

6100509

REPORT AA

DAILY DRILLING REPORTS -- WELL REWORK
California-Pacific Rig No. 1
38 p.

Appendix A

DAILY DRILLING REPORTS—WELL REWORK

Onshore Drilling Report

WELL NAME-NO. Kennecott State # 2-14					RIG Cal Pac No 1.	RIG PHONE				
PRESENT OPERATION R.I.H. with fishing tools			RPT. # 1	TIME 0600	DATE 8/2/87	DEPTH	TVD	FTG		

TRBLE CODE	TRBLE COST	DAILY COST 8,090	CUM COST 35,410
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SUPV. INIT. lan	HRS. DRLG	LAST CSG 9 3/8 in @ 6000	FIT
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MUD TYPE Brine Water	CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$ 0	CUM. MUD \$ 0
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MWD 8.7	FV	PV	YP	GELS	10 sec	10 min	pH	FL	HTP FL	100#	500#
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FC API /32	FC HTP /32	Pm	PI	MI	CI	ppm	Ca	ppm	SAND %	SOLIDS %
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OIL %	WATER %	MBT	TEMP IN 81 °F.	TEMP OUT	BH TEMP °F
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PUMPS	#1 MAKE/MODEL	HP	#2 MAKE/MODEL	HP	#3 MAKE/MODEL	HP	GPM	AVDP	AVDC
	Oilwell A600PT	650	Oilwell A600PT	650					

JINER SIZE	1 5 1/2	2 5 1/2	3 5 1/2	SPM	1 34/120	2 34/120	3	PUMP PRESS 1100	RPM	JAR UP x1000	JAR DN x1000
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BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft	2			ft	3			ft
HR. SINCE NSPEC.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
WT. x1000	10			ft	11			ft	12			ft

ANG	ANGLE	°	AZ	°	MD	°	AZ	°	MD	°	AZ	°
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CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL
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LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1300	7		Drill mouse hole through steel reinforced cellar bottom.		
0600			Repair leaks in pump line from brine pond killing well by 'bullheading' 8-7lb brine from brine pond. Started at 2 bbls/min; after four hours went to 4 bbls/min. At 2300 hrs stopped pumping and well started to flow. Continued kill procedure with both brine and fresh water. Pumped at 5-7 bbls/min. Well went on partial partial vacuum at 0500 hrs. Total fluid pumped 4200 bbls ±. Made up fishing tools: Spear/B/sub/Bowen sens/float sub and X-Overs. R.I.H @ 0500hrs		

DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec	sec	days	psi	psi @	psi @	psi @
BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED	DIESEL (MUD)
sc	sc	sc	sc	sc	sc	sc

Onshore Drilling Report

WELL NAME-NO. **Hemlock State # 2-14** RPT. # **4** TIME **0600** DATE **8/4/87** RIG **Cal Pac No 1.** RIG PHONE _____
 PRESENT OPERATION **Bullheading to kill well.** TRBLE CODE _____ TRBLE COST _____ DAILY COST _____ CUM COST _____
 SUPV INIT. **low** HRS DRLG _____ LAST CSG _____ in. @ _____ ft FIT _____

MUD TYPE **Bone Water** CHECK DEPTH _____ PIT FL _____ HOLE VOL. _____ bbl. PIT VOL. _____ bbl. DAILY MUD \$ _____ CUM. MUD \$ _____
 MW **8.7** ppg FV _____ sec PV _____ YP _____ GELS _____ 10 sec _____ 10 min _____ pH _____ FL _____ cc HTP FL _____ 100# _____ 500# _____
 FC API _____ /32 FC HTP _____ /32 Pm _____ PI _____ MI _____ CI _____ ppm Ca _____ ppm SAND _____ % SOLIDS _____ %
 OIL _____ % WATER _____ % MBT _____ TEMP IN _____ TEMP OUT _____ BH TEMP _____ °F

PUMPS #1 MAKE/MODEL **Oilwell 1600PT** HP _____ #2 MAKE/MODEL **Oilwell 1600PT** HP _____ #3 MAKE/MODEL _____ HP _____ GPM _____ AVDP _____ AVDC _____
 LINER SIZE 1 **5 1/2** 2 **5 1/2** 3 **5 1/2** SPM 1 **40/140** 2 **40/140** 3 _____ PUMP PRESS _____ RPM _____ JAR UP x1000 _____ JAR DN x1000 _____

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

ID	ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
			2			3		
			5			6		
			8			9		
			11			12		

RIP GAS _____ CONN. GAS _____ BKGD GAS _____ PORE PRESS _____ ppg DX _____ SHALE DEN _____ DELTA TRIP CL _____

LITHOLOGY: _____

RANGE: _____

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1000	4		P.O.O.H with 'scab' liner. Remove fishing tool assembly and lay down 7 1/2" casing.		
1100	1		Pick up fishing tools and change out jaws. R.I.H and land on damaged 7" liner at 6,528'-97' at 1730 hrs. Set fishing tool and picked up. Weight		
1800	7		indicator showed an increase in weight of 8,000 lb. P.O.O.H. Tripped jaws to get through dog-leg @ 165,000 lbs		
2300	5		Well started to flow just as collars were reached. Closed bag, and killed well.		
0200	3		P.O.O.H. 5 joints of 7" liner bottom joint end pin dam split, cracked, and damaged. Joint full of fill (P.T.O. -)		

DRILL _____ SAFETY VALVE DRILL _____ BOP TEST _____ MAX SICP _____ SLOW PUMP #1 _____ SLOW PUMP #2 _____ SLOW PUMP #3 _____
 sec / / sec / / days psi psi @ spm psi @ spm psi @ spm
 DIESEL USED _____ SODA ASH USED _____ CAUSTIC USED _____ LIGNO USED _____ POLYMER USED _____ LCM USED _____ DIESEL USED _____
 sec sec sec sec sec sec sec

TIME CODES											
DRILLING	00	Prep Location	26		51	Run Prod Csg/NU Wellhead	76				
	01	RU/RD	27		52	Test Csg/Wellhead	77				
	02	Drilling	28		53	Primary Cementing/WOC	78				
	03	Ream/Hole Opening	29		54	Remedial Cementing/WOC	79				
	04	Coring	30		55	NU/ND BOP's	80				
	05	Circulate/Condition Mud	DRLG TROUBLE	31	Abnormal Pressure/Well Control Problems	56	Testing BOP's	COMP TROUBLE	81	Primary/Remedial Sqz Cement Troub	
	06	Tripping		32	Lost Circulation/Open Hole Problems	57	Milling/Drilling/Washing		82	Stuck Pipe/Fishing Operations.WO Tools	
	07	Lub Rig		33	Directional Drilling/Deviation Problems	58	Circulating/Conditioning Fluid		83	BOP/Wellhead/Tubular Integrity Failures	
	08	Repair Rig/WO Rig Parts		34	Stuck Pipe/Fishing Operations/WO Tools	59	Tripping		84	Rig/Rig Equipment Failures	
	09	CuV Slip/Replace Drill Line		35	BOP/Wellhead/Tubular Integrity Failures	60	PU/LD String		85	Evaluation/Completion/Testing Problems	
	10	Directional Surveying	PLUGGING	36	Rig Equipment/Drill String Failures	COMPLETION	61	RU/RD Completion Rig	OFFSHORE	86	Weather/Other Misc. Completion Problems
	11	Logging/DST/Evaluation		37	Logging/Evaluation/Testing Problems		62	Lub Rig		87	
	12	Run Csg/WH Equip		38	Weather/Other Miscellaneous Problems		63	Repair Rig/WO Rig Parts		88	
	13	Cementing/WOC		39	Primary/Remedial Cement Trouble		64	Repair/WO Non-rig Parts		89	
	14	NU/ND BOP's		40	Plugging Operations		65	Cased Hole Logging/Eval.		90	
	15	Test BOP's		41	Window/Section Cutting Oper.		66	Running Tubing/Prod Equip		91	Under Tow
	16	PU/LD String		42	Plugback		67	NU Tree/Testing		92	Positioning Rig
	17	Driving/Jetting Casing		43			68	Sand Control		93	Run/Pull Anchors
	18	Test CSG/Run FIT (Leak off Test)		44			69	Perforating		94	Diving
	19	Observing Well		45			70	Stimulation		95	Run TV
	20	WO Orders	46		71	Wireline Work	96	Run Risers/Bop's			
	21	Repair/WO Non-rig Parts	47		72	WO Orders	97				
	22		48		73		98				
	23		49		74		99				
	24	Inspect BHA	50		75						
25	Drill Cement/Float Equip.										

BHA COMPONENT ABBREVIATIONS				BHA ADDITIONAL DIMENSION DESCRIPTION					
DC	Drill Collar	WBS	Weld Blade Stabilizer	ITEM NO.	FACE OD (in)	FACE LENGTH (ft)	FACE WIDTH (in)	OFFSET (ft)	WEIGHT(#/ft)
MDC	Monel DC	IBS	Int. Blade Stabilizer						
SPDC	Spiral DC	SSTB	Sleeve Stabilizer						
SQDC	Square DC	MS	Monel Stabilizer						
PDC	Pony DC	RR	Roller Reamer						
DP	Drill Pipe	RMR	Reamer						
HWDP	Hevi-Wate DP	RWP	Removable Wear Pad						
XO	Crossover	HO	Hole Opener						
SUB	Sub	UR	Under Reamer						
PDM	Pos. Disp. Motor	SKW	Spiral Keyseat Wiper						
TUR	Turbine	KSW	Keyseat Wiper						
JB	Junk Basket	SS	Shock Sub						
FG	Fishing Tools	JAR	Jars						
FS	Float Sub	CB	Core Barrel						
PRS	Pressure Relief Sub	MWD	MWD						
B	Bent Sub (show deflection angle)	BS	Bit Sub						
BIT	Bit								

TO	HRS.	TIME CODE	ADDITIONAL ACTIVITY LOG
0500	4.		Bull head well with brine and laid down the last joint of 7" liner.
0600			Note: When coming out of the hole with the casing great difficulty was experienced while pulling through the dog-leg. The casing hung up on five separate occasions - jars tripped on one.

ADDITIONAL DIRECTIONAL SURVEYS									
MD 7	ANGLE	°	AZ	°	MD 8	ANGLE	°	AZ	°
MD 10	ANGLE	°	AZ	°	MD 11	ANGLE	°	AZ	°
MD 13	ANGLE	°	AZ	°	MD 14	ANGLE	°	AZ	°
MD 16	ANGLE	°	AZ	°	MD 17	ANGLE	°	AZ	°

ADDITIONAL BHA															
ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
13			ft.	14			ft.	15			ft.	16			ft.
16			ft.	17			ft.	18			ft.	19			ft.
19			ft.	20			ft.	21			ft.	22			ft.
22			ft.	23			ft.	24			ft.	25			ft.

		TIME CODES			
DRILLING	00	26		51	76
	01	27		52	77
	02	28		53	78
	03	29		54	79
	04	30		55	80
	05	31	DRLG TROUBLE	56	81
	06	32		57	82
	07	33		58	83
	08	34		59	84
	09	35		60	85
	10	36		61	86
	11	37		62	87
	12	38		63	88
	13	39		64	89
	14	40		65	90
	15	41	PLUGGING	66	91
	16	42		67	92
	17	43		68	93
	18	44		69	94
	19	45		70	95
	20	46		71	96
	21	47		72	97
	22	48		73	98
	23	49		74	99
	24	50		75	

BHA COMPONENT ABBREVIATIONS			BHA ADDITIONAL DIMENSION DESCRIPTION						
DC	Drill Collar	WBS	Weld Blade Stabilizer	ITEM NO.	FACE OD (in)	FACE LENGTH (ft)	FACE WIDTH (in)	OFFSET (ft)	WEIGHT(LBS/FT)
MDC	Monel DC	IBS	Int. Blade Stabilizer						
SPDC	Spiral DC	SSTB	Sleeve Stabilizer						
SQDC	Square DC	MS	Monel Stabilizer						
PDC	Pony DC	RR	Roller Reamer						
DP	Drill Pipe	RMR	Reamer						
HWDP	Hevi-Wate DP	RWP	Removable Wear Pad						
XO	Crossover	HO	Hole Opener						
SUB	Sub	UR	Under Reamer						
PDM	Pos. Disp. Motor	SKW	Spiral Keyseat Wiper						
TUR	Turbine	KSW	Keyseat Wiper						
JR	Junk Basket	SS	Shock Sub						
IG	Fishing Tools	JAR	Jars						
	Float Sub	CB	Core Barrel						
PRS	Pressure Relief Sub	MWD	MWD						
B	Bent Sub (show deflection angle)	BS	Bit Sub						
BIT	Bit								

TO	HRS.	TIME CODE	ADDITIONAL ACTIVITY LOG
0	6		R.I.H. to attempt tag. Well completely stable - no flow.
0200			Tagged cement @ 6036 ft - set down 75,000 lbs and pumped H ₂ O. Call Dog to witness tag - W.O.D.O.G.
0600			Drill cement down to 5048' and P.O.O.H.

ADDITIONAL DIRECTIONAL SURVEYS									
MD 7	ANGLE	°	AZ	°	MD 8	ANGLE	°	AZ	°
MD 10	ANGLE	°	AZ	°	MD 11	ANGLE	°	AZ	°
MD 13	ANGLE	°	AZ	°	MD 14	ANGLE	°	AZ	°
MD 16	ANGLE	°	AZ	°	MD 17	ANGLE	°	AZ	°

ADDITIONAL BHA														
	ITEM	OD	ID	LENGTH		ITEM	OD	ID	LENGTH		ITEM	OD	ID	LENGTH
	13			ft.	14				ft.	15				
	16			ft.	17				ft.	18				
	19			ft.	20				ft.	21				
	22			ft.	23				ft.	24				

Onshore Drilling Report

WELL NAME-NO. Kennecott State # 2-14				RPT # 6		TIME 05 00		DATE 8/6/87		DEPTH 6036		RIG Cal Pac No 1.		RIG PHONE			
PRESENT OPERATION Cooling mud and well				TABLE CODE #		TABLE COST		DAILY COST		CUM COST							
				SUPV. INIT. land		HRS. DRLG		LAST CSG 9 5/8		in. @ 6000		FIT		CCG			
MUD TYPE Gel Poly		CHECK DEPTH		PIT FL		HOLE VOL. 441		PIT VOL. 582		DAILY MUD \$ 7357		CUM. MUD \$ 7357					
MW 8.5+		FV 34		PV 6		YP 5		GELS 1		10 sec 7		10 min 9.5		FL 17.6			
FC API 1 /32		FC HTP 1/32		Pm N/A		PI 2.5		MI 5		Cl 13,600		Ca 480		SAND NIL			
DIL 0		WATER 100		MBT 10		TEMP IN 112		TEMP OUT 180/204		BH TEMP 600							
PUMPS #1 MAKE/MODEL Oilwell A600 PT 600				#2 MAKE/MODEL Oilwell A600FT				#3 MAKE/MODEL				GPM		AVDP		AVOC	
INNER SIZE 5.5		SIZE 5.5		SIZE 5.5		SPM 40/120		PUMP PRESS		RPM		JAR UP x1000		JAR DN x1000			
TORO OFF BTM		TORO ON BTM		TORO MAX.		WOB x1000		ROT WT. x1000		P/U WT. x1000		SLACK OFF WT. x1000					

BIT #	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2	2			ft 3				ft
HR. SINCE NSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
WGT. x1000	10			ft 11				ft 12				ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		

RIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	DPG	OX	SHALE DEN	DELTA TRIP CL

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0900	3		Pulling out of hole, shut in well; - well flowing slowly.		
1000	1		Break off bit and subs. Float sub plugged in float valve.		
1530	5.5		Stage in hole to 5956 ft.		
0200	12 1/2		Circulate hole with water while building active mud system. Change over from water to mud in well @ 1800.		
0600	4		Mud temperature reaches 204° F. Shut in well. Mud coolers not working properly because of a Kern steel failed water pressure regulator. Get Remove regulator and cool mud back to 88° F. Set up to cool well under control through choke manifold with water.		

BIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / / /	days	psi	psi @	psi @	psi @
CEL USED 207	BARITE USED	SODA ASH USED	CAUSTIC USED 10	LIGNO USED	POLYMER USED	LCM USED
DCC 12/14	25	Kern	Bicarb	Biozan		DIESEL

Onshore Drilling Report

WELL NAME-NO. **Kennecott State #2-14** RPT # **7** TIME **06:00** DATE **8/7/87** RIG **cal Pac No 1.** RIG PHONE _____
 DEPTH _____ TVD _____ FTG _____

PRESENT OPERATION **Pulling out of hole** TRBLE CODE # _____ TRBLE COST _____ DAILY COST _____ CUM COST _____
 SUPV INIT. _____ HRS. DRLG _____ LAST CSG **9.5** in. @ **6000** ft FIT _____

MUD TYPE **Gel/Poly** CHECK DEPTH _____ PIT FL _____ HOLE VOL. _____ PIT VOL. **450** bbl. DAILY MUD \$ **175** CUM. MUD \$ **7532**
 MW **8.5** ppq FV **30** sec PV **3** YP **4** GELS **1** 10 sec **5** 10 min PH **9** FL **18.2** cc HTP FL _____ 100# _____ 500# _____

FC API **2** /32 FC HTP _____ /32 Pm **0** PI **0.7** MI **1.1** CI **11,500** ppm Ca **420** ppm SAND **Trace** % SOLIDS **1 1/4** %
 OIL **0** % WATER **100%** % MBT **10** TEMP IN **90** TEMP OUT **126** BH TEMP **600** °F

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP **600** #2 MAKE/MODEL **Oilwell A600PT** HP **600** #3 MAKE/MODEL _____ HP _____ GPM **100/250** AVDP **105** AVDC **202**

LINEAR SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 **40/140** 2 **40/140** 3 _____ PUMP PRESS **250/1500** RPM **N/A** JAR UP **120** x1000 JAR DN **40** x1000
 TORO OFF BTM _____ TORO ON BTM _____ TORO MAX. _____ WOB **25** x1000 ROT WT. _____ x1000 P/U WT. _____ x1000 SLACK OFF WT. _____ x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
No 1.	8 1/2	sec	S44 G	16 16 16		6076	40	1	III		

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		
		5			6		

RIP GAS _____ CONN. GAS _____ BKGD GAS _____ PORE PRESS _____ ppm DX _____ SHALE DEN _____ DELTA TRIP CL _____

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1100	5		Work on mud coolers and circulate well cool with H2O.		
2200	11		Pull out of hole; make up directional drilling assembly. R.I.H.		
2300	1		Circulate and condition. Tag cement, and dress cement down to 6058'. 6036'		
0600			Drill and survey. Survey picture no good. Navidril will not work past 6076' P.O.O.H checking each joint for wash-out. None found.		
			B.H.A. Bit; Mach 3 Navidril; Monel. 1-5° sub: x0; 3x6 1/2 DC. 13 HWDP; Jars: 4 HWDP — 693 ft.		

BIT DRILL _____ SAFETY VALVE DRILL _____ BOP TEST **3** days MAX SICP **95** psi SLOW PUMP #1 _____ psi @ _____ sdpm SLOW PUMP #2 _____ psi @ _____ sdpm SLOW PUMP #3 _____ psi @ _____ sdpm
 GEL USED _____ BARITE USED _____ SODA ASH USED _____ CAUSTIC USED _____ LIGNO USED _____ POLYMER USED _____ LCM USED _____ DIESEL (MUD) _____ DIESEL _____

Onshore Drilling Report

WELL NAME-NO Kennecott State # 2-14				RPT. # 8	TIME 0600	DATE 8/8/87	DEPTH 6083	FVO	FTG
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SENT IATION Rig shut down for repairs.				TABLE CODE #	TABLE COST	DAILY COST 5,989	CUM. COST 99,516
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MUD TYPE Gel/Poly		CHECK DEPTH N/A.	PIT FL	HOLE VOL.	bbl.	PIT VOL.	bbl.	DAILY MUD \$	CUM. MUD \$
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MW	ppg	FV	sec	PV	YP	GELS	10 sec	10 min	pH	FL	cc	HTP FL	100#	500#
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FC API	/32	FC HTP	/32	Pm	Pi	Mi	CI	ppm	Ca	ppm	SAND	%	SOLIDS	%
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DIL	%	WATER	%	MBT	TEMP IN	TEMP OUT	BH TEMP	°F
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PUMPS	#1 MAKE/MODEL	HP	#2 MAKE/MODEL	HP	#3 MAKE/MODEL	HP	GPM	AVDP	AVDC
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LINER SIZE	1	2	3	SPM	1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR DN	x1000
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TORO OFF BTM	TORO ON BTM	TORO MAX.	WOB	x1000	ROT WT.	x1000	PIU WT.	x1000	SLACK OFF WT.	x1000
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BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
1	8 1/2	Sec	S4TG	16	16	16		6083	30	.5	1 NC	355691	1

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft	2			ft	3			ft
HRS. SINCE NSPEC.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
BHA WT. x1000	10			ft	11			ft	12			ft

IN 6083	ANGLE 8°	AZ N75E	MD 2	ANGLE	AZ	MD 3	ANGLE	AZ
	ANGLE	AZ	MD 5	ANGLE	AZ	MD 6	ANGLE	AZ

RIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL
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LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1330			Pick up new mud motor - first one obviously damaged. R.I.H. and test motor by drilling to 6083. Start to run directional survey and rig power fails totally at 1153hrs. - No 2 engine cannot be re-started and power cannot be sustained on remaining two. Shut rig down for repairs. Secured well after P.O.O.H.		
0600			Rig shut down.		

IT DRILL	sec	/	/	SAFETY VALVE DRILL	sec	/	/	BOP TEST	days	MAX SICP	psi	SLOW PUMP #1	psi @	spm	SLOW PUMP #2	psi @	spm	SLOW PUMP #3	psi @	spm
CEL USED	sk	BARITE USED	sk	SODA ASH USED	sk	CAUSTIC USED	sk	LIGNO USED	sk	POLYMER USED	sk	LCM USED	sk	DIESEL (MUD)	sk	DIESEL (USED)	sk			

Onshore Drilling Report

WELL NAME-NO. **Kennecott State # 2-14** RPT # **9** TIME **08:00** RIG **Cal Pac No 1.** DATE **8/19/87** DEPTH **6083** RIG PHONE
 SENSATION **Rig shut down for repairs.** TRBLE CODE # TRBLE COST DAILY COST **1,485** CUM COST **101,001**

MUD TYPE **Gel Poly** CHECK DEPTH PIT FL HOLE VOL. bbl. PIT VOL. bbl. DAILY MUD \$ CUM. MUD \$
 MW ppq FV sec PV YP GELS 10 sec 10 min pH FL cc HTP FL 100# .500#
 SUPV INIT. **layf** HRS. DRLG **0** LAST CSG in @ ft FIT ppq

FC API /32 FC HTP /32 Pm PI MI CI ppm Ca ppm SAND % SOLIDS %
 OIL % WATER % MBT TEMP IN TEMP OUT BH TEMP °F

PUMPS #1 MAKE/MODEL HP #2 MAKE/MODEL HP #3 MAKE/MODEL HP GPM AVDP AVDC
 LINER SIZE 1 2 3 SPM 1 2 3 PUMP PRESS RPM JAR UP x1000 JAR DN x1000

TORQ OFF BTM TORQ ON BTM TORQ MAX. WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2	2			ft 3				ft
H.R. SINCE NSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
WT. x1000	10			ft 11				ft 12				ft

ANGLE ° AZ ° MD 2 ANGLE ° AZ ° MD 3 ANGLE ° AZ °
 ANGLE ° AZ ° MD 5 ANGLE ° AZ ° MD 6 ANGLE ° AZ °

TRIP GAS CONN. GAS BKGD GAS PORE PRESS ppq DX SHALE DEN DELTA TRIP CL

LITHOLOGY:
 RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0600			New engine installed.		

BIT DRILL sec / / SAFETY VALVE DRILL sec / / BOP TEST days MAX SICP psi SLOW PUMP #1 psi @ spm SLOW PUMP #2 psi @ spm SLOW PUMP #3 psi @ spm
 LUBRICATION: OIL USED sx BARITE USED sx SODA ASH USED sx CAUSTIC USED sx LIGNO USED sx POLYMER USED sx LCM USED sx DIESEL (MUD) cc. DIESEL

Onshore Drilling Report

ALL NAME-NO. **Kennecott State** # **2-1F** RPT # **11** TIME **0600** DATE **8/11/87** DEPTH **6083** TVD FTG
 RIG **Cal Pac No. 1** RIG PHONE

PRESENT OPERATION **Installing new annular** TABLE CODE # TABLE COST DAILY COST CUM COST
 SUPV. INIT. **lady** HRS. DRLG LAST CSG **9-5** in. @ **6000** ft FIT 20g

MUD TYPE **Gal/10ly Water** CHECK DEPTH PIT FL HOLE VOL. bbl. PIT VOL. bbl. DAILY MUD \$ CUM MUD \$
 VW **8-5** dpg FV sec PV YP GELS 10 sec 10 min pH FL cc HTP FL 100# 500#

FC API **32** FC HTP **32** Pm PI MI CI Ca ppm SAND ppm SOLIDS %
 OIL % WATER % MBT TEMP IN **85** TEMP OUT **120** BH TEMP **600** °C

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP #2 MAKE/MODEL **Oilwell A600PT** HP #3 MAKE/MODEL HP GPM AVOP AVDC

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 2 3 PUMP PRESS RPM JAR UP x1000 JAR DN x1000
 TORQ OFF BTM TORQ ON BTM TORQ MAX. WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND		SERIAL NO.	BHA NO
1	8 1/2	Sec	S44G	16	16	16	Ø	6083	20	2	1	1	F	

SHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
SHA #	1			ft	2			ft	3			ft
HRS. SINCE NSPEC.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
WT. x1000	10			ft	11			ft	12			ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		
		5			6		

RIP GAS CONN. GAS BKGD GAS PORE PRESS dpg DX SHALE DEN DELTA TRIP CL

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1000			Install new annular and rotating head. Test.		
2000			R.H. to cool well with water.		
0300			P.O.O.H. and pick up Navidril:- will not test properly.		
0600			Pick up turbo drill, test and R.I.H.		

BIT DRILL SAFETY VALVE DRILL BOP TEST MAX SICP SLOW PUMP #1 SLOW PUMP #2 SLOW PUMP #3
 REL USED **56** SX BARITE USED SX SODA ASH USED **7** SX CAUSTIC USED **2** SX LIGNO USED SX POLYMER USED SX LCM USED SX DIESEL (MUD) SX DIESEL

Onshore Drilling Report

WELL NAME-NO. Kennecott State # 2-14				RPT # 12	TIME 06:00	DATE 8/12/87	DEPTH 6133	RIG Cal Pac No 1.	RIG PHONE
PRESENT OPERATION Pulling out of Hole				TRBLE CODE #	TRBLE COST	DAILY COST 1299	CUM. COST 123922		

MUD TYPE Gel Poly	CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$ 1296	CUM. MUD \$ 8938			
MW 8-5 ppg	FV 30 sec	PV 1	YP 3	GELS 1	10 sec 4 10 min	PH 8-2	FL 100 cc	HTP FL 100	500 #
FC API Flu /32	FC HTP /32	Pm	Pi .01	Mi .03	CI 19,600 ppm	Ca 2400 ppm	SAND Trace %	SOLIDS 1 %	
OIL %		WATER %		MBT	TEMP IN 85	TEMP OUT 136	BH Temp 600 °C		

PUMPS #1 MAKE/MODEL Oilwell A600PT		HP	#2 MAKE/MODEL Oilwell A600PT		HP	#3 MAKE/MODEL		HP	GPM 600	AVDP	AVDC
LINER SIZE 1 5.5 2 5.5 3 5.5			SPM 1	2	3	PUMP PRESS	RPM	JAR UP x1000	JAR DN x1000		
TORO OFF BTM		TORO ON BTM		TORO MAX.	WOB x1000	ROT WT. x1000	PIU WT. x1000	SLACK OFF WT. x1000			

BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND			SERIAL NO.	BHA NO.
1	8 1/2	Sec	S44G	0	0	0	35	6095	35	3	1	1	I	355691	
2	8 7/8	R.B.I.	CJ1	16	16	16	39	6133	39	1	1	1	I	AP815	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

ANGLE	AZ	MD 2	ANGLE	AZ	MD 3	ANGLE	AZ
ANGLE	AZ	MD 5	ANGLE	AZ	MD 6	ANGLE	AZ

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1300			Stage in hole. Survey, orientate and attempt to sidetrack. Turbo drill will not function.		
1800			P.O.O.H and test motor. Will not function and pieces of bearing are seen around drive sub. Make up locked B.H.A. R.H. to cool and dress cement plug further. Dress down to 6133' and P.O.O.H. Pick up new turbo motor, R.H.		
0600					

IT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / / /	days	psi	psi @	psi @	psi @
WATER USED 129 sx	BARITE USED	SODA ASH USED 5 sx	CAUSTIC USED 10 sx	LIGNO USED	POLYMER USED	LCM Sandust 2 USED sx
						DIESEL (MUO) 2 sx
						DIESEL

Onshore Drilling Report

WELL NAME-NO. Kennecott State #2-14					RIG Cal Pac No 1.		RIG PHONE		
PRESENT OPERATION Killingwell.			RPT. # 13	TIME 00	DATE 8/13/87	DEPTH 6636	TVD	FTG	
TRBLE CODE #		TRBLE COST	DAILY COST 28,898	CUM. COST 150,870					
SUPV. INIT. land		HRS. DRLG 8	LAST CSG 9.5' in. @ 6000	FIT		PPG			
MUD TYPE Gel Poly	CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$ 1950	CUM. MUD \$ 10,888			
MW 8.5 ppg	FV 29 sec	PV 1	YP 1	GELS 1	10 sec 2	10 min	pH 9	FL	
FC API Flm /32	FC HTP	Pm 4	Pi 0.1	Mi 0.2	CI 11,000 ppm	Ca 2080 ppm	SAND Trace %	SOLIDS 3/4 %	
DIL %	WATER %	MBT	TEMP IN		TEMP OUT		BH TEMP °F		
#1 MAKE/MODEL		HP	#2 MAKE/MODEL		HP	#3 MAKE/MODEL		HP	
GPM		AVDP	AVDC						
INNER SIZE 1	2	3	SPM 1	2	3	PUMP PRESS	RPM	JAR UP x1000	
TORQ OFF BTM		TORQ ON BTM	TORQ MAX.	WOB x1000	ROT WT. x1000	P/U WT. x1000	SLACK OFF WT. x1000	JAR DN x1000	
BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	
COND		SERIAL NO.		BHA NO.					
BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	
BHA #	1			ft 2				ft 3	
HR. SINCE NSPEC.	4			ft 5				ft 6	
DRILL STRING #	7			ft 8				ft 9	
WT. x1000	10			ft 11				ft 12	
ANGLE °	AZ	°	MD 2	ANGLE °	AZ	°	MD 3	ANGLE °	
ANGLE °	AZ	°	MD 5	ANGLE °	AZ	°	MD 6	ANGLE °	
RIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	PPG	DX	SHALE DEN	DELTA TRIP CL		

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1200			R.I.H. attempt to drill with turbo motor but motor fails. Rotate down to 6163, circulate.		
			P.O.O.H. Make up new bottom hole assembly, R.I.H to 6133.		
2200			Drill from 6133 to 6636. Drilled out of cement plug at 6480. Tagged hard again @ 6614. Fluid intrusion during drilling, approx 125 bbls. Well started flowing at 0556 - Started kill procedures.		
			BHA, Bit; stab; stab; lead collar; stab; ^{stab} Bit sub; stab; manel; stab; DC; stab; 5 DC; 6 HWDP; Jaws: 11 HWDP		

BIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @	psi @	psi @
CEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER. USED	LCM USED
sx	USED	sx	USED	sx	USED	sx
						DIESEL (MUD)
						DIESEL

Onshore Drilling Report

WELL NAME-NO: **Kennecott State # 2-14** RPT # **14** TIME **06:00** DATE **8/14/87** DEPTH **6636** RIG **Cal Pac No 1.** RIG PHONE

PRESENT OPERATION: **Pulling out of hole.** TRBLE CODE # TRBLE COST DAILY COST CUM COST

MUD TYPE: **Gel Pds** CHECK DEPTH PIT FL HOLE VOL. **353** bbl. PIT VOL. **775** bbl. DAILY MUD S **1372** CUM. MUD S **12,260**

MW **8.5** ppv **32** sec PV **2** YP **3** GELS **1** 10 sec **2** 10 min pH **9.5** FL HTP FL **100#** 500#

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP #2 MAKE/MODEL **Oilwell A600PT.** HP #3 MAKE/MODEL HP GPM AVDP AVDC

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 2 3 PUMP PRESS RPM JAR UP x1000 JAR DN x1000

TORQ OFF 3TM TORQ ON BTM TORQ MAX. x1000 WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT# **3** SIZE **8 1/2** MAKE **Sec** TYPE **S44G** JETS **16 16 16** TFA DEPTH OUT **6636** FOOTAGE **500** HOURS **7 1/2** COND **3 3 2** SERIAL NO. **339159** BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
TR. SINCE NSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
WT. x1000	10			ft 11				ft 12				ft

ANGLE ° AZ ° MD 2 ANGLE ° AZ ° MD 3 ANGLE ° AZ ° MD 4 ANGLE ° AZ ° MD 5 ANGLE ° AZ ° MD 6

RIP GAS CONN. GAS BKGD GAS PORE PRESS ppv OX SHALE DEN DELTA TRIP CL

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0800			Kill well with mud, pull bit to shoe of 9 5/8" casing, shut well in and wait on instructions from DOE.		
1600			Build mud while waiting on instructions from DOE.		
2000			Receive orders to sidetrack with whipstock, continue building mud, run thermometer survey - est 420°F after 13hr shut in @ 6600ft. 442°F		
400			Kill well with 1000 bbls H2O. start pulling out of hole well starts flowing kill with a further 600 bbls 8-7 hr. P.O.O.H. B.N.A - same.		

BIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ spm	psi @ spm
GEL USED 142 sk	BARITE USED	SODA ASH USED 7 sk	CAUSTIC USED 2 sk	LIGNO USED	POLYMER USED 1 sk	LCM USED
					Wor Zon	DIESEL (MUD) DIESEL

Onshore Drilling Report

WELL NAME-NO: **Kennecott State #2-14** RPT # **15** TIME **0600** DATE **8/15/87** DEPTH **6531** TVD FTG
 RIG: **Cal Pac No 1** RIG PHONE

PRESENT OPERATION: TRBLE CODE # TRBLE COST **22,382** DAILY COST **13,425** CUM COST **176,872**

SUPV. INIT. **land** HRS. ORLG **1** LAST CSG **95** in. @ **6000** FIT DPG

MUD TYPE **col 1064** CHECK DEPTH PIT FL HOLE VOL. bbl. PIT VOL. bbl. DAILY MUD \$ **175** CUM. MUD \$ **12,435**

MW **8.5** ppq FV **32** sec PV **2** YP **3** GELS **1** 10 sec **2** 10 min pH **9.5** FL **-** cc HTP FL **100#** 500#

FC API **2** /32 FC HTP **-** /32 Pm PI **0.1** MI **0.3** CI **2240** ppm Ca **80** ppm SAND **TRACE** % SOLIDS **1.2** %

DIL **98.8** % WATER % MBT **17** TEMP IN **85** TEMP OUT **89** BH TEMP **442** °C

PUMPS #1 MAKE/MODEL **Oilwell A600 PT** HP #2 MAKE/MODEL **Oilwell A600 PT** HP #3 MAKE/MODEL HP GPM AVDP AVDC

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 2 3 PUMP PRESS **450** RPM **80** JAR UP x1000 JAR DN x1000

TORO OFF BTM TORO ON BTM TORO MAX. WOB **18,000** x1000 ROT WT. x1000 PIJ WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR 3											

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft	2			ft	3			ft
	4			ft	5			ft	6			ft
	7			ft	8			ft	9			ft
	10			ft	11			ft	12			ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		
		5			6		

RIP GAS CONN. GAS BKGD GAS PORE PRESS DPG OX SHALE DEN DELTA TRIP CL

LITHOLOGY: **Cement 90% 5-10% Claystone.**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0700			P.O.O.H.		
1000			R.I.H. open ended to 6611' rig up cement truck.		
1200			Circulate well cool through drill pipe and 'bullhead' through annulus.		
			Cement plug in place with 93 cuft G+40 silica.		
			P.O.O.H. with well starting to flow. Kill well and P.O.O.H.		
1800			Went on cement. R.I.H to tag. Tagged @ 6507'		
			Dressed plug to 6531 ft. @ 0330. Well flowing.		
500			Start to kill well prior to pulling out.		

BIT DRILL SAFETY VALVE DRILL BOP TEST MAX SICP SLOW PUMP #1 SLOW PUMP #2 SLOW PUMP #3

CEL USED BARITE USED SODA ASH USED CAUSTIC USED LIGNO USED POLYMER USED LCM USED DIESEL (MUD) DIESEL

Onshore Drilling Report

WELL NAME NO. **Kemecott State #2-14** RPT. TIME **06:00** DATE **8/16/87** DEPTH **6531** RIG **Cal Pac No. 1** RIG PHONE

PRESENT OPERATION **Rig shut down - brake problems.** TABLE CODE # TABLE COST DAILY COST CUM. COST **188,135**

SUPV. INIT. **land** HRS. DRLG **0** LAST CSG **9 1/2** in. **6000** ft. FIT

MUD TYPE **Gel Pad** CHECK DEPTH PIT FL. HOLE VOL. **431** bbl. PIT VOL. **396** bbl. DAILY MUD S **1278** CUM. MUD S **13688**

MW **8.5** ppg FV **34** sec PV **100/4** YP **6** GELS **3** 10 sec **5** 10 min PH **8.5** FL **16.2** cc HTP FL **—** 100# **—** 500#

FC API **2** /32 FC HTP **—** /32 Pm **—** P **0-1** MI **0.3** CI **16,500** ppm Ca **1520** ppm SAND **TRACE** % SOLIDS **1 1/2** %

DIL **—** % WATER **98.5** % MBT **17** TEMP IN **85** TEMP OUT **138** BH TEMP **442** °F

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP **600** #2 MAKE/MODEL **Oilwell A600PT** HP #3 MAKE/MODEL HP GPM AVDP AVDC

LINEAR SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 2 3 PUMP PRESS RPM JAR UP x1000 JAR ON x1000

TORQ OFF BTM TORQ ON BTM TORQ MAX. WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR3	8 1/2	Sec	S44G	16 16 16		6531	23		1 2 I	339159	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		
		6			6		

RIP GAS CONN. GAS BKGD GAS PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY: **Cement / Claystone.**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0900			Bullhead brine into well to kill flow.		
1300			P.O.O.H. lay down stabilizers, make up 6' whipstock		
1500			R.I.H. to 6515 (12' of fill)		
1800			Changeover to mud through kelly/annulus.		
2100			Survey for sidetrack, orientate whipstock. Directional drilling head collapses - apparently heart related problems - take to hospital - condition is stable.		
0100			P.O.O.H - strap out to check measurements.		
0200			R.I.H. staging @ 2000 ft. Brake failure @ 2751		
300			Rig shut down for repairs on brake. (band blocks)		

IT DRILL SAFETY VALVE DRILL BOP TEST MAX SICP SLOW PUMP #1 SLOW PUMP #2 SLOW PUMP #3

REL USED **64** SX BARITE USED SODA ASH USED CAUSTIC USED **1** SX LIGNO USED POLYMER USED LCM USED **22** SX DIESEL (MUD) **—** SX

C.S. HULLS **Sawdust** DFE 104 **1** LD-8 **1** Kem seal **Riser hucks** DIESEL **—**

Onshore Drilling Report

WELL NAME NO. Kennecott State # 2-14				RPT # 17 TIME 06:00		RIG Cal Pac No 1		RIG PHONE	
PRESENT OPERATION Pumping pill.				DATE 8/17/87		DEPTH 6537		TVD	
TRBLE CODE #				TRBLE COST		DAILY COST		CUM COST	
SUPV. INIT. land				HRS. ORLG		LAST CSG 9 3/8 @ 6000		FIT	
MUD TYPE Gel Poly		CHECK DEPTH 6537		PIT VOL. 367 bbl		PIT VOL. 393 bbl		DAILY MUD \$ 4297	
MW 8-75 ppg		FV 43 sec		PV 5 YP 9		GELS 4 10 sec 13 10 min		PH 10 FL 12.1 cc	
FC API 2 /32		FC HTP — /32		PI .4 MI .7		CI 16,200 ppm		Ca 180 ppm	
DIL — %		WATER 97-25 %		MBT 20		TEMP IN 140		TEMP OUT 169	

PUMPS #1 MAKE/MODEL		HP		#2 MAKE/MODEL		HP		#3 MAKE/MODEL		HP		GPM		AVDP		AVDC	
Oilwell A600PT		600		Oilwell A600PT		600								110		158	
LINER SIZE 1 5.5 2 5.5 3 5.5		SPM 1 2 3		PUMP PRESS 200		RPM		JAR UP		x1000		JAR DN		x1000			
TORQ OFF BTM		TORQ ON BTM		TORQ MAX.		WOB x1000		ROT WT. x1000		P/U WT. x1000		SLACK OFF WT. x1000					

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR3	8 1/2	Sec	S44G	16 16 16	—	—	—	—	1 2 I	339159	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

RIP GAS		CONN. GAS		BKGD GAS		PORE PRESS		DX		SHALE DEN		DELTA TRIP CL	
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LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1630			Rig shut down for repairs - 13 1/2 hrs. total. Slip line.		
2200			Run down to 5976', circulate and condition mud CO2 entry. Build mud weight to 8-7 ppg.		
0600			Continue to build and condition mud. R.I.H. to bottom; tagged 21' of fill; cleaned out. Bullhead new mud down, circulate. Wiped hole back to shoe. No fill. mixed 9-4 pill and pumped. (Hole cleaned to 6537) (col 128,000 ppm.)		

IT DRILL		SAFETY VALVE DRILL		BOP TEST		MAX SICP		SLOW PUMP #1		SLOW PUMP #2		SLOW PUMP #3	
sec / /		sec / /		days		psi		psi @		spm		psi @	
GEL USED 93 sx		BARITE USED 85 sx		SODA ASH USED 5 sx		CAUSTIC USED 10 sx		LIGNO USED 1 sx		POLYMER USED		LCM USED	
Bi Carb. 4		DPE 10/12/08		1		Kan Sol 2		2000 5				DIESEL (MUD) 20.	

RIG Cal Pac No.1. RIG PHONE

WELL NAME-NO. **Kemecott State #2-14** APT. #19 TIME 0600 DATE 8/18/87 DEPTH 6547 TVO FTG

PRESENT OPERATION **R.I.H.** TRBLE CODE # TRBLE COST DAILY COST 10,363 CUM. COST 209,175

SUPV. INIT. HRS. DRLG LAST CSG FIT

MUD TYPE **Gel Poly** CHECK DEPTH PIT FL HOLE VOL. 418 bbl. PIT VOL. 339 bbl. DAILY MUD \$ 705 CUM. MUD \$ 15,693

MW 8.7 PPG FV 32 sec PV 5 YP 8 GELS 3 10 sec 12 10 min pH 9.1 FL 11.4 cc HTP FL 100# 500#

FC API 2 /32 FC HTP /32 Pm PI .2 MI .3 CI 18600 ppm Ca 280 ppm SAND TRACE % SOLIDS 2.5 %

OIL WATER 77.5 % MBT 20 TEMP IN 140 TEMP OUT 198 BH TEMP

PUMPS #1 MAKE/MODEL HP #2 MAKE/MODEL HP #3 MAKE/MODEL HP GPM AVDP AVDC
Oilwell A600PT 600 Oilwell A600PT 600

LINER SIZE 1 5.5 2 5.5 3 5.5 SPM 2 3 PUMP PRESS 375 RPM 8-10 JAR UP 100 x1000 JAR DN 32 x1000

TORO OFF BTM TORO ON BTM TORO MAX. WOB ROT WT. P/U WT. SLACK OFF WT.

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO
RR3	8 1/2	SEC	S44G	16 16 16		6537	28	-	1 2 I	339,159	
WP 2	6	SEC	S4J	20 20 20		6547	11	2	1 1 I	325,022	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft	2			ft	3			ft
HR. SINCE INSPEC.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
BHA AIR WT. x1000	10			ft	11			ft	12			ft

ANGLE	AZ	MD	ANGLE	AZ	MD	ANGLE	AZ
		2			3		
		5			6		
		8			9		
		11			12		

TRIP GAS CONN. GAS BKGD GAS PORE PRESS PPG DX SHALE DEN DELTA TRIP CL

LITHOLOGY: **cement / siltstone / claystone**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1100			Circulate and pull out of hole.		
1500			Stage in hole and tag @ 6528		
2300			Work whipstock down, circulate, survey, orientate and drill off to 6547!		
0600			Circulate, weight up mud, pull out of hole. Change out drilling jars and lay down whipstock. Make up bull nosed reamer and R.I.H.		

PIT DRILL SAFETY VALVE DRILL BOP TEST MAX SICP SLOW PUMP #1 SLOW PUMP #2 SLOW PUMP #3

GEL USED 20 BARITE USED 20 SODA ASH USED CAUSTIC USED LIGNO USED POLYMER USED LCM USED DIESEL (MUD) DIESEL USED

Kennecott

WELL NAME-NO. Kennecott State (Q) #2-14		RPT # 19	TIME 00	DATE 8/14/87	DEPTH 6737	TVD	FTG ?
PRESENT OPERATION Reaming and sidetracking.		TRBLE CODE #	TABLE COST	DAILY MUD \$ 13,343	CUM. COST 222,518		
MUD TYPE Gel/Poly		CHECK DEPTH 6737	PIT FL	HOLE VOL. 377 bbl.	PIT VOL. 410 bbl.	DAILY MUD \$ 2648	CUM. MUD \$ 21,341
MW 8.7 pdg	FV 43 sec	PV 6	YP 11	GELS 3	10 sec 16 10 min	pH 9.5	FL 10.8 cc
FC API 2 /32	FC HTP — /32	Pm —	PI .3	MI .5	CI 14,200 ppm	Ca 240 ppm	SAND .25 %
OIL — %		WATER — %		MBT 20	TEMP IN 130	TEMP OUT 174	BH TEMP — °F

PUMPS #1 MAKE/MODEL Oilwell A600 PT	HP 600	#2 MAKE/MODEL Oilwell A600 PT	HP 600	#3 MAKE/MODEL	HP	GPM	AVOP 137	AVOC 197	
LINER SIZE 1 5.5	2 5.5	3 5.5	SPM 1	2	3	PUMP PRESS 670	RPM 90	JAR UP 100 x1000	JAR DN 32 x1000
TORG OFF BTM 200	TORG ON BTM 300	TORG MAX. 400	WOB 1-28 x1000	ROT WT. 15 x1000	PU WT. 148 x1000	SLACK OFF WT. 146 x1000			

BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR4	8 1/2	RBI	C31	16	16	16				3 1/2	8 8 1/2	AP815	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
SHA WT. x1000	10			ft 11				ft 12				ft

ANGLE	° AZ	° MD 2	ANGLE	° AZ	° MD 3	ANGLE	° AZ	°
MD 4	ANGLE	° AZ	° MD 5	ANGLE	° AZ	° MD 6	ANGLE	° AZ

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1000			Run in hole with bull nose reamer, cut shoulder, circulate.		
1300			Pull out of hole, lay down hole opener.		
0600			Pick up BHA, R.I.H. drill out side track but fall back into original hole. Drill out cement plug at 6630ft. Drill down to top of 7" liner @ 6737ft. Drill down alongside 7" to 6737ft. (attempting forced side track)		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @	psi @	psi @
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
sc	sc	sc	sc	sc	sc	sc
						DIESEL (MUD) USED
						sc

Kennecott

WELL NAME-NO. Kennecott State #2-14										RIG Cal Pac No 1.					RIG PHONE									
RPT # 20 TIME 06:00										DATE 8/20/87					DEPTH 6744									
PRESENT OPERATION Milling										TABLE CODE #					TABLE COST									
DAILY COST 15,948										CUM COST 238,466														
MUD TYPE Gel Poly										CHECK DEPTH					PIT FL									
HOLE VOL.										PIT VOL.					DAILY MUD \$ 998									
MW 8.6 ppg										FV 38 sec					PV 6									
YP 10										GELS 2					10 sec									
11 10 min										PH 9.5					FL 12.4 cc									
FC API 2 /32										FC HTP - /32					Pm -									
PI .3										MI .6					CI 10,500 ppm									
Ca 320 ppm										SAND 14 %					SOLIDS 3 %									
OIL - %										WATER - %					MBT 19									
TEMP IN 130										TEMP OUT 182					BH TEMP *F									
PUMPS #1 MAKE/MODEL Oilwell A600PT 600										HP					#2 MAKE/MODEL Oilwell A600PT 600									
HP										HP					#3 MAKE/MODEL									
GPM										AVDP 126					AVDC 180									
LINER SIZE 1 5.5 2 5.5 3 5.5										SPM 1 2 3					PUMP PRESS 675									
RPM 105										JAR UP 100 x1000					JAR DN 32 x1000									
TORQ OFF BTM 100A										TORQ ON BTM 390					TORQ MAX. 450									
WOB 2-30 x1000										ROT WT. 15 x1000					PU WT. 147 x1000									
SLACK OFF WT. 146 x1000																								
BIT#										SIZE					MAKE									
TYPE										JETS					TFA									
DEPTH OUT										FOOTAGE					HOURS									
COND										SERIAL NO.					BHA NO.									
5										8 1/2					RBI									
CSI										16 16 16														
6741										6					6									
8 8 1/8										N 978														
BHA CHANGE (Y/N)										ITEM					OD									
ID										LENGTH					ITEM									
OD										ID					LENGTH									
ITEM										OD					ID									
LENGTH										ITEM					OD									
ID										LENGTH					ITEM									
OD										ID					LENGTH									
BHA #										1					2									
HR. SINCE INSP.										4					5									
DRILL STRING #										7					8									
BHA AIR WT. x1000										10					11									
ANGLE										° AZ					° MD									
° MD										° MD					° MD									
° MD										° MD					° MD									
TRIP GAS										CONN. GAS					BKGD GAS									
PORE PRESS										ppg					DX									
SHALE DEN										DELTA TRIP CL														
LITHOLOGY:																								
RANGE:																								
0600 TO										HRS.					TIME CODE					ACTIVITY LOG				
ACCIDENTS (Y/N)										POLLUTION (Y/N)														
1400															Drilling down to 6738, circulate; P.O.H. Pick up new bit and three point reamer. R.I.H. and ream from 6730									
1900															Bit dulled on junk; (steel) - obstruction in hole.									
2300															P.O.H. make up flat bottom mill and junk basket R.I.H. circulate and mill @ 6744.									
PIT DRILL										SAFETY VALVE DRILL					BOP TEST									
MAX SICP										SLOW PUMP #1					SLOW PUMP #2									
SLOW PUMP #3										sec					psi									
psi @										spm					psi @									
spm										psi @					spm									
GEL USED										BARITE USED 24					SODA ASH USED									
CAUSTIC USED										LIGNO USED					POLYMER USED									
LCM USED 9										DIESEL (MUD) USED					DIESEL USED									
bbl.										bbl.					bbl.									

Kennecott

RIG **Cal Pac Vol.** RIG PHONE

WELL NAME-NO. **Kennecott State # 2-14** RPT # **21** TIME **06:00** DATE **8/21/87** DEPTH **6755** TVD FTG

PRESENT OPERATION **Drilling ahead** TRBLE CODE # TRBLE COST DAILY COST CUM. COST

SUPV. INIT. **land** HRS. DRLG **5** LAST CSG **958** in @ **6000** ft FIT

MUD TYPE **60 lb/s** CHECK DEPTH PIT FL HOLE VOL. bbl. PIT VOL. bbl. DAILY MUD \$ CUM. MUD \$

MW **8-7** ppq FV **33** sec PV **7** YP **12** GELS **3** 10 sec **14** 10 min pH **11.4** cc HTP FL **100#** - 500#

FC API **2** /32 FC HTP **-** /32 Pm **-** PI **.3** MI **.5** CI **10,000** ppm Ca **280** ppm SAND **1/4** % SOLIDS **3** %

OIL % WATER % MBT **20** TEMP IN **138** TEMP OUT **190** BH TEMP °F

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP **600** #2 MAKE/MODEL **Oilwell A600PT** HP **600** #3 MAKE/MODEL GPM **460** AVOP **203** AVOC **291**

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 **84** 2 **84** 3 PUMP PRESS **1100** RPM **40-80** JAR UP **100** x1000 JAR DN **32** x1000

TORO OFF BTM **20** TORO ON BTM **300** TORO MAX. **420** WOB **2-22** x1000 ROT WT. **130** x1000 P/U WT. **157** x1000 SLACK OFF WT. **150** x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR2	8 1/2	Sec	S44G	16 16 16		6751	3	5	88 I	339159	
RR3	8 1/2	Sec	S44G	16 16 16							

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	1			ft 2				ft 3				ft
	4			ft 5				ft 6				ft
	7			ft 8				ft 9				ft
	10			ft 11				ft 12				ft

ANGLE	° AZ	° MD	ANGLE	° AZ	° MD	ANGLE	° AZ	° MD
		2			3			3
		5			6			6
		8			9			9
		11			12			12

TRIP GAS CONN. GAS BKGD GAS PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1000			Millng on junk, circulate.		
1300			P.O.O.H. Make up bit; R.I.H.		
1600			R.I.H. staging.		
2200			Circulate, ream, drill to 6751		
0500			P.O.O.H., change bit and bottom hole assembly; R.I.H. circulate.		
0600			Drilling ahead to 6755.		

PIT DRILL sec / / SAFETY VALVE DRILL sec / / BOP TEST days MAX SICP psi SLOW PUMP #1 psi @ spm SLOW PUMP #2 psi @ spm SLOW PUMP #3 psi @ spm

GEL USED **23** BARITE USED **45** SODA ASH USED CAUSTIC USED **2** LIGNO USED **6** POLYMER USED LCM USED **10** DIESEL (MUD) USED **1** DIESEL USED

AL **1** **Kennecott** **5**

Kennecott

RIG **Cal Pae No 1** RIG PHONE

WELL NAME-NO. **Kennecott State # 2-14** RPT # **22** TIME **06:00** DATE **8/22/87** DEPTH **6875** TVD FTG

PRESENT OPERATION **Drilling ahead** TABLE CODE # TABLE COST DAILY COST CUM. COST

SUPV. INIT. **layd** HRS. DRLG LAST CSG in. @ FIT

MUD TYPE **Cell Poly** CHECK DEPTH PIT FL HOLE VOL. **384** bbl. PIT VOL. **507** bbl. DAILY MUD \$ **735** CUM. MUD \$ **25,119**

MW **8.7** ppg FV **38** sec PV **7** YP **13** GELS **3** 10 sec **12** 10 min PH **9.5** FL **11.8** cc HTP FL - 100# - 500#

FC API **2** /32 FC HTP - /32 Pm - PI **.2** MI **.5** CI **9860** ppm Ca **280** ppm SAND **1/2** % SOLIDS **3** %

OIL - % WATER **97** % MBT **20** TEMP IN **140** °F TEMP OUT **191** °F BH TEMP °F

PUMPS #1 MAKE/MODEL HP #2 MAKE/MODEL HP #3 MAKE/MODEL HP GPM AVOP AVDC
Oilwell A600PT 600 Oilwell A600PT 600 459 159 228

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 **1-130** 2 **1-130** 3 PUMP PRESS **830** RPM **60/100** JAR UP **100** x1000 JAR DN **32** x1000

TORQ OFF BTM TORQ ON BTM TORQ MAX. WOB **2-15** x1000 ROT WT. **190** x1000 P/U WT. **155** x1000 SLACK OFF WT. **145** x1000

BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RLS	8 1/2	Sec	S44 G	16	16	16		6818	87	7	8 8 7	355691	
6	8 1/2	RBI	C-1	14	14	14					1 N C		

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft	2			ft	3			ft
HR. SINCE INSPEC.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
BHA #	10			ft	11			ft	12			ft

6790 ANGLE **645** ° AZ **S13W** ° MD **2** ANGLE ° AZ ° MD **3** ANGLE ° AZ ° MD **4** ANGLE ° AZ ° MD **5** ANGLE ° AZ ° MD **6** ANGLE ° AZ ° MD **7**

TRIP GAS CONN. GAS BKGD GAS PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY: **100% Claystone**

RANGE: **0-100% Claystone.**

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1400	8		Drilling from 6751 to 6818; circulate; survey.		
0100	11		Pull out of hole; work pipe in tight spots from 6320 - 6226. lay down 18 singles; change bits and stabilizers; run in hole staging for cooling.		
0600			Ream old hole from 6730 - 6815. Drill ahead to 6875.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ spm	psi @ spm
GEL USED 58 sx	BARITE USED 4 sx	SODA ASH USED sx	CAUSTIC USED 2 sx	LIGNO USED sx	POLYMER USED sx	LCM USED 20 sx
						DIESEL (MUD) USED sx

Kennecott

RIG **Cal Pac No 1.** RIG PHONE

WELL NAME-NO **Kennecott State # 2-14** RPT # **23** TIME **06:00** DATE **8/23/87** DEPTH **6976** TVD FTG

EVENT OPERATION **Drilling ahead.** TRBLE CODE # TRBLE COST DAILY COST **12,909** CUM. COST **275,117**

SUPV. INIT. **aut** HRS. DRLG LAST CSG **9 1/2** in @ **6000** ft FIT

MUD **Gel Poly** CHECK DEPTH **6970** PIT FL HOLE VOL. **389** bbl. PIT VOL. **665** bbl. DAILY MUD \$ **562** CUM. MUD \$ **25,683**

MW **8.7** ppg FV **34** sec PV **5** YP **7** GELS **2** 10 sec - 10 min pH **9** FL **11.8** cc HTP FL 100# 500#

FC API **2** /32 FC HTP - /32 Pm - PI **-1** MI **.5** CI **6180** ppm Ca **240** ppm SAND **1/4** % SOLIDS **3** %

OIL % WATER **97** % MBT **18.5** TEMP IN **140-168** TEMP OUT **180-202** BH TEMP - °F

PUMPS #1 MAKE/MODEL HP #2 MAKE/MODEL HP #3 MAKE/MODEL HP GPM AVDP AVDC

Oilwell 1600PT 600 Oilwell 1600PT 600 **430 157 225**

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 **140** 2 **140** 3 PUMP PRESS **675** RPM **40-90** JAR UP **100** x1000 JAR DN **32** x1000

TORO OFF BTM TORO ON BTM TORO MAX. WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.			BHA NO.
6	8.5	RBI	C-1	14	14	14		6958	140	15	8 8 1/4	AW603			
7	8.5	RBI	C-1	16	16	16		18	2	1	NC	AW604			

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
SHA WT. x1000	10			ft 11				ft 12				ft

ANGLE	° AZ	° MD	ANGLE	° AZ	° MD	ANGLE	° AZ	° MD
		2			3			
MD 4		5			6			

TRIP GAS CONN. GAS BKGD GAS. PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY: **100% Claystone - Trace of pyrite.**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1700			Drilling ahead from 6875. Well flowing temp @ 1500lbs 200°. Circulate and cool well. Pipe stuck @ 6958		
1800			Work on stuck pipe: - pulled 250,000lbs: - free pipe		
2300			P.O.H. - pipe dragging from 6450 - 6200ft.		
0600			Change B.H.A (remove welded stabilizer and replace with 1BS. R.I.H. and run last 50ft. Drill ahead to 6976.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ spm	psi @ spm
GEL USED 49 sx	BARITE USED sx	SODA ASH USED sx	CAUSTIC USED 2 sx	LIGNO USED sx	POLYMER USED sx	LCM USED 8 sx
						DIESEL (MUD) -bbl. DIESEL USED -bbl.

Kennecott

RIG Cal Pac No 1	RIG PHONE
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WELL NAME-NO. Kennecott State # 2-14	RPT. #	TIME : 00 00	DATE 8/24/87	DEPTH 7,100	TVD.	FTG
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EVENT ERATION Pulling out of hole.	TABLE CODE #	TABLE COST	DAILY COST	CUM. COST
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MUD TYPE Gal Poly	CHECK DEPTH 7,100	PIT FL	HOLE VOL.	bbl.	PIT VOL.	bbl.	DAILY MUD \$ 2287	CUM. MUD \$ 27,968
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MW 8.7	ppg	FV 30	sec	PV 4	YP 7	GELS 2	10 sec	8	10 min	pH 9.7	FL 10.3	cc	HTP FL	100#	—	SDS#
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FC API 2	/32	FC HTP	/32	Pm	PI 3	MI 5	Cl 6100	ppm	Ca 240	ppm	SAND 1/4	%	SOLIDS 3	%
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OIL	%	WATER 97	%	MBT 20	TEMP IN 142-165	TEMP OUT 180-200	BH TEMP	°F
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PUMPS #1 MAKE/MODEL Oilwell A600PT	HP 600	#2 MAKE/MODEL Oilwell A600PT	HP 600	#3 MAKE/MODEL	HP	GPM 430	AVDP 161	AVDC 231
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LINER SIZE 1 5.5	2 5.5	3 5.5	SPM 1	2	3	PUMP PRESS 800	RPM 40-90	JAR UP 100	x1000	JAR ON 32	x1000
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TORQ OFF BTM	TORQ ON BTM	TORQ MAX.	WOB x1000	ROT WT. x1000	P/U WT. x1000	SLACK OFF WT. x1000
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BIT#	SIZE	MAKE	TYPE	JETS			TFA	DEPTH OUT	FOOTAGE	HOURS	COND		SERIAL NO.	BHA NO.
7	8 1/2	RBI	C-1	16	16	16		7100	142	18	8	8	# AW 604	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft	2			ft	3			ft
HR. SINCE INSP.	4			ft	5			ft	6			ft
DRILL STRING #	7			ft	8			ft	9			ft
BHA WT. x1000	10			ft	11			ft	12			ft

MD.	ANGLE	°	AZ	°	MD	°	AZ	°	MD	°	AZ	°	MD	°	AZ	°
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TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL
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LITHOLOGY: **100% claystone.**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0300	21		Drilling ahead from 6976' to 7100 ft. Circulate. Return.		
0600	3		Pulling out of hole.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec	sec	days	psi	psi @	spm	psi @
sec	sec	days	psi	psi @	spm	psi @
SECT	SECT	SECT	SECT	SECT	SECT	SECT
BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED	DIESEL (MUD) USED
lb	lb	lb	lb	lb	lb	lb

Kennecott

RIG *Cal Pac No 1.* RIG PHONE

WELL NAME NO *Kennecott State* # *2-14* RPT # *25* TIME *00:00* DATE *8/25/87* DEPTH *7180* TVD FTG

ESSENTIAL OPERATION *Drilling on fill.* TRBLE CODE # TRBLE COST DAILY COST *12,751* CUM. COST *298,912*

SUPV. INIT. *[Signature]* HRS. DRLG *7* LAST CSG *9 1/2* in. @ *6000* ft FIT

MUD TYPE *gel poly* CHECK DEPTH *7180* PIT FL. HOLE VOL. *400* bbl. PIT VOL. *465* bbl. DAILY MUD \$ *486* CUM. MUD \$ *28,456*

MW *8-7* ppg FV *35* sec PV *5* YP *9* GELS *2* 10 sec *8* 10 min *9.5* FL *10-3* cc HTP FL *—* 100# *—* 500#

FC API *2* /32 FC HTP *—* /32 Pm *—* PI *.3* MI *.5* CI *6100* ppm Ca *240* ppm SAND *1/4* % SOLIDS *3* %

OIL % WATER *97* % MBT *2* TEMP IN *120-150* TEMP OUT *170-198* BH TEMP

PUMPS #1 MAKE/MODEL *Oilwell Abscopt 600* HP #2 MAKE/MODEL *Oilwell Abscopt 600* HP #3 MAKE/MODEL GPM AVDP AVDC *342 161 231*

LINER SIZE 1 *5.5* 2 *5.5* 3 *5.5* SPM 1 *146* 2 *146* 3 PUMP PRESS *800* RPM *60-90* JAR UP *76* x1000 JAR DN *28* x1000

TORO OFF BTM TORO ON BTM TORO MAX. WOB *2-15* x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
<i>8</i>	<i>8 1/2</i>	<i>SEC</i>	<i>SAAG</i>	<i>16 16 16</i>		<i>7180</i>	<i>8</i>	<i>7</i>	<i>SS 1/8</i>	<i>335050</i>	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
	<i>1</i>			<i>ft 2</i>				<i>ft 3</i>				<i>ft</i>
	<i>4</i>			<i>ft 5</i>				<i>ft 6</i>				<i>ft</i>
	<i>7</i>			<i>ft 8</i>				<i>ft 9</i>				<i>ft</i>
	<i>10</i>			<i>ft 11</i>				<i>ft 12</i>				<i>ft</i>

ANGLE	° AZ	° MD	ANGLE	° AZ	° MD	ANGLE	° AZ
		<i>2</i>			<i>3</i>		
		<i>5</i>			<i>6</i>		
		<i>5</i>			<i>6</i>		

TRIP GAS CONN. GAS BKGD GAS PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY: *100% Claystone*

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
<i>0100</i>			<i>change bits; cones off bit that was pulled, R.I.H. Circulate and drill ahead from 7100-7180ft. P.O.O.H.</i>		
<i>0600</i>			<i>R.I.H. land on "bridge" @ 7071ft. Drill on "bridge" - does not appear to be formation fill</i>		

PIT DRILL SAFETY VALVE DRILL BOP TEST MAX SICP SLOW PUMP #1 SLOW PUMP #2 SLOW PUMP #3

GEL USED *DFE 104 3* BARITE USED SODA ASH USED CAUSTIC USED LIGNO USED POLYMER USED LCM USED *6* DIESEL (MUD) DIESEL

Kennecott

RIG **Cal Pac No 1.** RIG PHONE

WELL NAME-NO. **Kennecott State #2-4** RPT. # **00** TIME **00** DATE **8/26/87** DEPTH **7091/1160** TVD FTG

PRESENT OPERATION **Milling / pushing junk down hole.** TRBLE CODE # TRBLE COST DAILY COST CUM. COST

MUD TYPE **Gel Poly.** CHECK DEPTH **7080** PIT FL MOLE VOL. **Same** SUPV. INIT. **laul** HRS. DRLG **528** LAST CSG **9.5 in @ 6000** FIT

MW **8.6** ppg FV **32** sec PV **5** YP **7** GELS **2** 10 sec **8** 10 min pH **9.0** FL **10-0** cc HTP FL **100#** 500#

FC API **2** /32 FC HTP **-** /32 Pm **-** Pt **-2** Mi **-4** Cl **5680** ppm Ca **210** ppm SAND **7** % SOLIOS **23** %

OIL % WATER % MBT **20** TEMP IN **128/150** TEMP OUT **175/196** BH TEMP °F

PUMPS #1 MAKE/MODEL **Oilwell A600PT** HP **600** #2 MAKE/MODEL **Oilwell A600PT** HP **600** #3 MAKE/MODEL HP GPM **278** AVDP **131** AVDC **188**

LINER SIZE 1 **5.5** 2 **5.5** 3 **5.5** SPM 1 2 3 PUMP PRESS **800** RPM **40/120** JAR UP **76** x1000 JAR DN **32** x1000

TORO OFF BTM TORO ON BTM TORO MAX. WOB x1000 ROT WT. x1000 P/U WT. x1000 SLACK OFF WT. x1000

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
10	8 1/2	NL	Mill.								
9	8 1/2	RBI	C2	16/16/16		7071		1/2	S3I	AWS37	

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
BHA WT. x1000	10			ft 11				ft 12				ft

7030 ANGLE **8.30** ° AZ — ° MD 2 ANGLE ° AZ ° MD 3 ANGLE ° AZ ° MD 4 ANGLE ° AZ ° MD 5 ANGLE ° AZ ° MD 6 ANGLE ° AZ °

TRIP GAS CONN. GAS BKGD GAS PORE PRESS ppg DX SHALE DEN DELTA TRIP CL

LITHOLOGY: **Metal shavings**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1400			Attempt to recum past 7071ft. get to 7074, high torque and drag. Circulate; survey; P.O.H.		
0600			R.I.H. with flat bottom mill. milled / pushed junk down to 7091ft. Metal shavings with oxidization in places coming over shakers.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ spm	psi @ spm
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
DIASEL (MUD) USED	DIASEL USED					

Kennecott

WELL NAME-NO. Kennecott State # 2-14				RPT # 27	TIME 06 00	DATE 8/27/87	DEPTH 7101	TVD	FIT
PRESENT OPERATION P.O.H.				TABLE CODE #	TABLE COST	DAILY COST	CUM. COST		

MUD TYPE Water		CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$	CUM. MUD \$	
MW	FV	PV	YP	GELS	10 sec	10 min	FL	HTP FL
FC API	FC HTP	Pm	PI	MI	CI	ppm	Ca	SAND
OIL %	WATER %	MBT	TEMP IN		TEMP OUT		BH TEMP	

PUMPS #1 MAKE/MODEL		HP	#2 MAKE/MODEL		HP	#3 MAKE/MODEL		HP	GPM	AVDP	AVDC
Oilwell A600PT		600	Oilwell A600PT		600						
LINER SIZE 1	2	3	SPM 1	2	3	PUMP PRESS	RPM	JAR UP	JAR DN		
TORO OFF BTM	TORO ON BTM	TORO MAX.	WOB	ROT WT.	P/U WT.	SLACK OFF WT.					

BIT #	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.
RR	8 1/2	Sec	S4FG	000							

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
BHA WT. x1000	10			ft 11				ft 12				ft

LITHOLOGY: **Metal shavings**

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1100			Milling at 7101 ft.		
1600			P.O.H., lay down mill and monel collar.		
2000			R.I.H.		
2300			Change well over to fresh water P.O.H to 6631. Well starts to flow. Shut in with annular and kill.		
0600			Continue to kill well with brine. (600 Bbls.) P.O.H. shut master valve.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ sdp	psi @ sdp
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
sc	sc	sc	sc	sc	sc	sc
						DIESEL USED
						sc

Kennecott

WELL NAME NO. Kennecott State		# 2-14	RPT # 28	TIME 06:00	DATE 8/28/87	DEPTH 7101	TVD	FTG
PRESENT OPERATION Nippling down BOP.			TABLE CODE #	TABLE COST	DAILY COST 9125	CUM. COST 328,749.		

SUPV. INIT. byd	HRS. ORLG	LAST CSG 95	in. @ 6000	FIT	POG	
MUD TYPE	CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$	CUM. MUD \$

MW	FV	PV	YP	GELS	10 sec	10 min	pH	FL	HTP FL	100#	500#	
FC API	FC HTP	Pm	PI	MI	CI	ppm	Ca	ppm	SAND	%	SOLIDS	%

OIL	WATER	MBT	TEMP IN	TEMP OUT	BH TEMP	*F					
#1 MAKE/MODEL		HP	#2 MAKE/MODEL		HP	#3 MAKE/MODEL		HP	GPM	AVDP	AVDC

LINEAR SIZE 1	2	3	SPM 1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR DN	x1000
TORO OFF BTM	TORO ON BTM	TORO MAX.	WOB	x1000	ROT WT.	x1000	P/U WT.	x1000	SLACK OFF WT.	x1000	

BIT #	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
BHA WT. x1000	10			ft 11				ft 12				ft

TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL	
ANGLE	° AZ	° MD 2	ANGLE	° AZ	° MD 3	ANGLE	° AZ	
MD 4	ANGLE	° AZ	° MD 5	ANGLE	° AZ	° MD 6	ANGLE	° AZ

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
1200			P.O.D.H. Bullhead well with fresh water. lay down drill pipe. Close master valve.		
0600			Start stripping down BOP. Master valve leaking. Reinstall BOP. Set Baker Model 'c' packer, remove BOP and Master valve.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3	
sec	sec	days	psi	psi @	spm	psi @	spm
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED	DIESEL (MUD) USED

Kennecott

WELL NAME NO	Kennecott State # 2-14	RPT #	29	TIME	06:00	DATE	8/29/87	DEPTH		TVD		FTG		RIG	Cal Pac No 1	RIG PHONE	
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ESSENTIAL OPERATION	Rigging up flowlines.	TRBLE CODE #		TRBLE COST		DAILY COST		CUM COST	
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SUPV. INIT.	land	HRS. DRLG		LAST CSG		ft	FIT		ppg
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MUD TYPE		CHECK DEPTH		PIT FL	HOLE VOL	bbl	PIT VOL.	bbl	DAILY MUD \$	CUM MUD \$
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MW	ppg	FV	sec	PV	YP	GELS	10 sec	10 min	pH	FL	cc	HTP	100#	500#
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FC API	/32	FC HTP	/32	Pm	PI	MI	CI	ppm	Ca	ppm	SAND	%	SOLIDS	%
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OIL	%	WATER	%	MBT		TEMP IN		TEMP OUT		BH TEMP	°F
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PUMPS	#1 MAKE/MODEL	HP	#2 MAKE/MODEL	HP	#3 MAKE/MODEL	HP	GPM	AVDP	AVOC
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LINER SIZE	1	2	3	SPM	1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR DN	x1000
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TORO OFF BTM	TORO ON BTM	TORO MAX.	WOB	x1000	ROT WT.	x1000	P/U WT.	x1000	SLACK OFF WT.	x1000
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BIT#	SIZE	MAKE	TYPE	JETS	TRF	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
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BHA #	1			ft	2			ft	3			ft
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HR. SINCE INSPEC.	4			ft	5			ft	6			ft
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DRILL STRING #	7			ft	8			ft	9			ft
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BHA WT.	x1000	10		ft	11			ft	12			ft
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ANGLE	°	AZ	°	MD 2	ANGLE	°	AZ	°	MD 3	ANGLE	°	AZ	°
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MD 4	ANGLE	°	AZ	°	MD 5	ANGLE	°	AZ	°	MD 6	ANGLE	°	AZ	°
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TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL
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LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0600			Nipple down BOP. Change out leaking master valve. Retire Re-install BOP; retrieve Model 'c' Bridge plug; test master valve; nipple down BOP and start rigging up flow lines. Lay down more drill pipe.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
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GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED	DIESEL (MUD) USED	DIESEL USED
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Onshore Drilling Report

WELL NAME-NO. State # 2-14					RPT. #		TIME		DATE 8/30/87		DEPTH		TVD		RIG Cal Pac No. 1		RIG PHONE		
EVENT DESCRIPTION Rigging up Flowline					TABLE CODE #		TABLE COST		DAILY COST		CUM. COST		FIT						
MUD TYPE				CHECK DEPTH		PIT FL		HOLE VOL.		PIT VOL.		DAILY MUD \$		CUM. MUD \$					
MW		FV		PV		YP		GELS		10 sec		10 min		pH		FL		CC	
FC API		FC HTP		Pm		PI		MI		CI		ppm		Ca		ppm		SAND	
OIL		WATER		MBT				TEMP IN		TEMP OUT		BH TEMP		°F					
PUMPS #1 MAKE/MODEL				#2 MAKE/MODEL				#3 MAKE/MODEL				GPM		AVDP		AVDC			
LINER SIZE		2		3		SPM		2		3		PUMP PRESS		RPM		JAR UP		x1000	
TORQ OFF BTM		TORQ ON BTM		TORQ MAX.		WOB		x1000		ROT WT.		x1000		PAU WT.		x1000		SLACK OFF WT. x1000	
BIT#	SIZE	MAKE	TYPE		JETS		TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.		BHA NO.					
BHA CHANGE (Y/N)		ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH						
BHA #		1			ft	2			ft	3			ft						
HR. SINCE INSPEC.		4			ft	5			ft	6			ft						
DRILL STRING #		7			ft	8			ft	9			ft						
BHA WT.	x1000	10			ft	11			ft	12			ft						
ANGLE		° AZ		° MD 2		ANGLE		° AZ		° MD 3		ANGLE		° AZ					
ANGLE		° AZ		° MD 5		ANGLE		° AZ		° MD 6		ANGLE		° AZ					
TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS		ppg	DX	SHALE DEN	DELTA TRIP CL											

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0600			Laying down drill pipe and refabricating flow line.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec / /	sec / /	days	psi	psi @ spm	psi @ spm	psi @ spm
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
sr	sr	sr	sr	sr	sr	sr
						DIESEL USED
						5bl.

Onshore Drilling Report

WELL NAME-NO. State # 2-14					RPT. #	TIME	DATE 8/31/87	DEPTH	TVD	FTG	RIG Cal Pac No. 1	RIG PHONE	
EVENT ERATION Preparing for flow test				TABLE CODE #	TABLE COST	DAILY COST		CUM. COST					
MUD TYPE		CHECK DEPTH	PIT FL	HOLE VOL.	bbi.	PIT VOL.	bbi.	DAILY MUD \$	CUM. MUD \$		FIT		
MW	ppg	FV	sec	PV	YP	GELS	10 sec	10 min	pH	FL	HTP FL	100#	
FC API	/32	FC HTP	/32	Pm	Pt	MI	CI	ppm	Ca	ppm	SAND	SOLIDS	
OIL	%	WATER	%	MBT	TEMP IN		TEMP OUT		BH TEMP		*F		
PUMPS #1 MAKE/MODEL		HP	#2 MAKE/MODEL		HP	#3 MAKE/MODEL		HP	GPM	AVDP	AVDC		
LINER SIZE	1	2	3	SPM	1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR DN	
TORQ OFF BTM	TORQ ON BTM		TORQ MAX.		WOB	x1000	ROT WT.	x1000	PAJ WT.	x1000	SLACK OFF WT.	x1000	
BIT#	SIZE	MAKE	TYPE	JETS		TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO	
BHA CHANGE (Y/N)		ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #		1			ft	2			ft	3			ft
HR. SINCE INSPEC.		4			ft	5			ft	6			ft
DRILL STRING #		7			ft	8			ft	9			ft
BHA WGT.	x1000	10			ft	11			ft	12			ft
ANGLE		°	AZ	°	MD 2	ANGLE	°	AZ	°	MD 3	ANGLE	°	AZ
ANGLE		°	AZ	°	MD 5	ANGLE	°	AZ	°	MD 6	ANGLE	°	AZ
TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL						

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
0600			Finished laying down drill pipe and rigging up for flow test. Made a one hour flow test after pressure testing flow line to 800 psi. Preparing to start flow test into brine pond.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec	sec	days	psi	psi @	spm	psi @
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
sr	sr	sr	sr	sr	sr	sr
						DIESEL USED
						dbl.
						DIESEL USED
						dbl.

Kennecott

WELL NAME-NO. <i>State # 2-14</i>					RPT. #	TIME <i>00</i>	DATE <i>9/3/87</i>	DEPTH	TVD	FTG		
PRESENT OPERATION <i>Moving Rig on daylight</i>					TRBLE CODE #	TRBLE COST	DAILY COST	CUM. COST				
MUD TYPE				CHECK DEPTH	PIT FL	HOLE VOL.	PIT VOL.	DAILY MUD \$	CUM. MUD \$			
MW	FV	sec	PV	YP	GELS	10 sec	10 min	PH	FL	HTP FL		
FC API	FC HTP	FC	Pi	MI	CI	ppm	Ca	ppm	SAND	SOLIDS		
OIL	WATER	MBT	TEMP IN				TEMP OUT			BH TEMP		
PUMPS #1 MAKE/MODEL			HP	#2 MAKE/MODEL			HP	#3 MAKE/MODEL			HP	
AVDP	AVDC											
LINER SIZE 1	2	3	SPM 1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR ON	x1000	
TORQ OFF BTM	TORQ ON BTM	TORQ MAX.	WOB	x1000	ROT WT.	x1000	P/U WT.	x1000	SLACK OFF WT.	x1000		
BIT #	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.	
BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSP. #	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
BHA WT. x1000	10			ft 11				ft 12				ft
ANGLE	AZ	MD 2	ANGLE	AZ	MD 3	ANGLE	AZ					
ANGLE	AZ	MD 5	ANGLE	AZ	MD 8	ANGLE	AZ					
TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	ppg	DX	SHALE DEN	DELTA TRIP CL					

LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
<i>1900</i>			<i>Moving rig to Imperial # 1-13. Rain-Fet-Rent picked-up 4" water lines and generator</i>		

PIT DRILL	SAFETY VALVE DRILL			BOP TEST	MAX SKCP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec	sec	sec	days	psi	psi @	spm	psi @	spm
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED	DIESEL (MUD) USED	bbl.
							DIESEL USED	bbl.

Kennecott

WELL NAME-NO. State # 2-14				RPT. #	TIME	DATE 9/4/87	DEPTH	TVD	FTG
PRESENT OPERATION						TRBLE CODE #	TRBLE COST	DAILY COST	CUM. COST
SUPV. INIT.			HRS. DRLG		LAST CSG		FIT		PPG

RIG Cal Pac No 1	RIG PHONE
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MUD TYPE	CHECK DEPTH	PIT FL	HOLE VOL.	bbl.	PIT VOL.	bbl.	DAILY MUD \$	CUM. MUD \$					
MW	FV	sec	PV	YP	GELS	10 sec	10 min	PH	FL	cc	HTP FC	100#	500#
FC API	/32	FC HTP	/32	PI	MI	CI	ppm	Ca	ppm	SAND	%	SOLIDS	%
OIL	%	WATER	%	MBT	TEMP IN		TEMP OUT		BH TEMP		°F		

PUMPS #1 MAKE/MODEL	HP	#2 MAKE/MODEL	HP	#3 MAKE/MODEL	HP	GPM	AVDP	AVDC
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LINER SIZE 1	2	3	SPM 1	2	3	PUMP PRESS	RPM	JAR UP	x1000	JAR DN	x1000
TORQ OFF BTM	TORQ ON BTM	TORQ MAX.	WOB	x1000	BOT WT.	x1000	P/U WT.	x1000	SLACK OFF WT.	x1000	

BIT#	SIZE	MAKE	TYPE	JETS	TFA	DEPTH OUT	FOOTAGE	HOURS	COND	SERIAL NO.	BHA NO.

BHA CHANGE (Y/N)	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH	ITEM	OD	ID	LENGTH
BHA #	1			ft 2				ft 3				ft
HR. SINCE INSPEC.	4			ft 5				ft 6				ft
DRILL STRING #	7			ft 8				ft 9				ft
BHA WT. x1000	10			ft 11				ft 12				ft

ANGLE °	AZ	MD 2	ANGLE °	AZ	MD 3	ANGLE °	AZ
ANGLE °	AZ	MD 5	ANGLE °	AZ	MD 6	ANGLE °	AZ

TRIP GAS	CONN. GAS	BKGD GAS	PORE PRESS	PPG	DX	SHALE DEN	DELTA TRIP CL
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LITHOLOGY:

RANGE:

0600 TO	HRS.	TIME CODE	ACTIVITY LOG	ACCIDENTS (Y/N)	POLLUTION (Y/N)
2000			All rig equipment moved. Installed 10" Tee & wing valve back on master valve. Shipped remaining 10" master valve to W.L. Godard for inspection & repair. Bolted inspection door back on muffler & repaired fence around brine pond.		

PIT DRILL	SAFETY VALVE DRILL	BOP TEST	MAX SICP	SLOW PUMP #1	SLOW PUMP #2	SLOW PUMP #3
sec	sec	days	psi	psi	spm	psi
GEL USED	BARITE USED	SODA ASH USED	CAUSTIC USED	LIGNO USED	POLYMER USED	LCM USED
						DIESEL (MUD)
						DIESEL USED