Schlumberger

FOUR – ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
(COMPUTED)

COUNTY COLUMBIA
FIELD or LOCATION 11-6N-5W
WELL COLUMBIA COUNTY NO. 43-11
COMPANY REICHHOLD ENERGY

COMPANY REICHHOLD ENERGY CORP
RECEIVED PTLD
AUG 12 1980
DEPT OF GEOLOGY & MINERAL INDUS.
WELL COLUMBIA COUNTY NO. 43-11
FIELD MIST NEHALEM BASIN
COUNTY COLUMBIA STATE OREGON

LOCATION: 460'SOUTH & 835'WEST FROM THE EAST ¼ OF: OF W. B. M.
Sec. 11 Twp. 6N Rge. 5W

Other Services:
DI-SFL
BHC

Permanent Datum: GL, Elev. 797.34
Log Measured From KB 10,55 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 797.89
D.F. --
G.L. 797.34

Date	6-13-80			
Run No.	ONE			
Depth—Driller	3326			
Depth—Logger	3313			
Btm. Log Interval	3312			
Top Log Interval	405			
Casing—Driller	7" @ 405	@	@	@
Casing—Logger	405			
Bit Size	6¼"			
Type Fluid in Hole	LIGNOSULFONATE			
Dens. | Visc.	75 | 44			
pH | Fluid Loss	9.8 | 7.0 ml	ml	ml	ml
Source of Sample	CIRCULATION			
R_m @ Meas. Temp.	2.79 @ 74 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	2.98 @ 58 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	3.19 @ 58 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	M | M			
R_m @ BHT	2.18 @ 95 °F	@ °F	@ °F	@ °F
Time Since Circ.	17½ HOURS			
Max. Rec. Temp.	95 °F	°F	°F	°F
Equip. | Location	8128 | SAC			
Recorded By	LANGFORD			
Witnessed By	BRUER			

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-E			
HDM No.	707			
Magnetic Declination	20°			
Analog Panel No.	--			
Digital Panel No.	--			
Correlated By	--			
Computed By	PCDCC			
Plotted By	PCDCC			

Remarks — SERVICE ORDER NO.123895

"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

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

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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°

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6-20-80 12895

REICHHOLD ENERGY CORP.
COLUMBIA COUNTY #43-11
MIST-NEHALEM BASIN FIELD
COLUMBIA COUNTY.OREGON
RUN NO. ONE 13-JUN-80
P.C.D.C.C.
ARROW PLOT FROM CLUSTER PROGRAM

CORRELATION LENGTH 4 FT.
STEP LENGTH 2 FT.
SEARCH ANGLE 30 DEGREES X2
HDT-G CSU DEC-10

JOB 4450.00

FOOT DUO-DECIMAL .500 IN. GRID

MBERGER

DIPMETER ARROW PLOT

CORRELATION CURVE	DEPTHS	DIP ANGLE AND DIRECTION	BOREHOLE DRIFT
		0 10 20 30 40 50 60 70 80 90	0 10

POOLED ARROW PLOT

2 LEVELS POOLED WHEN WITHIN

3.5 DEGREES SOLID ANGLE

BLACK ARROWS ARE POOLED RESULTS

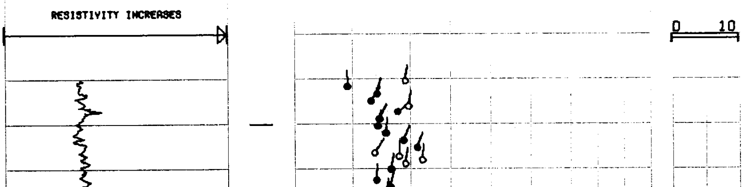
CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEGREES X2

PC0130023518307001020420

ZONE FROM 426 TO 3226



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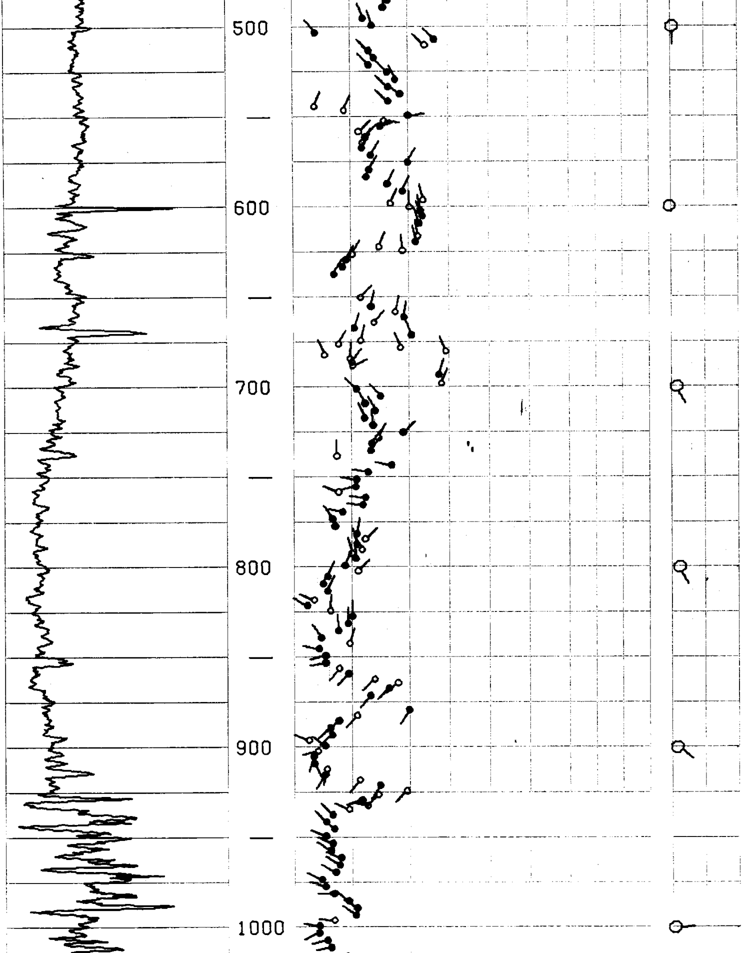
DIPMETER ARROW PLOT



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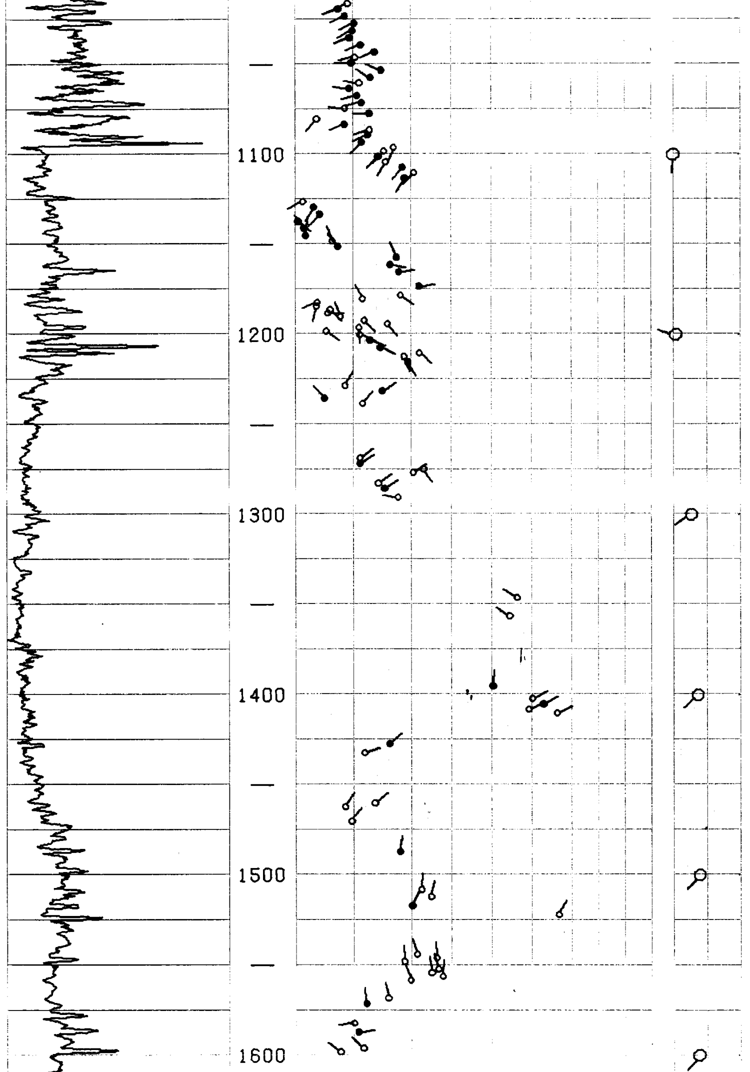

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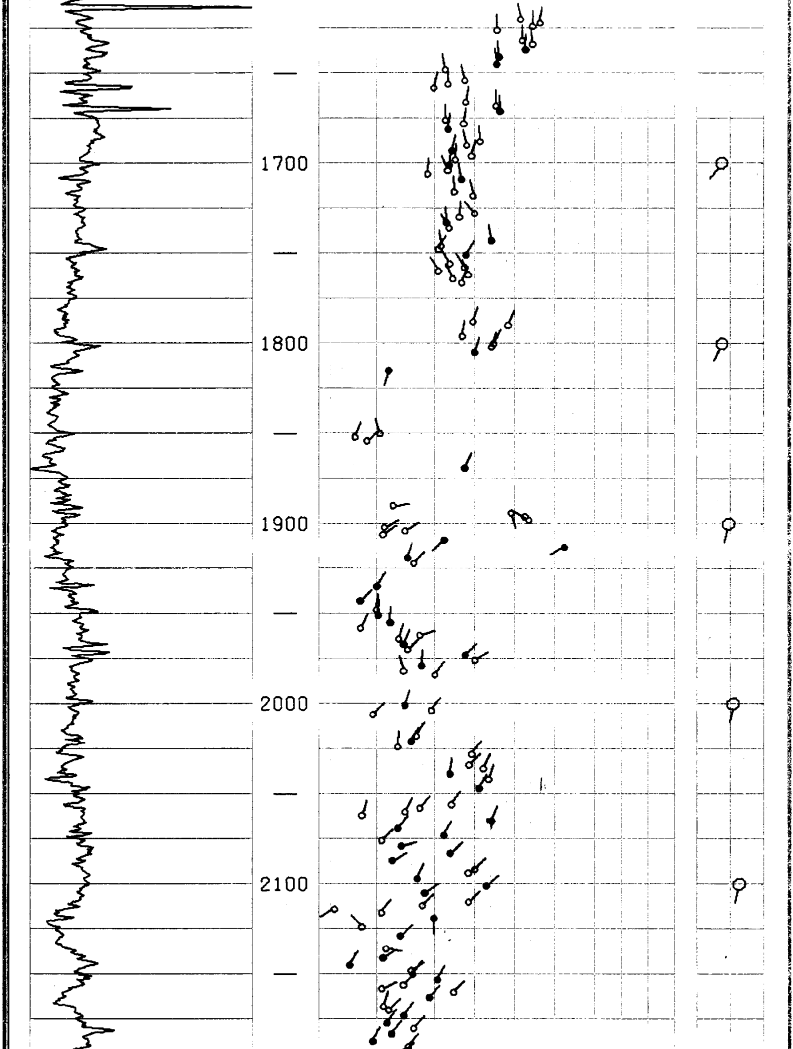
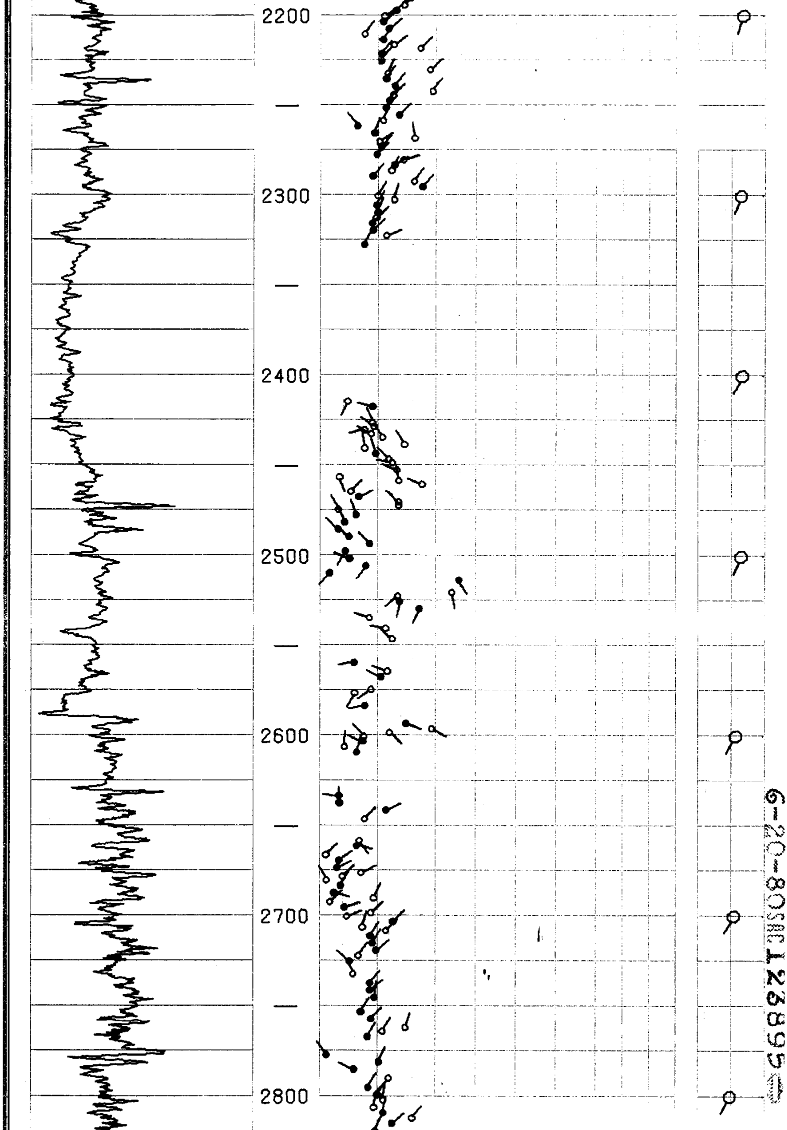


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT

6-20-80 SRC 123895



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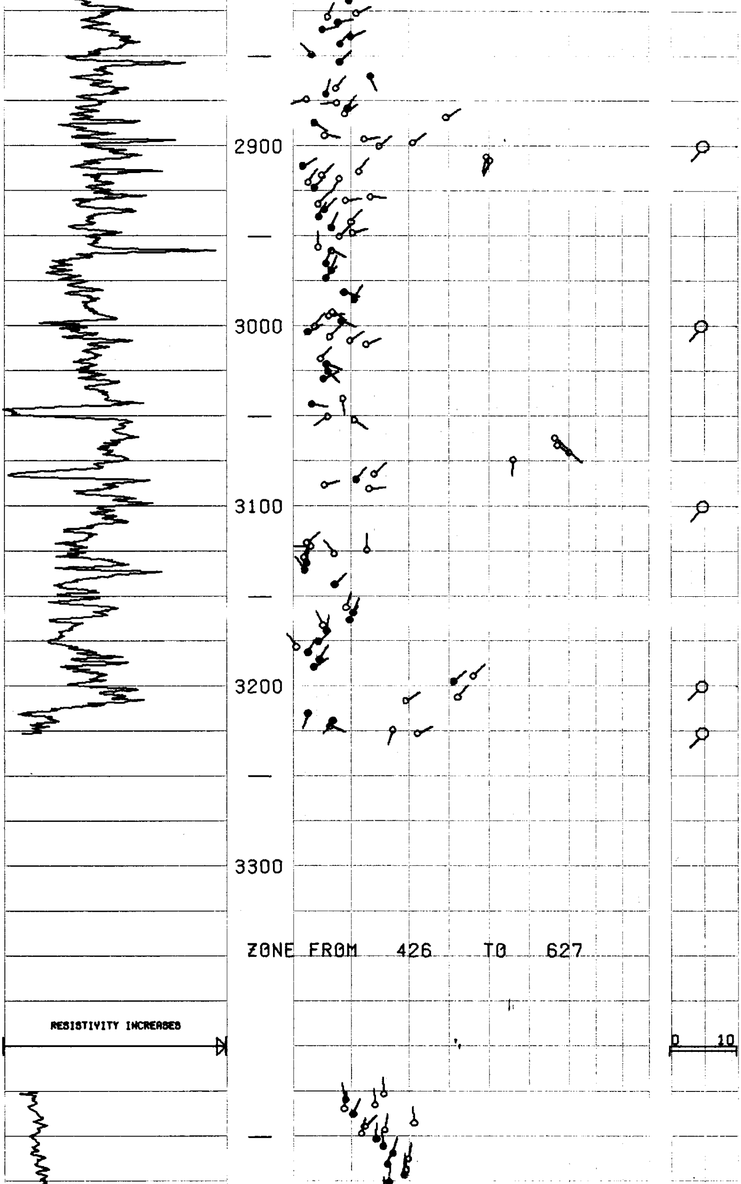

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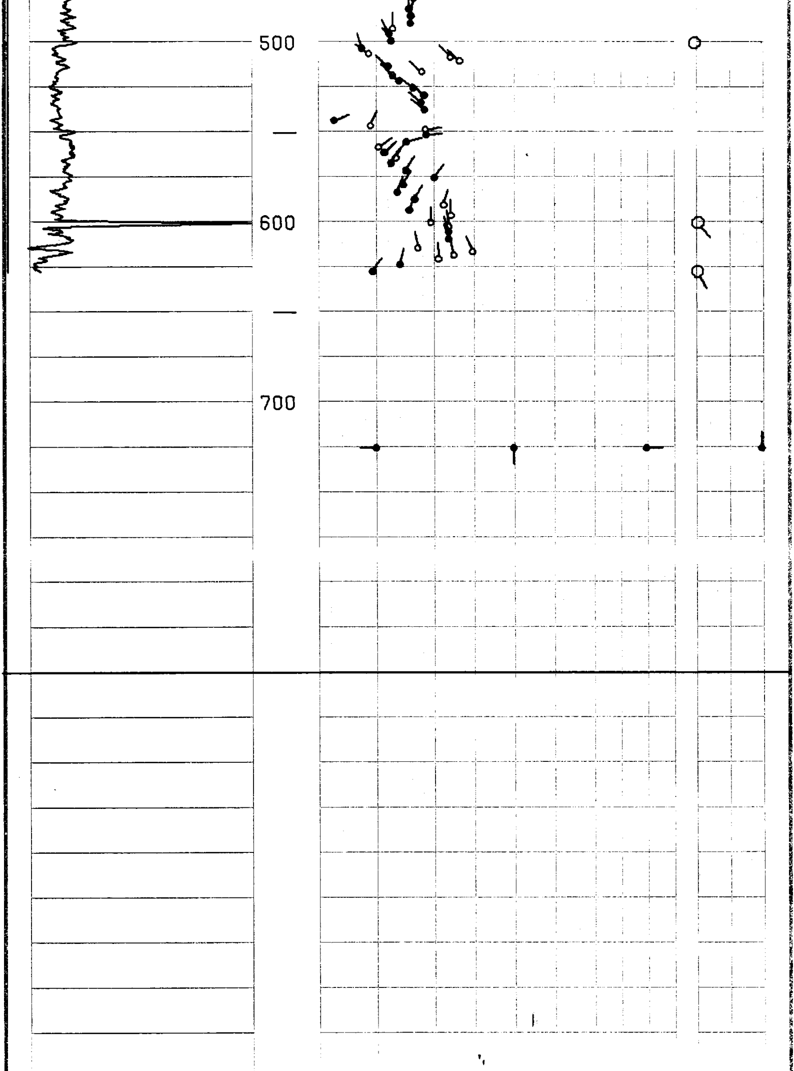


SCHLUMBERGER DIPMETER ARROW PLOT

JOB 4450.00

FOOT DUO-DECIMAL .500 IN. GRID

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 004450

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

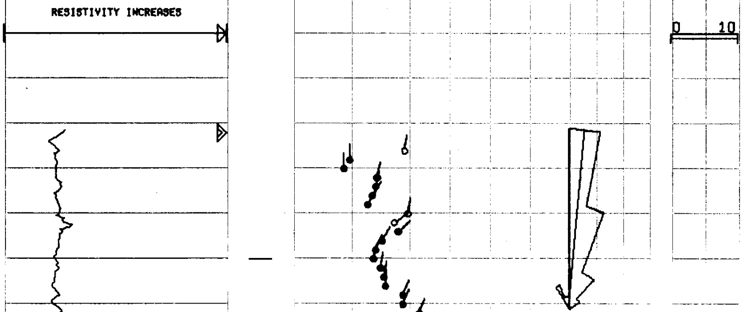
CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

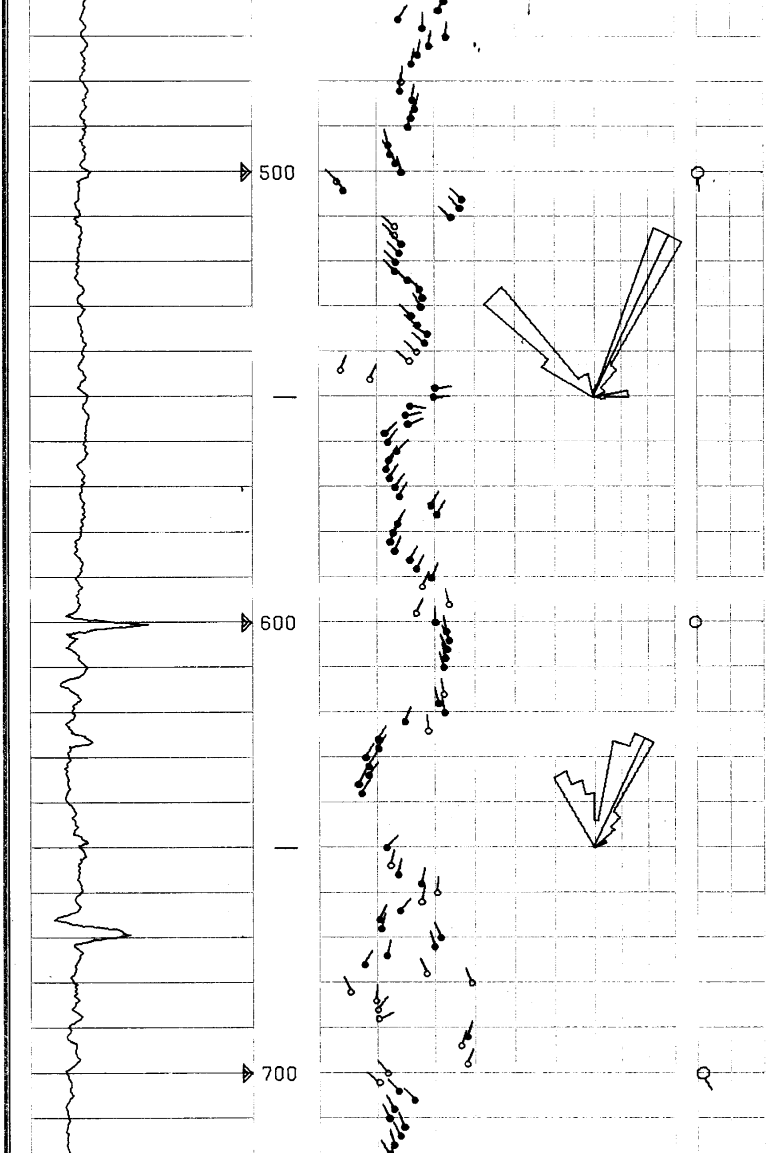
SEARCH ANGLE 30 DEGREES X2

PC0130023518307001020420

ZONE FROM 422 TO 3306



SCHLUMBERGER DIPMETER ARROW PLOT



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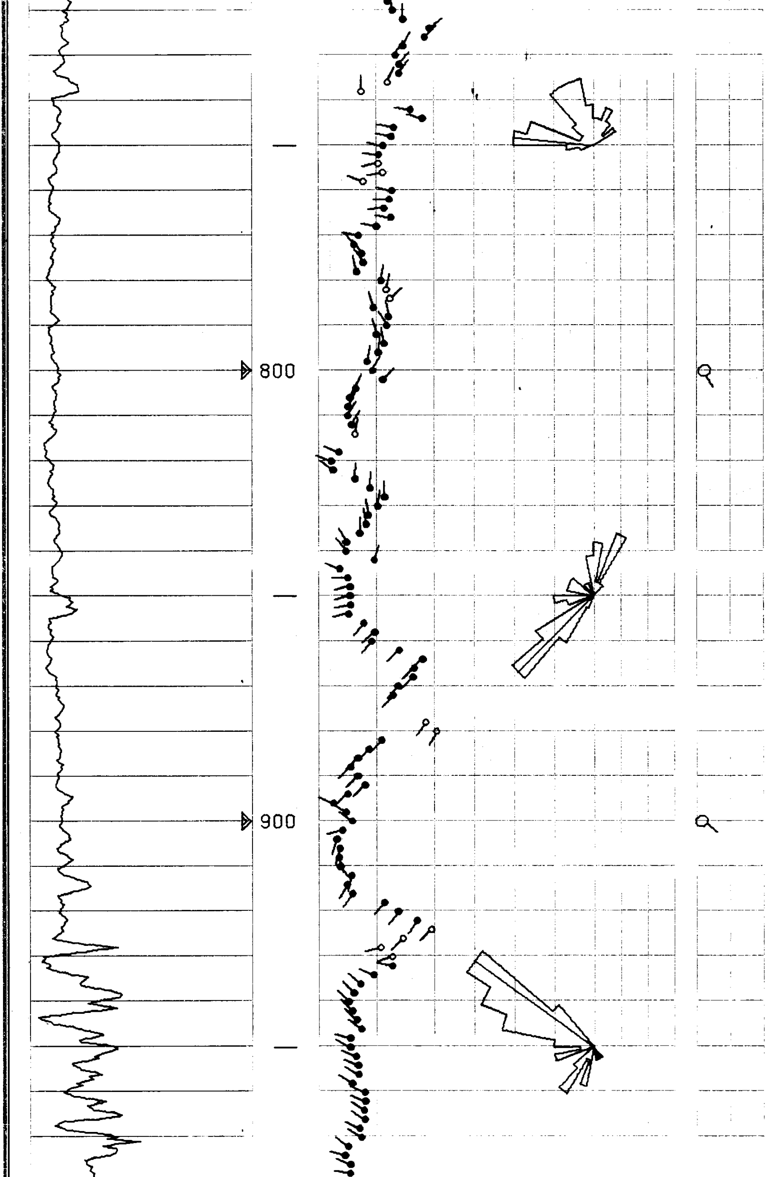
FOOT DUO-DECIMAL .500 IN. GRID

UMBERGER DIPMETER ARROW PLOT



FOOT DUO-DECIMAL .500 IN. GRID

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ER DIPMETER ARROW PLOT

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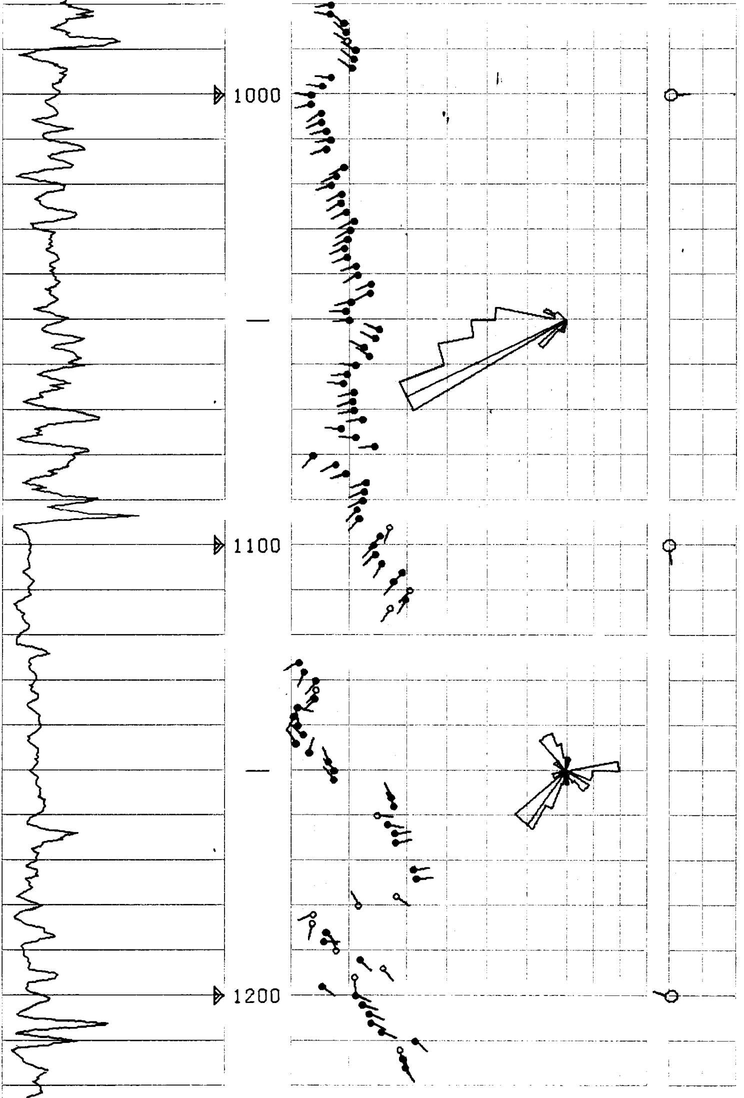

UO-DECIMAL .500 IN. GRID

FOOT DUO

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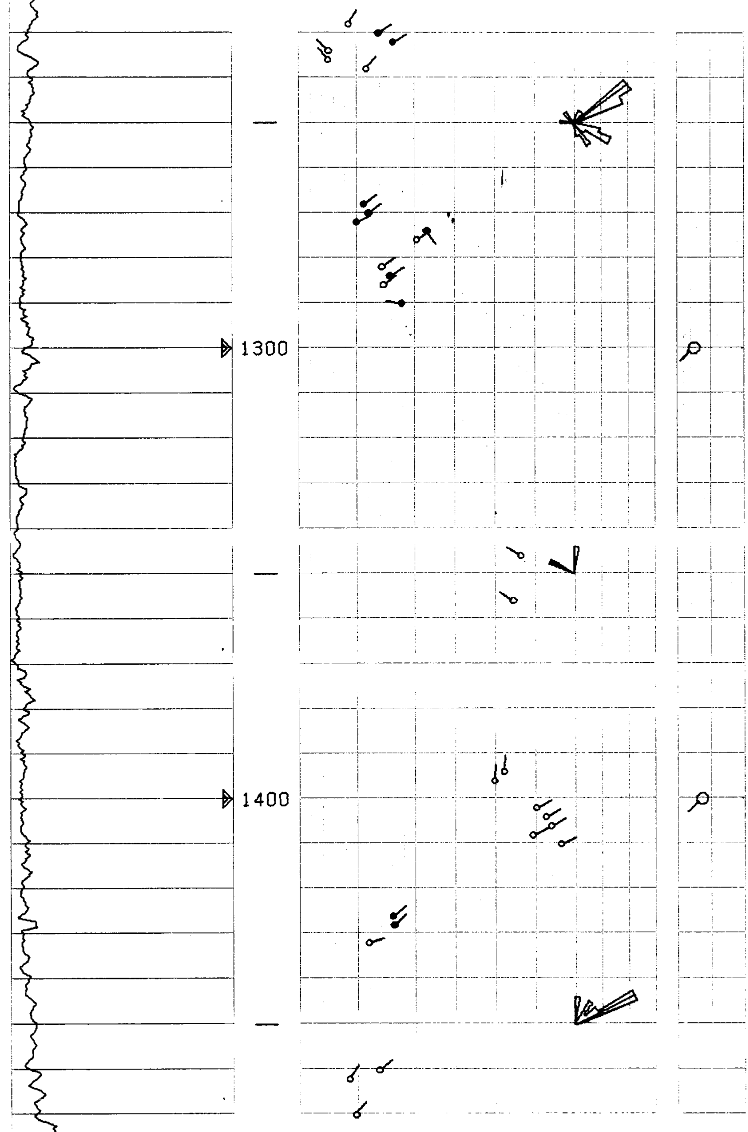
DIPMETER ARROW PLOT



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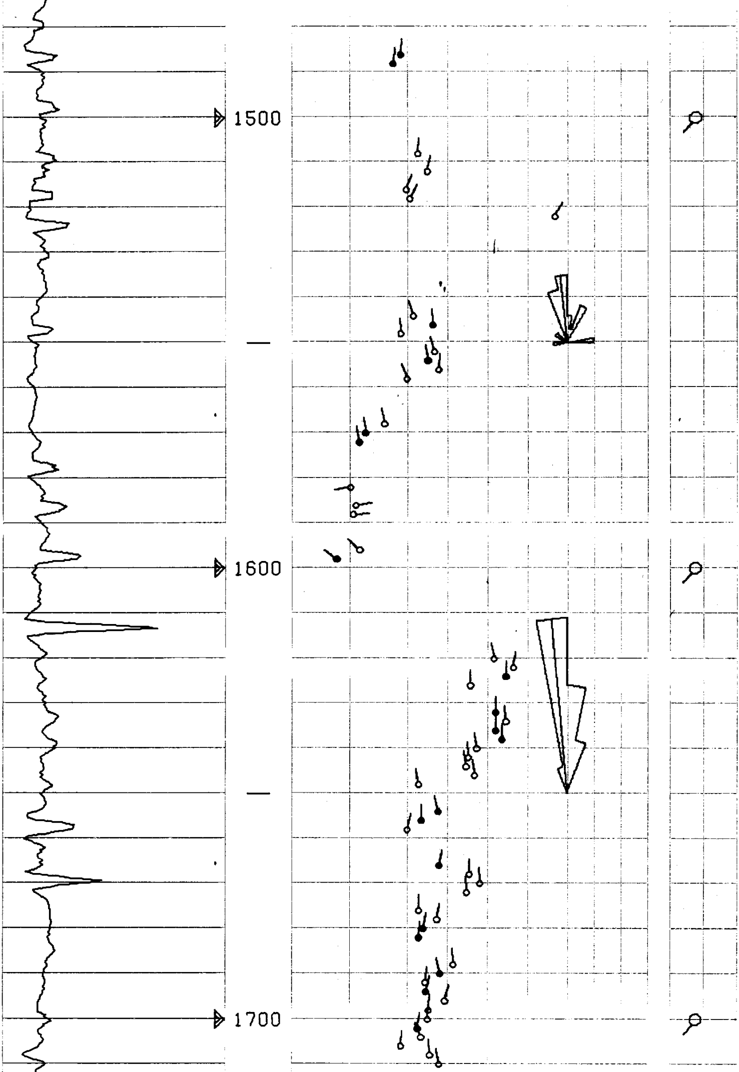
DIPMETER ARROW PLOT

6-20-80 SEC 1 23895

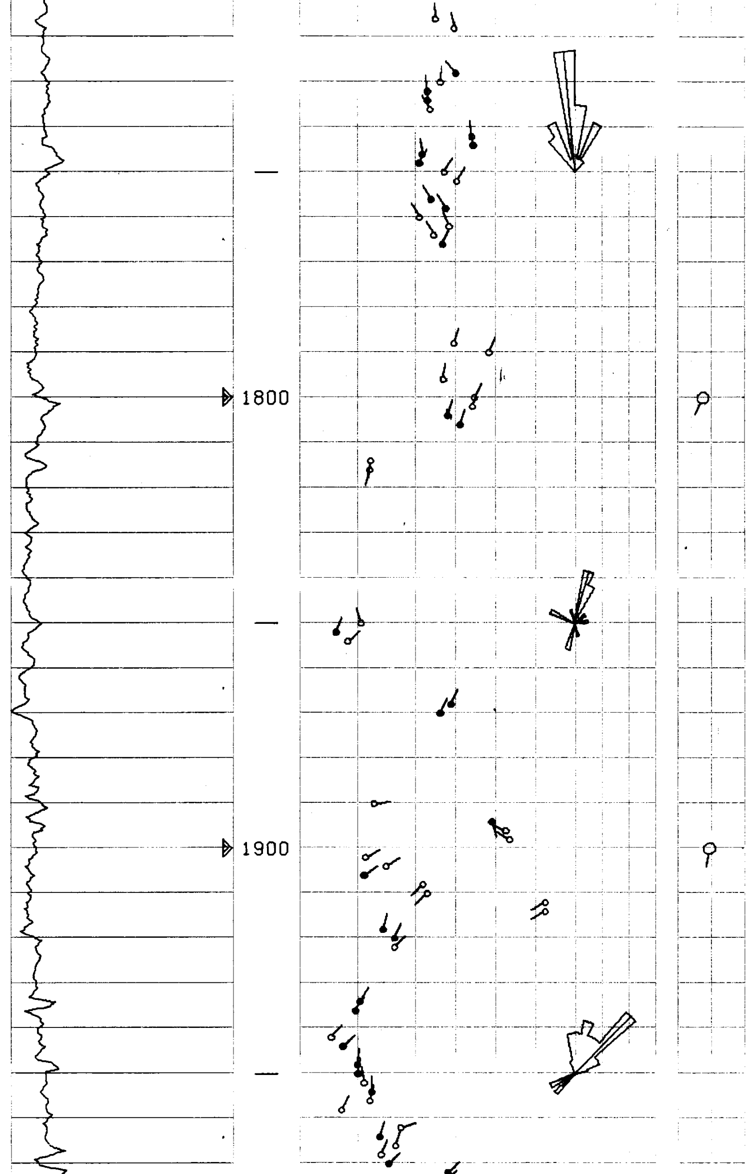


.500 IN. GRID

FOOT DUO DECIMA

DIPMETER ARROW PLOT

SCHLUMBERGER DIPMETER



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FOOT DUO-DECIMAL .500 IN. GRI

ARROW PLOT

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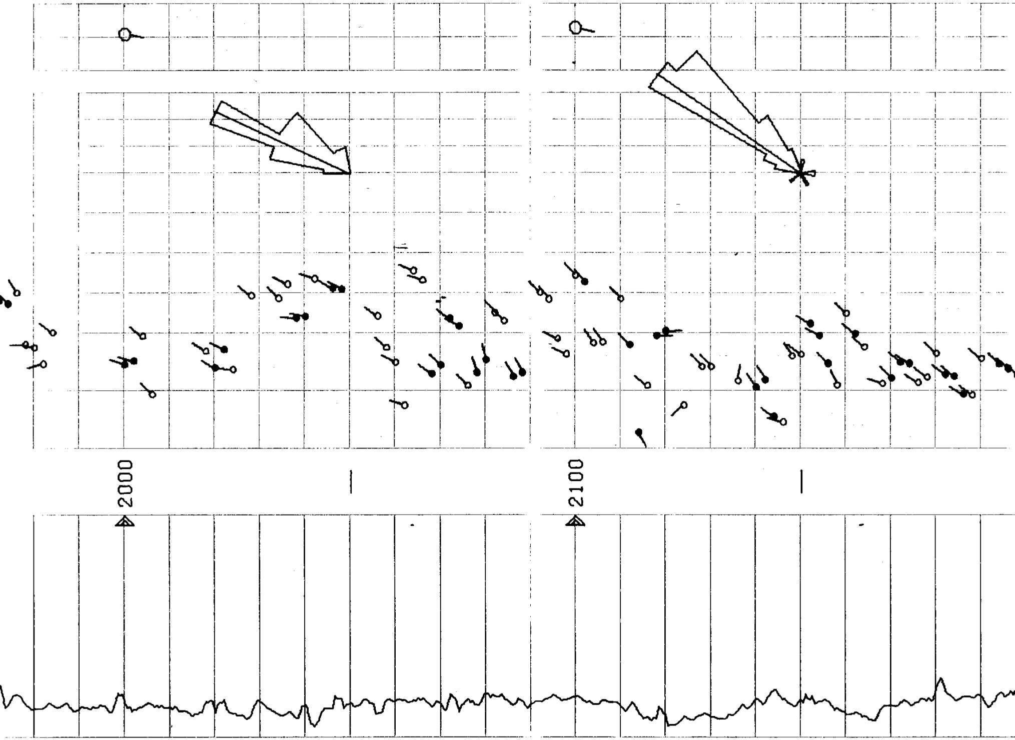

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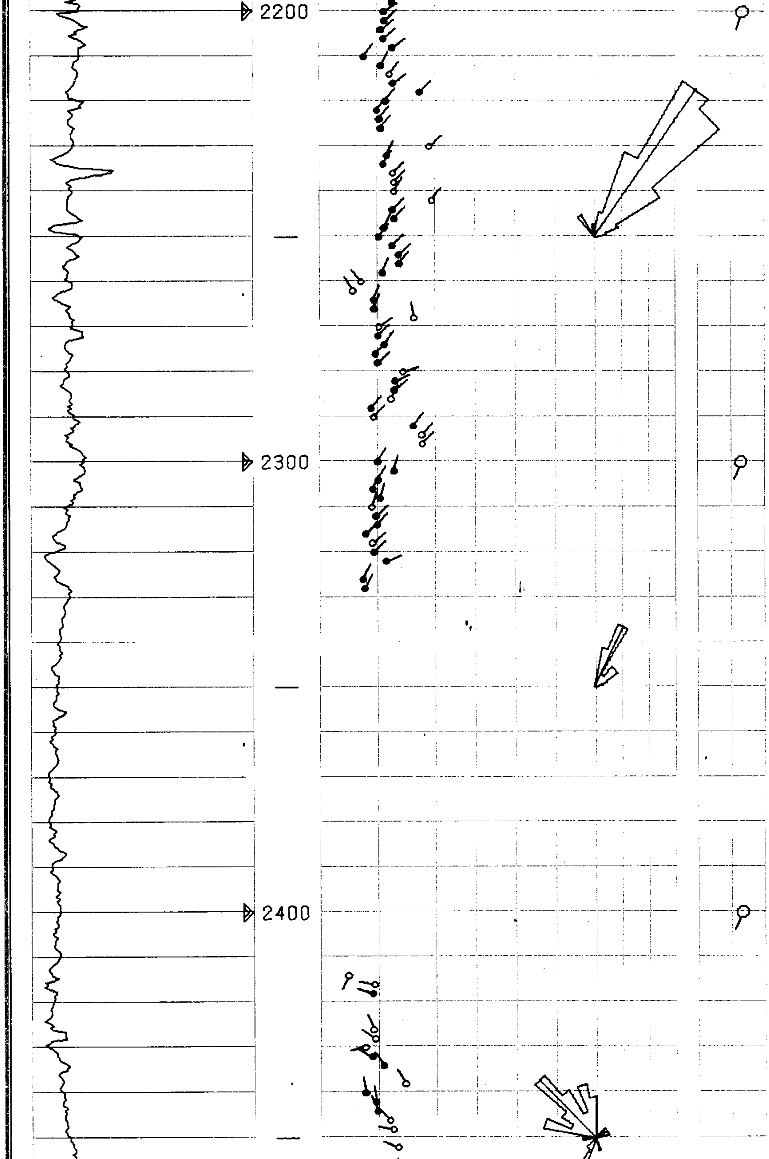

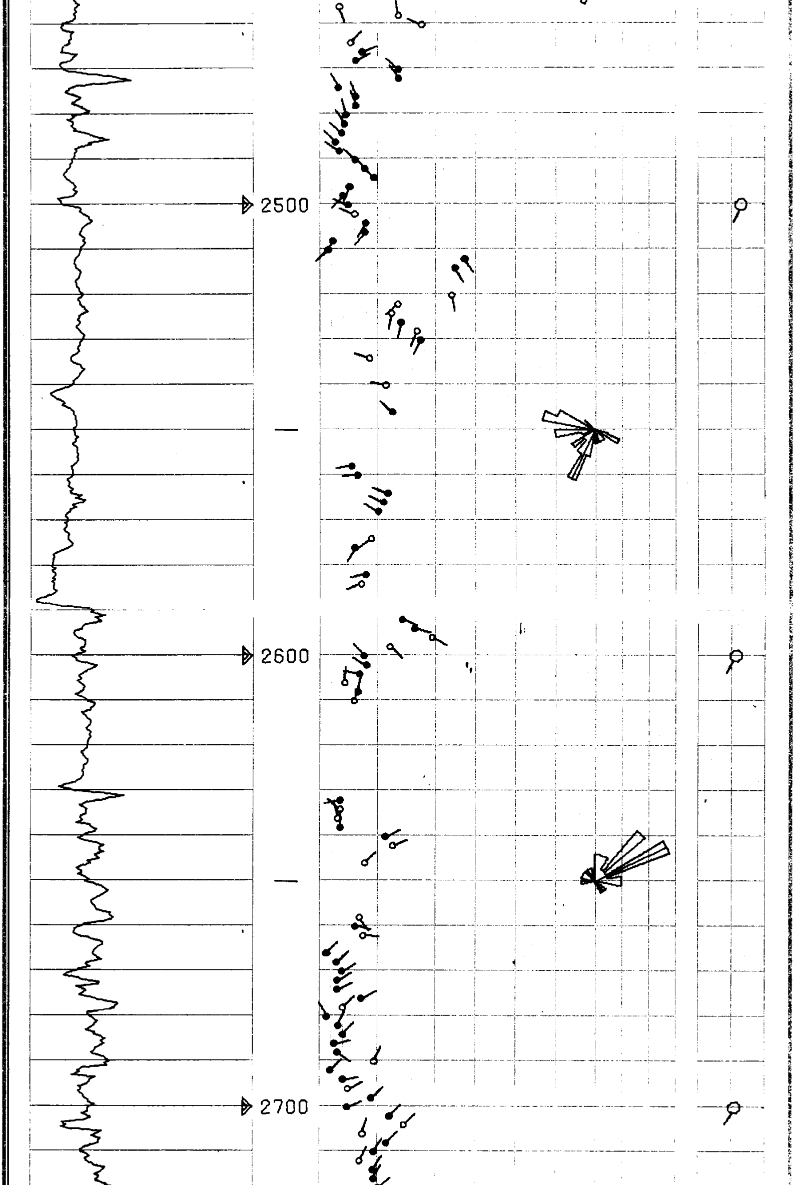

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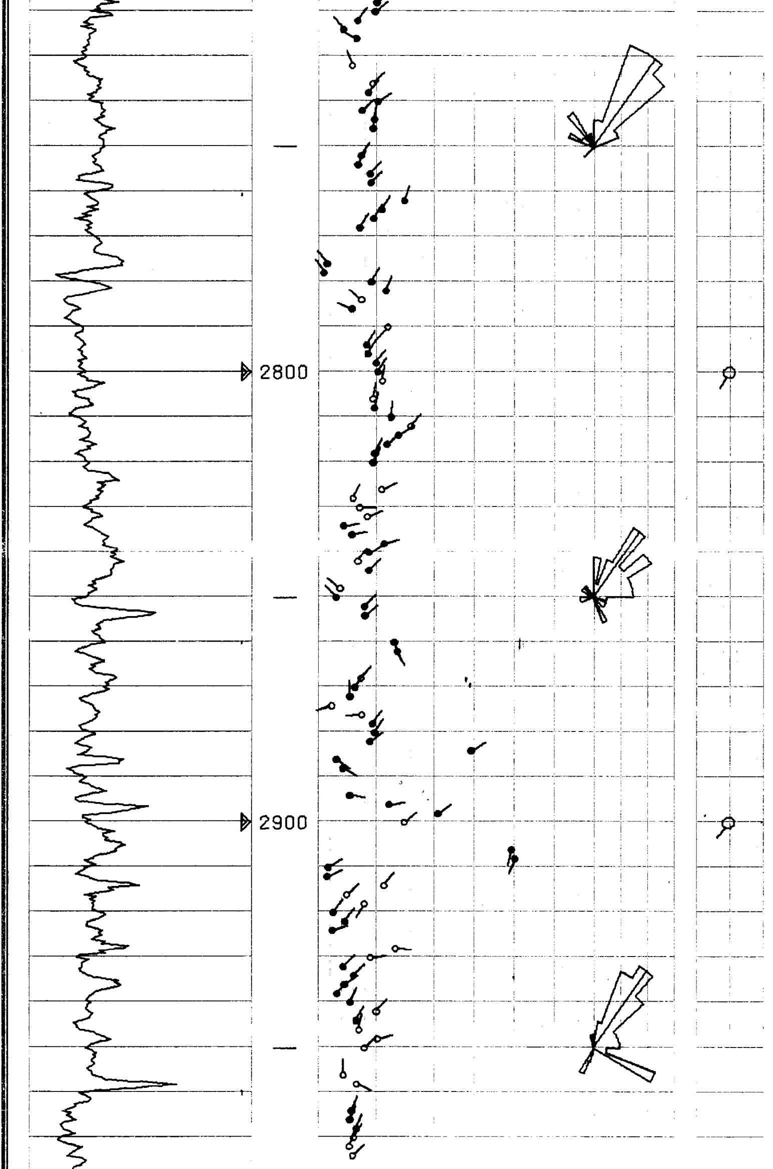
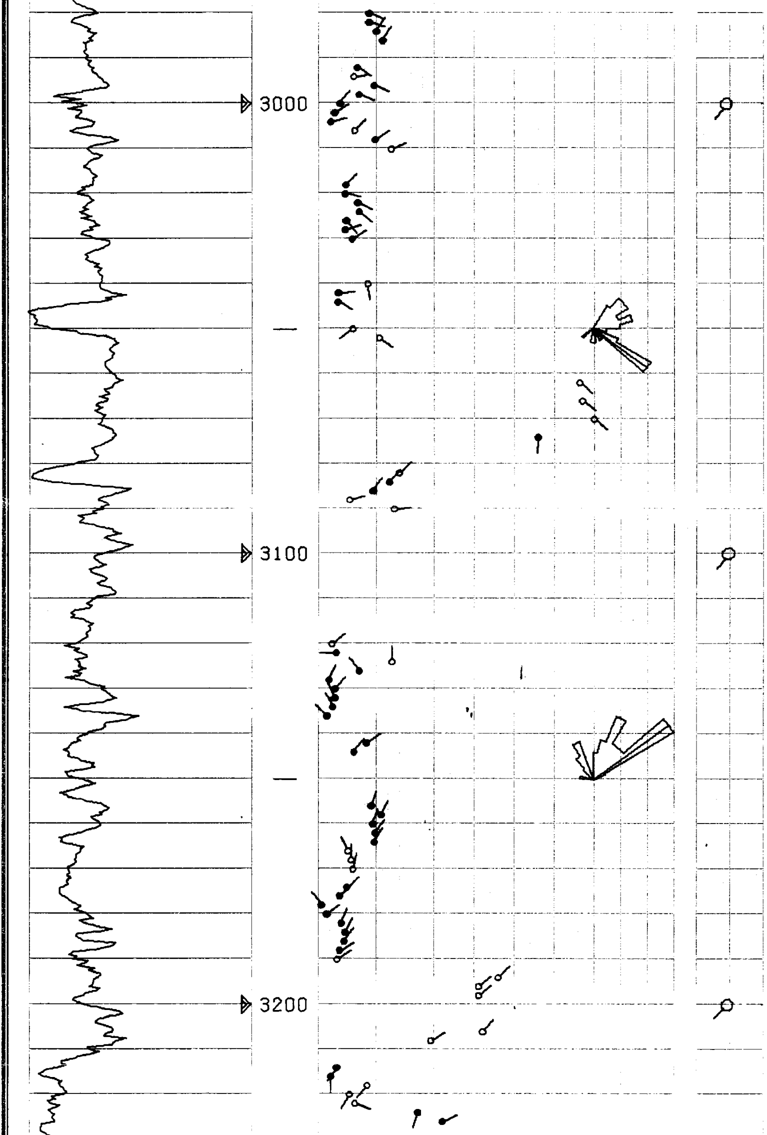


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



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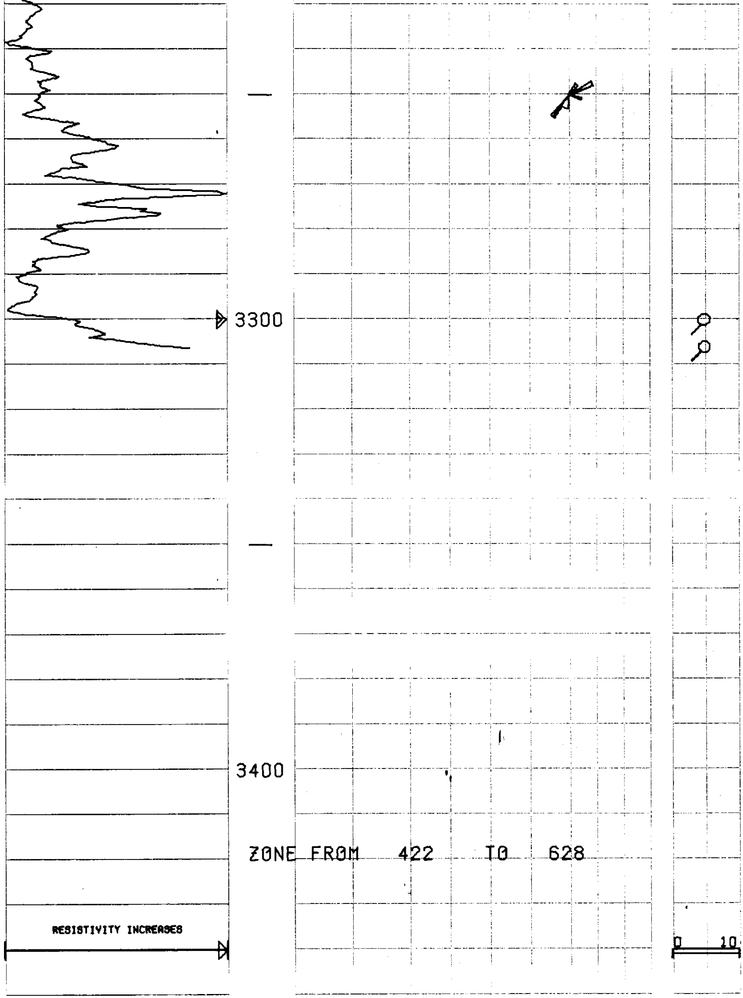
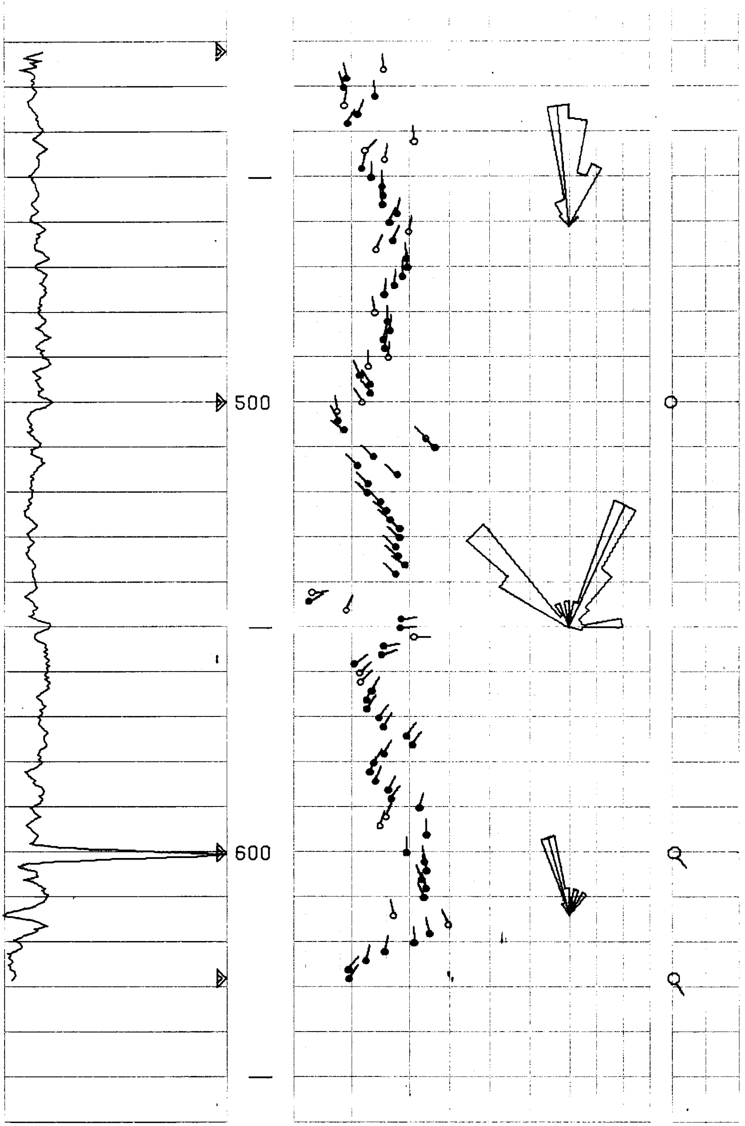


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



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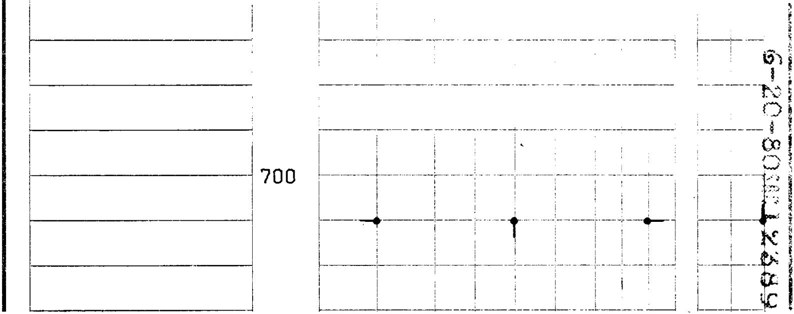

CORRELATION CURVE	DEPTHS	0° 10° 20° 30° 40° 50° 60° 70° 80° 90° TRUE DIP ANGLE AND DIRECTION	0° 10° DRIFT & DIRECTION OF SONDE

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY NO. 43-11

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA STATE OREGON

Rm 2.79 @ 74 °F
Rmf 2.98 @ 58 °F
Rmc 3.19 @ 58 °F
BHT 95 °F

SCHL. FR 3312
SCHL. TD 3313
DRLR TD 3326
Elev:
KB 797.89
DF --
GL 797.34