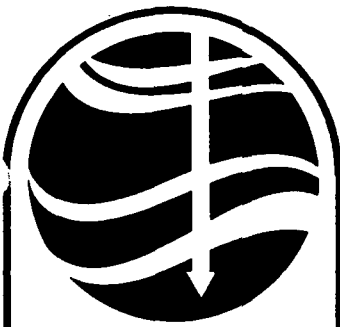


# Appendix M



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## Remedial Program Support Data



**RECEIVED**

OCT 1 1986

CHARLES A. HARPER

September 29, 1986

Mr. Charles Harper 50-20  
BECHTEL NATIONAL, INC  
P.O. Box 3965  
San Francisco, CA 94119

RE: Kennecott State 2-14 (RD-1)

Enclosed is the Drilling Fluids Properties and Product Usage  
Recaps for the Kennecott Corp State #2-14 workover well in  
Imperial County, California.

The workover well was done by Cleveland Drilling Rig #6.

The total invoiced cost for workover fluids was \$17,210.00.

PROFCO appreciates the opportunity to work for Bechtel  
National, Inc. and we hope you will consider PROFCO on future  
wells. If you have any questions regarding the drilling  
fluid recaps, please give me a call.

Sincerely,

Jerry W. Harbour -  
Executive Vice-President

JWH:dkb/DRLG7A  
enclosures

cc: OW. Patterson

**PROFCO**

"The Professionals in  
Drilling Fluids"

POST OFFICE BOX 3850  
VENTURA, CA 93006-3850

CORPORATE OFFICES  
1865 KNOLL DRIVE  
VENTURA, CA 93003  
805/656-1920

WELL DATA SHEET



P.O. BOX 3850  
 VENTURA, CA 93008-3850  
 805/656-1820  
 FORMERLY PROFESSIONAL DRILLING FLUID SERVICES, INC.

*just*

OPERATOR		BECHTEL NATIONAL							SURVEY SEC.					CASING SIZE			DEPTH		BIT SIZE
WELL		KENNECOTT STATE #2-14							FIELD					SURFACE			3,515'		8-1/2"
CONTRACTOR		Cleveland Rig #6							COUNTY					INTERMEDIATE			6,000'		6-1/16"
ENGINEER		Jerry Bewick							STATE					PRODUCTION			7"		10,136'
DATE	DEPTH	WT	VIS	PV	YP	GELS	pH	W/L	PF	CL PPM	CAPP	SOL%	OIL%	H.T.H.P.	TOTAL MUD COST		TOTAL DEPTH		
															\$17,210.97		10,475'		
															DAILY COST	ACCUMULATED COST	REMARKS		
1986																			
8/10		NO PIPE IN HOLE																	
8/11	5748	9.0	34				9.4	N/C							\$ 6,774.55	\$ 6,774.55	Mixed mud & LCM pill-spotted pill & chase with mud.		
8/12		ON TOP OF HANGER																	
8/13	10,136	9.0	33				10.3								3,007.00	9,781.55	Killed well with Gel & H2O. Increased wt of fluid to 9#/gal. Displaced hole RIH 5" D.P.-Circ & POOH for spear & tools to pull hanger & 7" csg at RPT time.		
8/14	6180	9.3	30				8.5						0	0			RIH with spear-caught fish & POOH with Hanger & parted 7" liner.		
8/15	7995	9.2	30				8.0						0	0	9,540.00	11,271.95	Pulled stack & pulled spear & hanger etc. RIH drill cement plug.		
8/16	8010	9.3	28				7.2						0	0	1,319.70	12,591.65	Retrieved rest of top fish. RIH with bit to top of 7" circulate and cool hole.		
8/17	10,455	9.2	28				8.3						0	0	1,777.40	14,369.05	Ran in hole with 6-1/16 tapered mill-stopped at 7995'. All nite losing fluid water dumped gel pill to clean scale 7 cuttings.		
8/17 & 18		HOLE DISPLACED WITH WATER																	
DATE SPUD	DATE T D		B H T		COMPLETION FLUID TYPE		Thermogel & Brine										COST		
8/10/86	8/18/86																COST		



P.O. BOX 3820  
 VENTURA, CA 93006-3820  
 805/926-1820  
 FORMERLY PROFESSIONAL DRILLING FLUID SERVICES, INC.

PRODUCTS USED

OPERATOR: BECHTEL NATIONAL  
 CONTRACTOR: Cleveland #6  
 ENGINEER: Jerry Bewick

LOCATION: Salton Sea  
 WELL NAME: KENNECOTT STATE 2-14 (RD-1)  
 COUNTY: Imperial

-----BID PRODUCTS-----

DATE	TICKET #	SALT	E-PAL	CTN PLTS	THERMVIS	HIB-100	THERMOGEL	CAUS SODA	AL STEARATE	SEAL EASE	SANDUST	GEL
		80#	55 gal	50#	20#	5 gal	50#	50#	25#	50#	2 cu ft	100#

1986

8/19	14211	352	1	34	8		1230	34	1	33		
8/19	14212					6					28	8

TOTAL SACKS USED	352	1	34	8	6		1230	34	1	33	28	8
COST/SACK	12.90	500.00	48.00	80.00	82.00		5.00	20.00	40.00	50.00	4.00	7.00
TOTAL	4540.80	500.00	1632.00	640.00	492.00		6150.00	680.00	40.00	1650.00	112.00	56.00

\$ 7,804.80 Subtotal  
 ( 2,497.54) Less 32% Discount  
 \$ 5,307.26 Discounted Product Total  
 8,688.00 Bid Product Total  
 \$13,995.26 Total Product  
 839.71 Sales Tax 6%  
 2,376.00 Trucking  
 \$17,210.97 TOTAL COST

TOTAL COST: \$17,210.97 = \$1.64  
 TOTAL DEPTH: 10,475'



MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTAN SEA

MUD Wt. <u>9.2</u> lb/gal. Vis. <u>28</u> Sec. PV YP W.L. cc/30 Sand % pH. <u>8.3</u> Ca+ PPM W.C. /32" CL- PPM Oil % Solids <u>1</u> % <u>10</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		RATES Penetration ft/hr Bit Weight M.lbs Rotary RPM Pump psi Pump SPM Pump liners Pump output = GPM Ann. Vel. = ft/min. Hours Running Centrifuge = Reduced Pump Rate: SPM = psi		Well <u>STATE 2-14</u> No. days this well Date <u>8-18-86</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Drilling Rig #6</u> Today's depth Yesterday's depth Drilled ft. in hrs. Last casing <u>2"</u> Depth <u>Top @ 5728' (Repair)</u> Rotating Hrs. this report = Cumulative rotating hours =	
--	--	--	--	---	--

BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION		
						FROM	TO				T	B	G

BHA Length: \_\_\_\_\_ Ft., Consist of: \_\_\_\_\_

BHA Wt. In Mud: \_\_\_\_\_ Lb.  
 Total String Wt.: \_\_\_\_\_ Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.	DIRECTION	Trip gas		Avg. background gas	
			units at	Ft.	units	lb./Gal.

HOURS	Operations last 24 Hours:
2 1/2	CONT R.I.H. w/ SAWTOOTH SHOE
1/2	WORK OVER FISH (LINER) @ 6519'

Daily Cost: \$	3	Circ @ 6519'
Cumulative Cost: \$	1/2	P.D.H. INTO SHOE @ 6000'
Daily Mud Cost: \$ <u>419.76</u>	6	Circ & WAIT ON EQUIP.
Cum. Mud Cost: \$ <u>14,788.81</u>	2 1/2	P.D.H.
MUD & CHEMICALS USED	1	Rig up & RUN 18 JTS 802' 7" 29* L-80 BT&C
Sack Barite:	1	Csg w/10' 5 1/2" STABIN TOOL
Bulk Barite:	4	MAKEUP SPEAR & RUN LINER ON 5" DP.
Gel:	1/2	LAND 7" LINER & RELEASE SPEAR (TOP OF 7"
Caustic Soda:	1	REPAIR @ 5728'
Lignite:	1	Circ TO COOL WELL
T-Gel	29	2 1/2 Rig up & LAY DOWN 5" DP.
Nach	4	
Hib 100	1	

MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

Wt. <u>9.3</u> MUD lb/gal. Vis. <u>28</u> Sec. PV YP W.L. cc/30 Sand % pH. <u>7.2</u> Ca+ PPM W.C. /32" CL- PPM Oil % Solids <u>1</u> % <u>10</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		RATES Penetration ft/hr Bit Weight M.lbs Rotary RPM Pump psi Pump SPM Pump liners Pump output = GPM Ann. Vel. = ft/min. Hours Running Centrifuge = Reduced Pump Rate: SPM = psi		Well <u>STATE 2-14</u> No. days this well Date <u>8-17-96</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Delg Rig #6</u> Today's depth Yesterday's depth Drilled ft. in hrs. Last casing <u>7"</u> Depth Rotating Hrs. this report = Cumulative rotating hours =	
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BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	

BHA Length: Ft., Consist of: 8 1/8" Sawtooth Shoe - ① - 5 x 6 1/4" DC - ②  
5" D.P.

BHA Wt. In Mud: Lb.  
 Total String Wt.: Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.		DIRECTION	Trip gas units at Ft. Avg. background gas units
	o			

Connection gas: Max. units at mud wt. lb./Gal.  
 Coordinates: M.D. TVD  
 Present operations:

HOURS	Operations last 24 Hours:
1/2	Cont. Milling & Working to 8005'
1 1/2	Circ @ 8005' (Lost 100% Returns)
	P.O.H. 4/D Taper Mill & Make up 8 1/8"
Daily Cost: \$	7 Pilot Mill & R.I.H. Crag Liner @ 6519'
Cumulative Cost: \$	2 Mill on 7" Buttress Collar @ 6519' to 6521'
Daily Mud Cost: \$ 1777 <sup>40</sup>	2 Circ @ 6521'
Cum. Mud Cost: \$ 14,369 <sup>05</sup>	3 P.O.H. (All six (6) Blade Cutters Broke off Pilot Mill)

MUD & CHEMICALS USED	HOURS	Operations last 24 Hours:
	2	Wait on Equip.
Sack Barite:	3	Makeup Taper Mill & R.I.H. (Chgoeders)
Bulk Barite:	1/2	Circ to Cool Hole
Gel:	2 1/2	P.O.H. & R.I.H. w/ Sawtooth Shoe & 6 1/4"
Caustic Soda:		BHA @ 6:00 AM
Lignite:		
TGel 180		
SALT Gel 90		
Naph 7		

MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

MUD				RATES				Well <u>STATE 2-14</u>			
Wt. _____ lb/gal.	Penetration _____ ft/hr	No. days this well _____ Date <u>8-16-86</u>									
Vis. _____ Sec. _____ PV _____ YP _____	Bit Weight _____ M.lbs	Operator <u>Bechtel</u>									
W.L. _____ cc/30 Sand _____ %	Rotary RPM _____	Contractor <u>Cleveland Delq. Rig #6</u>									
pH. _____ Ca+ _____ PPM	Pump psi _____	Today's depth _____									
W.C. _____ /32" CL- _____ PPM	Pump SPM _____	Yesterday's depth _____									
Oil _____ % Solids _____ % lb/B°	Pump liners _____	Drilled _____ ft. in _____ hrs.									
Temp. _____ °F, Gels = _____ / _____	Pump output = _____ GPM	Last casing <u>7"</u> " Depth _____									
ALK. (Pf) = _____	Ann. Vel. = _____ ft/min.	Rotating Hrs. this report = _____									
K+ion = _____ PPM	Hours Running _____	Cumulative rotating hours = _____									
Na+ion = _____ PPM	Centrifuge = _____										
At Depth = _____ Ft.	Reduced Pump Rate: _____ SPM = _____ psi										

BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	

BHA Length: 110.62 Ft., Consist of: 6 1/8" Taper Mill (NL) - BIT Sub - 2 x 4 3/4" DC  
JARS - Bumper Sub - 1 x 4 3/4" DC -  
45 x 3 1/2" DP. - 5" DP.

BHA Wt. In Mud: \_\_\_\_\_ Lb.  
 Total String Wt.: 145,000 Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.		DIRECTION	Trip gas _____ units at _____ Ft. Avg. background gas _____ units
	°	'		

HOURS	Operations last 24 Hours:
<u>3</u>	<u>Circ To Cool Mud @ 6519'</u>
<u>2</u>	<u>P.O.H.</u>

Daily Cost: \$	<u>Make up 6 1/8" Taper Mill (NL) + Pick up</u>
Cumulative Cost: \$	<u>8 1/2 3 x 4 3/4" DC + 3 1/2" DP + R.I.H. w/ 5" DP.</u>
	<u>1/2 Mill + work into liner top @ 6519'</u>
Daily Mud Cost: \$	<u>2 R.I.H. to 6657'</u>
Cum. Mud Cost: \$	<u>5 P.O.H. out of liner (packing off) +</u>
	<u>work pipe back to 6714' + work mill</u>

MUD & CHEMICALS USED	
Sack Barite:	<u>1 Mix + Pum Gel Sweep</u>
Bulk Barite:	<u>1 R.I.H. to 7995'</u>
Gel:	<u>1 Work Mill to 8005' @ 6:00 AM</u>
Caustic Soda:	
Lignite:	



MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

Wt. <u>9.2</u> MUD lb/gal. Vis. <u>30</u> Sec. PV YP W.L. <u>N/C</u> cc/30 Sand % pH. <u>8.0</u> Ca+ PPM W.C. /32" CL- PPM Oil % Solids % <u>5.8</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		RATES Penetration ft/hr Bit Weight M.lbs Rotary RPM Pump psi Pump SPM Pump liners Pump output = GPM Ann. Vel. = ft/min. Hours Running Centrifuge = Reduced Pump Rate = SPM = psi		Well <u>STATE 2-14</u> No. days this well Date <u>3-15-86</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Del. Rig #6</u> Today's depth Yesterday's depth Drilled ft. in hrs. Last casing <u>7"</u> Depth Rotating Hrs. this report = Cumulative rotating hours =	
--	--	---	--	--	--

BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	
1	8 1/2"	SPS BB 9516	M-44	OUT	RT.									

BHA Length: 160.27 Ft., Consist of: 8 1/2" BIT - BIT Sub - 5x6 1/4" D.C.  
⊗ - 5" D.P.

BHA Wt. In Mud: Lb.  
 Total String Wt.: 170,000 Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.		DIRECTION	Trip gas units at Ft. Avg. background gas units	Connection gas: Max. units at mud wt. lb./Gal.	Coordinates: M.D. TVD	Present operations:
	o	.					
							HOURS Operations last 24 Hours:
							2 CONT. Drillout Retainer Plug (cont.)
							1/2 R.I.H.
Daily Cost: \$							2 Well started flowing - Kill Thru Kill Line
Cumulative Cost: \$							w/ 10.4 ppq Brine
Daily Mud Cost: \$ <u>1319<sup>12</sup></u>							2 1/2 CONT. R.I.H. & Pick up D.P.
Cum. Mud Cost: \$ <u>12,591<sup>45</sup></u>							1/2 TAG LINER @ 6301
							1 1/2 Circ Well @ 6301
MUD & CHEMICALS USED							6 P.O.H. & Pick up Acme Spear & R.I.H.
Sack Barite:							1/2 Circ over fish @ 6301
Bulk Barite:							1/2 Work spear in to fish @ 6301
Gel:							5 P.O.H. w/ fish - Lay down 5 Joints 7"
Caustic Soda:							217' - Lay down Spear
Lignite:							Make up 8 1/2" Bit & R.I.H. - TAG Top of
T-Gel	45						3 LINER @ 6519'
SALT Gel	180						
Naoh	6						

MORNING REPORT

H.T. H.P. W/L: Remedial

Field: SALTEN SPA

<b>MUD</b> Wt. <u>9.3</u> lb./gal. Vis. <u>30</u> Sec. PV _____ YP _____ W.L. _____ cc/30 Sand _____ % pH. <u>8.5</u> Ca+ _____ PPM W.C. _____ /32" CL- _____ PPM Oil _____ % Solids <u>1+</u> % <u>10</u> lb/B° Temp. _____ °F, Gels = _____ ALK. (Pf) = _____ K+ion = _____ PPM Na+ion = _____ PPM At Depth = _____ Ft.		<b>RATES</b> Penetration _____ ft/hr Bit Weight _____ M.lbs Rotary RPM _____ Pump psi _____ Pump SPM _____ Pump liners _____ Pump output = _____ GPM Ann. Vel. = _____ ft/min. Hours Running _____ Centrifuge = _____ Reduced Pump Rate: _____ SPM = _____ psi		Well <u>STATE 2-14</u> No. days this well _____ Date <u>8-14-86</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Dalg Rig #6</u> Today's depth _____ Yesterday's depth _____ Drilled _____ ft. in _____ hrs. Last casing <u>7"</u> " Depth _____ Rotating Hrs. this report = _____ Cumulative rotating hours = _____	
--	--	---	--	--	--

BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	
1	8 1/2	SPS BB8516	M-44	OUT	RT.									

BHA Length: 160.27 Ft., Consist of: 8 1/2" BIT - BIT Sub - 5x6 1/4" D.C.  
⊗ - 5" DP.

BHA Wt. In Mud: \_\_\_\_\_ Lb.  
 Total String Wt.: 70,000 Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.	DIRECTION	Trip gas _____ units at _____ Ft. Avg. background gas _____ units
	o		Connection gas: Max. _____ units at _____' mud wt. _____ lb./Gal.
			Coordinates: _____ M.D. _____ TVD _____
			Present operations: _____

HOURS	Operations last 24 Hours:
2	CONT. W.O.C. & TEST Plug w/250psi.
1	Rig Down ROTARY TABLE & FLOOR
7	Nipple Down B.D.P.E. incl. MASTER VALVE & EXPANSION SPOOL - (SLIPS Fell OUT of HANGER IN EXPAN SPOOL CAUSING TO STICK) RETRIEVED
	4 JTs 184.67 7" LINER & ALL HANGER SLIPS
11 1/2	Reinstall B.D.P.E. & Nipple up - TEST B.D.P.E. T/1000 psi

MUD & CHEMICALS USED	QUANTITY
Sack Barite:	
Bulk Barite:	
Gel:	
Caustic Soda:	
Lignite:	
T-Gel	18

MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

Wt. <u>9.0</u> MUD lb/gal. Vis. <u>.33</u> Sec. PV YP W.L. cc/30 Sand <u>TR</u> % pH. <u>10.3</u> Ca+ PPM W.C. /32" CL- PPM Oil % Solids <u>2</u> % <u>18</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		RATES Penetration ft/hr Bit Weight M.lbs Rotary RPM Pump psi Pump SPM Pump liners Pump output = GPM Ann. Vel. = ft/min. Hours Running Centrifuge = Reduced Pump Rate: SPM = psi		Well <u>STATE 2-14</u> No. days this well Date <u>8-13-86</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Dalg. Rig #6</u> Today's depth Yesterday's depth Drilled ft. in hrs. Last casing <u>7'</u> " Depth Rotating Hrs. this report = Cumulative rotating hours =	
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BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	

BHA Length: Ft., Consist of:

BHA Wt. In Mud: Lb.

Total String Wt.: Lb.

Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.		DIRECTION	Trip gas units at Ft. Avg. background gas units
	°	'		

Connection gas: Max. units at mud wt. lb./Gal.  
 Coordinates: M.D. TVD  
 Present operations:

HOURS Operations last 24 Hours:

5 1/2 CONT. Circ To Cool Mud @ 5782'  
 \* Mix Volume  
1/2 SPEAR LINER \* JAR free @ 5782'  
4 P.O.H. w/ fish  
3 LINER HANGER STUCK IN B.O.P. \* Well  
 Head - Try To WORK Thru.  
7 WAIT ON HALIBURTON - Slip & Cut DL 135  
3 Rig up Haliburton & Mix & Displace Retainer  
 Plug @ Est. Top 450' - 50 SX "G" + 40% Silica  
 flour. Displaced w/ 119 c/gt H<sub>2</sub>O C.I.P. @ 4:50am  
1 WAIT ON CEMENT

MUD & CHEMICALS USED

Sack Barite:  
 Bulk Barite:  
 Gel:  
 Caustic Soda:  
 Lignite:  
 T-Gel 146  
 Naoh 3  
 G-Pal 1

MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

<b>MUD</b> Wt. <u>9.0</u> lb/gal. Vis. <u>34</u> Sec. PV YP W.L. <u>N/C</u> cc/30 Sand % pH. <u>9.0</u> Ca+ PPM W.C. /32" CL- PPM Oil % Solids <u>2</u> % <u>16</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		<b>RATES</b> Penetration _____ ft/hr Bit Weight _____ M.lbs Rotary RPM _____ Pump psi _____ Pump SPM _____ Pump liners _____ Pump output = _____ GPM Ann. Vel. = _____ ft/min. Hours Running _____ Centrifuge = _____ Reduced Pump Rate: _____ SPM = _____ psi		Well <u>STATE 2-14</u> No. days this well _____ Date <u>8-12-86</u> Operator <u>Bectel</u> Contractor <u>Cleveland Delg. Rig #6</u> Today's depth _____ Yesterday's depth _____ Drilled _____ ft. in _____ hrs. Last casing <u>7"</u> " Depth _____ Rotating Hrs. this report = _____ Cumulative rotating hours = _____	
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BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION		
						FROM	TO				T	B	G

BHA Length: 210.51 Ft., Consist of: Csg Spear - 2 @ - 1 x 4 3/4" DC - @ - Bumper Sub Jars - @ - 5 x 6 1/4" D.C. - @ - 5" D.P.

BHA Wt. In Mud: \_\_\_\_\_ Lb.  
 Total String Wt.: 170,000 Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.	DIRECTION	Trip gas _____ units at _____ Ft. Avg. background gas _____ units	
			o	

Connection gas: Max. \_\_\_\_\_ units at \_\_\_\_\_ mud wt. \_\_\_\_\_ lb./Gal.  
 Coordinates: \_\_\_\_\_ M.D. \_\_\_\_\_ TVD \_\_\_\_\_  
 Present operations: \_\_\_\_\_

HOURS Operations last 24 Hours:  
2 P.D.H. w/ Plugged Bit (Metal Machine Shop Shavings) + R.I.H.

Daily Cost: \$ \_\_\_\_\_  
 Cumulative Cost: \$ \_\_\_\_\_  
6 CONT. Pick up 5" D.P. (Rabbit) Tagged Top Liner @ 5782'  
 Daily Mud Cost: \$ None  
 Cum. Mud Cost: \$ 9,781.55 5 P.D.H. w/ Plugged Bit (wet)

MUD & CHEMICALS USED 4 Pick up N.L. Arme Csg Spear + R.I.H. Stopped @ 4365' (8 3/8" STOP)

Sack Barite:  
 Bulk Barite:  
 Gel: None 6 P.D.H. + Chg. STOP RAN 8 1/2" Lugged STOP + R.I.H. TO 5782'  
 Caustic Soda:  
 Lignite:

1 Circ To Cool Mud

MORNING REPORT

H.T. - H.P. W/L: Remedial

Field: SALTON SEA

<b>MUD</b> Wt. <u>9.0</u> lb/gal. Vis. <u>34</u> Sec. PV YP W.L. <u>N/C</u> cc/30 Sand % pH. <u>9.4</u> Ca+ PPM W.C. <u>1/32</u> " CL- PPM Oil % Solids <u>2</u> % <u>18</u> lb/B* Temp. °F, Gels = <u>1</u> ALK. (Pf) = K+ion = PPM Na+ion = PPM At Depth = Ft.		<b>RATES</b> Penetration ft/hr Bit Weight M.lbs Rotary RPM Pump psi Pump SPM Pump liners Pump output = GPM Ann. Vel. = ft/min. Hours Running Centrifuge = Reduced Pump Rate: SPM = psi		Well <u>STATE 2-14</u> No. days this well Date <u>8-11-86</u> Operator <u>Bechtel</u> Contractor <u>Cleveland Delq Rig #6</u> Today's depth Yesterday's depth Drilled ft. in hrs Last casing " Depth Rotating Hrs. this report = Cumulative rotating hours =	
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BIT NO.	SIZE	MAKE & SERIAL NO.	TYPE	JET SIZES	NEW USED	INTERVAL		FEET DRLD.	HOURS	RATE FT/HR	CONDITION			
						FROM	TO				T	B	G	
1	8 1/2"	SPS BB9516	M-44	OUT	RT.									

BHA Length: 191.14 Ft., Consist of: 8 1/2" BIT - BITsub - 6x6 1/4" DC. - 5" DP

BHA Wt. In Mud: Lb.

Total String Wt.: Lb. Oxy Drilling Supervisor: G.W. Reich

DEPTH	DEV.		DIRECTION	Trip gas units at ..... Ft. Avg. background gas ..... units Connection gas: Max. .... units at ..... mud wt. .... lb./Gal. Coordinates: ..... M.D. .... TVD ..... Present operations: .....
	°	'		

HOURS	Operations last 24 Hours:
7	Bull head Cold water Down Hole T/cool

Daily Cost: \$	2	Mix Hi-Vis LCM Pill Spot pill in open Hole
Cumulative Cost: \$		Section Displaced w/ mud
Daily Mud Cost: \$ <u>3007.00</u>	4	Check well F/flow (well static)
Cum. Mud Cost: \$ <u>2007.00</u> <u>9781.55</u>	2	Make up Bit & Pick up 6 1/4" Drill Collars & 5" Drill Pipe

MUD & CHEMICALS USED	
Sack Barite:	9 Well started to flow - Shut in & Kill w/ mud
Bulk Barite:	Mixed Mud T 9.0 ppg & Bull Head
Gel:	
Caustic Soda:	
Lignite:	
T-Gel	141
NaCl	215
NaOH	3



