Schlumberger

FOUR — ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
(COMPUTED)

COUNTY COLUMBIA
FIELD or LOCATION 3-6N-5W
WELL COLUMBIA COUNTY NO. 33-3
COMPANY REICHHOLD ENERGY

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY NO. 33-3

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA STATE OREGON

LOCATION: 1669'NORTH & 380'EAST OF SOUTH $\frac{1}{4}$

Sec. 3 Twp. 6N Rge. 5W

Other Services:
DI-SFL
BHC

Permanent Datum: GL, Elev. 1028.8
Log Measured From KB, 10.5 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 1039.3
D.F. --
G.L. 1028.8

SCANNED

Date	6-1-80			
Run No.	ONE			
Depth—Driller	2777			
Depth—Logger	2777			
Btm. Log Interval	2774			
Top Log Interval	406			
Casing—Driller	7" @ 407	@	@	@
Casing—Logger	406			
Bit Size	$6\frac{1}{4}$"			
Type Fluid in Hole	LIGNOSULFONATE			
Dens. | Visc.	78 | 43	|	|	|
pH | Fluid Loss	10.5 | 7 ml	| ml	| ml	| ml
Source of Sample	FLOWLINE			
R_m @ Meas. Temp.	1.40 @ 63 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	1.80 @ 52 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	2.01 @ 52 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	M. | M	|	|	|
R_m @ BHT	0.99 @ 92 °F	@ °F	@ °F	@ °F
Time Since Circ.	$6\frac{1}{2}$ HOURS			
Max. Rec. Temp.	92 °F	°F	°F	°F
Equip. | Location	8126 | SAC	|	|	|
Recorded By	KAISER/CLAGUE			
Witnessed By	BRUER			

SWS-1854-B

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			
HDM No.	--			
Magnetic Declination	20°			
Analog Panel No.	--			
Digital Panel No.	752			
Correlated By	--			
Computed By	PCDCC			
Plotted By	PCDCC			
Remarks —	SERVICE ORDER NO. 123967			

"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°

OW PLOT

C1-80SMC 12896/[illegible]

REICHHOLD ENERGY CORP.
COLUMBIA COUNTY #33-3
MIST-NEHALEM FIELD
COLUMBIA COUNTY, OREGON
RUN NO. ONE 1-JUN-80
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 4423.

SCHLUMBERGER DIPMETER ARROW PLOT

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

POOLED ARROW PLOT

2 LEVELS POOLED WHEN WITHIN

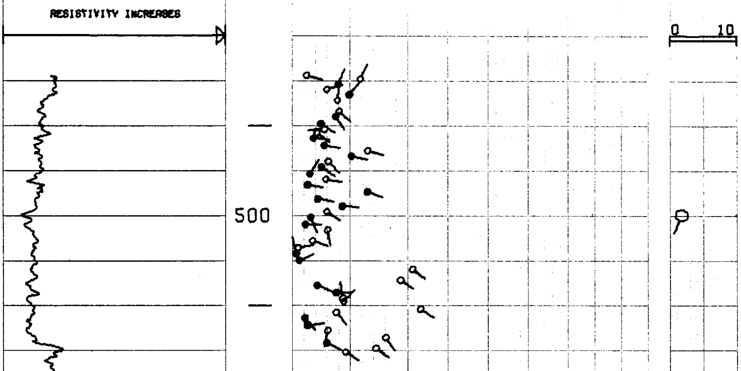
3.5 DEGREES SOLID ANGLE

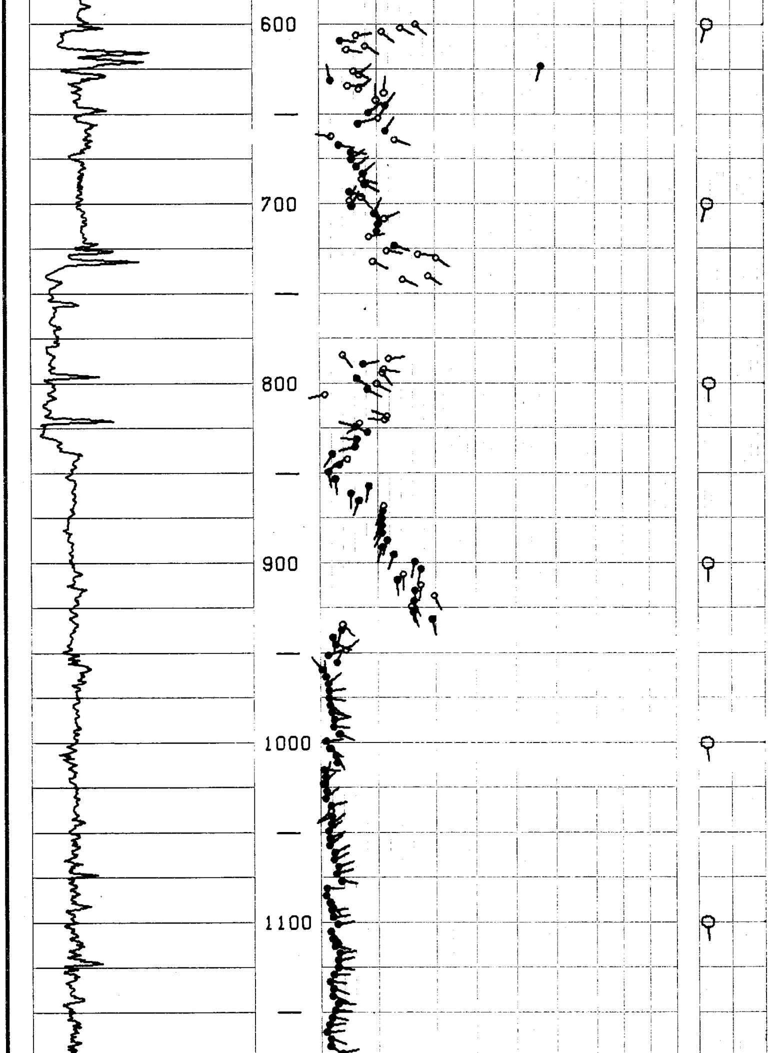
BLACK ARROWS ARE POOLED RESULTS

CORRELATION LENGTH	4 FT.
STEP LENGTH	2 FT.
SEARCH ANGLE	30 DEGREES X2

PC0130023518307001020420

ZONE FROM 422 TO 2740

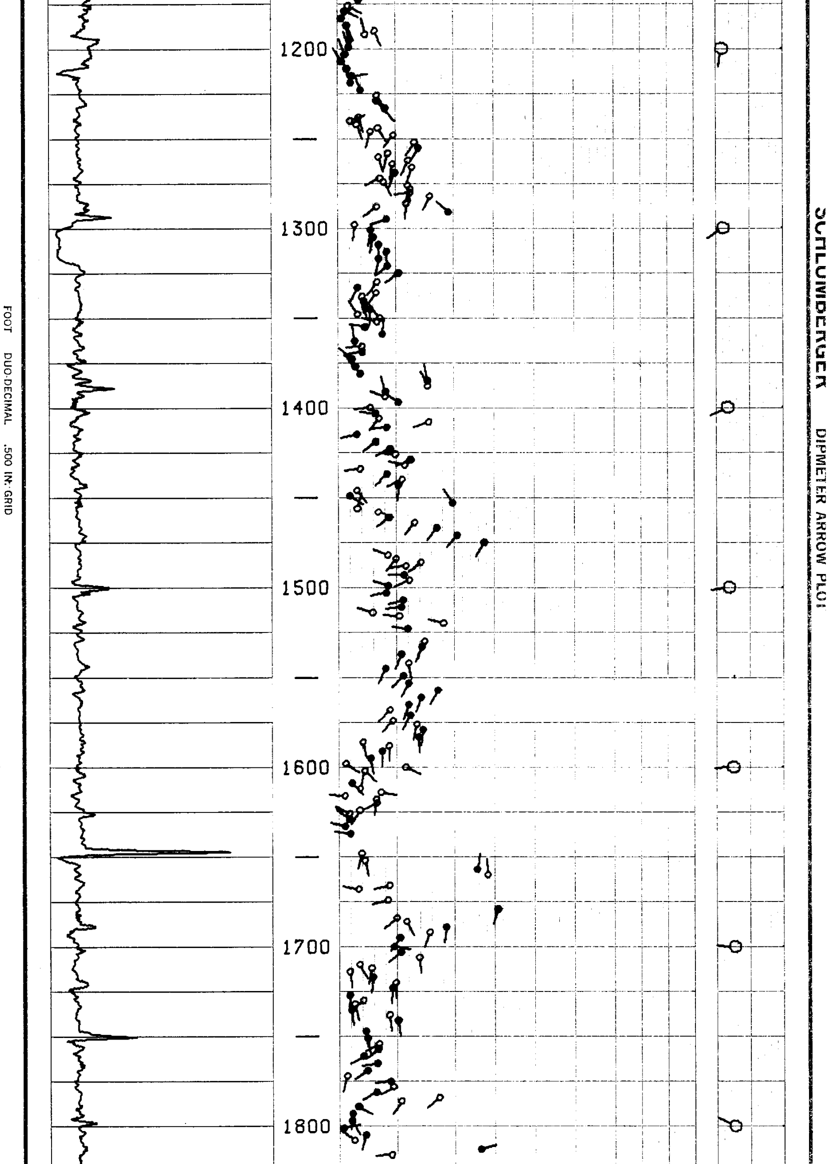


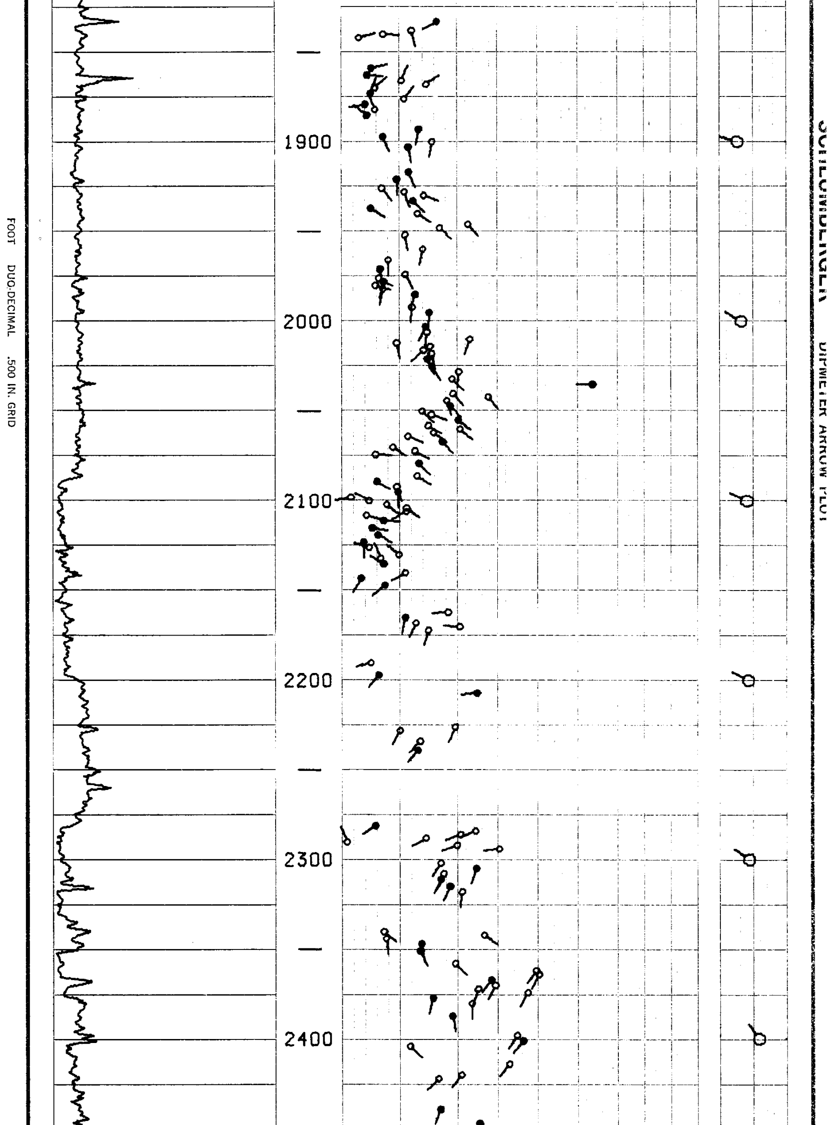


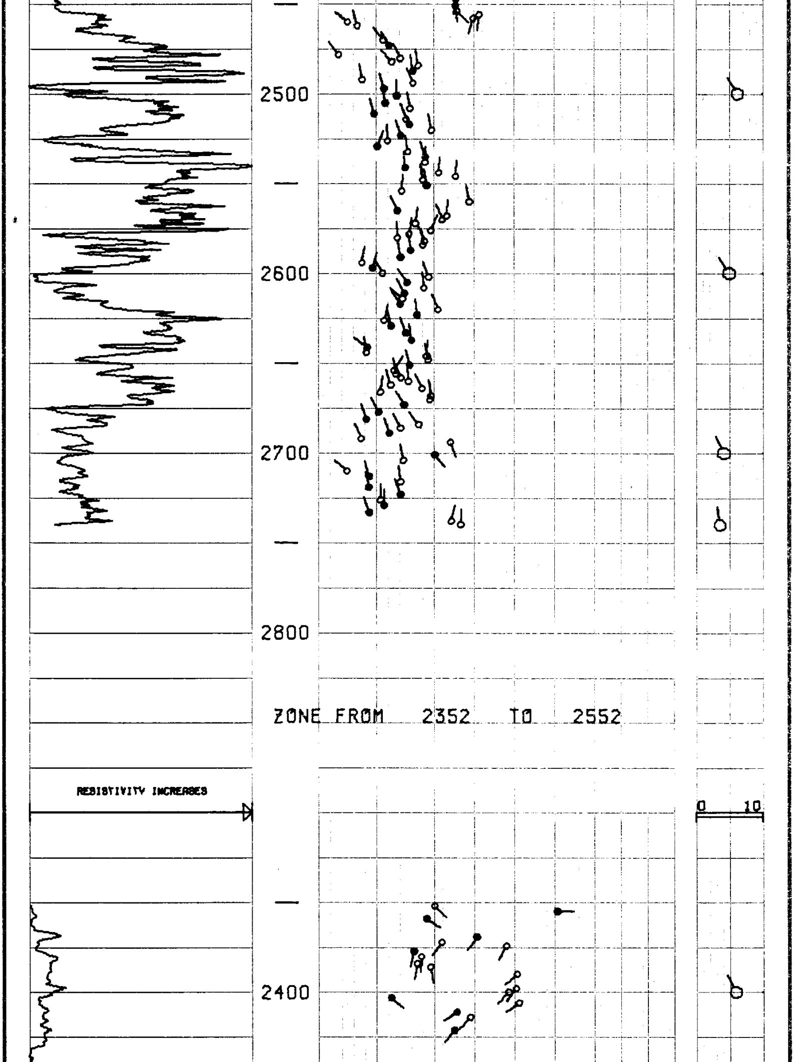
SCHLUMBERGER DIPMETER ARROW PLOT

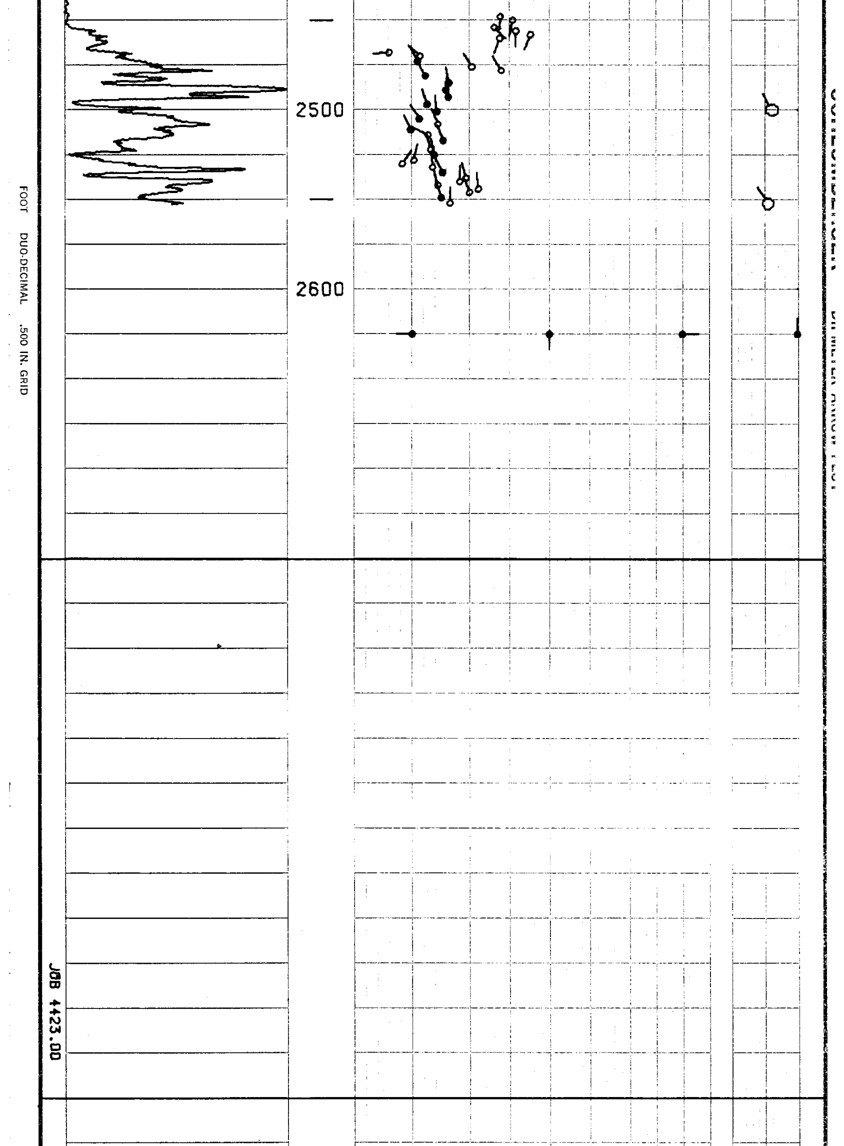
6-08-80 SAT 1239670

FOOT DUO-DECIMAL .500 IN. GRID









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 4423

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

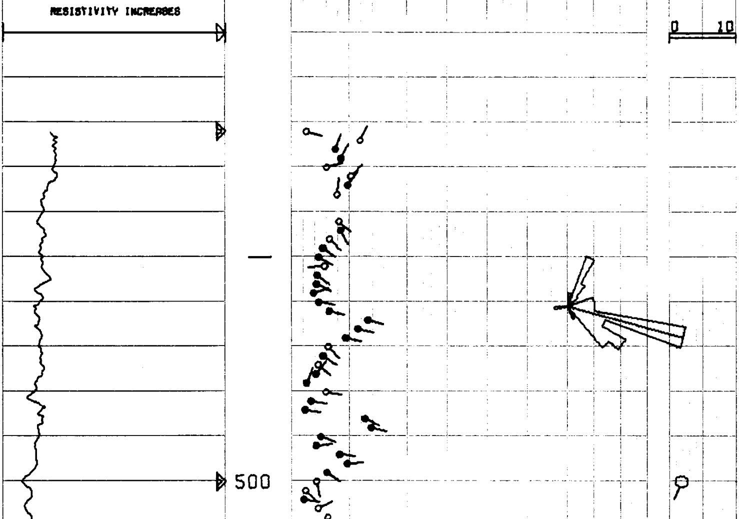
CORRELATION LENGTH 4 FT.

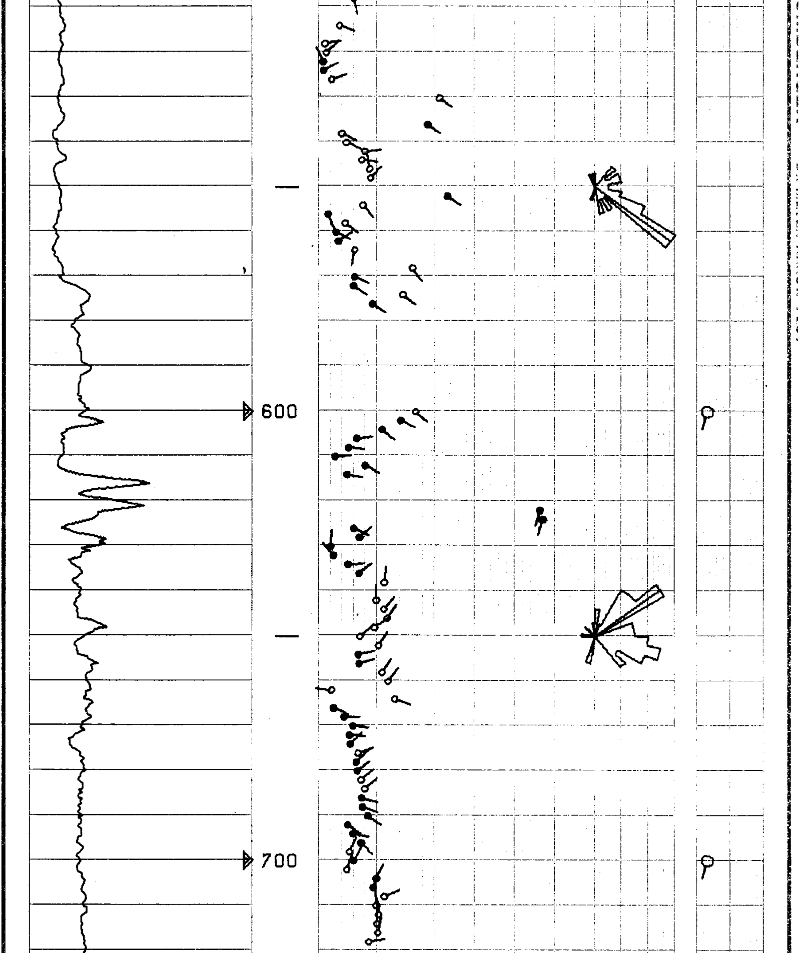
STEP LENGTH 2 FT.

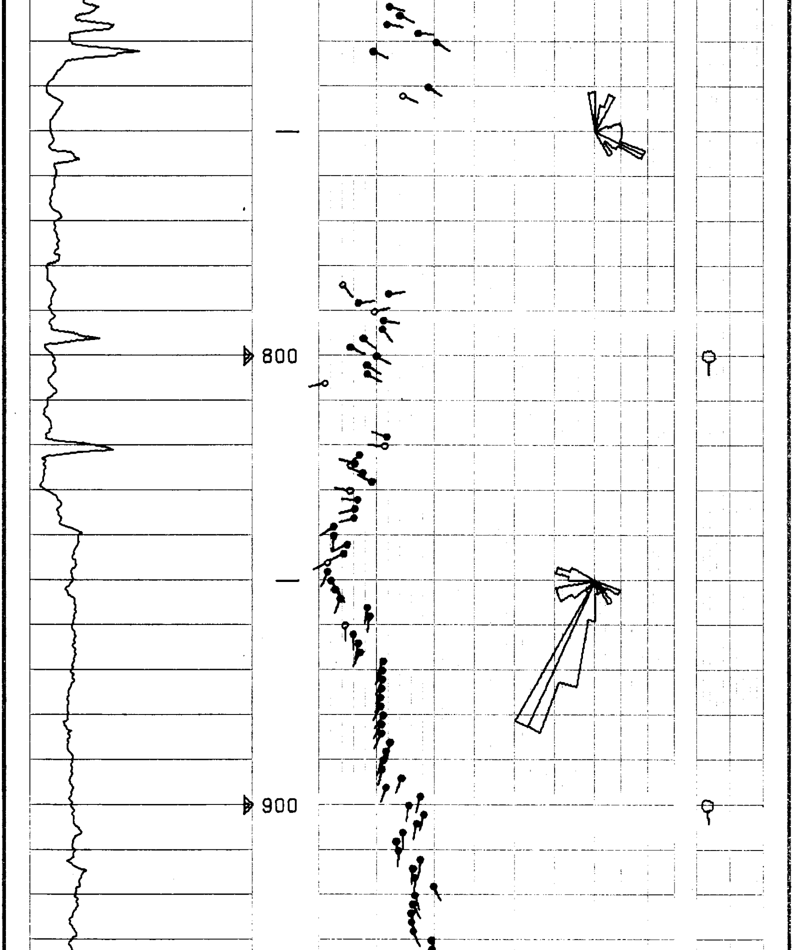
SEARCH ANGLE 30 DEGREES X2

PC0130023518307001020420

ZONE FROM 422 TO 2766







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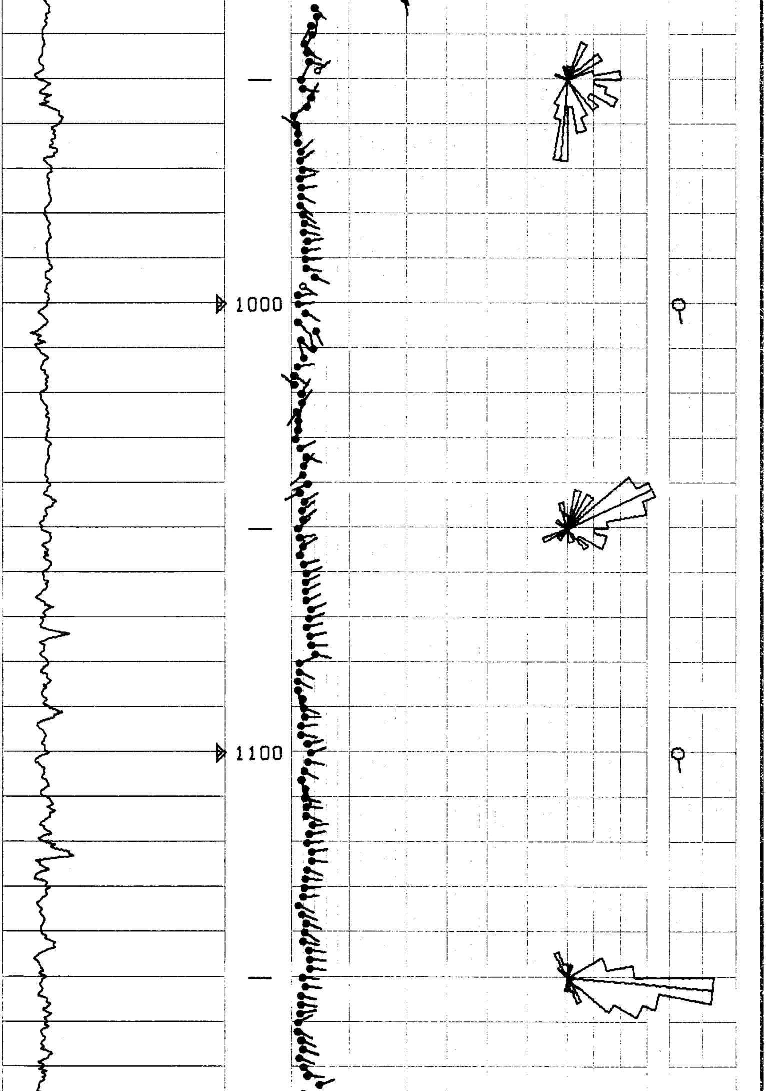

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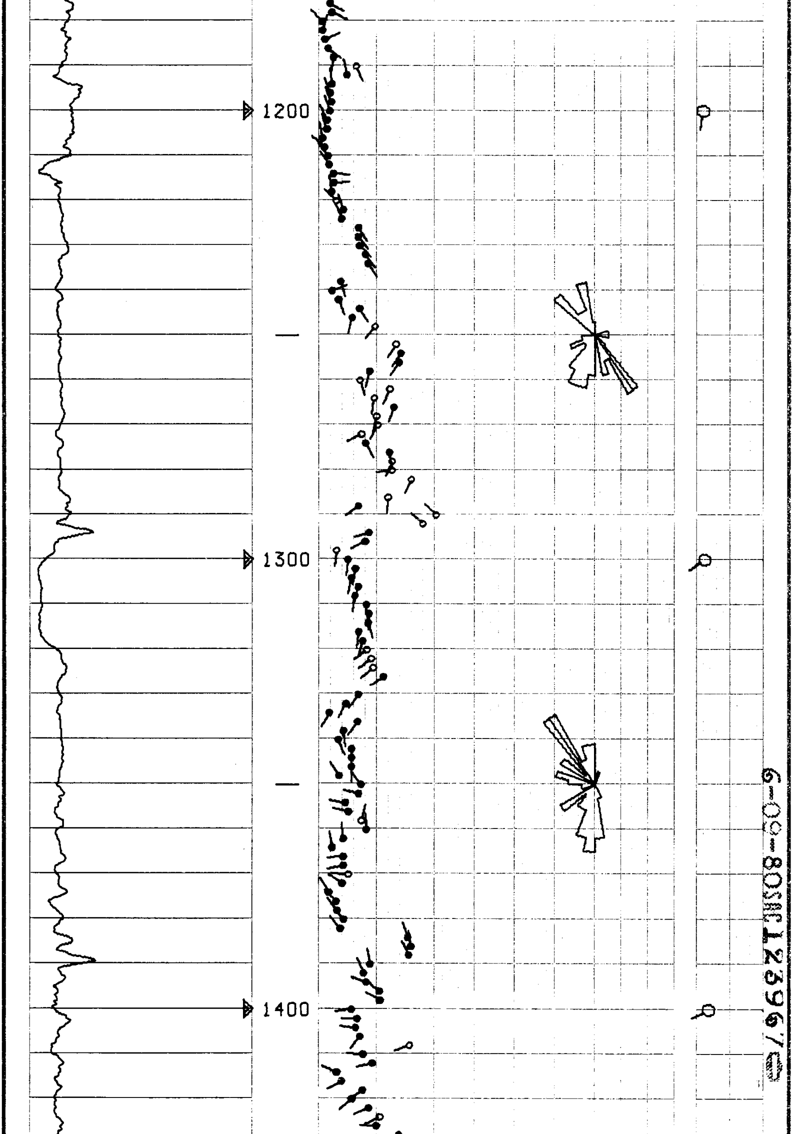

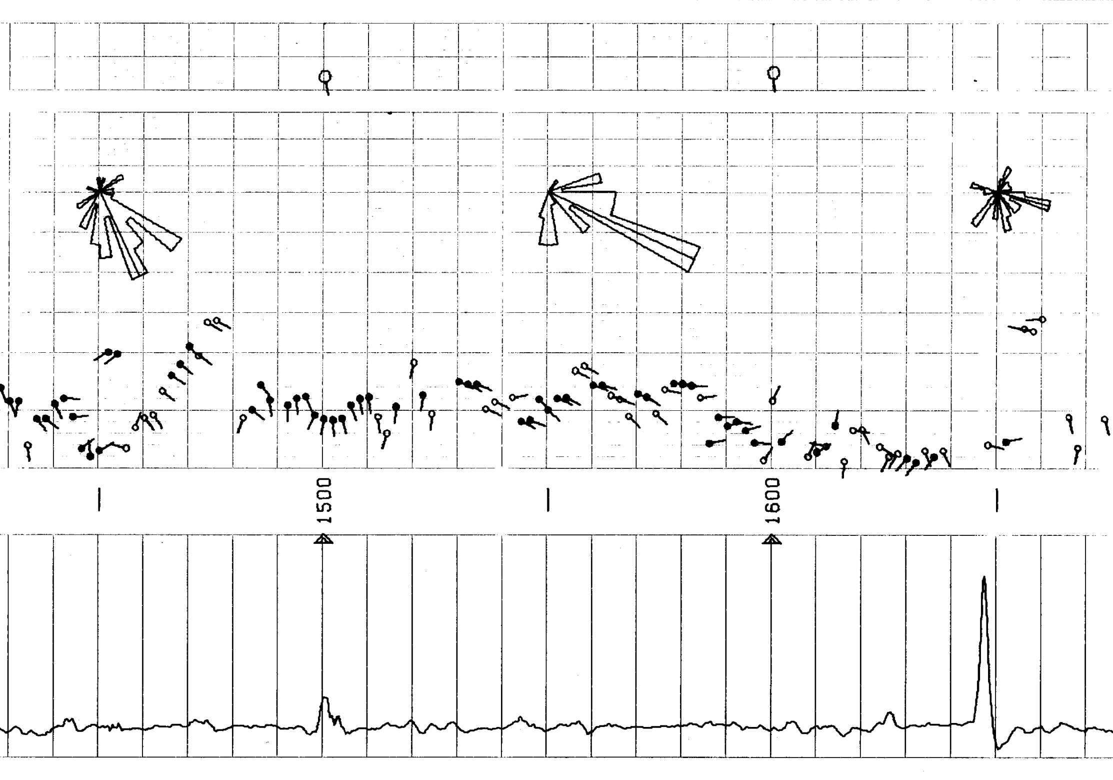

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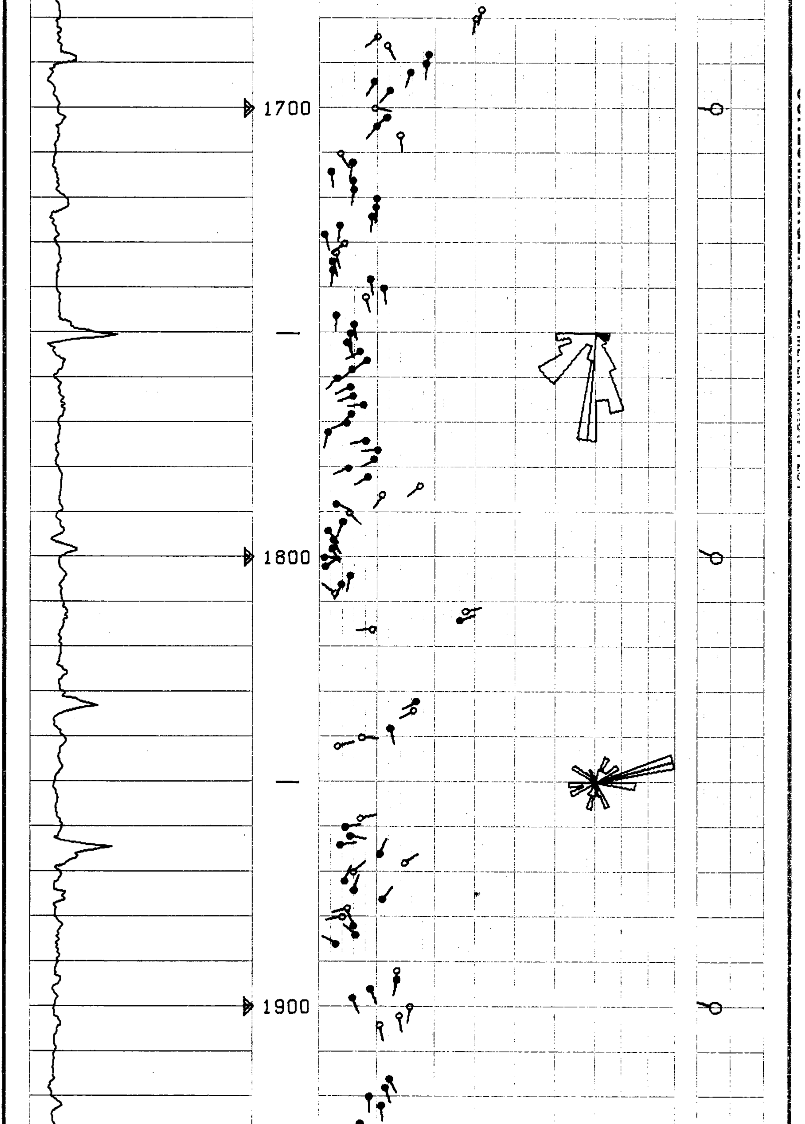
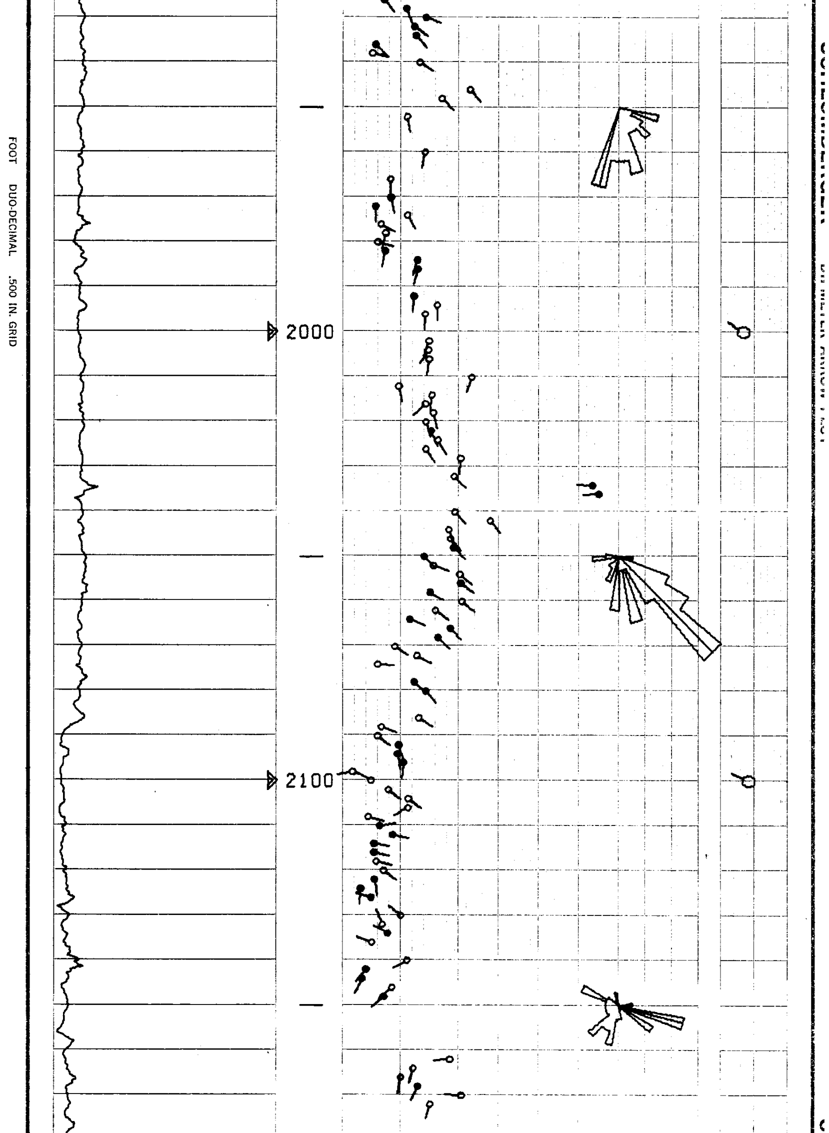
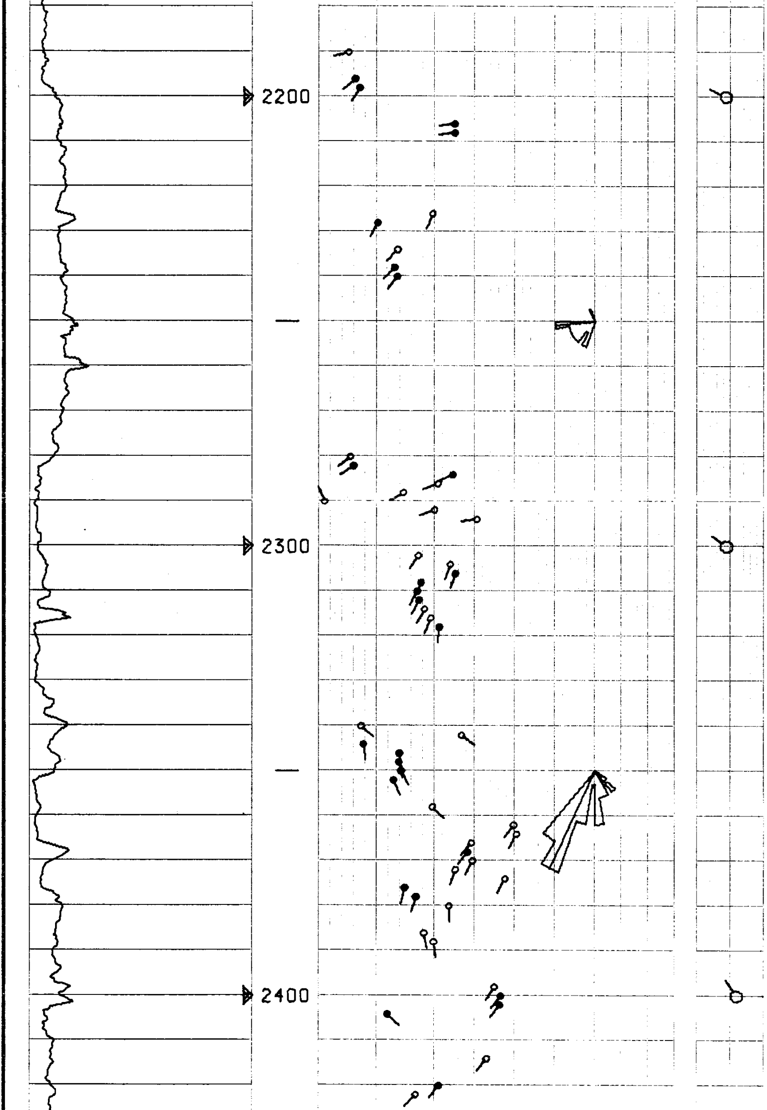


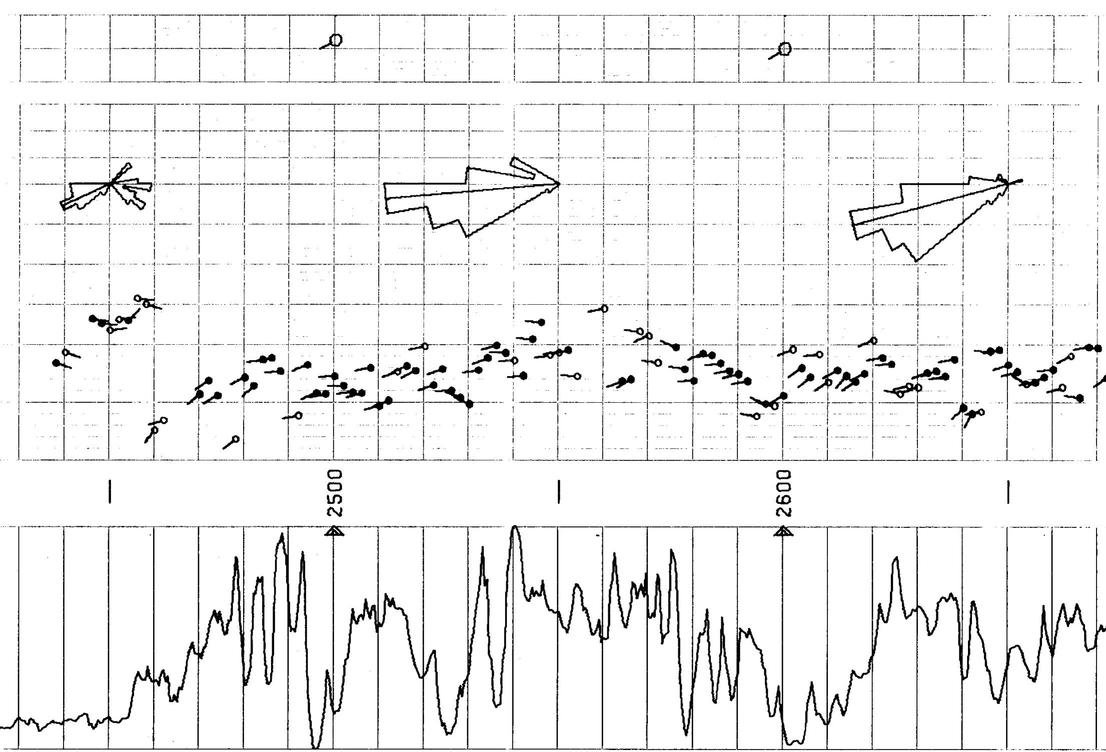


DIPMETER ARROW PLOT



FOOT DUO-DECIMAL .500 IN. GRID

DIPMETER ARROW PLOT



FOOT DUO-DECIMAL .500 IN. GRID

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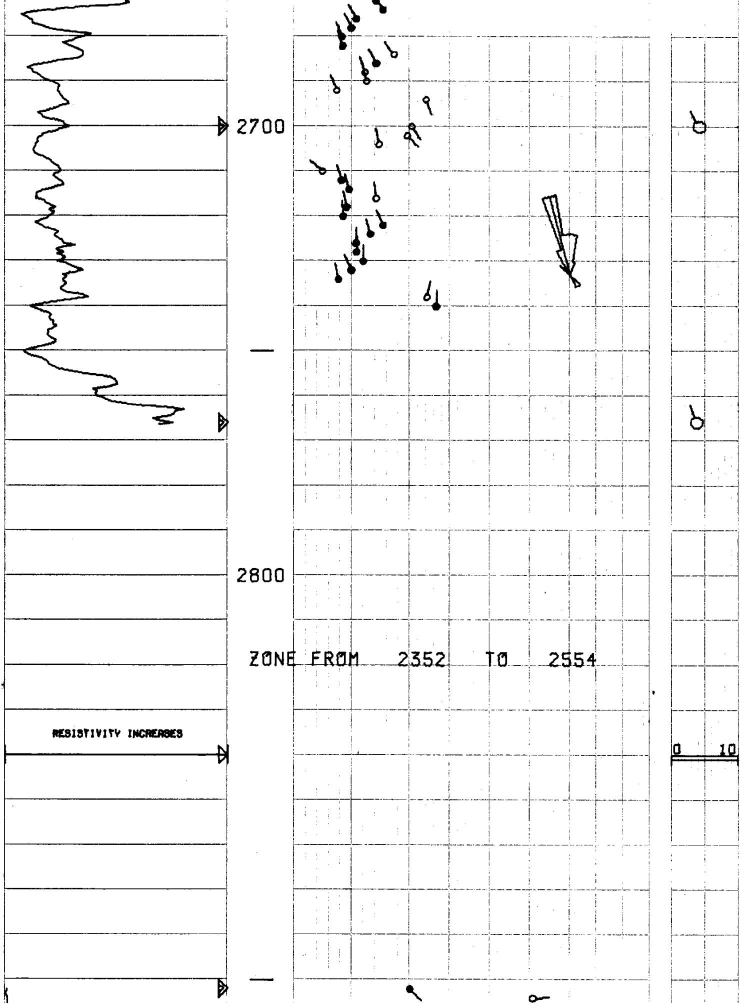
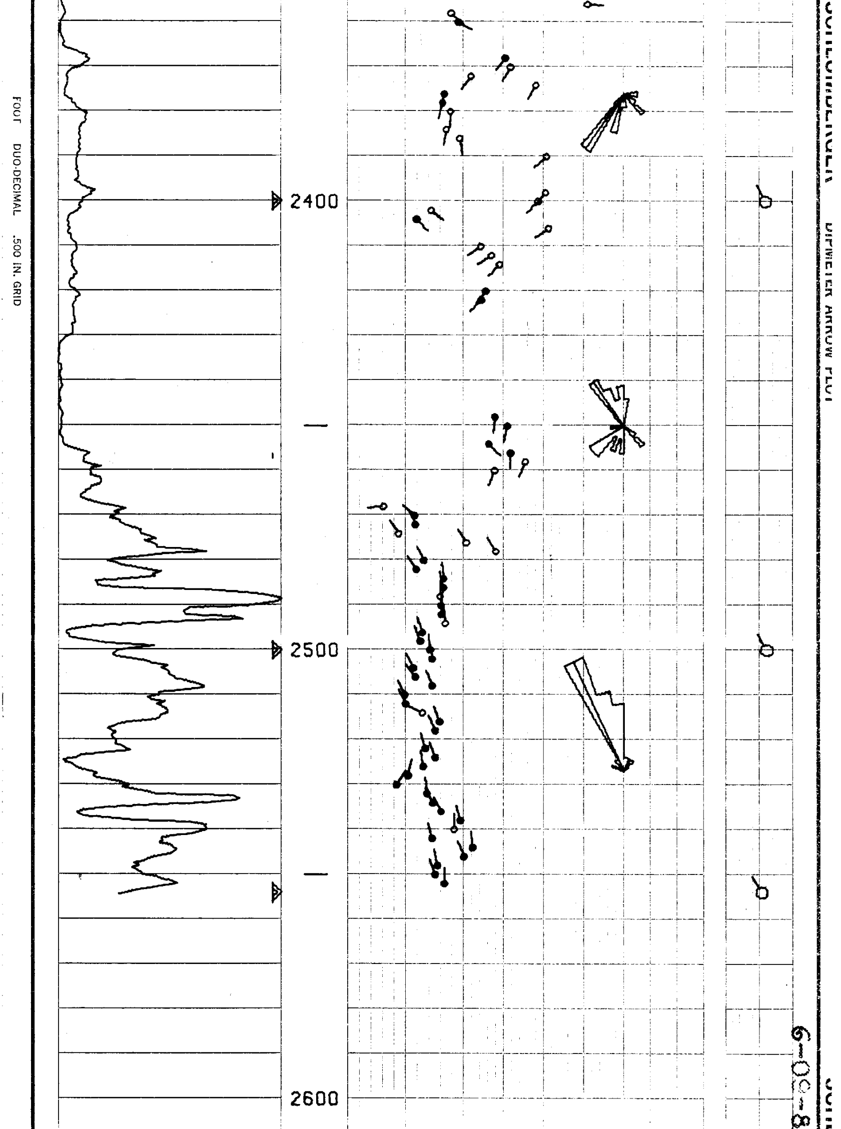
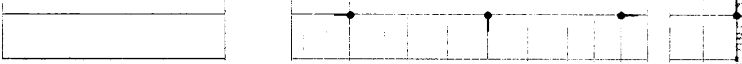


DIPMETER ARROW PLOT





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. 33-3

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA STATE CALIFORNIA

Rm 1.40 @ 63 °F
Rmf 1.80 @ 52 °F
Rmc 2.01 @ 52 °F
BHT 92 °F

SCHL. FR 2774
SCHL. TD 2777
DRLR TD 2777
Elev:
KB 1039.3
DF --
GL 1028.8