CC12

APR 23 1980
Schlumberger

FOUR – ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
(COMPUTED)

COUNTY COLUMBIA
FIELD or LOCATION 14-6N-5W
WELL COLUMBIA COUNTY NO. 12
COMPANY REICHHOLD ENERGY

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY NO. 12

FIELD MIST-NEHALEM BASIN

COUNTY COLUMBIA **STATE** OREGON

LOCATION : 39'SOUTH & 209'EAST OF THE NORTHWEST CORNER OF:
Sec. 14 Twp. 6N Rge. 5W

Other Services:
DI-SFL
BHC 2"=100'
5"=100'

Permanent Datum: GL, Elev. 797.65
Log Measured From KB, 10.8 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 808.45
D.F. --
G.L. 797.65

Date	3-3-80			
Run No.	ONE			
Depth—Driller	3160			
Depth—Logger	3160			
Btm. Log Interval	3156			
Top Log Interval	398			
Casing—Driller	7" @ 399	@	@	@
Casing—Logger	398			
Bit Size	6¼"			
Type Fluid in Hole	LIGNOSULFONATE			
Dens. | Visc.	86 | 54	|	|	|
pH | Fluid Loss	9.6 | 7 ml	ml	ml	ml
Source of Sample	FLOWLINE			
R_m @ Meas. Temp.	1.73 @ 60 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	1.29 @ 48 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	2.44 @ 48 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	M | M	|	|	|
R_m @ BHT	1.26 @101 °F	@ °F	@ °F	@ °F
Time Since Circ.	13 HOURS			
Max. Rec. Temp.	101 °F	°F	°F	°F
Equip. | Location	8126 | SAC	|	|	|
Recorded By	FINNELL			
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		| 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	20°			
Analog Panel No.	--			
Digital Panel No.	958			
Correlated By	--			
Computed By	PCDCC			
Plotted By	PCDCC			
Remarks —	SERVICE ORDER NO.123939			

"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 0° 10° 20° 30° 40° 50° 60° 70° 80° 90°	DRIFT & DIRECTION OF SONDE 0° 10°

SCHLUMBERGER
DIPMETER ARROW PLOT
800123939

REICHOLD ENERGY
COLUMBIA CO. #12
MIST-NEHALEM BASIN FIELD
COLUMBIA COUNTY, OREGON
RUN NO. ONE 3-MAR-80
P.C.D.C.
ARROW PLOT FROM CLUSTER PROGRAM

CORRELATION LENGTH 4 FT.
STEP LENGTH 2 FT.
SEARCH ANGLE 30 DEGREES X2
HDT-D CSU PDP/11

JOB 4163.00

FOOT DUO-DECIMAL .500 IN. GRID

CORRELATION CURVE	DEPTHS	DIP ANGLE AND DIRECTION	BOREHOLE DRIFT

POOLED ARROW PLOT

2 LEVELS POOLED WHEN WITHIN

3.5 DEGREES SOLID ANGLE

BLACK ARROWS ARE POOLED RESULTS

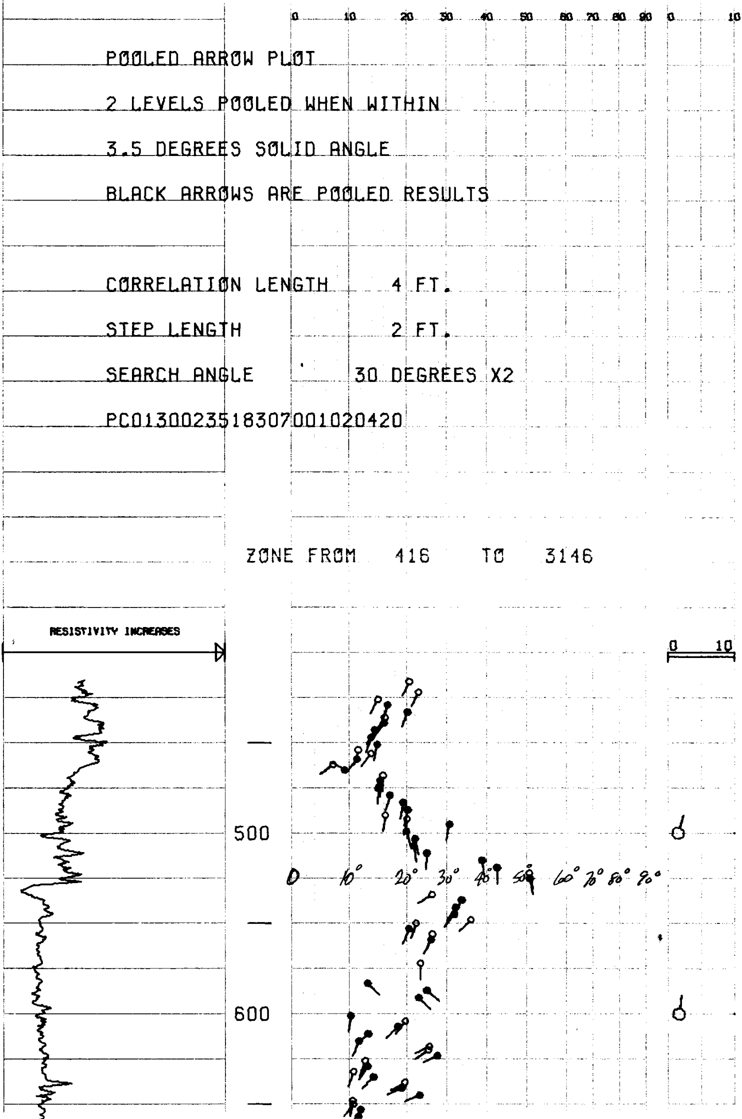
CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEGREES X2

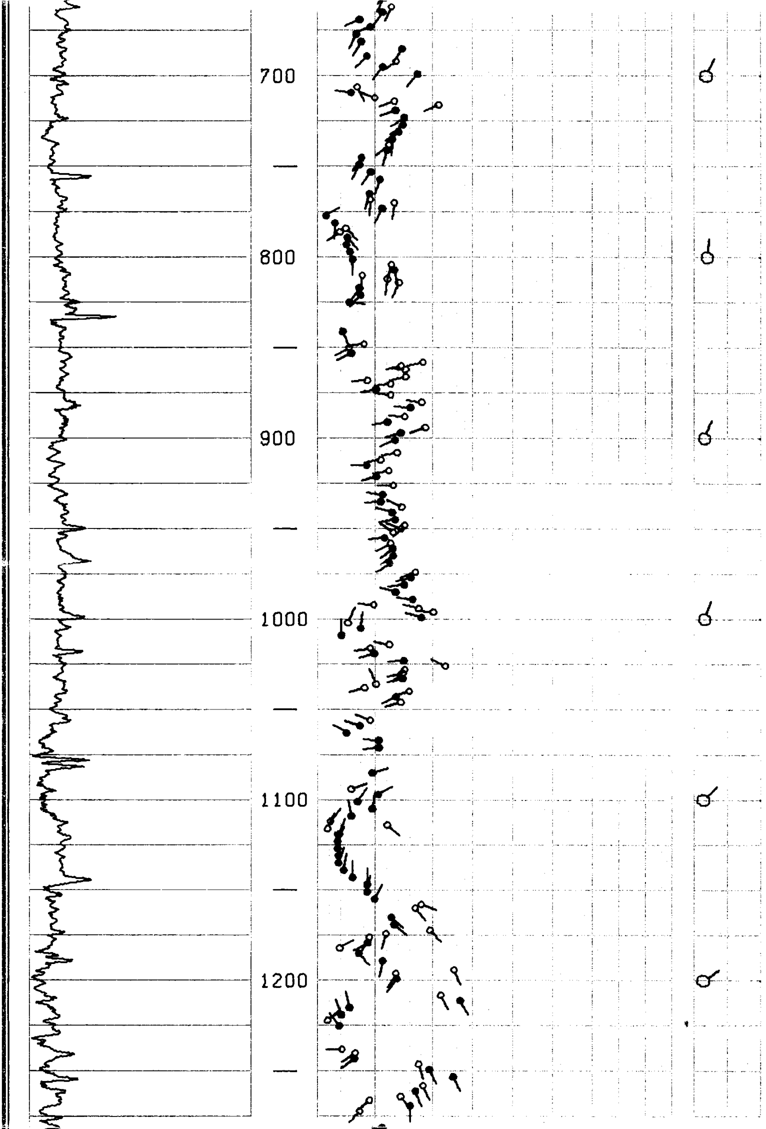
PC0130023518307001020420

ZONE FROM 416 TO 3146



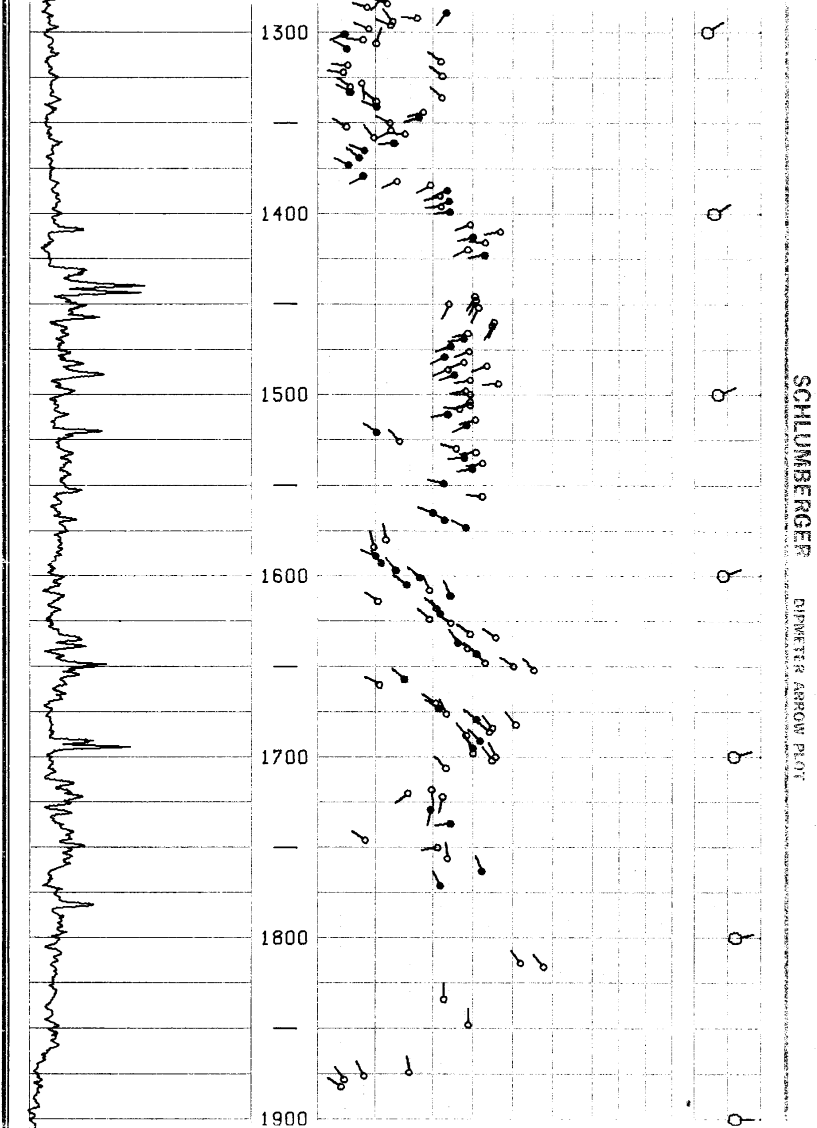
SCHLUMBERGER DIPMETER ARROW PLOT

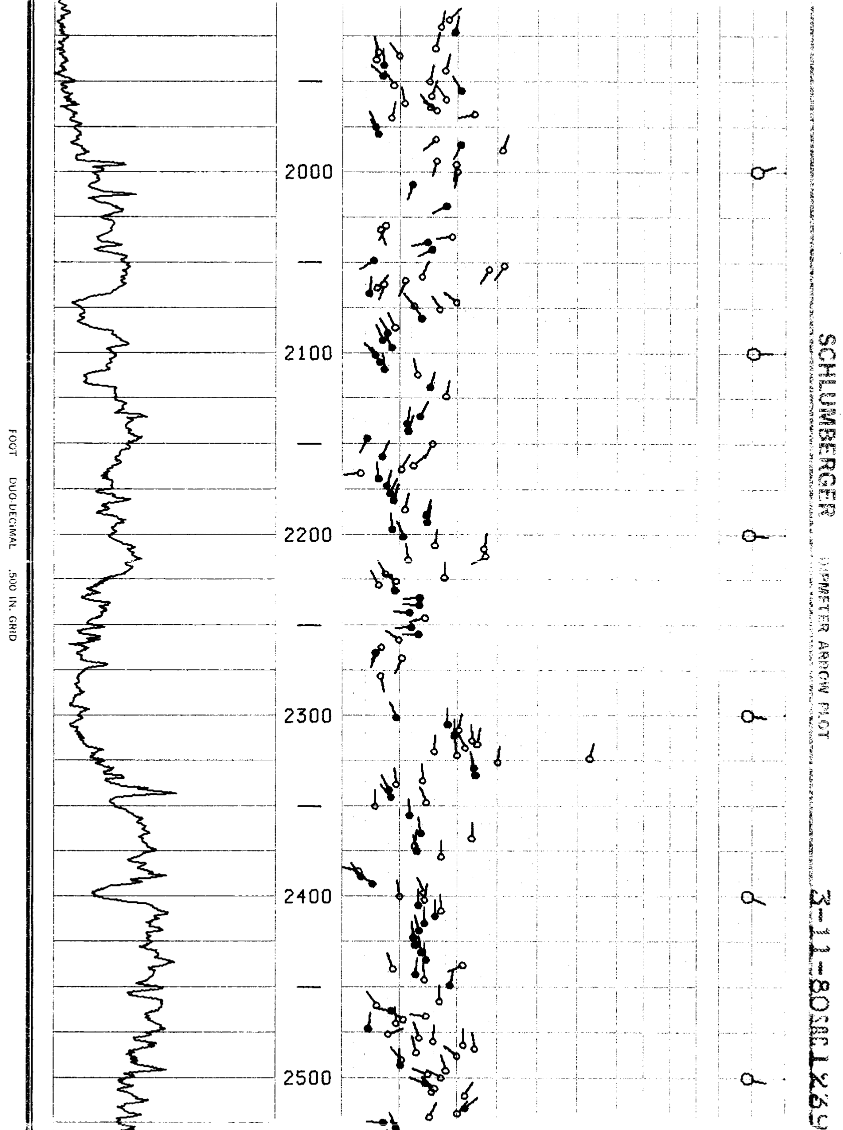
FOOT DUO-DECIMAL .500 IN. GRID



SCHLUMBERGER DIPMETER ARROW PLOT

1 FOOT DUO-DECIMAL .500 IN. GRID





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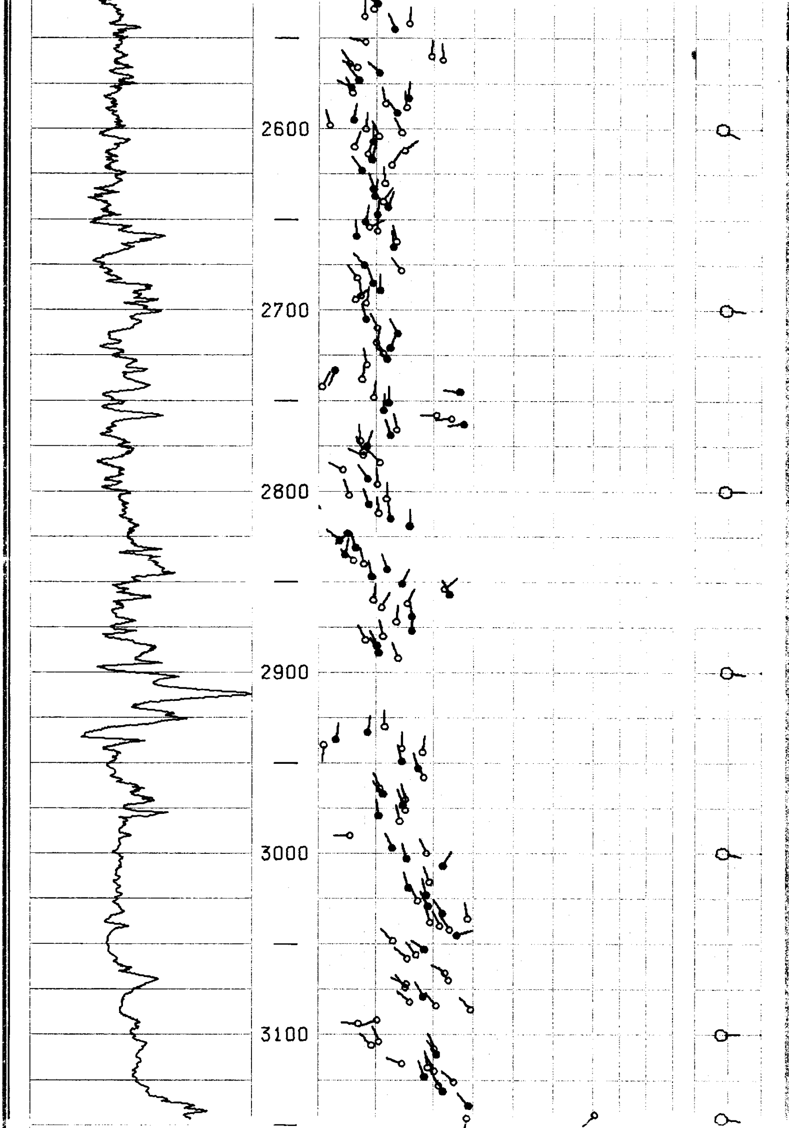
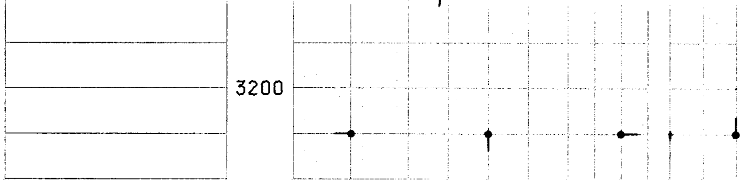




CORRELATION CURVE | DEPTHS | DIP ANGLE AND DIRECTION | BOREHOLE DRIFT

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

ALL QUALITY ARROW PLOT 4163

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

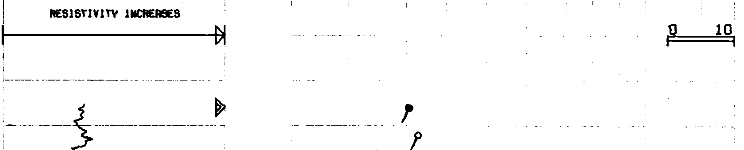
CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEGREES X2

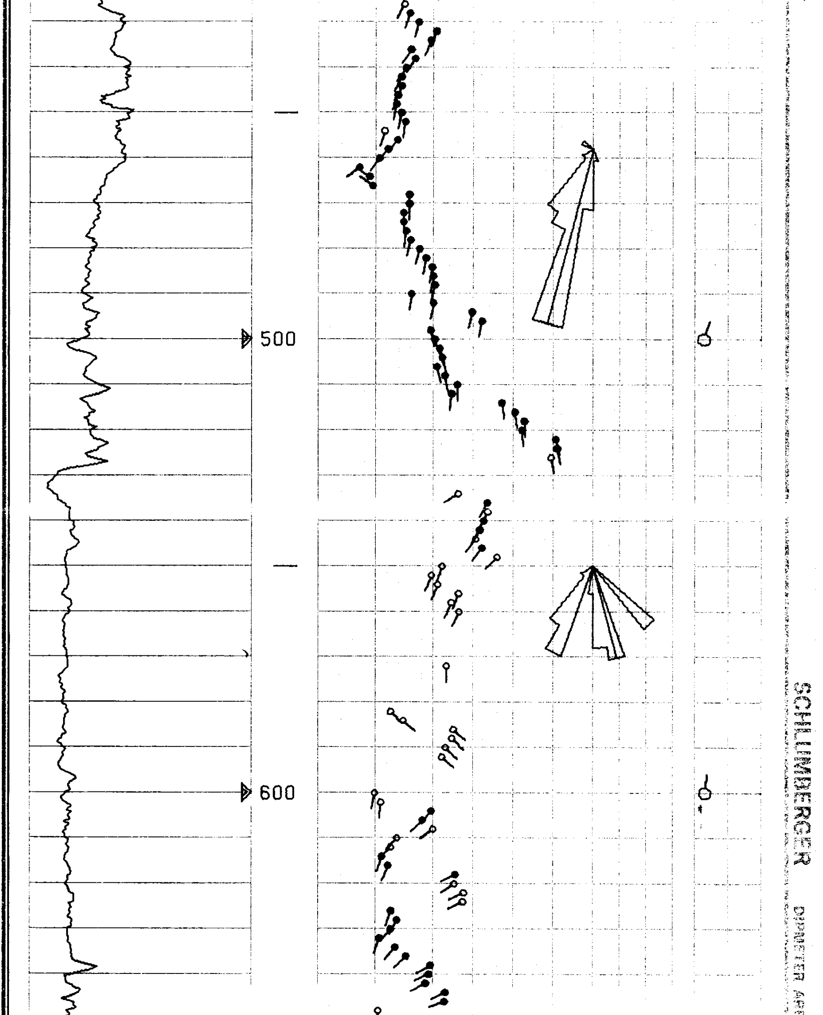
PC0130023518307001020420

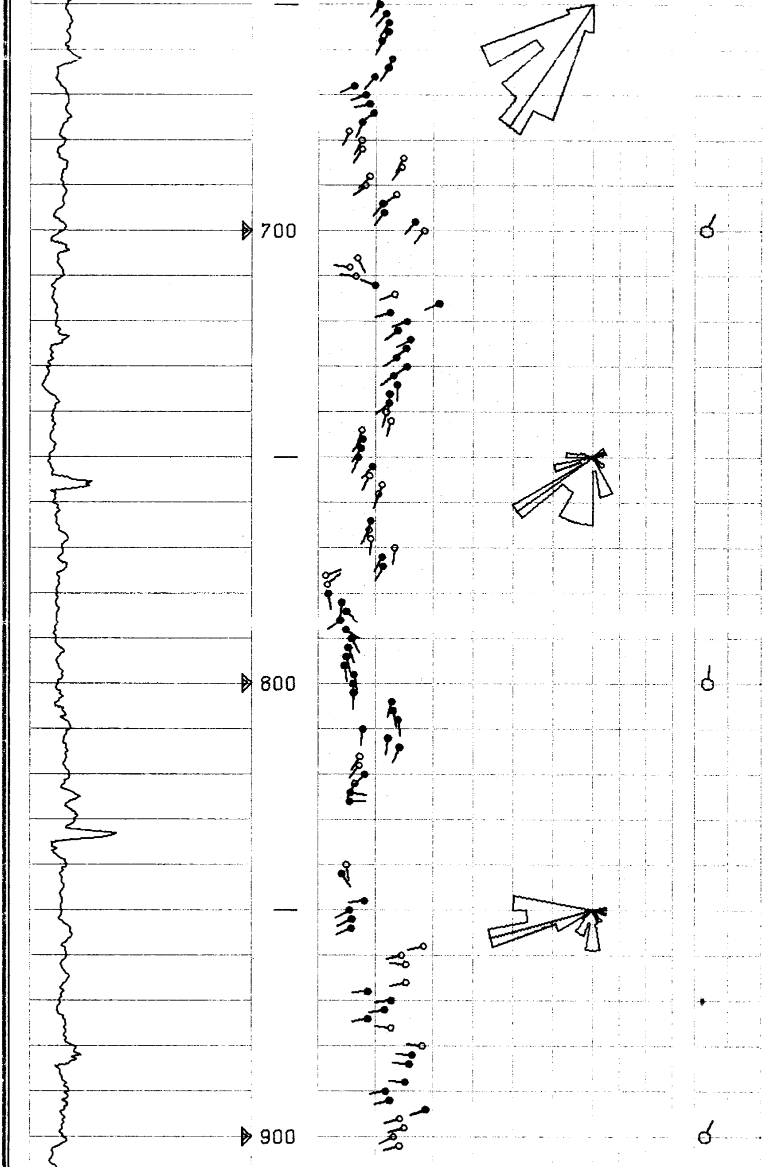
ZONE FROM 416 TO 3146



SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID



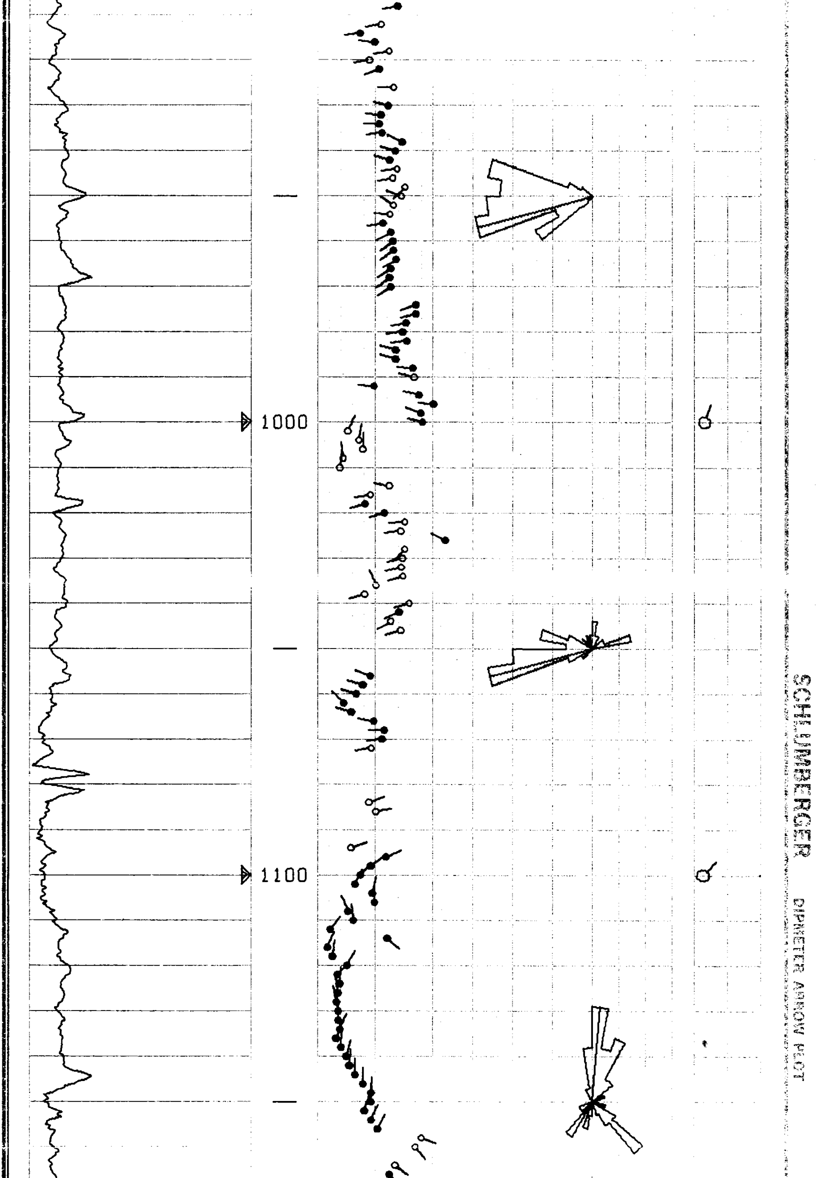


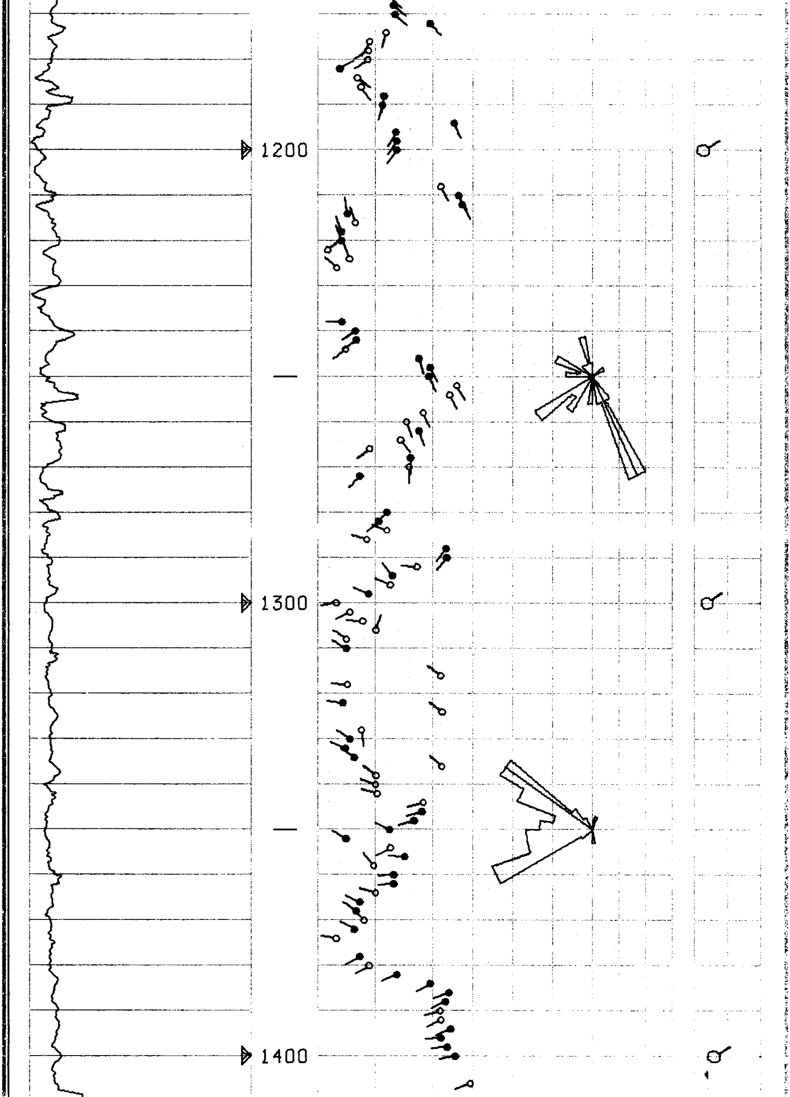
OW PLOT

3-11-80SRC 123939

SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUODECIMAL 500 IN. GRID





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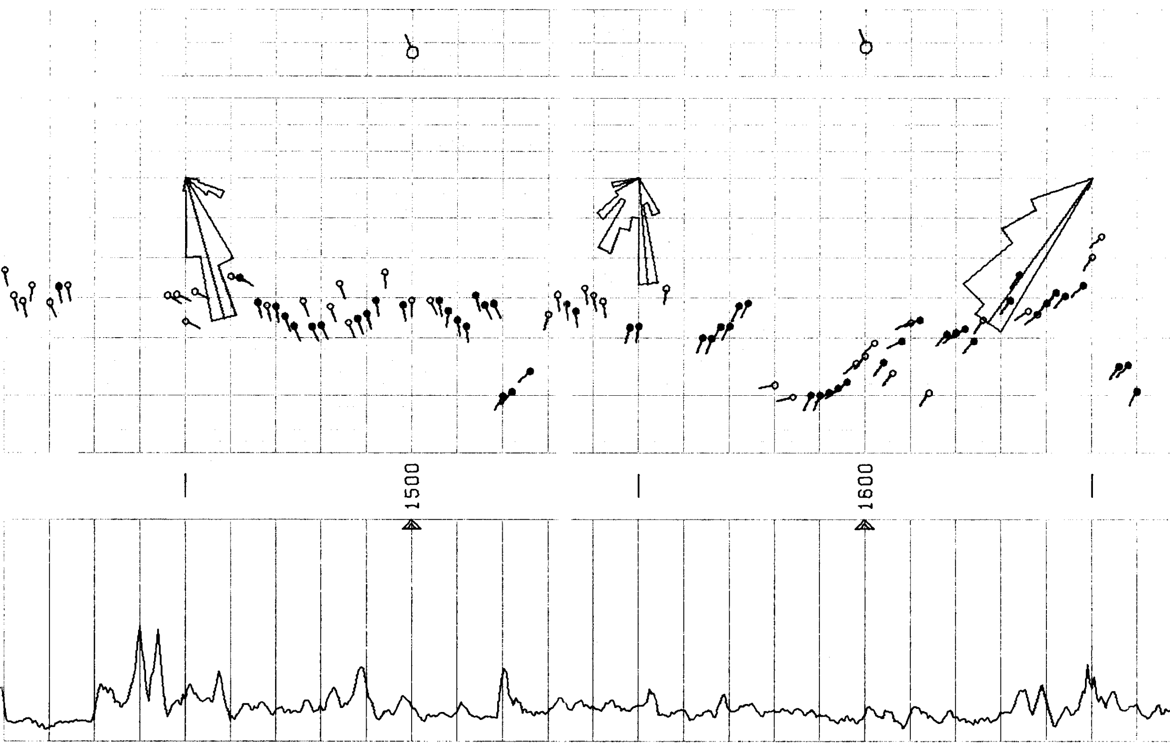
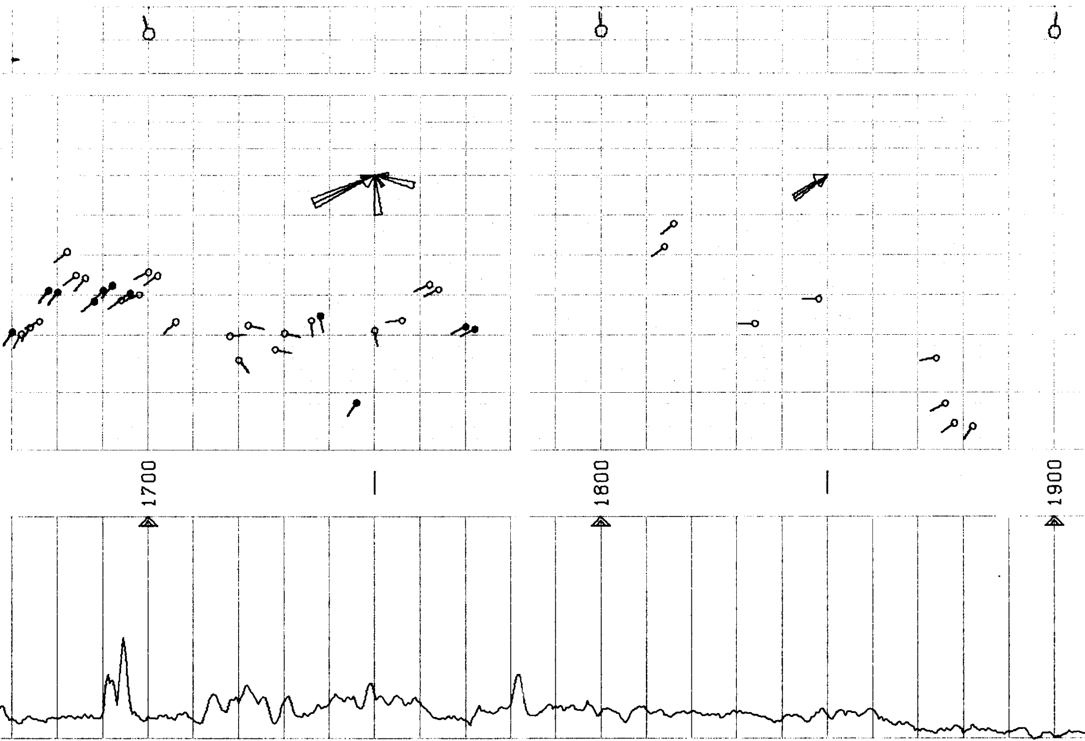


FOOT DUO DECIMAL 500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



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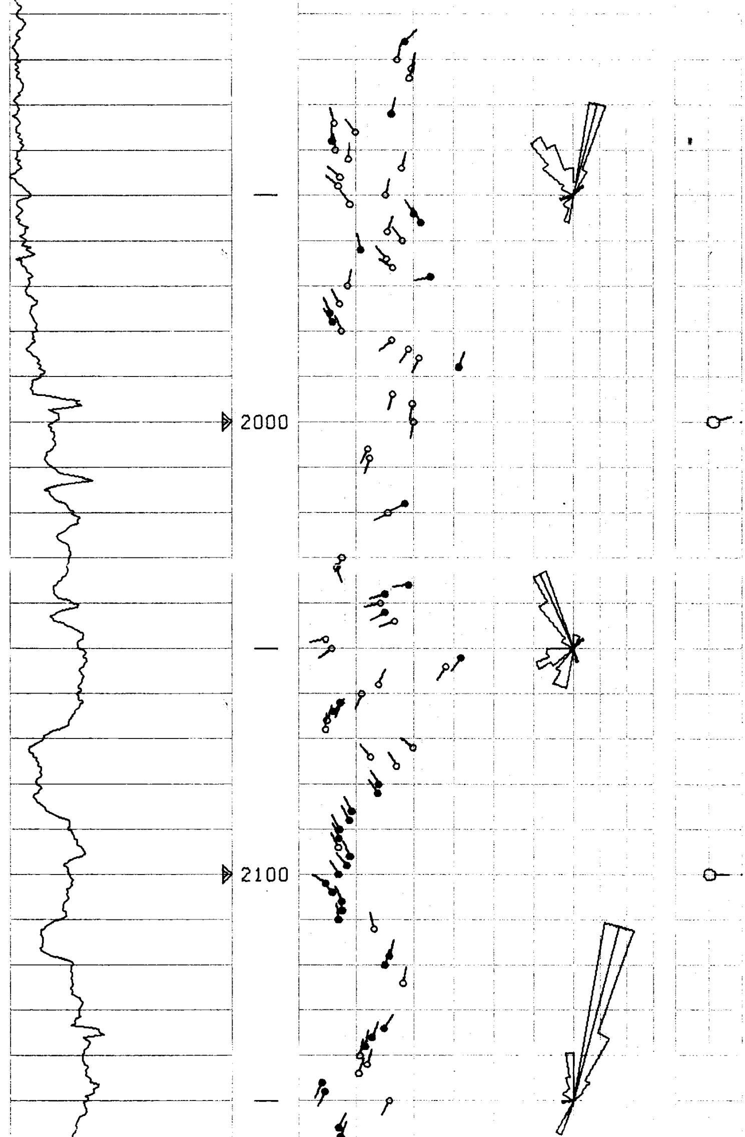

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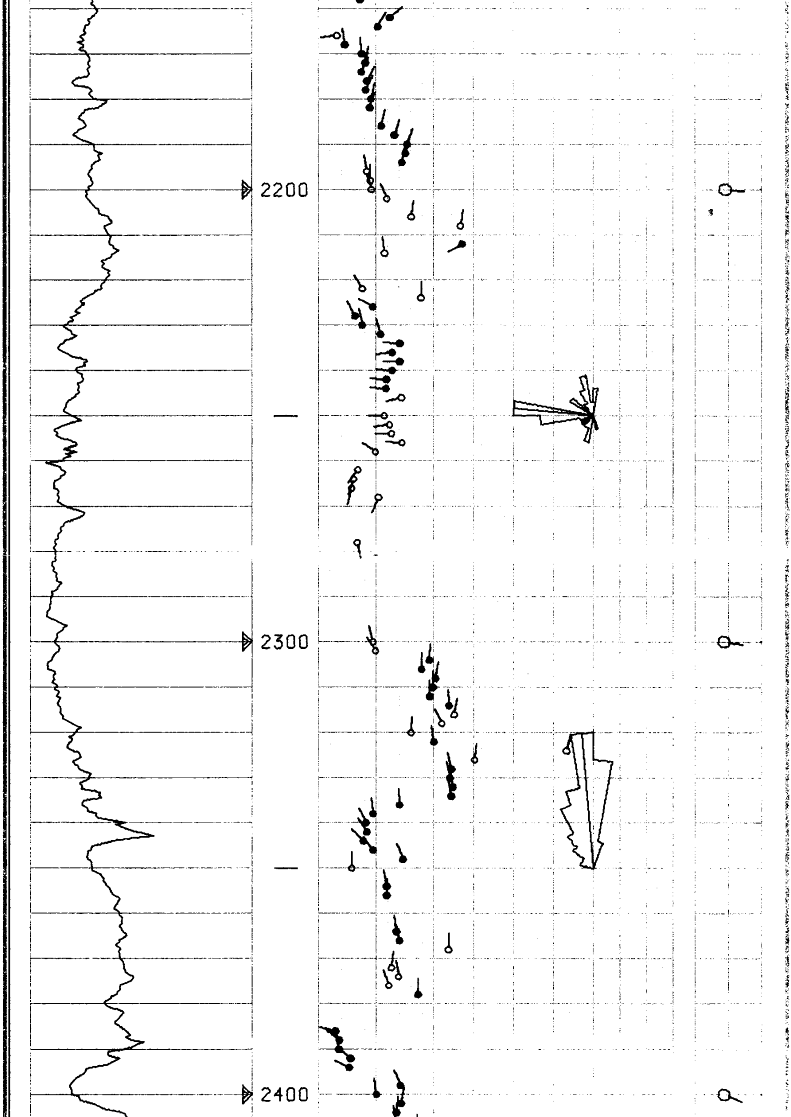

SCHLUMBERGER DIPMETER ARROW PLOT

3-11-80

C123939

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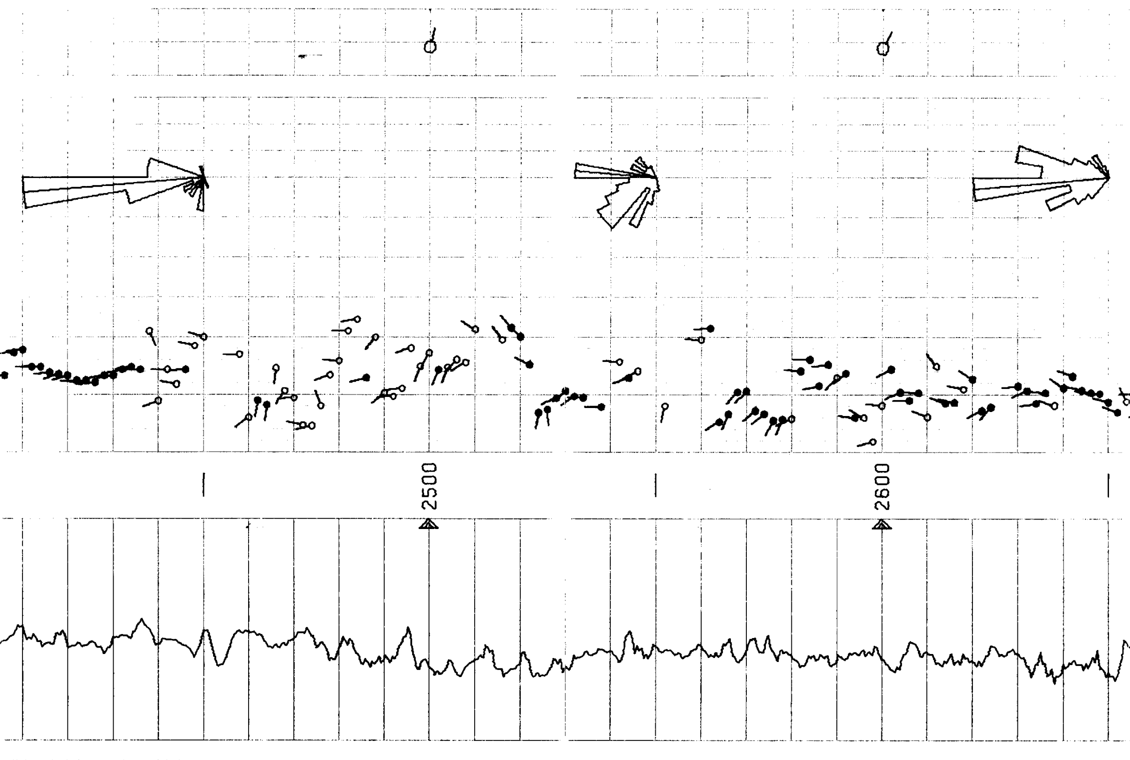

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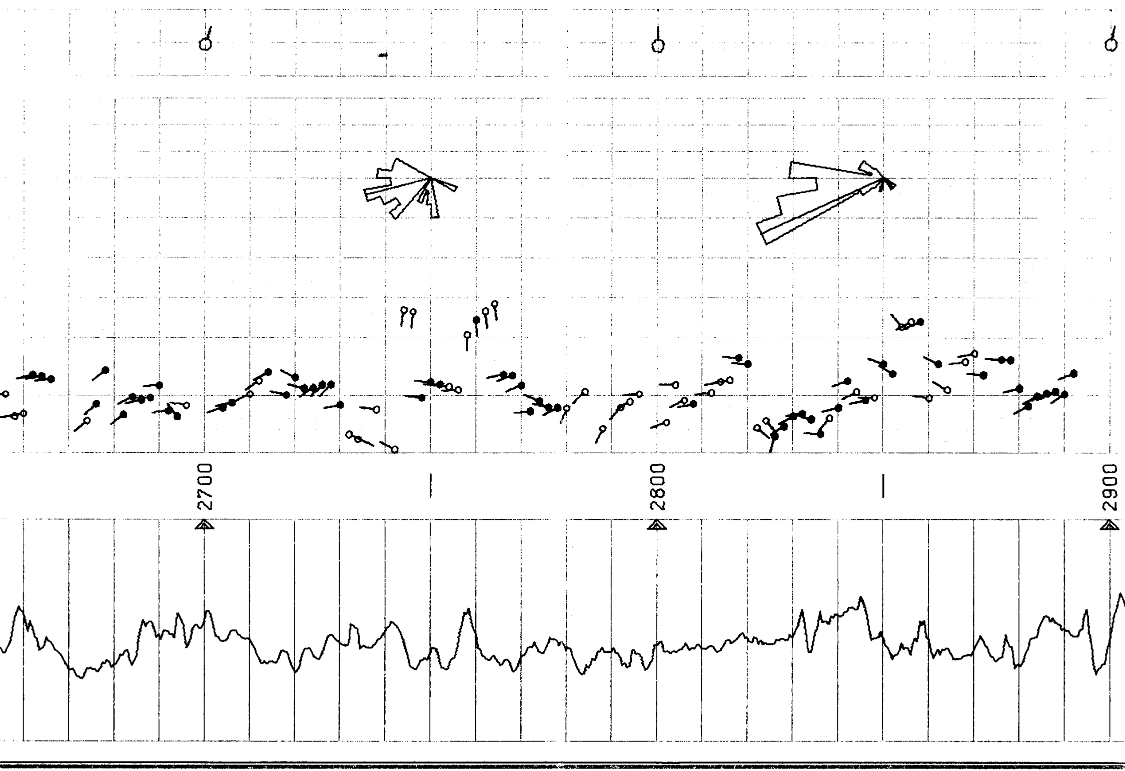

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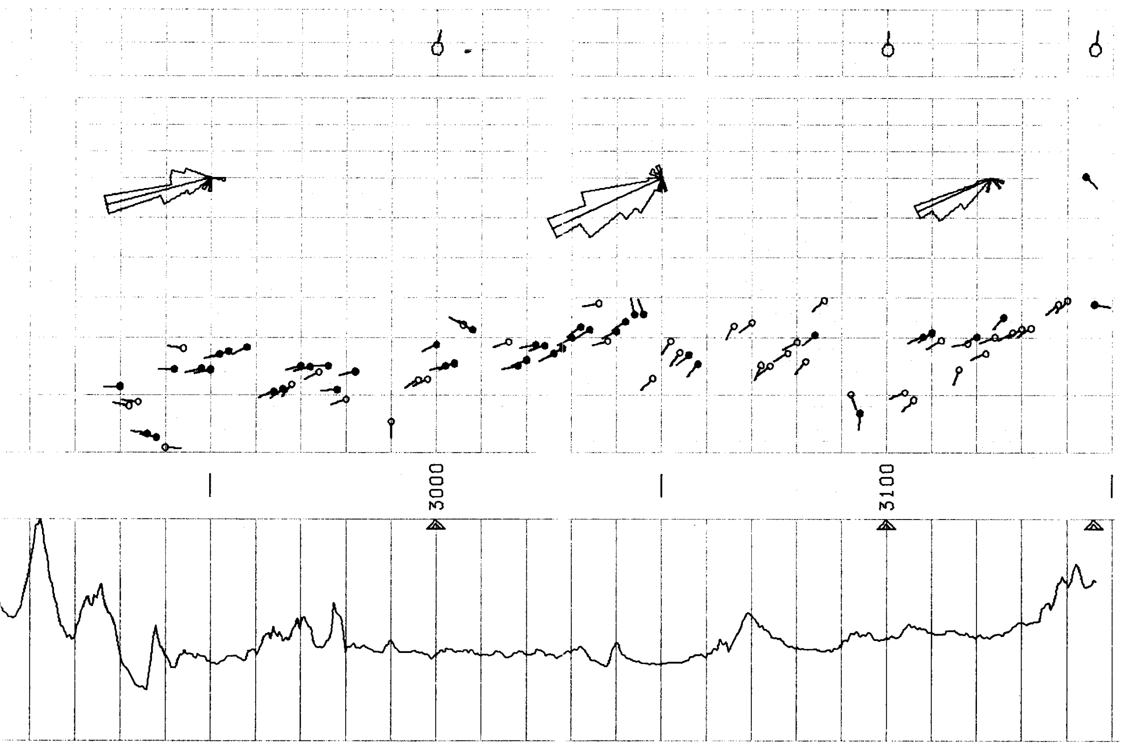

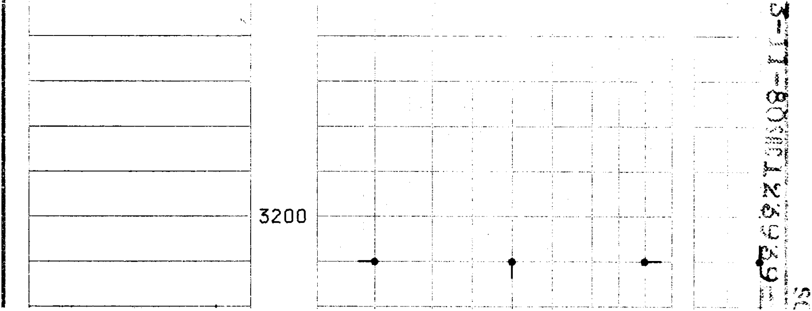

CORRELATION CURVE	DEPTHS	0° 10° 20° 30° 40° 50° 60° 70° 80° 90° TRUE DIP ANGLE AND DIRECTION	0° 10 DRIFT & DIRECTION OF SONDE

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY NO. 12

FIELD MIST-NEHALEM BASIN

COUNTY COLUMBIA STATE OREGON

Rm 1.73 @ 60 °F
Rmf 1.29 @ 48 °F
Rmc 2.44 @ 48 °F
BHT 101 °F

SCHL. FR 3156
SCHL. TD 3160
DRLR TD 3160
Elev:
KB 808.45
DF --
GL 797.65