Schlumberger

FOUR – ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER

GL04387_5

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

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

LOCATION 2910' SOUTH & 80' WEST FROM THE NORTHEAST 1/4 OF
API SERIAL NO. — SEC. 18 TWP 31N RANGE 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	4518		
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
Source of Sample	CIRCULATED		
Rm @ Meas. Temp.	4.5 @ 52 °F	@ °F	@ °F
Rmf @ Meas. Temp.	4.68 @ 48 °F	@ °F	@ °F
Rmc @ Meas. Temp.	3.16 @ 58 °F	@ °F	@ °F
Source: Rmf | Rmc	M | M		
Rm @ BHT	1.07 @ 240 °F	@ °F	@ °F
TIME Circulation Stopped	5-9 1830		
TIME Logger on Bottom	5-11 1300		
Max. Rec. Temp.	240 °F	°F	°F
Equip. | Location	7763 | SAC		
Recorded By	ANDERSEN		
Witnessed By Mr.	LOVENETTI		

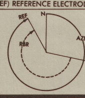
FOLD HERE The well name, location and borehole reference data were furnished by the customer.

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

Run No.		1		2		3		4		ROLL NO.	INTERVAL
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								

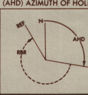
TOOL AZIMUTH AND HOLE DIRECTION CALCULATION DEFINITIONS

(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 ☒

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°		S. O. NO. 1
RELATIVE BEARING 0° 120° 240° 360°		S. O. NO. 2
DEVIATION 0° 9°		S. O. NO. 3
		S. O. NO. 4
		4 ARM CALIPER 1 - 3 CALIPER 26" 16" 6"
		2 - 4 CALIPER 26" 16" 6"

4

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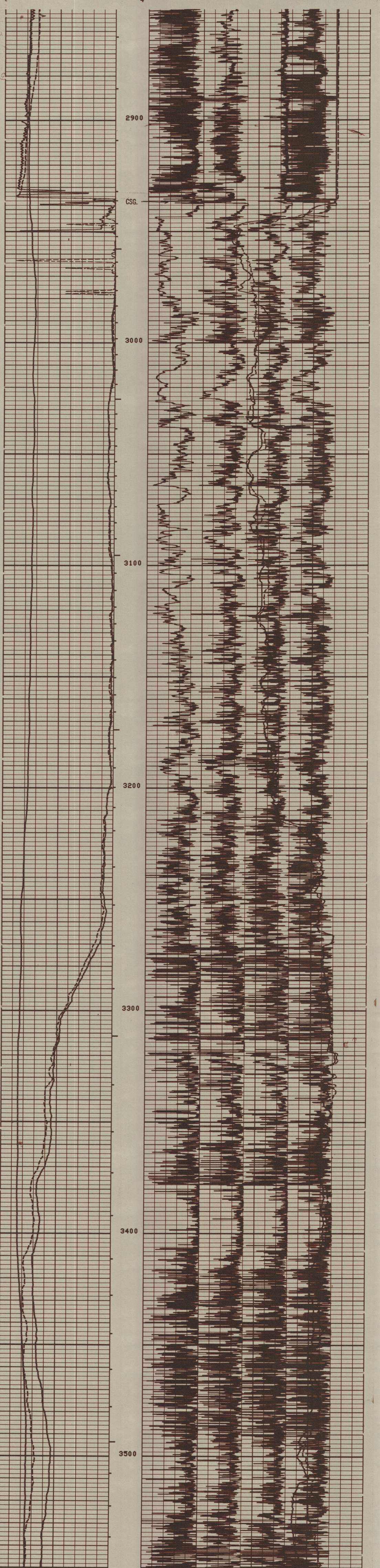

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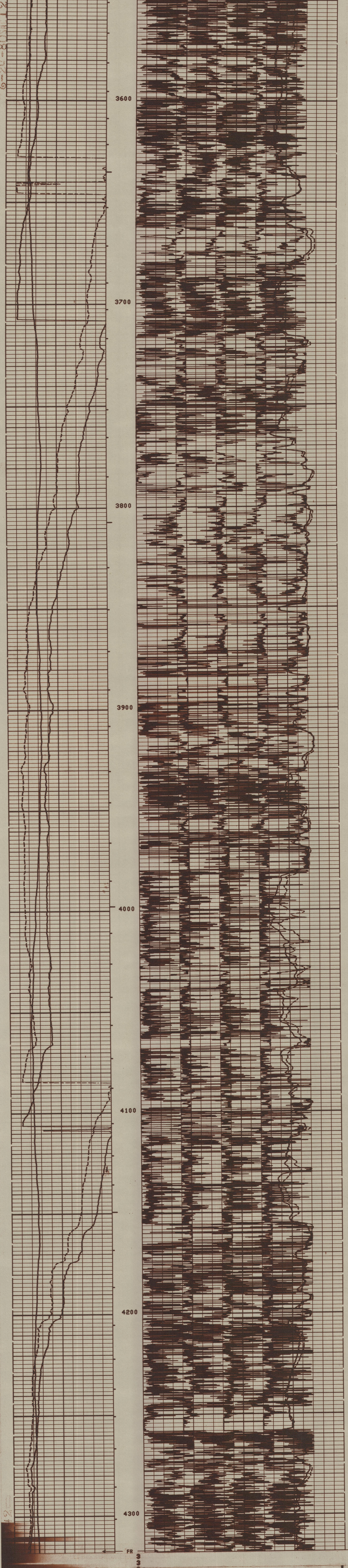
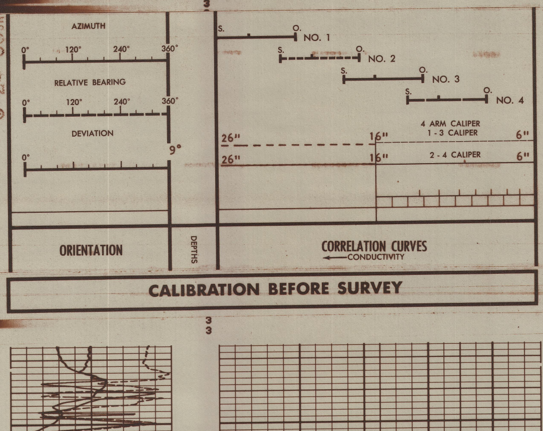
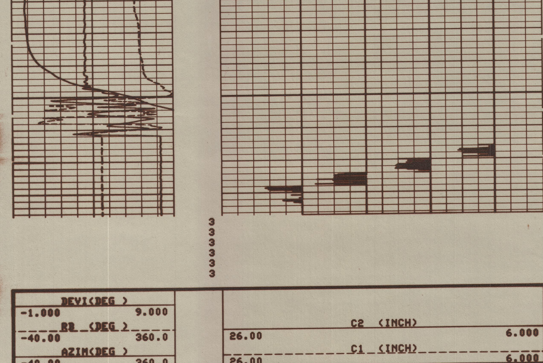




CALIBRATION BEFORE SURVEY

3
3



3
3
3
3
3
3

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

2
2
2
2
2
2

BEFORE SURVEY CALIBRATION SUMMARY

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

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

2
2

COMPANY CHEVRON U.S.A., INC.

WELL BEOWAWE 85-18

FIELD BEOWAWE GEYSERS

COUNTY LANDER STATE NEVADA

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