ESSO EXPLORATION AND PRODUCTION NORWAY INC.

GEOLOGICAL COMPLETION REPORT

25/11-9

BALDER FIELD

December 1980

Stavanger, Norway

Esso 25/11-9
BALDER FIELD

I Introduction

Well is identified as follows:

A	Operator	Esso Exploration and Production Norway Inc.
B	Production Licence	001
C	Well Designation	25/11-9
D	Classification	Field Appraisal (Oil)
E	Field	Balder
F	Location	Lat: 59° 10' 14.36" N Long: 02° 22' 31.0" E
G	Water Depth	126.4m

II Purpose of Well

The 25/11-9 well was drilled to establish the presence of a thick accumulation of oil sand in the southern part of the Balder Field, and to confirm the reservoir quality of Lobe 8 penetrated in the 25/11-5 well.

III Results of Well

The 25/11-9 well was drilled to a total depth of 1910m (1910m log depth) in the Cretaceous. Two main oil sand zones were encountered, one of Eocene age between 1708.5 m and 1742 m and the second of Paleocene age between 1781.5 m and 1785 m.

Zone III Sand 1708.5m

Top sand	1708.5m (-1683.5)
Base of Sand	1742m (-1717m)
Gross Thickness	33.5m
Net oil Sand	29.5m
Average Porosity	33.8%
Average Water Saturation	7.4%
Fluid Contacts	None
Production Test	None

could be "dead" oil ?

Zone II Sand 1781m

fluid level & saturation questionable

EC 15/05 1997

Top Sand	1781.5 m (-1756.5 m)
Base of Sand	1818.0 m (-1793.0 m)
Gross Thickness	37 m
Net oil Sand	3.5 m
Average Porosity (oil zone)	33,5%
Average Water Saturation	17,5%
Fluid Contacts	1785 m (-1760 m)
Production Test	None

A few thin sands in the basal Eocene from 1671 m (-1646 m) to 1694 m (-1669 m) also appear to be oil bearing.

What about the Zone 1 sand ?

IV Well History Data

EC 15/05/97

A General Information

1.	Spud date	November 4, 198(
2.	Completed Drilling	November 23, 1980
3.	Total Depth	1910m (1910m log depth)
4.	Rig Released	December 7, 1980 at 1940 hrs
5.	Status	Plugged & Abandoned Oil Well

B Contractor & Rig

Global Marine's Glomar Semi II

C Casing

1.	30"	set at	213.5 m
2.	13 3/8"	set at	482.3 m
3.	9 5/8"	set at	1207.5 m

D Mud Program

Sea Water/Gel/Lignosulphonate

E Cores

1. Conventional
   Four cores were cut for reservoir analysis
   (see Appendix A)

Core No	Drilled Depth	Recovery	% Recovered
	1693 1698		
1.	1718-1723	3.5 m	70%
2.	1723-1733	0	0
3.	Reamed open hole with Core Bit		
4.	1734-1744	1.5 m	15%

2. Sidewall Cores

Run 1 (13"cables)
Shot 50, Recovered 25 i.e. 50%

Run 2 (13"cables)
Shot 25, Recovered 18 i.e. 72%

F Logging Service Companies

1. Mud log: Gearhart Geodata (Appendix O)
2. Wireline log: Dresser Atlas (see Table 1)
3. Velocity Survey: Seismic Services Ltd.

G Tests
There were no tests conducted

V Stratigraphy

A Discussion

The reservoir sands are mainly of Eocene age though some 3,5 m near the oil water contact is of Paleocene age (dinoflaggellate zone II). This is the first well in the Balder Field area that has penetrated a significant thickness of Eocene sand. The Paleocene sands are similar to those found in the 25/11-4 to the south.

B Lithological Descriptions

These are recorded as follows:

1.	Conventional cores	Appendix A
2.	Sidewall cores	Appendix B
3.	Drill cuttings	Appendix C
4.	Mud log	Appendix D
5.	Completion data	Appendix E

VI Conclusions

There is one significant massive sand at 1713 m (-1688m). The well proved 33.0 m of net oil sand or a gross oil column of 76.5 m. The oil-water contact at 1785 m (-1760 m) confirms the field oil-water contact found in 25/11-6, 25/11-7 and 25/11-8.

TABLE I

Logging Program on well 25/11-9

Log	DEPTHS(m)	Casing on log(m)	Total Depth logs(m)
Induction-Electrical BHC Acoustic Log with GR x SP			
Run 1A	150- 495.8	213.5	497.8
Run 2B	475-1225	485.1	1227
Run 4C	1100-1908.5	1207.5	1910
DLL/MLL/GR			
Run 4A	1192-1909	1207	1910
Densilog-Neutron-GR			
Run 4A	1185-1909.5	1207 1910	
Diplog			
Run 4A	1208-1909	1206.5	1910
Cement Bond Log			
SWC			
Run 4A	1895-1250		
4B	1790-1718		

Logging Service Company: Dresser Atlas

Velocity Survey

Service Company: Seismic Services Ltd.

TABLE II Stratigraphy Well 25/11-9

Kelly Bushing: 25m

Time-Stratigraphic Unit	Unit Top	Unit Thickness
Undifferentiated	151.4(-126.4)	468.6
Miocene	620.0(-595)	402.0
Oligocene	1022.0(-997)	294.0
Eocene	1316 (-1291)	440.0
Paleocene	1755 (-1730)	131.5
Danian	1886.5(-1861.5)	14.8
Late Cretaceous	1901.3(-1876.3)	8.7
Total Depth Log	1910 (-1885)	
Drilled	1910 (-1885)	

9.12.80
JSt/lgp

APPENDIX A

CORE DESCRIPTIONS

25/11-9

CONVENTIONAL CORE DESCRIPTION

DATE: 20/11/80 GEOL.: S. Ballestad, S. Staffurth

COMPANY: EEPNI

WELL: 25/11-9

COUNTRY (On/Offshore): BALDER

CORE No: 1

INTERVAL: FROM: 1718 TO: 1723

RECOVERY: 3,5 m EXM. 70 %

DEPTH	LITHOLOGY Contacts Accessories Fossils	Sed. Structures	DIP	POROSITY % OBSER. P	F	G	Meas.	K	LITHOLOGIC DESCRIPTION (REMARKS)	SHOWS Type-Quality	Envir
1718-19	SND					x		vgd	SND: CLR,FG,SUBANG-SUBRDD,MSRTD,LSE, QTZ, MICA,TR TUFF	GLD,VGD, FLOR;BRWH STRMN CUT	
20	70,6% Rec										
21											
22	SND					x		vgd	SND:a/a	a/a	
23											
									Note core was recovered in sleeves only top + bottom described.		

CONVENTIONAL CORE DESCRIPTION

S. Ballestad

DATE: GEOL.: T. Craig

COMPANY: EEPNI

WELL: 25/11-9

COUNTRY (~~Onshore~~/Offshore): BALDER

CORE No: 2

INTERVAL: FROM: 1723 m TO: 1733 m

RECOVERY: 0 ~~FT/M~~ 0 %

DEPTH	LITHOLOGY Contacts Accessories Fossils	Sed. Structures	DIP	POROSITY % OBSER. P	F	G	Meas.	K	LITHOLOGIC DESCRIPTION (REMARKS)	SHOWS Type-Quality	Environ
1723									No Recovery Probably SS AA		
1730											
1733											

CONVENTIONAL CORE DESCRIPTION

DATE: GEOL.: S. Ballestad T. Craig

COMPANY: EEPNI

WELL: 25/11-9

COUNTRY (On/Offshore): BALDER

CORE No: 3

INTERVAL: FROM: 1723 TO: 1734

RECOVERY: Misrun FT/M. %

DEPTH	LITHOLOGY Contacts Accessories Fossils	Sed. Structures	DIP	POROSITY % OBSER. P	F	G	Meas.	K	LITHOLOGIC DESCRIPTION (REMARKS)	SHOWS Type-Quality	Environ
1723	REAMED OPEN HOLE W/CORE BIT:										
1727											
1731											
1733											
1734											

CONVENTIONAL CORE DESCRIPTION

COMPANY:	EEPN
WELL:	25/11-9
COUNTRY (On/Offshore)	Nor-Off
DATE:	30.11.80
GEOL.:	T. Craig
CORE No:	4
INTERVAL: FROM:	1734
TO:	1744
RECOVERY:	1.5 ~~XXT~~/M. %

DEPTH	LITHOLOGY Contacts Accessories Fossils	Sed. Structures	DIP	POROSITY % OBSER. P	F	G	Meas.	K	LITHOLOGIC DESCRIPTION (REMARKS)	SHOWS Type-Quality	Enviro
1734											
35	SS								Plastic Sleeve core Lithology from drill holes spaced, 25m up the length of the sleeve		
36											
1738	SiS										
39											
40	SH										
41											
1742	SiS										
43	SH										
44									Shale/Siltstone Intbedd. Shale: DKGY, SILTY, MH, BLCKY Siltstone: MGY, QTZITIC, OCC FOND. SANDGNS, MH, NO EFF Ø Some BLK. LITHIC GNS.	No Shows	

17 ↑

APPENDIX B

SIDEWALL CORE DESCRIPTIONS

25/11-9

SIDEWALL CORE DESCRIPTION

RUN NO: 1 TYPE: L Tandem HOLE SIZE: 8½"

COMPANY: Esso

DATE: 25/11/80

WELL: 25/11-9

GEOL.: Craig

	DEPTH	REC.	LITHOLOGIC DESCRIPTION	POROSITY	SHOW
1	1895		CHALK, WHT, MH, MICROSKEL		
2	1885		SHALE, GY - GRN		
3	1875		SHALE, MGY, SLTY		
4	1865	NR			
5	1855		SST, CLR, QTZ, VF-FG, SA-SR, MS, UNCONS, NO CMT,		
	.		SOME GNS	GIG	No Show
6	1845		SHALE, INTRBDD OK GY AND GRN		
7	1835		SHALE, GRN		
8	1824		SHALE, OK-M GY, SLTY		
9	1820		SHALE, OK GRN-GY,SLTY		
10	1805		GST, CLR, QTZ, VF-FG, SA, MS.		
			UNCONS, NO CMT, TR GLAUC	GIG	No show
11	1795	NR			
12	1790		SST, A/A BUT FG, OCC MG		
13	1787		SST, A/A TR GLAUC		
14	1782	NR			
15	1778	NR			
16	1770	NR			
17	1765	NR			
18	1760	NR			
19	1755	NR			
20	1750	NR			
21	1744	NR			
22	1733	NR			
23	1728	NR			
24	1725	NR			
25	1718	NR			
26	1716	NR			
27	1714	NR			
28	1712		Mudstone w/CLR, WH, CALC VN		
29	1709	NR			
30	1703		SHALE, MGY, DISM PYR		
31	1695		SHALE, M BRN-GY		

1,790 No Show HC Next run

1,787 show / no show ?

← !?

EC 15/05/97

Gjøstein 35125

SIDEWALL CORE DESCRIPTION

RUN NO: 1 TYPE: HOLE SIZE: 8½"

COMPANY: Esso

DATE: 25/11/80

WELL: 25/11-9

GEOL.: CRAIG

	DEPTH	REC.	LITHOLOGIC DESCRIPTION	POROSITY	SHOW
32	1690		SHALE, WH SPKLO		
33	1680	NR			
34	1676	NR			
35	1672	NR			
36	1665	NR			
37	1630		MUDSTONE, SL MIC		
38	1600		SHALE, M GY		
39	1557		SHALE, GY-BRN,SLTY?		
40	1500		SHALE, A/A		
41	1450		SHALE/MUDSTONE, GY-BRN		
42	1405	NR			
43	1390	NR			
44	1378		SHALE/ SIS		
45	1330	NR			
46	1320		MUDSTONE/CLAYSTONE, GY-GRN, MIC		
47	1310		MUDSTONE/CLAYSTONE, FOSS.		
48	1300		MUDSTONE/CLAYSTONE,MIC		
49	1290	NR			
50	1250		MUDSTONE/SHALE, MIC.		

SIDEWALL CORE DESCRIPTION

RUN NO: 2 TYPE: SINGLE HOLE SIZE: 8½"

COMPANY: Esso

DATE: 25/11/80

WELL: 25/11-9

GEOL.: CRAIG

	DEPTH	REC.	LITHOLOGIC DESCRIPTION	POROSITY	SHOW
1			SST, DEPTH UNKNOWN		
2	1790		SST, QTZ, FG, SA-SR, MS, UNCONS,		
			NO CMT	GIG	NO SHOW
3	1787		SST, VFG A/A		
4	1782		SST, CLR BRN, QTZ, FG, SA-SR, MS,		Abund PL YEL FLUOR,
			UNCONS, NO CMT	GIG	INST MASSIVE YEL CUT
5	1778	NR			LIVE OIL STN
6	1770		SHALE, M. DK GY		
7	1765		SHALE, V LT GY		
8	1760		SHALE, A/A		
9	1755		SHALE, M GY		
10	1752		SHALE, M-DK GY		
11	1748		SHALE, V.LT GY SLTY		
12	1745	NR			
13	1743		SHALE, M GY		
14	1740		SST, CLR, BRN, QTZ, VF- FG, SA-SR,		ABUND,PL YEL FLUOR,
			MS, UNCONS,	GIG	Massive Yel CUT, LIVE OSTN
15	1733		SST A/A	"	"
16	1730		SST A/A	"	"
17	1728		SST A/A	"	"
18	1725		SST A/A	"	"
19	1723		SST A/A	"	"
20	1718		SST A/A	"	"
21		NS			
22		NS			
23		NS			
24		NS			
25		NS			

NR = NO RECOVERY

NS = NOT SHOT

APPENDIX C

DRILL CUTTINGS

WELLSITE SAMPLE DESCRIPTIONS

25/11-9

WELLSITE SAMPLE DESCRIPTION

CRAIG

HOLE SIZE: 12 1/4 " GEOL.: HORVIK

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 11.11.80	COUNTRY NOR off

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
		Clastic Description procedure:	
		Gross rock Type, colour, composition	
		Grain size, rounding sorting, induration, cements	
		Porosity, shows.	
500			
510		CLAY-CLAYSTONE, MED GY, GUMBO,	
		COHEISIVE, SOFT.	
520		A/A	
525		A/A W/SM CRS-M SAND, YELLOW-CLR, SUBROUNDED	
		MOD. SRTD, W TR PYRITIZED BURROWS, TR. MUSCOVITE	
530			
540		CLAYST/MUDST, MED GY, SOFT	
550		A/A	
560		A/A	
570		A/A tr carb shell frags & fine qtz grains	
580		A/A	
590		A/A incr in shell content & forams frags and	
		bivalves, sand clr-yellow, well rounded, fine grained	
		tr pyritized burrows	

Gjestein 35124

WELLSITE SAMPLE DESCRIPTION

T. CRAIG

HOLE SIZE: 12 1/4 " GEOL.: S. Horvik

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 11.11.80	COUNTRY NOR-OFF

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
600		MUDSTONE, med gy, soft	
		tr vf sand & foram frags	
		sand is sub rounded- sub ang., silty	
610		a/a	
620		MUDSTONE, med gy soft, becoming	
		silty and sandy. The sd is vf., clr, subrnd.-	
		well rnd, tr Foram. frags and glauc.	
630		COQUINA BEDS wh, yel, lse, broken calsite shell and	
		foram frags, tr-vcrs, arg, unbroken bivalves, fn	
		sm qyz, lse, vf occ crs, slty, subang-subrnd	
640		tr pyrite aggreg in burrows, tr glauc,	
		A/A INTBEDED w SILTSTONE, MED. GY, V ARG	
		SOFT, $CaCo_3$, ARG. MATRIX SCATTERED	
650		A/A BLACK CARBONACEOUS (COALY) FLECKS	
		SOME GLAUC. GNS	
660		A/A	
670		SILTSTONE: MEDBRNSH-GY, QTZ - ARG. SANDY I.P.	
		SOFT, SOME $Caco_3$ IN ARG MATRIX CARBONACEOUS FLECKS	
		w SOME COQUINA AA	
680		SILTSTONE AA BECOMING MORE FIRM	
690		SILTSTONE AA GNS BECOMING V.F. SAND SIZE	
700		SILTSTONE AA w Sandy MUDSTONE	
		(GRADATION FROM SILTSTONE)	

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 11.12.80	COUNTRY NOR-OFF

HOLE SIZE: GEOL.: CRAIG

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
710		GRADNG BACK TO SILTSTONE: MEDGY, QTZ-ARG w CAR FLECKS SCATTERED FINE SAND GNS, SOFT, $CaCo_3$, ARG. MATRIX SOME GLAUC. GNS.	
720		SILTSTONE AA. GLAUC. GNS COMMON SCATTERED FORAMS.	
730		SILTY MUDSTONE (GRADATIONAL FROM ABOVE) ABUNDANT GLAUC. GNS, CARB. GNS.	
740		V. SILTY MUDSTONE, UNLITHIFIED. BECOMING WELL SORTED, SOME GLAUCS GNS, CARB. FLECKS AA SOME MICACEOUS FLECKS	
750		V. SILTY MUDSTONE, AA UNCOHEISIVE	
760		AA	
770		SANDSTONE: S+P, 80% QTZ, 20% BLACK PHOSPHATIC GNS MG/ WR/ WS/ UNCONSOL. EXCELLENT INT. GRAIN. POR. 1 ABUND. GLAUC., COMMON MICA COMMON SHELL FRAG'S	NO SHOWS
780		SS AA- SCATTERED COARSE GNS, WR.	
790		SS AA NOW MED-CRS GND. SA-SR LESS PHOSPHATIC GNS. POSSIBLE MUDSTONE INTBEDS	
800		SS A/A	

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 12.11.80	COUNTRY NOR OFF

HOLE SIZE: GEOL.: S. Horvik Craig

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
810		SAND, CLEAR, QTZOSE, MG/SA/ MWS	
		UNCONSOL GIGØ NO SHOWS	
		COMMON SHELL FRAG, MICA FLAKES	
820		SAND AA	
830		SAND AA S-P, SR-SA	
		GLAUC GNS COMMON	
840		SAND AA V Clean	
850		SAND AA -W SOME MUDSTONE	
		ABUND. BLACK PHOSPHATIC GNS (BOTRYOIDAL?)	
860		SAND AA BECOMING F.G.	
870		SAND AA FG.	
880		SAND AA W SAND, CRS GND VWR, WS.	
		UNCON. TR. SHELL FRAG.	
900		SAND: WI SM INTERBEDS OF MUDDY SLTST	
		SAND, CLR, QTZ, MED GR, OCC FN, CRS, WR/MWS	
		UNCONSOL. V. HIGH ø	NO SHOW
		5% MED GR, BLK, OFR. PHOSPHATIC GRAINS, WR,	
		tv GLAUC, SM CRS BROKEN CALSITE SHELL FRAGS	
		tr MUSCOVITE FLAKES, PYRITIZED BURROWS	
		SLTST: YEL BRN, SF, F; W/QTZ; CALSITE FRAGS, PHOSPHATIC	
		GRAINS, GLAUC, AND LT BRN MICA (FUCHITE)	
910		A/A BUT LESS MUDDY SLTST (<1%), and tr calsite shell frags	
		ab. carbonaceous frags (10%), med gr. sm up	
		tr 2 com long angular frags, blk-dk brn,	
		mod hd, blky.	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE: 12.25" GEOL.: S. HORVIK

COMPANY: EEPN

DATE: 12.11.80

WELL (Onshore/Offshore): 25/11-9

COUNTRY: NORWAY

DEPTH ~~F/M~~ RKB	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
930		SAND, CLR, tr WH, QTZ, MED GR, WR, WS,	
		UNCONSOL, EXCELL Ø	NO SHOW
		2% MED GR. BLK, WR, BLK PELLETS (PHOSPH? ?	
		3% MEDGR, BLK, ANG, BLK CARBONACEOUS MOT.	
		2% M-CRS, YEL-WH, BROKEN/ANG CALSITE	
		SHELL FRAGS.	
		SM. MUSCOVITE tr GREEN MIC, GLAUC	
940		SAND A/A	
950		SAND A/A BUT INCR TO 5% of BLK PHOSPH? PELLETS.	
960		SAND w/ INTBD MUDDY SLTST	
		SAND: CLR, TR WH, QYZ, MED TO MED-FN GR,	
		WR-SR, WS, UNCONSOL, EXCELL Ø	
		AB GLAUC, TO 10% DK GRN-BLK PELLETS, MED GR	
		TR CARBONACEOUS MAT. BLK	
		TR SHELL FRAGS, TR MOSCOVITE	
		SILTSTONE: YEL BRN, MUDDY , SFT,	
970		MUDSTONE, MED BRN, SFT, VF SDY TO SLTY	
		QTZ, CALSITEFRAGS, PHOSPHATIC DK GRN-BLK GRAINS, GLAUC	
		MICROMIC	
980		MUDSTONE A/A, INCL ARGILL	
990		MUDSTONE, MEO BRN, SFT	
		TR VF SD, TR GLAUC, TR MICROMIC, TR CALSITEFRAG	
1000		MUDSTONE A/A	
1010		SAND, CLR, TR WH, QTZ, MED GR, WR, WS, UNCONSOL	
		EXCELL Ø	NO SHOW
		TR GLAUC , TR CALSITE FRAGS, TR BLK-DK GRN PHOSPH PELLETS	
		TR MUSCOVITE, TR MUDSTONE A/A	
1020		SAND W/SM MUDSTONE INTBD	
		SAND: A/A, INCR IN MUSCOVITE CONENT	
		MUDST: A/A	
1030		MUDSTONE, PALE BRN-YEL BRN, SFT	
		TR FN QTZ SD, WR, WS, TR GLAUC.	

WELLSITE SAMPLE DESCRIPTION

CRAIG

HOLE SIZE: 12.25" GEOL.: HORVIK

COMPANY: EEPN

DATE: 12.11.80

WELL (Onshore/Offshore): 25/11-9

COUNTRY: NORWAY

DEPTH F/M ~~XXXRKB~~	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1040		INTERBEDDED SAND AND MUDSTONE	
		SAND: CLR, QTZ, MED GR, SR- WR, WS, UNCONSOL	
		EXCELL Ø, TR GLAUC, TR PHOSPHATE PELLETS	
		TR BROKEN SHELL FRAGS, TR MUSCOVITE	
		MUDSTONE: PALE BRN-YEL BRN, SFT	
1050		A/A, INCR SAND CONTENT, TR SLIGHTLY	
		FIRM MUDST	
1060		MDSTNE w MINOR SS INTBEDD	
		MDSTNE, M GYSHBRN., SILTY, SEMILITH,	
		NON CALC. SS:AA	
1070		MDSTNE AA w MINOR SS AA	
1080		SS AA w MINOR MUDSTN, AA, BECOMING	
		LESS SILTY MORE ARG.	
1090		SS AA F-MGN, SA-SR,	
1100		SS AA TR GLAUC., CLEAN	
1110		SS AA MS	
1120		SS AA GRADING INTO F- VF - SILT.	
1130		SILTSTONE: MED BRN/GY, QTZ - ARG. SOFT	
		SEMI LITH. TR GLAUC., MICACEOUS.	
		w SILTSTONE: LTGY, QTZ-CLAY.	
		KAOLINITIC. FIRM-SEMI LITH.	
1140		SILTSTONE AA	

WELLSITE SAMPLE DESCRIPTION

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

HOLE SIZE:

GEOL.: HORVIK

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1150		MUDSTONE: MEDGY TO MED BRN, SOFT, tr FIRM	
		TR MICROMIC, TR GLAUC, AB SILTST: LT BRN TO	
		MD GY, FIRM	
1160		MUDSTONE A/A	
1170		SILTSTONE: MED GY TO LT BRN, SOFT-FIRM, QTZ	
		MUSCOVITE, TR GLAUC, TR SANDSTONE; CLR, WH, QTZ,FINE GR WELL CMTD,HARD.	
1180		SILTSTONE: MED GY TO LT BRN, TR LT GY/GRN	
		FIRM; SLIGHTLY FISSILE, QTZ MUSCOVITE	
		TR GLAUC, TR SANDSTONE: CLR, WH, QTZ	
		FINE GR, WELL CEMENTED, FIRM-HARD	
		CLAY AND CARBONATE CMT	
		TR RND PYRITE CLASTS	
1190		SILTSTONE: MED GY, LT BRN	
		FIRM, FISSILE, QTZ, MUSCOVITE	
		TR GLAUC, TR SANDSTONE; CLR, WH, QTZ	
		FINE GR, CEMENTED, FIRM HARD, w/AB GLAUC.	
		TR KAOL, TR FORAMS	
		CLAY AND CARBONATE CMT	
1200		SANDSTONE W/SILTSTONE INTERBEDS	
		SANDSTONE: CLR, OCC WH, QTZ, FN, tr M, A-SR	
		WS, UNCONSOL, SM HARD W/PYRITE CMT.	
		AB. MICROCRYST PYRITE, SM GLAUC, TR PYR	
		BURR, TR FORAMS, TR MUSC. HIGH Ø IN	
		UNCONSOL PTS.	
		SILTSTONE: A/A	
1210		A/A INCR IN PYRITE CONTENT	
1220		SLTST: M GY-BRN, ARG CALC I/P, SFT-	
		SL FIRM, SNDY I/P, TR GLAUC, TR MICA	
		TR SST: WH - CLR, LSE, FR, SUBR,- R, MSRTD,	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE:

GEOL.: J. STAFFURTH
S. BALLESTAD

COMPANY: ESSO

DATE:

WELL (Onshore/Offshore): 25/11-9

COUNTRY: BALDER

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1225		SANDST INTRBDD w SLTST	
		SST CLR- WH, LSE, FG, MG I/P PR SRTD,	
		SURRDD-RDD, OCC PYR CMT, TR GLAUC;	
		SLTST a/a TR FORAMS	
1230	100%	SLTST: BRNMGY, CALC, MICA SFT-SL FIRM, SNDY I/P	
		TR GLAUC, TR FORAMS, TR PYR	
1240	100%	SLTST: a/a TR SST : WH-CLR, FG, MG I/P LSE	NOTE PYR IS WHITE
		PR SRTD, TR PYR, TR GLAUC, TR FORAMS	COULD BE MARCASITE
		TR SPIC	
1250	100%	SLTST: a/a TR SST: WH-CLR FG, MG I/P	
		SUB ANG- SUBRDD, LSE. OCC PYR CMT, TR	
		FORAMS, TR SPIC	
1260	100%	SLTST: A/A TR SST: A/A, TR FORAMS,	
		TR PYR	
1270	100%	SLTST: MGY-BRN, DOLO/CALC MICA, SFT- SL FIRM	
		TR SST: A/A, TR PYR, TR FORAM	
		SL TR LST, M BRN, MICRITIC, ARG, OOLIC,	
		4D	
1280	100%	SLTST, MGY, ARG, DOLIC, SFT- SLFM, TR MICA,	FIRST SIG LST/OOL
		TR PYR, TR GLAUC	
		GD TR L'ST/DOL; BUFF-M BRN, MICRIC,	NO SHOW
		SL ARG I/P SNDY, TR SPIC, HD - FM	
		TR DISM PYR.	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE:

GEOL.: S. Ballestad, J. Staffurth

COMPANY: ESSO

DATE: 17.11.80

WELL (Onshore/Offshore): 25/11-9

FIELD: BALDER

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1290	100	SLTST, MGY, DOLIC I/p ARG, FM-SET, DISM PYR, SNDY I/P TR MIC MICA, SUB-FISS I/p	
	SL	TR DOL/LST a/a	
1300	100	SLTST a/a	
		TR DOL/LST a/a	
1310	100	SLTST, M GY-BRN, ARG, SFT- SL FR, TR DISM PYR, SNDY I/p TR MICMICA, SUBFISS I/p	
			TOP EOCENE C 1315
* 1320	100	SLTST, MGY-BRN, ARG, FR-SFT, TR DISM PYR, SNDY I/p , BLKY	
1330	100	SLTST a/a	
	SL	TR DOL, BUFF, MICRIC, SNDY, FM-HD, ARG, TR DISM PYR	
1340	100	SLTST, MBRN, MGY I/p, ARG, FM-SFT, DISM PYR, SNDY I/p, BLKY.	
1350	100	SLTST a/a	
1360	100	SLTST, MBRN, ARG, FM-SFT, TR DISM PYR SNDY.	
* 1370	70	i. SLTST a/a	
	30	i. CLY, MBRN, SFT, STKY, SL SLTY.	
* 1380	70	SLTST, M BRN, MGY, ARG, CALC I/p FM_SFT, DISM PYR, SL TR GLAUC, TR MICMICA	
	30	CLAY a/a	

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
ESSO	25/11-9
DATE: 17/11/80	COUNTRY BALDER

HOLE SIZE: GEOL.: J. STAFFURTH

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
390	80	SLTST, MBRN, GY-GRN I/p ARG, CALC I/p FM - SFT	
		DISM PYR, TR MICMICA, TR GLAUC, TR SPIC	
	20	CLAY a/a	
1400	10	DOL, GY-GYGRN, MICXLN- CRYPTOXLN, ARG I/P	
		DISM PYR, TT.	
	70	SLTST a/a	
	20	CLAY a/a	
1410	90	SLTST, GY-GRN, BRN I/p ARG GRDNG TO SLTY	
		SH, DOLIC-CALC, DISM PYR, TR GLAUC	
	10	CLAY a/a	
	TR	DOL a/a TR BRN VN CALC	
1420	90	SLTST, GRN-GY TR BRN, ARG, NON-CALC,	
		PYR XLS, DISM PYR, TR GLAUC, GRDS TO	
		SLTY SH.	
	10	CLAY a/a	
	TR	DOL a/a	
1430	10	DOL, BUFF - BRN, MICXLN, SLTY, TR DISM PTR.	NO SHOW
	80	SLTST GRN-GY a/a GRDNG TO SH	
	10	CLAY a/a	
1440	5	DOL a/a	
	85	SLTST/SH, GRN-GY, BLKY-SUB-FISS, FM, DISM PYR.	
		TR GLAUC.	
	10	CLAY, GY GRN- BRN, SFT, STKY, SLTY I/p	
1450	5	DOL a/a	
	65	SH/SLTST GRN-GY a/a	
	10	SLTST, BRN, ARG, SL DOLIC, DISM PYR, SFT - FM,	
		SUBFISS I/p TR MICA	
	20	CLAY a/a	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE:

GEOL.: S. BALLESTAD J. Staffurth

COMPANY:

DATE: 17.11.80

WELL (Onshore/Offshore)

COUNTRY

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1460	75	SH/SLTST, GRN-GY, GRN, BLKY, FM, SFT I/p,	
		DISM PYR I/p TR GLAUG, NON-CALC.	
	5	SLTST, BRN a/a	
	20	CLAY, GY.GRN, SFT, STKY, SLTY I/p, DOLIC I/p	
1470	60	SH, GRN-GY, SUBFISS-BLKY, FM, SFT I/p,	
		DISM PYR, GLAUC I/p NON-CALC.	
	10	SLTST, MBRN, FM, SFT I/p, ARG, DOLIC I/p,	
		DISM PYR, MICMICA, SNDY I/p	
	30	CLAY a/a	
1480	50	SH, a/a	
	30	SLTST, MBRN, WH I/p, FM, SFT I/p, ARG, DOLIC I/p	
		DISM PYR, MICMICA, SNDY I/p	
	20	CLAY a/a	
		TR LST, TR DOL, TR SPIC	
1490	50	SH, a/a	FIRST C_2
	30	SLTST, a/a	
	20	CLAY a/a	
		TR DOL a/a TR PYR, TR SPIC	
1500	45	SH, GRN-GY, SUBFISS-BLKY, FM, SFT I/p	
		DISM PYR, GLAUCO I/P, NONCALC	
	35	SLTST a/a	
	20	CLAY GY-GRN, SFT, STKY, SLTY I/p	
		TR DOL a/a TR PYR XLS	
1510	50	SH a/a	
	30	SLTST, MBRN-LTBRN, WH I/p FM, SFT I/p ARG	
		DISM PYR, MICMICA, SNDY I/p,	
	20	CLY: a/a	
		TR PYR XLS, TRDOL LT BRN XL.	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE:

GEOL.: S. BALLESTAD
J. STAFFURTH

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1520	45	SH, GRN-LTGY, SUBFISS-BLKY, FM, SFT 1/p,	
		DISM PYR, GLAUC i/p NON-CALC.	
	40	SLTST, a/a	
	10	CLY a/a	
	5	DOL, BF-LT BRN, MICXLN, DISM PYR,TT:	
		TR FORAM	
1530	40	SH a/a	
	55	SLTST, BRN, FM, SFT I/p, DISM PYR,	
		MICMICA, SNDY I/p	
	5	DOL a/a	
		TR PYR	
1540	35	SH a/a	
	65	SLTST a/a LTGY i/p	
		TR DOLO a/a, TR GLAUC, TRPYR	
1550	30	SH, GRN-GY, SUBFISS-BLKY, FM, SFT i/p,	
		DISM PYR, NON-CALC	
	70	SLTST, BRN, FM-SFT, DISM PYR, SNDY i/p	
		TR DOL a/a TR GLAUC	
1560	35	SH a/a	
	55	SLTST, a/a	
		TR DOL a/a	
	10	CLY GY - GRN, SFT, STKY	
1570	30	SH a/a	
	60	SLTST a/a	
	10	CLY a/a	
		TR DOL a/a	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE:

GEOL.: S. BALLESTAD J. STAFFURTH

COMPANY: EEPNI

DATE:

WELL (Onshore/Offshore): 25/11-9

COUNTRY: BALDER

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1580	40	SH GRN-GY, SUB FISS-BLKY, FM, SFT 1/p, DISM	
		PYR, NON CALC, SLTY 1/p	
	50	SLTST, BRN, FM, SFT 1/p, DISM PYR, MIC-	
		MICA	
	10	CLY GY-GRN,SFT,STKY	
		TR DOL, LT BRN, MICXLN-CRPTOXLN	
1590	40	SH a/a	
	35	SLTST a/a	
	20	CLY a/a	
	5	DOL/LST, LT BRN, MICXLN-CRPTOXLN	
		TR PYR, TR GLAUC	
1600	30	SH, GRN-MGY, SUB FISS-BLKY, FM-SFT 1/p, SLTY 1/p,	T-C_2 FROM 1605
		DISM PYR, NON-CALC	
	60	SLTST, DK GY- BRN, FM, SFT 1/p DISM PYR,	
		MICMICA, GLAUC 1/p	
	10	CLY a/a	
		TR PYR, TR GLAUC, TR LST/DOL	
1610	35	SH a/a	
	65	SLTST a/a	
		Tr LST/DOL, TR PYR, TR GLAUC	
1620	30	SH a/a	
	70	SLTST a/a	
		TR DOL, TR PYR, TR GLAUC, TR TUFF	ONLY 1-3 TUFF
		PALE GREEN, w/BLK, WH AND LT BRN SPS	GRNS
1625	45	SH M-DK GN; SUB FISS-BLKY, FM, SFT 1/p, SLTY	
		DISM PYR, NON CALC	
	55	SLTST a/a MBRN	1 TUFF GRN
		TR DOL, LT BRN, BF, MICXLN, TT, TR TUFF%	

WELLSITE SAMPLE DESCRIPTION

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

HOLE SIZE:

GEOL.: BALLESTAD

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
		TUFF a/a	
1628	30	SH a/a	
	70	SLTST a/a	
1631	20	SH GY - GRN, BLKY, FM, SLTY, TR DISM	
		PYR	
	80	SLTST, GY-BRN, ARG GRDNG TO SH,FM,	
		TR DISM PYR, TR SD,	
		TR DOL a/a	
		TR TUFF, PL GRN, TRNSLUC, GLASSY,	1 GRN ONLY
		FLD, TR PYR, SFT, BRIT	
1634	20	SH a/a	
	80	SLTST a/a	
		TR TUFF a/a	1 GRN
1637	10	SH a/a	
	90	SLTST a/a	
		TR TUF a/a, TR DOL a/a	
1640	100	SLTST, GYBRN-GYGRN, ARG, GRDNG	
		TO SH, BLKY, DISM PYR,	
		TR SH a/a	
1643	100	SLTST a/a	
		TR TUF a/a	
1646	100	SLTST a/a	
		TR PYR,	

WELLSITE SAMPLE DESCRIPTION

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

HOLE SIZE:

GEOL.: BALLESTAD

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1649	100	SLTST a/a GRDNG TO SLTYSH	
1652	100	SLTST,BRN GY-LT BRN, ARG FLD 1/p GRDNG TO SH.	
		BLKY TO SUB FISS, DISM PYR,FLD,	
		TR PYR, TR GLAUC, TR DOL LT BRN-	
		BF, MICXLN, TR VN CALC, XLN	
		TR TUF PL GRN, TRNSLUC, GLASSY, FLD,	
		SFT, BRIT	
1655	100	SLTST a/a	
		TR GLAUC, TR DOL a/a	
		TR SCTST, BUFF, MO, BRIT, SIL, DOLIC 1/p, TR	
		FLD	
1658	60	SLTST, BRNGY/OCC GRN GY, BLKY,	
		OCC SVB FISS, ARG, ASH, DISM PYR,	
		TR GLAUC 1/p	
	40	SH, GYGRN, SUB FISS, ASH 1/p,	
		PYR 1/p, TR GLAVC, SLTY 1/p,	
		TR ASH, LT BRN, BNDD, FLD, FM	
		TR SH RD BRN, BLKY, SLTY, ABNT	
		GY GRN NODS, RDD	
1661	70	SLTST, a/a	ASH IS INTBDD
	30	SH a/a	w/SH
		GD TR ASH a/a	
		TR SH, RD BRN a/a	
1664	70	SLTST, a/a, BCMNG MORE SHLY,	
	25	SH,a/a	
	5	ASH, BF-LT BRN, BLKY, BNDD, FLD 1/p	
		TR PYR, TR QTZ.	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE: GEOL.: BALLESTAD

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1667	70	SLTST a/a	
	25	SH a/a FISS i/p	
	5	ASH a/a	
1670	70	SLTST a/a	
	30	SH a/a	
		TR ASH a/a INTRBDD W/SH	
		TR TUFF, BL GY, TRNSLUC, GLASSY,	
		FLD, HD, BRIT	
		GD TR DOL, LTBRN, MICXLN-FXLN,	
		TR SD, OCC DOL VNS,	
1673	80	SLTST a/a, GRDNG TO SH	
	20	SH a/a TR PYR	
		TR ASH a/a, TR TUFF a/a, GD TR DOL a/a	
1676	80	SLTST, GY BRN, BLKY, FM, ARG, ASH,	
		DISM PYR,	
	10	SH, GY BRN, FISS, ASH, PYR, SLTY i/p	
	10	TUFF, BL, GRN i/p FM TO HD, BRIT,	
		FLD, QTZ, ASH, VIT i/p	
		TR ASH a/a TR DOL a/a	
1679	80	SLTST, a/a, BUT GEN GY	
	10	SH, a/a	
	5	TUFF, a/a	
	5	SST, PL GY-BRN, VRG-SLT, WSRTD,	100% PL YEL
		ANG, OCC FG, PSRTD, SUBRDD, QTZ,	FLUOR, BRI YEL
		DOL CMT, 5% Ø, LOW PERM, BT	STRMNG CUT
		25% Ø, WHERE FG	
		TR DOL a/a	

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE: GEOL: BALLESTAD

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1682	95	SLTST a/a, BT GY	
	5	SST, VFGa/a	OIL FLUOR a/a
		GD TR TUFF, GD TR SH,	
		TR SH, TD BRN, BLKY, HD, BRIT,	
		SLTY, ABNT GY GRN NODS, RDD	
1685	100	SLTST, GY, BLKY, FM-HD, ARG,	
		ASH, DISM PYR, GRDS TO SLTY SH	
		GD TR SST a/a	OIL FLUOR a/a
		GD TR TUFF a/a	
1688	95	SLTST, a/a	
	5	SH, GY, FISS, FM-HD, ASH, DISM PYR,	
		SLTY 1/p,	
		TR SST a/a, GD TR TUFF a/a	OIL FLUOR a/a
		TR RD BRN SH a/a	
1691	95	SLTST a/a	
	5	SH a/a	
		GD TR SST, LT GY, FG, SUBANG, MSRTD	
		QTZ, TR FLD, TR PYR, SIL CMT, MICA	
		TR GLAUC; GD TR TUFF, GRN, HD, BRIT,	
		FG, VITR i/p	
1694	90	SLTST a/a	
	10	SH a/a	
		TR SST a/a TR TUFF a/a	
1697	90	SLTST a/a	
	10	SH a/a	
		GD TR SST a/a	100 % GOLD FLUOR
		TR TUFF a/a	PL YEL STR MNG CUT
		TR DOL, ORNG BRN, MICXLN, SLTY i/p, TT	

WELLSITE SAMPLE DESCRIPTION

COMPANY:

DATE:

WELL (Onshore/Offshore)

COUNTRY

HOLE SIZE:

GEOL.: BALLESTAD

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1700	60	SLTST a/a	
	40	SH a/a	
		TR TUFF a/a, TR PYR	
		TR SST a/a, TR DOL a/a	
1703	40	SLTST a/a	
	60	SH a/a SLTY	
		GD TR SST a/a	
		TR PYR, TR TUFF a/a, TR GLAUC.	
1706	25	SLTST a/a	
	75	SH MGY-GRN GV, FISS, FM-HD, DISM	
		PYR, SLTY	
		GDTR SST a/a	
	TR	PYR, TR DOL a/a	
1709	20	SLTST a/a	
	80	SH a/a	
		GD TR SD, CL-LT GY, FG, MG i/p, SUBANG	
		MSRTED,QTZ	
		TR PYR, TR DOL a/a	
1712	20	SLTST a/a	
	50	SH a/a	
	30	SD,GLR, FG, SUBANG, WSRTD, LSE, QTZ, MICA, PYR i/p	
		TR PYR, TR DOL a/a	
1715	40	SD,CLR, F-MG, SUBANG, MSRTD, LSE	
		QTZ, MICA	
	60	SH, a/a	
		TR TUFF, LT GY, FM TO HD, BRIT, w/BLK SPTS	
			Stop at 1718
			to cut core#1

WELLSITE SAMPLE DESCRIPTION

HOLE SIZE: GEOL.: CRAIG

COMPANY: EEPNI

DATE: 22.11.80

WELL (Onshore/Offshore) 25/11-9

~~COUNTRY~~ BALDER

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1743		SILTSTONE/SHALE INTBEDD/ SILTSTONE, MGY	
		QTZ, ARG, BLK LITHICGNS, MH, FINE SHELL DEBRIS.	
45		NO EFFEC.Ø, NO SHOWS.	
49		-SILTSTONE AA w SOME FINE GDD.SS. (GRADATIONAL)	ABUND
		F-GIGØ, ABUND. YELLOW FLUOR	YELLOW FLUOR.
52			
55		AA SOFT-FIRM.PIGØ:	TRC YELLOW
58		TRACE FINE X' LINE PY	
61		AA N.E.Ø SS IS MORE ARG.	NO SHOWS.
64			
67		AA	
70			
73		INTBED'D SILTSTONE/SHALE w MINOR	
		SS INTBEDS. SS IS V.F.GND. (GRADATIONAL	
76		w SIS.	
79		AA	
82		S.S. INTBEDS.: CLEAR, QTZOSE.VF-FOND	WK YELLOW FLUOR
		SR/MWS/UNCONSOL. NO CMT.	FAST WK.YELLOW CVT.
85			
		SS AA (100)	
88			

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 22.11.80	COUNTRY NOR-OFF

HOLE SIZE: GEOL: CRAIG

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1791		SS:, WHT-CLEAR, QUZOSE, VF-FGND/SA/MS	
		UNCONSOL NO CMT. GIGØ. SOME DK	
94		GY ARG ILLITE GNS. WR. TR. FORAwS.	
97			
1800		SS: AA, MICACEOVS.	WK FLUOR
			WK, SLOW CVT:
03			
06			
		SS AA.	AA
09			
1811		SS BECOMING F-MGNA	
14			
17		SS:, CLEAR, QTZOSE, M-CGND/SA-SR/MS	
		UNCONSOL. NO CMT, GIGØ,	
1820			
23		SHALE:MGY-GYGN., SOFT-FIRM,	
		OXIDIZED, FISSILE. SOME SS AA.	
26		FINELY-MICROMICACEOUS.	
29		SHALES AA.	
1832			
35		GNS SHALES AA W PY	

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE: 22.11.80	COUNTRY NOROFF

HOLE SIZE: GEOL: T. Craig

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1838			
		- SHALES BECOMING QUITE SPLINTERY.	
41		SHALES, GN, GY-GN SOFT-FIRM,	
		OXIDIZED, FISSILE, PYRITTIC	
44			
		SOME SAND GNS: MGND, SR, MWS,	
47		(POSSIBLE INTBEDD)	
1850		SHALE AA w/SHALE, REDSH BRN, FIRM,	
		BLOCKY, SILTY IP.	
53			
56		SHALES AA.	
59			
1862		SHALE, REDSH BRN, GN.	
65			
		SHALE AA	
68			
1871		SHALE AA w POSSIBLE MINOR SAND	
		INTBEDS.	
74		BRN SHALES BECOMING FISSILE.	
77			
1880		SHALES AA BOTH BRN. + GN SHALES ARE	
		NOW SPLINTERY.	
1883			

WELLSITE SAMPLE DESCRIPTION

COMPANY:	WELL (Onshore/Offshore)
EEPN	25/11-9
DATE:	COUNTRY
22.11.80	NOR-OFF

HOLE SIZE: GEOL.: T. CRAIG

DEPTH Ft/M	LITH %	LITHOLOGIC DESCRIPTION	SHOWS & REMARKS
1886		CHALK: V.LTGY- WHT, MICROSKEL, SOFT- FIRM	
		N.E.Ø NO SHOWS	
89			
91		AA	
94		CHALK AA WHT, BECOMING SLIGHTLY	
		MORE FIRM.	
97			
1900		CHALK AA	
03		CHALK AA INTERBEDD w/SHALE,	
		OLIVE GY, FISSILE- SUB BLCKY, CALC-V.Calc	
06			
09		CHALK/SH AA TRCE SHATTERED CHT	
12		FTD 1910 m	
14			
17			
1920			

APPENDIX D

MUD LOG

25/11-9

Badger Work Room

[redacted] Exploration and Production ~~[redacted]~~ Inc.

FORM 8 **COMPLETION LOG** COP

LOCATION: Bonus COORDINATES: 28 MN ... COUNTY OR PARISH: Cameron

API/Serial No.: Operator: Exploration and Production Inc. Lease: Badger Work Room Well No.: 1 Field: Bonus Block: 2004 Survey: Abst. Thomas Vera Rodriguez Range: Section: Township: Elevation: Date Spud: 11/1/1978 Date Comp.: 11/15/1978 Total Depth: 14,000 Date Plug: Plug Back Depth: Drilling Contractor: Drilling Fluid: Water Base Mud Type Completion: Gas Single Completion Perforations: 13,800-13,900 Casing Record: 13 3/8" 68# @ 1,000' 9 5/8" 47# @ 13,000' Tubing Record: 2 7/8" 6.5# @ 13,800'

SYMBOLS

CAP CLOSURE	CAVE
CEMENT	DRILL
BRIDGE PLUG TOP(S)	DRILL
CIBP OR CIBP TOP(S)	DRILL
CIBP OR CIBP TOP(S)	DRILL
	DRILL
	DRILL