COUNTY COLUMBIA
FIELD or LOCATION 13-6N-5W
WELL WHITE 33-13
COMPANY REICHHOLD ENERGY

Schlumberger

FOUR — ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
(COMPUTED)

COMPANY REICHHOLD ENERGY CORPORATION

WELL WHITE 33-13

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA STATE OREGON

LOCATION: 1800'NORTH & 1700'WEST FROM THE SOUTHEAST CORNER OF:

Sec. 13 Twp. 6N Rge. 5W

Other Services:
DI-SFL
BHC

Permanent Datum: GL, Elev. 555.68
Log Measured From KB 10.5 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 566.18
D.F. --
G.L. 555.68

RECEIVED-PTLD
JUL 1 1980
DEPT OF GEOLOGY & MINERAL INDUS

Date	5-17-80			
Run No.	ONE			
Depth—Driller	2708			
Depth—Logger	2704			
Btm. Log Interval	2703			
Top Log Interval	406			
Casing—Driller	7" @ 406	@	@	@
Casing—Logger	406			
Bit Size	6¼"			
Type Fluid in Hole	LIGNOSULFO-NATE			
Dens. | Visc.	74 | 45			
pH | Fluid Loss	10.5 | 8 ml	ml	ml	ml
Source of Sample	CIRCULATION			
R_m @ Meas. Temp.	1.9 @ 70 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	2.32 @ 64 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	2.3 @ 80 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	C | C			
R_m @ BHT	1.4 @ 94 °F	@ °F	@ °F	@ °F
Time Since Circ.	9HOURS 15MIN			
Max. Rec. Temp.	110°F	°F	°F	°F
Equip. | Location	7763 | SAC			
Recorded By	ANDERSEN			
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.	1702			
Magnetic Declination	20°			
Analog Panel No.	--			
Digital Panel No.	1876			
Correlated By	--			
Computed By	PCDCC			
Plotted By	PCDCC			
Remarks —	SERVICE ORDER NO. 123995			

"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′)
1	1.75	17.5	92.2
2	3.5	35.	184.
3	5.2	52.	277.
4	7.0	70.	369.
5	8.8	88.	462.
6	10.5	105.	555.
7	12.3	123.	648.
8	14.1	141.	742.
9	15.8	158.	836.
10	17.6	176.	931.
11	19.4	194.	1026.
12	21.3	213.	1122.
13	23.1	231.	1219.
14	24.9	249.	1316.
15	26.8	268.	1415.
16	28.7	287.	1514.
17	30.6	306.	1614.
18	32.5	325.	1716.

DIP ANGLES (degrees)	VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF 100′	1000′	1 mile (5280′)
19	34.4	344.	1818.
20	36.4	364.	1922.
21	38.4	384.	2027.
22	40.4	404.	2133.
23	42.5	425.	2241.
24	44.5	445.	2351.
25	46.6	466.	2462.
30	57.7	577.	3048.
35	70.0	700.	3697.
40	83.9	839.	4430.
45	100.0	1000.	5280.
50	119.2	1192.	6293.
55	142.8	1428.	7540.
60	173.2	1732.	9145.
65	214.4	2144.	11323.
70	274.8	2748.	14507.
75	373.2	3732.	19705.
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°

REICHOLD ENERGY CORP.
WHITE 33-13
MIST NEHALEM BASIN FIELD
COLUMBIA COUNTY,OREGON
RUN NO. ONE 10-MAY-
P.C.D.C.
ARROW PLOT FROM CLUSTER P

CORRELATION LENGTH 4
STEP LENGTH 2
SEARCH ANGLE 30 DE
HDT-D TTR PDP/11

5-22-80 [illegible] 12895

SCHLUMBERGER

DIPMETER ARROW PLOT

JOB 4373.DD

GREES X2

FT.

FT.

ROGRAM

80

CORRELATION CURVE

DEPTHS

DIP ANGLE AND DIRECTION

0 10 20 30 40 50 60 70 80 90

BOREHOLE DRIFT

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

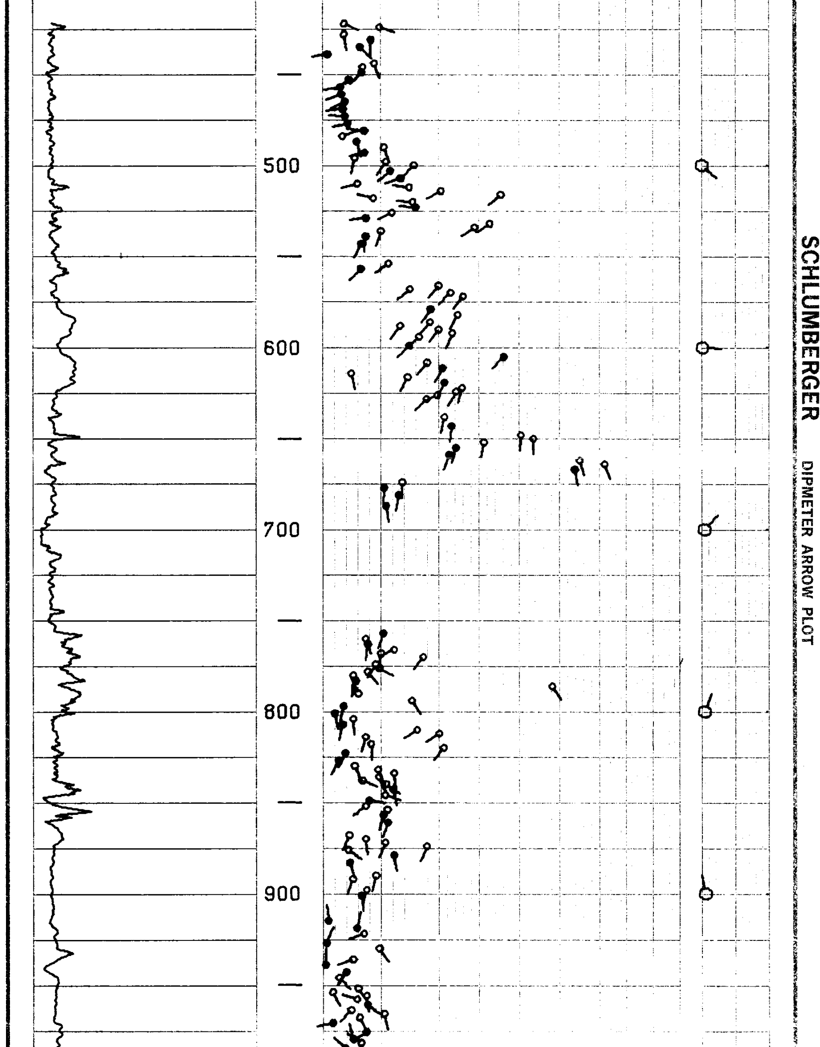
PC013002351830700102042O

ZONE FROM 422 TO 2697

RESISTIVITY INCREASES

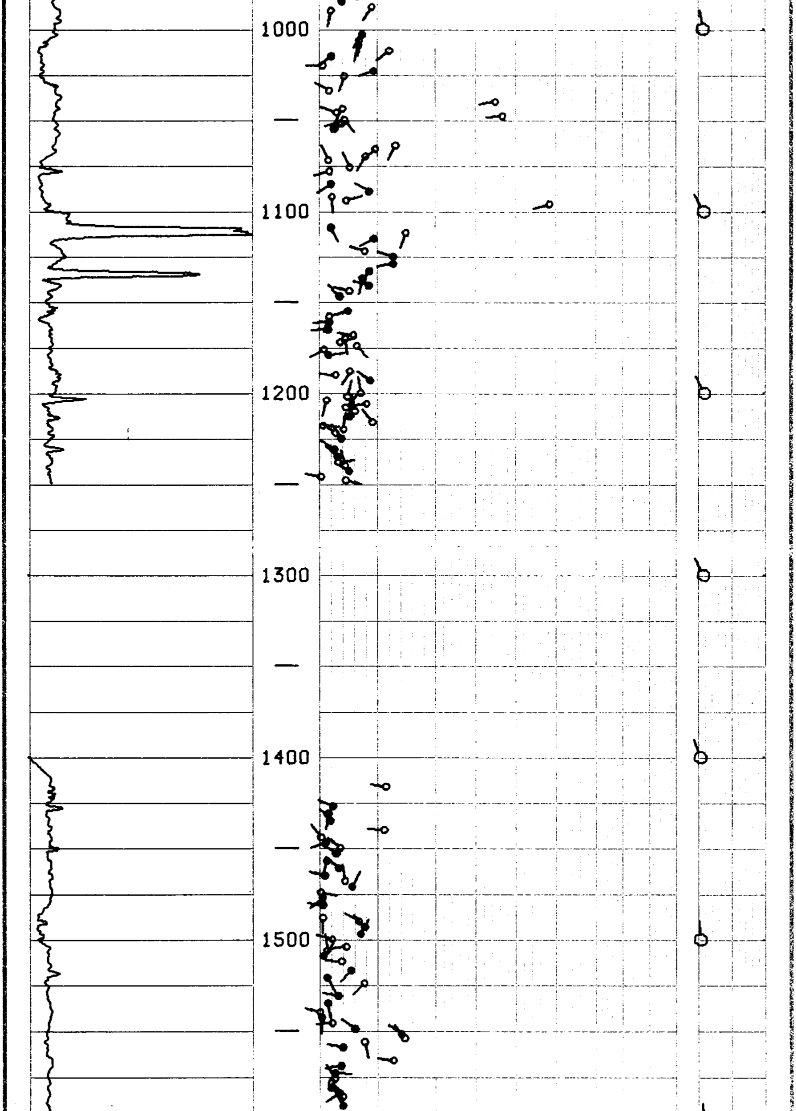
0 10

FOOT DUO-DECIMAL .500 IN. GRID



SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID



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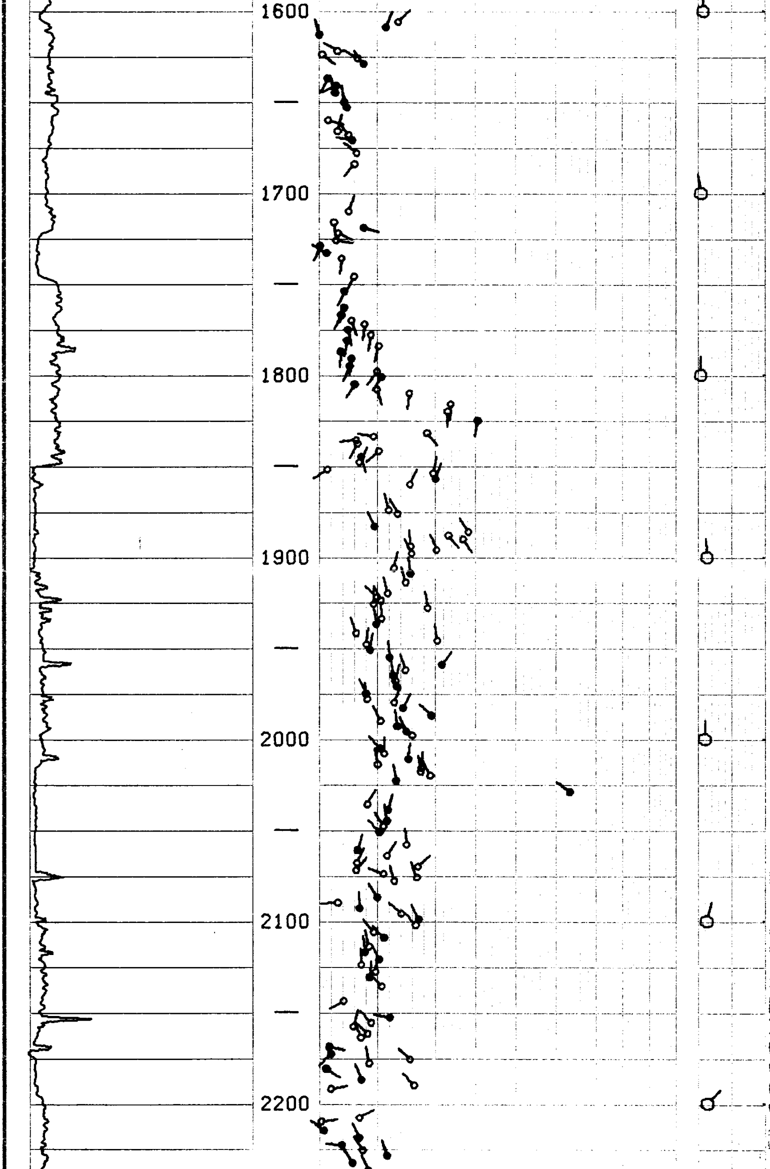
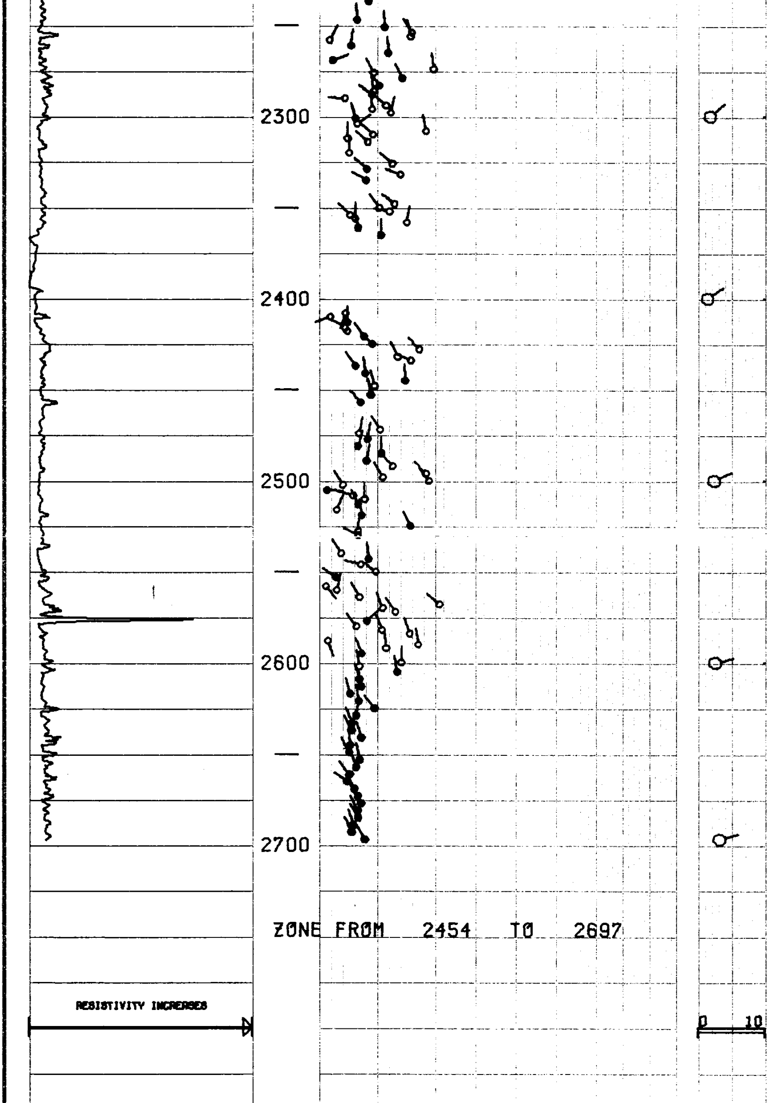


SCHLUMBERGER DIPMETER ARROW PLOT

5-28-80SAC12995

SCHLUMBERGER DIPMETER ARROW PLOT



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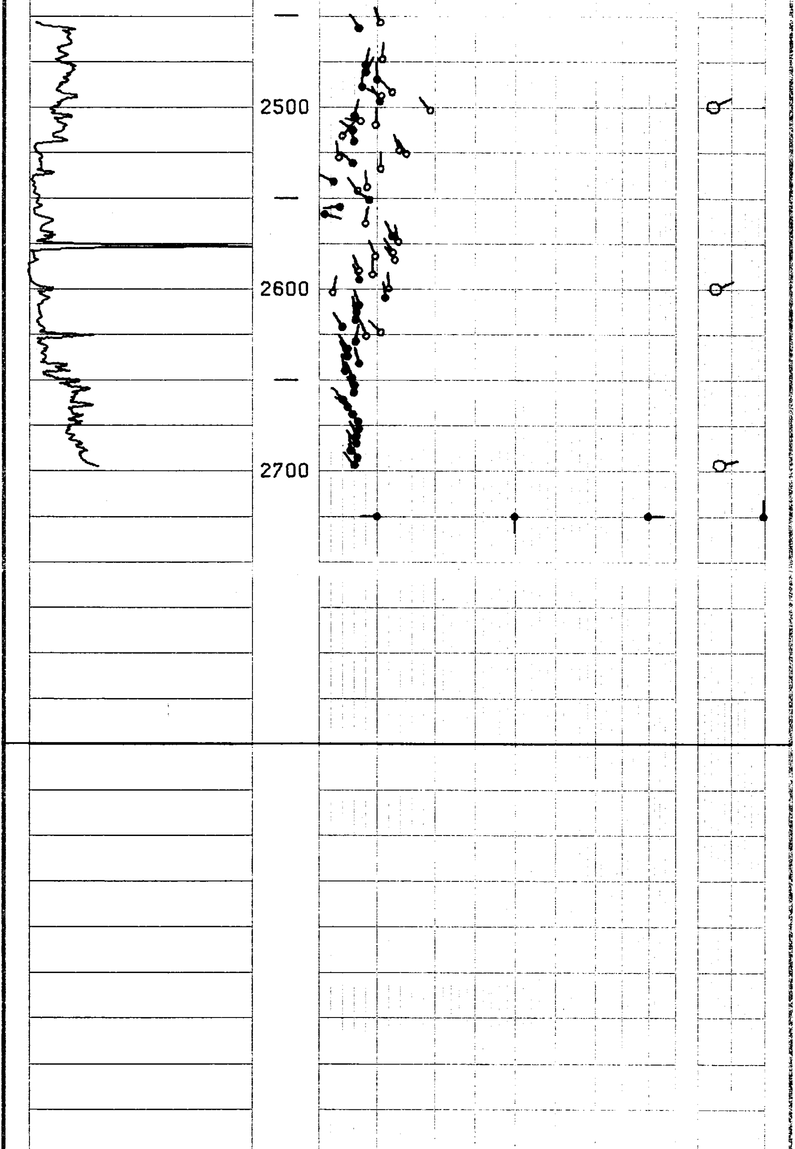
SCHLUMBERGER DIPMETER ARROW PLOT



FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER

DIPMETER ARROW PLOT

JOB 4373.00

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 4373

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

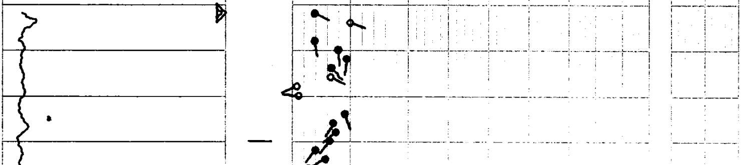
SEARCH ANGLE 30 DEGREES X2

PC01300235183070001020420

ZONE FROM 422 TO 2698

RESISTIVITY INCREASES

0 10



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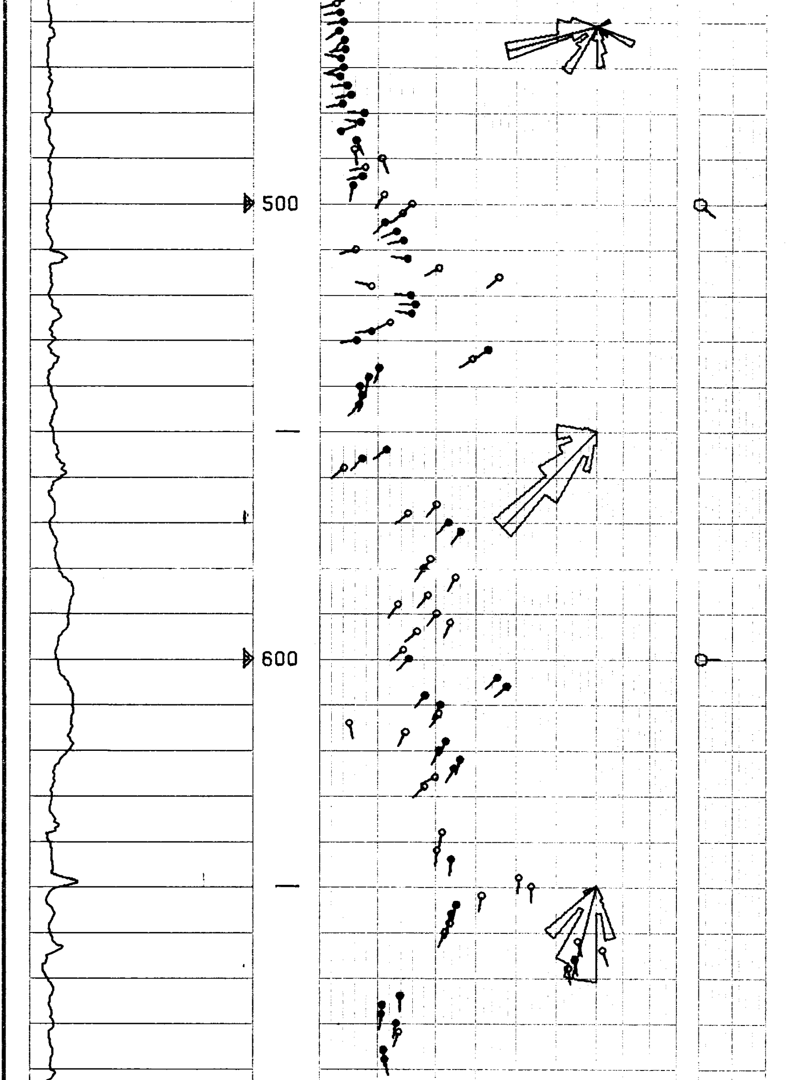

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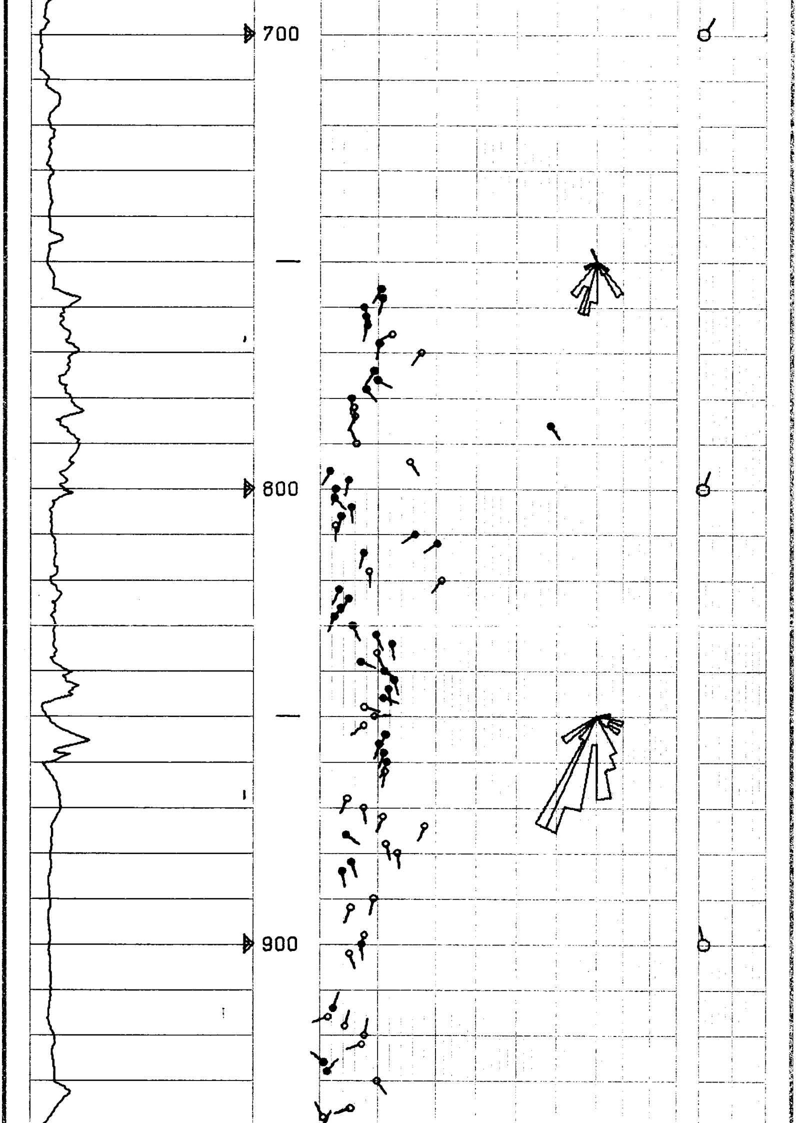
SCHLUMBERGER

DIPMETER ARROW PLOT

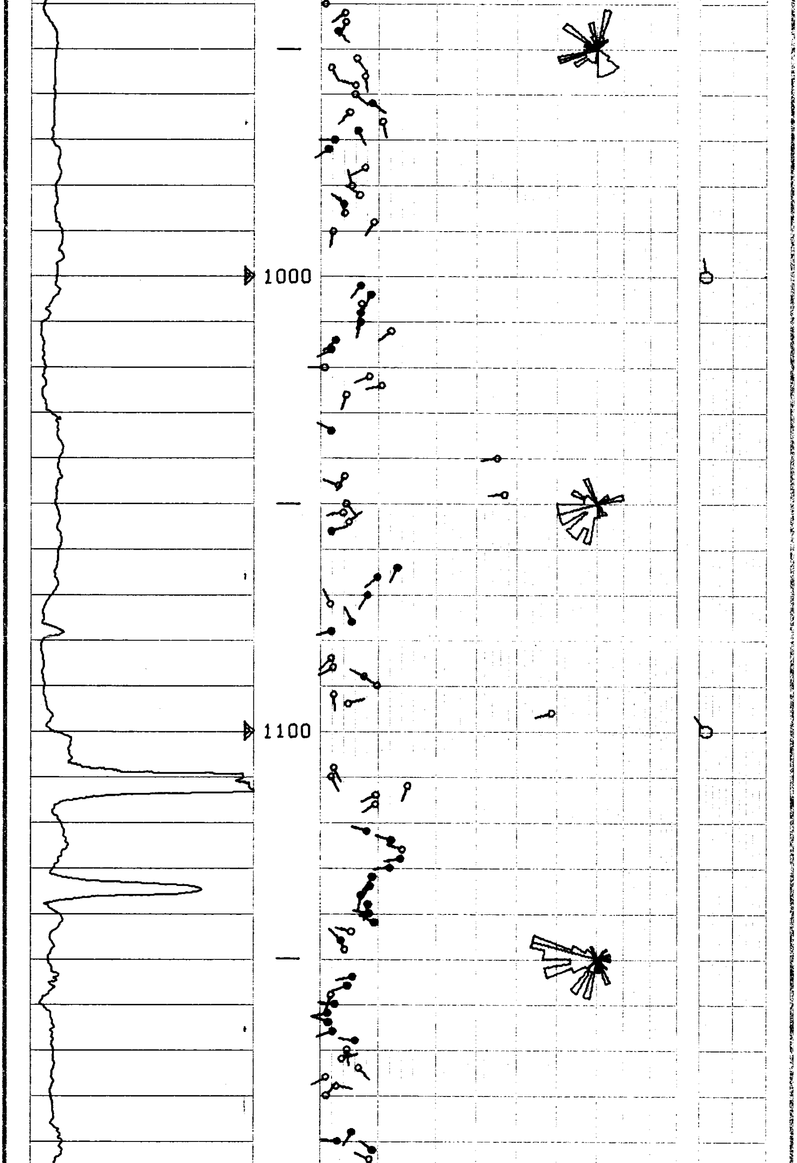


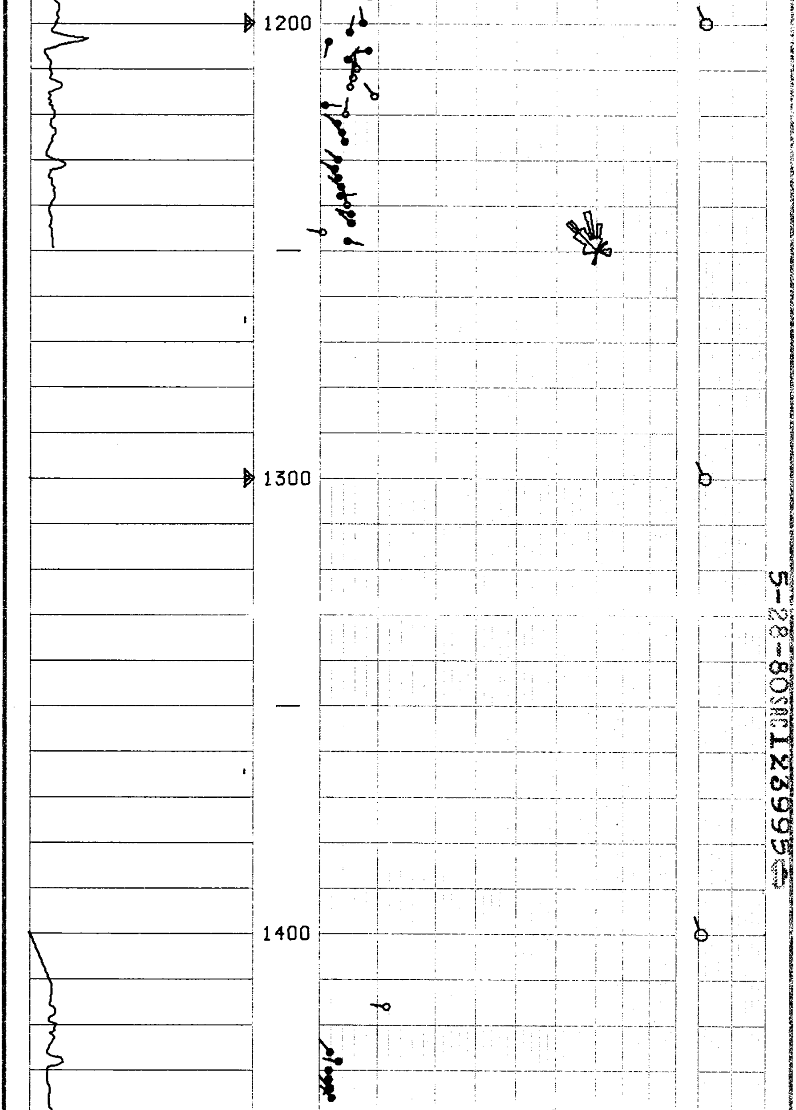
FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER

DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID





SCHLUMBERGER DIPMETER ARROW PLOT

5-28-80 SRC 123995

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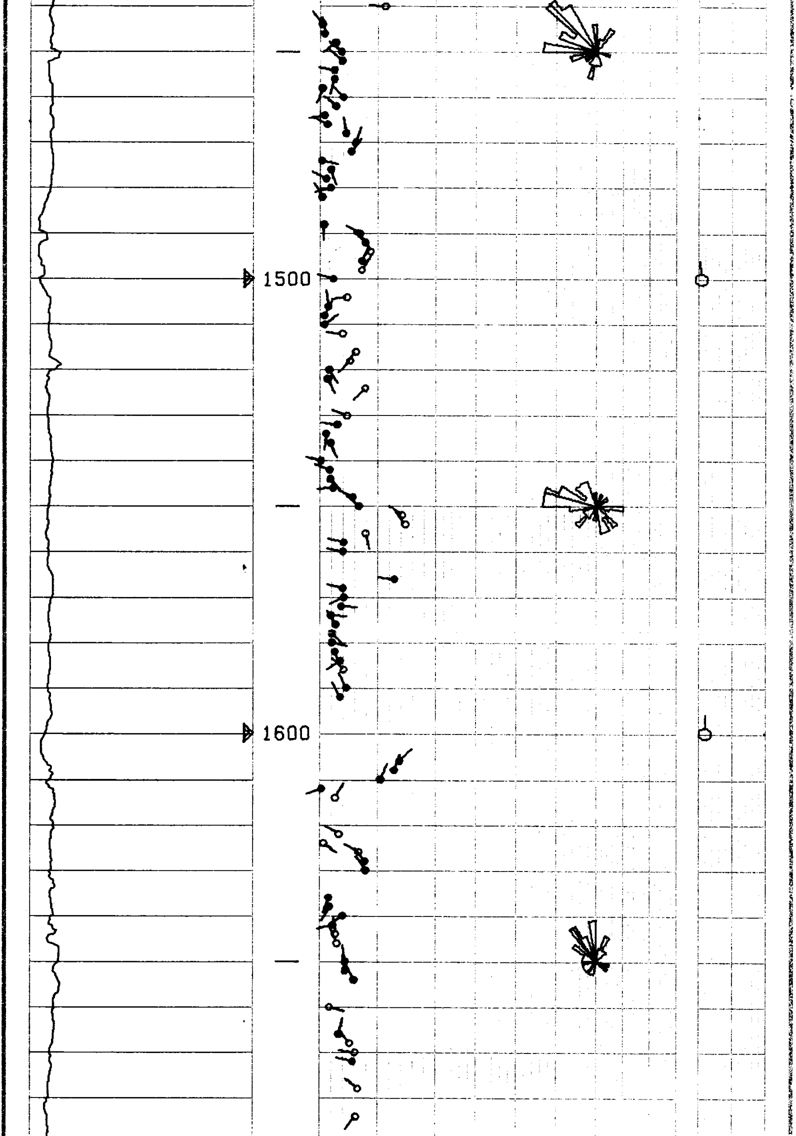
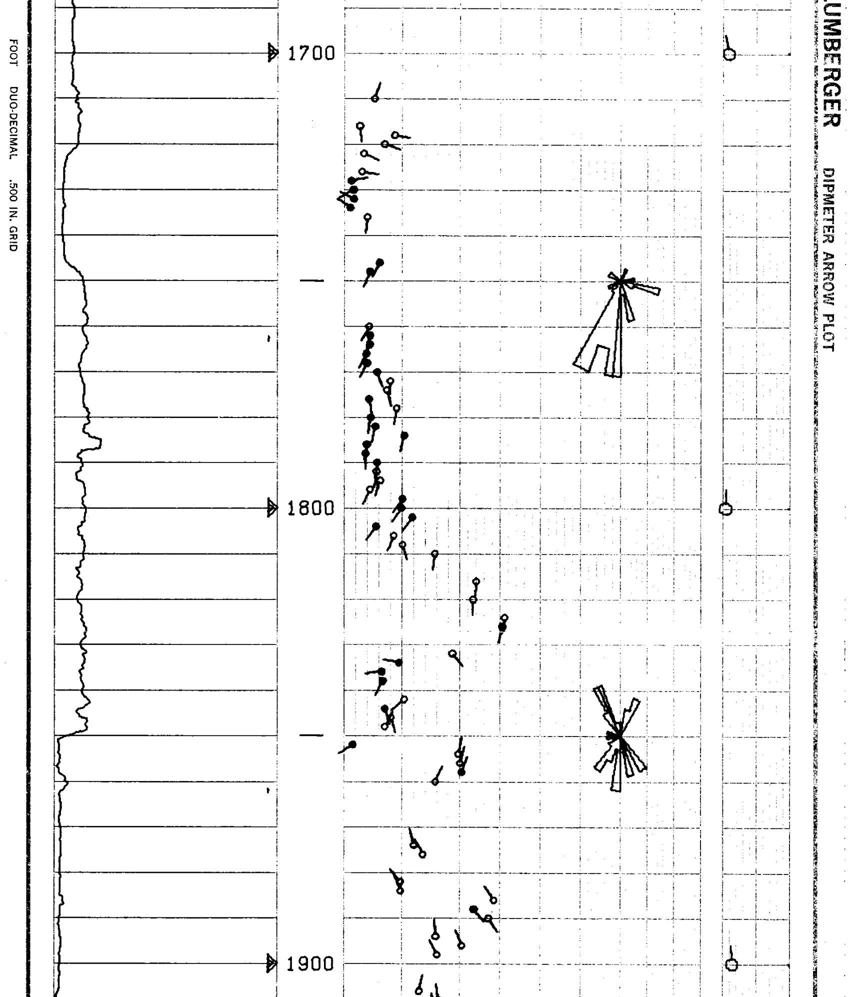
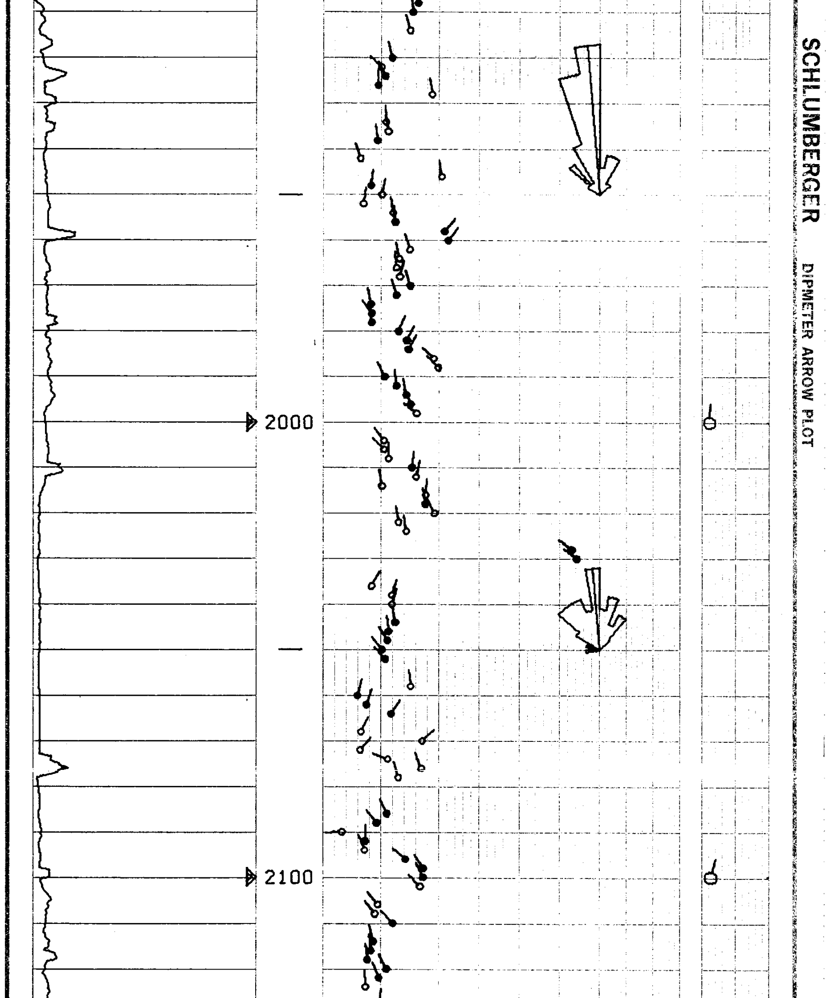


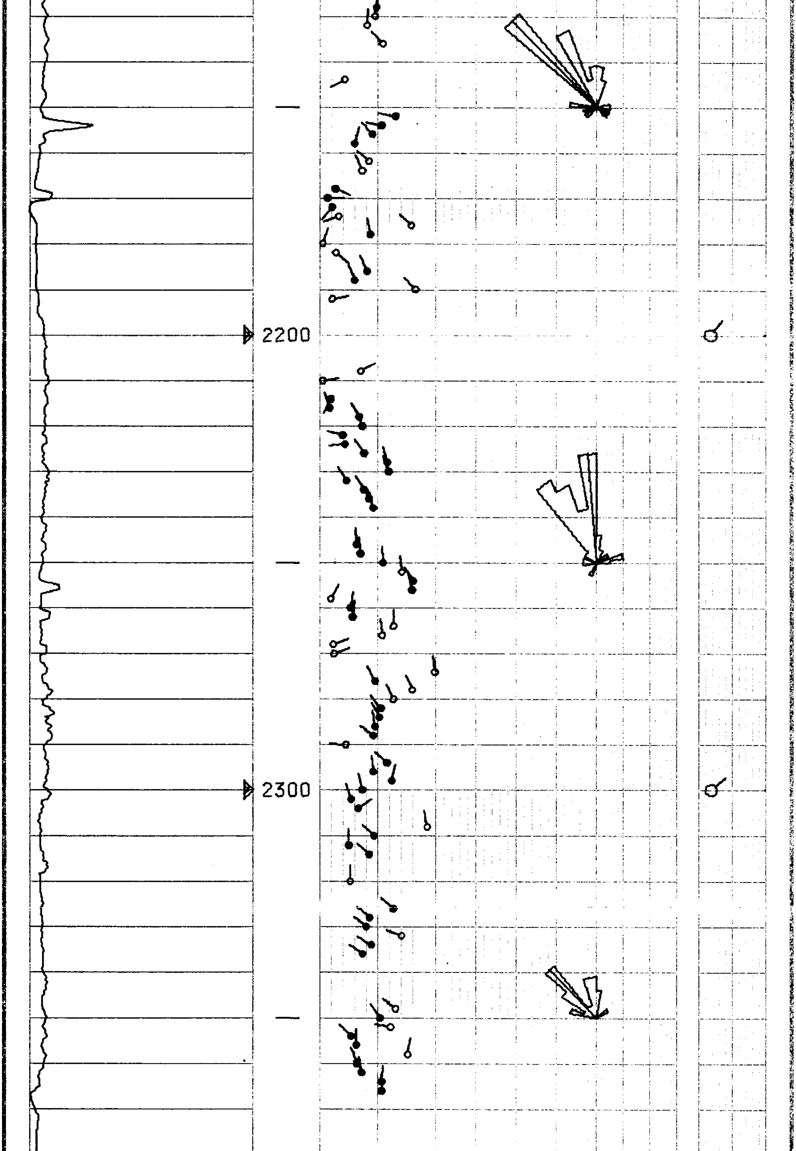



SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER

DIPMETER ARROW PLOT



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SCHLUMBERGER DIPMETER ARROW PLOT

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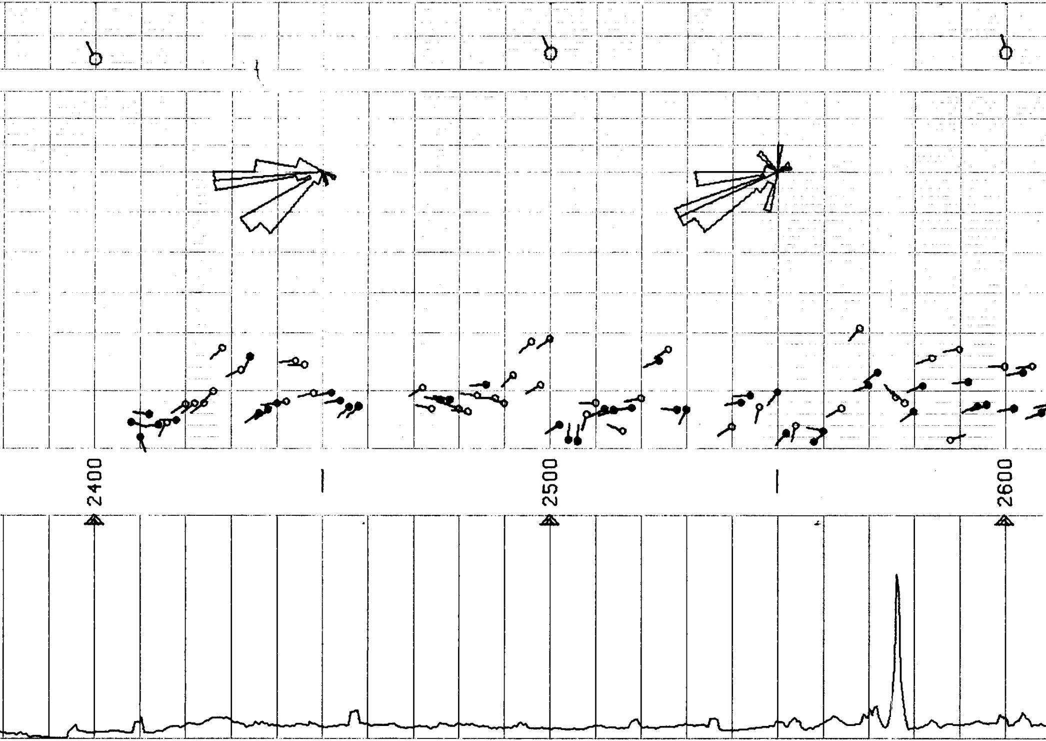
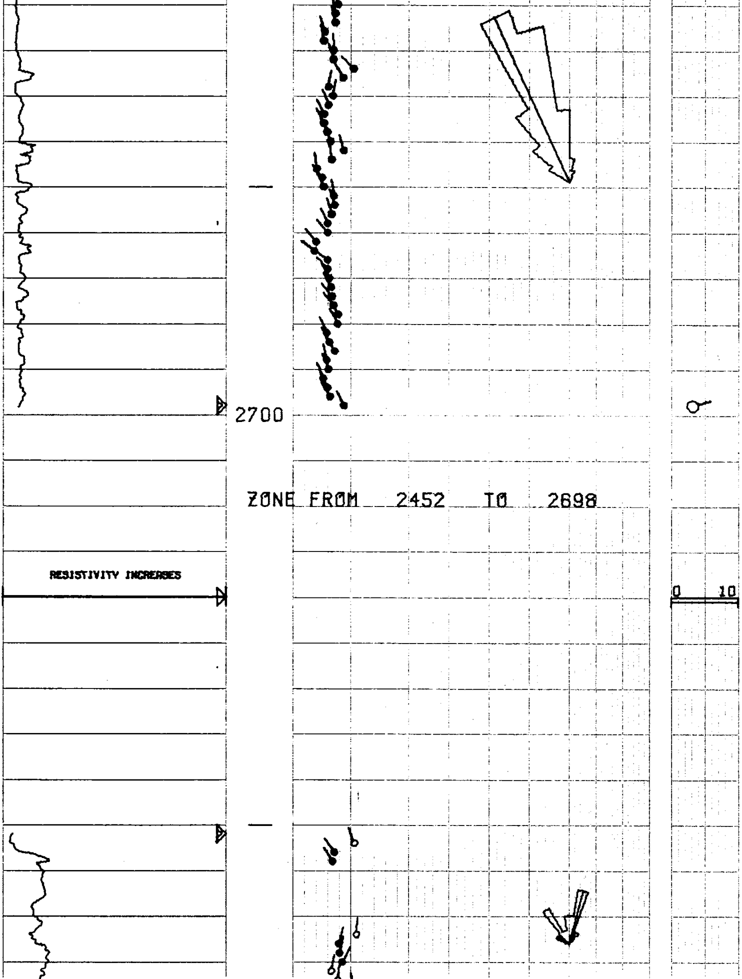


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER

DIPMETER ARROW PLOT

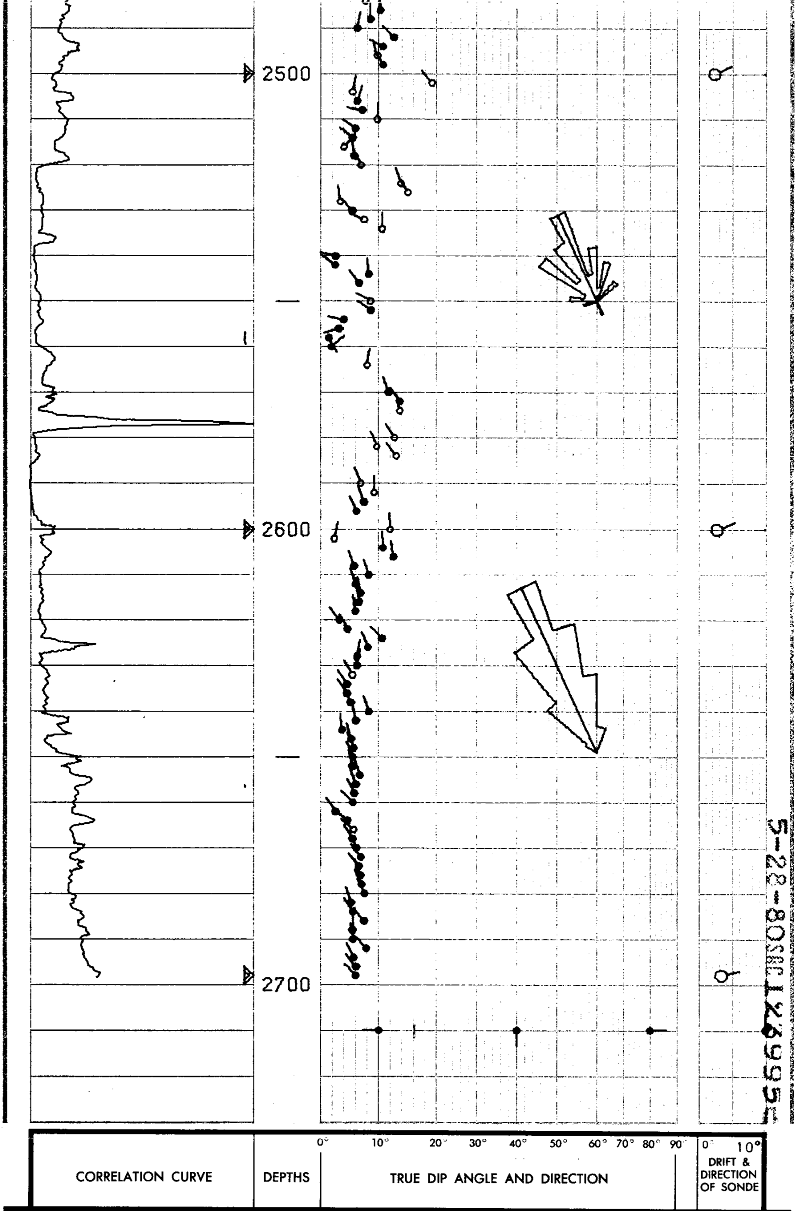


FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID

5-22-80 SEC 12695



COMPANY REICHHOLD ENERGY CORPORATION	Rm 1.9 @ 70 °F	SCHL. FR 2703
WELL WHITE 33-13	Rmf 2.32 @ 64 °F	SCHL. TD 2704
FIELD MIST NEHALEM BASIN	Rmc 2.3 @ 80 °F	DRLR TD 2708
COUNTY COLUMBIA STATE OREGON	BHT 110 °F	Elev: KB 566.18 DF -- GL 555.68