

FDU-ARM  
HIGH RESOLUTION  
CONTINUOUS DIPMETER

Schlumberger

27001 Grass

COMPANY: UNION OIL COMPANY

WELL: RICHARD WEISHAUPF NO. 1

FIELD: STILLWATER

COUNTY: CHURCHILL STATE: NEVADA

LOCATION: ST. LUKE'S

DATE: 8/17/81

TIME: 10:00

RUN NO.: 1

ROLL NO.: 1

INTERVAL: 6.000

MAGNETIC DECLINATION: 177

SERVICE ORDER NO.: 20000

TOOL AZIMUTH AND HOLE DIRECTION CALCULATION

DEFINITIONS

(DHD) HIGH SIDE OF TOOL - Direction from center of tool to upper side of tool.

(RN) NORTH - Direction from center of tool to Magnetic North.

(REF) REFERENCE ELECTRODE - Direction from center of tool to #1 electrode.

(AZ) AZIMUTH OF REFERENCE ELECTRODE - Clockwise angle from N to REF.

(RR) RELATIVE BEARING - Clockwise angle from DHD to REF.

(AH) AZIMUTH OF HOLE REV. (TOO AXIS) - Clockwise angle from N to DHD.

(LW) LOW ANGLE UNIT - 100'

(HW) HIGH ANGLE UNIT - 100'

EXAMPLE

HDM - Low Angle Unit (0.36') (solid curve) = 330'

AZI - (dotted curve) = 230'

RRB - (dotted curve) = 230'

AHD - AZI - RRB = 100' = 100'

EXAMPLE

HDM - High Angle Unit (0.72') (solid curve) = 100'

AHD - (dotted curve) = 230'

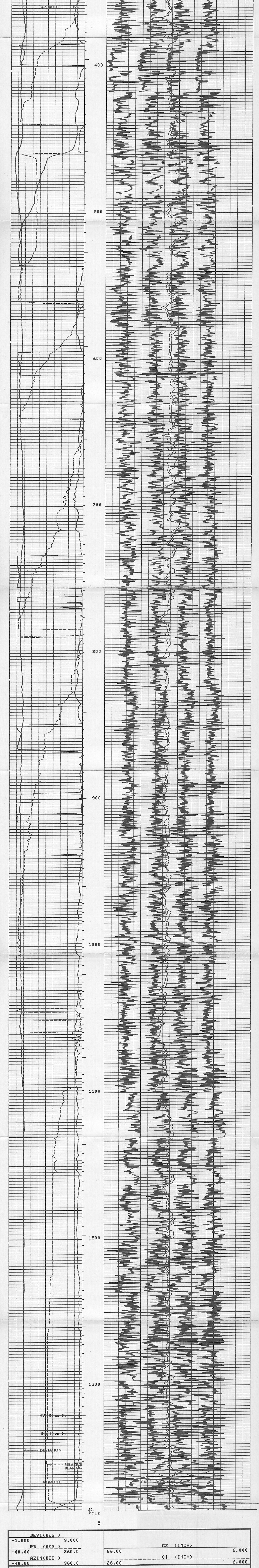
ARR - (dotted curve) = 230'

AHD + RRB = 100' = 100'

All interpretations are opinions based on information furnished or otherwise measured and we cannot and do not guarantee the accuracy or correctness of any interpretations, and we shall not be held responsible for any loss, cost, damage or expense incurred by customer 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.

Run No.	1	2	3	4	ROLL NO.	INTERVAL
Tool Type	L WEIGHT (E)					
DDR	TR					
DPI	1891					
HDE						
HDS						
Adapter Hand						
UG	CG	SAH				
5" Film	10" Film	60" Record				
Head	Digital					
Calculation Stopped						
Schl. on Bottom	0.07					

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



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

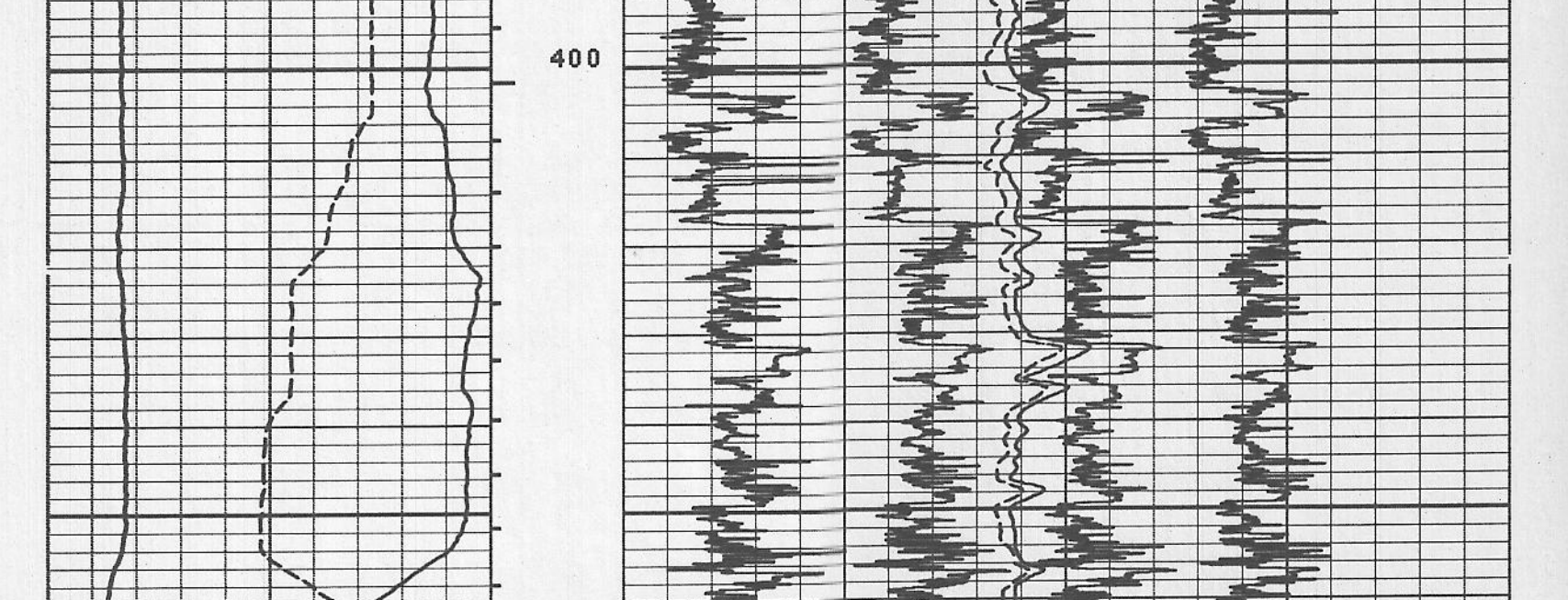
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP	LH	0.0	MCT	DEG	78	BS	INCH	17.50
DD			BHS		DPEN	FPHI	PHIX	

REPEAT SECTION

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP	LH	0.0	MCT	DEG	78	BS	INCH	17.50
DD			BHS		DPEN	FPHI	PHIX	

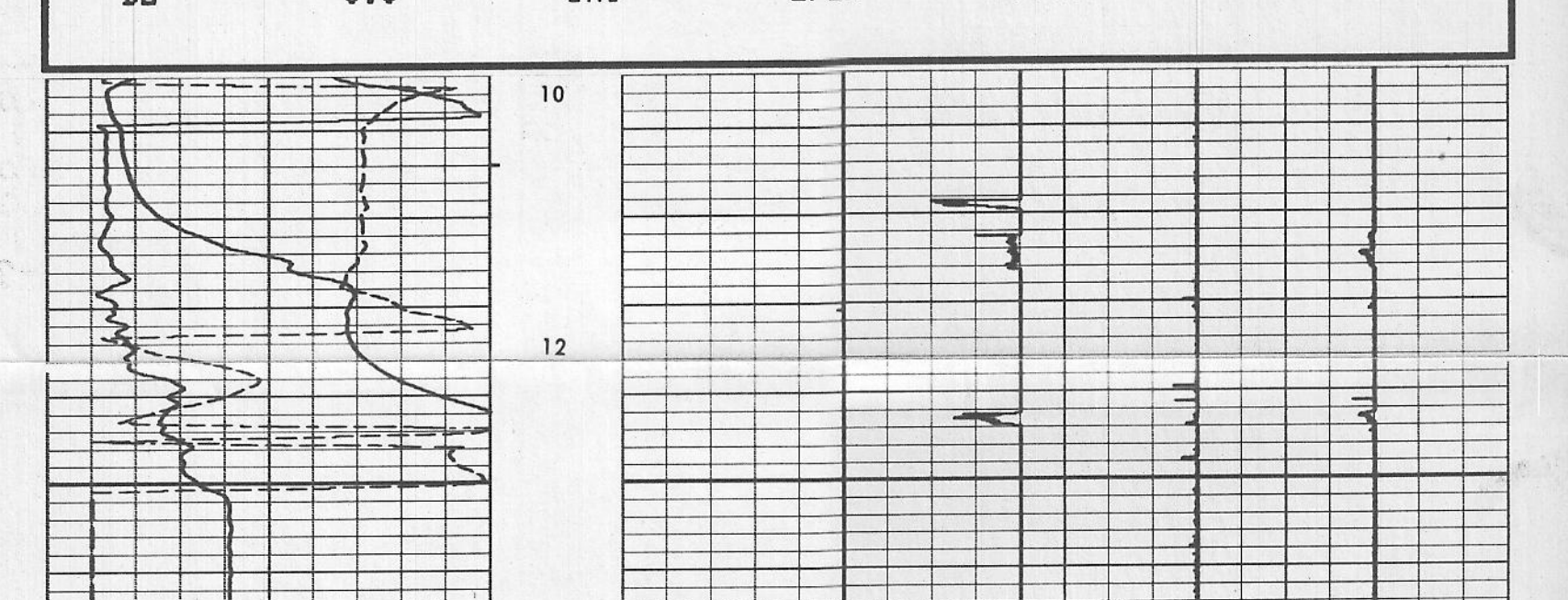
DEVI (DEG)	9.000			
RB (DEG)	360.0	26.00		6.000
AZIM (DEG)	360.0	26.00		6.000
			C2 (INCH)	
			C1 (INCH)	

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP	LH	0.0	MCT	DEG	78	BS	INCH	17.50
DD			BHS		DPEN	FPHI	PHIX	



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

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP	LH	0.0	MCT	DEG	78	BS	INCH	17.50
DD			BHS		DPEN	FPHI	PHIX	



BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED:	81/05/17
PROGRAM FILE:	HDT (VERSION 18.2 80/4/29)

HDT	MEASURED	CALIBRATED	UNITS
	SMALL	SMALL	IN
C1	9.2	14.1	IN
C2	9.5	14.5	IN

FILE 3

- HIGH RESOLUTION DIPMETER CALIBRATION CODING
- MECHANICAL ZERO
  - ELECTRICAL ZERO
  - FULL SCALE ADJUST
  - CALIPER ADJUST AT 4" AND 16" CALIPER 1.3 IS CODED
  - CALIPER ADJUST AT 4" AND 16" CALIPER 2.4 IS CODED
  - PAD #1 RESPONSE CHECK
  - PAD #2 RESPONSE CHECK
  - PAD #3 RESPONSE CHECK
  - PAD #4 RESPONSE CHECK
  - SOME HANDING VERTICALLY
  - TOOL AND PAD #1 POINTED NORTH
  - TOOL ROTATING

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DEPTH INTERVAL: From 1385 To 228