Received early August 1976

16/8-1 W 20,30

D R I L L I N G P R O G R A M M E

CONOCO NORWAY, INC.

LOCATION BLOCK 16/8-1

JULY, 1976

WELL PROGRAMME

CONOCO/BRITISH PETROLEUM/PELICAN

EXPLORATION WELL 16/8-1

P.J. EBERLEIN
Manager Exploration

H.B. STEVES
Manager of Operations

B. YONGE
Chief Geologist

G.M. BRONSON
Manager of Drilling

GENERAL INFORMATION

BLOCK 16/8-1

Proposed Total Depth:	8,000 ft.
Location:	Latitude: 58° 27' 25" N Longitude: 02° 26' 02" E
Water Depth:	269 feet
Rig Elevation:	82 feet
Estimated Spud Date:	22 August, 1976
Drilling Contractor:	Rowan (Nor-101) Inc. P.O. Box 1340, Vika, Oslo 1. Rig: Norskald

Service Companies:

Cementing and DST Service	Halliburton, P.O. Box 67, 4056 Tananger.
Diving Service	Comex Norge A/S, P.O. Box 549, 4001 Stavanger.
Electric Logging	Schlumberger Offshore Services, P.O. Box 129, 4051 Sola.
Helicopters	Helikopter Service A/S, 4033 Forus.
Mud Logging	Exploration Logging International Inc., P.O. Box 45, Windsor, Berkshire, Great Britain.
Survey Location	Gardline Ltd., River Side Road, Gorlston on Sea, Norfolk, England.
Standby Boat	North Sea Exploration Services, Dusavik, P.O. Box 138, 4001 Stavanger.
Supply Boats	Gruno Anne, Grundstad Supply A/S, Kirkegt. 30, 4000 Stavanger.
	Giant Tide, Tidewater Marine, Albemarle H01, Albemarle St., W1 London, England.

Service Companies Cont. ...

Wellhead System	18 3/8" 10.000 psi Cameron Single stack. 1 - Cameron Collet connector. 2 - Cameron type "U" double unit 10.000 psi W.P. 2 - Hydril - 5000 psi W.P. diverter - Regan. 30" pin connector - Cameron. Choke manifold - Cameron/ Halliburton 10.000 psi.

PROPOSED WELL PLAN OUTLINE

WELL NAME: 16/8-1 ESTIMATED WATER DEPTH: 269'

LOCATION: 58° 27' 25" / 2° 26' 2" RIG K.B.M.: 82

DEPTH RKB	FORMATION TOPS + TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRACTURE GRADIENT	FORMATION PRESSURE GRADIENT	MUD WEIGHT TYPE
1000	Pliocene	Gumbo possible Pressure transition zone at ± 1900 ft.	ISF/Sonic Gamma Ray/ SP	36	30" 551'			9.5
2000	Miocene			17½ and 26	20" 1751'	12.6	9.0	
3000	Obligocene			17½				10.0
4000	Eocene				13 3/8" at 4351'		10.5	11.0
5000	Paleocene		ISF/Sonic/ Gamma/Ray/ SP. CNL/ FDL/CAL/GR HRD Dual Later-olog/SP Velocity Survey CBL			14.9		
6000	Chalk	Low Rop in Chalk						
7000	L.Cretaceous U.Jurassic Triassic							11.5
8000	T.D.				9 5/8" at TD			
9000								

4.

CASING PROGRAM

SIZE	WT	GRADE	JOINT	TOP	BOTTOM	MAX SURFACE PRESSURE	EXT MUD WT	INT MUD WT	FLUID LEVEL FT	DESIGN FACTORS BURST	TENSION****	COLLAPSE***
30"	310	Line pipe	ADT	351	551							
20"	94	X-52	VETCO "L"	351	1751	1032	9.0	11	1751	1.49*	8.18	.63
13 3/8	68	K-55	BUTT	351	4351	3034	11.0	11.5	4351	1.13*	6.44	.85
9 5/8	47	N-80	BUTT	351	8000	4306	11.5	11.5	8000	1.59**	3.02	.99

* Based on fracture gradlines less gas gradient.
** Based on reservoir pressure less gas gradient.
*** Based on no fluid in casing.
**** Weight unbuoyed.

CEMENTING PROGRAM

Well 16/8-1

30" Conductor - hole size 36" (washed out to 46")
Cement to seabed with 200 feet of penetration.

30" x 46" Annular Volume

$$\frac{\frac{\pi}{4}(42in^2 - 30in^2)}{144\frac{in^2}{ft^2}} \times 200ft = 942ft^3$$

30" x 1" Wall Casing

$$\frac{\frac{\pi}{4}(30in^2 - 2in^2)}{144\frac{in^2}{ft^2}} \times 20ft = 98ft^3$$

Total Volume Required $1040ft^3$

CEMENT DATA

Slurry

Class	G
Sacks	881
CACL	2% = 1656 lbs.
Mix Water	Sea
Volume Mix Water	5.2 gal/sk
Weight of Slurry	15.0 PPG
Yield	1.18 ft^3/sk.
Pump Time	1 Hour
Compressive Strength	1350 Psi in 24 hrs.

Be prepared to run a string of 5" drillpipe alongside the 30" if cement returns are not obtained on the seabed.

Cementing Program Well 16/8-1 Cont. ...

20" Conductor - hole size 26" (washed out to 33")
Cement to seabed.

33" x 20" Annular Volume

$$\frac{\frac{\pi}{4}(33in^2 - 20in^2)}{144\frac{in^2}{ft^2}} \times (1751ft - 551ft) = 4509ft^3$$

30" x 1" Wall x 20" Annular Volume

$$\frac{\frac{\pi}{4}(28in^2 - 20in^2)}{144\frac{in^2}{ft^2}} \times 200ft = 419ft^3$$

Casing Volume, 40ft of 20 inch

$$\frac{\frac{\pi}{4}(19.124in^2)}{144\frac{in^2}{ft^2}} \times 40ft = 80ft^3$$

Total Slurry Volume Required $5008ft^3$

CEMENT DATA

	Lead Slurry	Tail Slurry
Class	G	G
Sacks	2427	500
Gel	2% Prehydrated = 4563 lbs	0
Mix Water	Fresh	Sea
Volume Mix Water	9.99 gal/sk.	5.2 gal/sk.
Weight of Slurry	13.1 PPG	15.6 PPG
Yield	1.82 ft^3/sk	1.18 ft^3/sk.
Pump Time	2.5 H+	3 H+

Cementing Program Well 16/8-1 Cont. ...

13 3/8" Cementing Program
Hole size 17½" (washed to 19½")

20" x 13 3/8" Annular Volume

$$\frac{\frac{\pi}{4}(19.125\text{in}^2 - 13.375\text{in}^2)}{144\frac{\text{in}^2}{\text{ft}^2}} \times 1400\text{ft} = 1427\text{ft}^3$$

Hole x 13 3/8" Volume

$$\frac{\frac{\pi}{4}(19.5\text{in}^2 - 13.375\text{in}^2)}{144\frac{\text{in}^2}{\text{ft}^2}} \times (4351-1751) = 2855\text{ft}^3$$

40 ft Casing Volume

$$\frac{\frac{\pi}{4}(12.254\text{in})^2}{144\frac{\text{in}^2}{\text{ft}^2}} \times 40\text{ft} = 33\text{ft}^3$$

Total Volume Required 4315ft^3

	Lead	Tail
Class	G	G
Sack	2057	500
Gel	Prehydrated 8,5 lbs/bbl of mix water	0
CFR-2	0.5%	1%
HR-7	.2%	
Mix Water	Fresh	Fresh
Volume Mix Water	10 gal/sk.	5.0 gal/sk.
Weight of Slurry	13.2 ppg	15.8 ppg
Yield	1.82 ft^3/sk.	1.14 ft^3/sk.
Pump Time	4:10 H	4 H+
Compressive Strength	500 psi in 24 H at 130°F	2000 psi in 8 H at 140°F
Estimated BHT Static	146°F	146°F

Cementing Program Well 16/8-1 Cont. ...

9 5/8" Cementing Program
Assume 8.000 ft TD, 14 inch hole.

14" x 9 5/8" Volume

$$\frac{\frac{\pi}{4}\,(14\text{in}^2 - 9.625\text{in}^2)}{144\frac{\text{in}^2}{\text{ft}^2}} \times (8000-4351) = 2057\text{ft}^3$$

13 3/8" x 9 5/8" Volume

$$\frac{\frac{\pi}{4}\,(12.259\text{in}^2 - 9.625\text{in}^2)}{144\frac{\text{in}^2}{\text{ft}^2}} \times 2000\text{ft} = 629\text{ft}^3$$

Total Volume 2731ft^3

	Lead	Tail
Class	-	G
Sacks	1000	1000
CFR-2	.5%	.75%
HR-7	.2%	.3%
Gel	8.5 lbs/bbl water	0
Mix Water	Fresh	Sea
Volume Mix Water	10 gal/sk.	5 gal/sack
Weight of Slurry	13.2 ppg	16.1. ppg
Yield	1.82 ft^3/sk.	1.14 ft^3/sk.
Pump Time	4:30 H	4:30 H
Compressive Strength	1000 psi 8 H at 170°F	2000 psi 8 H at 200°F
Estimated BHT Static	202°F	202°F
Total Slurry Volume	1820ft^3 +	1140ft^3 = 2960ft^3

CEMENT FLOAT EQUIPMENT

Size	Float Shoe	Float Collar
30"	Yes	No
20"	Auto Fill	Auto fill one jt up
13 3/8"	Auto Fill	Auto fill one jt up
9 5/8"	Auto Fill	Auto fill one jt up

CENTRALIZER PROGRAM

Size	
30"	None
20"	One at and lower 3 joints plus 2 at 30 inch shoe.
13 3/8"	One at shoe and lower 5 joints, one everyother joint for 500 feet and two at 20" shoe.
9 5/8"	One at shoe and one each joint across any potential pay zone. Two at 13 3/8" casing shoe.

MUD PROGRAM

Interval	Type	Weight	Viscosity	Fluid Loss
0-551	Water	8,5	-	-

Fill hole with 80-120 viscosity mud before POH to run 30".

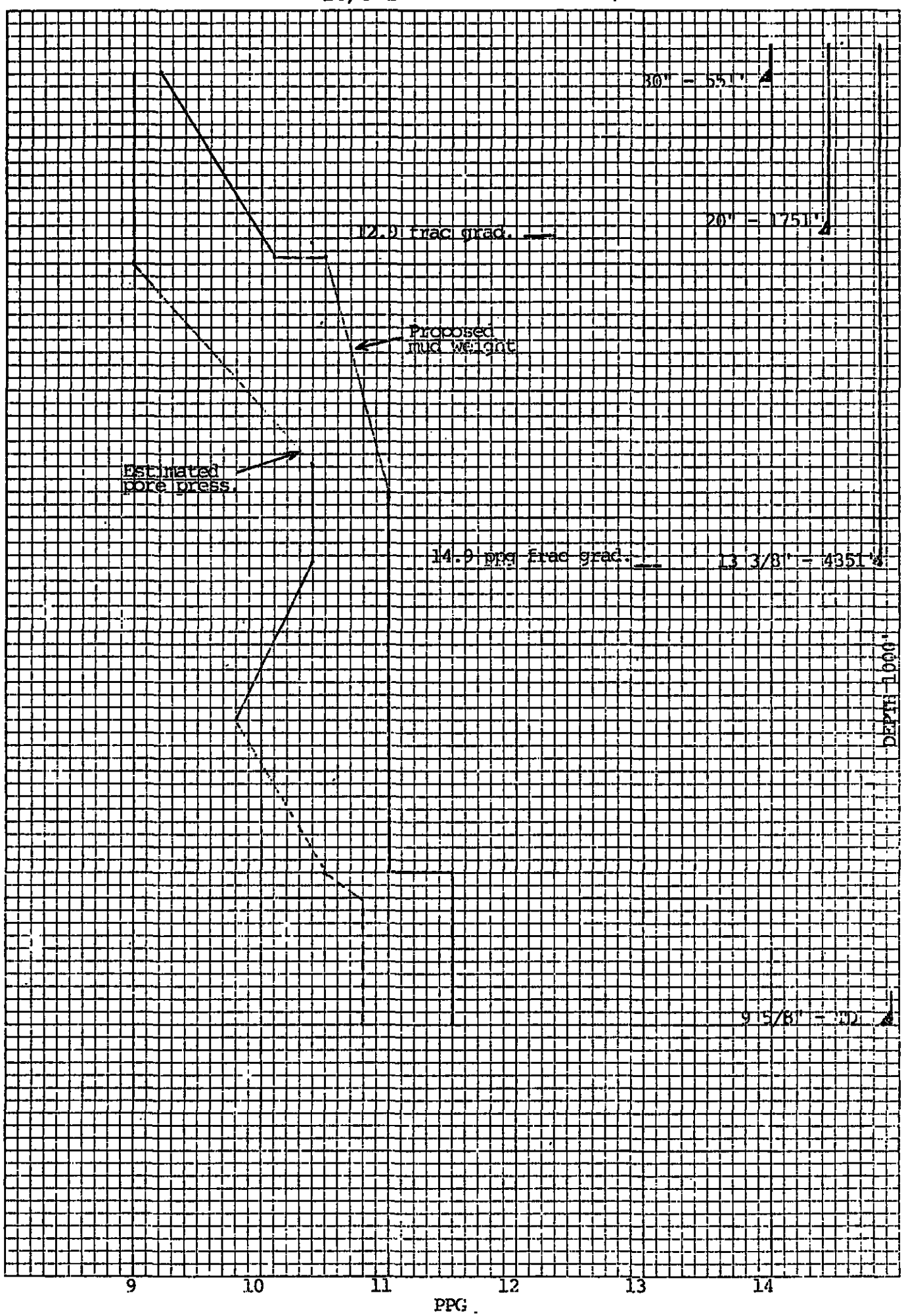
551-1751	Gel water	9-9.5	40-55	UC

Run desander and desilter. Prehydrate gel in fresh water before adding to mud system. Fill hole with 80-120 viscosity mud before pulling out of hole to run casing.

1751'- 4351'	Seawater Drispac	10.1-11	45-55	10-20
4351'- 8000'	Seawater Drispac	11-11.5	45-55	5-10

See mud program supplied by mud company for details. The above are minimum mud weights; hole condition may require higher mud weights.

16/8-1



BIT PROGRAM

INTERVAL	BIT SIZE	BITS REQUIRED
0-551	26" x 36" HO	1 OSC3A
551-1751	17.5	1 OSC3A 1 Under-reamer
1751-4351	17.5	2 OSC3A
4351-6070	12.25	2 X3A 1 X3
6070-6955		2 XIG or 2 S-84 1 X3
6955-8000		4 XIG

1 HYDRAULICS PROGRAM

HOLE DIA. DRILL PIPE DRILL COLLARS PUMP PRESSURE

LENGTH= 186.FT

17.500IN OD= 5.000IN OD= 9.000IN 3000. PSI

ID= 4.276IN ID= 3.000IN

DEPTH FT.	MUD WT.	NOZZLES 32NDS.			PUMP STKS
1000	9.0	20	19	19	239
1000	9.5	20	20	19	239
1000	10.0	20	20	20	239
1000	10.5	21	20	20	239
1000	11.0	21	21	20	239
1500	9.0	20	20	19	239
1500	9.5	20	20	20	239
1500	10.0	21	20	20	239
1500	10.5	21	21	20	239
1500	11.0	22	21	21	239
2000	9.0	20	20	20	239
2000	9.5	21	20	20	239
2000	10.0	21	21	20	239
2000	10.5	22	21	21	239
2000	11.0	22	22	22	239
2500	9.0	21	20	20	239
2500	9.5	21	21	21	239
2500	10.0	22	21	21	239
2500	10.5	22	22	22	238
2500	11.0	22	22	21	230
3000	9.0	21	21	21	239
3000	9.5	22	21	21	235
3000	10.0	22	21	21	230
3000	10.5	21	21	21	221
3000	11.0	21	21	21	214
3500	9.0	21	21	20	226
3500	9.5	21	21	20	221
3500	10.0	21	21	20	216
3500	10.5	21	20	20	208
3500	11.0	21	20	20	201
4000	9.0	20	20	20	214
4000	9.5	20	20	20	209
4000	10.0	20	20	20	203
4000	10.5	20	20	20	196
4000	11.0	20	20	19	189
4500	9.0	20	19	19	203
4500	9.5	20	19	19	198
4500	10.0	20	19	19	193
4500	10.5	20	19	19	187
4500	11.0	20	19	19	181
5000	9.0	19	19	19	194
5000	9.5	19	19	19	189
5000	10.0	19	19	19	184
5000	10.5	19	19	19	178
5000	11.0	19	19	18	172

1 HYDRAULICS PROGRAM

HOLE DIA.	DRILL PIPE	DRILL COLLARS	PUMP PRESSURE
		LENGTH= 450.FT	
12.250IN	OD= 5.000IN ID= 4.276IN	OD= 8.000IN ID= 2.813IN	3000. PSI

DEPTH FT.	MUD WT.	NOZZLES 32NDS.			PUMP STKS
4000	10.0	15	15	15	132
4000	10.5	15	15	15	128
4000	11.0	15	15	14	124
4000	11.5	15	15	14	119
4000	12.0	15	15	14	115
4000	12.5	15	14	14	111
4000	13.0	15	14	14	107
4000	13.5	15	14	14	103
4000	14.0	14	14	14	101
4500	10.0	15	15	14	128
4500	10.5	15	15	14	123
4500	11.0	15	14	14	119
4500	11.5	15	14	14	115
4500	12.0	15	14	14	110
4500	12.5	15	14	14	107
4500	13.0	14	14	14	103
4500	13.5	14	14	14	100
4500	14.0	14	14	13	96
5000	10.0	15	14	14	123
5000	10.5	15	14	14	118
5000	11.0	15	14	14	115
5000	11.5	14	14	14	110
5000	12.0	14	14	14	107
5000	12.5	14	14	14	102
5000	13.0	14	14	13	99
5000	13.5	14	14	13	96
5000	14.0	14	14	13	93
5500	10.0	14	14	14	118
5500	10.5	14	14	14	115
5500	11.0	14	14	14	110
5500	11.5	14	14	14	107
5500	12.0	14	14	13	102
5500	12.5	14	14	13	99
5500	13.0	14	14	13	95
5500	13.5	14	13	13	93
5500	14.0	14	13	13	90
6000	10.0	14	14	14	115
6000	10.5	14	14	13	110
6000	11.0	14	14	13	107
6000	11.5	14	14	13	103
6000	12.0	14	13	13	99
6000	12.5	14	13	13	95
6000	13.0	14	13	13	93
6000	13.5	14	13	13	89
6000	14.0	13	13	13	87
6500	10.0	14	14	13	111
6500	10.5	14	14	13	108
6500	11.0	14	14	13	104
6500	11.5	14	13	13	100
6500	12.0	14	13	13	96

HYDRAULICS PROGRAM

DRILL DIA.	DRILL PIPE	DRILL COLLARS LENGTH= 450.FT	PUMP PRESSURE
12.2501N	OD= 5.0001N ID= 4.2301N	OD= 8.0001N ID= 2.8131N	3000. PSI

DEPTH Ft.	MUD Wt.	NOZZLES 32NDS.			PUMP STKS
6500	12.5	14	13	13	93
6500	13.0	13	12	13	90
6500	13.5	13	13	13	87
6500	14.0	13	13	13	84
7000	10.0	14	13	13	108
7000	10.5	14	13	13	104
7000	11.0	14	13	13	101
7000	11.5	14	13	13	97
7000	12.0	13	13	13	94
7000	12.5	13	13	13	90
7000	13.0	13	13	13	87
7000	13.5	13	13	12	84
7000	14.0	13	13	12	81
7500	10.0	14	13	13	105
7500	10.5	14	13	13	102
7500	11.0	13	13	13	98
7500	11.5	13	13	13	95
7500	12.0	13	13	13	91
7500	12.5	13	13	12	87
7500	13.0	13	13	12	85
7500	13.5	13	13	12	82
7500	14.0	13	13	12	80
8000	10.0	13	13	13	102
8000	10.5	13	13	13	99
8000	11.0	13	13	13	95
8000	11.5	13	13	13	92
8000	12.0	13	13	12	89
8000	12.5	13	13	12	85
8000	13.0	13	13	12	82
8000	13.5	13	12	12	80
8000	14.0	13	12	12	77
8500	10.0	13	13	13	100
8500	10.5	13	13	13	96
8500	11.0	13	13	12	93
8500	11.5	13	13	12	89
8500	12.0	13	13	12	86
8500	12.5	13	13	12	83
8500	13.0	13	12	12	80
8500	13.5	13	12	12	78
8500	14.0	13	12	12	75
9000	10.0	13	13	12	97
9000	10.5	13	13	12	94
9000	11.0	13	13	12	90
9000	11.5	13	12	12	87
9000	12.0	13	12	12	84
9000	12.5	13	12	12	80
9000	13.0	13	12	12	78
9000	13.5	12	12	12	75
9000	14.0	12	12	12	73

HYDRAULICS PROGRAM

BIT DRILL DIA. DRILL PIPE DRILL COLLARS PUMP PRESSURE

LENGTH= 450.FT

12.250IN OD= 5.000IN OD= 8.000IN 4000. PSI

ID= 4.276IN ID= 2.813IN

DEPTH FT.	MUD WT.	NOZZLES 32NDS.			PUMP STKS
4000	10.0	15	15	15	158
4000	10.5	15	15	15	152
4000	11.0	15	15	15	146
4000	11.5	15	15	15	141
4000	12.0	15	15	14	137
4000	12.5	15	15	14	131
4000	13.0	15	15	14	127
4000	13.5	15	14	14	124
4000	14.0	15	14	14	120
4500	10.0	15	15	15	152
4500	10.5	15	15	14	146
4500	11.0	15	15	14	141
4500	11.5	15	15	14	136
4500	12.0	15	14	14	131
4500	12.5	15	14	14	126
4500	13.0	15	14	14	123
4500	13.5	14	14	14	118
4500	14.0	14	14	14	115
5000	10.0	15	15	14	145
5000	10.5	15	14	14	140
5000	11.0	15	14	14	136
5000	11.5	15	14	14	131
5000	12.0	15	14	14	126
5000	12.5	14	14	14	122
5000	13.0	14	14	14	118
5000	13.5	14	14	14	114
5000	14.0	14	14	13	110
5500	10.0	15	14	14	141
5500	10.5	15	14	14	136
5500	11.0	15	14	14	131
5500	11.5	14	14	14	126
5500	12.0	14	14	14	122
5500	12.5	14	14	13	117
5500	13.0	14	14	13	114
5500	13.5	14	14	13	110
5500	14.0	14	14	13	107
6000	10.0	14	14	14	136
6000	10.5	14	14	14	131
6000	11.0	14	14	14	127
6000	11.5	14	14	14	123
6000	12.0	14	14	13	118
6000	12.5	14	14	13	114
6000	13.0	14	14	13	110
6000	13.5	14	13	13	107
6000	14.0	14	13	13	103
6500	10.0	14	14	14	132
6500	10.5	14	14	13	127
6500	11.0	14	14	13	123
6500	11.5	14	14	13	118
6500	12.0	14	14	13	115

HYDRAULICS PROGRAM

BIT SIZE	DRILL PIPE	DRILL COLLARS	PUMP PRESSURE
		LENGTH= 450.FT	
12.250IN	OD= 5.000IN	OD= 8.000IN	4000. PSI
	ID= 4.230IN	ID= 2.813IN	

DEPTH FT.	MUD WT.	NOZZLES 32NDS.			PUMP STKS
6500	12.5	14	13	13	116
6500	13.0	14	13	13	107
6500	13.5	14	13	13	103
6500	14.0	13	13	13	100
7000	10.0	14	14	13	128
7000	10.5	14	14	13	124
7000	11.0	14	13	13	119
7000	11.5	14	13	13	115
7000	12.0	14	13	13	111
7000	12.5	14	13	13	107
7000	13.0	13	13	13	103
7000	13.5	13	13	13	100
7000	14.0	13	13	13	97
7500	10.0	14	13	13	124
7500	10.5	14	13	13	120
7500	11.0	14	13	13	116
7500	11.5	14	13	13	112
7500	12.0	13	13	13	108
7500	12.5	13	13	13	104
7500	13.0	13	13	13	101
7500	13.5	13	13	12	97
7500	14.0	13	13	12	95
8000	10.0	14	13	13	121
8000	10.5	14	13	13	116
8000	11.0	13	13	13	113
8000	11.5	13	13	13	109
8000	12.0	13	13	13	105
8000	12.5	13	13	13	102
8000	13.0	13	13	12	98
8000	13.5	13	13	12	95
8000	14.0	13	13	12	92
8500	10.0	13	13	13	118
8500	10.5	13	13	13	114
8500	11.0	13	13	13	110
8500	11.5	13	13	13	106
8500	12.0	13	13	12	102
8500	12.5	13	13	12	99
8500	13.0	13	13	12	95
8500	13.5	13	12	12	92
8500	14.0	13	12	12	89
9000	10.0	13	13	13	115
9000	10.5	13	13	13	111
9000	11.0	13	13	12	108
9000	11.5	13	13	12	105
9000	12.0	13	13	12	102
9000	12.5	13	13	12	98
9000	13.0	13	12	12	95
9000	13.5	13	12	12	92
9000	14.0	13	12	12	89

GENERAL DRILLING

36" Hole

1. Run TGB

1a. Run 36" hole opener with 26" bit and monel drillcollar. Drill to 200 feet ± below mudline. Circulate at maximum pump rate while drilling. It is desired to land the PGB on the TGB.

2. Pump 10 barrel slug of high viscosity (> 90 sec) mud before each connection while drilling hole.

3. Clean hole with sea water and then fill with high viscosity mud weighing about 9.5 ppg. Make short trip and POOH.

4. Run 30" with squench joints and float shoe.

5. Run a full stinger of drillpipe inside the 30". Pick up 30" running tool assembly on Hevi Wate drill pipe and make up on to the stinger. The drillpipe stinger below the running tool should extend to within 20-30 feet of the float shoe. Run 30" conductor housing inside the permanent guide base and fasten in place.

6. Run 30" on Hevi Wate. Fill 30" with sea water and vent air trapped below running tool. With the shoe at T.D. the wellhead should be approximately 5 feet above the ocean floor and landed in the TGB.

7. Run TV camera and place in service.

8. Cement the 30" conductor casing, overdisplace the stinger, not the 30" shoe. Check for back flow. If float holds, release 30" running tool and POOH.

26" Hole

1. Run 30" pin connector, ball joint on marine riser. Install slip joint and diverter.

2. Install thirty mesh screens on shale shakers. Determine that all cones on desander and desilter are operating properly.

3. Drill 17½" hole with gel and water mud system to 1400 feet below the ocean floor. Use a drill pipe float. The rig pump must be on at least 15 minutes each 30 feet; ie, drilling + circulating = 15 minutes.

4. Run logs as required.

5. Under-ream 17½" hole to 26" with 17½" bit and 26" under-reamer. Use low bit weight and less than 100 RPM. Pump at least 15 minutes per 30 feet; ie, drilling + circulating = 15 minutes.

6. Circulate hole clean and pull up to ocean floor. Circulate riser clean with sea water. Observe hole. If there are no indications of flow POOH and disconnect riser. No welding or open flares will be permitted while operating with open hole unprotected by BOP's.

7. Run 20" and thread lock shoe and bottom 2 joints.

8. Run 20" on Hevi Wate drillpipe and land in wellhead with shoe 20-30 feet above TD.

9. Cement the 20" back to the ocean floor. If floats hold, release running tool and POOH.

17½" Hole

1. Pressure test 18 3/4" BOP stack on the test stump prior to running. Test rams and wing valves to 10.000 psi, Hydrils to 5000 psi. Test all surfaces manifold valves to 10.000 psi.

2. Run the BOP stack on the marine riser. Latch stack onto the 18 3/4" housing. Nipple up diverter.

3. Test rams and wing valves to 5000 psi, Hydrils to 2500 psi. All tests to be made with water.

4. Test 20" casing to 1000 psi for 15 minutes. Drill out 20" float and shoe with 17½" bit. Drill 5 feet of new formation and test formation to 12 ppg or formation bleed-off.

5. Drill a 17½" hole to +4351 feet RKB.
Conduct weekly pressure tests of BOP using test plug. Test pressure to be 3500 psi on pipe rams and all wing valves and 2500 psi on Hydrils. Pipe rams shall be function

tested at least once each bit trip on drillpipe. Hydrils shall be function tested on drill pipe once a week. Pressure tests shall be operated from alternate control panels. Pit drills shall be conducted once on each tour. "Hang-off" drills to be conducted weekly and without closing the Hydril. Do not use a drill pipe float. Run Hydril pump down sub and have dart available on floor at all times.

6. Log hole as required.

7. Run 13 3/8" casing using automatic shoe with automatic float collar one joints up. Run centralizers and cement as per program. Run a 12 1/4" rabbit through all 13 3/8" prior to picking it up.

8. Back out running tool, pick up 2' and circulate through choke and kill lines.

9. Run 13 3/8" x 18 3/4" seal assembly. Activate seals and test to 1800 psi. Test rams and Hydril to 1800 psi and choke and kill lines to 3500 psi.

12 1/4" Hole

1. Prior to drilling out cement of the 13 3/8" pressure test to 1800 psi for 15 minutes.

1a. Gauge all stabilizers and bits with 12 1/4" gauge ring.

2. Drill out 13 3/8" shoe with 12 1/4" bit. Drill five feet of new formation. Test formation to 14,0 ppg or leak-off.

3. Conduct weekly pressure tests of BOP using test plug. Test pressure to be limited to 2200 psi. Pipe rams are to be function tested on each trip out of the hole against D.P. Bag preventers will be tested against D.P. on weekly BOP tests. Tests should be operated from alternate control panels. Pit Drills are required once each tour. "Hang-off" drills to be conducted at least once each week for each drilling crew. Do not run a drill pipe float. Run a Hydril pump down sub.

4. Drill 12 1/4" hole as per mud program monitoring drilling parameters and hole conditions. Make necessary changes as drilling conditions dictate.

5. Log open hole as per the geologic well plan.

6. Run and cement the 9 5/8" from T.D. up into the 13 3/8" as per cement program.

7. Run 9 5/8" x 18 3/4" 10,000 psi seal assembly. Test to 4000 psi.

FORMATION BLEED-OFF PRESSURE TESTING PROCEDURE

After a successful pressure test of the blowout preventer stack and casing, drill out cement plug, float collar (if used) and float shoe of casing. Drill approximately five feet of new formation below casing total depth. Do NOT exceed ten feet. Follow the procedure outlined below to determine formation bleed-off pressure:

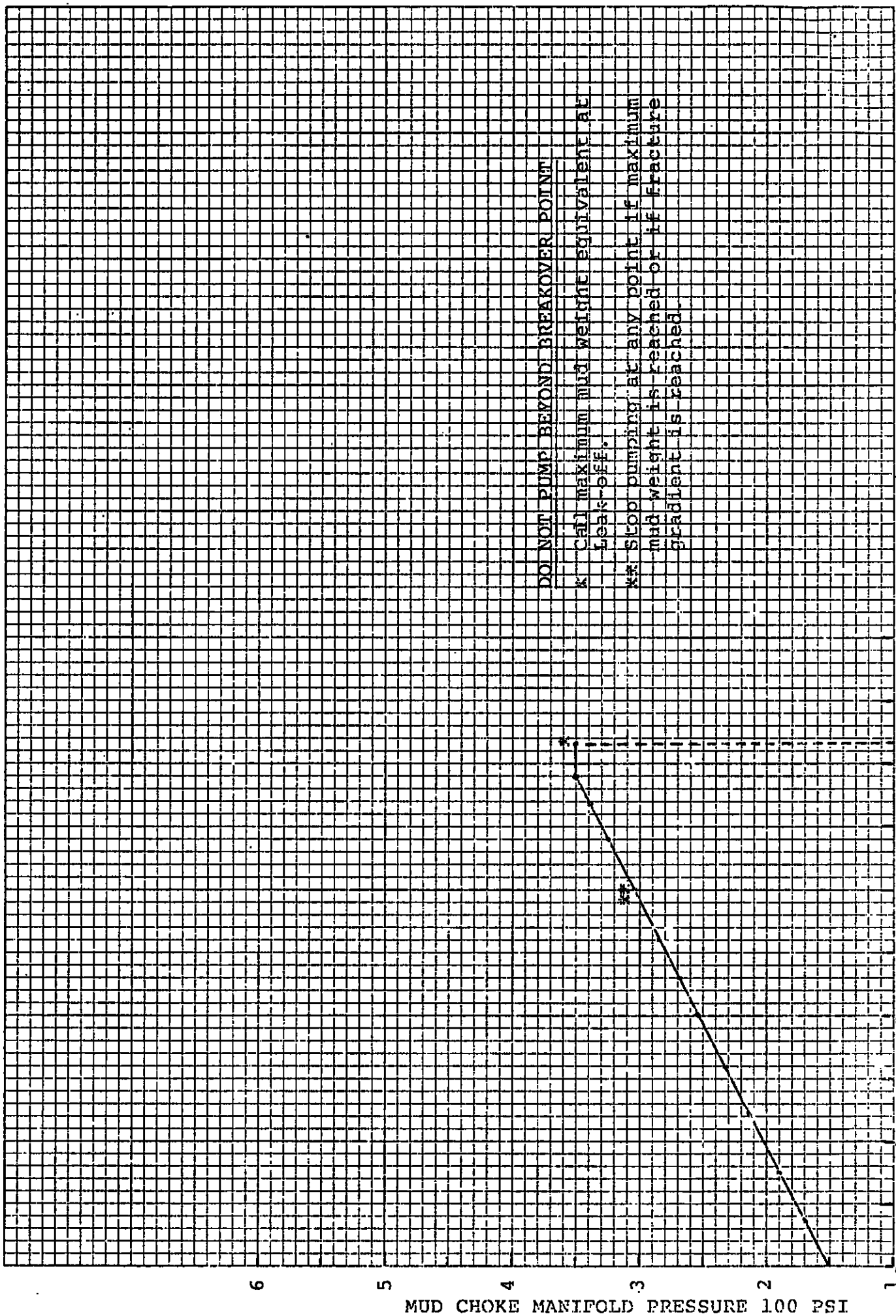
1. Circulate hole to drilling mud. Water cannot be used for test.
2. Pull bit up inside casing string.
3. Close pipe ram insuring tool joint clear of area.
4. Hang drill pipe off on rams.
5. Install 1000 psi gauge manifold on mud line.
6. Pressure up drill pipe slowly to a pressure determined from chart below, counting pump strokes required to obtain this pressure. If less than 1 stroke continue to pressure up until 1 stroke is obtained. Hold for 1 minute. Record pressure and pump stroke(s).
7. Pressure up drill pipe using number of pump strokes determined in step 6. Hold pressure 1 minute. Record pressure and total pump strokes.
8. Continue pressuring up incrementally as in step 7. Plot pressure VS pump strokes until desired mud weight equivalent pressure is reached or until plot breaks from straight line, as shown in attached example graph.

   DO NOT pump beyond one incremental step after plot breaks from straight line.

CSG SIZE	START PRESSURE
20"	50
13-3/8"	100
9-5/8"	150
7"	200

(EXAMPLE)

FORMATION BLEED-OFF PRESSURE TEST PROCEDURE



MISCELLANEOUS

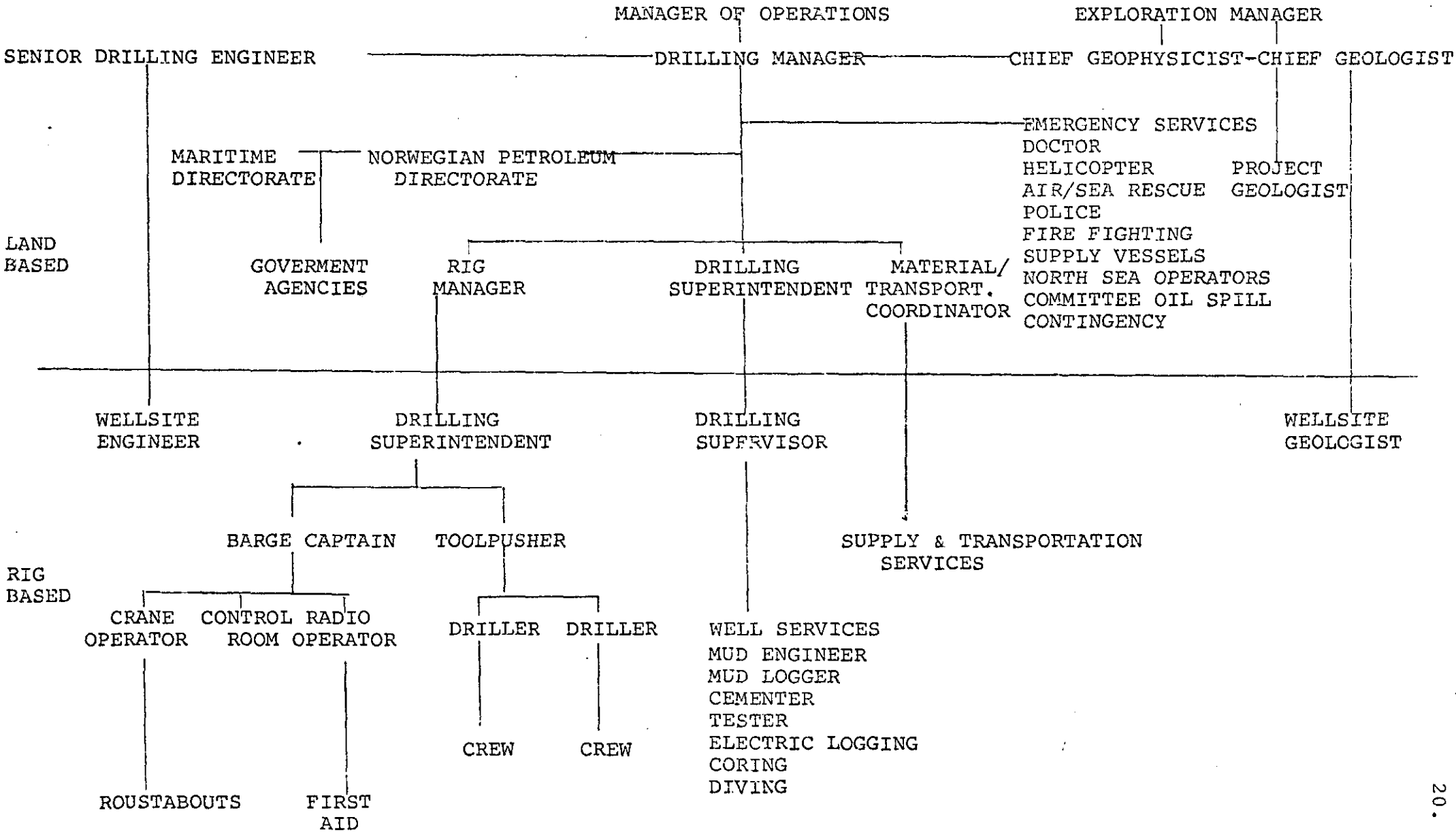
Well Control Responsible
The Drilling Supervisor will be responsible for coordinating well control procedures. Conoco pore pressure prediction and well control procedures will be followed.

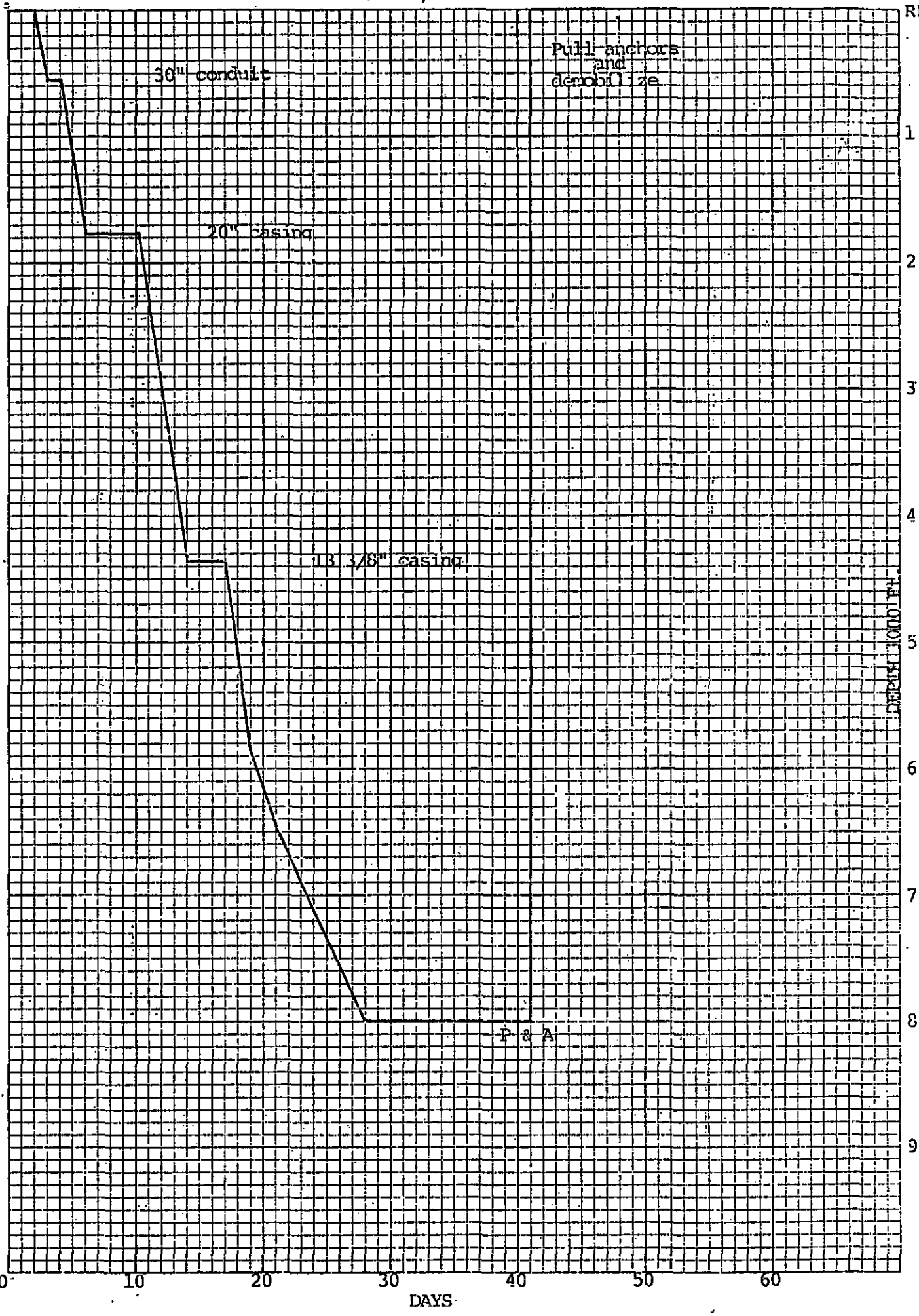
Oil Spill Pollution Control
The Drilling Supervisor will be responsible for oil spill pollution control procedures and coordination of clean-up operations.

Hole Deviation
Deviation surveys will be made at 300 feet intervals or on bit changes when practical. Survey with a monel in the 36" hole.

CONOCO NORWAY INC. - EXPLORATION WELL 16/8-1

ORGANIZATION CHART

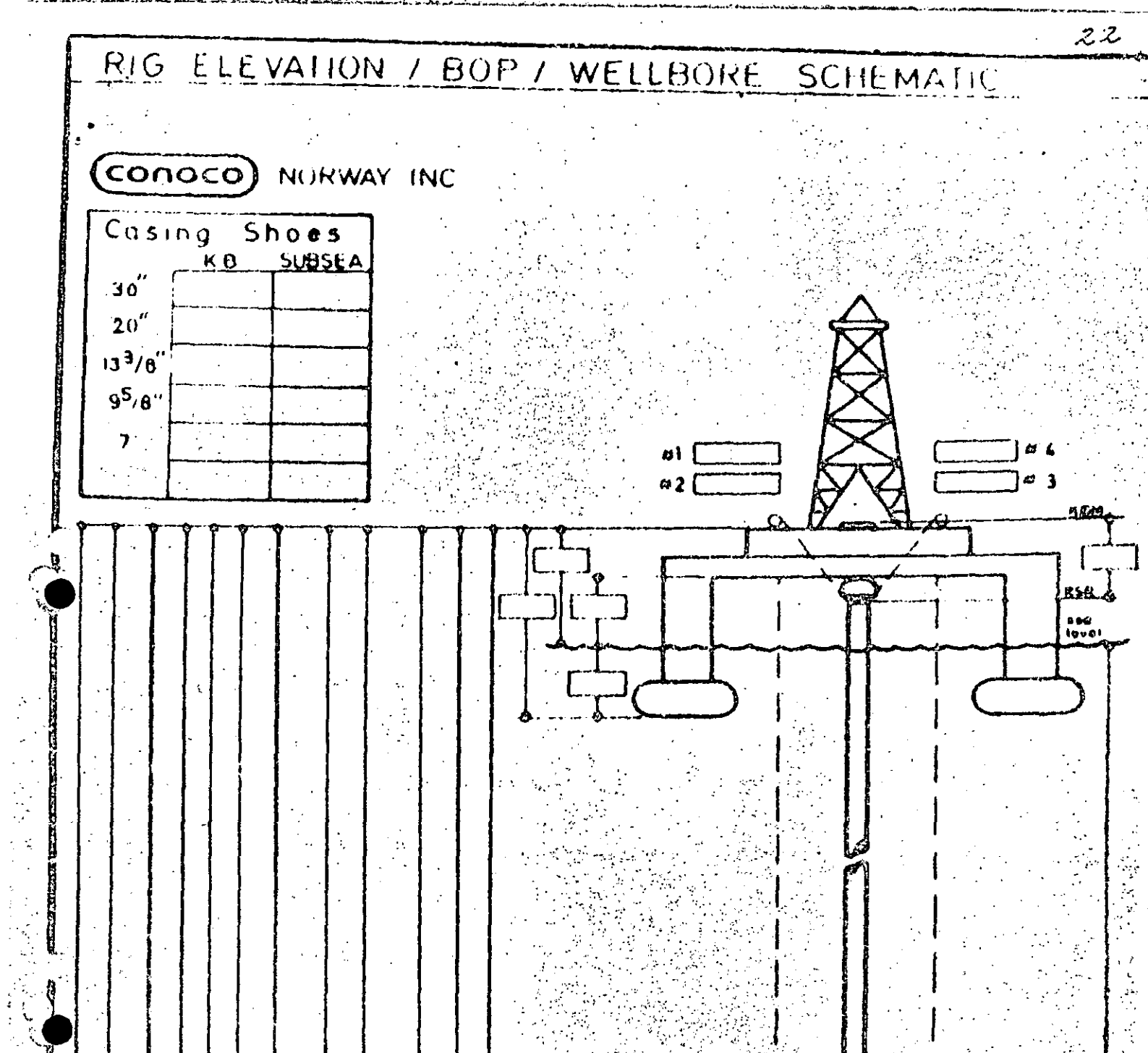




RIG ELEVATION / BOP / WELLBORE SCHEMATIC

conoco NORWAY INC

Casing Shoes	KB	SUBSEA
30"		
20"		
$13^3/8$"		
$9^5/8$"		
7		



ABANDONMENT PROCEDURE

1. All uncased permeable zones in which gas or fluids have been found must be isolated by cement plugs to prevent them escaping into other strata. The cement plug shall extend 30 meters above and below the zone.

2. If there is an open hole below the 9 5/8" casing or if a liner is not set, a cement plug, extending 30 meters above and below the casing shoe, shall be set. A mechanical bridge plug may be set in the lower part of the casing but not more than 50 meters above the shoe. A 15 meter cement plug must be placed on top of the bridge plug. The plugs shall be tested to 1000 psi differential pressure.

3. Perforations shall be isolated by means of a mechanical bridge plug and squeeze cemented, or a cement plug shall be placed across the perforations extending 30 meters above and below the perforated interval or down to a casing plug whichever is less.

4. A cement plug of at least 30 meters shall be placed in the smallest casing string. This plug shall be placed at the level of the 20" casing shoe.

5. A cement plug of at least 50 meters, with the top of the plug not more than 50 meters below the sea floor, shall be placed in the smallest string of casing extending to the sea floor.

6. Casing strings and other installations extending above the sea floor must be removed to a depth of at least 5 meters below the ocean floor.

7. The sea floor shall be inspected by divers to make sure that no obstructions remain on the sea-bed which may cause danger or impediment to fishing or shipping.

8. A specific abandonment program will be prepared and issued when the well reaches total depth.