

CONTRACTOR ODECO RIG NO. OCEAN VIKING RIG MAKE _____ COLLARS: OD X ID X LENGTH _____ MO. / DAY / YR. _____ T.P.-DRILLERS _____

COMPANY PPCO FIELD _____ RIG SIZE 7 3/4 x 3 x 600' SPUD _____

LEASE 45 WELL NO. 2 PUMP NO. 1 EMSCO UNDER SURFACE _____

STATE NORWAY COUNTY NORTH SEA PUMP NO. 2 D-1350-18 DRILL PIPE 5" 19.5"/ft UNDER INTER. _____ WATER SOURCE _____

SEC. / T'SHIP/RANGE _____ MUD TYPE LIGNOSULFONATE TOOL JOINT _____ TOTAL DEPTH _____ FUEL SOURCE _____

RUN NO.	SIZE	MAKE	TYPE	SERIAL NO.	SETS 32nds			DEPTH OUT	FEET	HOURS	FEET PER HOUR	CUM. HOURS	WT. 1000 LBS.	R.P.M.	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		MUD PROPERTIES					Yr. Dev.	Dull. Cond.				Date	
					Liner	SPM	Liner									SPM	Wt.	W.L.	F.V.	P.V.	Y.P.	T	B	G		RC					
1	26"	SMITH	DS	MA526	K	R	R	437'	117	3	39	3	15	60	675	6 3/4	62	6 3/4	62	8.8	7 1/2										
2RR	26"	SMITH	DS	MA526	R	R	R	1620'	1183	16.5	71.7	19.5	30	150	900	"	60	"	60	11	20	2°	3	3	I						
3	17 1/2"	REED	VT3AJ	195220	20	20	20	4032'	2412	32.	73.4	51.5	35	180	2600	"	60	"	60	11	6	53	25	21	2						
4	12 1/4"	HTC	X-3A	45390	16	18	20	5326'	1294	23.	56.3	74.5	35	180	3000	"	49	"	49	13.8	8.2	60	20	24	6	4	IN				
5	12 1/4"	SMITH	SDS	NB077	18	18	18	7878'	2552	30.	85.1	104.5	25	180	3000	"	42	"	42	13.5	6.4	61	31	17	6	3	I				
6	12 1/4"	SEC	S44	442391	18	18	18	9710'	1832	33.5	54.7	138	40	180	3000	"	39	"	39	14.	6.4	56	32	15							
7	12 1/4"	SEC	M44N	460548	18	18	20	9933'	223	10.	27.3	148	60	180	3000	"	41	"	36	14.	5.8	58	29	18	8						
8	12 1/4"	SEC	M44N	460510	20	20	20	10,000'	67	3.	22.3	151.	30	75	3000	"	39	"	41	14.	5.8	54	30	17							
9	12 1/4"	SMITH	DSJ	JU194	20	20	20	1480'	60	1.5	40.	152.5	15	60	1500	"	50	"	50	11.5	4.6	45	24	9						Dril.cmt. plug	
10	8 1/2"	SMITH	SUH	NH552	12	12	12	10,210'	210	20.	10.5	172.5	50	60	3000	"	42			14.2	4.1	69	36	17							
11	8 1/2"	SMITH	SUH	NH535	11	11	11	10,471'	261	21	12.4	193.5	40	80	3000	"	38			14.3	4.5	62	37	21	6	2	I				
12	8 1/2"	HTC	J44	EE413	12	12	12	10,987'	516	53	9.7	241.5	35	40	3000	"	43			14.3	4.2	56	35	16	1	1	I				
13	8 1/2"	HTC	J33	MM874	12	12	12	11,112'	125	16	7.8	262.5	35	35	3000	"	42			14.4	5.2	65	43	21	2	2					
14	8 1/2"	SEC	M44NG	384260	12	12	12	11,147'	35	5	7.	267.5	40	80	3000	"	32			14.2	4.0	47	30	10	1	1	I				
15	8 1/2"	SEC	M44NG	243040	13	13	13	11,318'	171	16.5	10.1	284	40	80	1900	"	40			14.	5.3	45	22	11							
16	8 1/2"	HTC	J33	ME324	12	12	12	11,370'	52	8.5	6.1	292.5	50	80	2500	"	40			14.1	4.2	57	30	16	1	1	I				
17	8 1/2"	HTC	XV	24205	11	11	10	11,467'	97	19.5	5.	312	35	75	3000	"	38			14.1	3.6	54	32	17	4	3	I				
18	8 1/2"	SEC	M44N	384481	10	10	10	11,560'	93	21	4.4	333	40	80	3000	"	25			14.2	3.	57	32	19	5	3	I				
19	8 1/2"	SEC	M44N	501002	10	10	10	11,656'	96	16.5	5.8	349.5	35	85	3000	"	33			14.1	3.3	55	37	22	4	2	FAIR				
20	8 1/2"	HTC	J44	WE259	11	11	11	11,912'	256	61.5	4.2	411	40	40	2950	"	38			14.2	3.5	49	32	17	4	3	I				
21	8 1/2"	SEC	M44	380454	10	10	10	12,038'	126	22.5	5.6	433.5	40	50	2900	"	33			14.2	3.4	54	33	14	7	5	I				
22	8 1/2"	SEC	M44	501003	10	10	10	12,167'	129	25	5.2	458.5	40	60	3000	"	33			14.2	3.3	50	35	17	5	2	I				

CONTRACTOR _____	RIG NO. _____	RIG MAKE _____	COLLARS: OD X ID X LENGTH _____	MO. / DAY / YR. _____	T.P.-DRILLERS _____
COMPANY _____	FIELD _____	RIG SIZE _____	_____ X _____ X _____	SPUD _____	
LEASE <u>1/5</u>	WELL NO. <u>2</u>	PUMP NO. 1 _____	_____ X _____ X _____	UNDER SURFACE _____	
STATE _____	COUNTY _____	PUMP NO. 2 _____	DRILL PIPE _____	UNDER INTER. _____	WATER SOURCE _____
SEC. / T'SHIP RANGE _____		MUD TYPE _____	TOOL JOINT _____	TOTAL DEPTH _____	FUEL SOURCE _____

RUN NO.	SIZE	MAKE	TYPE	SERIAL NO.	JETS - 32nds			DEPTH OUT	FEET	HOURS	FEET PER HOUR	CUM. HOURS	WT. 1000 LBS.	R.P.M.	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		MUD PROPERTIES					Date					
					1	2	3									Liner	SPM	Liner	SPM	Wt.	W.L.	F.V.	P.V.	Y.P.		Ver. Dev.	Dull. Cond. 1/4 1/8			
23	8 1/2"	CHRIS.	M0311	17878766	-	-	-	13,034	867	63	13.8	521.5	40	190	2800	6 3/4	38			14.1	4.5	7	35	18						Diamond bit
24	6"	SEC	M4LJ	316100	R	R	R					10	75	2400	"	36			14.1	4.8	4	38	9							Drlg. cmt. plugs
25	6"	SEC	M4LG	385791	-	-	-	13,041	12	5	2.4	526.6	15	50	2400	"	32			14.2	3.6	5	34	10	2	5	I			
26	6"	SEC	M4LG	383112	-	-	-	13,072	31	8.	3.9	534.5	15	50	2400	"	32			14.2	3.5	5	37	10						
27	5 3/4"	CHRIS.	M0311	93277			0.25	14,060	988	42.5	23.3	577.	16	120	2600	"	24			14.7	3.3	5	41	12				30% used		Diamond bit
28	6"	SEC	M4N		-	-	-	11,100		2		579	10	60	2000	"	31			14.2	4.5	6	32	14	1	2	I			Drlg. cement

MUD PROGRAM

Formation loss

<u>Depth (RKB)</u>	<u>PPG</u> <u>Weight</u>	<u>Funnel</u> <u>Viscosity</u>	<u>PV</u>	<u>YP</u>	<u>Water Loss</u>
0 - 1620 ft.	(Sea water with periodic spotting of high viscosity mud)				
1620 - 4032 ft.	11,0	49	22	21	9.
4032 - 4135 ft.	11,1	42	13	18	6.3
4135 - 4700 ft.	11,6	60	18	27	6.7
4700 - 5210 ft.	13.6	54	23	19	7.4
5210 - 7000 ft.	13.5	61	31	17	6.4
7000 - 10,000 ft.	14,0	55	30	17	5.7
10,000 - 10,272 ft.	14.3	65	37	21	4.6
10,272 - 10,471 ft.	14.2	57	36	17	4.6
10,471 - 10,950 ft.	14.3	59	36	20	4.7
10,950 - 10,990 ft.	14.4	65	43	21	5.2
10,990 - 11,180 ft.	14.2	45	30	9	4.2
11,180 - 11,318 ft.	14,0	50	27	15	4.5
11,318 - 11,664 ft.	14.1	53	33	19	3.2
11,664 - 11,849 ft.	14.2	50	36	17	3.5
11,844 - 11,912 ft.	14.1	51	37	21	3.6
11,912 - 12,700 ft.	14.2	51	34	15	3.3
12,700 - 13,027 ft.	14.1	55	35	18	3.7
13,027 - 13,478 ft.	14.2	50	34	10	3.6
13,478 - 13,984 ft.	14.7	52	41	14	3.4
13,984 - 14,060 ft.	15.0	52	43	13	3.2

APL