Schlumberger

DUAL LATEROLOG
MICRO SFL

COMPANY	SOUTHERN CALIFORNIA GAS COMPANY
WELL	PORTER 72B
FIELD	ALISO CANYON
COUNTY	LOS ANGELES
STATE	CALIFORNIA
LOCATION	909' South & 668' West from station 84.
Other Services:	NONE

API SERIAL NO.	SECT.	TWP.	RANGE
037-24146	27	3N	16W

Permanent Datum	GROUND LEVEL	Elev.: K.B.	1933.0 F
Log Measured From	KELLY BUSHING 24.0 F above Perm. Datum	D.F.	1909.0 F
Drilling Measured From	KELLY BUSHING	G.L.	1909.0 F

Date	19 NOV 1993		
Run No.	TWO		
Depth-Driller	7203.0 F		
Depth-Logger (Schl.)	7070.0 F		
Btm. Log Interval	7068.0 F		
Top Log Interval	6500.0 F		
Casing-Driller	13 3/8" @ 815.0 F	9 5/8" @ 6828.0 F	@
Casing-Logger	815.0 F	6828.0 F	
Bit Size	17 1/2" @ 820.0 F	12 1/4" @ 6875.0 F	8 1/2" @ 7203.0 F
Type Fluid in Hole	XCD/PAC/CACL		
Density	10.10 LB/G		40.0 S
pH	7.5		4.8 C3
Fluid Loss			
Source of Sample	MUD PIT		
Rm @ Meas. Temp.	.055 OHMM @ 71.0 DEGF		
Rmf @ Meas. Temp.	.054 OHMM @ 64.0 DEGF		
Rmc @ Meas. Temp.	.079 OHMM @ 64.0 DEGF		
Source: Rmf / Rmc	PRESS / PRESS		
Rm @ BHT	.027 OHMM @ 152. DEGF		
Circulation Ended	05:00 19 NOV 1993		
Logger on Bottom	11:00 19 NOV 1993		
Max. Rec. Temp.	152. DEGF		
Equip. / Location	8357 / LONG BEACH		
Recorded By	STEVE WILLIAMS		
Witnessed By	RASHA PRINCE / IAN BINMORE		

RECEIVED
JAN 11 1994
@ OIL, GAS AND
DIVISION OF GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

The well name, location and borehole reference data were furnished by the customer.

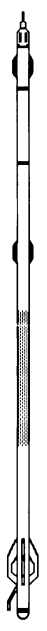
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	TWO		
Service Order No.	620041		
Drilling Fluid Level			
Salinity			
Rmf @ BHT	.024 OHMM @ 152. DEGF		@
Rmc @ BHT	.035 OHMM @ 152. DEGF		@
Logging Speed	3600.0 F/HR		
EQUIPMENT DATA			
Tool Number 1	SRS-D 786		
Tool Number 2	SRE-F 811		
Tool Number 3	DLS-F 961		
Tool Number 4	DLC-D 875		
Tool Number 5	AH-169 883		
Tool Number 6	SGC-SA 631		
Tool Number 7	TCC-B 257		
Tool Number 8	7-46NT 1260		
Tool Number 9	TCM-AB 128		
Tool Number 10	LCM-AA 1724		
Tool Number 11			
Tool Number 12			

REMARKS:

DEPTH CORRELATED TO CASING SHOE AT 6828 FEET.
PREVIOUS LOG WAS NOT USED FOR CORRELATION PURPOSES.
TOOL STRING RAN WITH 1 1/2" STAND-OFFS.
TD NOT REACHED DUE TO FISH IN THE HOLE AT 7203 FEET.
TOOL STRING HUNG UP AT 7070 FEET DUE TO OBSTRUCTION IN THE HOLE.
A SECOND TRIP INTO THE WELL WAS MADE USING A RUBBER HOLE-
FINDER. THE TOOLSTRING HUNG UP AT 7070 FEET AGAIN.

LOGGING TOOL STRING SKETCH



TCCB, 3 3/8" OD		39.2 F
SGTL, 3 3/8" OD	GR	36.2 F 35.3 F
DSTE, 3 3/8" OD		30.7 F
	LLS LLD	14.9 F
	CALS	3.1 F
	MSFL	1.1 F TOOL ZERO

TOTAL TOOL STRING LENGTH IS 41.7 F.
TOTAL TOOL STRING WEIGHT IS 666. LB IN AIR.

MAIN LOG : 2 IN /100 FT LINEAR

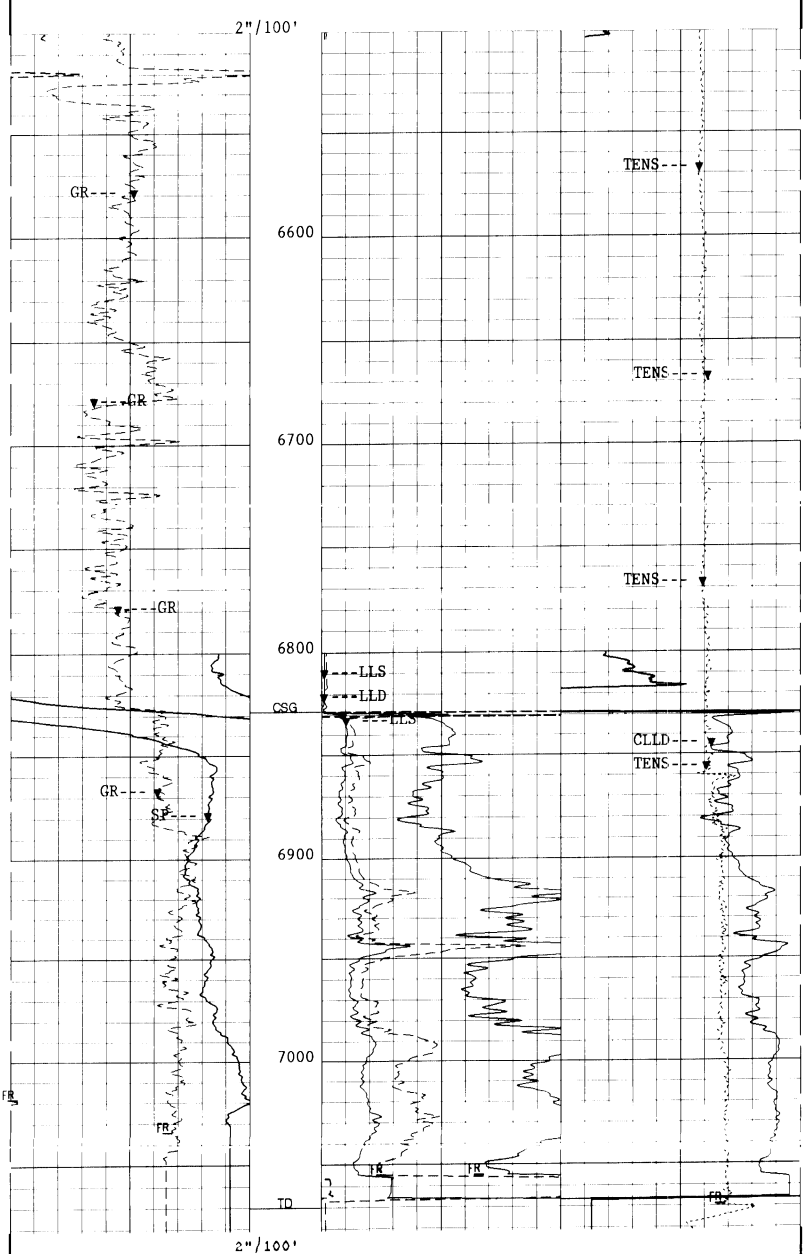
ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume: 112.987 F3 FROM 7070.00 F TO 6828.00 F
Integrated Cement Volume: 48.5758 F3 FROM 7070.00 F TO 6828.00 F
(ASSUMING 7.00000 IN O.D. CASING)

GR(GAPI)	LLS(OHMM)	CLLD(MM/M)
0.0 — 150.00	0.0 — 10.000	
	LLD(OHMM) 0.0 — 50.000	500.00 — 0.0
SP(MV) -120.0 — -20.00	LLS(OHMM) 0.0 — 50.000	TENS(LBF) 0.0 — 5000.0

CP 38.2 FILE 29 19-NOV-1993 15:14

INPUT FILE(S) CREATION DATE
22 19-NOV-1993 12:42



CP 38.2 FILE 29 19-NOV-1993 15:07

INPUT FILE(S) CREATION DATE
22 19-NOV-1993 12:42

GR(GAPI)	LLS(OHMM)	CLLD(MM/M)
0.0 — 150.00	0.0 — 10.000	
	LLD(OHMM) 0.0 — 50.000	500.00 — 0.0
SP(MV) -120.0 — -20.00	LLS(OHMM) 0.0 — 50.000	TENS(LBF) 0.0 — 5000.0

SENSOR MEASURE POINT TO TOOL ZERO

SPAR	51.5	FEET	SP	51.5	FEET
DV1	14.9	FEET	CAL1	2.8	FEET
SVO	14.9	FEET	SIO	14.9	FEET
DVO	14.9	FEET	DIO	14.9	FEET
CALS	3.1	FEET	DLCS	.6	FEET
TENS	.6	FEET	GR	35.3	FEET
CMSF	1.1	FEET	I1	1.3	FEET

PARAMETERS

PARAMETER	VALUE	UNIT
PP - Playback Processing	NORM	
DO - Depth Offset for Logical Unit LI1	0.0	F
TD - Total Depth	7070.00	F
FCD - Future Casing Diameter	7.00000	IN
NCJT - NGT Calibration Jig Type	GSRY	
GTSE - Generalized Temperature Selection	TEMP	
SHT - Surface Hole Temperature	80.0000	DEGF
BHT - Bottom Hole Temperature	180.000	DEGF
RMUD - Resistivity of Mud	1.00000	OHMM
SPT - SRT Pad Type	STAN	
CREF - Current Reference	AUTO	
OMR - Origin of Mud Resistivity	CONS	
SPRF - Shallow Power Reference	550.000	NW
DPRF - Deep Power Reference	550.000	NW
BS - Bit Size	8.50000	IN
BHS - BoreHole Status (Open or Cased)	OPEN	

MAIN LOG : 5 IN / 100 FT LINEAR

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume: 112.987 F3 FROM 7070.00 F TO 6828.00 F
Integrated Cement Volume: 48.5758 F3 FROM 7070.00 F TO 6828.00 F
(ASSUMING 7.00000 IN O.D. CASING)

GR(GAPI)	LLD(OHMM)	CLLD(MM/M)
0.0 — 150.00	0.0 — 50.000	500.00 — 0.0
SP(MV) -120.0 — -20.00	LLS(OHMM) 0.0 — 50.000	TENS(LBF) 0.0 — 5000.0