

## 1. RESULTS AND CONCLUSIONS

1. A gross interval from 14710 to 15554 ft MD (4484 to 4740 m) was perforated. The net height specified in the test analysis was 392 ft (119 m), with average porosity of 11% and average water saturation of 28%. The test was interpreted as a well producing in a homogeneous reservoir with truncated channel outer boundary conditions. From the match of the entire event, results are:

k = 17.3 md (kh = 6782 md-ft)  
S = +9  
Pi = 11896 psia (820.4 bars)  
(at 12779 ft/3895 m TVD, gauge sensing depth),  
or  
12,232 psia (843.6 bars)  
(at 14070 ft/4289m TVD, mid-perforations)

channel width: 440 ft (134 m)  
distance from side: 220 ft ( 67 m)  
distance from channel end: 900 ft (274 m).

Evidence for the channel end (truncation) is not strong. The skin value has been corrected for the flowing friction pressure drop between gauge sensing depth and top-perforation depth.

2. When flowing 3660 STBO/D (582 Sm<sup>3</sup>O/D) and 6.37 MMSCF/D (182414 Sm<sup>3</sup>G/D)(end of the main flow), the bottomhole drawdown was approximately 500 psi (34.5 bars). Other representative values were: GOR: 1740 SCF/STB (313 Sm<sup>3</sup>/Sm<sup>3</sup>); oil sg: 0.80 (45 deg API); gas sg: 0.80; H<sub>2</sub>S: 27 ppm (peak); CO<sub>2</sub>: 6 vol %.
3. At the end of the cleanup flow, skin damage was about 11. Additional cleanup appears to have occurred during the main flow; at the end of the main flow, skin damage was 9.
4. Initial reservoir pressure from the DST analysis and RFT-determined formation pressure in the adjacent wellbore (2/7-23S), referenced to the same depth, agree.
5. There is no evidence for depletion.
6. Four wellhead (monophasic) samples were collected. Two of the four were analyzed with good consistency of results. The PVT analysis results indicate a volatile oil with characteristics very much like those of samples from other Embla wells.

7. Some PVT analysis results are:

<u>DST 1 monophasic sample</u>	<u>No.3</u>	<u>No.4</u>
Bubble Pt. pressure, Pb, psia at 320 deg.F	4445	4452
Solution GOR, SCF/STB (single stage flash)	2035	2089
Formation Volume Factor at Pb, RB/STB	2.425	2.469
Oil viscosity, cp at 12,000 psia*	0.160	0.161
at Pb	0.112	0.118
*extrapolated		
Stock tank oil gravity degrees API	0.811 43.0	0.813 42.6

8. Hydrogen sulfide content was in the range of 25 to 27 ppm.  
Carbon dioxide content was 6 vol%.
9. No formation water was produced during the test.
10. No formation solids were produced during the test.

**PHILLIPS**  
**DIMS Mud Products Summary**

**GENERAL INFORMATION**

Page 1

WELL : EMBLA 2/7-27S  
 DEPTH : 15,750.00  
 DRILL CONTRACTOR: SMEDVIG DRILLING  
 SPUD DATE : 09/11/91

RIG NO.:  
 RIG RELEASED DATE: / /

**MUD PRODUCTS SUMMARY**

PRODUCT	AMOUNT	COST	PRODUCT	AMOUNT	COST
AKTAFLO-S	21	16,611	MICA F/C	48	672
B SCAV D	79	4,351	NF-1 (HALLIBURT)	13	750
F SCAV-D	20	1,101	NF-3 (HALLIBURT)	30	2,955
ACOR 95	10	8,150	PAC L	84	9,828
BARADEF OAM W-300	2	1,686	PAC R	6	702
BARANEX	2,318	185,547	PHPA	471	66,923
BARASCAV-D	324	17,499	PIPE LAX	6	2,742
BARITE	7,066	635,940	POTASSIUM CHLOR.	676	39,610
BARITE BULK	89	8,010	POTASSIUM HYDRO.	83	3,403
BENTONITE	94	13,270	SIL. DEFOAMER	6	571
BICARB	51	532	SILDEFOAM	31	2,914
BICARBONATE	80	834	SILICA DEFOAM	2	190
BRINE	4,583	68,149	SILICA DEFOAMER	10	1,142
BRINE-90 PPB KCL	240	3,569	SILICON DEF	6	571
CALC CHLORIDE	56	840	SILICON DEFOAMER	21	1,998
CAUSTIC SODA	311	5,029	SODA ASH	149	1,341
CITRIC ACID	124	7,068	SODIUM BICARBONE	301	3,010
CONDET	56	15,288	SODIUM SULFATE	3	135
D6L DEFOAMER	110	3,197	SOLTEX	696	41,064
DEFOAMER	2	190	THERMA-CHEK	367	117,807
DESCO	8	327	THERMA-THIN	1,225	134,750
DESCO CHROME FRE	375	15,000	THERMA-VIS	152	84,360
DEF DRUMS	2		THERMATHIN	35	3,926
DRISPAC REGULAR	450	56,250	THERMATHIN DRUMS	8	897
DRISPAC S.L.	6	764	TORQ-TRIM II	24	18,744
DRISPAC SUPERLO	1,150	143,750	WALNUT F/C	125	1,750
EZ MUD (PHPA)	67	9,380	WYOMING BENTON.	1,634	21,280
EZ SPOT	6	4,734	XCD POLYMER	301	78,862
KCL	711	7,082			
KCL BRINE	1,360	15,167			
KCL BRINE, BBLs	2,448	31,941	TOTAL MUD COSTS		1,980,544
KCL-BRINE, BBLs	200	2,974			
KCL-BRINE, BBLs	140	2,082			
KOH	70	2,953			
LIME	1,026	5,130			
LIQUID CASING	471	20,253			
M-I LUBE	46	23,000			

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
1	11/10/91	517	SPUD MUD	8.90	150							/											/		
2	11/11/91	524	SPUD MUD	12.00	150							/											/		
3	11/12/91	910	SPUD MUD	8.50	150							/											/		
4	11/13/91	1870	SPUD MUD	8.70	150		0					/											/		
5	11/14/91	1880	SPUD MUD	8.70	150							0/											/		
6	11/15/91	1880	KCL	11.00	68	16	12	2	6	8.50	5.4	/		1	0.30	0.50				9.5			/		
7	11/16/91	1880	KCL	11.00	77	18	17	4	12	8.50	3.0	/	0.0	1	0.30	0.50				13.0			/		
8	11/17/91	1700	KCL	11.20	75	17	17	4	7	8.50	3.0	/		1	0.30	0.50	62000	160		13.0			/		
8	11/17/91	2230	KCL	11.10	64	17	16	3	6	8.70	2.8	/		1	0.30	0.70	59000	160		9.8		2.50	/		
9	11/18/91	2640	KCL-POLYME	11.10	55	22	17	2	6	8.80	3.5	/		1	0.30	0.70	62000	180				3.80	/		
9	11/18/91	3295	KCL-POLYME	11.10	70	28	18	2	7	8.80	3.0	/		1	0.30	0.80	60000	160				5.00	/		
9	11/18/91	3390	KCL-POLYME	11.10	62	24	18	2	6	8.50	2.8	/		1	0.30	0.60	62000	160				5.00	/		
10	11/19/91	3390	KCL-POLYME	11.10	73	30	19	3	7	8.40	2.8	/		1	0.28	0.60	66700	180		13.5		7.50	/		
10	11/19/91	3390	KCL-POLYME	11.10	73	30	19	3	7	8.40	3.0	/		1	0.20	0.60	66700	180		13.5		7.50	/		
11	11/20/91	3423	KCL-POLYME	11.30	60	25	16	4	9	8.50	3.0	/		1	0.30	0.90	68000	180		15.0		10.00	/		
11	11/20/91	3712	KCL-POLYME	12.10	56	27	17	4	9	8.35	2.6	/		1	0.18	0.98	70000	200		17.5		11.20	/		
12	11/21/91	4160	KCL/POLYME	12.90	65	41	18	5	10	8.30	3.0	/		1	0.90	2.00	66000	203		20.0		12.50	/		
12	11/21/91	4412	KCL/POLYME	13.50	65	43	19	5	10	8.40	3.0	/		1	0.19	0.96	65000	192		23.0		13.00	/		
13	11/22/91	4959	KCL/POLYME	13.50	67	43	20	6	12	8.40	3.0	/		1	0.10	1.00	65000	170		25.0	0	16.00	/		
13	11/22/91	4550	KCL/POLYME	13.50	68	43	15	5	11	8.50	3.0	/		1	0.20	1.00	65000	180		24.0		16.00	/		
14	11/23/91	5500	KCL/POLYME	13.70	68	49	17	11	14	8.00	3.7	/		1	0.30	1.90	64000	280		24.0		21.00	/		
14	11/23/91	6200	KCL/POLYME	14.20	70	50	20	13	18	8.00	3.2	/		1	0.30	2.00	65000	190		28.0		30.00	/		
15	11/24/91	6800	KCL/POLYME	14.30	65	38	16	10	14	8.00	3.0	/		1	0.10	1.10	67000	360		26.0		20.00	/		
15	11/24/91	7046	KCL/POLYME	14.30	68	38	18	10	15	8.00	3.0	/		1	0.10	1.20	65000	300		27.0		21.00	/		
16	11/25/91	7046	KCL/POLYME	14.80	63	40	16	5	10	8.00	3.8	/		1	0.10	1.10	65000	300		29.0		19.00	/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S 10M	PH	API WL	HTMP TEMP FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
17	11/26/91	7046	Polymer	14.80	63	40	16	5 10	8.00	3.8	/	1	0.10	1.10	65000	300		29.0		19.00	/		
18	11/27/91	7046	KCL	14.80	58	41	16	5 10	9.20	4.0	/	1	1.90	0.10	64000	120		29.0		19.00	/		
19	11/28/91	7020	KCL	14.80	60	39	18	5 10	9.30	4.2	/	1	1.90	1.00	64	120		29.0		19.00	/		
20	11/29/91	7065	KCL	14.80	65	35	15	5 20	9.80	6.0	/ 3.8	1	0.30	0.90	64000	160		30.0		19.00	/		
20	11/29/91	7133	KCL	14.80	69	35	18	5 20	9.70	6.0	/ 3.8	1	0.40	0.80	65000	160		30.0		19.00	/		
21	11/30/91	7400	KCL	15.60	69	48	20	7 34	9.80	5.4	/ 4.0	1	0.30	1.00	66000	300		31.0		21.00	/		
21	11/30/91	7430	Polymer	15.50	65	42	18	7 30	9.60	5.0	/ 5.0	1	0.15	1.10	66000	100		31.0		20.00	/		
22	12/01/91	7676	KCL	15.50	80	43	20	6 28	9.40	5.6	/ 4.0	1	0.20	1.20	62000	400		31.0		21.00	/		
22	12/01/91	8100	KCL	15.60	78	46	15	6 20	8.90	5.5	/ 4.0	1	0.20	1.10	77000	200		30.0		20.00	/		
23	12/02/91	8277	KCL	15.60	60	48	20	7 26	8.50	4.8	/ 3.9	1	0.15	0.80	88000	0		33.0		17.50	/		
23	12/02/91	8595	KCL	15.60	66	54	23	7 26	8.60	5.0	/ 4.0	1	0.17	0.80	83000	52		32.0		19.00	/		
24	12/03/91	9018	KCL	15.60	63	44	20	8 30	9.00	4.6	/ 4.0	1	0.10	0.80	82000	480		32.0		22.00	/		
24	12/03/91	9018	KCL	15.60	74	46	18	10 36	8.60	54.0	/ 4.0	1	0.15	0.85	85000	80000		32.0		21.00	/		
25	12/04/91	9264	KCL	15.60	70	50	19	9 35	8.60	5.3	/ 4.0	1	0.15	0.90	82000	80		32.0		22.00	/		
25	12/04/91	9274	KCL	15.60	68	52	15	10 36	8.60	5.4	/ 4.0	1	0.16	0.90	82000	90		32.0		21.00	/		
26	12/05/91	9274	KCL	15.60	70	18	11	7 22	8.70	4.4	/ 3.9	1	0.10	1.20	83000	120		32.0		21.00	/		
26	12/05/91	9280	KCL	15.60	66	46	16	9 38	8.70	4.6	/ 4.0	1	0.15	1.10	82000	100		32.0		21.00	/		
26	12/05/91	9327	KCL	15.60	66	43	16	10 35	8.60	4.0	/ 4.0	1	0.15	1.05	80000	120		32.0		21.00	/		
27	12/06/91	9385	KCL	15.60	76	39	16	10 34	8.40	3.8	/ 4.0	1	0.10	0.80	85000	1120		32.0		22.50	/		
27	12/06/91	9457	KCL	15.60	78	47	18	14 40	8.10	5.6	/ 4.1	1	0.01	0.70	82000	920		33.0		21.20	/		
28	12/07/91	9515	KCL	15.60	66	37	22	20 52	8.10	6.8	/ 4.0	1	0.01	0.30	79000	920		33.0		18.70	/		
28	12/07/91	9845	KCL	15.60	58	34	20	10 42	8.60	4.0	/ 4.0	1	0.10	0.60	76000	420		33.0		21.30	/		
28	12/07/91	9867	KCL	15.60	78	47	24	20 53	8.50	3.6	/ 4.0	1	0.16	0.80	80000	480		33.0		22.50	/		
29	12/08/91	9958	KCL	15.60	66	51	19	13 48	8.40	3.2	/ 3.9	1	0.15	0.55	73000	560		33.0	1	21.30	/		
29	12/08/91	10040	KCL	15.60	58	52	16	10 36	8.30	3.2	/ 3.9	1	0.15	0.60	72000	560		33.0	1	30.00	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S 10M		PH	API WL	HTMP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
29	12/08/91	9314	KCL	15.60	61	53	25	14	36	8.20	5.0	/	3.8	1	0.01	0.01	75000	960		34.0	1	18.70	/		MUD CHECK TAKEN ON BTMS UP AT 9314'.
30	12/09/91	10105	KCL	15.60	76	53	37	21	45	8.90	4.4	/	3.8	1	0.30	1.30	74000	120		34.0	2	21.30	/		
30	12/09/91	10160	KCL	15.70	73	52	27	13	38	8.80	4.4	/	3.8	1	0.10	1.10	68000	240		34.0	1	20.00	/		
30	12/09/91	10303	KCL	15.60	61	38	26	10	36	8.70	4.4	/	3.8	2	0.20	1.20	74000	160		34.0	1	18.80	/		
31	12/10/91	10345	KCL	15.60	59	50	25	13	38	8.30	4.4	/		1	0.15	0.85	72000	240		33.0	1	20.00	/		
31	12/10/91	10381	KCL	15.60	63	53	27	13	40	8.30	3.6	/		1	0.15	1.10	72000	240		33.0	1	20.00	/		
31	12/10/91	10498	KCL	15.60	59	44	22	10	35	8.25	3.4	/		2	0.15	1.00	79000	220		33.0	1	20.00	/		
32	12/11/91	10540	KCL	15.60	64	42	28	13	42	8.30	3.6	/		1	0.15	1.50	77000	200		33.0	1	20.00	/		
32	12/11/91	10700	KCL	15.60	50	32	22	6	26	8.20	3.0	/		1	0.10	1.10	77000	240		33.0	1	16.30	/		
33	12/12/91	10714	KCL	15.60	50	36	24	11	40	8.30	3.2	/		1	0.15	1.70	77000	280		33.0	1	17.50	/		
33	12/12/91	10714	KCL	15.60	81	36	24	13	40	8.50	3.8	/		1	0.15	1.70	77000	280		33.0	1	17.50	/		
34	12/13/91	10727	KCL	15.60	56	33	25	13	40	8.40	3.0	/		1	0.05	1.20	75000	320		32.8	1	15.00	/		
34	12/13/91	10815	KCL	15.60	53	30	22	10	32	8.30	3.0	/		1		1.00	70000	280		33.0	1	15.00	/		
35	12/14/91	10908	KCL	15.60	53	37	24	12	40	8.10	3.8	/		1	0.45	1.10	76000	240		33.0	1	18.00	/		
35	12/14/91	11000	KCL	15.60	54	36	26	13	42	8.50	3.4	/		1	0.25	1.40	77000	200		32.8	1	17.50	/		
35	12/14/91	11126	KCL	15.60	53	34	24	10	32	8.40	3.4	/		1	0.20	1.40	77000	180		33.0	1	17.50	/		
36	12/15/91	11178	KCL	15.60	52	33	25	13	42	8.30	4.0	/		1	0.30	1.00	74000	160		33.0	1	18.00	/		
36	12/15/91	11270	KCL	15.60	53	35	21	10	33	8.10	3.8	/		1	0.15	0.90	75000	180		33.0	1	17.50	/		
36	12/15/91	11283	KCL	15.60	53	34	26	12	32	8.40	4.0	/		1	0.25	1.25	76000	180		33.0	1	20.00	/		PIT CHECK - TRIPPING FOR BIT CHANGE.
37	12/16/91	11286	KCL	15.60	59	36	27	14	35	8.50	3.0	/		1	0.30	1.70	82000	280		33.0	1	16.30	/		
37	12/16/91	11310	KCL	15.60	50	32	22	10	30	8.40	4.0	/		1	0.30	1.70	80000	280		33.0	1	15.00	/		
38	12/17/91	11368	KCL	15.60	50	33	24	14	33	8.10	4.5	/		1	0.15	0.40	76000	160		33.0	1	16.30	/		
38	12/17/91	11386	KCL	15.10	46	26	20	8	31	8.30	4.0	/		1	0.33	1.73	75000	360		31.0	2	16.50	/		
38	12/17/91	11386	KCL	15.10	46	26	20	8	33	8.20	4.0	/		1	0.30	1.70	75000	320		31.0	2	16.30	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
39	12/18/91	11386	KCL	15.10	48	29	23	14	32	8.40	4.0	250/ 8.0	1	0.30	1.70	74000	160		31.0	2	16.30	/			
39	12/18/91	11386	KCL	14.80	46	25	19	10	30	8.60	4.0	250/ 8.0	1	0.35	1.55	72000	300		30.0	1	15.00	/			
40	12/19/91	11386	KCL	14.60	54	27	19	9	35	8.20	3.7	250/ 8.0	1	0.20	0.50	67000	220		30.0	1	16.00	/			MUD CHECK ON RESERVE MUD.
40	12/19/91	11386	KCL	15.50	56	26	22	10	36	8.30	3.9	250/ 9.0	1	0.20	0.60	67000	230		31.0	1	16.00	/			
41	12/20/91	11386	KCL	15.60	56	23	24	10	34	8.30	3.8	250/ 8.9	1	0.20	0.60	67000	230		31.0	1	16.00	/			
42	12/21/91	11386	KCL	14.50	53	28	17	8	30	8.30	3.7	250/ 8.5	1	0.20	0.40	60000	400		28.0	1	15.00	/			
42	12/21/91	11386	KCL	14.50	55	28	19	7	20	8.00	3.4	250/ 8.1	1	0.10	0.40	60000	500		28.0	1	15.00	/			
43	12/22/91	11386	KCL	14.50	53	22	16	12	43	8.00	3.9	250/ 8.5	1	0.15	0.50	61000	500		30.0	1	15.00	/			
43	12/22/91	11386	KCL	15.50	58	28	20	13	43	8.60	3.6	250/ 8.6	1	0.16	0.60	61000	500		31.0	1	15.00	/			
44	12/23/91	11386	KCL	15.50	57	31	19	14	40	8.00	3.5	250/ 9.5	1	0.15	1.60	60000	500		31.0	1	15.00	/			
44	12/23/91	11386	KCL	15.50	55	29	22	13	40	8.10	3.6	250/ 9.8	1	0.18	1.60	60000	200		27.0	1	16.00	/			
45	12/24/91	11386	KCL	15.50	78	29	22	15	40	8.00	3.6	250/ 10.0	1	0.18	1.60	60000	200			2	15.00	/			
45	12/24/91	11386	KCL	15.50	80	33	17	15	38	8.10	3.6	250/ 10.0	1	0.18	1.60	60000	200			3	13.00	/			
46	12/25/91	11386	KCL	15.50	50	33	17	15	39	8.10	4.0	250/ 10.0	1	0.18	1.60	61000			31.2	3	13.00	/			
46	12/25/91	11386	KCL	15.50	90	22	14	15	40	8.30	3.9	250/ 10.5	1	0.45	2.00	63000	240		30.0	3	12.00	/			
47	12/26/91	11386	KCL	15.50	50	27	14	11	44	8.20	4.3	250/ 12.0	1	0.25	0.60	59000	160		30.0	3	12.00	/			
47	12/26/91	11386	KCL	15.50	54	21	17	11	40	8.20	4.4	250/ 13.0	1	0.30	0.60	62000	180		30.0	3	12.00	/			
48	12/27/91	11386	KCL	14.00	55	21	15	10	35	7.90	4.4	250/ 14.0	1	0.20	0.60	60000	200		25.0	3	10.00	/			
48	12/27/91	11386	KCL	15.50	60	20	20	10	40	8.10	4.5	250/ 15.0	1	0.30	0.60	59000	210		30.0	4	10.00	/			
49	12/28/91	11386	KCL	15.50	60	22	21	9	42	8.00	4.6	250/ 16.0	2	0.30	0.50	59000	320		30.0	4	10.00	/			
50	12/29/91	9715	KCL	15.50	70	27	24	11	45	9.20	6.0	250/ 18.0	2	0.20	0.90	55000	600			3	10.00	/			
51	12/30/91	10120	KCL	14.60	65	28	17	5	40	10.50	4.5	250/ 14.0	1	0.35	0.70	55000	640		29.0	2	9.00	/			
51	12/30/91	10320	KCL	14.50	63	27	17	4	38	10.20	4.3	250/ 14.0	2	0.30	0.70	55000	600		28.0	2	9.00	/			
52	12/31/91	10320	KCL/POLYME	**.**	65	30	18	5	42	10.50	4.5	250/ 15.0	2	0.35	0.75	58000	720		29.0	2	10.00	/			
53	01/01/92	10000	KCL/POLYME	14.50	70	34	16	4		11.40	4.1	250/ 14.0	2	0.60	1.40	51000	160		28.0	4	10.00	/			

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 5

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	NF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
53	01/01/92	10130	KCL/POLYME	14.50	75	35	18	4		11.00	4.0	250/ 14.0		2	0.50	1.20	50000	200		28.0	3	10.00	/		
53	01/01/92	10215	KCL/POLYME	14.50	61	37	15	4		11.30	2.8	250/ 13.0		2	0.20	1.00	51000	280		27.0	3	8.00	/		
54	01/02/92	10345	KCL/POLYME	14.50	78	42	21	5	18	11.20	2.6	250/ 14.0		2	0.35	0.95	54000	240		29.0	3	8.00	/		
54	01/02/92	10400	KCL/POLYME	15.60	76	48	24	8	19	11.20	3.2	/		1	0.20	0.80	50000	240		33.0	3	8.00	/		
54	01/02/92	10400	KCL/POLYME	15.60	84	50	26	8	17	11.20	3.0	/		1	0.20	0.90	50000	280		33.0	3	7.50	/		
55	01/03/92	10400	KCL/POLYME	15.60	100	50	27	7	15	11.20	2.8	/		1	0.20	0.80	53000	280		32.0	4	7.50	/		
56	01/04/92	7263	KCL/POLYME	15.55	107	40	18	5	14	11.20	2.2	/		1	0.20	0.75	53000	600		33.0	3	7.50	/		
56	01/04/92	7900	KCL/POLYME	15.60	103	43	24	6	20	11.00	2.2	/		1	0.20	0.75	48000	640		33.0	3	7.50	/		
56	01/04/92	8895	KCL/POLYME	15.60	86	44	25	7	22	11.00	2.7	/		1	0.20	0.70	50000	380		33.0	3	10.00	/		
56	01/04/92	10136	KCL/POLYME	15.60	90	45	22	7	25	11.00	2.5	/		1	0.15	0.70	50000	480		33.0	3	10.00	/		
57	01/05/92	10400	KCL/POLYME	15.60	86	42	21	8	28	11.00	2.6	/		2	0.70	0.70	50000	400		34.0	2	11.30	/		
57	01/05/92	10400	KCL/POLYME	15.60	94	42	24	7	26	11.00	2.8	/		1	0.15	0.60	49500	620		34.0	2	12.00	/		
58	01/06/92	10400	KCL/POLYME	15.60	107	38	22	5	22	11.00	2.4	/		1	0.20	0.70	50000	600		34.0	2	12.00	/		
58	01/06/92	10400	KCL/POLYME	15.60	63	42	12	5	15	10.40	4.8	250/ 6.5		1	0.35	1.20	42000	680		33.5	1	8.50	/		
59	01/07/92	10080	KCL/POLYME	15.60	88	32	17	5	20	9.80	1.8	250/ 5.6		1	0.20	0.80	45000	1000		32.0	2	8.70	/		
59	01/07/92	10080	KCL/POLYME	15.60	75	29	13	4	15	10.00	4.1	250/ 5.2		1	0.30	1.00	41000	760		31.0	3	10.00	/		
59	01/07/92	10080	KCL/POLYME	15.60	74	28	9	5	12	10.40	3.8	250/ 8.0		1	0.45	1.50	44000	620		32.0	2	10.00	/		
60	01/08/92	7600	KCL/POLYME	15.60	79	29	11	4	15	10.40	3.2	250/ 15.0		2	0.40	1.00	42000	800		32.0	2	10.00	/		
60	01/08/92	7800	KCL/POLYME	15.60	65	30	15	4	15	11.70	4.5	250/ 13.8		2	0.40	1.20	40000	440		32.0	2	10.00	/		
60	01/08/92	8487	KCL/POLYME	15.60	55	30	11	6	17	12.10	5.2	250/ 15.2		2	1.10	3.05	39000	400		32.0	3	10.00	/		
61	01/09/92	9092	KCL/POLYME	15.60	69	27	9	5	17	12.10	6.6	/		1	1.00	2.00	37	460		33.0	3	10.00	/		
61	01/09/92	9827	KCL/POLYME	15.60	58	25	9	8	22	12.10	9.5	/		2	1.20	1.50	35000	440		32.0	3	7.50	/		
61	01/09/92	10095	KCL/POLYME	15.60	70	26	8	5	20	11.90	7.8	250/ 2.2		2	1.10	3.20	34000	400		32.0	3	10.00	/		
62	01/10/92	6492	KCL/POLYME	15.60	63	26	10	4	20	12.30	6.6	250/ 17.6		1	0.90	1.30	33000	480		32.0	4	8.00	/		
63	01/11/92	6492	KCL/POLYME	15.60	55	25	9	5	24	12.10	8.2	250/ 27.0		2	1.10	2.20	34	540		34.0	3	8.50	/		



Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 6

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
64	01/12/92	6427	KCL/POLYME	15.60	70	24	8	5	20	12.30	10.2	250/ 32.0		3	0.95	1.95	32000	420		32.0	2	7.50	/		
65	01/13/92	9975	KCL/POLYME	15.60	50	20	6	3	24	12.20	17.6	/		3	1.20	1.80	31000	620		32.0	2	7.50	/		
66	01/14/92	10014	KCL	15.60	67	34	10	12	38	11.70	8.4	/		2	0.50	1.60	30000	440		32.0	2	7.50	/		BACKLOADED 2150 BBLs 15.6 PPG MUD.
66	01/14/92	10098	KCL	14.40	57	26	13	5	19	11.00	3.8	250/ 14.0		1	0.15	0.80	32000	400		26.5	1	5.00	/		
67	01/15/92	10410	KCL	13.50	55	29	17	2	6	10.80	4.2	250/ 17.2		3	0.30	0.90	26000	80		22.0		5.00	/		
67	01/15/92	10410	KCL	13.50		29	15	4	6	11.00	3.5	250/ 18.0		3	0.25	1.00	25000	80		22.0		5.00	/		PIT CHECK.
68	01/16/92	10460	Polymer	13.50	60	24	12	4	5	11.30	4.2	250/ 17.0		3	0.20	0.70	27000	240		21.0		5.00	/		PIT CHECK
69	01/17/92	10500	Polymer	13.50	58	30	20	4	6	11.00	3.2	250/ 15.0		2	0.10	0.50	24000	280		22.0		4.00	/		
69	01/17/92	10630	Polymer	13.50	52	31	16	4	4	11.10	3.5	250/ 15.0		2	0.30	0.60	24000	220		21.0		4.00	/		
70	01/18/92	10692	Polymer	13.50	53	27	16	4	5	10.70	3.8	250/ 11.0		2	0.20	1.40	27000	260		20.0		4.00	/		
70	01/18/92	10715	Polymer	13.50	51	27	17	4	5	10.50	3.8	250/ 11.0		2	0.20	1.40	27000	260		20.0		4.00	/		
71	01/19/92	10745	Polymer	13.50	55	26	13	3	4	10.60	3.8	250/ 11.9		2	0.20	0.50	26000	280		20.0		3.00	/		
71	01/19/92	10822	Polymer	13.50	65	30	17	4	8	10.50	3.0	250/ 12.5		2	0.09	0.40	24000	320		22.0		3.80	/		
72	01/20/92	10930	Polymer	13.50	52	28	16	5	10	9.90	3.0	250/ 12.5		2	0.10	0.30	24000	320		22.0		5.00	/		
72	01/20/92	11040	Polymer	13.50	52	28	17	5	10	9.70	3.4	250/ 12.5		2	0.05	0.50	23000	360		22.0		6.30	/		
72	01/20/92	11073	Polymer	13.30	58	30	20	5	11	9.50	3.4	250/ 13.0		2	0.05	0.40	22000	360		20.0		6.30	/		
73	01/21/92	11073	Polymer	13.30	60	30	19	5	10	9.50	3.4	250/ 13.0		2	0.05	0.40	22000	360		20.0		6.30	/		
74	01/22/92	11073	Polymer	13.30	70	29	22	7	13	9.50	3.5	250/ 13.0		3	0.10	0.80	23000	360		22.0		5.00	/		MUD CHECK RUN ON MUD FROM BOTTOMS UP.
74	01/22/92	11073	Polymer	13.30	60	30	18	5	12	9.90	2.8	250/ 12.0		2	0.15	0.60	22000	280		20.0		6.30	/		PIT CHECK
75	01/23/92	11073	Polymer	13.30	58	29	20	5	11	9.90	3.0	250/ 12.0		3	0.10	0.80	21000	360		21.0		6.30	/		
76	01/24/92	11073	Polymer	13.30	65	31	20	6	10	9.90	3.5	250/ 15.0		3	0.10	1.80	19000	360		20.0		6.30	/		
76	01/24/92	11073	Polymer	13.30	70	30	20	5	11	9.90	3.5	250/ 15.0		3	0.10	1.80	19000	360		20.0		6.30	/		MUD CHECK RUN ON COLD MUD FROM PIT.
77	01/25/92	11092	Polymer	13.30	67	35	17	5	12	11.10	3.3	250/ 15.0		2	0.10	1.20	18000	360		21.0		6.30	/		
77	01/25/92	10850	Polymer	13.30	68	35	18	5	10	11.00	2.0	350/ 18.0		1	0.10	0.80	18000	120		20.0		7.50	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 7

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
78	01/26/92	11114	Polymer	13.30	64	36	18	5	10	10.80	3.2	250/ 18.0		1	0.10	0.70	18000	200		79.0		6.30	/		
78	01/26/92	11270	Polymer	13.10	61	34	20	5	11	10.50	2.4	250/ 11.0		1	0.10	0.80	17000	280		20.0		6.80	/		
78	01/26/92	11395	Polymer	13.10	58	33	19	4	8	10.50	2.5	250/ 11.5		1	0.10	0.70	17000	280		20.0		7.00	/		
79	01/27/92	11445	Polymer	13.00	54	29	15	4	8	10.20	3.0	250/ 13.0		1	0.10	0.70	17000	300		20.0		7.50	/		
79	01/27/92	11600	Polymer	13.00	62	35	18	4	9	10.30	2.8	250/ 14.0		1	0.15	1.10	17	140		20.0		7.50	/		
80	01/28/92	11710	KCL	13.00	62	30	15	4	9	11.90	3.1	250/ 16.0		1	1.30	2.60	17000	140	0.4	21.0		7.50	/		
80	01/28/92	11790	KCL	13.00	65	31	17	5	10	11.50	3.2	250/ 14.0		1	1.20	2.30	17000	280	0.9	20.0		7.50	/		
80	01/28/92	11870	KCL	13.00	60	32	18	5	10	11.50	3.0	250/ 15.0		1	1.60	3.00	15000	200	0.7	20.0		7.50	/		
81	01/29/92	11943	KCL	13.00	65	34	20	5	11	11.70	3.3	250/ 16.0		1	3.50	0.55	16000	160		21.0		7.50	/		
81	01/29/92	12000	KCL	13.00	63	34	18	5	11	11.70	2.8	250/ 14.0		1	1.20	2.50	16000	160	0.5	21.0		7.50	/		
81	01/29/92	12057	KCL	13.00	60	35	19	5	11	11.70	2.6	250/ 14.0		1	1.20	2.30	16000	160	0.5	21.0		8.00	/		
82	01/30/92	12077	KCL	13.00	64	32	21	5	11	11.50	2.8	250/ 15.0		1	1.20	2.50	16000	200	0.5	21.0		8.70	/		
82	01/30/92	12077	KCL	13.00	70	36	22	5	9	11.60	2.1	250/ 12.0		2	0.90	2.20	12000	160		21.0		8.70	/		
83	01/31/92	12172	KCL	13.00	59	31	19	6	11	11.50	2.3	250/ 12.4		1	0.80	1.70	11000	140	0.7	20.0		10.00	/		
83	01/31/92	12318	KCL	13.00	58	29	19	3	12	11.50	2.5	250/ 8.8		2	0.70	1.60	14000	120	0.6	21.0		12.00	/		
83	01/31/92	12438	KCL	13.00	56	30	18	5	14	10.80	2.2	250/ 10.0		2	0.60	1.40	14000	320	0.6	21.0		12.50	/		
84	02/01/92	12634	BARANEX/TH	13.00	54	30	18	5	9	11.30	2.5	250/ 9.6		1	0.60	1.50	12500	100	0.6	21.0		10.00	/		
84	02/01/92	12721	BARANEX/TH	13.00	53	28	21	6	15	11.10	1.6	250/ 11.6		1	0.80	1.90	13000	120	0.6	22.0		12.50	/		
84	02/01/92	12762	BARANEX/TH	13.20	60	35	43	14	16	10.60	1.8	250/ 11.4		1	0.70	2.20	12000	240	0.5	21.0		12.50	/		
85	02/02/92	12798	BARANEX/TH	13.20	105	43	47	18	27	11.10	1.8	250/ 10.8		1	0.80	2.00	13000	240	0.5	23.0		12.50	/		
86	02/03/92	12813	BARANEX/TH	13.20	180	38	49	19	28	10.90	1.8	250/ 11.2		2	0.90	1.90	13000	240	0.4	23.0		12.50	/		
87	02/04/92	12854	BARANEX/TH	13.20	90	35	60	20	27	10.70	2.2	250/ 9.8		1	0.80	1.90	13000	300		22.0		12.00	/		
87	02/04/92	12892	BARANEX/TH	13.20	56	10	67	15	23	10.90	2.1	250/ 10.4		1	1.10	2.50	12000	200	0.4	20.0		12.50	/		
88	02/05/92	10371	BARANEX/TH	13.30	55	21	32	7	18	11.10	1.6	250/ 8.2		2	0.60	1.70	12000	260	0.3	22.0		10.00	/		
88	02/05/92	11070	BARANEX/TH	13.20	51	22	21	5	24	11.20	2.2	250/ 11.6		2	1.00	1.30	11000	160	0.4	21.0		12.50	/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
89	02/06/92	11414	BARANEX/TH	13.20	57	23	23	6	22	11.00	2.4	250/ 9.2	2	0.80	1.90	11500	200	0.3	22.0		12.00	/		
89	02/06/92	12325	BARANEX/TH	13.20	54	21	23	11	34	10.70	2.8	250/ 11.0	2	0.80	2.00	10500	120	0.4	22.0		12.00	/		
89	02/06/92	12628	BARANEX/TH	13.20	52	22	23	8	22	10.70	2.8	250/ 10.5	2	0.90	2.00	10000	160	0.3	21.0		12.00	/		
90	02/07/92	12892	BARANEX/TH	13.20	54	21	21	8	30	10.80	3.2	250/ 11.2	2	1.00	1.80	11000	150	0.3	20.0		10.00	/		
90	02/07/92	12935	BARANEX/TH	13.50	70	22	23	9	22	10.70	3.0	250/ 11.2	2	0.90	1.90	11000	160	0.3	22.0		12.00	/		
91	02/08/92	12935	BARANEX/TH	13.50	60	20	25	14	38	10.60	2.8	250/ 11.2	2	0.60	1.80	10000	200	0.5	21.0		10.00	/		
92	02/09/92	12986	BARANEX/TH	13.50	55	22	30	16	45	10.40	4.3	250/ 12.0	2	0.90	1.80	10500	150	0.5	26.0		9.00	/		
92	02/09/92	13067	BARANEX/TH	13.50	60	23	23	17	47	10.80	4.8	250/ 12.4	2	1.10	2.50	9000	140	0.4	24.0		10.00	/		
92	02/09/92	13108	BARANEX/TH	13.50	57	22	22	10	20	10.70	4.0	250/ 11.7	2	1.20	2.30	10000	140	0.3	23.0		10.00	/		
93	02/10/92	13129	BARANEX/TH	13.70	63	23	38	25	47	10.70	4.9	250/ 12.2	2	1.40	2.60	9500	180	0.3	26.0		9.00	/		
94	02/11/92	13050	BARANEX/TH	13.70	70	20	37	35	55	10.70	5.1	250/ 12.4	2	1.20	2.30	9500	150	0.3	28.0	0	9.00	/		
94	02/11/92	13190	BARANEX/TH	13.90	67	22	18	6	30	9.60	3.9	250/ 12.2	2	0.60	1.90	9000	120	0.2	33.0		8.00	/		
95	02/12/92	13211	BARANEX/TH	13.90	70	22	41	35	54	10.90	6.5	250/ 12.6	2	1.60	2.80	9000	50		29.0	0	10.00	/		
95	02/12/92	13292	BARANEX/TH	14.00	63	21	23	17	39	10.80	6.1	250/ 13.0	3	1.30	2.70	9000	120		28.0		10.00	/		
95	02/12/92	13274	BARANEX/TH	14.10	52	20	26	18	38	10.60	5.6	250/ 12.7	2	1.30	2.70	9000	120		31.0		10.00	/		
96	02/13/92	13309	BARANEX/TH	14.10	53	19	26	18	38	10.90	7.0	250/ 14.9	2	1.30	2.70	9500	80		30.0		8.50	/		
96	02/13/92	13384	BARANEX/TH	14.10	65	20	28	22	30	11.10	6.5	250/ 17.0	2	1.90	3.60	9500	80		29.0		9.00	/		
97	02/14/92	13408	BARANEX/TH	14.10	61	22	14	8	16	11.00	4.8	0/	2	1.90	2.60	9500	0		29.0		9.00	/		
97	02/14/92	13429	BARANEX/TH	14.10	55	22	14	8	16	11.10	5.2	250/ 16.0	2	1.70	2.90	9500	140		29.0		9.00	/		
97	02/14/92	13472	BARANEX/TH	14.10	65	25	14	5	19	11.20	4.3	250/ 14.4	2	2.00	3.80	9000	120		28.0		9.50	/		
98	02/15/92	13505	BARANEX/TH	14.10	60	27	19	7	28	10.80	4.0	250/ 12.4	2	1.40	2.50	9000	120		28.0		9.00	/		
98	02/15/92	13535	BARANEX/TH	14.10	65	29	19	8	17	11.20	3.5	250/ 13.2	2	1.20	3.50	8000	150		27.0		10.00	/		
98	02/15/92	13562	BARANEX/TH	14.10	67	32	18	5	21	11.00	3.2	250/ 14.6	2	1.40	2.50	8500	120		26.0		12.00	/		
99	02/16/92	13593	BARANEX/TH	14.10	68	32	18	5	14	11.30	3.0	250/ 11.8	2	1.70	2.60	9000	160	0.5	26.0		11.50	/		
99	02/16/92	13602	BARANEX/TH	14.10	64	32	16	5	10	11.50	3.3	/	1	1.80	2.60	9000	180	0.5	25.0		11.00	/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL X	MBT	O/W RATIO	ES	COMMENTS
99	02/16/92	13616	BARANEX/TH	14.10	63	28	17	4	8	11.50	3.2	250/ 14.0		2	1.70	3.30	8500	200	0.6	25.0		10.50	/		
99	02/16/92	13637	BARANEX/TH	14.10	64	30	16	4	10	11.30	2.6	250/ 10.0		2	1.70	3.00	8000	225	0.6	24.0		11.00	/		
100	02/17/92	13674	BARANEX/TH	14.10	61	28	17	4	9	11.50	2.8	250/ 12.0		2	1.70	2.60	8500	240	0.5	24.0		10.50	/		
100	02/17/92	13674	BARANEX/TH	14.10	72	29	14	3	4	11.40	2.9	250/ 12.2		2	1.70	2.60	8500	240	0.5	24.0		10.50	/		
101	02/18/92	13240	BARANEX/TH	14.20	300	44	52	29	70	11.00	4.6	250/ 14.8		2	1.10	2.50	8000	60	0.4	27.0		12.00	/		
101	02/18/92	13392	BARANEX/TH	14.10	73	33	23	4	23	11.20	3.5	250/ 13.5		2	1.30	2.90	8000	180	3.8	25.0		12.00	/		
102	02/19/92	13500	BARANEX/TH	14.10	67	34	19	4	21	11.10	3.5	250/ 14.1		2	1.30	2.90	8000	160	0.5	25.0		12.50	/		
102	02/19/92	13580	BARANEX/TH	14.10	61	31	15	4	14	11.60	3.6	250/ 13.0		2	1.70	3.70	8000	200	0.8	25.0		12.50	/		
102	02/19/92	13685	BARANEX/TH	14.10	52	27	13	3	8	11.60	3.5	250/ 14.4		2	1.60	3.10	9000	200	0.8	25.5		11.50	0/		
103	02/20/92	13698	BARANEX/TH	14.10	53	34	10	3	7	12.00	3.5	250/ 14.5		2	1.80	3.40	8000	400	0.8	26.0		11.30	/		
103	02/20/92	13748	BARANEX/TH	14.10	52	27	10	3	7	11.50	3.4	250/ 12.4		2	1.80	3.40	8000	400	0.9	26.0		11.30	/		
104	02/21/92	13797	BARANEX/TH	14.10	61	29	45	14	15	11.50	3.2	250/ 11.0		2	1.70	2.80	8000	280	0.5	25.0		13.00	/		
104	02/21/92	13886	BARANEX/TH	14.10	50	27	10	1	14	11.90	3.5	250/ 13.0		2	1.70	3.70	9000	360	0.8	26.0		12.50	/		
104	02/21/92	13920	BARANEX/TH	14.10	52	24	16	3	8	11.30	3.8	250/ 12.8		2	1.50	3.00	8000	320	1.0	26.0		12.50	/		
105	02/22/92	13977	BARANEX/TH	14.10	55	30	17	4	14	11.70	3.0	250/ 11.8		2	2.50	4.10	8000	260	1.1	26.0		12.50	/		
105	02/22/92	14037	BARANEX/TH	14.10	53	29	10	3	12	12.00	3.0	250/ 11.8		2	2.70	2.80	8000	360	0.9	27.0		11.20	/		
105	02/22/92	14105	BARANEX/TH	14.10	54	24	11	3	10	11.70	3.0	250/ 12.4		2	2.70	3.20	8000	400	1.0	26.0		12.50	/		
106	02/23/92	14106	BARANEX/TH	14.10	56	28	13	3	14	11.80	3.2	250/ 12.2		2	2.70	3.80	8000	280	1.0	26.0		12.50	/		
106	02/23/92	14106	BARANEX/TH	14.30	50	24	11	3	7	11.90	3.0	250/ 12.8		2	2.40	3.90	8000	440	1.5	27.0		11.30	/		
107	02/24/92	14106	BARANEX/TH	14.30	68	22	13	3	8	12.00	3.0	250/ 12.8		2	2.60	2.70	8000	520	0.8	28.0		11.30	/		
107	02/24/92	10139	BARANEX/TH	14.30	100	23	12	3	9	12.00	3.2	250/ 14.4		2	2.80	4.20	8000	480	1.2	27.0		11.30	/		
107	02/24/92	10380	BARANEX/TH	14.30	55	24	11	3	8	12.00	3.0	25/ 14.0		2	2.60	3.90	8000	480	1.1	27.0		11.30	/		
108	02/25/92	10720	Polymer	14.30	84	29	11	4	13	11.70	3.0	250/ 13.8		3	2.60	3.60	8000	440	1.1	26.0	1	11.30	/		
108	02/25/92	10880	Polymer	14.30	71	35	15	5	20	11.80	2.9	250/ 13.0		3	2.40	3.40	8000	400	1.2	26.0	1	11.30	/		
108	02/25/92	13150	Polymer	14.30	62	29	13	4	17	11.70	3.2	250/ 13.4		3	2.60	4.10	7000	440	1.2	26.0	1	10.00	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 10

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS		PH	API WL	HTHP		FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
								10S	10M			TEMP	FL												
109	02/26/92	14106	Polymer	14.30	67	30	15	4	16	11.90	3.4	250/	12.0	3	2.30	4.30	7000	440	1.4	26.0	1	10.00	/		
109	02/26/92	10480	Polymer	14.30	62	29	14	4	17	11.80	3.0	250/	12.8	3	2.10	3.90	7000	380	1.3	26.0	1	10.00	/		
110	02/27/92	13272	Polymer	14.30	62	32	20	4	15	11.90	3.4	250/	14.0	3	1.80	4.10	9000	360	1.5	26.0	1	11.30	/		
110	02/27/92	13539	Polymer	14.30	56	28	12	5	12	11.70	3.6	250/	12.8	3	1.80	3.40	6500	560	1.5	26.0	1	11.50	/		
110	02/27/92	13539	Polymer	14.30	60	25	10	3	10	11.60	3.6	250/	13.2	3	1.90	3.80	7000	600	1.3	26.0	1	11.30	/		
111	02/28/92	10170	Polymer	14.30	57	30	8	3	13	12.00	3.2	250/	12.0	3	1.80	4.30	7500						/		
111	02/28/92	12740	Polymer	14.60	58	29	13	3	11	11.80	3.0	250/	13.0	3	1.50	3.00	6500	580	1.3	26.0		11.30	/		
111	02/28/92	13734	Polymer	14.60	62	29	12	4	11	11.60	2.8	250/	12.8	3	1.30	3.40	7000	520	1.1	26.0		11.30	/		
112	02/29/92	13932	Polymer	14.60	57	35	12	4	12	11.60	3.0	250/	11.0	3	1.30	3.00	7000	480	1.3	27.0	1	12.50	/		
112	02/29/92	13949	Polymer	14.60	56	28	11	1	10	11.60	3.1	250/	11.6	3	1.10	2.30	7000	480	1.0	26.0		12.50	/		
112	02/29/92	13949	Polymer	14.60	67	29	11	3	10	11.60	3.0	250/	12.0	3	1.20	2.20	7000	480	1.0	26.0		12.50	/		
113	03/01/92	13192	Polymer	14.60	57	36	11	5	12	11.40	3.0	250/	11.0	3	1.10	3.30	7500	520	1.2	26.0		11.30	/		
113	03/01/92	14024	Polymer	14.60	53	25	10	6	13	11.30	2.7	250/	10.2	2	1.20	2.40	7000	500	0.7	27.0		12.50	/		
113	03/01/92	14106	Polymer	14.60	54	29	11	5	14	11.20	2.8	250/	10.8	3	1.20	2.80	7000	520	0.9	27.0	1	12.50	/		
114	03/02/92	14106	Polymer	14.60	55	30	10	5	12	11.30	3.0	/		1	1.10	2.80	7000	440	0.9	27.0		11.30	/		
114	03/02/92	10595	Polymer	14.60	62	39	20	7	18	11.00	3.0	250/	12.0	3	0.80	2.30	7000	440	0.9	27.0		12.50	/		
115	03/03/92	11032	Polymer	14.60	57	24	12	3	11	11.50	2.7	250/	10.0	3	1.10	3.20	7000	460	1.0	27.0		12.50	/		
115	03/03/92	11670	Polymer	14.60	54	24	13	3	9	11.50	2.9	250/	10.0	3	1.00	3.40	7000	600	1.0	27.0	1	12.50	/		
115	03/03/92	12080	Polymer	14.60	53	26	13	4	11	11.60	2.8	250/	11.2	3	1.40	3.40	7000	640	1.0	27.0		12.50	/		
116	03/04/92	12532	Polymer	14.60	54	25	10	4	10	11.40	2.9	250/	11.0	3	1.00	2.60	7000	560	1.0	27.0	1	11.30	/		
116	03/04/92	12932	Polymer	14.60	56	27	13	3	12	11.50	2.7	250/	10.2	3	0.90	2.30	7000	660	1.1	28.0		12.50	/		
116	03/04/92	13250	Polymer	14.60	52	29	11	6	15	10.80	2.8	250/	10.4	3	0.70	2.30	7000	680	0.9	28.0		12.50	/		
117	03/05/92	13657	Polymer	14.60	51	30	10	4	12	11.40	3.0	250/	11.0	3	1.10	3.00	7500	440	0.9	27.0		11.30	/		
117	03/05/92	13889	Polymer	14.60	54	27	14	5	11	11.60	2.8	250/	10.8	2	1.10	3.80	6500	560	0.8	27.0		12.50	/		
117	03/05/92	14066	Polymer	14.60	50	24	13	3	10	11.30	2.6	250/	10.6	2	1.30	3.90	6500	580	0.8	27.0		12.00	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
118	03/06/92	14106	Polymer	14.60	53	28	13	5	12	11.50	2.4	250/ 10.2		3	0.90	2.90	7000	620	1.0	27.0		12.50	/		
119	03/07/92	14106	Polymer	14.70	65	26	17	4	11	11.50	2.0	0/		1	1.00	2.90	7000	600	0.8	27.0		12.00	/		
120	03/08/92	14059	Polymer	14.60	67	25	13	4	14	11.30	2.2	250/ 9.8		2	0.80	2.90	7000	600	0.6	26.0	1	12.50	/		
121	03/09/92	6297	Polymer	14.60	67	31	25	11		11.90	2.5	250/ 10.0		3	1.60	2.70	8000	720	1.0	28.0		11.00	/		
121	03/09/92	13941	Polymer	14.60	63	28	16	4	30	11.90	2.4	250/ 10.3		2	2.00	3.10	7000	780	1.7	28.0		12.00	/		
122	03/10/92	6297	Polymer	14.60	69	26	17	6	43	12.10	3.1	250/ 11.6		3	1.40	3.60	7000	760	2.2	25.8	3	11.00	/		
122	03/10/92	14106	Polymer	14.60	62	21	13	4	28	11.90	3.6	250/ 10.8		2	1.60	3.70	7500	780	2.1	26.8	3	11.00	/		
123	03/11/92	6297	Polymer	14.60	58	25	13	3	34	12.00	3.6	250/ 13.2		3	1.40	3.40	6500	520	2.2	25.8	2	12.50	/		
123	03/11/92	6297	Polymer	14.60	62	24	14	5	29	11.90	3.8	250/ 13.0		3	1.50	3.60	6500	500	2.1	25.8	2	12.00	/		
124	03/12/92	14106	Polymer	14.60	65	21	13	3	34	12.20	2.7	/		1	1.20	2.80	7000	200	2.2	26.0	1	12.50	/		
125	03/13/92	1900	Polymer	13.00	52	20	11	3	7	10.90	4.2	/		1						24.0		/			
126	03/14/92	1900	Polymer	13.00	53	15	14	10	60	12.60	5.0	/		1	1.70	2.40	7500	480	2.5	21.8		10.00	/		
127	03/15/92	1900	Polymer	13.00	55	13	19	11	65	12.30	4.8	/		1	1.70	2.40	7500	480	2.5	21.8		10.00	/		
128	03/16/92	1600	Polymer	13.00	54	14	18	12	60	12.30	4.8	/		1	1.70	2.50	7000	480	2.5	21.1		10.00	/		
129	03/17/92	14106	BARANEX/TH	14.60	57	22	18	10	30	12.50	3.2	/ 0.0		1	1.70	2.70	6500	400	2.7	27.0		10.00	/		
130	03/18/92	14106	BARANEX/TH	14.60	55	22	19	11	30	12.30	3.1	/		1	1.70	2.70	6500	400	2.5	27.0		10.00	/		
131	03/19/92	14106	BARANEX/TH	14.60	63	22	14	4	30	12.50	4.8	250/ 24.0		1	2.20	3.70	6000	600	2.9	26.0		7.50	/		
132	03/20/92	6230	BARANEX/TH	14.60	58	22	16	5	34	12.20	5.0	300/ 25.0		1	2.10	3.60	6000	520	2.8	26.0		7.50	/		
133	03/21/92	14106	BARANEX/TH	14.60	54	22	14	4	28	12.40	5.0	300/ 26.0		3	2.40	3.60	6000	520	2.4	26.0		7.50	/		
134	03/22/92	6300	BARANEX/TH	14.70	53	18	13	4	30	12.30	4.8	300/ 28.0		2	1.80	2.80	6000	520	2.8	24.0		7.50	/		
135	03/23/92	14106	BARANEX/TH	14.60	52	14	22	3	40	12.50	5.2	300/ 32.0		3	1.50	2.60	6000	110	2.9	26.0		7.50	/		
135	03/23/92	6297	BARANEX/TH	14.70	65	20	18	15	50	12.60	5.6	300/ 30.0		3	1.80	3.00	6000	560	3.0	26.0		7.50	/		
136	03/24/92	13979	BARANEX/TH	17.00	55	22	10	3	19	12.20	4.2	300/ 18.0		2	1.50	2.60	4500	280	1.7	34.0		7.50	/		
137	03/25/92	14081	BARANEX/TH	17.00	56	20	10	3	17	12.30	4.2	300/ 26.0		3	9.20	10.20	5000	440	0.7	34.0		8.70	/		
137	03/25/92	14141	BARANEX/TH	17.00	54	27	12	4	17	11.90	3.8	300/ 16.0		2	6.50	8.00	4500	280	1.2	34.0		7.50	/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
137	03/25/92	14183	BARANEX/TH	17.00	52	29	14	6	20	11.80	3.8	300/ 18.0		2	5.70	8.40	4500	720	1.0	35.0		10.00	/		
138	03/26/92	14198	BARANEX/TH	17.00	48	24	14	4	32	11.70	2.8	300/ 16.0		2	5.20	7.90	4500	720	0.6	34.0		9.00	/		
138	03/26/92	14198	BARANEX/TH	17.00	56	25	20	12	50	11.30	3.8	300/ 18.0		3	3.90	6.60	5000	640	1.3	35.0		12.50	/		
139	03/27/92	14334	BARANEX/TH	17.00	50	25	22	22	72	11.10	3.3	300/ 17.0		2	4.30	7.00	5000	640	1.2	35.0		10.00	/		
139	03/27/92	14448	BARANEX/TH	17.00	52	23	25	27	72	11.40	3.1	300/ 16.0		2	4.30	6.80	5000	760	1.0	36.0		10.00	/64		
139	03/27/92	14492	BARANEX/TH	17.00	49	24	20	20	70	11.30	2.8	300/ 15.6		2	4.10	7.20	5000	720	0.5	37.0		10.00	/		
139	03/27/92	14560	BARANEX/TH	17.00	50	27	20	35	65	11.30	3.0	300/ 10.0		2	3.90	7.30	5000	1000	0.8	26.0		9.00	/		
140	03/28/92	14616	BARANEX/TH	17.20	52	22	24	37	68	11.10	3.0	300/ 15.0		2	3.20	5.40	5000	680	0.6	36.0		10.00	/		PORE PRESS : 12012 PSI ( 16.95 PPG )
140	03/28/92	14663	BARANEX/TH	17.20	51	22	19	37	65	11.10	3.1	300/ 16.4		2	2.80	5.40	5000	680	0.3	36.0		10.00	/		PORE PRESS : 12046 PSI. ( 16.95 PPG )
140	03/28/92	14707	BARANEX/TH	17.30	52	21	29	29	63	11.10	2.9	300/ 16.8		2	3.10	6.20	5000	740	0.4	33.0		8.50	/		PORE PRESS : 12080 PSI. (16.95 PPG)
140	03/28/92	14764	BARANEX/TH	17.30	47	23	21	26	63	10.90	2.7	300/ 15.8		3	2.60	5.00	5000	740	0.6	39.0		10.00	/		PORE PRESS: 12120 PSI. (16.95 PPG)
141	03/29/92	14779	THERMADRIL	17.30	50	20	22	36	72	10.70	2.8	300/ 15.0		2	2.20	4.70	5000	720	0.9	38.5		10.00	/		PORE PRESS 12165 PSI.
141	03/29/92	14779	THERMADR/B	17.30	47	23	12	15	64	10.40	3.2	300/ 19.6		3	1.90	4.60	5000	740		37.0		10.00	/		PORE PRESS: 12165 PSI.
142	03/30/92	14779	THERMADR/B	17.30	50	22	8	19	84	10.50	2.2	300/ 18.0		4	1.90	4.90	5000	680	0.5	37.0		8.70	/		
142	03/30/92	14854	THERMADR/B	17.30	47	20	13	19	58	11.10	2.7	300/ 19.6		4	2.10	4.30	5000	620	0.5	37.0		8.50	/		
142	03/30/92	14892	THERMADR/B	17.30	48	20	13	19	58	11.00	2.2	300/ 24.4		5	1.90	4.30	5000	420	0.5	38.0		8.50	/		
143	03/31/92	14922	High Temp	17.30	45	22	13	22	50	11.00	2.1	300/ 18.0		3	1.70	4.50	5000	520	0.5	37.0		9.00	/		
143	03/31/92	14922	High Temp	17.30	45	21	11	11	40	11.40	2.1	300/ 14.2		4	1.30	3.30	3000	440	0.7	36.0		8.50	/		PIT CHECK.
143	03/31/92	14079	High Temp	17.30	46	23	10	10	35	11.60	1.8	300/ 14.0		4	1.70	3.70	3000	320	0.6	36.0		8.50	/		
144	04/01/92	14922	High Temp	17.30	48	25	17	20	45	11.80	1.8	300/ 8.0		2	1.70	4.50	3000	320	0.3	36.0		8.50	/		
144	04/01/92	14012	High Temp	17.30	45	20	14	26	37	11.70	2.3	300/ 16.0		3	1.80	4.40	4500	320	0.4	37.0		8.80	/		
144	04/01/92	15039	High Temp	17.30	43	19	15	22	35	11.50	2.4	300/ 16.0		4	1.80	4.00	4000	280	0.6	36.0		10.00	/		
144	04/01/92	15039	High Temp	17.50	46	18	10	17	36	11.90	2.2	300/ 15.0		4	2.30	5.50	3000	280	0.7	38.0		8.80	/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
145	04/02/92	15039	High Temp	17.50	47	29	14	4	10	12.30	1.4	300/ 10.0		2	3.80	6.60	3000	240	0.8	36.0		6.30	/		
145	04/02/92	15039	High Temp	17.50	48	28	17	5	10	12.40	1.4	300/ 11.4		4	3.30	5.70	3500	360	1.0	37.0		9.00	/		
146	04/03/92	15039	High Temp	17.50	60	27	18	4	10	11.90	1.3	300/ 13.4		3	3.20	5.90	4000	280	1.0	37.5		7.50	/		PIT CHECK.
146	04/03/92	15055	High Temp	17.50	51	25	15	1	7	12.40	1.6	300/ 11.8		5	3.50	5.70	3500	380	1.0	36.0		8.80	/		
147	04/04/92	15055	High Temp	17.40	48	21	7	1	3	12.20	2.2	300/ 12.0		5	2.00	3.60	3500	280	0.9	36.0		8.80	/		PIT CHECK
148	04/05/92	15057	High Temp	17.50	50	18	11	3	11	12.10	2.0	300/ 11.6		5	2.00	4.30	4500	180	0.8	37.0		8.00	/		
148	04/05/92	15058	High Temp	17.45	49	25	12	3	4		1.8	300/ 10.6		5	2.50	5.00	4750	300	0.9	35.0		8.00	/		
148	04/05/92	15058	High Temp	17.50	50	26	11	2	4	12.40	1.7	300/ 12.4		5	2.50	4.80	3000	300	1.2	37.0		8.80	/		
149	04/06/92	14903	High Temp	17.50	50	27	14	3	8	12.80	1.4	300/ 11.4		5	2.45	4.55	5500	220	1.1	36.5		8.50	/		
149	04/06/92	15055	High Temp	17.50	45	22	12	1	2	12.40	1.7	300/ 11.8		5	2.20	4.10	4000	280	0.9	38.0		8.80	/		PIT CHECK.
150	04/07/92	14080	High Temp	17.50	84	41	26	15	46	11.60	8.8	300/		5	2.35	4.80	3500	150	0.5	40.0		9.50	/		MUDCHECK RUN ON BTM UP SAMPLE.
150	04/07/92	15055	High Temp	17.50	48	28	11	2	2	12.60	2.3	300/ 14.2		5	3.10	5.00	3500	480		38.0		10.00	/		PIT CHECK.
151	04/08/92	14932	High Temp	17.50	52	23	21	3	15	12.40	1.8	300/ 13.6		4	2.10	3.80	4000	200	1.0	38.0		8.50	/		
151	04/08/92	15055	High Temp	17.50	45	30	16	2	12	11.90	2.0	300/ 9.8		5	1.50	3.30	3000	280	0.9	37.0		11.30	/		PIT CHECK.
151	04/08/92	14967	High Temp	17.50	51	25	10	2	27	12.40	2.9	300/ 12.4		5	2.90	4.40	3000	600	1.3	37.0		12.50	/		
152	04/09/92	15055	High Temp	17.50	49	26	7	2	12	12.40	2.8	300/ 13.2		5	2.80	4.80	4500	400	1.8	37.0		11.50	/		PIT CHECK.
152	04/09/92	15055	High Temp	17.50	48	23	9	2	18	12.40	3.0	300/ 13.4		5	2.40	4.70	4500	360		37.0		13.00	/		PIT CHECK.
152	04/09/92	13960	High Temp	17.50	47	21	7	3	4	12.30	2.0	300/ 13.2		5	1.75	3.50	4000	320	0.9	36.0		11.00	/		
153	04/10/92	15055	High Temp	17.50	65	29	6	3	5	12.30	2.4	300/ 13.2		6	2.60	3.90	4200	480	0.8	36.5		11.50	/		PIT CHECK.
153	04/10/92	15055	High Temp	17.50	61	33	17	3	13	12.00	2.4	300/ 12.4		6	1.50	3.50	4000	260	0.9	37.0		12.00	/		
154	04/11/92	15050	High Temp	17.50	60	30	18	3	12	12.10	3.1	300/ 15.5		6	1.40	3.40	4000	300	0.9	37.0		12.00	/		
154	04/11/92	15050	High Temp	17.70	106	36	21	9	36	11.70	2.8	300/ 13.2		6	1.20	3.40	5000	330	0.8	40.0		12.50	/		MUD CHECK RUN ON BTM UP SAMPLE.
154	04/11/92	15062	High Temp	17.70	48	30	17	4	15	11.80	1.8	300/ 13.4		5	1.20	2.80	6000	300	0.7	38.0		12.00	/		
154	04/11/92	15068	High Temp	17.70	67	33	15	4	10	11.80	2.0	300/ 13.2		5	1.30	2.80	4500	360	0.7	38.5		12.00	/		



Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 14

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
155	04/12/92	15075	High Temp	17.70	49	31	13	3	9	11.80	2.2	300/ 13.0		5	1.20	2.40	4000	400	0.7	38.0		12.50	/		PIT CHECK.
155	04/12/92	15086	High Temp	17.70	50	29	15	3	8	11.80	2.4	300/ 13.7		5	1.20	2.60	4000	400	0.8	38.0		11.50	/		
156	04/13/92	15169	High Temp	17.70	46	28	13	4	10	11.80	2.3	300/ 12.6		4	1.40	2.60	4000	360		38.0		11.50	/		
157	04/14/92	15238	High Temp	17.50	54	33	23	7	19	11.70	7.2	300/ 24.0		6	1.00	3.60	4000	400	0.7	36.9		12.00	/		
157	04/14/92	15291	High Temp	17.50	48	31	14	3	15	11.95	2.6	300/ 15.2		6	1.30	3.30	4500	360	0.7	37.9		11.50	/		
157	04/14/92	15316	High Temp	17.50	48	30	13	3	7	11.80	2.1	300/ 13.7		6	1.30	3.10	4000	400	0.7	37.4		10.00	/		
158	04/15/92	15316	High Temp	17.50	92	36	25	14	57	11.50	5.6	/			1.10	2.60	5000	520	0.5	37.8		11.00	/		
158	04/15/92	15357	High Temp	17.50	50	27	13	4	23	11.75	2.4	300/ 18.2		6	1.00	2.70	4000	320	0.6	37.9		11.50	/		
158	04/15/92	15411	High Temp	17.50	51	28	14	3	21	11.80	2.3	300/ 15.6		6	1.10	2.90	4500	320	0.8	36.9		11.00	/		
159	04/16/92	15475	High Temp	17.50	49	27	13	3	19	11.90	2.2	300/ 17.2		6	1.30	3.10	4000	480	0.6	36.9		12.50	/		
159	04/16/92	15570	High Temp	17.50	52	27	14	5	20	12.00	2.0	300/ 17.0		5	1.20	3.00	4000	400	0.6	36.9		12.50	/		
160	04/17/92	15580	High Temp	17.50	54	30	14	8	40	11.80	6.0	300/ 17.8		5	1.10	2.50	4500	560	0.5	36.0		12.50	/		
160	04/17/92	15666	High Temp	17.50	52	31	14	7	42	11.70	6.2	300/ 19.0		5	0.90	2.40	4500	600	0.5	35.0		10.00	/		
161	04/18/92	15727	High Temp	17.50	49	30	14	11	42	11.50	2.6	300/ 18.4		5	0.60	2.80	4000	480	0.5	35.0		10.00	/		
161	04/18/92	15750	High Temp	17.50	47	28	10	6	26	11.80	2.6	300/ 18.0		5	1.10	2.80	4000	440	0.5	35.0		10.00	/		
162	04/19/92	15750	High Temp	17.50	97	41	56	41	87	11.20	3.4	300/ 18.0		6	0.60	3.50	4500	480	0.5	37.0		10.00	/		
162	04/19/92	15750	High Temp	17.00	57	34	14	8	15	12.05	3.2	300/ 15.4		5	1.20	2.30	4000	560	1.0	35.0		10.00	/		
163	04/20/92	15750	High Temp	17.00	54	17	26	3	10	12.20	3.0	300/ 15.8		6	2.20	4.00	4000	600	1.2	35.0		10.00	/		
163	04/20/92	15750	High Temp	16.40	82	24	8	3	30	12.15	2.2	300/ 15.0		5	1.70	3.40	4200	440	0.7	32.0	6	10.00	/		
163	04/20/92	15750	High Temp	17.20	52	27	4	3	7	12.10	3.0	300/ 16.0		6	1.60	2.80	4000	480	1.0	34.0	1	10.00	/		
164	04/21/92	15750	High Temp	17.00	45	24	9	3	12	12.20	3.2	300/ 18.4		6	2.40	4.00	4000	520	1.1	36.0	1	10.00	/		
164	04/21/92	15750	High Temp	17.20	48	27	13	3	12	12.20	2.8	300/ 18.0		6	1.40	2.80	4500	380	1.3	35.0	1	10.00	/		
165	04/22/92	15750	High Temp	17.20	54	33	9	4	9	12.30	3.2	300/ 12.0		6	2.10	3.60	4000	600	1.3	36.0	1	11.20	/		
165	04/22/92	15750	High Temp	17.20	47	30	8	3	5	12.20	3.4	300/ 18.2		6	2.00	3.80	4000	600	1.3	36.0	1	11.20	/		
166	04/23/92	15750	High Temp	17.20	48	28	8	2	3	11.80	2.6	300/ 15.2		4	1.90	3.10	4000	600	1.4	36.0	1	11.20	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
166	04/23/92	15750	High Temp	17.20	50	27	8	2	3	12.10	2.8	300/ 16.8	5	2.20	3.70	4000	600	1.4	36.0	1	8.80	/			
167	04/24/92	15750	High Temp	17.20	64	40	11	3	10	11.80	2.6	300/ 18.4	6	2.70	4.50	4000	480	0.8	36.0	1	10.00	/			
167	04/24/92	15750	High Temp	17.20	56	34	11	3	9	12.10	2.2	300/ 16.0	6	2.60	4.60	4000	720	1.0	36.0	1	10.00	/			
167	04/24/92	15750	High Temp	17.20	52	32	11	2	6	12.10	2.7	300/ 18.0	6	2.60	4.20	4000	580	1.4	35.0	2	10.00	/			
168	04/25/92	15750	High Temp	17.20	74	39	6	3	10	12.00	2.4	300/ 18.2	6	2.60	5.60	4000	560	1.3	35.0	2	10.00	/			
168	04/25/92	15750	High Temp	17.20	58	37	14	3	12	12.30	2.5	300/ 14.4	4	3.40	5.30	3500	920	1.1	36.0	2	8.80	/			
168	04/25/92	15750	High Temp	17.20	53	32	8	1	3	12.10	2.5	300/ 14.8	4	1.80	3.40	4000	560	1.2	35.0	2	8.80	/			
169	04/26/92	15750	High Temp	17.20	60	32	9	1	1	12.20	2.4	300/ 15.2	4	1.90	3.70	4000	580	1.2	35.9	1	8.50	/			
170	04/27/92	15750	High Temp	17.40	64	31	11	1	5	11.90	2.0	300/ 16.4	6	2.30	4.60	4000	560	1.1	36.0	2	8.50	/			
170	04/27/92	15750	High Temp	16.10		31	33	17	63	8.00	2.2	300/ 20.0	4		4.80	4000	600		32.0	20		/			
170	04/27/92	15750	High Temp	17.40	62	35	8	2	3	12.00	2.3	300/ 12.0	4	2.30	4.40	4000	480	0.9	36.0	4	8.80	/			
171	04/28/92	15750	THERMADRIL	17.40	58	32	6	1	3	12.10	2.2	300/ 15.8	4	2.40	5.40	4000	480	1.1	36.0	4	8.70	/			
171	04/28/92	15750	THERMADRIL	17.40	73	40	13	1	3	12.10	1.9	300/ 12.0	3	2.20	4.30	4000	540	1.2	36.0	4	8.70	/			
172	04/29/92	15750	THERMADRIL	17.40	79	37	9	1	3	12.00	2.0	300/ 13.6	4	2.40	4.10	4000	560	1.1	36.0	4	8.70	/			
172	04/29/92	15750	THERMADRIL	17.40	94	43	14	4	6	11.70	2.0	300/ 13.6	4	1.60	3.60	400	440	0.8	36.0	5	8.50	/			
172	04/29/92	15750	THERMADRIL	17.20	54	29	10	1	3	12.00	2.0	300/ 13.6	3	1.80	3.50	4000	460	0.8	36.0	3	8.70	/			
173	04/30/92	15750	THERMADRIL	17.20	53	30	7	3	5	12.00	1.9	300/ 13.0	4	1.70	3.60	4000	440	0.8	36.0	3	8.70	/			
173	04/30/92	15750	THERMADRIL	17.30	57	38	9	1	6	11.80	2.0	300/ 12.4	5	1.50	3.50	4000	440	0.7	35.0	4	11.30	/			
174	05/01/92	15750	THERMADRIL	17.30	57	36	9	2	3	11.70	1.8	300/ 12.5	4	1.20	3.20	5000	420	4.0	36.0	4	8.70	/			
174	05/01/92	15750	THERMADRIL	17.30	58	40	22	3	22	12.20	2.4	300/ 18.0	5	2.00	3.90	5000	720	0.9	36.0	4	8.50	/			
174	05/01/92	15750	THERMADRIL	17.30	62	35	12	2	2	11.80	2.4	300/ 13.2	4	1.50	3.30	4000	520	0.7	36.0	4	8.80	/			
175	05/02/92	15750	THERMADRIL	17.40	57	36	11	3	3	11.90	1.9	300/ 9.8	4	1.40	3.30	5500	480	0.8	36.5	4	8.50	/			
175	05/02/92	15750	THERMADRIL	17.40	65	33	12	1	2	12.00	2.8	300/ 15.0	5	1.60	3.30	4000	560	0.8	36.0	3	10.00	/			
176	05/03/92	15750	THERMADRIL	17.40	62	34	9	2	3	12.00	2.6	300/ 14.0	5	1.20	3.10	4500	460	0.9	36.5	3	9.00	/			
176	05/03/92	15750	THERMADRIL	17.40	80	42	15	1	9	11.70	2.7	300/ 15.6	3	1.30	3.30	4000	480	0.9	36.0	2	8.80	/			

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LINE	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
177	05/04/92	15750	THERMADRIL	17.40	65	36	14	3	3	11.90	2.0	300/ 14.0		3	1.20	3.40	4500	480	1.0	36.0	3	8.50	/		
177	05/04/92	15750	THERMADRIL	17.40	68	35	14	2	7	11.70	2.2	/		1	1.20	2.60	4000	500	0.9	36.0	2	10.00	/		
178	05/05/92	15750	THERMADRIL	17.40	66	38	16	3	8	11.90	1.8	/		1	1.10	2.30	4500	500	0.8	36.0	3	9.30	/		
178	05/05/92	13671	THERMADRIL	17.40	63	37	14	1	7	11.90		/		1	1.30	3.10	4000	520	0.9	36.0	2	10.00	/		
179	05/06/92	15750	THERMADRIL	17.30	65	38	15	2	3	11.85	2.0	/		4	1.10	2.80	4500	520	0.9	36.0	3	9.00	/		
179	05/06/92	15750	THERMADRIL	17.30	63	35	15	2	2	11.90	2.6	/		1	1.00	2.70	4000	480	0.8	36.0	2	10.00	/		
180	05/07/92	15750	THERMADRIL	17.35	62	32	14	2	3	11.80	2.4	/		1	1.00	2.50	4500	500	0.8	36.0	3	10.00	/		
180	05/07/92	15750	THERMADRIL	17.30	63	35	22	3	15	12.00	2.3	300/ 14.4		5	1.10	2.40	4500	480	0.8	36.0	2	10.00	/		
181	05/08/92	15750	THERMADRIL	17.30	68	40	38	6	35	12.00	2.8	300/ 19.0		6	1.10	2.80	4500	500	1.3	36.0	3	10.30	/		
181	05/08/92	15750	THERMADRIL	17.30	60	34	15	4	7	12.00	3.3	300/ 18.0		6	1.40	2.80	4400	600	1.3	36.0	2	10.00	/		
182	05/09/92	5685	THERMADRIL	17.30	62	36	21	2	16	12.10	2.4	300/ 14.0		6	1.10	2.70	5500	650	1.3	36.0	3	10.00	/		
182	05/09/92	5800	THERMADRIL	16.90	0	28	6	4	5	11.90	2.4	/		1	1.00	1.80	4800	580	0.5	34.0	1	10.00	/		BACKLOADED MUD FROM NORMAND PROSPER.
182	05/09/92	6100	THERMADRIL	17.30	63	34	27	5	30	12.70	4.5	300/ 17.2		6	3.00	4.30	5800	840	2.9	36.0	2	8.00	/		
183	05/10/92	6330	THERMADRIL	17.30	62	34	15	2	14	12.20	2.6	/		1	2.30	4.50	6000	800	3.0	36.0	2	9.00	/		
183	05/10/92	5460	THERMADRIL	17.30	63	38	35	4	31	12.80	3.7	/		7	3.00	5.30	6200	1000	3.3	36.0	2	9.00	0/		
184	05/11/92	13660	THERMADRIL	17.30	111	28	21	5	63	12.80	2.8	300/ 17.0		6	3.50	4.90	5800	520	4.6	35.0	2	9.00	/		
184	05/11/92	15750	THERMADRIL			21	11	3	5	12.00	2.5	300/ 17.0		5	2.30	4.50	5000	520	1.8	34.0		8.00	/		
184	05/11/92	6330	THERMADRIL	17.30	50	31	12	2	16	12.50	2.5	300/ 18.0		6	2.80	4.60	6000	400	4.6	36.0	2	8.00	/		
185	05/12/92	13660	High Temp	17.30	45	31	10	1	2	12.20	3.0	300/ 24.0		7	2.40	3.90	5000	420	2.2	34.0	1	8.50	/		
185	05/12/92	15750	High Temp	17.30	45	28	12	3	6	12.60	7.0	300/ 23.0		6	3.10	4.40	4700	600	3.1	34.0	1	8.50	/		
186	05/13/92	15750	High Temp	17.30	47	29	13	2	12	12.60	3.0	300/ 21.0		5	2.10	3.70	5000	440	2.9	35.0	1	9.00	/		PIT CHECK.
186	05/13/92	15669	High Temp	17.30	43	29	9	2	5		3.0	/								35.0	1		/		
186	05/13/92	15669	High Temp	17.30	43	26	3					/											/		
187	05/14/92	15669	High Temp	17.30	44	27	6	1	2	12.40	3.0	300/ 17.0		6	2.00	3.90	4700	300	1.5	35.0		9.00	/		
187	05/14/92	15669	High Temp	17.30	55	34	10	2	10	12.00	3.0	300/ 17.0		6	1.80	2.90	4700	440	1.6	35.0		11.00	/		

Well Name: EMBLA 2/7-27S  
API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
DRILLING MUD RECAP

PAGE 17

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S	10M	PH	API WL	HTHP TEMP	FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
188	05/15/92	15750	High Temp	17.30	48	31	19	3	15	12.10	2.4	/		1	1.40	2.70	5000	300	1.7	36.0	1	11.20	/		PIT CHECK
188	05/15/92	15750	High Temp	17.30	48	32	19	5	19	12.00	2.8	/		1	1.50	2.90	5000	400	1.6	35.0	1	11.50	/		PIT CHECK
189	05/16/92	15669	High Temp	17.30	55	26	12	4	9	12.30	2.0	/		1	1.90	3.60	4800	440	1.0	35.0	1	11.50	/		PIT CHECK
190	05/17/92	15750	High Temp	17.30	52	30	12	4	9	12.20	2.2	300/ 18.2		6	1.80	3.50	4800	440	1.1	35.0	1	11.50	/		PIT CHECK.
191	05/18/92	15558	High Temp	17.50	78	32	14	4	10	12.20	2.2	300/ 14.0		5	1.20	3.30	4800	480	0.6	36.0	1	12.00	/		
192	05/19/92	15750	High Temp	17.30	48	26	12	4	9	12.10	2.2	300/ 14.0		5	1.20	3.20	4800	440	0.7	35.0	1	12.00	/		PIT CHECK
193	05/20/92	15750	High Temp	17.30	47	26	13	4	9	12.10	2.2	300/ 14.2		5	1.30	3.30	4800	420	0.7	35.0	1	12.00	/		PIT CHECK
194	05/21/92	15750	High Temp	17.30	51	22	11	4	9	12.00	2.4	300/ 14.8		6	1.30	3.50	4800	480	1.0	35.0	1	12.00	/		PIT CHECK
195	05/22/92	14485	High Temp	17.30	47	24	9	4	9	12.10	2.2	300/ 14.6		6	1.30	3.30	4800	400	1.2	35.0	1	12.00	/		MUD CHECK RUN ON SAMPLE FROM BTM UP.
195	05/22/92	14485	High Temp	17.30	48	25	11	4	10	12.10	2.4	/		2	1.30	3.40	4800	400	1.2	35.0	1	12.00	/		
196	05/23/92	14480	High Temp	17.30	44	23	9	4	9	12.10	2.2	300/ 14.8		6	1.30	3.30	4800	440	1.2	35.0	1	12.00	/		MUD CHECK ON SAMPLE FROM BTM UP.
196	05/23/92	15480	High Temp	17.30	46	26	12	5	10	12.10	2.3	/		2	1.30	3.40	4800	400	1.2	35.0	1	12.00	/		PIT CHECK.
197	05/24/92	14478	High Temp	17.30	52	26	10	4	9	12.10	2.2	300/ 13.2		6	1.30	3.40	4800	400	1.2	35.0	1	12.00	/		PIT CHECK.
198	05/25/92	14499	High Temp	17.30	51	24	10	4	9	12.00	2.2	/ 0.0		2			4800	440	1.2	35.0	1	12.00	/		PIT CHECK
198	05/25/92	14490	High Temp	17.30	48	23	11	5	11	11.90	2.2	300/ 13.6		6			4800	400	1.2	35.0	1	12.00	/		
199	05/26/92	15750	High Temp	17.30	52	26	10	5	10	11.80	2.1	250/ 12.8		6	1.40	4.00	4800	440	1.2	35.0		12.00	/		
199	05/26/92	15750	High Temp	17.40	48	24	10	5	10	11.60	2.2	/			1.30	3.90	4800	400	1.2	35.0		12.00	/		
199	05/26/92	15750	High Temp	17.30	49	24	12	5	11	11.50	2.1	250/ 12.4			1.40	4.00	4800	440	1.2	35.0		12.00	/		
200	05/27/92	15750	High Temp	17.30	50	25	11	5	12	11.50	2.0	250/ 12.4		2	1.40	3.90	4800	440	1.2	35.0		11.00	/		
201	05/28/92	15750	High Temp	17.30	52	26	10	5	13	11.50	2.1	250/ 12.6		2	1.40	4.10	4800	400	1.2	35.0		11.00	/		
202	05/29/92	15750	High Temp	17.30	53	24	10	4	12	11.60		250/ 13.2					4800	400	1.2	35.0			/		
203	05/30/92	15750	High Temp	17.30	51	24	10	3	11	11.60	2.3	250/ 13.6		2	1.40	3.90	4800	440	1.0	35.0			/		
204	05/31/92	15750	High Temp	17.30	52	23	10	4	12	11.50	2.4	250/ 14.0			1.40	3.90	4800	400	1.0	35.0			/		
205	06/01/92	15750	High Temp	17.30	51	23	10	4	13	11.50	2.3	250/ 13.8		2	1.40	3.90	4800	400	1.0	35.0			/		

Well Name: EMBLA 2/7-27S  
 API NUMBER: NO

FIELD: EMBLA

PHILLIPS PETROLEUM COMPANY  
 DRILLING MUD RECAP

PAGE 18

REPT NO	DATE	DEPTH	TYPE	MW	VIS	PV	YP	GELS 10S/10M	PH	API WL	HTMP TEMP FL	FLT CKE	PF	MF	CL	CA	EXC LIME	S'LDS TOTAL	OIL %	MBT	O/W RATIO	ES	COMMENTS
206	06/02/92	15750	High Temp	17.30	53	24	10	4 13	11.50	2.2	250/ 14.0	2	1.30	4.00	4800	400	1.0	35.0			/		
207	06/03/92	15750	High Temp	17.40	52	23	10	4 12	11.50	2.3	250/ 14.4	2	1.30	3.90	4800	400	1.0	35.0			/		
208	06/04/92	15750	High Temp	17.30	43	27	10	2 7	11.20	2.6	300/ 12.0	2	0.70	3.20	5500	520	0.9	35.0	1		/		
209	06/05/92	15750	High Temp	17.30	48	22	10	3 10	12.00	2.8	300/ 12.0	3	0.70	2.00	5500	520		35.0			/		
210	06/06/92	15750	High Temp	17.30	49	22	10	3 10	11.40	3.0	300/ 12.5	1	0.50	1.70	5000	520	1.1	35.0		11.50	/		
211	06/07/92	15750	Native	17.30	49	25	12	2 11	11.20	3.0	300/ 18.0	1	0.60	2.00	6000	600	1.2	34.5	1	11.50	/		
212	06/08/92	15750	High Temp	17.30	48	22	14	3 11	11.30	3.0	300/ 18.0	1	0.60	2.10	6000	600	1.2	34.5	1	11.50	/		
213	06/09/92	15750	High Temp	17.30	48	26	15	3 20	11.20	3.0	350/ 17.2	6	0.60	2.00	6000	600		34.5	1	11.50	/		
214	06/10/92	15750	High Temp	17.30	45	23	12	3 15	11.40	3.6	/	1	0.50	1.80	6200	520		35.0		11.00	/		
214	06/10/92	15750	High Temp	17.50	24	24	13	3 38	11.20	4.0	350/ 22.0	6	0.50	1.90	6500	585		36.0	2	10.50	/		
215	06/11/92	15750	High Temp	17.50	59	32	26	2 4	12.20	4.0	/	1	0.50	1.90	7000	600		36.0	2	10.50	/		
215	06/11/92	15750	High Temp	17.50	51	31	24	2 43	11.20	4.0	350/ 21.0	6	0.30	1.80	7000	580		36.0	2	10.50	/		
216	06/12/92	15750	High Temp	17.50	47	25	12	2 10	11.30	4.2	350/ 22.0	6	0.40	1.70	7000	580	0.9	36.0	2	10.50	/		
217	06/13/92	14200	High Temp	17.50	50	33	29	9 65	11.30	5.0	300/ 27.0	8	0.50	1.90	7500	680	0.8	36.0	4	10.00	/		
217	06/13/92	13400	High Temp	17.50	49	32	17	6 34	11.10		/										/		
218	06/14/92	13170	High Temp	17.50	54	32	30	10 64	11.30	5.3	300/ 30.0	5	0.80	2.00	6500	680	1.0	35.0	4	10.00	/		
219	06/15/92	15750	High Temp	17.50	59	34	32	11 85	11.70	6.6	/	2	0.70	2.20	7000	720	1.1	35.0	2	10.00	/		
219	06/15/92	15750	High Temp	17.50	56	30	16	2 28	11.30	6.6	/	2	0.80	1.80	7000	720	1.4	35.0	2	10.00	/		
220	06/16/92										/										/		
221	06/17/92										/										/		