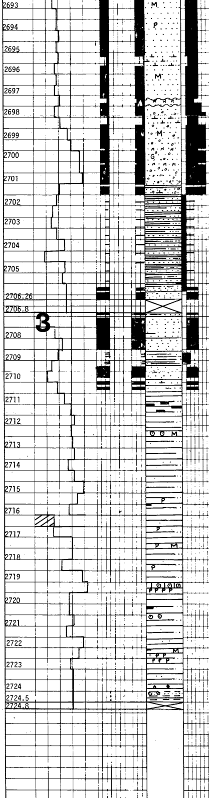
COMPANY
WELL 33/9-8
FIELD WILDCAT
CORE NO. 1,2 & 3
FROM 2670 M TO 2724.8 M
RECOVERED 36.73 M 67 %
FORMATION U.J. Shale/Sand, M.J. Cold Shale
DATE 18-20 Dec, 76
DESCRIBED BY AL/ I



Sandstone, arg, lt brn gy, v fn-fn fr srtd, A, carb, pyr, glauc, 15% mica fri, fr por, fair oil show: oil odor lt brn stn, br yl fluor, lt bl fast cldy cut which turns to m fast strmy cut, lt tan res color.

Comment: lowest 0.39 m calc cmtd and hd, trace of bleeding oil.

Sandstone, arg, lt tan gy, clr, [illegible]m, fr srtd, glauc, mic, tr carb, fri, fr por, oil odor, lt tan stn, br gold yl fluor, bl wh flash cloudy cut, tan res color



S.S. clr, lt gy, m, fr srtd, calc cmtd, v hd-brit, v poor por, weak yl fluor

Sandstone, cong, lt brn gy, v fn-v crse, p srtd. SA-SR, mic, glauc, pebbles up to 16 mm, rounded rip up clasts of claystone, dk gy, [illegible], carb, hd .

Claystone, slty, [illegible] gy, lam, sb fiss, carb mic, pyr, hd interlam sandstone, wh, clr, v fn, fr srtd. A. fair-poor por, trace weak golden fluor, tr bl wh flash cut

Minitectonic features

Sandstone, lt brn gy, v fn srtd. SA, mic, carb, glauc,hd (occ [illegible]) fair-g por, fair-good oil show.

Sandstone, lt brn gy, tan,fn, w srtd, SA, mic, tr carb,hd-fri,g por, oil odor, lt brn stn, br yl fluor, lt bl flash cut (turns strmy) t tan res color. inter lam claystone, sdy, dk gy,fiss, mic, pyr, carb (plant foss) hd. W/Minitectonic features

Claystone, gy, brn gy, occ grn, carb, mic, lt brn limonite, sks, hd.

Limestone, oolithic, chamositic lt grn gy, pyr, siderite,hd

Pyrite lenses

Mudstone/claystone, sdy, dk, gy carb. mic. hd. sand [illegible] crsc [illegible] v fn, A, no vis por, very weak oil odor, sptdd dull yl fluor v weak bl wh flash cut