

DAILY DRILLING - WORKOVER LOG

GLO/069

LEASE / WELL

USA 11-36

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SPUDED May 15,

1980

ELEVATIONS: GND. _____ BH _____ DF _____ RDB _____

CASING RECORD

PIPE SIZE	HOLE	SEAT	F. C.	CEMENTING DATA: Sacks, Kind, etc.	
Conductor:					
Surface:					
Intermed:					
Oil String:					

DATE	DEPTH TODAY	FOOT-AGE	DEGREES OFF		MUD		REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.)
			DEG.	DEPTH	WT	VIS	
5-15	150	150			8.4	58	Rig up, mix mud, rig repairs, drilling to 150'.
5-16	325	175			8.5	45	Survey at 150', drilling, circulate, short trip, wait on Howco and casing crew, had three flats on Howco and casing crew truck, rig up to run 20" casing, ran three jts. of 20" casing stop, tried to work casing by bridge, POOH with casing, stood back and laid down 1 jt., made up 26" bit and TIH to 90'.
5-17	325	0			8.5	45	TIH and ream from 80' to 130', circulate and condition mud and wait on stab., POOH, pick up 26" steel stabilizer from 70' to 325', rig up and ran 8 joints of 20" 94# K55, set 320', circulate and rig up Howco and cement with 800 sacks Class G with 3% CaCl, cement in place at 9:45 p.m., waiting on cement.
5-18	325	0	0	150	8.8	57	Waiting on cement, cut off 20" and nipple up 20" hydrill, test to 200# on Hydrill and manifold, pick up bottom hole assembly and TIH to 314', tag cement, drilling cement and float shoe, circulate and condition mud, POOH to pick up stabilizer.
			0	300			
5-19	1585	1260	0	440	9.1	43	Drilling, ream from 1,536' to 1,576', short trip, circulate and survey.
			1/2	1020			
			1/2	1267			
			3/4	1513			
5-20	2199	614	3/4	1764	9.0	37	Drilling, trip for bit, survey.
			1/2	2039			
5-21	2634	435	1/2	2321	9.0	38	Drilling, survey and short trip.
5-22	2705	71			9.0	40	Drilling to depth of 2,705', circulate, POOH and TIH, clean up run - no fill, rig up to run 13 3/8" 61# casing, running 2,700' of 13 3/8" 61# K55 casing, B&W shoe on bottom, float collars at 2 jts. above shoe, circulate, prep. to cement job.
5-23	2705	0			9.0	42	Circulate, condition after getting casing to

DATE	DEPTH TODAY	FOOT-AGE	DEGREES OFF		MUD		REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.)
			DEG.	DEPTH	WT	VIS	
5-23							bottom, cementing 13 3/8 at 2,701' with 18 bbls of water ahead followed by 28 bbls. sepolite flush mixed 1,576 sacks of 1:1 pearlite, 40% SSA-1, .5% CFR-2, 3% gel, .1% HR7, .25# per sack Flocele, tail cement consisting of 185 sacks Class G, 40% SSA-1, .75 CFR2, .1% HR7, 25# per sack of Flocele, displace with 402 bbls. mud, bumped plug, recover 25% of the 100% excess to surface, cement did not fall back, in place at 4 a.m., waiting on cement, cut off 13 3/8 casing, set out 20" hydril, load out same, break cement sheath, orange peel 20" and 30", dress top of 13 3/8" casing, set on WKM.
5-24	2701	0			8.6	45	Weld on casing head and nipple up, change ram blocks in H&H gate as they were upside down, rebuild kill line and manifold line, run in test plug, test blind rams to 1,000 psi for 30 minutes in presence of USGS man at midnight
5-25	3136	436	1/2	2961	8.8	42	TIH to 2,603', tag cement, test pipe rams to 1,000# OK by USGS man, drill out shoe at 2,701', drilling, POOH after survey to change BHA, change BHA, TIH to 2,798', ream from 2,798' to 3,085' because of addition of stabilizers.
5-26	3683	546	1/2	3222	9.0	41	Drilling, survey.
			1/2	3467			
5-27	3891	208	3/4	3716	9.0	39	Drilling, survey & POOH, TIH to 2,778', reaming from 2,778' to 3,068', circulate and condition hole and mud, ream from 3,068' to 3,192'.
5-28	4185	294	1 1/2	3966	8.9	39	Ream and circulate 3,195' to 3,891', drilling, circulate and survey.
			1 1/2	4025			
			1 3/4	4149			
5-29	4294	109	1 1/2	4254	9.0	40	Drilling to 4,254', POOH, tight spot 3,590' to 2,860', TIH with new bit to 2,876', reaming from 2,876' to 4,254', drilling.
5-30	4630	340	1 3/4	4521	9.1	40	Drilling, reaming after short trip, short trip.
5-31	4957	327	2	4647			Drilling, trip, circulate and survey.
6-1	5300	343	4	5300	8.9	45	Drilling, short trips, circulate and survey.
6-2	5526	226	3 1/2	5420	8.9	40	Drilling, trip time, pooh and TIH for bit #8, reaming from 5,260' to 5,300', circulate and survey.
6-3	5832	306	3 1/2	5545	9.0	40	Drilling, circulate and survey, short trips.
			3	5669			
6-4	5976	144	3 1/2	5887	8.9	39	Drilling and survey with bit #8, POOH with bit #8, change stabilizers, dress reamer with new cutters, check jars and shock sub, pick up bit #9, TIH, drilling twisted off, POOH, left 12 1/2 reamer and bit

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CASING RECORD

PIPE SIZE	HOLE	SEAT	F. C.	CEMENTING DATA: Sacks, Kind, etc.
Conductor:				
Surface:				
Intermed:				
Oil String:				

DATE	DEPTH TODAY	FOOT-AGE	DEGREES OFF		MUD		REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.)
			DEG.	DEPTH	WT	VIS	
6-4							in hole due to failure of bit sub washed out, TIH to screw into fish at midnight.
6-5	6001	25			9.0	40	Fishing, TIH, circulate at fish, screw into fish, established circulation, pumped fish free, chain out, lay down fish, Magna-Flux drill collars and subs, picked up new BHA, TIH, checking tool joints on Hevi-wall, hit bridge at 5,877', spot reamed to TD, drilling, one of the mud pumps went down around midnight due to electrical short not able to run optimum hydraulics.
6-6	6062	61			8.9	39	Drilling with one mud pump due to electrical failure, POOH on even stands, dressed near bit reamer, changed out worn out drilling jars, partial TIH at midnight.
6-7	6160	98	1½	6098	8.9	45	TIH to 6,002', ream to 6,062', circulate and survey, drilling with bit #10 average 4.9'/Hr.
6-8	6280	120	NG	6280	9.0	45	Drilling, trip, circulate and survey.
6-9	6395	115			9.0	40	Trip for bit, ream after trip 6,240' to 6,280', drilling.
6-10	6528	103	1½	6528	8.9	39	Drilling, survey, POOH for bit and reamer cutter change.
6-11	6630	102			9.0	38	TIH to 6,452', reaming after trip, drilling.
6-12	6755	125			9.0	37	Drilling with Bit #12
6-13	6857	102	2½	6809	9.0	37	Drilling to 6,809', survey and POOH, _____ _____ TIH with Bit #13, stopped at 6,793', break circulation, washed out fill to 6,809', drilling to 6,857' at midnight.
6-14	7056	199			9.0	42	Drilling with Bit #13 and one pump.
6-15	7205	149	3½	7121	8.9	42	Drilling with Bit #13, POOH to change bit, survey.

DATE	DEPTH TODAY	FOOT-AGE	DEGREES OFF		MUD		REMARKS (Activity) (Formation) (D.S.T.) (Coring) (etc.)
			DEG.	DEPTH	WT	VIS	
6-16	7312	107			9.0	36	Finish POOH, change bit, RIH 11' fill, drilling with Bit #14.
6-17	7438	126	4 3/4	7363	9.0	37	Drilling with Bit #14, survey for direction.
6-18	7519	81	5 1/2	7546	8.9	38	Drilling with Bit #14, survey, POOH, change bit reamers and stabilizer, RIH - no fill, drilling with Bit #15.
6-19	7635	116	5 1/2	7550	9.0	40	Drilling, survey.
6-20	7737	102	4 3/4	7643	9.0	38	Drilling, survey.
			5	7733			
6-21	7809	72			9.0	35	Drilling, trip for Bit #16, POOH and TIH - no problems, cut off drilling line.
6-22	7924	115	5 1/2	7859	8.9	38	Drilling with Bit #16, survey at 7,859'.
6-23	8022	98	5 1/2	7952	8.9	39	Drilling with Bit #16, directional Wireline survey
			5 1/2	8044			
6-24	8144	122	5 1/2	8044	9.0	39	Drilling with Bit #16, survey.
			5 1/2	8137			
6-25	8258	114			9.06	46	Drilling, POOH for bit change, drop junk sub, pick up Bit #17, TIH to 8,161', circulate for trip.
6-26	8421	163	5 1/2	8258	9.0	38	Drilling, survey.
			5 3/4	8352			
6-27	8565	144	5 1/2	8444	8.9	32	Drilling, circulate and condition hole, survey dev.
			5 1/2	8565			
6-28	8565	0			9.0	37	POOH, short trip, TIH 35' fill, circulate and condition hole and mud, POOH to log, set back drill collars, run temp. surveys, stuck same on second run at 5,700', pulled line in two at key seat, making up four prong spear to fish wireline and instruments at midnight.
6-29	8565	0			9.0	40	TIH with spear, picking up wireline to 8,397' at 6:00, circulate, POOH, recovered all of fish. attempt to run electric logs - failed, repairing short in log line of Dresser Atlas, running DI, FL, BHC, AL, Cal at midnight.
6-30	8565	0			9.0	46	Finish electric log Dresser Atlas, CDL GR logs, running Pruitt Wireline Services, temp. surveys, both stops, and travers charts at midnight.

FIELD Am. 150 24 HR. PERIOD ENDING 12 Mid Night REPORT NO. 1
 LEASE 150 - 150 A.M. DATE 8-15-80 WELL NO. _____
 DATE SPURRED 5-15-80 DAYS SINCE SPURRED IN _____
 DEPTH 150' FORMATION 150' HOLE MADE 150 HRS. DRLG. _____
 MUD WT. 8.4 VIS. 52 WL _____ CHL _____ TYPE 150 LCM _____
 OIL _____ SD _____ PV _____ YP _____ SOLIDS _____ PH _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE	30	42	35	
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BOH = 26' Est; 24' Sect. 5-8' DC over.
Spurred @ 8-P.M. 8-15-80.

20 Hr. R.V. 150' 150'
1 Hr. Rig Again (Pock Sewel)
3 Hr. Data 150'

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>1 RR</u>	DEPTH OUT			
SIZE	<u>26</u>	DEPTH IN	<u>0</u>		
MAKE	<u>HTC</u>	FEET MADE	<u>150</u>		
TYPE	<u>OSBJ</u>	HRS. DRILLED	<u>5</u>		
SER. NO.	<u>OC-655</u>	WT. ON BIT	<u>5-20</u>		
NO. & SIZE JETS	<u>1</u>	REV. PER MIN.	<u>60</u>		
		CONDITION			
LINEK SIZE		GAL. PER MIN.			
LENGTH STROKE		AN. VEL.			
STROKES MIN.		JET VEL.			
PRESSURE		BIT H.P.			

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT! RIG NO. _____
 SIGNATURE _____

FIELD Grass Valley 24 HR. PERIOD ENDING _____ REPORT NO. 2
 LEASE USR A.M. DATE 5-16-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN _____ WELL NO. 1126
 DEPTH 325 FORMATION St. + 1000' HOLE MADE 175 HRS. DRLG. 78
 MUD WT. 8.5 VIS. 45 WL _____ CHL _____ TYPE _____ LCM _____
 OIL _____ SD _____ PV _____ YP _____ SOLIDS _____ pH _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS:

1/4 hr Survey @ 150
7³¹4 hrs. Drilling
10 min. Circ. & Lost Trip. w/obscure & casing 100'
Had 3 flats on casing & casing 100' thick.
5 1/4 hrs. (1) to form 20" casing 3 jets 120"
Casing stop, tried to work inside for 10 min.
0 POOH w/ casing stand. Back & used 100'
3/4 hr. Made up 26" bit & T.I.N. to 90'

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$			TO DATE \$		
WELL COST PREVIOUS \$	TODAY \$			TO DATE \$		
BIT NO.	<u>RR</u>	DEPTH OUT	<u>325</u>			
SIZE	<u>26</u>	DEPTH IN	<u>0</u>			
MAKE	<u>NTC</u>	FEET MADE	<u>325</u>			
TYPE	<u>OS3AS</u>	HRS. DRILLED	<u>10314</u>			
SER. NO.		WT. ON BIT	<u>520</u>			
NO. & SIZE JETS	<u>3</u>	REV. PER MIN.	<u>60</u>			
		CONDITION				
LINER SIZE		GAL. PER MIN.				
LENGTH STROKE		AN. VEL.				
STROKES/MIN.		JET VEL.				
PRESSURE		BIT H.P.				

DRILLING CONTRACTOR: FILL IN ON FIRST AND LAST REPORT

RIG NO.

SIGNATURE

DAILY DRILLING REPORT

FIELD Gross Valley 24 HR. PERIOD ENDING _____ REPORT NO. 3
 LEASE USA 11-36 A.M. DATE 11-12-81
 DATE SPURRED 11-15-81 DAYS SINCE SPURRED IN _____ WELL NO. _____
 DEPTH 225 FORMATION _____ HOLE MADE _____ HRS. DRLG. _____
 MUD WT. 8.5 VIS. 45 WL _____ CHL _____ TYPE _____ LCM _____
 OIL _____ SD _____ PV _____ YP _____ SOLIDS _____ pH _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS:
 9 1/2 Hr. T.I.H + Run from 80' - 130'
 2 Hr. Cir + Run Head + w.o. stab.
 3 Hr. 400# P.V. 26" steel stab from 70' - to 325'
 4 1/2 Hr. R.V. & Run 8 JT i- 20" 44# K55
 set 320'
 2 Hr. Cir + Run Nouse - + Cut w/ 400# Cir - B
 w/ 3% cut in 2 case a 9:45 PM
 2 Hr. W.O.C.

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ | TODAY \$ _____ | TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ | TODAY \$ _____ | TO DATE \$ _____

BIT NO.		DEPTH OUT	
SIZE		DEPTH IN	
MAKE		FEET MADE	
TYPE		HRS. DRILLED	
SER. NO.		WT. ON BIT	
NO. & SIZE JETS		REV. PER MIN.	
		CONDITION	
LINER SIZE		GAL. PER MIN.	
LENGTH STROKE		AN. VEL.	
STROKES. MIN.		JET VEL.	
PRESSURE		BIT H.P.	

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD USA 11-36 24 HR. PERIOD ENDING _____ REPORT NO. 2
 LEASE USA 11-36 A.M. DATE 5-15-80
 DATE SPUNDED 5-15-80 DAYS SINCE SPUNDED IN 2
 DEPTH 325 FORMATION _____ HOLE MADE _____ HRS. DRLG. _____
 MUD WT. 8.8 VIS. 57 WL 35 CHL 3 TYPE _____ LCM _____
 OIL _____ SD _____ PV 1 YP 21 SOLIDS _____ pH 11.5

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
<u>150</u>			<u>0°</u>	DRIVE				
<u>300</u>			<u>0°</u>	CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: ROH - Bit-F.S.-S.S.- 9-8" D.C. - 1000.
8 Hr. U.I.O.C.
11 Hr. Cut off 20" = 11.5. 20" R.D. Drill
1/2 Hr. Test 1/16 200# on R.D. Drill + 1/2 Hr. 1/16
1/2 Hr. R.D. Cut + T.I.H.T. 314' Test Cont.
2 Hr. D.R. Cont + First Show in 1/2 Hr. Mud.
1 Hr. P.O.H. in R.D. 5 Hr.

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$			TO DATE \$		
WELL COST PREVIOUS \$	TODAY \$			TO DATE \$		
BIT NO.	<u>2</u>	DEPTH OUT				
SIZE	<u>1 7/8</u>	DEPTH IN	<u>325</u>			
MAKE	<u>HTC</u>	FEET MADE				
TYPE	<u>OSG 1K</u>	HRS. DRILLED				
SER. NO.	<u>111 278</u>	WT. ON BIT				
NO. & SIZE JETS	<u>3-20"</u>	REV. PER MIN.				
		CONDITION				
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>750</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>600-76</u>			
STROKES MIN.	<u>120</u> <u>2 pumps</u>	JET VEL.				
PRESSURE	<u>750</u>	BIT H.P.				

DRILLING CONTRACTOR - FILL IN ON FIRST AND LAST REPORT! RIG NO. _____
 SIGNATURE _____

FIELD GRASS VALLEY 1260 24 HR. PERIOD ENDING _____
 LEASE USA
 DATE SPUNDED 5-15- DAYS SINCE SPUNDED IN _____
 DEPTH 1585 FORMATION sand-clay HOLE MADE 1260 HRS. DRLG. 20
 MUD WT. 7.1 VIS. 43 WL 21 CHL 100 TYPE 92 LCM _____
 OIL _____ SD 1 PV 11 YP 25 SOLIDS 4.5 PH 9

REPORT NO. 5
 A.M. DATE 11-19-36
 WELL NO. 11-36

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
440	0			DRIVE				
1020	1/2			CONDUCTOR				
1267	1/2			SURFACE				
1513	3/4			INTERMED.				
				OTHER				

REMARKS: BHA bit sub, shock sub, IDC, stab, IDC, stab
10 DC lower

20 hr dalg
1 hr return 1536 to 1576
1 hr short trip
2 hr circ + survey

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>2</u>	DEPTH OUT	
SIZE	<u>1 7/8</u>	DEPTH IN	<u>325</u>
MAKE	<u>HTC</u>	FEET MADE	
TYPE	<u>OSC 16J</u>	HRS. DRILLED	
SER. NO.	<u>VV 378</u>	WT. ON BIT	<u>15-20</u>
NO. & SIZE JETS	<u>3-20</u>	REV. PER MIN.	<u>65</u>
		CONDITION	
LINER SIZE	<u>0</u>	GAL. PER MIN.	<u>650</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>59-68</u>
STROKES/MIN.	<u>108</u>	JET VEL.	
PRESSURE	<u>1000</u>	BIT H.P.	<u>63 1/2</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____

SIGNATURE _____

FIELD Cross Valley 24 HR. PERIOD ENDING Midnight REPORT NO. 6
 LEASE 13A A.M. DATE 5-20-80 WELL NO. 36-11
 DATE SPUDDED 5- DAYS SINCE SPUDDED IN _____
 DEPTH 2199 FORMATION Sd - Green - Grand HOLE MADE 614 HRS. DRLG. 20
 MUD WT. 9.0 VIS. 32 WLC 25 CHL 200 TYPE 6el LCM _____
 OIL _____ SD 1/2 PV 6 YP 21 SOLIDS 4.8 PH 9

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
1764	3/4°			DRIVE	20	26	320	
2039	1/4°			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA. Some

20 Hr. Dily.
3 Hr. Trip for Bit
1 Hr. Survey

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$			TO DATE \$		
WELL COST PREVIOUS \$	TODAY \$			TO DATE \$		
BIT NO.	<u>20</u>	<u>3</u>	DEPTH OUT	<u>1857</u>		<u>1</u>
SIZE	<u>17 1/2</u>	<u>17 1/2</u>	DEPTH IN	<u>325</u>		<u>1857</u>
MAKE	<u>HTC</u>	<u>See</u>	FEET MADE	<u>1532</u>		<u>342</u>
TYPE	<u>MSC 3163</u>	<u>M 44N</u>	HRS. DRILLED	<u>26 1/2</u>		<u>12</u>
SER. NO.	<u>VV 378</u>	<u>859910</u>	WT. ON BIT	<u>20</u>		<u>20</u>
NO. & SIZE JETS	<u>3-20</u>	<u>3-20</u>	REV. PER MIN.	<u>70</u>		<u>70</u>
LINER SIZE	<u>6</u>		CONDITION	<u>2-2-1A</u>		
LENGTH STROKE	<u>16</u>		GAL. PER MIN.	<u>600</u>		
STROKES/MIN.	<u>108</u>		AN. VEL.	<u>59-69</u>		
PRESSURE	<u>1000</u>		JET VEL.			
			BIT H.P.	<u>21 per Min.</u>		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____

SIGNATURE _____

DAILY DRILLING REPORT

FIELD LUCY GRASS VALLEY 24 HR. PERIOD ENDING Midnight REPORT NO. 7
 LEASE USA A.M. DATE 5-21-80
 DATE SPUDDED 5-15-80 WELLS NO. 11-36
 DEPTH 2634 FORMATION SAND-CLOY DAYS SINCE SPUDDED IN 6
 MUD WT. 9.0 VIB. 38 #L 25 CHL 200 TYPE 256 MRS. DRLG. 23
 OIL - SD 2 PV 15 YP 26 SOLIDS 48 M 9.2

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
<u>2621</u>			<u>1/4</u>	DRIVE			
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>
				SURFACE			
				INTERMED.			
				OTHER			

REMARKS: BHA: SAME AS BEFORE

23 HRS. DRLG.
1 HRS. SURVEY AND SHORT TRIP.

TEMP: TEMPERATURE 122°
SECTION 119°
DEPTH: 2705 GIDAM
5-22-80

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO. <u>5</u>	DEPTH OUT <u>INC</u>
SIZE <u>1 1/2</u>	DEPTH IN <u>1857</u>
MAKE <u>SECURITY</u>	FEET MADE <u>777</u>
TYPE <u>HARIN</u>	MRS. DRILLED I <u>35.5</u>
SER. NO. <u>85910</u>	WT. ON BIT <u>30</u>
NO. & SIZE JETS <u>3 20</u>	REV. PER MIN. <u>60</u>
	CONDITION <u>INC</u>
LINER SIZE <u>6</u>	GAL. PER MIN. <u>750</u>
LENGTH STROKE <u>16</u>	AN. VEL. <u>67 1/2 76 1/2</u>
STROKES MIN. <u>120</u>	JET VEL. <u>-</u>
PRESSURE <u>1300</u>	BIT W.P. <u>197 1/2</u>

LISTENING CONTRACTOR WILL SIGN ON FIRST AND LAST REPORT

SIGNATURE [Signature] 2

FIELD W/O GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO. 822
 LEASE USA A.M. DATE 5-25-80
 DATE SPUNDED 5-15-80 DAYS SINCE SPUNDED IN 7 WELL NO. 11-56
 DEPTH 2705 FORMATION SAND-SHALE HOLE MADE 71 HRS. DRLG. 6
 MUD WT. 9.0 VIS. 40 WL. 25 CHL. 200 TYPE CEL LCM. 6
 OIL - SD. .5 PV. 11 YP. 26 SOLIDS 4.5 M. 92

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE				
				CONDUCTOR	<u>20</u>	<u>2 1/2</u>	<u>320</u>	
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS BEFORE

6 HRS: DRILLING TO DEPTH OF 2705

3 HRS: CIRC

2 HRS: POOH AND TIR CLEAN UP RUN NO FILL

2 HRS: RIG UP TO RUN 13 3/8" 61# CSG.

9 HRS: RUNNING 2700' OF 13 3/8" 61# K-55 CSG. BAW SHOE ON BOTTOM, FLOAT COLLARS AT 2 JTS ABOVE SHOE.

2 HRS: CIRC, PREP TO CEMENT JOB

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>3</u>	DEPTH OUT	<u>2705</u>			
SIZE	<u>17 1/2</u>	DEPTH IN	<u>1857</u>			
MAKE	<u>SEC</u>	FEET MADE	<u>848</u>			
TYPE	<u>HYDIN</u>	HRS. DRILLED	<u>41</u>			
SER. NO.	<u>859910</u>	WT. ON BIT	<u>20/30</u>			
NO. & SIZE JETS	<u>20-20-20</u>	REV. PER MIN.	<u>80</u>			
		CONDITION	<u>1-7- IN</u>			
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>750</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>67 DP - 76 DC</u>			
STROKES/MIN.	<u>120</u>	SETTEL.				
PRESSURE	<u>1300</u>	DISCH. P.	<u>12 FT/HR</u>			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE [Signature] IRIG NO. 2

DAILY DRILLING REPORT

FIELD: WC / GRASS Valley 24 HR. PERIOD ENDING _____
 LEASE: USA A.M. DATE: 5-23-8
 DATE SPUNDED _____ DAYS SINCE SPUNDED IN 8 WELL NO. 11-26
 DEPTH: 2705 FORMATION: clay + sand HOLE MADE _____ HRS. DRLG. _____
 MUD WT. 9.0 VIS. 42 WL 20 CHL 200 TYPE Hel LCM _____
 OIL _____ SD 15 PV 12 YP 16 SOLIDS 4.5 PH 9.2

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE	20	26	320	
				CONDUCTOR				
				SURFACE	13 3/8	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: 1 HR Circ, cont after getting csg to btwn.
 3 HR Cementing 13 3/8" at 2701' with
 18 bbls of water ahead followed by
 28 bbls of separate flush mixed
 1576 sx of 1110 Pearlite, 40% SSA
 .5% CFR-2, 3% Sel, .1% HR-7,
 .25 # per sack 7 locale
 tail cont consisting of 185 sx
 class B, 40% SSA-1, .75 CFR 2,
 .1% HR 7, 25 #/sack of 7 locale
 Displace w 402 bbls mud, bumper
 plug, recover 25% of the 100%
 excess to surface cont did not
 fall bench, in place at 4:10
 12 HR WOC
 8 HR cut off 13 3/8" csg, set out 20"
 hydrol load out same break cont
 sheath, orange peel 20" + 30",
 drew up of 13 3/8" csg. set on WK at

NUMBER OF COMPRESSORS _____	DISCHARGE PRESSURE _____	VOLUME OF AIR _____	CFM _____
MUD COST PREVIOUS \$ _____	TODAY \$ _____	TO DATE \$ _____	
WELL COST PREVIOUS \$ _____	TODAY \$ _____	TO DATE \$ _____	
BIT NO. _____	DEPTH OUT _____		
SIZE _____	DEPTH IN _____		
MAKE _____	FEET MADE _____		
TYPE _____	HRS. DRILLED _____		
SER. NO. _____	WT. ON BIT _____		
NO. & SIZE JETS _____	REV. PER MIN. _____		
	CONDITION _____		
LINER SIZE <u>6</u>	GAL. PER MIN. <u>410</u>		
LENGTH STROKE <u>16</u>	AN. VEL. <u>881</u>		
STROKES/MIN. <u>65</u>	JET VEL. _____		
PRESSURE <u>580</u>	BIT H.P. _____		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. 2
 SIGNATURE _____

DAILY DRILLING REPORT

10
5-24-84
11-36

LEASE USA WELL NO. 11-36
 DATE SPUDDED _____ DAYS SINCE SPUDDED IN 9
 DEPTH 270' FORMATION Clay + Sand HOLE MADE 0 HRS. DRLG. 0
 MUD WT. 8.6 VIS. 45 WL 40 CHL 200 TYPE Gel LCM _____
 OIL _____ SD .5 PV 11 YP 16 SOLIDS 3.2 pH 12.2

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: 21 HRS - Weld on casing head + make up
 chg row blocks in H + H gate
 as they were upscale down,
 rebuild of hill line + manifold
 line,
3 HRS Run in test plug test blend
 runs to 1000 PSI for 30 min
 in presence of WGS man.
 at midnight

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.		DEPTH OUT			
SIZE		DEPTH IN			
MAKE		FEET MADE			
TYPE		HRS. DRILLED			
SER. NO.		WT. ON BIT			
NO. & SIZE JETS		REV. PER MIN.			
		CONDITION			
LINER SIZE	<u>6</u>	GAL. PER MIN.			
LENGTH STROKE	<u>16</u>	AN. VEL.			
STROKES/MIN.		JET VEL.			
PRESSURE		BIT H.P.			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) 2 RIG NO. 2
 SIGNATURE J.R.

DAILY DRILLING REPORT

FIELD WVC/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 A.M. DATE 5-25-80 REPORT NO 11
 LEASE USA WELL NO. 11-36
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 10
 DEPTH 3136 FORMATION CLAYSTONE HOLE MADE 436 HRS. DRG. _____
 MUD WT. 8.8 VIS 42 WL 30 CHL 150 TYPE GEL LCM -
 OIL _____ SD 5 PV 13 YP 19 SOLIDS 3.2 W 11.3

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
<u>2961</u>			<u>1/2°</u>	DRIVE				
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>15 1/2</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS: BHA; BIT, BIT SUB, SHOCK SUB, 12-8" DC, XD

5 HRS: T1H TO 2603' TAG CEMENT, TEST PIPE RANS TO 1000' OK BY USGS MAN. DRILL OUT SHOE AT 2701'

9 HRS: DRILLING

4 HRS: POOH, AFTER SURVEY TO CHANGE BHA

2 HRS: CHANGE BHA

4 HRS: T1H TO 2798', REAM FROM 2798-3035. BECAUSE OF ADDITION OF STABILIZERS.

MIDNIGHT P.OOH
5-26-80

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>4</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>2700</u>
MAKE	<u>REED</u>	FEET MADE	<u>436</u>
TYPE	<u>FD-51</u>	HRS. DRILLED	<u>6</u>
SER. NO.	<u>900401</u>	WT. ON BIT	<u>15/20</u>
NO. & SIZE JETS	<u>16/16 No</u>	REV. PER MIN.	<u>90</u>
		CONDITION	<u>100</u>

LINER SIZE 6 GAL. PER MIN. 687
 LENGTH STROKE 16 AN. VEL. 134' / MIN DP 195' / MIN DC
 STROKES/MIN. 109 JET VEL. _____
 PRESSURE 1800 BIT H.P. 48 FT/HR

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE [Signature] RBH 2

DAILY DRILLING REPORT

FIELD NE1 GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT A.M. DATE 5-26-12
 LEASE USA WELL NO. 11-36
 DATE SPUDED _____ DAYS SINCE SPUDED IN 11
 DEPTH 5623 FORMATION CLAYSTONE HOLE MADE 546 HRS. DRLG. 27
 MUD WT. 9 VIS. 41 WL 26 CHL 150 TYPE Gel LCM _____
 OIL _____ SD .5 PV 18 YP 20 SOLIDS 4.8 pH 10.4

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
<u>3222</u>			<u>1/4°</u>	DRIVE				
<u>3467</u>			<u>1/4°</u>	CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA: Bit, bit sub, ss, 1 DC, stab, 1 DC, stab, 10 DC's @ x0

27 HRS only
1 HR survey

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>4</u>	DEPTH OUT	<u>Done</u>
SIZE	<u>12 1/4</u>	DEPTH IN	<u>2700</u>
MAKE	<u>Reed</u>	FEET MADE	<u>983</u>
TYPE	<u>FP51</u>	HRS. DRILLED	<u>27</u>
SER. NO.	<u>900 YD1</u>	WT. ON BIT	<u>20-25, 500</u>
NO. & SIZE JETS	<u>3 16's</u>	REV. PER MIN.	<u>90</u>
		CONDITION	<u>Good</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>695</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>DP-126' min 197-DC</u>
STROKES/MIN.	<u>110</u>	JET VEL.	
PRESSURE	<u>1800</u>	BIT # - RATE	<u>28' / HR</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. 2
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD LEACH H.S. (Jones Valley) 24 HR. PERIOD ENDING _____
 LEASE USA REPORT NO. 13
 A.M. DATE 5-27-80
 WELL NO. 11-36
 DATE SPUDDED _____ DAYS SINCE SPUDDED IN _____
 DEPTH 3871 FORMATION Waxstone HOLE MADE 208 HRS. DRLG. 10
 MUD WT. 9.0 VIS. 3.7 WL 19 CHL 125 TYPE see LCM _____
 OIL _____ SD 1 PV 7 YP 14 SOLIDS 4.6 PH 10.4

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
3716	3/4			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA bit near bit 3rd reamer, stuck with 1 DC
stab, 1 DC stab 10 DC lower 12 jts hoist

10 hrs dily
4 hrs survey + POOH
1 TH to 2773
5 hr reaming 2778 to 3068
1 hr circ cold hole + mud
1 hr ream 3069 to 3192

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>4</u>	DEPTH OUT	<u>3871</u>		
SIZE	<u>12/4</u>	DEPTH IN	<u>2701</u>		
MAKE	<u>REED</u>	FEET MADE	<u>1190</u>		
TYPE	<u>FP51</u>	HRS. DRILLED	<u>43</u>		
SER. NO.	<u>9004D1</u>	WT. ON BIT	<u>20</u>		
NO. & SIZE JETS	<u>3-16</u>	REV. PER MIN.	<u>70</u>		
		CONDITION	<u>3-4-3/16</u>		
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>630</u>		
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>123/179</u>		
STROKES/MIN.	<u>100 (2 pumps)</u>	JET VEL.			
PRESSURE	<u>1900</u>	BIT H.P.	<u>21 FT/HR</u>		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD LEACH H.S 24 HR. PERIOD ENDING _____
 LEASE USA REPORT NO. 14
 DATE SPUDDED _____ A.M. DATE 5-25-60
 DEPTH 4125 FORMATION crystalline HOLE MADE 294 HRS. DRLG. 19
 MUD WT. 8.9 VIS. 2.0 WL 15 CHL 100 TYPE gal LCM _____
 OIL _____ SD 1/4 PV 6 YP 7 SOLIDS 4.1 PH 10

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
3966	1 1/4			DRIVE				
4025	1 1/4			CONDUCTOR				
4149	1 3/4			SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BAA ditto
3 1/2 ream+circ 3195 to 3391
19 dily
1 1/2 circ & survey

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>S</u>	DEPTH OUT		DEPTH IN	<u>3391</u>
SIZE	<u>12 1/4</u>	FEET MADE	<u>294</u>	HRS. DRILLED	<u>19</u>
MAKE	<u>HTC</u>	WT. ON BIT	<u>25</u>	REV. PER MIN.	<u>60</u>
TYPE	<u>22</u>	CONDITION	<u>INC</u>		
SER. NO.	<u>866W</u>	LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>616 630</u>
NO. & SIZE JETS	<u>3-16</u>	LENGTH STROKE	<u>16</u>	AN. VEL.	<u>123/129</u>
		STROKES/MIN.	<u>100</u>	JET VEL.	<u>1800</u>
		PRESSURE	<u>1800</u>	BIT H.P.	<u>15</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD Brass Valley 24 HR. PERIOD ENDING Midnight REPORT NO. 15
 LEASE USA 10-36 A.M. DATE 5-29-80 WELL NO. _____
 DATE SPUDDED 14 DAYS SINCE SPUDDED IN _____
 DEPTH 4294 FORMATION Siltstone sandstone SOLE MADE 109 HRS. DRIG. 13
 MUD WT. 9.0 VIS. 90 WL 14 CHL 100 TYPE Gel LCM _____
 OIL _____ SD 14 2/3 PV 2 YP 12 SOLIDS 9.8 PH 10.9

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
4254	1 1/2			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: B.H.A. Bit - Ream - S.S. - 1-8" DC - stab - -1-8" DC -
stab - 10-8" DC. xoul. Jow - H.W.

12 Hr. Drlg to 4254'
 4 Hr. P 80 H - Tight Spot - 3590' - 2860'
 3 Hr. T I H w/ New Bit to 2876' - 0
 4 Hr. Reaming from 2876 - 4254 (Spotted)
 1 Hr. Drlg

Temp - 140° - 135°

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>5</u>	<u>6</u>	DEPTH OUT	<u>4254</u>		
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>3891</u>	<u>4254</u>	
MAKE	<u>HTC</u>	<u>HTC</u>	FEET MADE	<u>363</u>	<u>20</u>	
TYPE	<u>J 22</u>	<u>J-33</u>	HRS. DRILLED	<u>26 1/4</u>	<u>1</u>	
SER. NO.	<u>866 W</u>	<u>BR 995</u>	WT. ON BIT	<u>25</u>	<u>25/35</u>	
NO. & SIZE JETS	<u>16's</u>	<u>16's</u>	REV. PER MIN.	<u>50</u>	<u>50</u>	
LINER SIZE	<u>6</u>		CONDITION	<u>J-S-IN</u>		
LENGTH STROKE	<u>16</u>		GAL. PER MIN.	<u>630</u>		
STROKES/MIN.	<u>100</u>		APR VEL.	<u>123-179</u>		
PRESSURE	<u>1700</u>		JET VEL.			
			BIT H.P.	<u>8.3 FPM</u>		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

FIELD LEACH H.S 24 HR. PERIOD ENDING _____
 LEASE USA REPORT NO. 10
 DATE SPUDDED 4/2 DAYS SINCE SPUDDED IN 15 A.M. DATE 5-30
 DEPTH 4630 FORMATION sandstone HOLE MADE 340 WELL NO. 11-36
 MUD WT. 9.1 VIS. 7.0 WL 10 CHL 100 TYPE gal LCM _____
 OIL _____ SD 4 PV 8 YP 12 SOLIDS 5 PH 7.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
4521	13/4			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA ditto 529.80'

22 1/2 hrs delo
1 removal after short trip
1/2 short trip

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$		TO DATE \$		
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$		TO DATE \$		
BIT NO.	<u>6</u>	DEPTH OUT	<u>4250</u>			
SIZE	<u>12/4</u>	DEPTH IN	<u>4250</u>			
MAKE	<u>HTC</u>	FEET MADE	<u>376</u>			
TYPE	<u>3-33</u>	HRS. DRILLED	<u>22 1/2</u>			
SER. NO.	<u>BR 995</u>	WT. ON BIT	<u>25</u>			
NO. & SIZE JETS	<u>3-16</u>	REV. PER MIN.	<u>50</u>			
		CONDITION				
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>630</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>123/179</u>			
STROKES/MIN.	<u>100</u>	JET VEL.				
PRESSURE	<u>1600</u>	BIT H.P.	<u>15</u>			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____

SIGNATURE _____

DAILY DRILLING REPORT

FIELD LEACH H.S 24 HR. PERIOD ENDING _____ REPORT NO. 17
 LEASE USA A.M. DATE 5-31
 DATE SPUDED _____ DAYS SINCE SPUDED IN 16 WELL NO. 11-36
 DEPTH 4957 FORMATION sand & basalt HOLE MADE 327 HRS. DRLG. 15
 MUD WT. _____ VIS. _____ WL _____ CHL _____ TYPE _____ LCM _____
 OIL _____ SD _____ PV _____ YP _____ SOLIDS _____ pH _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
4647	2			DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA bit bit sub, near bit reamer, shock sub, 1 D.C., stab,
1 D.C., stab 10 D.C., cover up + dn dily gear
15 hrs drlg
8 trip
1 circ & survey

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>6</u>	<u>7</u>	DEPTH OUT	<u>4730</u>		
SIZE	<u>HTC 1 1/4</u>	<u>1 1/4</u>	DEPTH IN	<u>4254</u>	<u>4730</u>	
MAKE	<u>HTC</u>	<u>Smith</u>	FEET MADE	<u>476</u>	<u>227</u>	
TYPE	<u>J-33</u>	<u>F-3</u>	HRS. DRILLED	<u>31</u>	<u>9 1/4</u>	
SER. NO.	<u>BR 995</u>	<u>046 TX</u>	WT. ON BIT	<u>25</u>	<u>25</u>	
NO. & SIZE JETS	<u>3-16</u>	<u>3-16</u>	REV. PER MIN.	<u>50</u>	<u>50</u>	
			CONDITION	<u>3-4-in</u>		
LINER SIZE	<u>6</u>		GAL. PER MIN.	<u>630</u>		
LENGTH STROKE	<u>16</u>		AN. VEL.	<u>123/179</u>		
STROKES/MIN.	<u>100</u>		JET VEL.			
PRESSURE	<u>1600</u>		BIT H.P.	<u>15.4</u>	<u>24.5</u>	

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD W.C. / GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO B
 LEASE LISA A.M. DATE 6-1-86
 DATE SPUDED 5-15-86 DAYS SINCE SPUDED IN 17 WELL NO 11-36
 DEPTH 5300 FORMATION DAVOLT HOLE MADE 343 HRS. DRLG. 21 3/4
 MUD WT. 8.9 VIS. 45 WL 12 CHL. 100 TYPE SEALED LCM
 OIL - SD 0.25 PY 6 YP 6 SOLIDS 40 # 10

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
5300			4°	CONDUCTOR	20	26	326	
				SURFACE	13 1/2	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS BEFORE

21 3/4 HRS: DRLG
1 HRS: SHORT TRIPS
1 1/4 HRS CIRC AND SURVEY

DEPTH AT 6:00 AM 5309

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>1</u>	DEPTH OUT	<u>2500</u>			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>4930</u>			
MAKE	<u>SMITH</u>	FEET MADE	<u>570</u>			
TYPE	<u>F-3</u>	HRS. DRILLED	<u>52</u>			
SER. NO.	<u>04877</u>	WT. ON BIT	<u>25</u>			
NO. & SIZE JETS	<u>16-16-16</u>	REV. PER MIN.	<u>60</u>			
LINER SIZE	<u>6</u>	CONDITION	<u>6-4 IN</u>			
LENGTH STROKE	<u>16</u>	GAL. PER MIN.	<u>650</u>			
STROKES/MIN.	<u>100</u>	AN. VEL.	<u>123.00 - 179.00</u>			
PRESSURE	<u>1700</u>	JET VEL.	<u>-</u>			
DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT		BIT H.P.	<u>15.7 F/IN.</u>			
		IRIG NO	<u>2</u>			

RBH

FIELD LEACH T.S. 24 HR. PERIOD ENDING _____ REPORT NO. 18
 LEASE USA A.M. DATE 5-2
 DATE SPURRED _____ DAYS SINCE SPURRED IN 17
 DEPTH 5300 FORMATION conglomerates HOLE MADE 343 HRS. DRLG. 21 3/4
 MUD WT. 8.9 VIS. 45 WL 17 CHL 100 TYPE gu & alg LCM _____
 OIL _____ SD 1/4 PV 6 YP 6 SOLIDS 40 PH 10

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
<u>5300</u>	<u>4</u>			DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: 21 3/4 data
1 short trips
1/4 circ & survey

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>2</u>	DEPTH OUT	<u>5300</u>			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>4730</u>			
MAKE	<u>Smith</u>	FEET MADE	<u>570</u>			
TYPE	<u>F-3</u>	HRS. DRILLED	<u>32</u>			
SER. NO.	<u>048TX</u>	WT. ON BIT	<u>25</u>			
NO. & SIZE JETS	<u>3-16</u>	REV. PER MIN.	<u>60</u>			
		CONDITION	<u>6-4 in</u>			
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>630</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>123/179</u>			
STROKES/MIN.	<u>100</u>	JET VEL.				
PRESSURE	<u>1000</u>	BIT H.P.	<u>15.7</u>			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____

SIGNATURE _____

FIELD WC - GRACE VALLEY HR. PERIOD ENDING 12 MID A.M. DATE 6-2-80
 LEASE USA WELL NO. 11-34
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 18
 DEPTH 3526 FORMATION GRANITE HOLE MADE 224 HRS. DRLG. 18
 MUD WT. 8.9 VIS. 10 WL 15 CHL 150 TYPE CLAY-SEPIOLITE
 OIL SD .25 PV 5 YP 5 SOLIDS 4 PH 11.0

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
<u>5700</u>			<u>3' 1/2</u>	CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS: ~~123~~ BHA: SAME AS 6180
 18 hrs drilling
 5 hrs TRIP TIME, POOH & TIE FOR
 BIT #8
 1/2 1/2 REAMING FROM 5260 TO 5300
 1/2 CIRC. + SURVEY

(5571 FT. AT 4 AM 6380)

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>8</u>	DEPTH OUT		DEPTH IN	<u>5300</u>
SIZE	<u>12 1/4</u>	FEET MADE	<u>224</u>	HRS. DRILLED	<u>18</u>
MAKE	<u>SEC.</u>	WT. ON BIT	<u>25</u>	REV. PER MIN.	<u>65</u>
TYPE	<u>5-86-7</u>	CONDITION	<u>IPC</u>	LINER SIZE	<u>6</u>
SER. NO.	<u>931494</u>	GAL. PER MIN.	<u>617</u>	LENGTH STROKE	<u>16</u>
NO. & SIZE JETS	<u>15-15-15</u>	AN. VEL.	<u>121 DP, 176 DC</u>	STROKES/MIN.	<u>48</u>
		JET VEL.	<u>400 FT PER. SECOND</u>	PRESSURE	<u>1750</u>
		FT. PER HR.	<u>12.5</u>		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD INC/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO 20
 LEASE USA A.M. DATE 6-3-80
 DATE SPUDED 5-15-80 DAYS SINCE SPUDED IN 19 WELL NO 11-36
 DEPTH 5832 FORMATION RYOLITE HOLE MADE 306 HRS. DRLG. 22
 MUD WT. 9.0 VIS. 40 WL 17 CHL 150 TYPE LCM
 OIL - SD .22 PV 10 YP 10 SOLIDS 4.2 PH 10.9

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
<u>5545</u>			<u>3 1/4"</u>	DRIVE			
<u>5669</u>			<u>30</u>	CONDUCTOR	<u>20</u>	<u>26</u>	<u>520</u>
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>
				INTERMED.			
				OTHER			

REMARKS: BHA: SAME AS 6-2-80

22 HRS: DRILLING
1 HR: CIRC AND SURVEY
1 HR: SHORT TRIPS

CRITICAL MUD VELOCITY: 201.30 FT/MIN 5887 @ 6:00AM 6-4-80
 ANNULAR PRESSURE LOSS: 19.93 PSI 3 1/4" DEI
 ECD AP : 9.07 #/GAL

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$			TO DATE \$		
WELL COST PREVIOUS \$	TODAY \$			TO DATE \$		
BIT NO.	<u>8</u>	DEPTH OUT	<u>-</u>			
SIZE	<u>1 1/4</u>	DEPTH IN	<u>5300</u>			
MAKE	<u>SEC</u>	FEET MADE	<u>532</u>			
TYPE	<u>S 86 F</u>	HRS. DRILLED	<u>41</u>			
SER. NO.	<u>931-485</u>	WT. ON BIT	<u>25</u>			
NO. & SIZE JETS	<u>15-15-15</u>	REV. PER MIN.	<u>55</u>			
		CONDITION	<u>INC</u>			
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>617</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>121 DP 176 DC</u>			
STROKES/MIN.	<u>98</u>	JET VE.	<u>400-8/SEC</u>			
PRESSURE	<u>1750</u>	BIT H.P.				

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

RBH

1810 NC

2

DAILY DRILLING REPORT

FIELD WVC/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT REPORT NO. 21
 LEASE USA DATE 6-4-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 20 WELL NO. 11-36
 DEPTH 5976 FORMATION RYOLITE HOLE MADE 144 HRS. DRLG. 13
 MUD WT. 8.9 VIS. 39 WL 15 CHL 150 TYPE GE/SEP LCM -
 OIL - SD .25 PV 4 YP 1 SOLIDS 3.9 # 10.5

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
5887			3 1/4	CONDUCTOR	20	26	322	
				SURFACE	13 3/8	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS 6-3-80

5 HRS: DRLG AND SURVEY WITH BIT #8
6 HRS: PDDH W/ BIT #8, CHANGE STABILIZERS, DRESS REAMER WITH NEW CUTTERS, CHECK JARS AND SHOCK SUB. PICK UP BIT #9 T.H.
8 HRS: DRLG TWISTED OFF
3 HRS: PDDH LEFT 12 1/4 REAMER AND BIT IN NOLE DUE TO FAILURE OF BIT SUB WASHED OUT
2 HRS: T.H TO SCREW INTO FISH AT MIDNIGHT 12:00 AM 6-5-80

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$		TODAY \$		TO DATE \$	
WELL COST PREVIOUS \$		TODAY \$		TO DATE \$	
BIT NO.	8	9	DEPTH OUT	5887	5976
SIZE	12 1/4	12 1/4	DEPTH IN	5300	5887
MAKE	SEC	UTC	FEET MADE	587	89
TYPE	586F	J-33	HRS. DRILLED	45 1/4	8 1/4
SER. NO.	931495	VE 304	WT. ON BIT	25130	25130
NO. & SIZE JETS	15-15-15	14-15-15	REV. PER MIN.	50/60	55/60
			CONDITION	6 1/5 IN	INC
LINER SIZE	6		1 GAL. PER MIN.	61.7	
LENGTH STROKE	16		AN. VEL.	121 DP 176 DC	
STROKES/MIN.	98		JET VEL.	400 FT/SEC	
PRESSURE	1750		DRY WT. P.	11.8 FT/HR	

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE [Signature] IRIG NO 2

DAILY DRILLING REPORT

FIELD WIC/ GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO 27
 LEASE USA A.M. DATE 6-5-80
 DATE SPUDED 5-15-80 DAYS SINCE SPUDED IN 21 WELL NO 11-36
 DEPTH 6001 FORMATION GRANITE HOLE MADE 25 HRS. DRLG. 9
 MUD WT. 9.0 VIS. 40 WL 15 CHL 150 TYPE LCM
 OIL - SD .25 PY 9 YP 11 SOLIDS 4.0 # 10.9

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.	
				DRIVE				
				CONDUCTOR	20	26	320	
				SURFACE	13 3/8	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: BIT, REAMER, SNOCK SUB, 1-8" DC, STAB, 1-8" DC, STAB, 10-8" DC'S, UP JAR

6 HRS: FISHING, TTH, CIRC AT FISH, SCREW INTO FISH, ESTABLISHED CIRC PUMPED FISH FREE, CHAIN OUT, LAY DOWN FISH

6 HRS: MAGNA-FLUX DC'S + SUBS, PICKED UP NEW BHA

3 HRS: TTH, CHECKING TOOL JOINTS ON HEVI-WALL, HIT BRIDGE AT 5777', SPOT REAMED TO T.D.

9 HRS: DRLG

ONE OF THE MUD PUMPS WENT DOWN AROUND MIDNIGHT DUE TO ELECTRICAL SHORT NOT ABLE TO RUN OPTIMUM HYDRAULICS, WILL BE REPAIRED 6-6-80

CRITICAL MUD VELOCITY: 213 FT/MIN
ANN. PRESSURE LOSS : 23.11 PSI
ECD ΔP : 9.07 #/GAL

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR	
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$	TO DATE \$	CFM	
BIT NO.	9	DEPTH OUT	-		
SIZE	12 1/4	DEPTH IN	5887		
MAKE	HTC	FEET MADE	116		
TYPE	J-33	HRS. DRILLED	17.25		
SER. NO.	VE-304	WT. ON BIT	25-30		
NO. & SIZE JETS	14-15-15	REV. PER MIN.	50-55		
		CONDITION	INC		
LINER SIZE	6	GAL. PER MIN.	440		
LENGTH STROKE	16	AN. VEL.	80 FT/MIN DP - 116 FT/MIN DC		
STROKES/MIN.	65	JET VEL.	260 FT/SEC		
PRESSURE	1100	BIT H.P.	2.78 #/GAL		

FIELD UK/GRASS VALLEY 24 HR. PERIOD ENDING NOON REPORT NO 23
 LEASE 115A A.M. DATE 6-6-80 WELL NO 11-36
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 22
 DEPTH 6062 FORMATION GRANITE, QUARTZ HOLE MADE 61 1/2 HRS. DRLG. 16
 MUD WT. 8.9 VIS. 39 WL 14 CHL 125 TYPE GEL/SAND LCM
 OIL - SD NIL PV 5 YP 6 SOLIDS 3.9 M 11.3

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR	20	26	320	
				SURFACE	13 1/2	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: BIT REAMER, SHOCK SUB, 1-8" DX, STAB, 18" DC, STAB, 10-8" DC'S
XC, DOWN, UP, DRLG JARS.

16 HRS: DRIG, WITH ONE MUD PUMP DUE TO ELECTRICAL FAILURE

8 HRS: POOH ON EVEN STANDS DRESSED NEAR BIT REAMER,
CHANGED OUT WORN OUT DRLG JARS. PARTIAL T.M.H.
AT 12 AM NOON 6-7-80.

6070' AT 6:00 AM 6-7-80

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>9</u>	<u>10</u>	DEPTH OUT	<u>6062</u>		
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>5887</u>	<u>6062</u>	
MAKE	<u>HTC</u>	<u>HTC</u>	FEET MADE	<u>175</u>		
TYPE	<u>U-33</u>	<u>U-44</u>	HRS. DRILLED	<u>33</u>		
SER. NO.	<u>YE-300</u>	<u>2460A</u>	WT. ON BIT	<u>30</u>		
NO. & SIZE JETS	<u>14-15-15</u>	<u>14-15-15</u>	REV. PER MIN.	<u>65-65</u>		
LINER SIZE	<u>6</u>		CONDITION	<u>5-6-18 OUT</u>		
LENGTH STROKE	<u>16</u>		GAL. PER MIN.	<u>554</u>		
STROKES/MIN.	<u>88</u>		AN. VEL.	<u>109 DP 158 DC</u>		
PRESSURE	<u>1800</u>		JET VEL.	<u>360 FT/SEC</u>		
			DRILL RATE	<u>4 FT/HR</u>		

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) SIGNATURE [Signature] RBM IRIG NO 2

FIELD WIC GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 A.M. DATE 6-7-80 ²⁴
 LEASE USA WELL NO. 1136
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 23
 DEPTH 6160 FORMATION GRAVITE-QUARTZITE HOLE MADE 98 HRS. DRLG. 28
 MUD WT. 8.9 VIS. 45 WL 12 CH. 125 TYPE GEL-SERVO-LEM
 OIL - SD ML PV 12 YP 15 SOLIDS 5.9 PH 11.3

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
6098			1 1/2	DRIVE			
				CONDUCTOR	20	26	320
				SURFACE	13 3/8	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS: BUR: SAME AS 6-6-80

2 1/2 HRS: T/H TO 6002
1/2 HR: REAM TO 6062
1 HR: CIRC AND SURVEY
20 HRS: DRLG WITH BIT #10 AVERAGE 4.9 FT/HR

CRITICAL MUD ANN. VELOCITY 265.81'/MIN
ANN. PRESSURE LOSS 34.96 PSI
ECD AP 9.01*/GAL

NUMBER OF COMPARTMENTS	DISCHARGE DESCRIBE	VALVE OR AM	CON
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$	
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$	

BIT NO.	<u>10</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>6020</u>
MAKE	<u>HTC</u>	FEET MADE	<u>98</u>
TYPE	<u>J-24</u>	HRS. DRILLED	<u>28</u>
SER. NO.	<u>DA-246</u>	WT. ON BIT	<u>35/40</u>
NO. & SIZE JETS	<u>14-15-15</u>	REV. PER MIN.	<u>40/55</u>
		CONDITION	<u>INC.</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>554</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>109 DP - 158 DK</u>
STROKES/MIN.	<u>88</u>	JET VEL.	<u>300 FT/SEC</u>
PRESSURE	<u>1800</u>	BIT W.P.	<u>4.90 FT/HR</u>

DRILLING CONTRACTOR SIGN IN ON FIRST AND LAST REPORT
 SIGNATURE [Signature]

RBH 2

FIELD W/ GRASS VALLEY 24 HR. PERIOD ENDING Midnight 12 REPORT NO 25
 LEASE USA A.M. DATE 6-8-80
 DATE SPUDED 5-15-80 DAYS SINCE SPUDED IN 24 WELL NO 11-36
 DEPTH 6280 FORMATION GRANITE-QUARTZ HOLE MADE 120 HRS. DRLG. 23
 MUD WT. 9.0 VIS 45 WL 12 CHL 100 TYPE GEL LCM
 OIL - SD NIL PV 20 YP 23 SOLIDS 4 M 10.7

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
6280			106000	DRIVE			
				CONDUCTOR	20	26	32E
				SURFACE	13 3/8	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS: BHA: SAME AS 6-7-80

23 HRS: DRLG
1/2 HR: TRIP
1/2 HR: CIRCUIT AND SURVEY

CRITICAL ANN VELOCITY: 355.73 FT/MIN
ANNULAR PRESSURE LOSS: 47.16 PSI
ECD DP : 9.14 #/GAL

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>10</u>	DEPTH OUT	<u>6280</u>	DEPTH IN	<u>6062</u>
SIZE	<u>12 1/4</u>	FEET MADE	<u>218</u>	HRS. DRILLED	<u>43.25</u>
MAKE	<u>HTC</u>	WT. ON BIT	<u>35</u>	REV. PER MIN.	<u>50</u>
TYPE	<u>J-44</u>	CONDITION	<u>BT-6-5-IN</u>	GAL. PER MIN.	<u>554</u>
SER. NO.	<u>DA-246</u>	AN. VEL.	<u>109 DP, 158 DG</u>	JET VEL.	<u>360 FT/MIN</u>
NO. & SIZE JETS	<u>14-15-15</u>	PRESSURE	<u>1800</u>		<u>5.22 FT/HR</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)
 SIGNATURE [Signature]

RBM
2

DAILY DRILLING REPORT

WELL LLC/GRASS VALLEY 24 HR. PERIOD ENDING HONOLULU 16:00 A.M. DATE 5-7-80 26
 LEASE USA WELL NO. 11-36
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 25
 DEPTH 6395 FORMATION GRANITE HOLE MADE 115 HRS. DRLG. 19 1/2
 MUD WT. 9.0 VIS. 40 FL 12 CML 100 TYPE CENT-SERIES CM
 OIL - SD NIL BV 7 YP 4 SOLIDS 4 M 0.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS: BHA: BIT, LUNK SUB, REAMER, STACK SUB, IDC, STABL, IDC STABL, 10 DC, X0
DOWN JARS, UP JARS

4 HRS: TRIP FOR BIT #
1/2 HR: REAM AFTER TRIP 6240-6280
19 1/2 HRS: DRILLING

TEMP: 143 OUT
135 IN

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>11</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>6280</u>
MAKE	<u>SMITH</u>	FEET MADE	<u>115</u>
TYPE	<u>F 4</u>	HRS. DRILLED	<u>19 1/2</u>
SER. NO.	<u>AF 4159</u>	WT. ON BIT	<u>35</u>
NO. & SIZE JETS	<u>15-15-15</u>	REV. PER MIN.	<u>45</u>
		CONDITION	<u>INC</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>554</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>129-158</u>
STROKES MIN.	<u>98</u>	JET VEL.	<u>360 FT/SEC</u>
PRESSURE	<u>1500</u>	DISCH. P.	<u>5.9 FT/LHR</u>

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT.

RBM 2

SIGNATURE John D. Bradley

DAILY DRILLING REPORT

FIELD WC/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO 27
 LEASE USA A.M. DATE 6-16-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 26 WELL NO 11-3
 DEPTH 6528 FORMATION GRANITE HOLE MADE 103 HRS. DRLG. 21
 MUD WT. 8.9 VIS. 39 WL 12 CH. 100 TYPE GEL LCM
 OIL - SD NIL PV 8 YP 9 SOLIDS 3.9 PH 11

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
6528			1 1/2	CONDUCTOR	20	26	320	
				SURFACE	133 1/2	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS 6-9-80

HRS: DRLE
1/2 HR: SURVEY
2 1/2 HRS: POOH FOR BIT AND REAMER CUTTER CHANGE

CRITICAL AV: 187.58 FT/MIN TEMP: 138° F OUT
AP : 22.80 PSI 127° F IN
ECD : 8.97 #/GAL

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>11</u>	DEPTH OUT	<u>6528</u>			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>6280</u>			
MAKE	<u>SUITT</u>	FEET MADE	<u>248</u>			
TYPE	<u>F4</u>	HRS. DRILLED	<u>40 1/2</u>			
SER. NO.	<u>AE4459</u>	WT. ON BI"	<u>40</u>			
NO. & SIZE JETS	<u>15 15 15</u>	REV. PER MIN.	<u>50</u>			
LINER SIZE	<u>6</u>	CONDITION	<u>BT 6-4-CUT 1/16"</u>			
LENGTH STROKE	<u>16</u>	GAL. PER MIN.	<u>529</u>			
STROKES/MIN.	<u>84</u>	AN. VE.	<u>104 FT/SEC</u>			
PRESSURE	<u>1500</u>	JET VE.	<u>326 FT/SEC</u>			
DRILLING CONTRACTOR "FILL IN ON FIRE" AND "LAST REPORT"		BIT W.P.	<u>4.9 FT/HR</u>			
		RIG NO	<u>2</u>			

RBH 2

DAILY DRILLING REPORT

FIELD WC/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO. 28
 LEASE USA A.M. DATE 6-11-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 27 WELL NO. 11-36
 DEPTH 6630 FORMATION GRANITE HOLE MADE 102 HRS. DRLG. 20 1/2
 MUD WT. 9.0 VIS. 38 WL 12 CH. 125 TYPE GEL LCM -
 OIL - SD - PV 11 YP 11 SOLIDS 4 M 16.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE				
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>13 3/4</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS 6-10-80

2 3/4 HRS: TH TO 6452
3/4 HR: REAMING AFTER TRIP
20 1/2 HRS: DRILLING

MUD COST PREVIOUS \$		TODAY \$	TO DATE \$
WELL COST PREVIOUS \$		TODAY \$	TO DATE \$
BIT NO.	<u>12</u>		
SIZE	<u>12 1/4</u>		
MAKE	<u>SEL</u>		
TYPE	<u>H-89TF</u>		
SER. NO.	<u>328150</u>		
NO. & SIZE JETS	<u>15-15-15</u>		
DEPTH OUT			
DEPTH IN		<u>6528</u>	
FEET MADE		<u>102</u>	
HRS. DRILLED		<u>20 1/2</u>	
WT. ON BIT		<u>40</u>	
REV. PER MIN.		<u>40</u>	
CONDITION		<u>INC</u>	
LINER SIZE	<u>6</u>		
LENGTH STROKE	<u>16</u>		
STROKES/MIN.	<u>84</u>		
PRESSURE	<u>1500</u>		
GAL. PER MIN.		<u>529</u>	
AN. VEL.		<u>104 DP-150 DC</u>	
JET VEL.		<u>326 FT/SEC</u>	
		<u>4.98 FT/HR</u>	

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE [Signature] RBH INCH NC 2

DAILY DRILLING REPORT

FIELD W. C. J. KASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT REPORT NO. 29
 LEASE USA A.M. DATE 6-12-8
 DATE SPUNDED 5-15-80 DAYS SINCE SPUNDED IN 28 WELL NO. 11-36
 DEPTH 6755 FORMATION Granite HOLE MADE 125 HRS. DRLG. 24
 MUD WT. 9 VIS. 37 WL 11 CHL 150 TYPE Gel LCM
 OIL — SD — PV 11 YP 11 SOLIDS 4 pH 10.8

E. C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.	
				DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA: Same
24 HRS - Drlg. with bit #12

Depth at 6 AM 6788'

Temp 140 in 130 mt

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$		TODAY \$		TO DATE \$		TO DATE \$
WELL COST PREVIOUS \$		TODAY \$		TO DATE \$		TO DATE \$
BIT NO.	<u>12</u>	DEPTH OUT		DEPTH IN	<u>6528</u>	
SIZE	<u>12 1/4</u>	FEET MADE		HRS. DRILLED	<u>22 1/2</u>	
MAKE	<u>SEC</u>	WT. ON BIT		REV. PER MIN.	<u>40</u>	
TYPE	<u>M 89 TF</u>	CONDITION			<u>ANC.</u>	
SER. NO.	<u>828150</u>	GAL. PER MIN.		AN. VEL.	<u>106 DP</u>	<u>154 PC</u>
NO. & SIZE JETS	<u>3 15s</u>	JET VEL.		BIT H.P. RATE	<u>338' / second</u>	
LINER SIZE	<u>6</u>				<u>5.21' / HR.</u>	
LENGTH STROKE	<u>16</u>					
STROKES/MIN.	<u>86</u>					
PRESSURE	<u>1700</u>					

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD WC/GROSS VALLEY 24 HR. PERIOD ENDING MIDNIGHT REPORT NO. 30
 LEASE USA A.M. DATE 6-13-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 29 WELL NO. 11-36
 DEPTH 6857 FORMATION GRANITE HOLE MADE 102 HRS. DRLG. 17
 MUD WT. 9.0 VIS. 37 WL 12 CHL 100 TYPE GEL LCM -
 OIL - SD NIL PV 10 YP 9 SOLIDS 4 10.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
6809			2 1/2°	CONDUCTOR	20	26	320	
				SURFACE	13 3/4	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA: BIT LEAVER, SHOCK SUB, 1 DC, STLB, 1 DC, STLB, 10 DC, XO, DOWN
SARS, UP SARS

10 HRS: DRLG TO 6809'
3 HRS: SURVEY AND POOH
2 HRS: PICK UP CUP TESTER, TIM 60. TEST BOE FOR 30 MIN AT 1000'
1 1/2 HRS: TIM WITH BIT IS STOPPED AT 6793'
1/2 HR: BREAK CIRC, WASHED OUT FILL TO 6809'
7 HRS: DRLG TO 6857' 12:00 AM MIDNIGHT 6-14-80

TEMP: 142° OUT
130° IN

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>12</u>	<u>12</u>	DEPTH OUT	<u>6809</u>		
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>6528</u>	<u>6809</u>	
MAKE	<u>SEC</u>	<u>SMITH</u>	FEET MADE	<u>281</u>	<u>48</u>	
TYPE	<u>H-89-TF</u>	<u>T-5</u>	HRS. DRILLED	<u>54 1/2</u>	<u>7</u>	
SER. NO.	<u>828150</u>	<u>AE-4397</u>	WT. ON BIT	<u>40</u>	<u>40</u>	
NO. & SIZE JETS	<u>15-15-15</u>	<u>14-15-15</u>	REV. PER MIN.	<u>40</u>	<u>40</u>	
LINER SIZE	<u>6</u>		CONDITION	<u>18T-45-IN</u>	<u>INC</u>	
LENGTH STROKE	<u>16</u>		GAL. PER MIN.	<u>330</u>		
STROKES/MIN.	<u>84</u>		AN. VEL.	<u>104-DA 151-DC</u>		
PRESSURE	<u>1750</u>		JET VEL.	<u>345 FT/SEC</u>		
DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)			BEFORE	<u>6 FT/HR</u>		

SIGNATURE John Barden RBM 2

FIELD GRASS 24 HR. PERIOD ENDING _____ REPORT NO. 31
 LEASE U.P. A.M. DATE 6-14-80
 DATE SPUDED _____ DAYS SINCE SPUDED IN _____ WELL NO. _____
 DEPTH 7056 FORMATION granite HOLE MADE 107 HRS. DRLG. 20
 MUD WT. 7.0 VIS. 42 WL 12 CHL 100 TYPE 2 LCM _____
 OIL _____ SD _____ PV 14 YP 12 SOLIDS _____ pH 10.5

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: B4A same letter
24 hrs drlg w/ bit = 13 + 1 pump
118/136

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>13</u>	DEPTH OUT	<u>5007</u>		
SIZE	<u>12 1/4</u>	DEPTH IN	<u>3339</u>		
MAKE	<u>Smith</u>	FEET MADE	<u>247</u>		
TYPE	<u>F-5</u>	HRS. DRILLED	<u>31</u>		
SER. NO.	<u>AE 4307</u>	WT. ON BIT	<u>40</u>		
NO. & SIZE JETS	<u>1-14 2-15</u>	REV. PER MIN.	<u>40</u>		
		CONDITION	<u>me</u>		
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>300</u>		
LENGTH STROKE	<u>5</u>	AN. VEL.	<u>72/104</u>		
STROKES MIN.	<u>530</u>	JET VEL.	<u>235</u>		
PRESSURE	<u>1200</u>	BIT H.P.	<u>5.5</u>		

DRILLING CONTRACTOR: FILL IN ON FIRST AND LAST REPORT. RIG NO. _____
 SIGNATURE _____

WELL DRILLING REPORT

FIELD 9 24 HR. PERIOD ENDING _____ REPORT NO 72
 LEASE USA A.M. DATE _____
 DATE SPUDED _____ DAYS SINCE SPUDED IN 31 WELL NO. _____
 DEPTH 720.5 FORMATION Shale HOLE MADE 147 HRS. DRLG. 21
 MUD WT. _____ VIS. 4.2 WL 1.4 CHL 100 TYPE MC LCM _____
 OIL _____ SD _____ PV 7 YP 7 SOLIDS 3.5 pH 13.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
7121	374			DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BAA = dater
21 dater w/ bit = 13
2 1/2 P.O.H to chg bit
1/2 survey
lost 35 bbl mud @ 7137
113/135 ft.

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CFM	
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____	
BIT NO.	<u>13</u>	DEPTH OUT	<u>720.5</u>		
SIZE	<u>12 1/2</u>	DEPTH IN	<u>630.9</u>		
MAKE	<u>Small</u>	FEET MADE	<u>89.6</u>		
TYPE	<u>F-5</u>	HRS. DRILLED	<u>42</u>		
SER. NO.	<u>AE 4397</u>	WT. ON BIT	<u>40</u>		
NO. & SIZE JETS	<u>1-14 2-15</u>	REV. PER MIN.	<u>40</u>		
		CONDITION	<u>6.5-in</u>		
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>53.5</u>		
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>75/138</u>		
STROKES MIN.	<u>77</u>	JET VEL.	<u>7.2</u>		
PRESSURE	<u>1700</u>	BIT H.P.	<u>7.1</u>		

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT: _____ RIG NO _____
 SIGNATURE _____

FIELD Grass Valley 24 HR. PERIOD ENDING _____
 LEASE U.S.P. A.M. DATE 6-16-81
 DATE SPUDDED _____ WELL NO. _____
 DEPTH 73 1/2 FORMATION sandstone DAYS SINCE SPUDDED IN 32
 MUD WT. 9 VIS. _____ HOLE MADE 10 1/2 HRS. DRLG. _____
 OIL _____ SD _____ WL 12 CHL 10 TYPE oil LCM _____
 PV 7 YP 2 SOLIDS _____ pH _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: R 4 F = JTD
5 1/2" cement 2504 cks bit RTH 11 ft
20 1/2" hole w/ bit U#14

122/147

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>12</u>	DEPTH OUT	
SIZE	<u>12 1/2</u>	DEPTH IN	<u>72 05</u>
MAKE	<u>211</u>	FEET MADE	<u>10 1/2</u>
TYPE	<u>12 1/2 - 5</u>	HRS. DRILLED	<u>20 1/2</u>
SER. NO.	<u>328 013</u>	WT. ON BIT	<u>20</u>
NO. & SIZE JETS	<u>1-13 2-12</u>	REV. PER MIN.	<u>300</u>
		CONDITION	<u>good</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>200</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>120-99</u>
STROKES/MIN.	<u>40</u>	JET VEL.	<u>200</u>
PRESSURE	<u>1750</u>	BIT H.P.	<u>5.2</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____

SIGNATURE _____

FIELD WC / GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 A.M. DATE 6-17-80 REPORT NO. 34
 LEASE LISA WELL NO. 11-36
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 33
 DEPTH 7438 FORMATION GRANITE HOLE MADE 126 HRS. DRLG. 23 1/4
 MUD WT. 9.0 VIS. 37 WL 14 CH. 100 TYPE GEL LCM -
 OIL - SD NIL PV 10 YP 9 SOLIDS 4 #10.8

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.	
<u>7362</u>			<u>4 3/4</u>	DRIVE				
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>13 3/4</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS BHA: SAME AS 6-16-80

23 1/4 HRS: DRLG WITH BIT #14
3/4 HR: SURVEY FOR DIRECTION

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$	TODAY \$	TO DATE \$
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$
BIT NO. <u>14</u>	DEPTH OUT	
SIZE <u>12 1/4</u>	DEPTH IN <u>7205</u>	
MAKE <u>SEC</u>	FEET MADE <u>233</u>	
TYPE <u>H89TF</u>	HRS. DRILLED <u>43 1/2</u>	
SER. NO. <u>928418</u>	WT. ON BIT <u>.20</u>	
NO. & SIZE JETS <u>13-14-14</u>	REV. PER MIN. <u>40</u>	
	CONDITION <u>INC</u>	
LINER SIZE <u>6</u>	GAL. PER MIN. <u>504</u>	
LENGTH STROKE <u>16</u>	AN. VEL. <u>126</u>	
STROKES/MIN. <u>80</u>	JET VEL. <u>310 FT/SEC</u>	
PRESSURE <u>1750</u>	SCOURGE. <u>5.36 FT/HR</u>	

DRILLING CONTRACTOR SIGN IN ON FIRST AND LAST REPORT

SIGNATURE [Signature]

R24 2

FIELD Grass Valley 24 HR. PERIOD ENDING _____
 LEASE USA 11 A.M. DATE 6-19
 DATE SPUDDED _____ WELL NO. 11-30
 DEPTH 7519 FORMATION granite DAYS SINCE SPUDDED IN _____
 MUD WT. 89 VIS. 33 HOLE MADE 81 HRS. DRILG. 1612
 OIL _____ SD _____ WL 15 CHL 100 TYPE oil LCM _____
 PV 9 YP 3 SOLIDS 41 pH 10.5

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
<u>7546</u>	<u>5 1/4</u>			DRIVE				
				CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BAA bit reamer bit cut short cut, 1 DC stab ~~also~~ 1 DC
stab 10 DC cover
3/4 dls with bit #14
1/2 survey
6 3/4 POOH log bit reamers + stabs RTH no fill
13/4 RTH dly w/ bit #15

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>14</u>	<u>15</u>	DEPTH OUT	<u>7455</u>		
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>7205</u>	<u>7455</u>	
MAKE	<u>See</u>	<u>Smith</u>	FEET MADE	<u>250</u>	<u>64</u>	
TYPE	<u>M89TF</u>	<u>F-5</u>	HRS. DRILLED	<u>46 3/4</u>	<u>13 1/4</u>	
SER. NO.	<u>923418</u>	<u>AE 4267</u>	WT. ON BIT	<u>40</u>	<u>40</u>	
NO. & SIZE JETS	<u>2-14 1-13</u>	<u>1-13 -2-14</u>	REV. PER MIN.	<u>40</u>	<u>40</u>	
			CONDITION	<u>1-2-1N</u>		
LINER SIZE	<u>6</u>		GAL. PER MIN.	<u>472</u>		
LENGTH STROKE	<u>16</u>		AN. VEL.	<u>92/132</u>		
STROKES/MIN.	<u>75</u>		JET VEL.	<u>352</u>		
PRESSURE	<u>1600</u>		BIT H.P.	<u>5.3</u>	<u>48</u>	

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

WELL DRILLING REPORT

FIELD Grass Valley

REPORT NO. 36

LEASE USM 24 HR. PERIOD ENDING _____

A.M. DATE 8-17

DATE SPUDDED _____

WELL NO. 11-36

DEPTH 7635 FORMATION gaburo DAYS SINCE SPUDDED IN _____

MUD WT. 9 VIS. 450 WL 15 HOLE MADE 116 HRS. DRLG. 25 1/2

OIL _____ SD _____ PV 12 YP 13 TYPE gel LCM _____

SOLIDS 4 pH 10.7

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
7550	5 1/4			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA ditto
23 1/2 drlg.
1/2 survey

132/142

200 max. read

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>15</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>7455</u>
MAKE	<u>Smith</u>	FEET MADE	<u>180</u>
TYPE	<u>F-5</u>	HRS. DRILLED	<u>27 1/2</u>
SER. NO.	<u>AE 0267</u>	WT. ON BIT	<u>40</u>
NO. & SIZE JETS	<u>1-13 2-14</u>	REV. PER MIN.	<u>40</u>
		CONDITION	<u>inc</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>472</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>92/134</u>
STROKES/MIN.	<u>75</u>	JET VEL.	<u>352</u>
PRESSURE	<u>1650</u>	BIT H.P.	<u>49</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

RIG NO.

SIGNATURE

UNLY DRILLING REPORT

REPORT NO. 57
 FIELD W/C/ GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 A.M. DATE 6-20-80
 LEASE USA WELL NO. 11-56
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 36
 DEPTH 7737 FORMATION GRANITE HOLE MADE 102 HRS. DRLG. 22 1/2
 MUD WT. 9.0 VIS. 38 WL 15 CHL 100 TYPE GEL LCM
 OIL - SO - PV 12 YP 11 SOLIDS 48 M 10.5

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
<u>7643</u>			<u>4 1/4°</u>	DRIVE			
<u>7733</u>			<u>5°</u>	CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>
				INTERMED.			
				OTHER			

REMARKS: BHA: SAME AS B GEORE

22 1/2 HRS: DRILLING
1 1/2 HR: SURVEY

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>15</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>7455</u>
MAKE	<u>SMITH</u>	FEET MADE	<u>282</u>
TYPE	<u>F-5</u>	HRS. DRILLED	<u>59 3/4</u>
SER. NO.	<u>AE-4267</u>	WT. ON BIT	<u>40</u>
NO. & SIZE JETS	<u>13-14-14</u>	REV. PER MIN.	<u>40</u>
		CONDITION	<u>INC</u>
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>470</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>92 DP 134 DC</u>
STROKES/MIN.	<u>75</u>	JET VEL.	<u>352 FT/SEC</u>
PRESSURE	<u>1750</u>	BIT H.P.	<u>4.5 FT/HR</u>

DRILLING CONTRACTOR: FILL IN ON FIRST AND LAST REPORT

PRM 2

FIELD WC/ GRASS VALLEY 24 HR PERIOD ENDING MIDNIGHT 12 REPORT NO 58
 LEASE USA A.V. DATE 6-21-80
 DATE SPUDED 5-15-80 DAYS SINCE SPUDED IN 57 WELL NO 11-36
 DEPTH 7809 FORMATION GRAWITE HOLE MADE 72 HRS. DRLG. 17
 MUD WT. 9.0 VIS 35 WL 14 CHL 100 TYPE GEL LCM -
 OIL - SD NIL PY 7 YP 6 SOLIDS 418 MH 10.3

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE			
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>
				INTERMED.			
				OTHER			

REMARKS: BHA: BIT JUNK SUB, REAMER, FLOAT SUB, SHOCK SUB, 1-8" DC, STAB, 1-8" DC, STAB, 10 8" DC, XO DOWN JARS, UP JARS, XO, H/W

17 HRS: DRILLING
6 HRS: TRIP FOR BIT #16 POOH AND TIH NO PROBLEMS
1 HR: OUT OF DRILLING LINE

MUD COST PREVIOUS \$			TODAY \$			TO DATE \$		
MUD COST PREVIOUS \$			TODAY \$			TO DATE \$		
WELL COST PREVIOUS \$			TODAY \$			TO DATE \$		
BIT NO.	<u>15</u>	<u>16</u>	DEPTH OUT	<u>7775</u>				
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>7455</u>	<u>7775</u>			
MAKE	<u>SMITH</u>	<u>SMITH</u>	FEET MADE	<u>320</u>	<u>34</u>			
TYPE	<u>F-5</u>	<u>F-5</u>	HRS. DRILLED	<u>68 3/4</u>	<u>7 1/2</u>			
SER. NO.	<u>AE4267</u>	<u>AE5587</u>	WT. ON BI	<u>40</u>	<u>40</u>			
NO. & SIZE JETS	<u>13-14-14</u>	<u>13-14-14</u>	REV. PER MIN.	<u>40</u>	<u>40</u>			
LINER SIZE	<u>6</u>		CONDITION	<u>6-4-1N</u>	<u>INC</u>			
LENGTH STROKE	<u>16</u>		GAL. PER MIN.	<u>4125</u>				
STROKES/MIN.	<u>75</u>		AN. VEL.	<u>92 DP, 1340C</u>				
PRESSURE	<u>1750</u>		JET VE.	<u>352 FT/SEC</u>				
			BIT H.P.	<u>423 FT/HL</u>				

39
6-22-80
11-36

LEASE USA WELL NO 11-36
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 38
 DEPTH 7924 FORMATION GRANITE HOLE MADE 115 MRS. DRLG. 23 1/2
 MUD WT 8.9 VIS. 38 WL 13 CHL 100 TYPE GEL LCM -
 OIL - SD - PY 7 YP 7 SOLIDS 40 M.D.R. -

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
7859			5'14"	DRIVE			
				CONDUCTOR	20	26	320
				SURFACE	13 3/4	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS: BHA: SAME AS 6-21-80

23 1/2 HRS: DRLG WITH BIT # 16
1/2 HR. SURVEY AT 7859'

DEPTH 6:00 AM 6-23-80
IS 7950'

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>16</u>	DEPTH OUT	
SIZE	<u>12 1/2</u>	DEPTH IN	<u>7775</u>
MAKE	<u>SMITH</u>	FEET MADE	<u>149</u>
TYPE	<u>F-5</u>	MRS. DRILLED	<u>21</u>
SER. NO.	<u>AE-3587</u>	WT. ON BIT	<u>40</u>
NO. & SIZE JETS	<u>13-14-14</u>	REV. PER MIN.	<u>40</u>
LINER SIZE	<u>6</u>	CONDITION	<u>INC</u>
LENGTH STROKE	<u>16</u>	GAL. PER MIN.	<u>472</u>
STROKES/MIN.	<u>75</u>	AN. VEL.	<u>92 FT/MIN DP, 134 FT/MIN DC</u>
PRESSURE	<u>1750</u>	JET VEL.	<u>352 FT/SEC</u>
		BIT M.P.	<u>4.89 FT/HR</u>

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT

SIGNATURE W. St. Paul

RBM 2

DRILLING REPORT

FIELD W.C. Cross Valley 24 HR. PERIOD ENDING Mid 1200 REPORT NO. 40
 LEASE USA - 11-36 A.M. DATE 6-23-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 39 WELL NO. 1F36
 DEPTH 8022 FORMATION Granite HOLE MADE 98' HRS. DRLG. 23 1/4
 MUD WT. 8.9 VIS. 39 WL 13 CHL 100 TYPE Gel LCM
 OIL SD PV 9 YP 14 SOLIDS 4.0 PH 10.1

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
7952			5 1/4	CONDUCTOR	20	26	320	
8044			5 1/2	SURFACE	13 3/8	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA - Same as 6-22-80

23 1/4 drlg. w/ Bit # 16
3/4 Directional Wireline survey

152 out chills off
142 " chills on

206 MRT

(Depth at 6 Am 6-24-80 - 8047)

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____		CFM
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____		
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____		
BIT NO.	<u>16</u>	DEPTH OUT	-			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>7775</u>			
MAKE	<u>Smith</u>	FEET MADE	<u>247</u>			
TYPE	<u>F-5</u>	HRS. DRILLED	<u>54 1/4</u>			
SER. NO.	<u>AE 3587</u>	WT. ON BIT	<u>40</u>			
NO. & SIZE JETS	<u>13-14-14</u>	REV. PER MIN.	<u>40 RPM</u>			
		CONDITION	<u>INC.</u>			
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>346</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>68/m D.P., 98/m DC</u>			
STROKES/MIN.	<u>55</u>	JET VEL.	<u>258/Sec.</u>			
PRESSURE	<u>1000</u>	BIT	<u>4.21 / Rev.</u>			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

RIG NO.

2

SIGNATURE

DAILY DRILLING REPORT

FIELD CU 24 HR. PERIOD ENDING _____ REPORT NO. 41
 LEASE USA A.M. DATE 6-24-50
 DATE SPUDED _____ WELL NO. 11-36
 DEPTH 8144 FORMATION BASALT HOLE MADE 122 HRS. DRLG. 22 1/2
 MUD WT. 9.0 VIS. 39 WL 10 CHL 100 TYPE _____ LCM _____
 OIL _____ SD _____ PV 16 YP 11 SOLIDS 4.8 pH 10

E. C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.	
<u>8044</u>	<u>5 1/2°</u>			DRIVE				
<u>8137</u>	<u>5 1/2°</u>			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA - sand

22 1/2 days with bit #116
1 1/2 survey

met temp on wellhead 213°

211 met 156° F out
148° F in

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____		CFM _____
MUD COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____		
WELL COST PREVIOUS \$ _____		TODAY \$ _____		TO DATE \$ _____		
BIT NO.	<u>16</u>	DEPTH OUT	_____			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>7775</u>			
MAKE	<u>SMITH</u>	FEET MADE	<u>369</u>			
TYPE	<u>F 5</u>	HRS. DRILLED	<u>26 1/4</u>			
SER. NO.	<u>AE 3581</u>	WT. ON BIT	<u>25/38</u>			
NO. & SIZE JETS	<u>13, 14, 14</u>	REV. PER MIN.	<u>50</u>			
LINER SIZE	<u>6</u>	CONDITION	<u>Good</u>			
LENGTH STROKE	<u>16</u>	GAL. PER MIN.	<u>472</u>			
STROKES/MIN.	<u>25</u>	AN. VEL.	<u>92 DP 124 DC</u>			
PRESSURE	<u>1750</u>	JET VEL.	<u>352' / second</u>			
DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)		BIT W. PLATE	<u>5.42' / HR</u>			

SIGNATURE _____ RIG NO. _____

DAILY DRILLING REPORT

FIELD WC/GRASS VALLEY 24 HR PERIOD ENDING MIDNIGHT 12 REPORT NO 42
 LEASE USA A.N. DATE 6-25-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 41 WELL NO 11-26
 DEPTH 8258 FORMATION INSALT HOLE MADE 114 MRS. DRLG. 173/4
 MUD WT. 9.06 VIS. 46 WL 9 CHL 100 TYPE CEL LCM -
 OIL - SD 25 PV 23 TP 24 SOLIDS 4.8 # 9.8

L.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE CONDUCTOR	30	36	320
				SURFACE	133/8	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS: BHA: BIT, REAMER, BIT SUB, SNACK SUB, 1-8" DC, STEEL, 1-8" DC, STEEL, 10-8" DC, XC, DOWN JARS, UP JARS XC

17 3/4 HOURS: DPLG
6 HOURS: POOH FOR BIT CHANGE, DROP JUNK SUB, PICK UP BIT #17 TO 8161'
1/4 HOUR: CIRCULATE FOR TRIP

TEMP: 161°F OUT, 156°F IN COOLER OFF 12:00 PM TO 11:54 PM 6-25-80
MUD LOSS: FROM 8180' TO 8260' HAVE EXPERIENCED 5 BBL./HR LOSS
TEMP: ON MAXIMUM READING FOR 15 MIN. 225°F

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$				
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$				
BIT NO.	<u>16</u>	<u>17</u>	DEPTH OUT	<u>8161</u>		
SIZE	<u>12 1/4</u>	<u>12 1/4</u>	DEPTH IN	<u>7775</u>	<u>3161</u>	
MAKE	<u>SHIM</u>	<u>HTC</u>	FEET MADE	<u>386</u>	<u>97</u>	
TYPE	<u>F-6</u>	<u>D-114</u>	MRS. DRILLED	<u>30</u>	<u>14 1/2</u>	
SER. NO.	<u>AE-3581</u>	<u>148-BF</u>	WT. ON BIT	<u>35</u>	<u>35/40</u>	
NO. & SIZE JETS	<u>13-14-14</u>	<u>13-14-14</u>	REV. PER MIN.	<u>50</u>	<u>50</u>	
			CONDITION	<u>D-2-1N</u>	<u>UNK</u>	
LINER SIZE	<u>6</u>		GAL. PER MIN.	<u>504</u>		
LENGTH STROKE	<u>16</u>		AN. VEL	<u>99 DP 145 DC</u>		
STROKES/MIN	<u>80</u>		JET VEL	<u>375 FT/SEC</u>		
PRESSURE	<u>1750</u>		BIT R.P	<u>64 FT/MIN</u>		

DAILY DRILLING REPORT

REPORT NO. 43
 A.M. DATE 6-26-80
 WELL NO. 11-36

FIELD GRASS VALLEY 24 HR. PERIOD ENDING _____
 LEASE USA
 DATE SPUDED _____ DAYS SINCE SPUDED IN 42
 DEPTH 8421 FORMATION amphibolite HOLE MADE 165 HRS. DRLG. 23
 MUD WT. 9 VIS. 35 WL 13 CHL 100 TYPE gel LCM _____
 OIL _____ SD 1/4 PV 13 YP 12 SOLIDS 4.6 PH 10.9

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.		SIZE	HOLE SIZE	SEAT	F.C.
8258	5 1/2			DRIVE				
8352	5 3/4			CONDUCTOR				
				SURFACE				
				INTERMED.				
				OTHER				

REMARKS: BHA - ditto

23 hrs drlg
1 survey

133 / 144 mud chiller on for 13 hrs

MRT 237
238 @ 8352 mud chiller on

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM
 MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	<u>17</u>	DEPTH OUT	
SIZE	<u>12 1/4</u>	DEPTH IN	<u>3161</u>
MAKE	<u>HTC</u>	FEET MADE	<u>260</u>
TYPE	<u>J-44</u>	HRS. DRILLED	<u>37 1/2</u>
SER. NO.	<u>148 BF</u>	WT. ON BIT	<u>40</u>
NO. & SIZE JETS	<u>1-B 2-14</u>	REV. PER MIN.	<u>45</u>
		CONDITION	
LINER SIZE	<u>6</u>	GAL. PER MIN.	<u>504</u>
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>99/113</u>
STROKES/MIN.	<u>80</u>	JET VEL.	<u>375</u>
PRESSURE	<u>1750</u>	BIT H.P.	<u>7.8</u>

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT) _____ RIG NO. _____
 SIGNATURE _____

DAILY DRILLING REPORT

FIELD W.C./GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT REPORT NO. 444
 LEASE USA A.M. DATE 6-27-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN _____ WELL NO. 11-36
 DEPTH 8565 FORMATION AMTIBOLITE HOLE MADE 144 HRS DRLD 21.5
 MUD WT 8.9 VIS. 32 WL 11 CHL 1.00 TYPE GEL LCV _____
 OIL _____ SD .25 PV 5 YF 5" SOLIDS 46 PH 10.4

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEVI.	SIZE	HOLE SIZE	SEAT	F.C.	
<u>8444</u>			<u>5'12"</u>	DRIVE				
<u>8565</u>			<u>5'12"</u>	CONDUCTOR	<u>20</u>	<u>26</u>	<u>320</u>	
				SURFACE	<u>13 3/8</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED.				
				OTHER				

REMARKS: BHA: SAME AS 6-24-80

21 1/2 HRS. DRLD.
1 1/4 HRS. CIRC AND CONDITION HOLE
1 1/4 HRS. SURVEY DEVI.

NUMBER OF COMPRESSORS _____		DISCHARGE PRESSURE _____		VOLUME OF AIR _____ CPM	
MUD COST PREVIOUS \$	TODAY \$	TO DATE \$			
WELL COST PREVIOUS \$	TODAY \$	TO DATE \$			
BIT NO. <u>17</u>	DEPTH OUT _____				
SIZE <u>12 1/4</u>	DEPTH IN <u>8161</u>				
MAKE <u>HTC</u>	FEET MADE <u>406</u>				
TYPE <u>U-44</u>	HRS. DRILLED <u>54</u>				
SER. NO. <u>148-BF</u>	WT. ON BIT <u>38</u>				
NO. & SIZE JETS <u>13-14-14</u>	REV. PER MIN. <u>45-50</u>				
	CONDITION <u>INC</u>				
LINER SIZE <u>6</u>	GAL. PER MIN. <u>504</u>				
LENGTH STROKE <u>16</u>	AN. VEL. <u>99 D.P. 143 D.C.</u>				
STROKES/MIN. <u>80</u>	JET VE. <u>378 FT/SEC</u>				
PRESSURE <u>1750</u>	CHURN. <u>6.7 FT/HC.</u>				

DRILLING CONTRACTOR _____

SIGNATURE _____

[Handwritten Signature]

RBH

WIG NO. 2

DAILY DRILLING REPORT

FIELD W.C. GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO. 45
 LEASE USA A.M. DATE 6-28-80
 DATE SPUNDED 5-15-80 DAYS SINCE SPUNDED IN 44 WELL NO. 11-36
 DEPTH 8565 FORMATION AMMOLITE MOLE MADE 0 HRS. DRILL. 0
 MUD WT. 9.0 VIS. 37 WL 10 CHL. 100 TYPE GEL LCM. -
 OIL - SD NIL PV 7 YP 6 SOLIDS 5.0 M 10.3

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLF SIZE	SEAT	F.C.
				DRIVE CONDUCTOR	20	26	320
				SURFACE	133/8	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS BHA: SUB, SPEAR

5 HRS: POOH, SHORT TRIP TH 55' FILL
4 HRS: CIRC CONDITION HOLE AND MUD
3 1/2 HRS: POOH TO LOG SET BACK DRILL COLLARS
11 HRS: RUN TEMP SURVEYS, STUCK SAME ON SECOND RUN AT 5700' PULLED LINE INTO AT KEY SEAT
1 1/2 HR: MAKING UP FOUR PRONG SPEAR TO FISH WIRELINE AND INSTRUMENTS AT MIDNIGHT 12:00 AM 6-29-80

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$		TODAY \$		TO DATE \$		
WELL COST PREVIOUS \$		TODAY \$		TO DATE \$		
BIT NO.	<u>17</u>	DEPTH OUT	<u>8565</u>			
SIZE	<u>12 1/4</u>	DEPTH IN	<u>8161</u>			
MAKE	<u>HTC</u>	FEET MADE	<u>404</u>			
TYPE	<u>D-44</u>	HRS. DRILLED	<u>59</u>			
SER. NO.	<u>148-BF</u>	WT. ON BIT	<u>38-40</u>			
NO. & SIZE JETS	<u>13-14-14</u>	REV. PER MIN.	<u>45</u>			
		CONDITION	<u>BT-6-4-IN</u>			
LINER SIZE	<u>6</u>	GAL PER MIN.	<u>-</u>			
LENGTH STROKE	<u>16</u>	AN. VEL.	<u>-</u>			
STROKES/MIN.	<u>-</u>	JET VEL.	<u>-</u>			
PRESSURE	<u>-</u>	BIT H.P.	<u>-</u>			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE Richard H. ...

RBM 2

DAILY DRILLING REPORT

FIELD WV / GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO 46
 LEASE USA A.M. DATE 6-24-80
 DATE SPUNDED 5-12-80 DAYS SINCE SPUNDED IN 45 WELL NO. 1436
 DEPTH 8565 FORMATION ALUMINOLITE HOLE MADE 0 HRS. DRLG 0
 MUD WT. 9.0 VIS. 40 WL 10 CHL 100 TYPE GEL LCM
 OIL --- SD NIL PV 9 YR 11 SOLIDS 5.0 M 10

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR	30	26	320	
				SURFACE	13 1/4	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS: BHA; SPEAR, BOT. SUB, NW

6 HRS: T1H WITH SPEAR, PICKING UP WIRE LINE TO 8397' AT 6:00 CIRC.

4 HRS: PDDH, RECOVERED ALL OF FISH.

7 HRS: ATTEMPT TO RUN ELECTRIC LOGS, FAILED, REPAIRING SHORT IN LOG LINE OF DRESSER ATLAS

7 HRS: RUNNING DI, FL, BHC, AL, CAL AT MIDNIGHT 12:00AM 6-20-80

NUMBER OF COMPRESSORS _____	DISCHARGE PRESSURE _____	VOLUME OF AIR _____	CFM _____
MUD COST PREVIOUS \$ _____	TODAY \$ _____	TO DATE \$ _____	
WELL COST PREVIOUS \$ _____	TODAY \$ _____	TO DATE \$ _____	
BIT NO. _____	DEPTH OUT _____		
SIZE _____	DEPTH IN _____		
MAKE _____	FEET MADE _____		
TYPE _____	HRS. DRILLED _____		
SER. NO. _____	WT. ON BIT _____		
NO. & SIZE JETS _____	REV. PER MIN. _____		
	CONDITION _____		
LINER SIZE <u>6</u>	GAL. PER MIN. <u>536</u>		
LENGTH STROKE <u>16</u>	AN. VEL. <u>165</u>		
STROKES/MIN. <u>85</u>	FT VEL. _____		
PRESSURE <u>1600</u>	BIT H.P. _____		

DRILLING CONTRACTOR FILL IN ON FIRST AND LAST REPORT

SIGNATURE John D. [Signature]

RBH 2

DAILY DRILLING REPORT

FIELD LLIC/GROSS VALLEY 24 HR PERIOD ENDING MIDNIGHT 13 REPORT NO 47
 LEASE USA A.M. DATE 6-30-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 46 WELL NO 11-34
 DEPTH 8565 FORMATION ANTHRODOLITE HOLE MADE P HRS DRLG 0
 MUD WT. 9.0 VIS 26 WL 10 CHL 100 TYPE GEL LCM
 OIL - SD 11 PV 10 YF 11 SOLIDS 5.0 PM 10.0

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEVI.	DRIVE	SIZE	MOLE SIZE	SEAT	F.C.
				CONDUCTOR	<u>20</u>	<u>26</u>	<u>520</u>	
				SURFACE	<u>1 3/8</u>	<u>17 1/2</u>	<u>2700</u>	
				INTERMED				
				OTHER				

REMARKS

7 HRS: FINISH ELECTRIC LOG (DRESSER ATLAS) CDL GR LOGS
17 HRS: RUNNING PRUITT WIRE LINE SERVICES, TEMP SIEVEYS
BOTH STOPS, AND TRAVEL BHARTS AT MIDNIGHT 12:00 AM 7-1-80

NUMBER OF COMPRESSORS		DISCHARGE PRESSURE		VOLUME OF AIR		CFM
MUD COST PREVIOUS \$		TODAY \$		TO DATE \$		
WELL COST PREVIOUS \$		TODAY \$		TO DATE \$		
BIT NO.		DEPTH OUT				
SIZE		DEPTH IN				
MAKE		FEET MADE				
TYPE		HRS. DRILL ED				
SER. NO.		WT. ON BIT				
NO. & SIZE JETS		REV. PER MIN.				
		CONDITION				
LINER SIZE		GAL. PER MIN.				
LENGTH STROKE		AN. VEL.				
STROKES/MIN.		JET VFL				
PRESSURE		BIT H.P.				

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)

SIGNATURE John D. Beckler

RBM IRIC NO 2

DAILY DRILLING REPORT

FIELD WL/GRASS VALLEY 24 HR. PERIOD ENDING MIDNIGHT 12 REPORT NO. 48
 LEASE USA A.M. DATE 7-1-80
 DATE SPUNDED 5-15-80 DAYS SINCE SPUNDED IN 47 WELL NO. 11-56
 DEPTH 8565 FORMATION ANTHROPOLITE HOLE MADE _____ HRS. DRLG. _____
 MUD WT. _____ VIS. _____ WL WATER CHL _____ TYPE _____ LCM _____
 OIL _____ SD _____ PY _____ YF _____ SOLIDS _____ PH _____

E.C. SURVEYS				CASING RECORD			
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	SIZE	HOLE SIZE	SEAT	F.C.
				DRIVE CONDUCTOR	20	26	320
				SURFACE	13 3/8	17 1/2	2700
				INTERMED.			
				OTHER			

REMARKS _____

4HRS: RUNNING CONTINUOUS TEMP. SURVEY SUCCESSFULLY.
 2HRS: TIH W/ DC'S, HW, AND 10 STDS. OF 5" DP
 7HRS: PUGH LAYING DOWN: 10 STDS OF DP, 12 JTS HW, 12 JTS DC'S, 12 1/4 TOOLS STABL. REAMERS ETC.
 11 1/2 HRS: TIH WITH 5" DP TO 7100'
 9 1/2 HRS: SET 50 SACK CEMENT PASTE CONSISTING OF 40% SSA-1, .75% CFR-2, 3% HR-7 AT 7100' 3:40 PM. PUGH SETTING BACK 2700' DP, LAYING DOWN THE REMAINDER. PUGHED UP EZSY TOOL TIH WITH SAME SET AT 2572' 10:40 PM, PRESSURE UP BACK SIDE 500 PSI. BREAK DOWN FORMATION AT 900 PSI, SQUEEZED 130 SXS CEMENT CONSISTING OF 40% SSA-1, .75% CFR-2, GOT OFF EZSY, PULLED 1 STD, SPOTTED 20 SXS CEMENT CONSISTING OF 40% SSA-1, .75% CFR-2 ON TOP OF EZSY, CLEARED PIPE W/ 3000 WATER AT MIDNIGHT 12:00 AM 7-2-80

NUMBER OF COMPRESSORS _____ DISCHARGE PRESSURE _____ VOLUME OF AIR _____ CFM

MUD COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____
 WELL COST PREVIOUS \$ _____ TODAY \$ _____ TO DATE \$ _____

BIT NO.	DEPTH OUT	DEPTH IN
SIZE	FEET MADE	HRS. DRILLED
MAKE	WT. ON BIT	REV. PER MIN.
TYPE	CONDITION	
SER. NO.		
NO. & SIZE JETS		
LINER SIZE	GAL. PER MIN.	
LENGTH STROKE	AM. VEL.	
STROKES/MIN.	JET VEL.	
PRESSURE	BIT H.P.	

DRILLING CONTRACTOR WILL IN ON FIRST AND LAST REPORT INIB NE 2

RBY

DAILY DRILLING REPORT

FIELD WATERBURY VALLEY 24 HR. PERIOD ENDING NOON REPORT NO. 209
 LEASE USA DATE 7-2-80
 DATE SPUDDED 5-15-80 DAYS SINCE SPUDDED IN 48 WELL NO. 11-36
 DEPTH 8565 FORMATION _____ HOLE MADE _____ MRS. DRLG _____
 MUD WT. _____ VIS _____ WL _____ CHL _____ TYPE _____ LCM _____
 OIL _____ SD _____ PV WATER YF _____ SOLIDS _____ M _____

E.C. SURVEYS				CASING RECORD				
DEPTH	ANGLE	COURSE LENGTH	TOTAL DEV.	DRIVE	SIZE	HOLE SIZE	SEAT	F.C.
				CONDUCTOR	20	26	320	
				SURFACE	13 1/2	17 1/2	2700	
				INTERMED.				
				OTHER				

REMARKS:
 4 HRS: POOH LAYING DOWN 81 JTS OF DP. 7 1/4" WITH 60 JTS, POOH LAYING DOWN SAME.
 1 HR: AT 60' IN PICKED UP KELLEY, PUMPED 9 BBL'S WATER AHEAD, SET 30-SACK CUT PILE CONSISTING OF 40% SSA-1, 75% CFB-2. DISPLACED WITH 2 BBL'S OF WATER TO CLEAR LINES.
 5 HRS: WASHED BOE CLEAN FOR SAFETY MEASURE, DISMANTLED AND SET CUT ROPE STACK IN 3 COMPONENTS, LOAD DRILL PIPE.
 2 HRS: CUT DEF CSE HEAD, 6 1/2' BELOW SURFACE, WELD ON CAP WITH HANDLE. RELEASED RIG AT 12:00 PM NOON 7-2-80.
 D&A AT 8565' DEPTH
 LAST REPORT

MUD COST PREVIOUS \$		TODAY \$		TO DATE \$	
MUD COST PREVIOUS \$		TODAY \$		TO DATE \$	
WELL COST PREVIOUS \$		TODAY \$		TO DATE \$	
BIT NO.		DEPTH OUT			
SIZE		DEPTH IN			
MAKE		FEET MADE			
TYPE		MRS. DRILLED			
SER. NO.		WT. ON BIT			
NO. & SIZE JETS		REV. PER MIN.			
		CONDITION			
LINER SIZE		GAL. PER MIN.			
LENGTH STROKE		AN. VEL.			
STROKES/MIN.		JET VEL.			
PRESSURE		BIT H.P.			

DRILLING CONTRACTOR (FILL IN ON FIRST AND LAST REPORT)
 SIGNATURE [Signature] RBH 2