GL04310_3

FINAL PRINT

Schlumberger

SIMULTANEOUS COMPENSATED NEUTRON-FORMATION DENSITY

COUNTY

FIELD HEBER

LOCATION

WELL HGU #154

COMPANY CHEVRON GEOTHERMAL

COMPANY ~~CHEVRON GEOTHERMAL~~

WELL HGU #154

FIELD HEBER

COUNTY IMPERIAL STATE CALIFORNIA

LOCATION NA

Other Services:

API SERIAL NO.	SEC.	TWP.	RANGE
	34	16S	14E

Permanent Datum: GL ; Elev.:
Log Measured From KB 28.6 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B.
D.F.
G.L.

Date	10-16-84			
Run No.	ONE			
Depth—Driller	6670			
Depth—Logger	6668			
Btm. Log Interval	6666			
Top Log Interval	805			
Casing—Driller	16" @ 807	@	@	@
Casing—Logger	805			
Bit Size	14 3/4			
Type Fluid in Hole	MILTEMP			
Dens. | Visc.	9.4 | 36			
pH | Fluid Loss	9 | 3.5 ml	ml	ml	ml
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	3.750@ 101 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	2.700@ 70 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	3.090@ 70 °F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	FILTER PRESS			
Rm @ BHT	1.832@ 214 °F	@ °F	@ °F	@ °F
TIME Circulation Stopped	7:30			
TIME Logger on Bottom	10:00			
Max. Rec. Temp.	214 °F	°F	°F	°F
Equip. | Location	8240 | 4404			
Recorded By	MORAN			
Witnessed By	ROBERTS			

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

RUN NO.	ONE			
Service Order No.	427453			
Fluid Level	FULL			
Salinity, PPM Cl.				
Speed - F.P.M.				
EQUIPMENT DATA				
Dens. Panel	[illegible]			
Dens. Cart.	[illegible]			
Dens. Skid.	[illegible]			
Dens. Sonde	[illegible]			
Dens. Source	[illegible]			
Dens. Calibrator	[illegible]			
Neut. Panel	--			
Neut. Cart.	--			
Neut. Source	--			
Neut. Calibrator	--			
GR Cart.	--			
Memorizer Panel	--			
Tape Recorder (TTR)	--			
Depth Encoder (DRE)	--			
Pressure Panel (CPW)	--			
Type	--			
No.	--			
S. O. — Inches	--			
CALIBRATION DATA				
GR BKG. CPS	--			
GR Source CPS	--			
GR Sens. - Cal	--			
GR T. C. - Cal	--			
CNL Short Spacing - Before Log	--			
CNL Long Spacing - Before Log	--			
CNL Short Spacing - After Log	--			
CNL Long Spacing - After Log	--			
FDC P¹ — Before Log	--			
FDC P² — Before Log	--			
FDC P¹ — After Log	--			
FDC P² — After Log	--			

Type Log	Depth			

REMARKS:

DENSITY REPEATABILITY ONLY FAIR
DUE TO POOR CONDITION OF BOREHOLE
OVER [illegible] INTERVAL

LOGGING DATA

DEPTH		CNP			FDC				GR			
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens. Logged	T. C.	Zero. Div. Left	Scale Per 100 Div.

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 interpretation made by any of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

```
BS  (IN  )
13.000          23.000
CALI(IN  )
13.000          23.000
GR  (GAPI)
0.0             150.00
SP  (MV  )
-80.00          20.000
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                         DRHO(G/C3)
                   -.2500          .25000
          RHOB(G/C3)
1.6500                            2.6500
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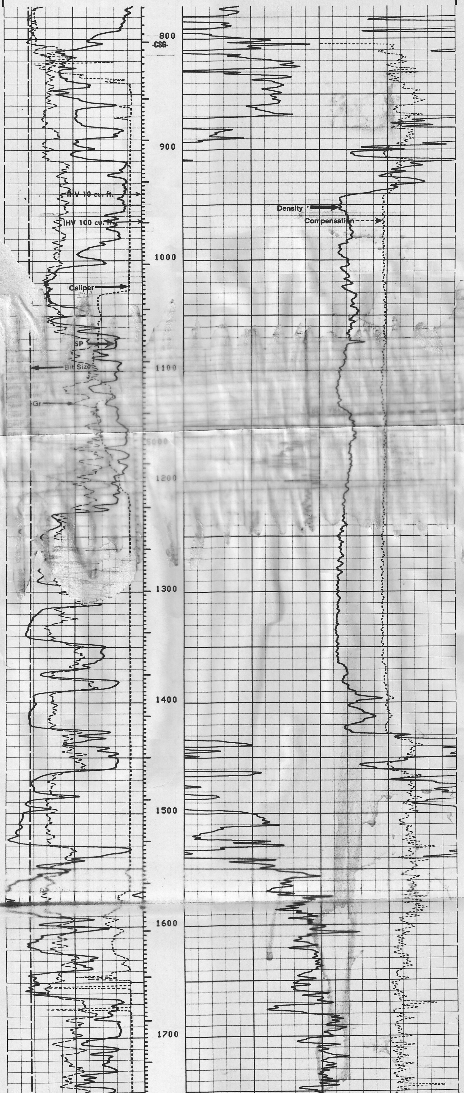

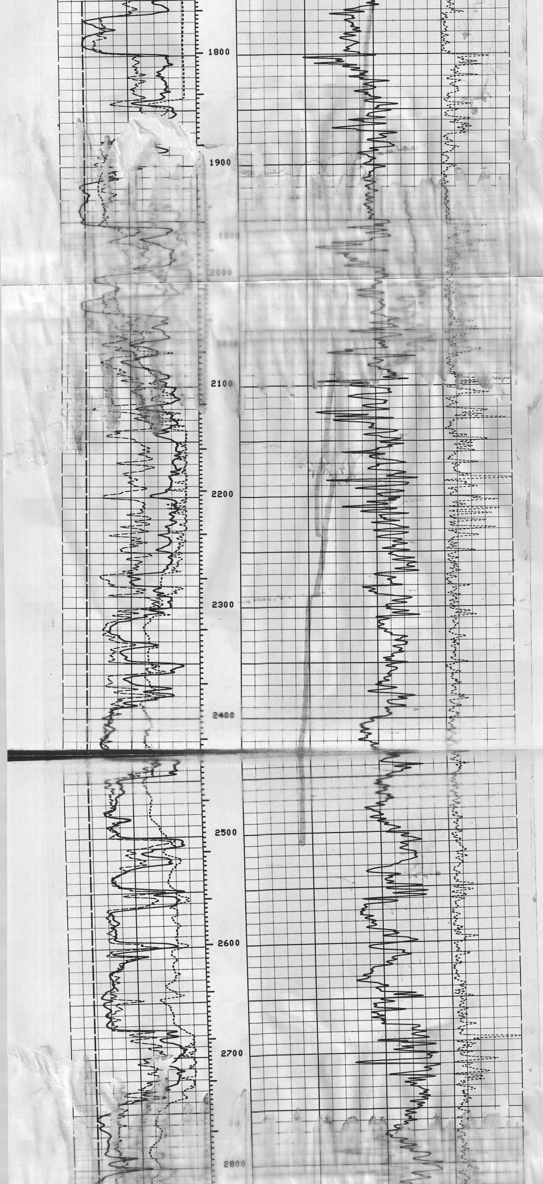

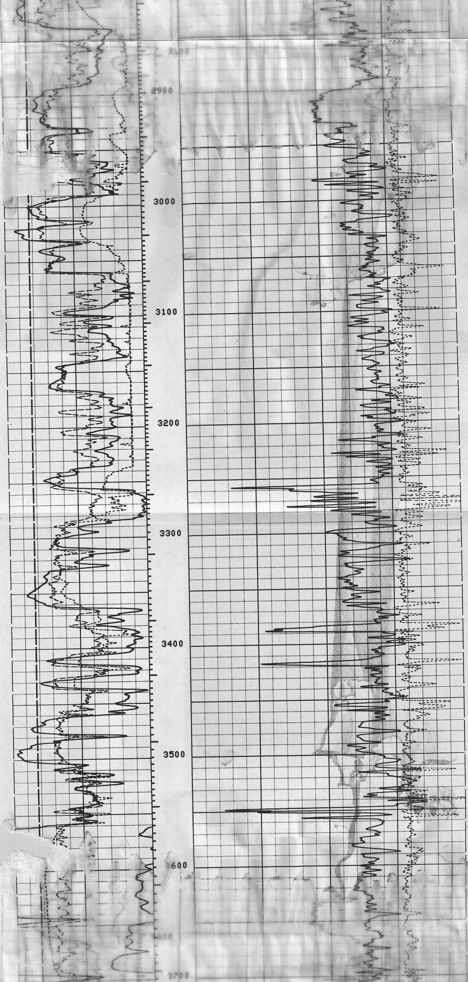

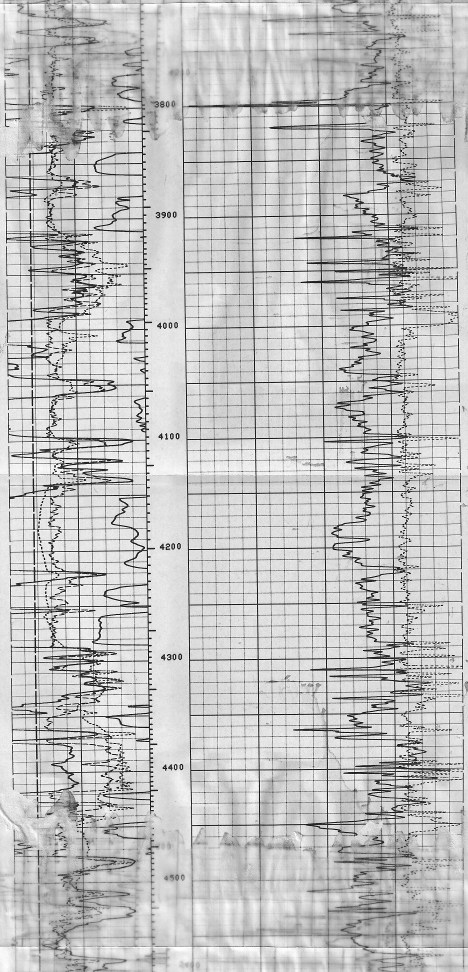

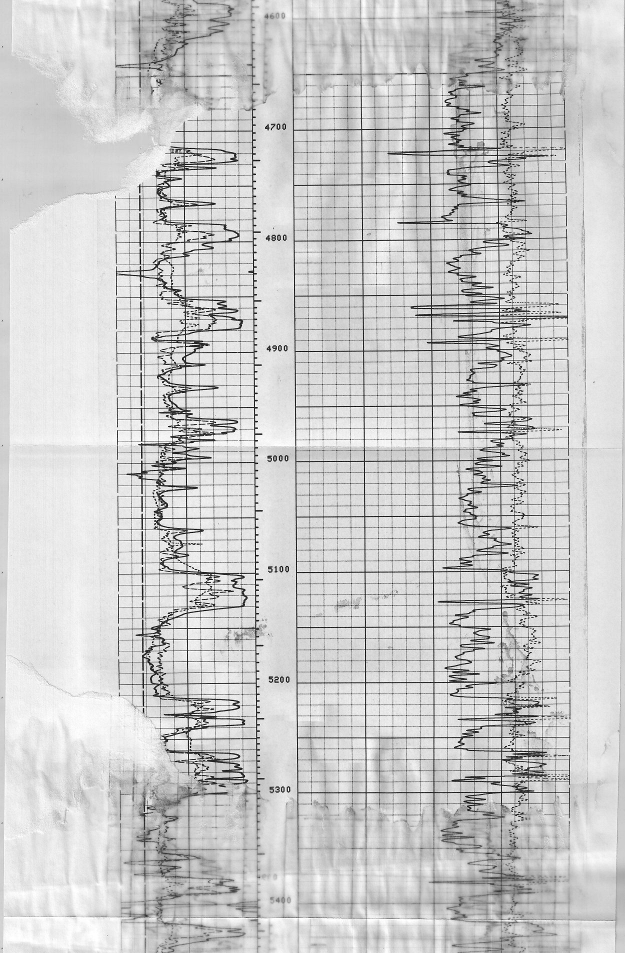

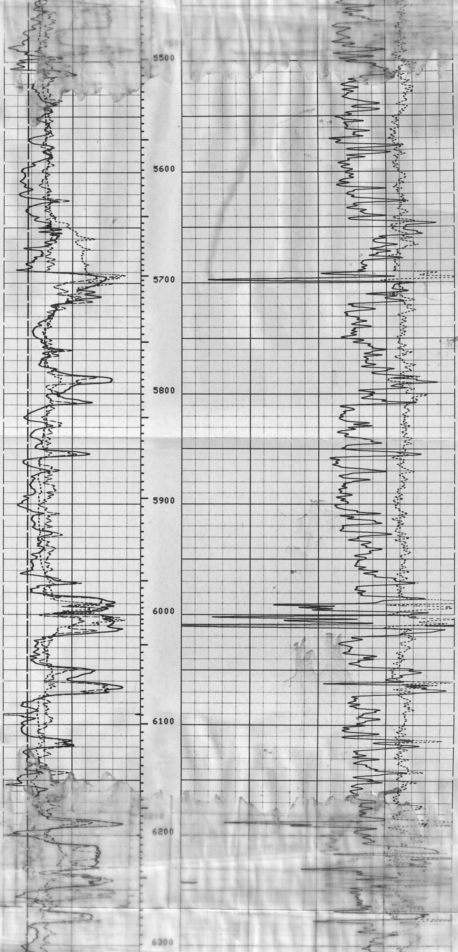

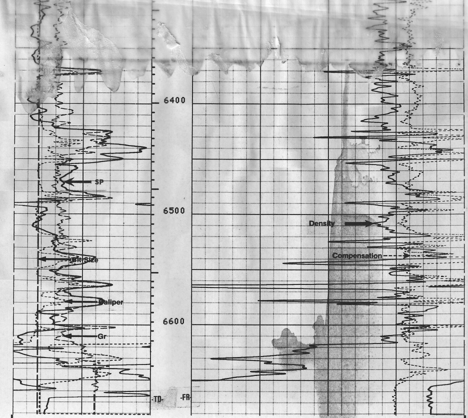

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BS (IN)
13.000 23.000
CALI(IN)
13.000 23.000
GR (GAPI)
0.0 150.00
SP (MV)
-80.00 20.000

DRHO(G/C3)
-.2500 .25000
RHOB(G/C3)
1.6500 2.6500

SENSOR MEASURE POINT TO TOOL ZERO

FFDC	6.7	FEET	GR	23.3	FEET
CALI	6.7	FEET	NFDC	6.7	FEET
SFL	6.4	FEET	ILD	9.4	FEET
SP	2.3	FEET	ILM	5.7	FEET
TENS	2.3	FEET	SPAR	2.3	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
MDEN	2.65000	G/C3	FD	1.00000	G/C3
BHF	WATE		FDCC	ALLO	
SBR	1.00000	OHMM	DSEC	4.50000	MMHO
BHS	OPEN		MSEC	4.50000	MMHO
BS	14.7500	IN			

COMPANY CHEVRON GEOTHERMAL
WELL HGU #154
[illegible] HEBER
CO[illegible]TY IMP[illegible]L STATE CALIFORNIA

SCHL. FR 6666
SCHL. TD 6668
DRLR. TD 6670

Elev: KB
DF
GL

SWS-2872