GL04390

Schlumberger
FOUR – ARM HIGH RESOLUTION CONTINUOUS DIPMETER

COMPANY CHEVRON U.S.A., INC.
WELL BEOWAWE 85-18
[redacted]

COMPANY CHEVRON U.S.A., INC.
WELL BEOWAWE 85-18
FIELD BEOWAWE GEYSERS
COUNTY LANDER STATE NEVADA

LOCATION 2960' SOUTH & 80' WEST FROM THE NORTHEAST 1/4 OF

API SERIAL NO.	SEC.	TWP	RANGE
	18	31N	48E

Other Services: DI-SFL, FDC/CNL/GR, BHC, CBL

Permanent Datum: GL ; Elev.: 4920
Log Measured From KB 15 Ft. Above Perm. Datum
Drilling Measured From KB
Elev.: K.B. 4935, D.F. –, G.L. 4920

Date	5-11-80			
Run No.	TWO			
Depth—Driller	4543			
Depth—Logger (Schl.)	4543			
Btm. Log Interval	4318			
Top Log Interval	2937			
Casing—Driller	9 5/8" @ 2937	@	@	@
Casing—Logger	2937			
Bit Size	8 3/4"			
Type Fluid in Hole	GEL			
Dens. / Visc.	8.9 / 43			
pH / Fluid Loss	9.4 / 8 ml	ml	ml	ml
Source of Sample	CIRCULATED			
Rm @ Meas. Temp.	4.5 @ 52°F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	4.68 @ 48°F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	3.16 @ 58°F	@ °F	@ °F	@ °F
Source: Rmf / Rmc	M / M			
Rm @ BHT	1.07 @ 240°F	@ °F	@ °F	@ °F
TIME Circulation Stopped	5-9 1830			
TIME Logger on Bottom	5-11 1300			
Max. Rec. Temp.	240°F	°F	°F	°F
Equip. / Location	7763 / SAC			
Recorded By	ANDERSEN			
Witnessed By Mr.	IOVENETTI			

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

REMARKS: Service Order No. 123994 Magnetic Declination
HYDRALIC COMPENSATOR RUPTURED OPENING SONDE. RAN LOG WITHOUT PAD PRESSURE.

Run No.		1		2	3	4
Tool Type		HDT				
HDP		CSU				
DDR	TTR	–	–			
DPI		– –				
HDM						
HDE						
HDS						
Adapter Head						
UG / CG	SAH					
5" Film / 10" Film	60" Record	X				
Analog	Digital		X			
TIME Circulation Stopped		5-9	1830			
TIME Schl. on Bottom		5-11	1300			

ROLL NO.	INTERVAL

TOOL AZIMUTH AND HOLE DIRECTION CALCULATION — DEFINITIONS

(DHD) HIGH SIDE OF TOOL = Direction from center of tool to upper side of tool.
(N) NORTH = Direction from center of tool to Magnetic North.
(REF) REFERENCE ELECTRODE = Direction from center of tool to #1 electrode.
(AZI) AZIMUTH OF REFERENCE ELECTRODE = Clockwise angle from N to REF.
(RBR) RELATIVE BEARING = Clockwise angle from DHD to REF.
(AHD) AZIMUTH OF HOLE DEV. (TOOL AXIS) = Clockwise angle from N to DHD.

LOW ANGLE UNIT [X]
EXAMPLE
HDM - Low Angle Unit (0-36°)
AZI (solid curve) = 330°
RBR (dotted curve) = 230°
AHD = AZI − RBR = 330° − 230° = 100°

HIGH ANGLE UNIT [ ]
EXAMPLE
HDM - High Angle Unit (0-72°)
AHD (solid curve) = 100°
RBR (dotted curve) = 230°
AZI = AHD + RBR = 100° + 230° = 330°

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 Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

ORIENTATION	DEPTHS	CORRELATION CURVES ←CONDUCTIVITY
AZIMUTH 0° 120° 240° 360°; RELATIVE BEARING 0° 120° 240° 360°; DEVIATION 0° 9°		NO. 1, NO. 2, NO. 3, NO. 4 (S. – O.); 4 ARM CALIPER 1-3 CALIPER 26" 16" 6"; 2-4 CALIPER 26" 16" 6"

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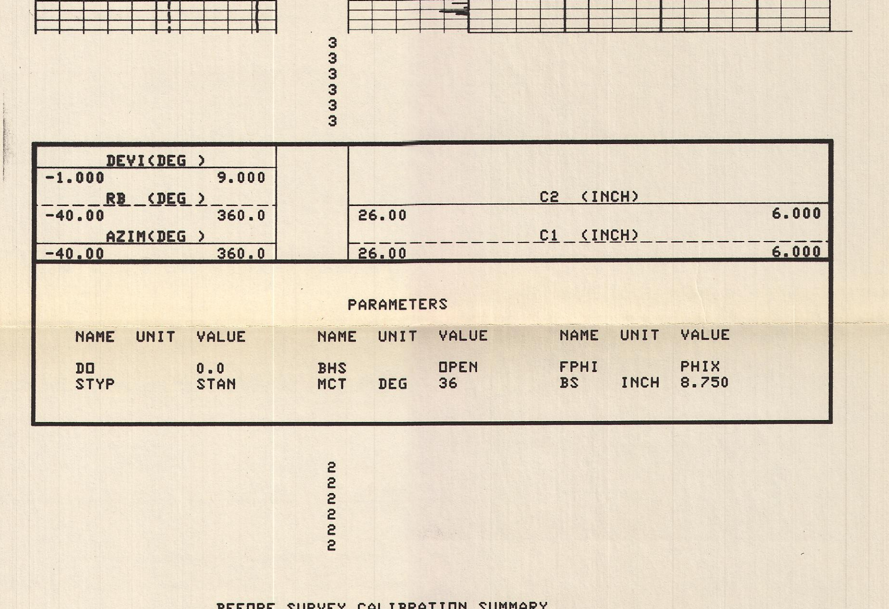
CALIBRATION BEFORE SURVEY



DEVI(DEG)		C2 (INCH)	
-1.000	9.000	26.00	6.000
RB (DEG)		C1 (INCH)	
-40.00	360.0	26.00	6.000
AZIM(DEG)			
-40.00	360.0		

PARAMETERS

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
DO		0.0	BHS		OPEN	FPHI		PHIX
STYP		STAN	MCT	DEG	36	BS	INCH	8.750

BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED: 80/05/10
PROGRAM FILE: HDT (VERSION 16.4 00/00/00)

HDT CALIPER CALIBRATION SUMMARY

	MEASURED SMALL	MEASURED LARGE	CALIBRATED SMALL	CALIBRATED LARGE	UNITS
C1	6.9	13.4	6.0	12.0	IN
C2	6.8	13.4	6.0	12.0	IN

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HIGH RESOLUTION DIPMETER CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO
3. FULL SCALE ADJUST
4. CALIPER ADJUST AT 6" AND 16" CALIPER 1-3 IS CODED
5. CALIPER ADJUST AT 6" AND 16" CALIPER 2-4 IS SOLID
6. PAD #1 RESPONSE CHECK
7. PAD #2 RESPONSE CHECK
8. PAD #3 RESPONSE CHECK
9. PAD #4 RESPONSE CHECK
10. SONDE HANGING VERTICALLY
11. TOOL AND PAD #1 POINTED NORTH
12. TOOL ROTATING