2" = 100'
5" = 100'
SCANNED

Schlumberger

FOUR ARM HIGH RESOLUTION CONTINUOUS DIPMETER

COUNTY CROOK
FIELD or LOCATION 17-19S-20E
WELL LOGAN BUTTE UNIT 17 NO.1
COMPANY TEXACO, INC.

COMPANY TEXACO, INC.

Well 17-01

WELL LOGAN BUTTE UNIT NO. 17 #1

FIELD LOGAN BUTTE

COUNTY CROOK **STATE** OREGON

LOCATION: 1670' SOUTH & 251' EAST FROM NORTH QUARTER OF:

Sec. 17 Twp. 19S Rge. 20E

Other Services:
DIL
BHC
FDC/CNL

Permanent Datum: GL, Elev. 5100
Log Measured From KB, 12 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 5112
D.F. --
G.L. 5100

RECEIVED-PTLD
MAR 25 1981
DEPT OF GEOLOGY & MINERAL INDS

Date	2-1-81			
Run No.	TWO			
Depth—Driller	6505			
Depth—Logger	6490			
Btm. Log Interval	6490			
Top Log Interval	2000			
Casing—Driller	9⅝" @ 2000	@	@	@
Casing—Logger	2000			
Bit Size	8½"			
Type Fluid in Hole	GEL CYPAN			
Dens. | Visc.	10.6 | 44			
pH | Fluid Loss	10 | 8 ml	ml	ml	ml
Source of Sample	CIRCULATION			
R_m @ Meas. Temp.	2.75 @ 63 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	3.8 @ 44 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	3.84 @ 50 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	M | M			
R_m @ BHT	1.1 @ 154°F	@ °F	@ °F	@ °F
Time Since Circ.	16 HOURS			
Max. Rec. Temp.	154°F	°F	°F	°F
Equip. | Location	8126 | SAC			
Recorded By	FINNELL			
Witnessed By	BEALL			

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

Changes in Mud Type or Additional Samples		
Date | Sample No.		
Depth—Driller		
Type Fluid in Hole		
Dens. | Visc.		
ph | Fluid Loss	ml	
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} | R_{mc}		
R_m @ BHT	@ °F	@ °F
R_{mf} @ BHT	@ °F	@ °F
R_{mc} @ BHT	@ °F	@ °F

Run No.	1	2	3	4
Tool Type	HDT-D			
HDM No.	-			
Magnetic Declination	19¼°			
Analog Panel No.	--			
Digital Panel No.	1891			
Correlated By	PCDCC			
Computed By	PCDCC			
Plotted By	PCDCC			

Remarks — SERVICE ORDER NO. 205742
TAPE STARTED AT 6490, BUT FILM BEGINS AT 6400

"Any directional computations made from the dipmeter log must be regarded as approximate only. This is because the dipmeter log indicates the orientation of the instrument itself, rather than the direction and amount of the wall drift. Therefore, we do not and cannot guarantee the accuracy of such directional computations, and we shall not, except in the case of willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained that may result from any such computations."

TABLE OF VERTICAL DISPLACEMENT IN FEET CORRESPONDING TO VARIOUS HORIZONTAL DISTANCES AND ANGLES OF DIP

	VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF				VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF		
DIP ANGLES (degrees)	100'	1000'	1 mile (5280')	DIP ANGLES (degrees)	100'	1000'	1 mile (5280')

1	1.75	17.5	92.2	19	34.4	344.	1818.
2	3.5	35.	184.	20	36.4	364.	1922.
3	5.2	52.	277.	21	38.4	384.	2027.
4	7.0	70.	369.	22	40.4	404.	2133.
5	8.8	88.	462.	23	42.5	425.	2241.
6	10.5	105.	555.	24	44.5	445.	2351.
7	12.3	123.	648.	25	46.6	466.	2462.
8	14.1	141.	742.	30	57.7	577.	3048.
9	15.8	158.	836.	35	70.0	700.	3697.
10	17.6	176.	931.	40	83.9	839.	4430.
11	19.4	194.	1026.	45	100.0	1000.	5280.
12	21.3	213.	1122.	50	119.2	1192.	6293.
13	23.1	231.	1219.	55	142.8	1428.	7540.
14	24.9	249.	1316.	60	173.2	1732.	9145.
15	26.8	268.	1415.	65	214.4	2144.	11323.
16	28.7	287.	1514.	70	274.8	2748.	14507.
17	30.6	306.	1614.	75	373.2	3732.	19705.
18	32.5	325.	1716.	80	567.1	5671.	29945.

To obtain vertical displacements corresponding to multiples of hundreds feet, thousands of feet or miles, multiply the number found in the table by the number of hundreds, thousands or miles.

Example: The formation dip is 16 degrees. The vertical displacement occurring at a spot 660 feet away from the well is desired. The table shows 28.7 feet per 100 feet for 16° dip. Therefore 28.7 x 6.60 = 189.42, or 189. feet.

N

GRAPHIC PRESENTATION

CORRELATION CURVE	DEPTHS	TRUE DIP ANGLE AND DIRECTION	DRIFT & DIRECTION OF SONDE
		0° 10° 20° 30° 40° 50° 60° 70° 80° 90°	0° 10°

2-13-81 205/42

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TEXACO, INC.
UNIT 17 #1
LOGAN BUTTE FIELD
CROOK COUNTY, OREGON
RUN NO. TWO            1-FEB-81
P.C.D.C.
ARROW PLOT FROM CLUSTER PROGRAM

CORRELATION LENGTH.     4 FT.
STEP LENGTH             2 FT.
SEARCH ANGLE           30 DEGREES X2
HDT-G CSU PDP/11 .
JOB 5170.00
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CORRELATION CURVE | DEPTHS | DIP ANGLE AND DIRECTION | BOREHOLE DRIFT

0 10 20 30 40 50 60 70 80 90 | 0 10

SCHLUMBERGER

DIPMETER ARROW PLOT

POOLED ARROW PLOT

2 LEVELS POOLED WHEN WITHIN

3.5 DEGREES SOLID ANGLE

BLACK ARROWS ARE POOLED RESULTS

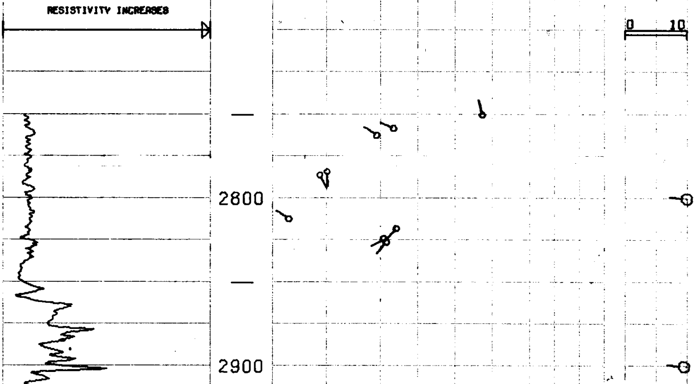
CORRELATION LENGTH 4 FT.

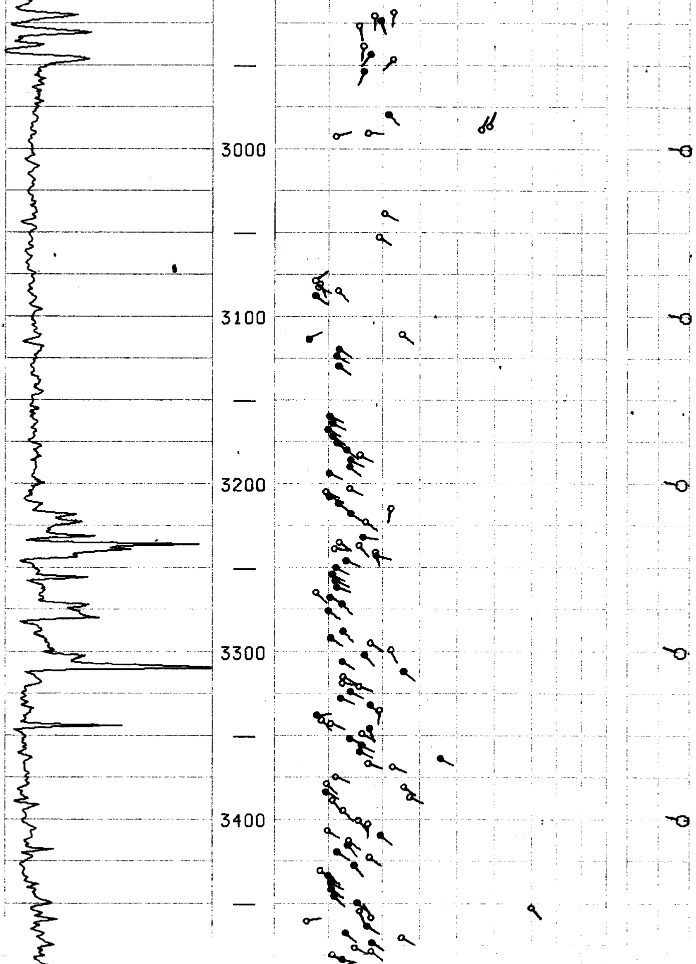
STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEGREES X2

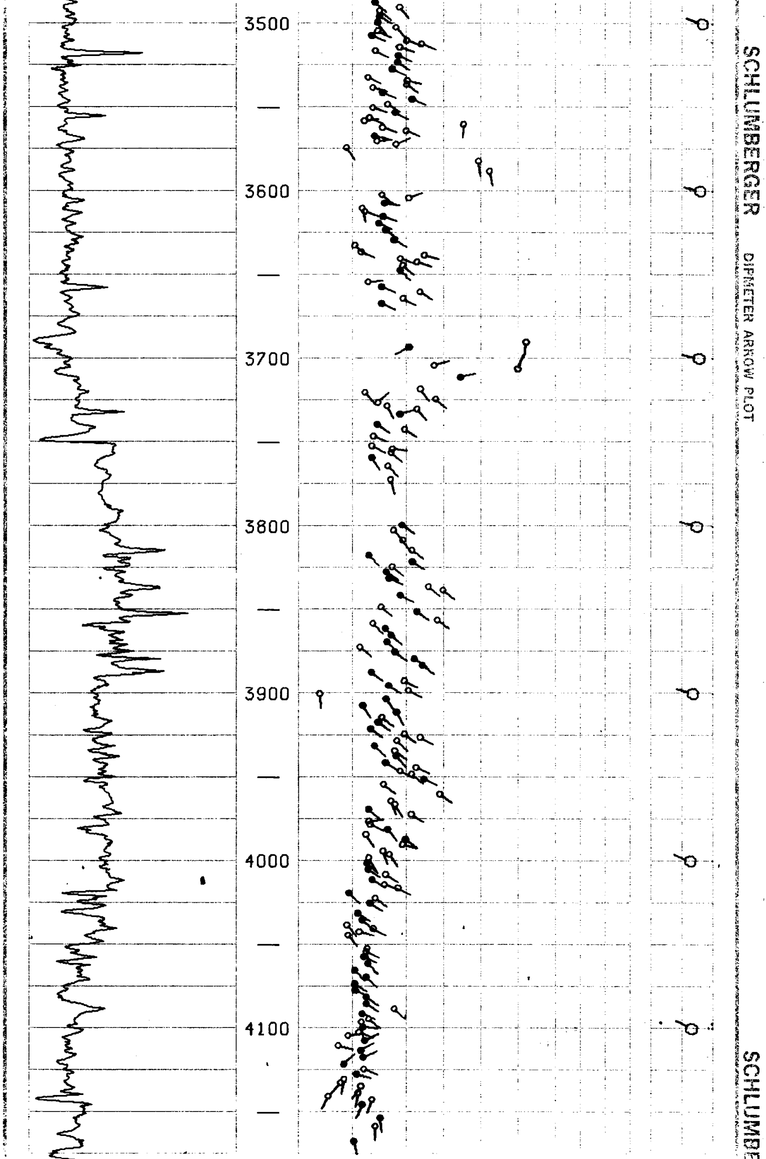
PC0130023518307001020420

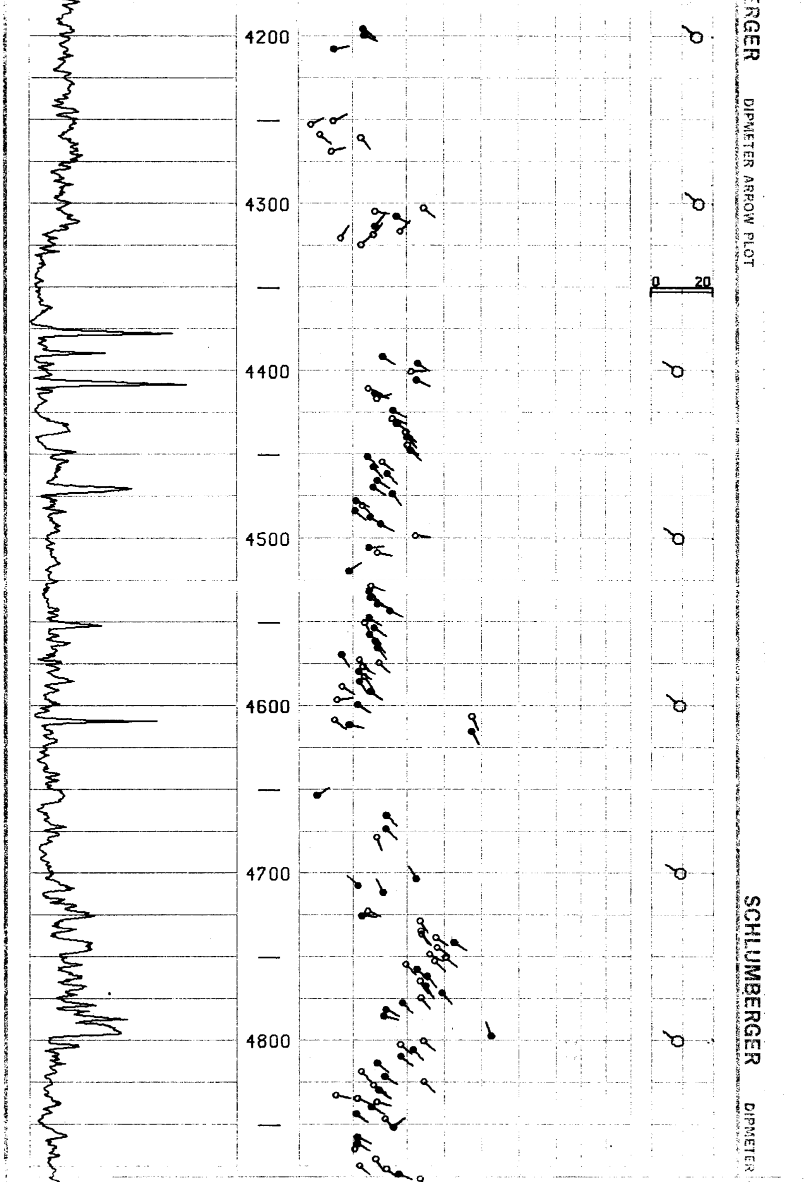
ZONE FROM 2750 TO 6406

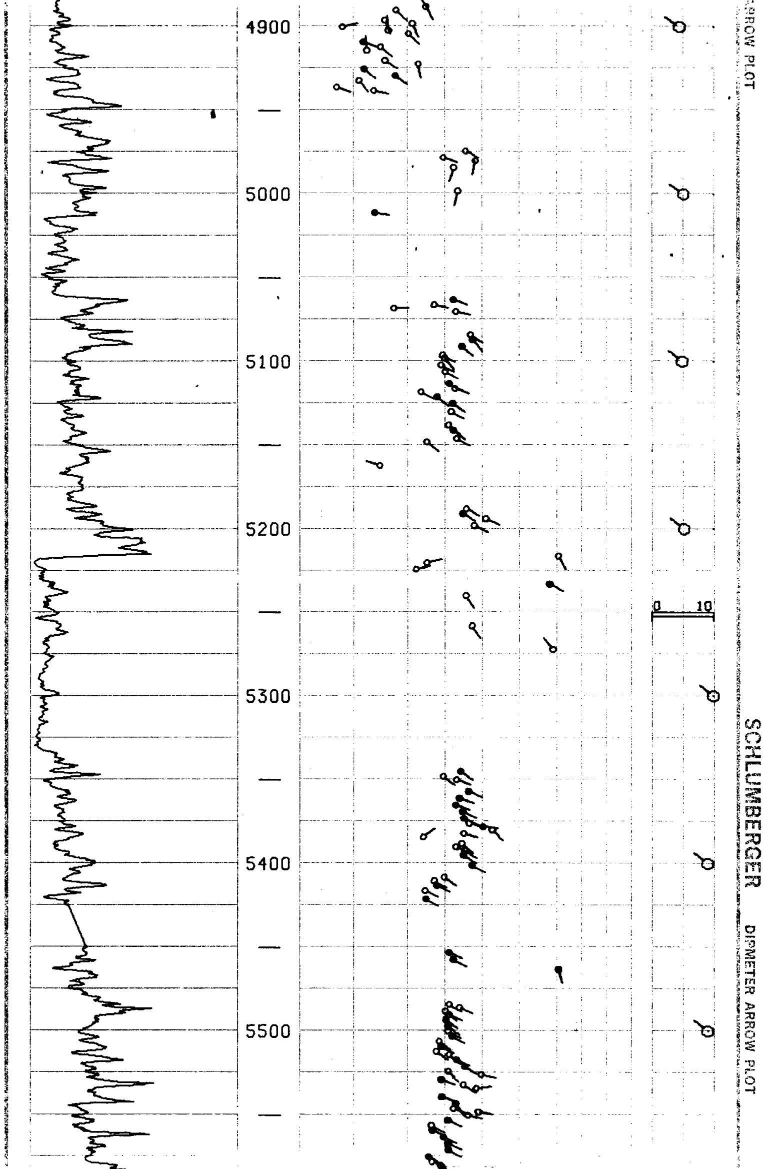


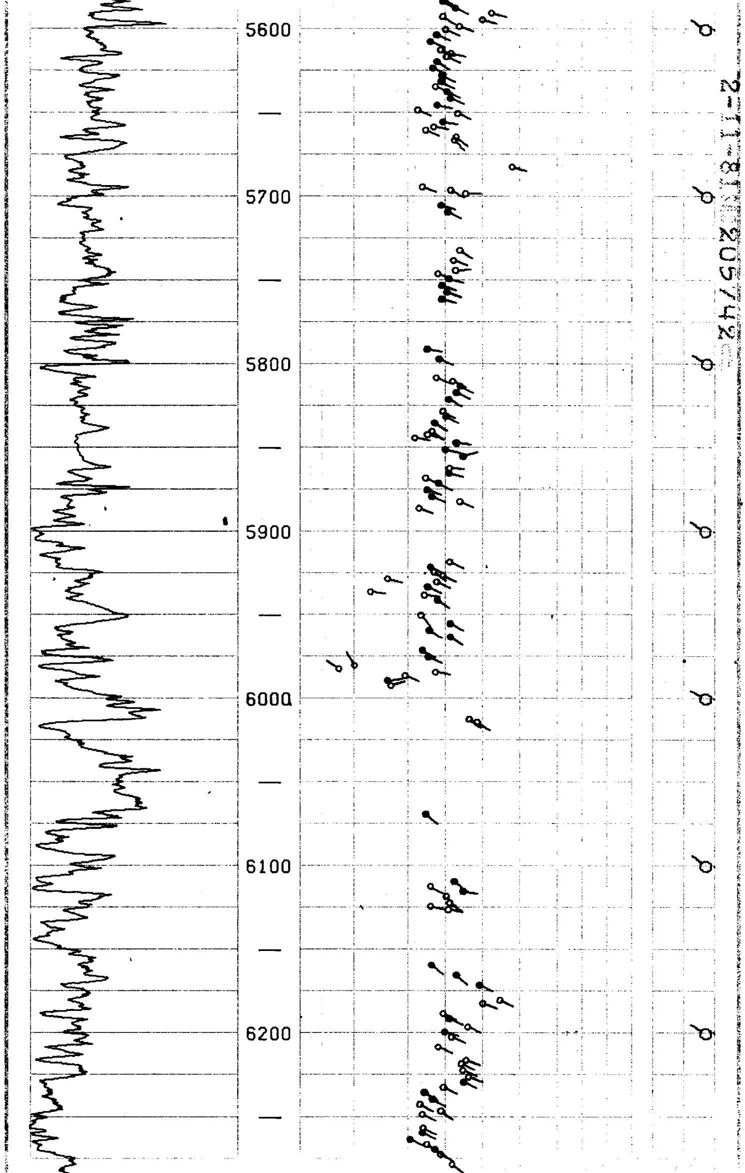


SCHLUMBERGER DIPMETER ARROW PLOT



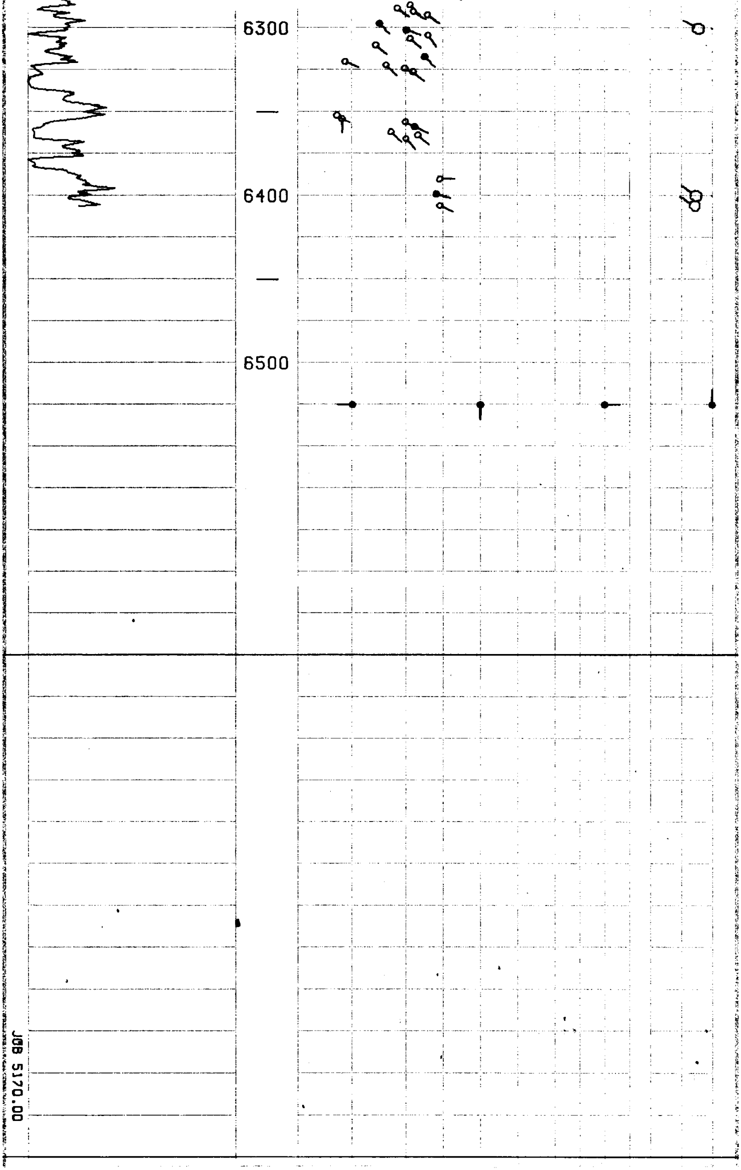






2-11-81 205/742

SCHLUMBERGER DIPMETER ARROW PLOT



CORRELATION CURVE DEPTHS DIP ANGLE AND DIRECTION BOREHOLE DRIFT

0 10 20 30 40 50 60 70 80 90 0 10

ALL QUALITY ARROW PLOT 5170

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

CORRELATION LENGTH 4 FT.

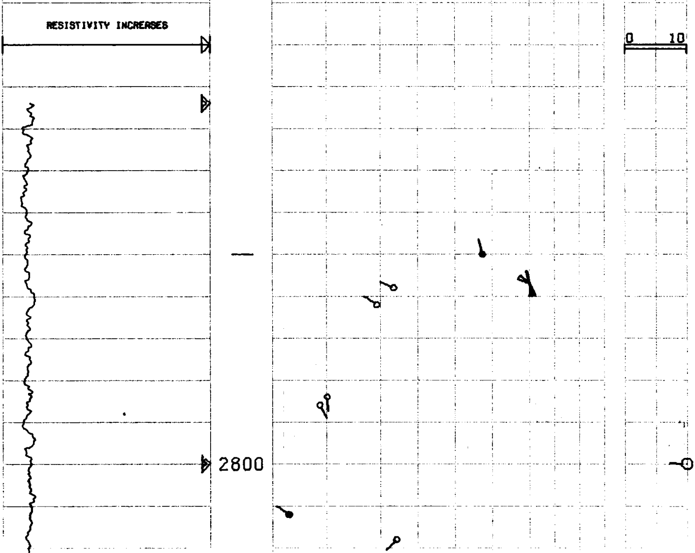
STEP LENGTH 2 FT.

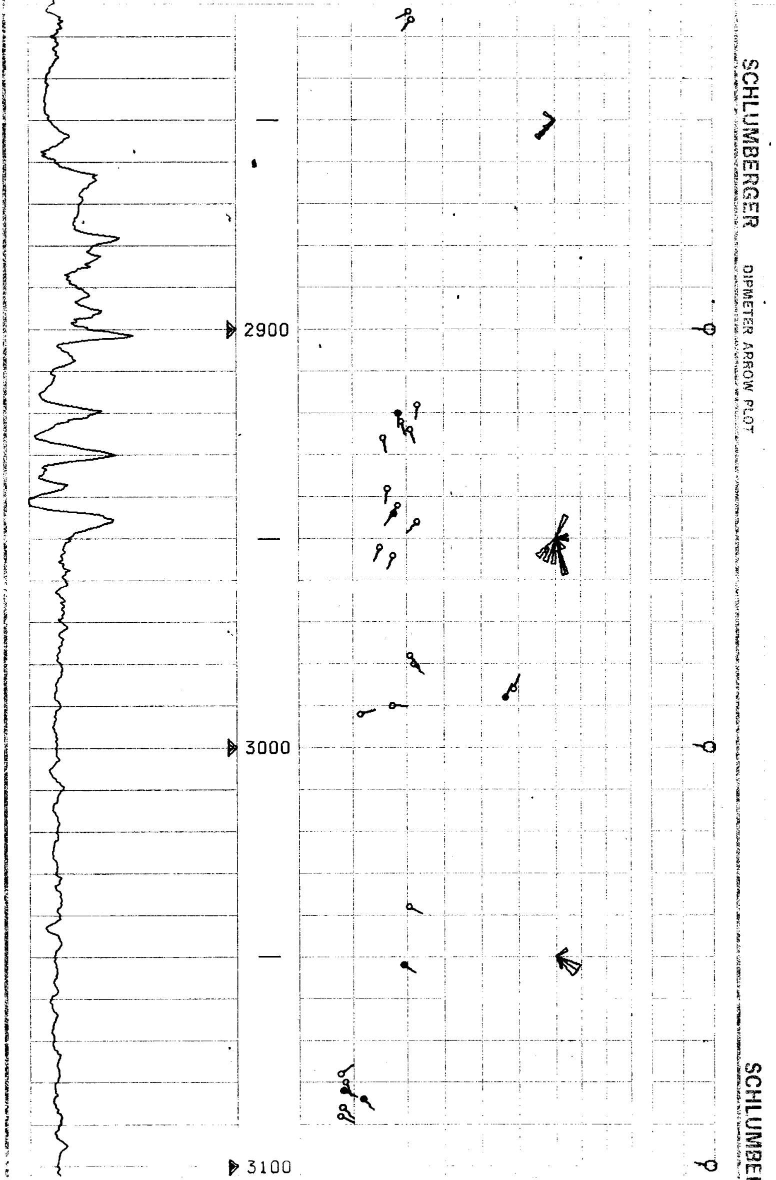
SEARCH ANGLE 30 DEGREES X2

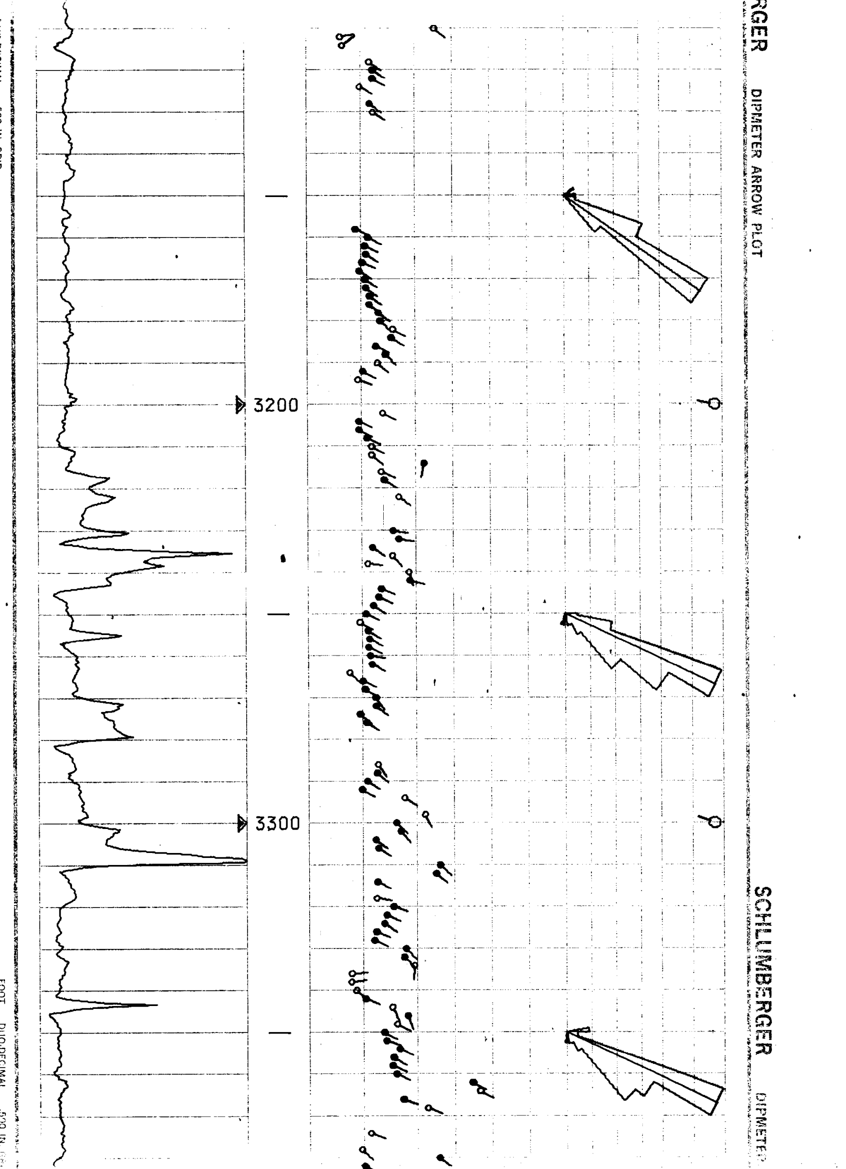
PC0130023518307001020420

ZONE FROM 2714 TO 6406

SCHLUMBERGER DIPMETER ARROW PLOT







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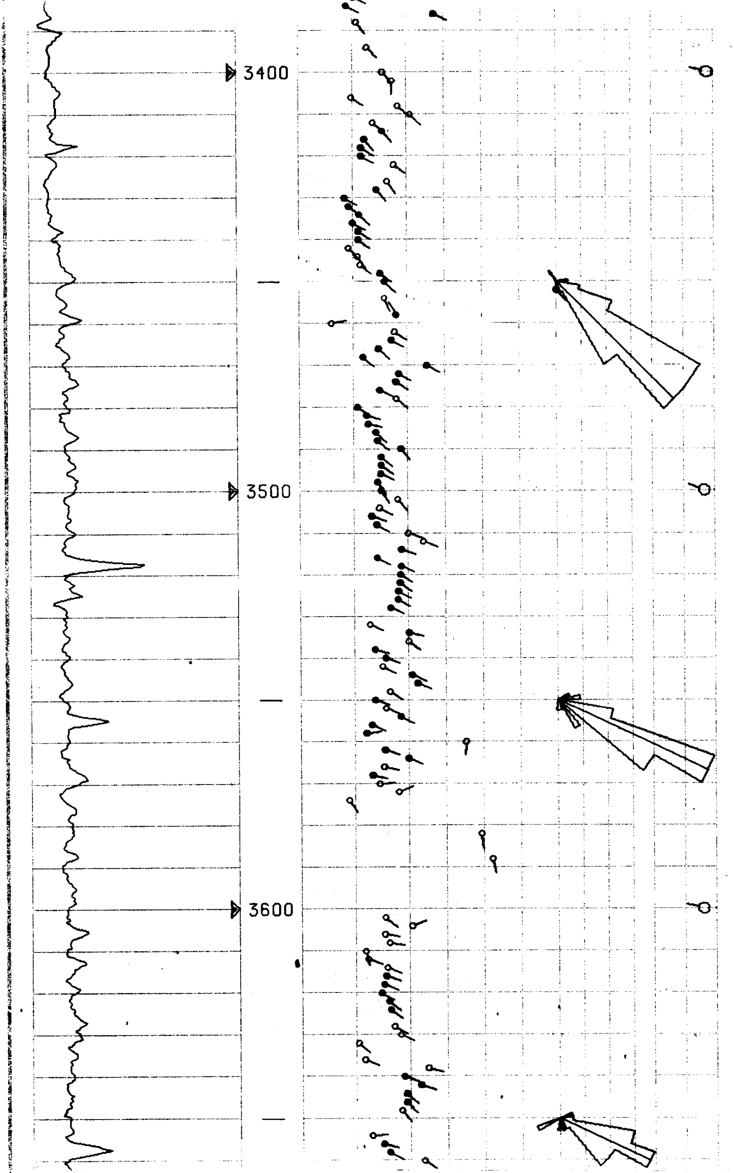
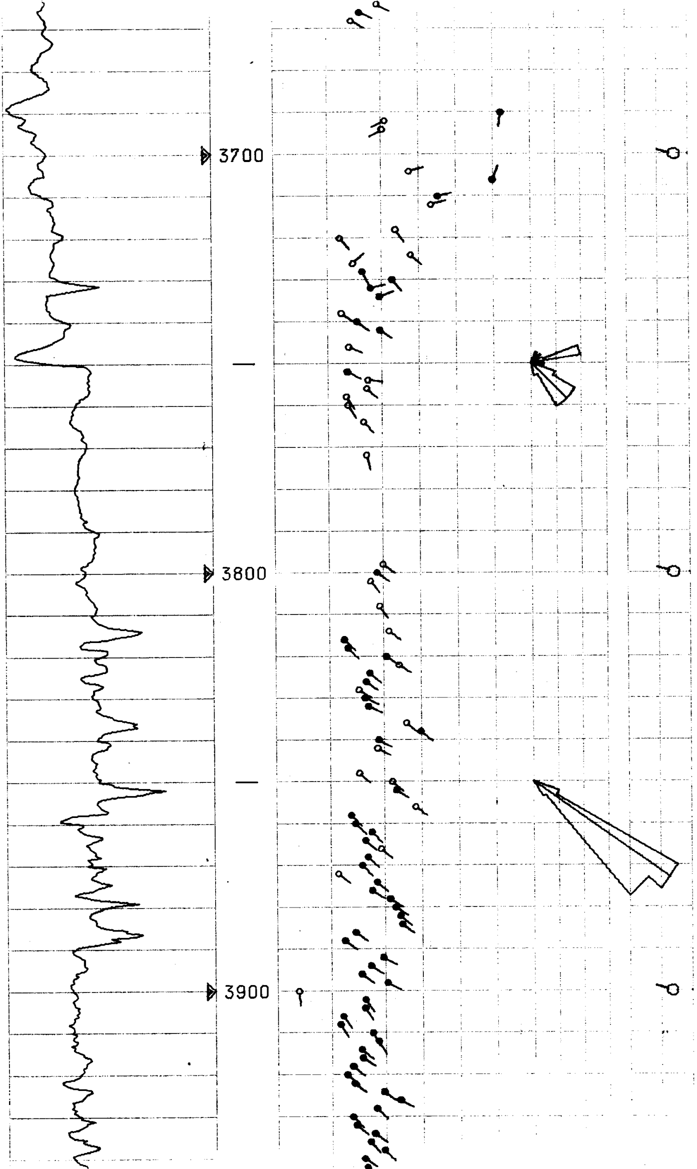


ARROW PLOT

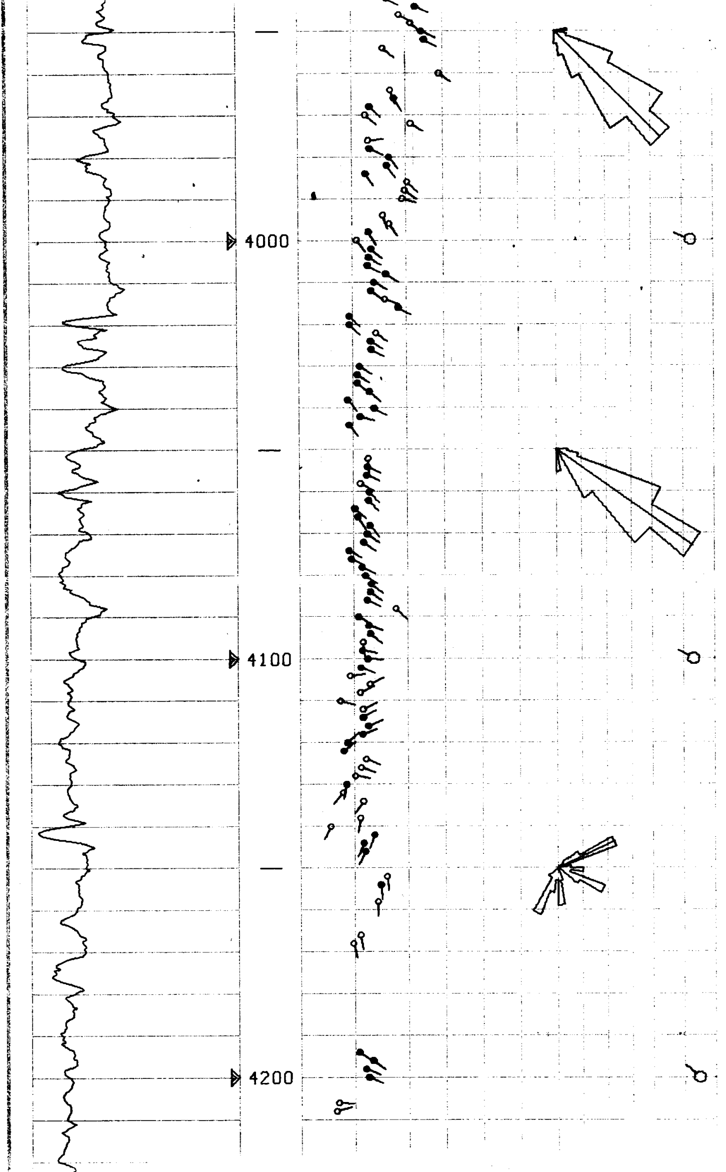
FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



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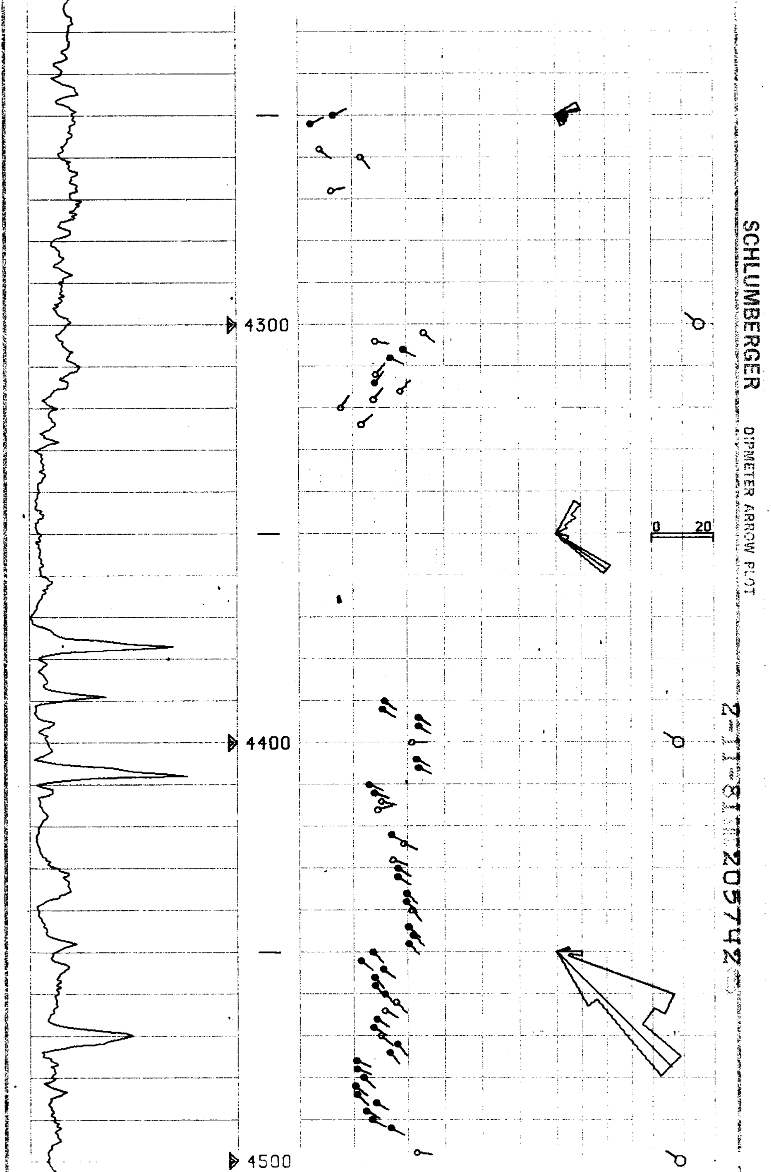
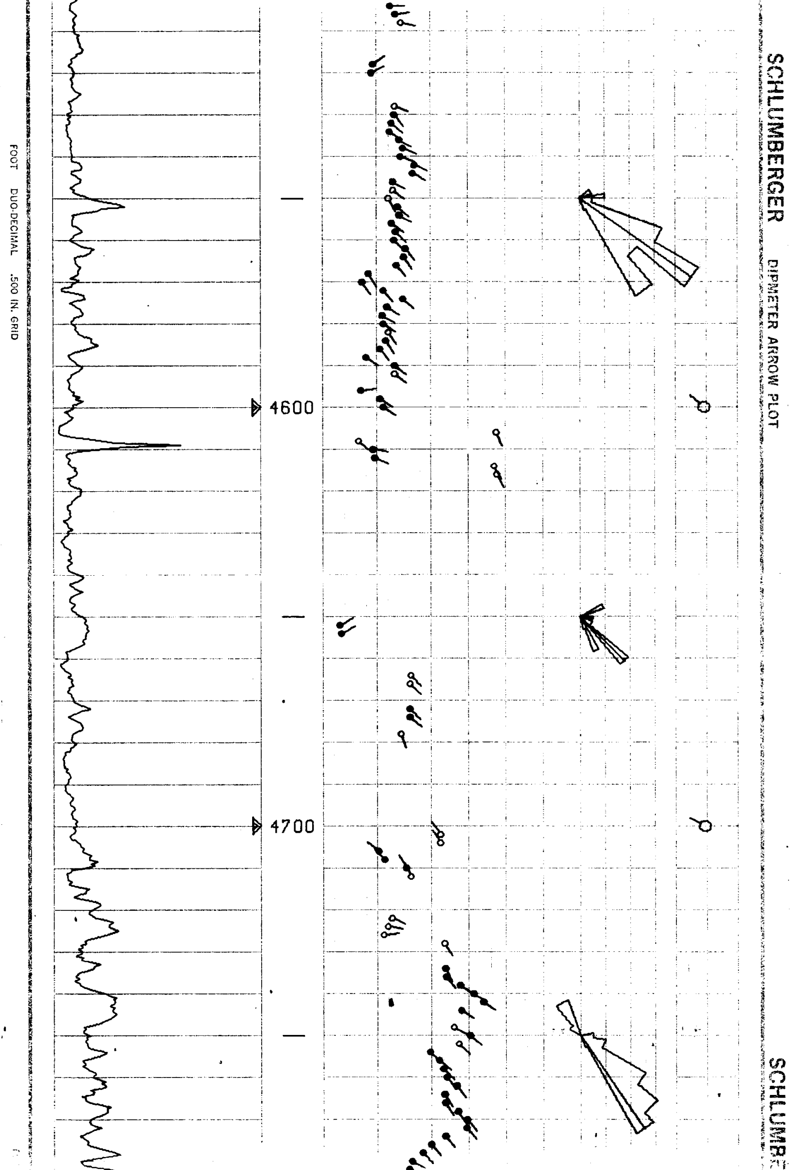
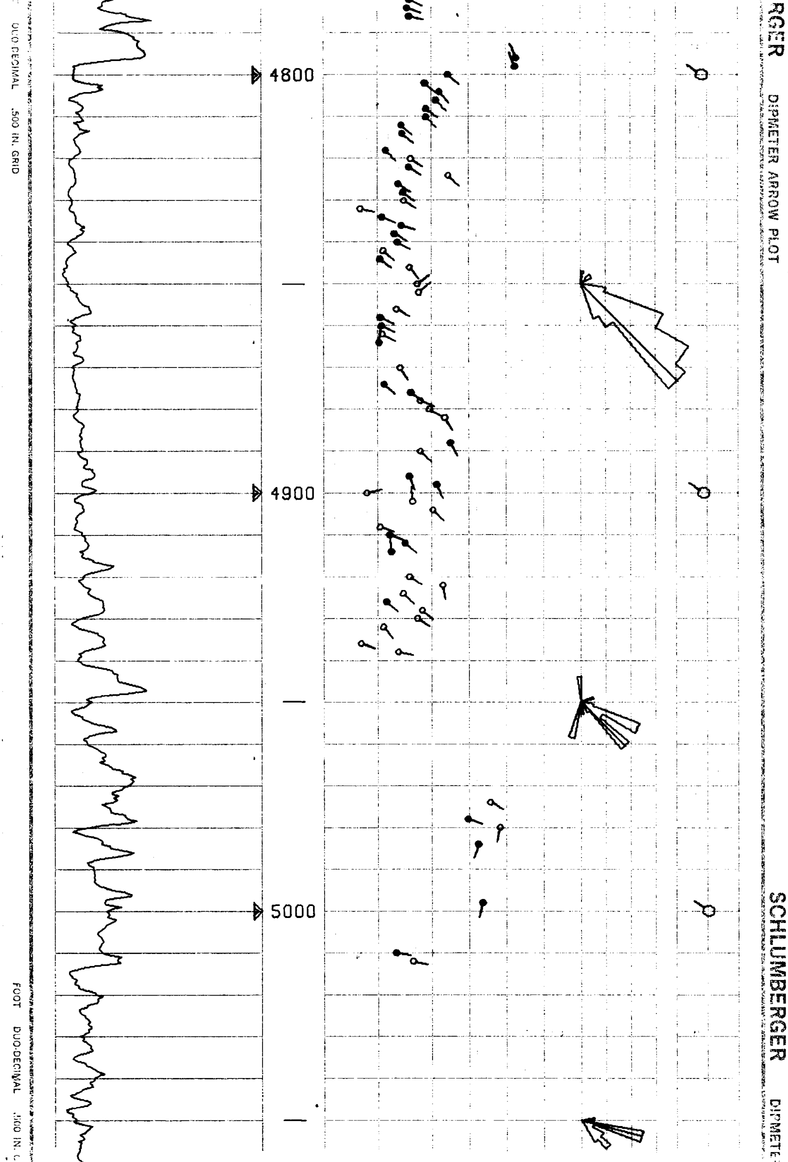
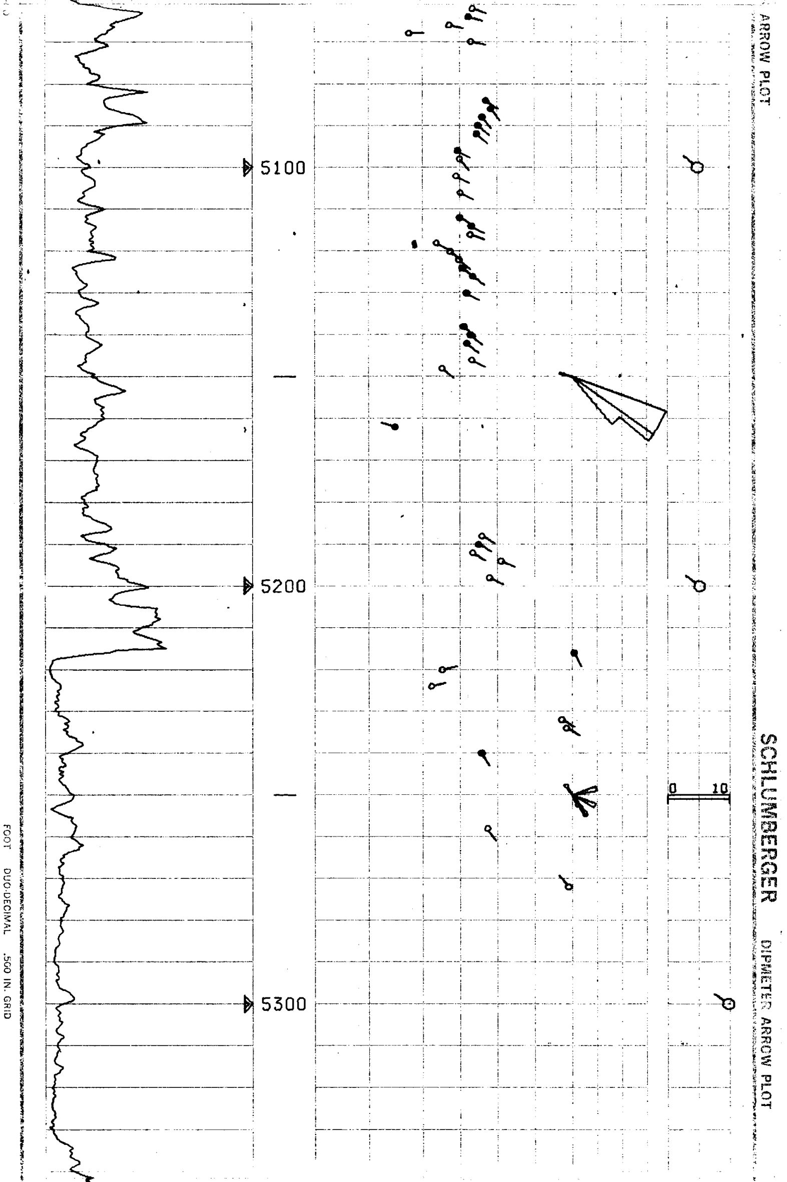
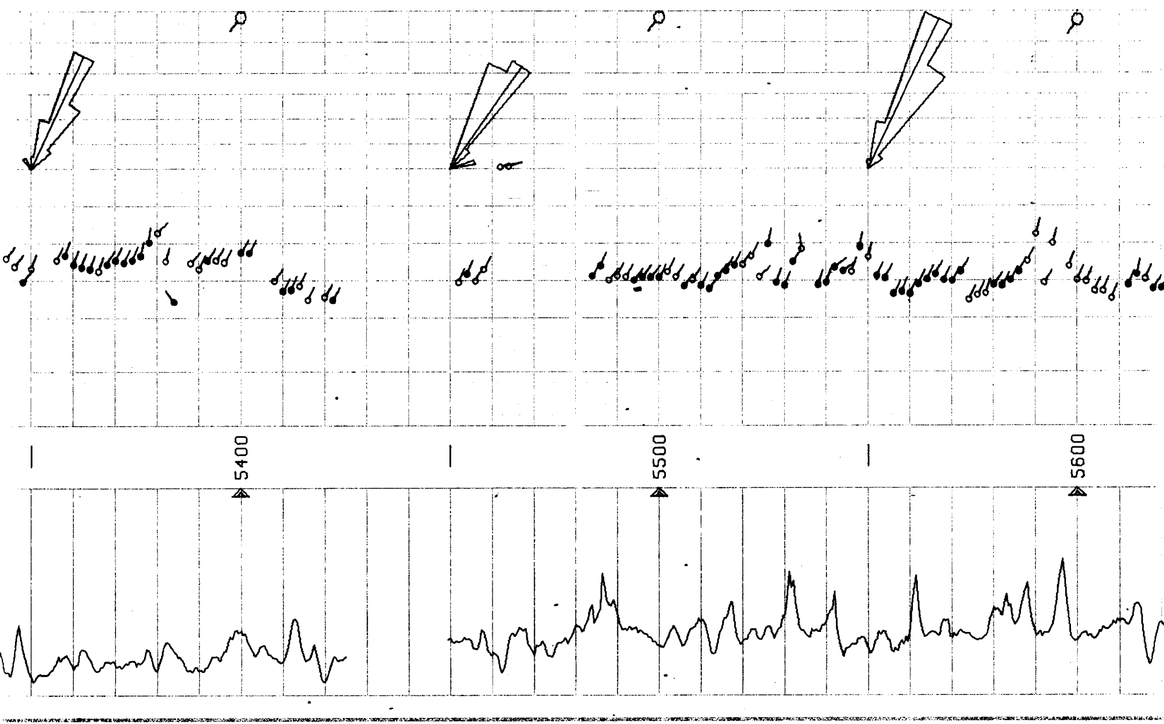








SCHLUMBERGER DIPMETER ARROW PLOT



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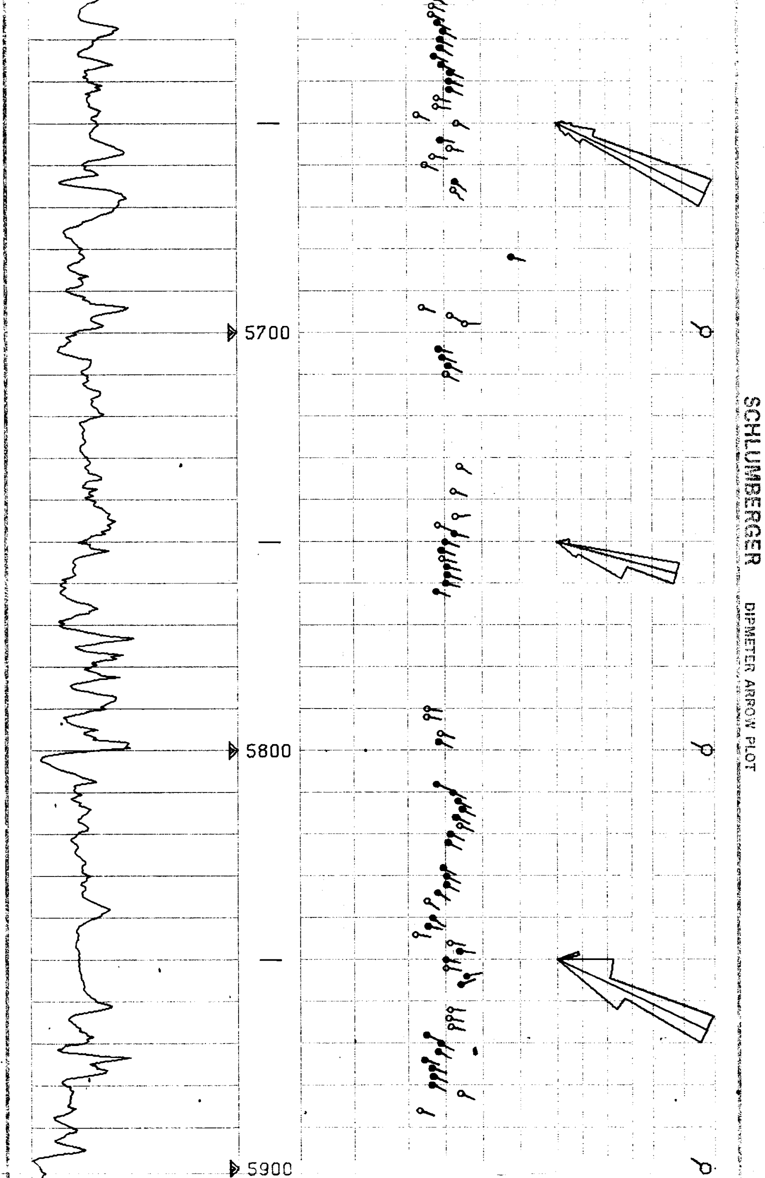

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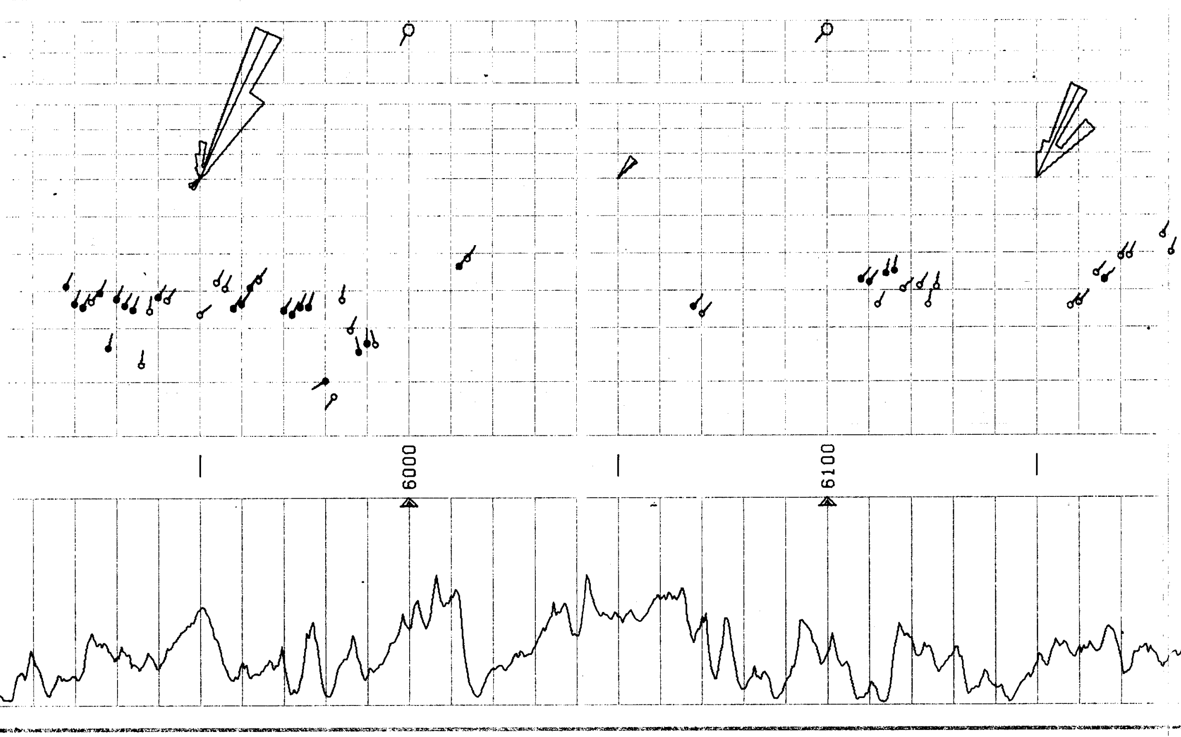
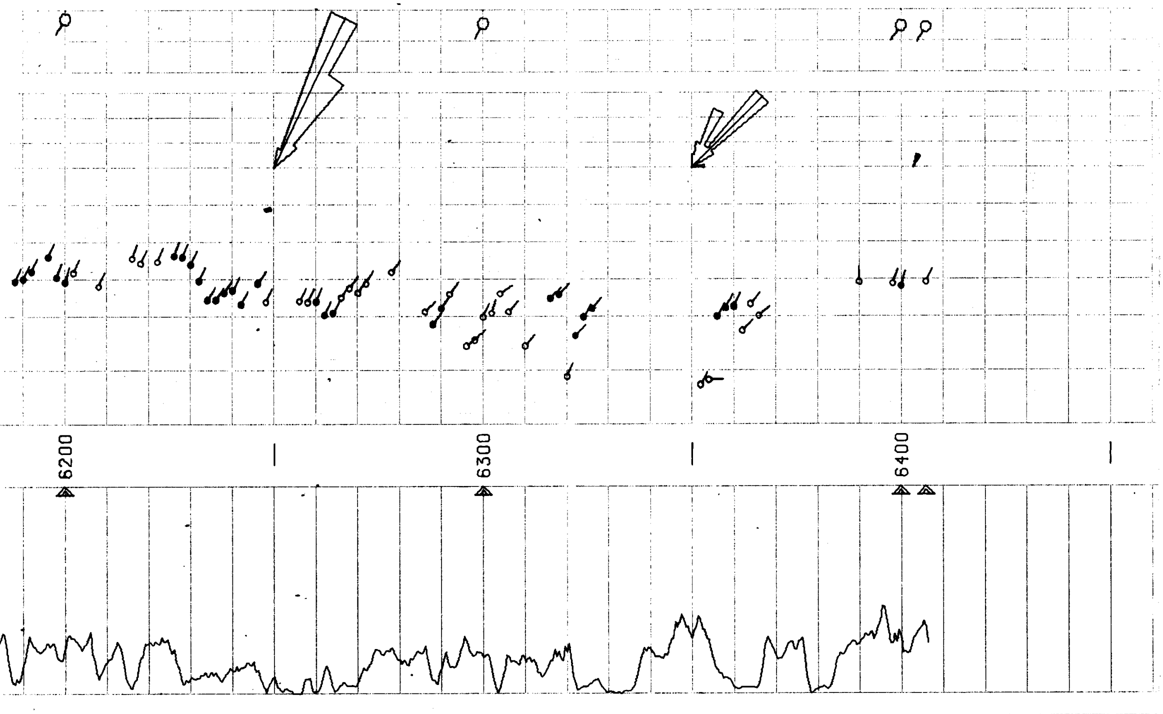


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT

SCHLUMBE



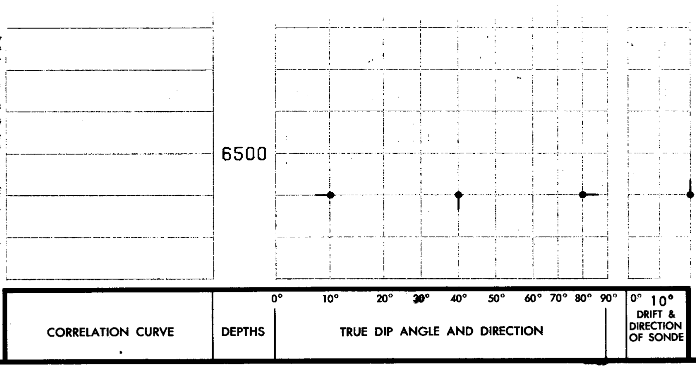
FOOT DUO-DECIMAL .500 IN. GRID

FCC

DUO-DECIMAL .500 IN. GRID

205742

RGER DIPMETER ARROW PLOT



COMPANY	TEXACO, INC.	Rm 2.75	@ 63 °F	SCHL. FR	6490
WELL	LOGAN BUTTE UNIT 17 #1	Rmf 3.8	@ 44 °F	SCHL. TD	6490
FIELD	LOGAN BUTTE	Rmc 3.84	@ 50 °F	DRLR TD	6505
COUNTY	CROOK STATE OREGON	BHT 154 °F		Elev:	
				KB	5112
				DF	--
				GL	5100