



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

Date: Nov. 25 - Nov. 27, 1971

Spud Mud

INTERVAL 441' - 1.600'
26" hole 20" casing

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	1890 sx.100 lb.	2.70	5.103.-
ntonite	60 sx.100 lb.	3.68	220.80
Salt Gel	200 sx. 50 lb.	3.13	626.-
Visquick	470 sx. 50 lb.	11.60	5.452.-
Salt Gel	305 sx.100 lb.	6.26	1.909.30
			<u>13.311.10</u>

Cost per ft. \$11.48
11 \$/gal. mud wt.

D.A.P. Mud

INTERVAL 1.600' - 5.325'
17½" hole 13.3/8" casing

Date: Nov. 28 - Dec. 10, 1971

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	12970 sx.100 lb.	2.70	35.019.-
Drill Aid	266 sx. 50 lb.	7.30	1.941.80
C.M.C. (L.V.)	40 sx. 56 lb.	14.56	582.40
Drispac	56 sx. 50 lb.	56.25	3.150.-
Desco	149 sx. 50 lb.	41.60	6.198.40
Sod. Chromate	41 sx. 56 lb.	11.76	482.16
D.A.P.	372 sx.112 lb.	16.-	5.952.-
Soltex	68 sx. 50 lb.	21.38	1.453.84
Diesel Oil	70 bbl.	-	-
			<u>54.779.60</u>

Cost per ft. \$14.71
Mud wt. 11.5 - 14.3 \$/gal.



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

GYP Mud

Date: Dec. 11 - Dec. 13, 1971

INTERVAL 5.325' - 7.253'
12.1/4" hole
1.928' drilled with GYP mud

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	5830 sx.100 lb.	2.70	15.741.-
Drill Aid	441 sx. 50 lb.	7.30	3.219.30
Caustic Soda	55 dr.112 lb.	11.20	616.-
GYP	150 sx. 40 kos.	3.50	525.-
Sod. Bicarb.	4 sx.112 lb.	4.97	19.88
Desco	68 sx. 50 lb.	41.60	2.828.80
Sod. Chromate	64 sx.112 lb.	11.76	752.64
M.D.	9 dr. 55 gal.	255.-	2.295.-
Soltex	112 sx. 50 lb.	21.38	2.394.56
Amoco Drill Aid 405	2 dr. 55 gal.	455.-	910.-
Diesel Oil	213 bbl.	-	-

INTERVAL

29.302.18

Cost per ft. \$15.20

Mud wt. 14.3 \$/gal.



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

Date: Dec. 14 - Dec. 24, 1971

Drill Aid/Seawater

INTERVAL 7.253' - 9.790'
2.537' of 12.1/4" hole

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	7658 sx.100 lb.	2.70	20.676.60
Drill Aid	367 sx. 50 lb.	7.30	2.679.10
R.D.-333	183 sx. 50 lb.	9.75	1.784.25
Desco	97 sx. 50 lb.	41.60	4.035.20
Sod. Chromate	5 sx.112 lb.	11.76	58.80
Caustic Soda	103 dr.112 lb.	11.20	1.153.60
Lime	25 sx.112 lb.	2.13	53.25
Sod. Bicarb.	26 sx.112 lb.	4.97	129.22
M.D.	7 dr. 55 gal.	255.-	1.785.-
Amoco Drill Aid 405	2 dr. 55 gal.	455.-	910.-
Soltex	60 sx. 50 lb.	21.38	1.282.80
XXXXXXXX Nut Plug	40 sx. 50 lb.	7.70	308.-
Diesel Oil	126 bbl.	-	-
			<hr/>
			34.855.82

Cost per ft. \$13.74

Mud wt. 14.3 - ~~14.5~~ S/gal.



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

Date: Dec. 11 - Dec. 25, 1971

INTERVAL 5.325' - 9.790'

12½" hole 9.5/8" casing

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	13488 sx.100 lb.	2.70	36.417.60
Drill Aid	808 sx. 50 lb.	7.30	5.898.40
R.D.-333	183 sx. 50 lb.	9.75	1.784.25
Desco	165 sx. 50 lb.	41.60	6.864.-
Sod. Chromate	69 sx. 56 lb.	11.76	811.44
Caustic Soda	158 sx.112 lb.	11.20	1.769.60
Lime	25 sx.112 lb.	2.13	53.25
Sod. Bicarb.	30 sx.112 lb.	4.97	149.10
M.D.	16 dr. 55 gal.	255.-	4.080.-
Amoco Drill aid 405	4 dr. 55 gal.	455.-	1.820.-
Soltex	172 sx. 50 lb.	21.38	3.677.36
XXXXXXXX Nut Plug	40 sx. 56 lb.	7.70	308.-
Diesel Oil	339 bbl.	-	-
			<u>63.633.-</u>

Cost per ft. \$14.25



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

INTERVAL 9.790' - 12.500'

Date: Dec. 26, 1971 - Feb. 5, 1972

8 1/2" hole 7" casing

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	6127 sx.100 lb.	2.70	16.542.90
Bentonite	156 sx.100 lb.	3.68	574.08
Bentonite	234 sx. 56 lb.	2.06	482.04
Spersene	542 sx. 50 lb.	9.75	5.284.50
R.D.-333	57 sx. 50 lb.	9.75	555.75
Unical	60 sx.	69.71	4.182.60
Ligcon	170 sx. 50 lb.	9.75	1.657.50
C.M.C. (L.V.)	10 sx. 56 lb.	14.56	145.60
Desco	25 sx. 50 lb.	41.60	1.040.-
Caustic Soda	108 dr.112 lb.	11.20	1.209.60
Lime	76 sx.112 lb.	2.13	161.88
XXXXXX			
Sod. Chromate	16 sx. 56 lb.	11.76	188.16
Sod. Bicarb.	5 sx.112 lb.	4.97	24.85
Cedar Seal	12 sx. 40 lb.	7.10	85.20
Nut Plug fine	40 sx. 56 lb.	7.70	308.-
Nut Plug med.	32 sx. 56 lb.	7.70	246.40
Mica fine	64 sx. 56 lb.	6.72	430.08
Kwik Seal	12 sx. 40 lb.	16.-	192.-
Soltex	42 sx. 50 lb.	21.38	897.96
Drispac	1 sx. 50 lb.	56.25	56.25
Diesel Oil	161 bbl.	-	-

34.265.35

Cost per ft. \$12.64

Mud wt. 14.3 - 14.8 \$/gal.



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 - 8AX

LOCATION: North Sea - Norway

Date: Feb. 6 - Feb. 16, 1972

Drispac/Sat. Salt

INTERVAL 12.500' - 13.370'
6" hole

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	2570 sx.100 lb.	2.70	6.939.-
Bentonite	65 sx.100 lb.	3.68	239.20
Caustic Soda	2 dr.112 lb.	11.20	22.40
Sod. Sulphate	108 sx.112 lb.	4.30	464.40
R.D.-333	60 sx. 50 lb.	9.75	585.-
Desco	13 sx. 50 lb.	41.60	540.80
Drispac	16 sx. 50 lb.	56.25	900.-
C.M.C.	177 sx. 56 lb.	14.56	2.577.12
Salt	1505 sx.112 lb.	2.24	3.371.20
Mica Fine	35 sx. 50 lb.	6.72	235.20
Surflo	1 dr. 55 gal.	389.21	389.21
XXXXXXXX Diesel Oil	30 bbl.	-	-
			<u>16.263.53</u>

Cost per ft. \$18.69



MATERIAL CONSUMPTION BREAKDOWN BY INTERVAL

OPERATOR: Phillips Petr. Co.

WELL: 2/4 -8AX

LOCATION: North Sea - Norway

Material used during
INTERVAL test period from Feb. 17 - March 23, 1972

<u>PRODUCT</u>	<u>UNIT</u>	<u>PRICE \$</u>	<u>COST \$</u>
Barite	6534 sx.100 lb.	2.70	17.641.80
Bentonite	211 sx.100 lb.	3.68	776.48
Drispac	72 sx. 50 lb.	56.25	4.050.-
Visquick	5 sx. 50 lb.	11.60	58.-
Magconol	1 dr. 55 gal.	375.-	375.-
Sod. Sulphate	60 sx.112 lb.	4.30	258.-
Sod. Bicarb.	5 sx.112 lb.	4.97	24.85
C.M.C. (H.V.)	20 sx. 56 lb.	19.60	392.-
			<u>23.576.13</u>

INTERVAL



TOTAL MATERIAL CONSUMPTION

OPERATOR Phillips Petr. Co.
 WELL 2/4 - 8AX
 LOCATION North Sea - Norway

PRODUCT

UNIT

PRICE \$

COST \$

PRODUCT

UNIT

PRICE \$

COST \$

Barite	43579	sx.100 lb.	2.70	117.663.30
Bentonite	492	sx.100 lb.	3.68	1.810.56
Bentonite	234	sx. 56 lb.	2.06	482.04
Salt Gel	200	sx. 50 lb.	3.13	626.-
Salt Gel	305	sx.100 lb.	6.26	1.909.30
Visquick	475	sx. 50 lb.	11.60	5.510.-
Drill Aid	1074	sx. 50 lb.	7.30	7.840.20
C.M.C. (L.V.)	227	sx. 56 lb.	14.56	3.305.12
C.M.C. (H.V.)	20	sx. 56 lb.	19.60	392.-
Drispac	145	sx. 50 lb.	56.25	8.156.25
Desco	352	sx. 50 lb.	41.60	14.643.20
Sod. Chromate	126	sx. 56 lb.	11.76	1.481.76
D.A.P.	372	sx.112 lb.	16.-	5.952.-
Soltex	282	sx. 50 lb.	21.38	6.029.16
Caustic Soda	268	dr.112 lb.	11.20	3.001.60
GYP	150	sx. 40 lb.	3.50	525.-
Sod. Bicarb.	40	sx.112 lb.	4.97	198.80
M.D.	16	dr. 55 gal.	255.-	4.080.-
Amoco Drill Aid 405	4	dr. 55 gal.	455.-	1.820.-
R.D.-333	300	sx. 50 lb.	9.75	2.925.-
Lime	101	sx.112 lb.	2.13	215.13
Nut Plug Fine	80	sx. 56 lb.	7.70	616.-
Nut Plug Med.	32	sx. 56 lb.	7.70	246.40
Spersene	542	sx. 50 lb.	9.75	5.284.50
Unical	60	sx. 50 lb.	69.71	4.182.60
Ligcon	170	sx. 50 lb.	9.75	1.657.50
Cedar Seal	12	sx. 40 lb.	7.10	85.20
Mica Fine	99	sx. 56 lb.	6.72	665.28
Kwik Seal	21	sx. 40 lb.	16.-	192.-
Sod. Sulphate	168	sx.112 lb.	4.30	722.40
Salt	1505	sx.112 lb.	2.24	3.371.20
Surflo	1	dr. 55 gal.	389.21	389.21
Magconol	1	dr. 55 gal.	375.-	375.-
Diesel Oil	600	bbls.	-	-

206.353.71

TOTAL



WELL DATA SHEET

MAG-545-A

OPERATOR <i>Ph. L.L. P.S. Pet. Cor.</i>	SURVEY SEC. <i>T R</i>	CASING SIZE <i>20"</i>	DEPTH <i>1570</i>	DRLG. DAYS <i>2</i>	BIT SIZE <i>26"</i>
WELL <i>214-8AF</i>	FIELD <i>NORTH SEA</i>	SURFACE <i>13 3/8"</i>	<i>5286</i>	<i>8</i>	<i>17 1/2"</i>
CONTRACTOR <i>ZAPATA</i>	COUNTY <i>Norway</i>	INTERMEDIATE <i>9 3/8"</i>	<i>9778</i>	<i>12</i>	<i>12 1/4"</i>
ENGINEER <i>SHREADER-Plumlee</i>	STATE <i>COUNTRY</i>	PRODUCTION <i>7"</i>	<i>12,144</i>	<i>34</i>	<i>8 1/2"</i>

DATE	DEPTH	WT.	VISCOSITY		CORR. 115°F		GELS		pH	FLUID LOSS		CL <input checked="" type="checkbox"/>	ALKALINITY			DAP #/LLD	RETORT			ACTIVITY		RATIO		# Bbl		
			SEC.	CPS.	PV	YP	0	10		100 PSI API	500 PSI 300 °F HT-HP		CACL <input type="checkbox"/>	PF	PM		MF	CA ppm	% OIL	% SOL	% WATER	As	Am		OIL	H2O
26-11	441	8.8	200																							
27-11	1518	11.0	190																							
28-11	1600	9.0	200																							
29-11	1600	11.7	63	47.5	27	41	4	11	8.5	6.0	-															
30-11	1691	11.2	43	25	13	24	2	9	8.0	7.0	-	21,000	0	-	-	-	-	16								
1-12	3100	12.2	54	34	20	28	3	15	8.0	4.0	-	21,000	N.L.	-	-	-	6.0	2	21	77						
2-12	4000	13.3	56	35.5	21	30	5	16	7.5	8.4	-	22,000	N.L.	-	-	-	7.5	2	22	76						
3-12	4034	12.7	45	18	13	10	1	13	8.0	6.0	-	17,000	N.L.	-	-	-	7.5	2	16	82						
4-12	4034	14.3	43	26.5	21	11	1	10	8.5	4.0	-	18,000	2.0	-	-	140	5.0	3	18	79						
5-12	4357	14.4	58	37	25	24	2	26	8.8	5.1	-	17,000	.2	-	-	-	6.0	2 1/2	27	70.5						
6-12	4753	14.2	53	27.5	20	15	2	19	8.6	6.0	-	15,000	.2	-	-	40	3.3	3	24	73						
7-12	5143	14.2	54	28.5	21	17	3	19	9.0	6.6	-	15,000	.2	-	-	80	TR 20	27	70							
8-12	5325	14.3	46	28.5	21	17	3	18	9.0	7.0	-	15,000	.1	-	-	40	1.0	2	26	72						
9-12	5325	14.4	50	32	22	20	2	18	9.0	6.7	-	15,000	.1	-	-	40	1.6	2	27	71						
10-12	5325	14.4	50	32	22	20	2	18	9.0	6.7	-	15,000	.1	-	-	40	1.0	2	27	71						
11-12	5325	14.4	50	33	39	21	2	32	11.0	7.0	-	16,000	.8	-	-	720	-	3	23	74						
12-12	5325	14.4	43	35	29	12	2	20	11.0	9.0	-	16,000	.9	-	-	800	-	3	25	72						
13-12	6700	14.4	50	32	24	16	2	22	9.5	9.5	-	15,000	.4	-	-	1260	-	3	22	75						
14-12	7510	14.2	46	30	25	10	0	12	10.0	5.0	-	17,000	.5	-	-	600	-	6	21	73						
15-12	7744	14.3	55	48	36	24	2	26	10.0	5.0	-	17,000	.4	-	-	600	-	6	21	73						
16-12	7744	14.5	54	48.5	36	25	2	28	10.0	5.0	-	17,000	.4	-	-	600	-	8	22	72						
17-12	7744	14.5	58	52.5	36	33	3	35	9.5	5.2	-	18,000	.4	-	-	640	-	6	22	72						
18-12	8429	14.4	55	47.5	30	35	3	24	10.0	4.0	-	17,000	.8	-	-	240	-	5	25	70						
19-12	9247	14.3	53	40	25	30	3	27	10.0	4.0	-	17,000	.6	-	-	240	-	6	24	70						
20-12	9247	14.2	55	39	25	28	3	22	10.0	4.2	-	17,000	.4	-	-	280	-	5	25	70						
21-12	9545	14.3	52	32.5	20	25	3	25	9.5	4.0	-	16,000	.3	-	-	280	-	5	25	70						
22-12	9545	14.3	44	35	25	20	0	5	11.0	3.0	-	18,000	1.0	-	-	360	-	8	22	72						

DATE SPUD: <i>26-11-71</i>	DATE T.D.: <i>14-2-72</i>	S.H.T.	COMPLETION FLUID TYPE:	COST:
			PACKER MUD TYPE:	COST:

WELL DATA SHEET CONTINUATION

MAG-381

WELL: 214-9AX

Page 2

DATE	DEPTH	WT.	VIS.	AV.	PV	YP	GELS	PH	W/L	PF	CL PPM.	CA PPM.	SOL %	OIL %	H.T.H.P.	REMARKS:	
Dec																	
23	9770	14.3	44	42	34	14	0	5	11.0	3.0	1.5	18,000	240	24	5	W.C.W. For wt. loss. Drilled to 955'	
24	9770	14.5	45	40	30	20	0	3	11.0	3.8	1.5	18,000	200	25	5	Drilled 9770' P.O.H. For logging	
25	9790	14.5	44	37	28	17	0	2	11.0	3.0	1.0	18,000	200	25	5	Logged. R.I.H. C.R. P.O.H. Running log	
26	9790	14.5	43	34	26	16	0	2	11.0	3.0	1.5	18,000	160	23	6	to 9770'. Well finished closed hydro	
27	9790	14.5	43	34	24	16	0	2	11.0	3.0	1.5	18,000	160	23	6	lost 150 gal. mud. w/ cementing	
28	9790	14.5	43	34	26	16	0	2	11.0	3.0	1.5	18,000	160	23	6	Drags slug + 5' hole - G/H to core	
29	9820	14.3	43	32.5	23	19	1	3	11.0	3.0	1.8	18,000	160	22	6	Core #1 e 2	
30	9872	14.2	44	35	26	18	1	3	11.0	3.2	1.6	18,000	160	24	5	Core #3 9850-9872 - Core #4 9872-9890	
31	9921	14.3	43	35	25	20	1	4	11.0	3.4	1.5	18,000	160	23	5	Core #5 9913-9921 - Core #6 9921-9930	
Jan '72	1	9968	14.3	44	36.5	27	19	0	3	11.0	3.4	1.7	17,000	120	23	5	Core #7 9968-9980 - Core #8 9980-10000
2	10016	14.3	45	36	26	20	0	4	11.0	3.6	1.6	18,000	120	22	4	Core #9 10007-10034 - Core #10 10034-10050	
3	10094	14.4	44	35	27	16	0	3	11.0	3.8	1.3	18,000	120	23	5	Core #11 10094 to 10155' Trip.	
4	10155	14.3	44	35	26	19	0	4	11.0	4.0	1.5	20,000	100	24	5	Cut Core #12 to 10197' Trip.	
5	10197	14.3	45	35	26	16	1	4	11.0	4.2	1.5	21,000	120	24	5	25 Cut Core #13 to 10258' Trip.	
6	10270	14.3	43	33	25	16	1	3	11.0	4.4	1.5	22,000	120	24	5	25 Cut Core #14 to 10270' Trip Cut Core #15	
7	10331	14.3	45	35	24	22	1	4	11.0	4.8	1.5	21,000	120	25	5	130 Cut Core #16 Trip Cut Core #17	
8	10453	14.3	46	42	35	14	0	2	11.0	3.0	1.6	26,000	120	23	6	25.0 to 10453' Trip. Cut Core #18 to 10500'	
9	10514	14.3	45	41	36	10	1	4	11.0	3.6	1.6	21,000	120	23	6	18.0 Cut Core #18 to 10514' Trip Cut Core #19	
10	10575	14.3	45	37	31	12	1	3	11.0	4.0	1.4	21,000	120	25	5	170 to 10575' Trip Cut Core #20 to 10582'	
11	10636	14.3	44	42	36	12	1	4	11.0	3.4	1.7	21,000	120	24	6	18.0 Drilled from 10636' to 10725'	
12	10725	14.3	44	42	36	12	1	4	11.0	3.2	1.8	19,000	80	25	6	18.0 Drilling from 10725' to 10812'	
13	10812	14.3	47	42	34	16	1	5	11.0	4.0	1.3	19,000	160	25	6	20.4 Drilling 10812' to 10907'	
14	10907	14.3	46	38.5	30	17	1	6	11.0	3.4	1.5	19,000	120	26	6	19.2 Drilling from 10907' to 10985'	
15	10985	14.3	44	38	31	14	1	5	11.0	3.4	1.7	21,000	120	26	6	22.4 Drilling to 11,000'	
16	11041	14.3	47	38	32	12	1	6	11.0	3.4	1.8	21,000	120	25	6	23.0 Drilling to 11077' P.O.H. to Log	
17	11077	14.3	46	38	29	18	1	4	11.0	3.0	1.6	22,000	120	24	6	19.4 Logging	
18	11077	14.3	46	38	29	20	1	4	11.0	3.0	1.2	21,000	160	24	6	19.8 Finished logging. R.I.H. Drilled to 11174'	
19	11165	14.3	45	38	28	20	2	4	11.0	3.0	1.6	22,000	160	26	6	28.0 Drilled to 11217' P.O.H.	
20	11234	14.3	44	37	28	18	1	3	11.0	3.0	1.7	25,000	280	23	7	15.0 R.I.H. Drilled to 11298'	
21	11378	14.3	45	37	34	14	1	4	11.0	3.2	1.6	24,000	140	22	6	22.0 P.O.H. to 1/2 core. R.I.H. Drilled on Fund	
22	11385	14.3	48	45	35	20	2	4	11.0	3.2	1.4	24,000	160	25	6	20.0 Drilled to 11224' Trip. Drilled to 11534'	
23	11378	14.3	44	42	34	14	2	3	11.0	3.0	1.7	24,000	120	25	6	25.6 Drilled to 11388' Trip Drilled to 11512'	
24	11431	14.3	44	40	32	16	2	4	11.0	3.5	2.0	25,000	130	25	6	24.4 Drilled to 11568'	
25	11568	14.3	45	37	33	12	0	3	11.0	3.0	1.4	25,000	160	26	6	25.6 Drilled to 11700'	
26	11736	14.3	46	40.5	35	11	1	5	11.0	3.6	1.4	25,000	80	26	6	26.0 Drilling	

WELL DATA SHEET CONTINUATION

MAG-381

WELL:

DATE	DEPTH	WT.	VIS.	AV.	PV	YP	GELS	PH	W/L	PF	CL PPM.	CA PPM.	SOL %	OIL %	H.T.H.P.	REMARKS:
Jan																
27	11867	14.5	43	37	33	8	1 4	11.0	3.8	1.2	24,000	80	26	5	25.6	Drilling to 11,830' w/ DIAMOND Bit
28	11990	14.6	44	37.5	32	11	2 8	11.0	4.0	1.4	25,000	120	27	6	28.0	Drilled to 12,055' wiper t.r.p. hole good
29	12,117	14.7	44	38	33	10	2 6	11.0	4.0	1.2	25,000	120	27	6	20.4	Drilling - lost pressure - PCH check for window
30	12,174	14.7	43	36	32	8	1 6	11.0	4.4	1.0	26,000	120	28	5	23.2	Drilled into salt string & any - CI going up
31	12,500	14.8	65	51	44	14	6 26	9.3	11.4	1.3	70,000	360	25	4	32.0	circ. second mud w shoe - w.c. Barite
Feb																
1	12,500	14.8	43	42.5	34	17	3 15	10.0	10.4	1.4	68,000	320	25	3	33.6	Logging
2	12,500	14.8	43	42.5	34	17	3 15	10.0	10.4	1.4	68,000	320	25	3	33.6	Logging, Trip, Lead Hole Trip
3	12,500	14.8	44	44	35	14	0 8	10.5	8.0	1.2	72,000	360	27	4	30.0	Logging
4	12,500	14.8	44	44	35	14	0 8	10.5	8.0	1.2	72,000	360	27	4	30.0	T.V.H. Circ. Lost 10000 mud
5	12,500	14.8	44	35	36	8	0 7	10.5	8.2	1.3	68,000	340	27	7	36	Layed down D.P. Running 7" Csg.
6	12,144	14.8	44	35	36	8	0 4	10.5	8.2	1.3	68,000	300	27	7	36	Run 7" Csg" to 12,144'
7	12,144	14.8	55	56	40	32	3 8	7.5	5.0	N.L	178,000	400	27	4	100	Run Ben Log - convert mud to Salt/sol
8	12,144	14.8	55	56	40	32	3 8	7.5	5.0	N.L	178,000	400	27	4	100.0	Test B.O.P. 5 - Pick up 3/2" D.P.
9	12,144	14.8	55	55	45	20	2 8	7.5	3.8	N.L	178,000	400	27	4	100.0	Displaced hole w/ Salt Sol H ₂ O -
10	12,291	14.8	54	60	45	30	4 10	7.5	6.4	N.L	175,000	600	28	4	105	Dr. cont-sloe's collar - washed to 12,291' c
11	12,540	14.8	62	60	45	40	3 9	7.3	6.0	N.L	172,000	1000	28	5	-	Washed to 12,500 & DrLD to 12,540' - PCH
12	12,620	14.8	62	90	55	30	4 18	7.0	4.8	N.L	170,000	640	29	5	-	Drilling w/ DIAMOND Bit - SALT FORM.
13	12,810	14.8	52	71	55	32	3 8	7.0	4.0	N.L	175,000	400	29	5	-	Drilling w/ DIAMOND Bit - SALT FORM.
14	12,770	14.8	56	67.5	48	35	2 6	7.2	4.0	N.L	170,000	600	29	5	-	Drilled to 12,770' PCH to log
15	12,370	14.8	50	67.5	48	35	2 6	7.2	4.2	N.L	170,000	600	29	5	-	Logging
16	12,370	14.8	50	67.5	48	35	2 6	7.2	4.2	N.L	170,000	600	29	5	-	Logging - Set Cement Plug to 11867'
17	11,610	14.8	49	67	50	37	2 5	7.5	4.6	N.L	170,000	760	28	5	57.6	Run C.B.L. Log. Picked up 3 1/2" Tooling
18	11,610	14.8	43		46	32	2 6	7.5	5.0	N.L	180,000	620	25	5	57.6	Run Tank basket & Breaker Plug
19	11,000	14.8	45	65	47	36	2 6	7.5	4.6	N.L	180,000	760	24	5	50	Run D.S.T. #1
20	11,000	14.4	56	62	27	37	0 3	7.5	4.6	N.L	180,000	760	23	5	45	Set mud to 14.4 w/ Residual mud to 1
21	10,400	14.3	57	84	72	34	2 4	7.5	4.4	N.L	172,000	780	24	7	44	Plug back to 10475. Perf. R.I.H. w/ T.
22	10,475	14.3	53	71	53	36	0 3	7.5	4.2	N.L	175,000	780	24	7	43.5	Run D.S.T. #2
23	10,475	14.3	53	79	50	38	0 3	7.5	4.8	N.L	146,000	1600	23	6	45.0	Circ. 3 cond mud -
24	10,275	14.3	60	85	60	50	0 3	7.5	4.0	N.L	146,000	1400	24	6	46.0	Testing
25	10,475	14.3	60	80	60	40	1 3	7.5	4.0	N.L	146,000	1400	24	6	45.0	Checked mud w/ 14.4 w/ Residual mud to 1
26	10,475	14.6	54	75	60	38	0 3	7.2	4.4	N.L	146,000	1400	23	6	45.0	Set Packer @ 10,372. R.I.H. Drilled
27	10,322	14.6	60	95	50	50	0 5	7.2	4.2	N.L	128,000	1000	24	6	46.0	Drilled Packer @ 10,475. Perf.
28	10,310	14.3	55	75	63	51	0 3	7.2	4.2	N.L	132,000	1400	24	6	45.0	Run Tank Basket, Packer. R.I.H. w/ T.
29	10,000	14.3	58	75	70	33	0 3	7.2	4.0	N.L	136,000	1000	25	6	46.0	Running D.S.T. #3
1	10,000	14.3	58	75	68	34	0 3	7.2	4.0	N.L	136,000	1000	25	6	46.0	

WELL DATA SHEET CONTINUATION

MAC-301

WELL:

DATE	DEPTH	WT.	VIS.	AV.	PV	YP	GELS	PH	W/L	PF	CL PPM.	CA PPM.	SOL %	OIL %	H.T.H.P.	REMARKS:	
March 29 1977																	
2	10600	14.4	55	89	59	60	3	6	7.0	3.8	NIL	136,000	1200	25	6	35.5	Finished D.S.T. #3 Killed well
3	10410	14.3	55	55	25	60	2	6	7.0	3.7	NIL	115,000	1600	24	5	34.0	Set Packer @ 10410', Perf. Fr. 10360'-27'
4	10410	14.4	55	55	25	60	2	6	7.0	3.8	NIL	115,000	1600	25	5	34.8	Perf. to 10140'. Run Junk Basket, R.H.W.I.T.
5	10410	14.4	55	54	22	64	2	4	7.0	5.0	NIL	96,000	1600	23	4	36.0	Well on D.S.T. #4. Losing mud in annulus
6	10410	14.4	55	55	19	74	2	4	7.0	5.3	NIL	73,000	1500	20	3	35.2	Killed well trip well on D.S.T. #4A
7	10410	14.3+	55	58.5	29	59	2	6	7.0	5.8	NIL	68,000	1600	19	3	36.2	Well on D.S.T. #4A.
8	10410	14.3+	55	84	62	42	2	6	7.0	6.0	NIL	62,000	1320	20	3	37.5	Attempting to circ. after killing well
9	10410	14.3	55	80	60	40	2	4	7.0	5.4	N.L	58,000	1120	20	3	38.5	Set return flow packers - circ. & pack
10	10020	14.3'	55	67.5	45	45	2	5	7.0	5.6	N.L	60,000	1120	20	3	40.0	Run Junk Basket 3 Perf. Run E-3 D. & completion
11	10020	14.3'	55	55	35	65	2	5	7.0	5.6	N.L	60,000	1000	20	3	40.0	Attempt to break down formation - circ. & pack
12	10014	14.3	55	67.5	35	65	2	4	7.0	5.0	N.L	60,000	1000	20	3	38.0	GIW/PR - comm. before perf. pack
13	9800	14.3'	55	55	30	50	1	3	7.0	5.6	N.L	55,000	800	20	2	35.4	MADE into conf. squeeze - built mud bed.
14	9710	14.3'	53	65	35	60	2	4	7.0	5.2	N.L	57,000	1000	20	2	38.0	D. man 2 on end. Tester - perf. to squeeze
15	9670	14.3	55	57.5	35	45	2	6	7.0	5.4	N.L	56,000	1120	20	2	38.0	Drill cut + retained
16	9744	14.3	57		37	55	2	7	7.2	5.0	NIL	57,000	1520	20	1	40.0	Drill + wash to 9610'. Perf.
17	10020	14.3	55	67.5	45	55	1	3	7.2	5.8	NIL	58,000	1120	20	1	38.0	Performing D.S.T. #4
18	10020	14.3	54	74	52	44	3	5	7.2	5.7	NIL	58,000	1400	20	1	38.5	Performing D.S.T. #4
19	10020	14.3	54	80	60	40	2	4	7.2	5.7	NIL	58,000	1400	20	1	38.6	Killing well
20	10020	14.3	55	57	64	30	2	4	7.2	5.5	NIL	59,000	1400	20	1	38.8	Set Packer @ 9855 + cemented
21	9855	14.3	53	57	66	42	2	4	7.0	6.8	NIL	46,000	1200	19	1	49.8	
22	9855	14.3	55	57	64	30	2	7	7.0	6.5	NIL	41,000	1200	19	1	49.2	
23	9855	14.3	52	80	65	30	1	3	7.2	7.2	N.L	40,000	1200	20	1	51.0	
24	9770	14.3	53	80	65	30	1	3	7.2	7.0	N.L	42,000	1200	20	1	50.0	

- Testing -

Seven drillstem tests were carried out, all through perforations in the 7 inch liner.

DST No. 1 10480 - 10510

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>BHP psia</u>
LHP			7891.8
LF	15 min		4863.0
ISI	150 min		5402.4
FF	660 min		
FHP			7891.8

On final flow period of 11 hours the well flowed at the rate of 16 gallons of water per hour. Salinity of final barrel reversed out 91,000 PPM Cl - (150,000 PPM Na Cl) $R_w = 0.08$ at 60°F.

DST No. 2 10450 - 10470
Flowed well 6 hours at 10 gallons water cushion per hour.

DST No. 3 10435 - 10470

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>WHP</u>
Flow	8 hours	32/64"	1307

After acidizing and on an 8 hour flow period, the well flowed 2787 BOPD, 40° API gravity, GOR 1596, no water.

DST No. 4 10480 - 10510

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>BHP</u>
IHP			7642.3
ISI			1317.8
Flow	8 hours	1"	1317.8
FSI	12 hours		7642.3

After acidizing and on an 8 hour flow period, the well flowed 1102 BOPD, 40.6° gravity, GOR 1863, no water.

DST No. 5 10140 - 10360

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>BHP</u>	<u>WHP</u>
ISI	3 hours			2522
IF	5 hours	16/64	6833.8	3456
FSI	10 hours		6914.7	4211

After acidizing and on a 5 hour flow period, the well flowed 4118 BOPD, 40.4° gravity, GOR 2013, no water.

DST No. 6 9890 - 9980

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>WHP</u>	<u>BHP</u>
Flow	8 hours	28/64	1698	
FSI	12 hours			3570

After acidizing the well, over an 8 hour period, flowed 2266 BOPD, 41.06 gravity, GOR 1443, no water.

DST No. 7 9830 - 9860

<u>Operations</u>	<u>Time</u>	<u>Choke</u>	<u>WHP</u>	<u>BHP</u>
Flow	8 hours		100/110	
FSI	12 hours			3190

After acidizing the well, over an 8 hour period, flowed 447 BOPD, 41.06 gravity, GOR 1886, 4% water.