COUNTY	COLUMBIA
FIELD or LOCATION	1-6N-5W
WELL	COLUMBIA COUNTY #13-1 RD#1
COMPANY	REICHHOLD ENERGY

Schlumberger

FOUR – ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
(COMPUTED)

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY #13-1 RD#1

FIELD MIST

COUNTY COLUMBIA **STATE** OREGON

LOCATION
1393' NORTH & 1252' EAST FROM
THE SOUTHWEST CORNER OF:
Sec. 1 Twp. 6N Rge. 5W

Other Services:
-

Permanent Datum: GL, Elev. 1163.2
Log Measured From KB, 11.4 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 1174.6
D.F. ------
G.L. 1163.2

RECEIVED-PTLD
MAY 18 1982
DEPT OF GEOLOG

Date	9 MAY 82			
Run No.	ONE			
Depth—Driller	3028			
Depth—Logger	3015			
Btm. Log Interval	3010			
Top Log Interval	437			
Casing—Driller	7" @436	@	@	@
Casing—Logger	437			
Bit Size	6¼"			
Type Fluid in Hole	GEL WATER -			
Dens. | Visc.	11.5 | 45.0			
pH | Fluid Loss	9.5 | 6.5 ml	ml	ml	ml
Source of Sample	MUD PIT			
R_m @ Meas. Temp.	6.55 @ 58 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	6.93 @ 45 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	4.12 @ 45 °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	M | M			
R_m @ BHT	5.01 @ 78 °F	@ °F	@ °F	@ °F
Time Since Circ.	0730			
Max. Rec. Temp.	78 °F	°F	°F	°F
Equip. | Location	8216 | SAC			
Recorded By	COLLINS			
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	[illegible]			
HDM No.	[illegible]			
Magnetic Declination	18° E			
Analog Panel No.	-			
Digital Panel No.	1891			
Correlated By	PCDCC			
Computed By	PCDCC			
Plotted By	PCDCC			

Remarks —SERVICE ORDER NO. 205640. OVERLAP TAKEN FROM 810' TO 950' TO REGAIN DATA FROM FOURTH PAD. LOW ANGLE UNIT (0-36°).

"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.

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.
COLUMBIA COUNTY #13-1 RD#1
MIST FIELD
COLUMBIA COUNTY, OREGON
RUN NO. ONE 09-MAY-82
P.C.C.C.
ARROW PLOT FROM CLUSTER PROGRAM

CORRELATION LENGTH 4 FT.
STEP LENGTH 2 FT.
SEARCH ANGLE 30 DEGREES X2
HDT-C CSU VAX 11/780

JOB 6401

SCHLUMBERGER DIPMETER ARROW PLOT

FOOT DUO-DECIMAL .500 IN. GRID

.00

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 454 TO 3003

CORRELATION CURVE

DEPTHS

DIP ANGLE AND DIRECTION

BOREHOLE DRIFT

CALIPERS

6 C1-3 — — — C2-4 — — — — — 16

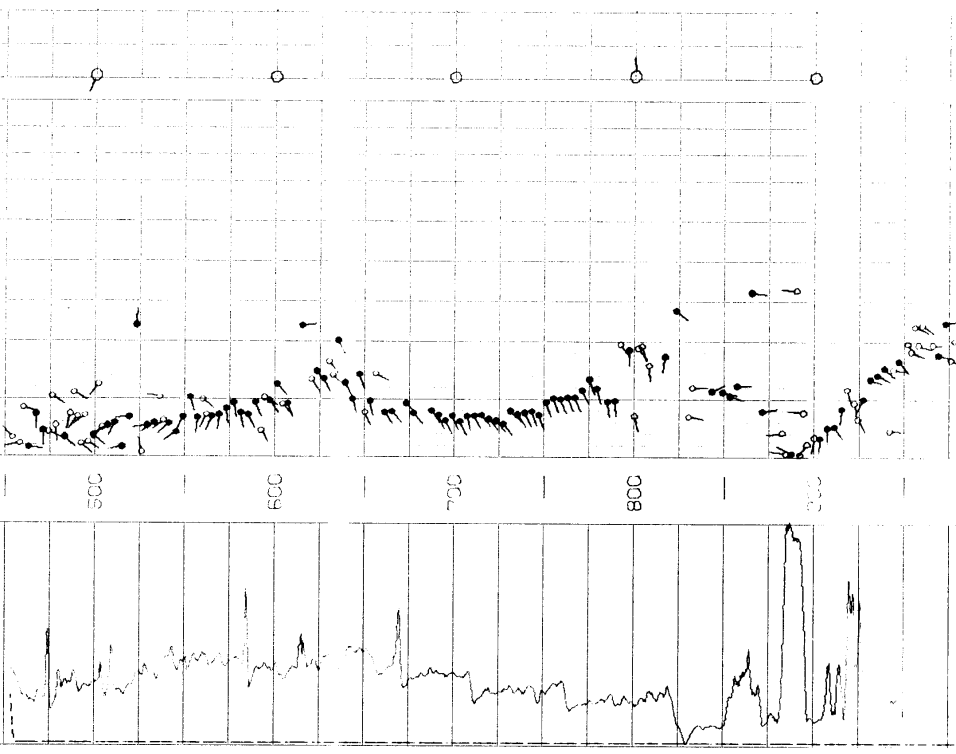
RESISTIVITY INCREASES

0 10 20 30 40 50 60 70 80 90

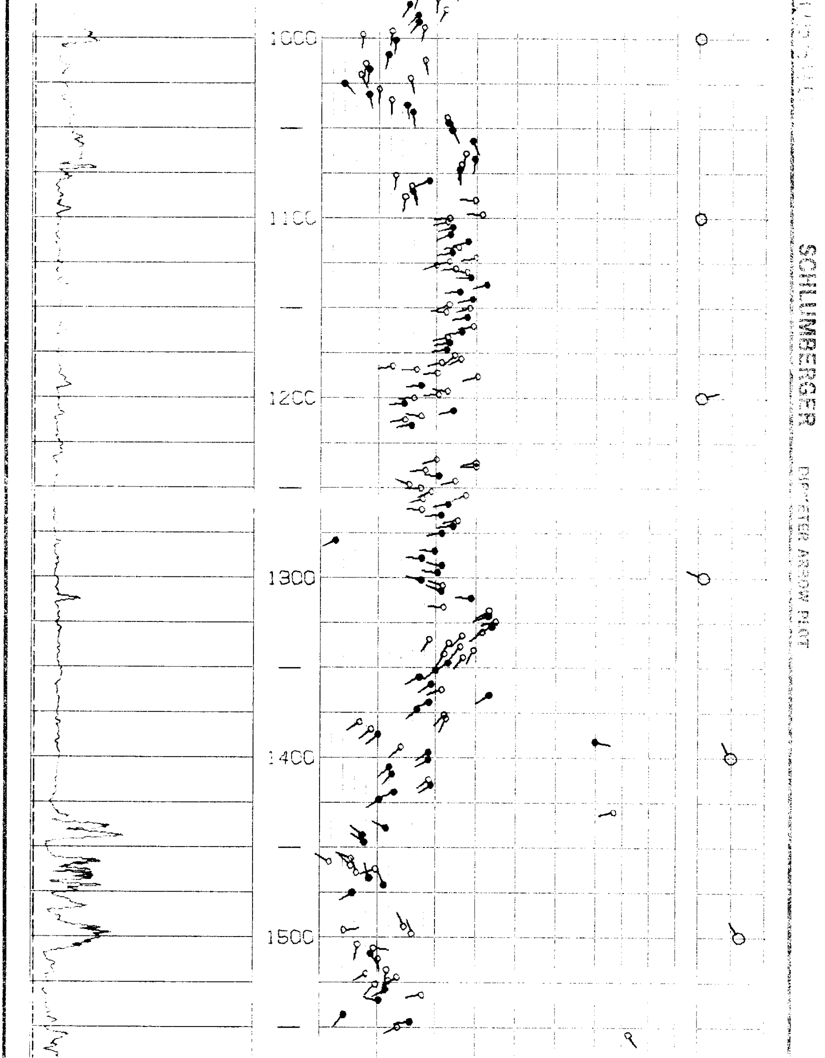
0 0

0 10

SCHLUMBERGER DIPMETER ARROW PLOT

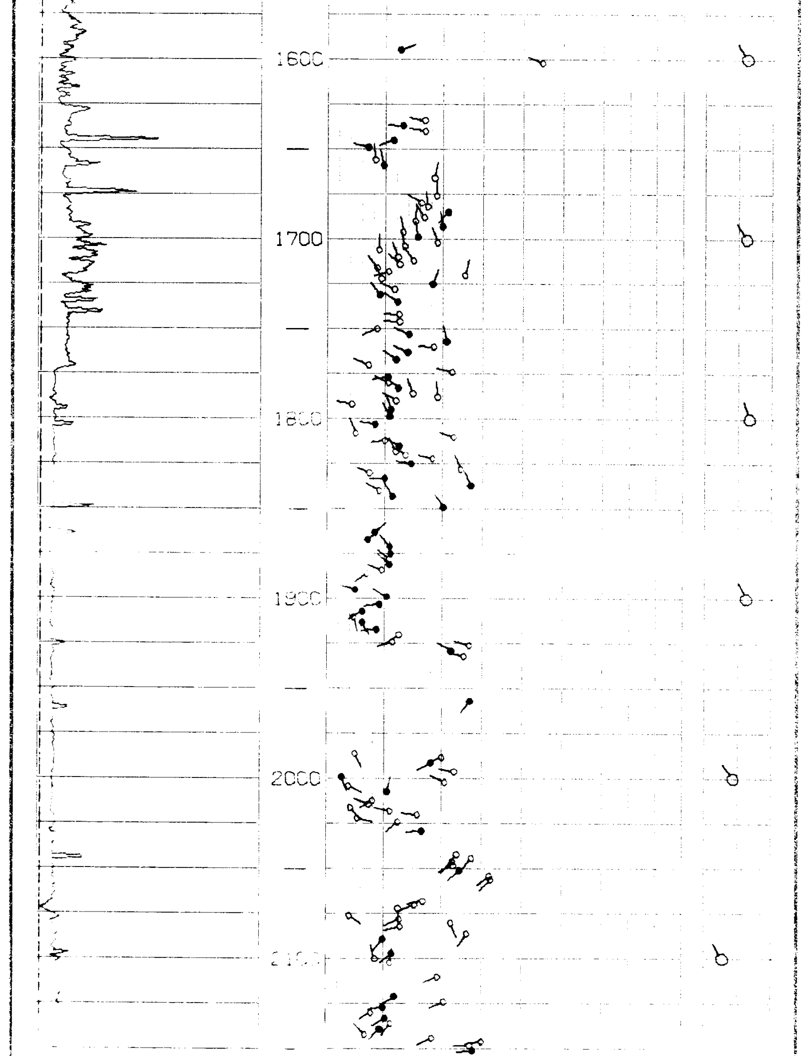


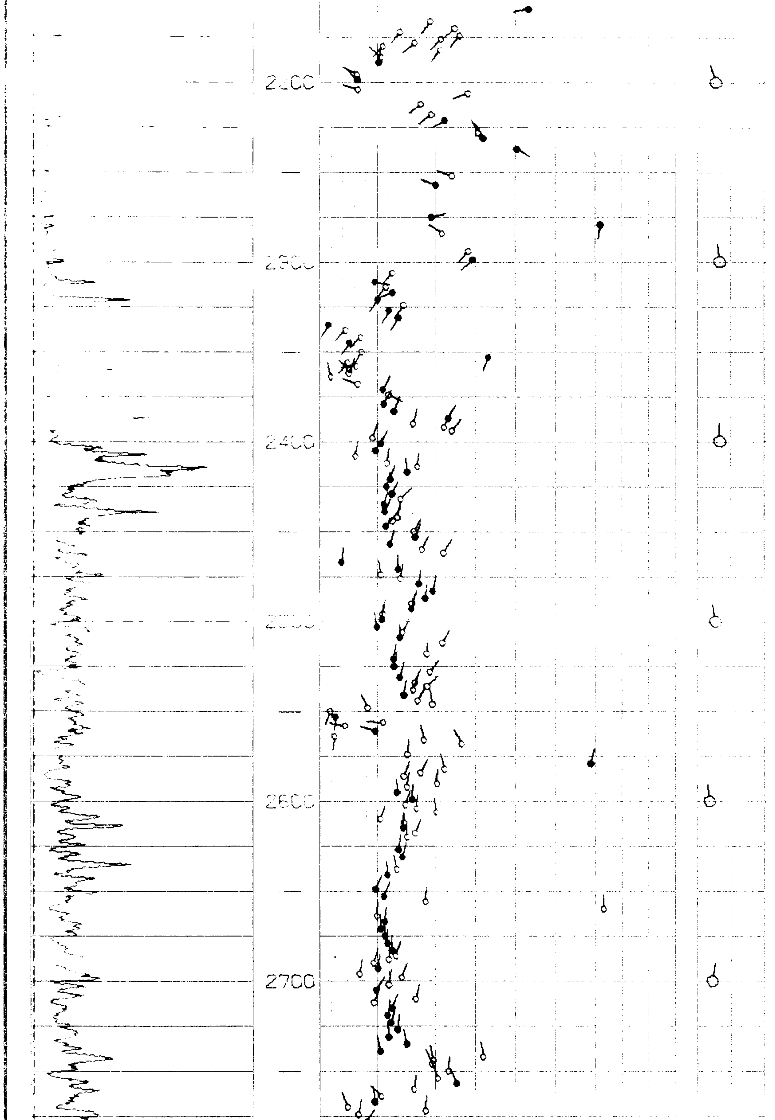
FOOT DUO-DECIMAL .500 IN. GRID



SCHLUMBERGER

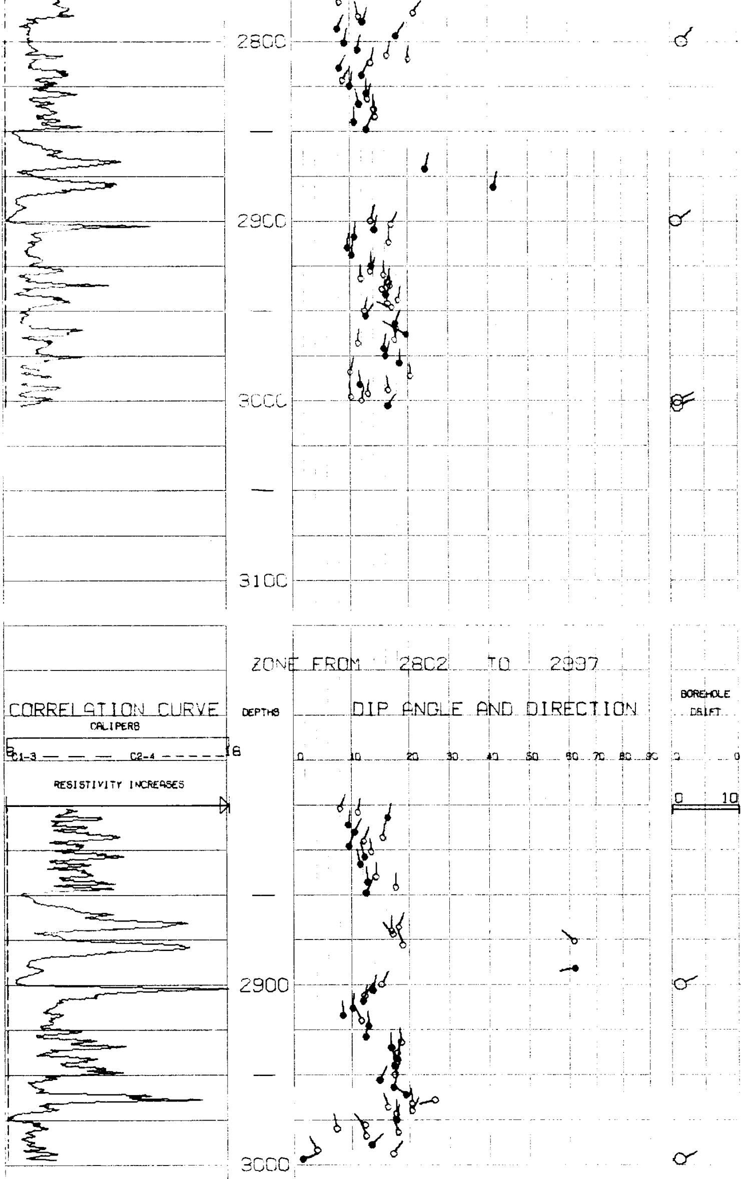
DIPMETER ARROW PLOT





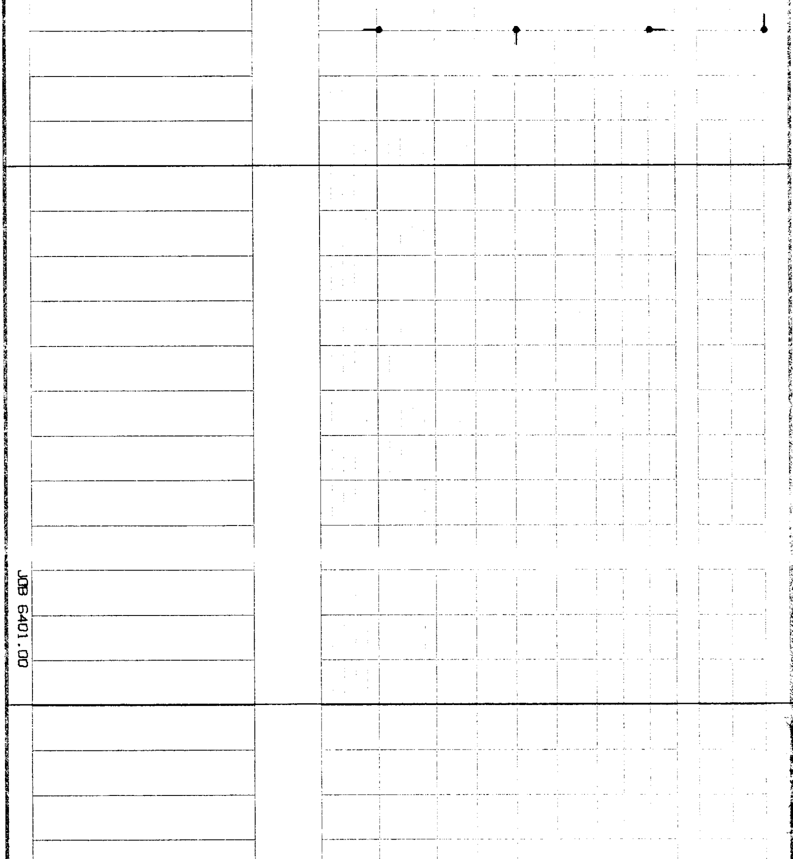
SCHLUMBERGER DIPMETER ARROW PLOT

SCHLUMBERGER DIPMETER ARROW PLOT



SCHLUMBERGER DIPMETER ARROW PLOT

JOB 6401.00



ALL QUALITY ARROW PLOT 6401

FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

CORRELATION LENGTH 4 FT.

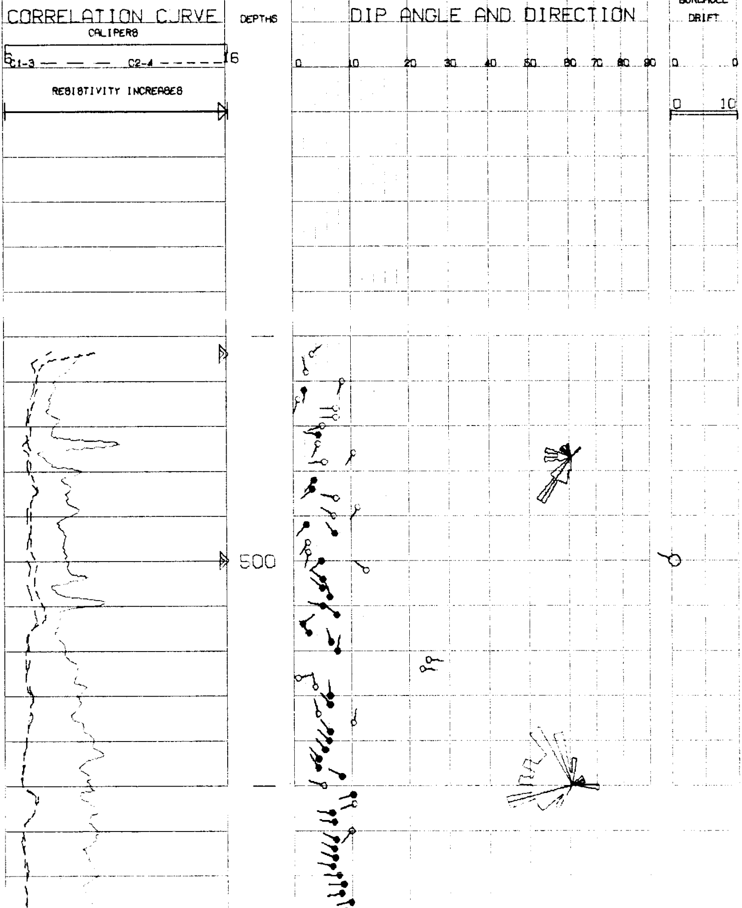
STEP LENGTH 2 FT.

SCHLUMBERGER DIPMETER ARROW PLOT

SEARCH ANGLE 30 DEGREES X2

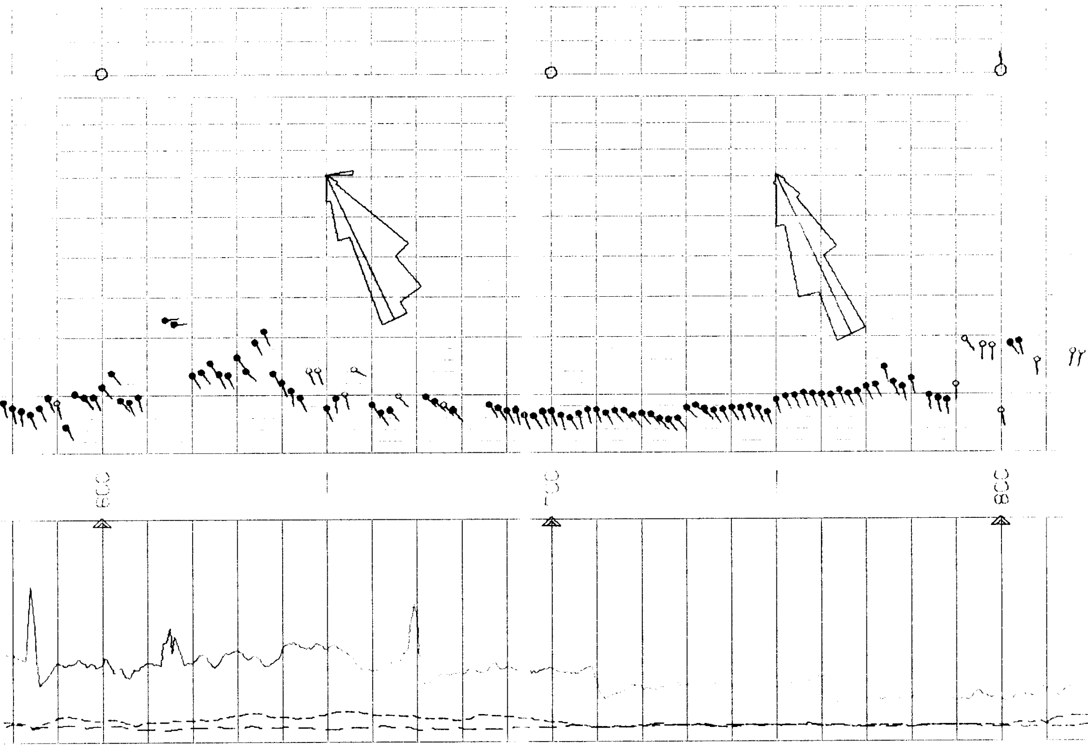
PC0130023518307001020420

ZONE FROM 454 TO 3004



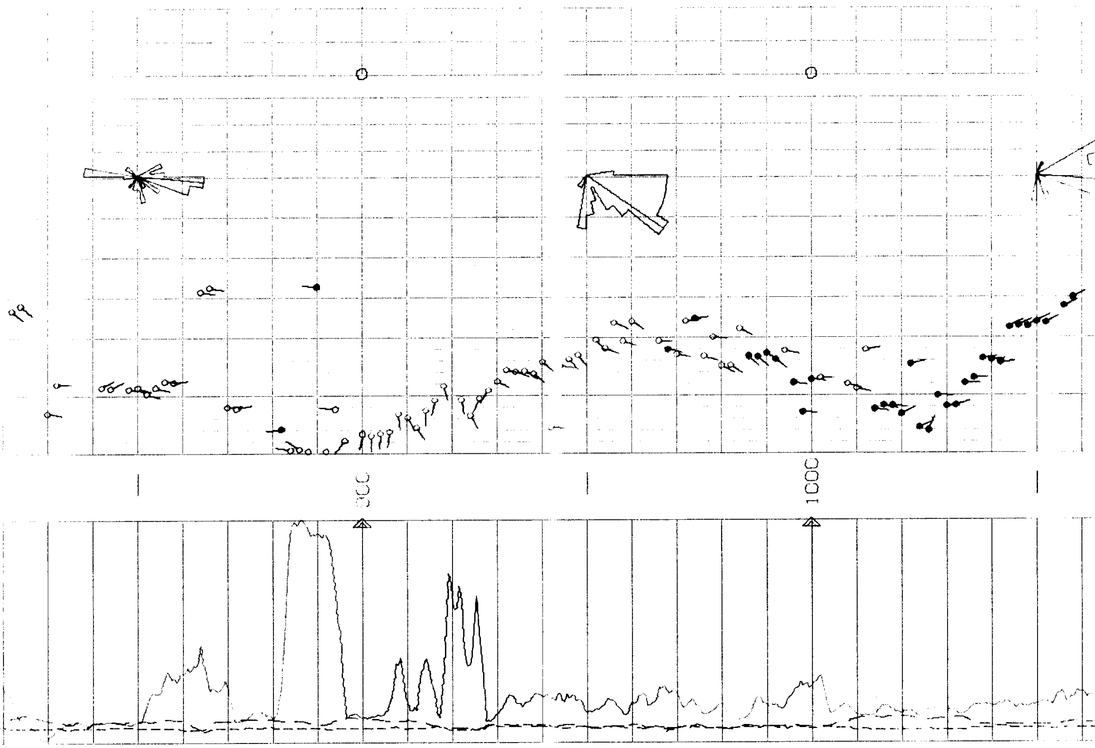
FCOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT



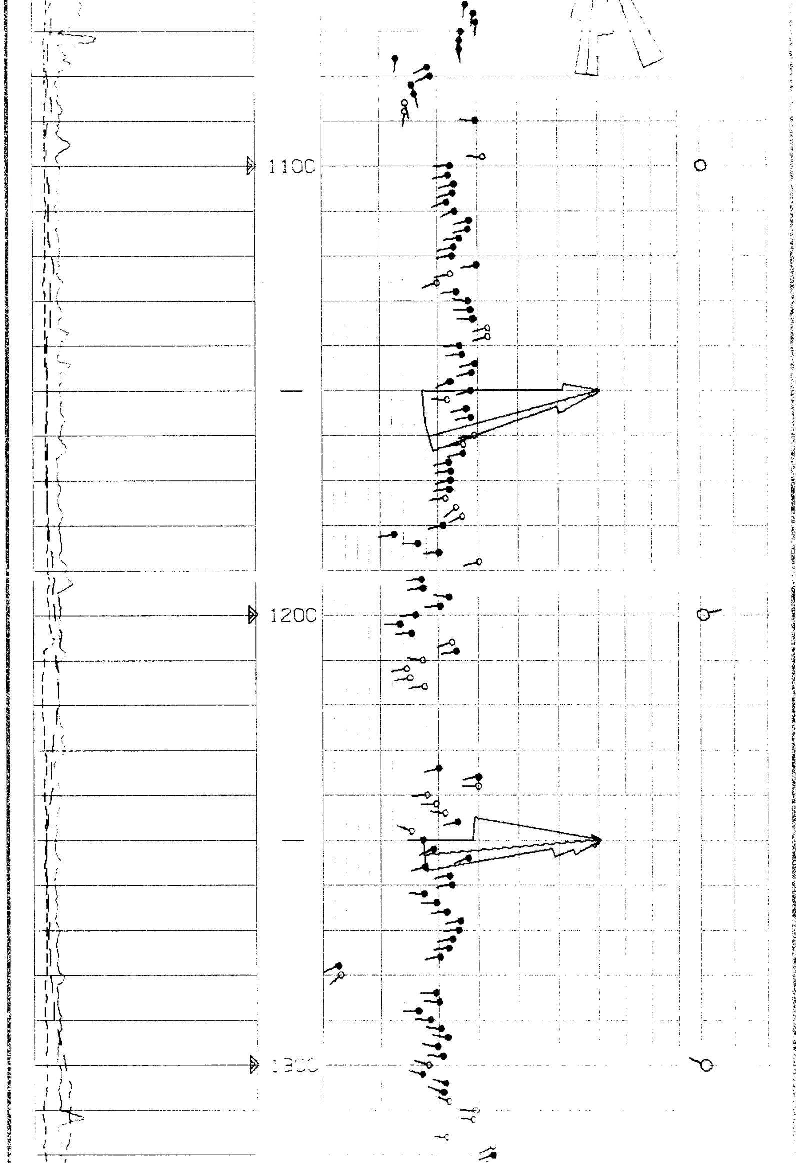
FOOT DUO-DECIMAL .500 IN. GRID

SCHLUMBERGER DIPMETER ARROW PLOT

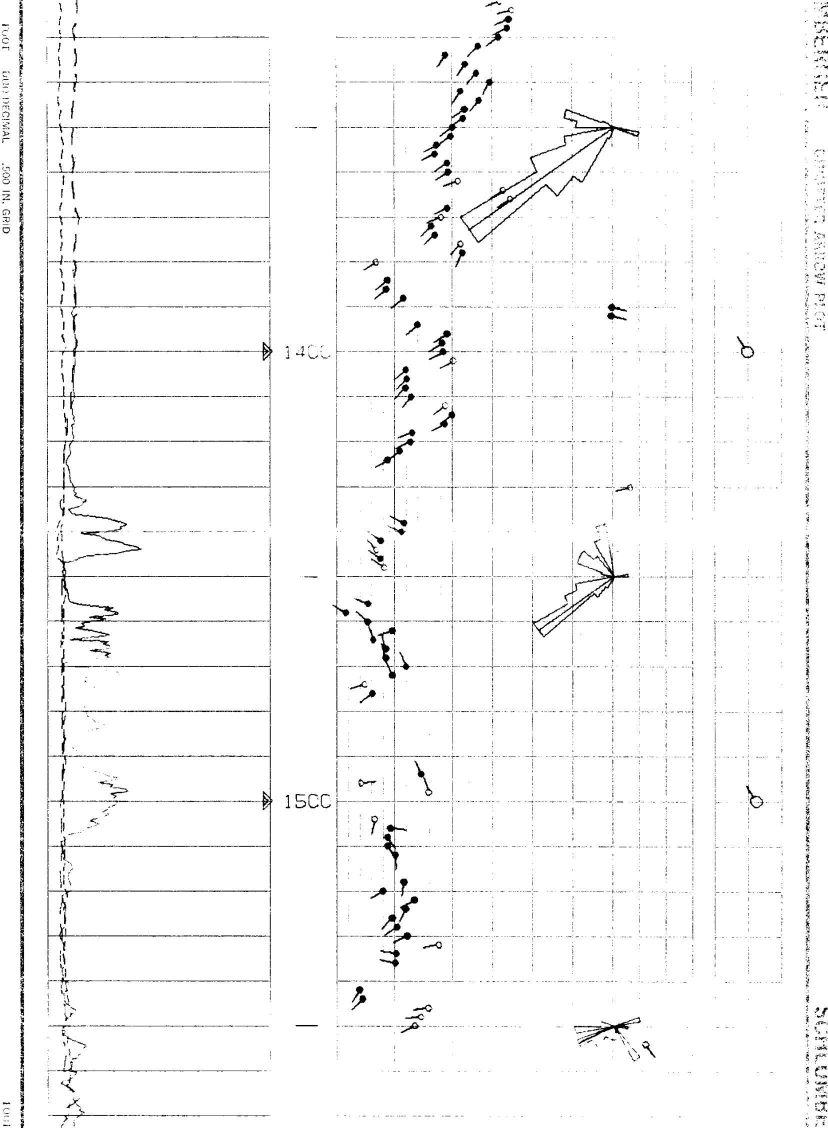


FOOT DUO-DECIMAL .500 IN. GRID

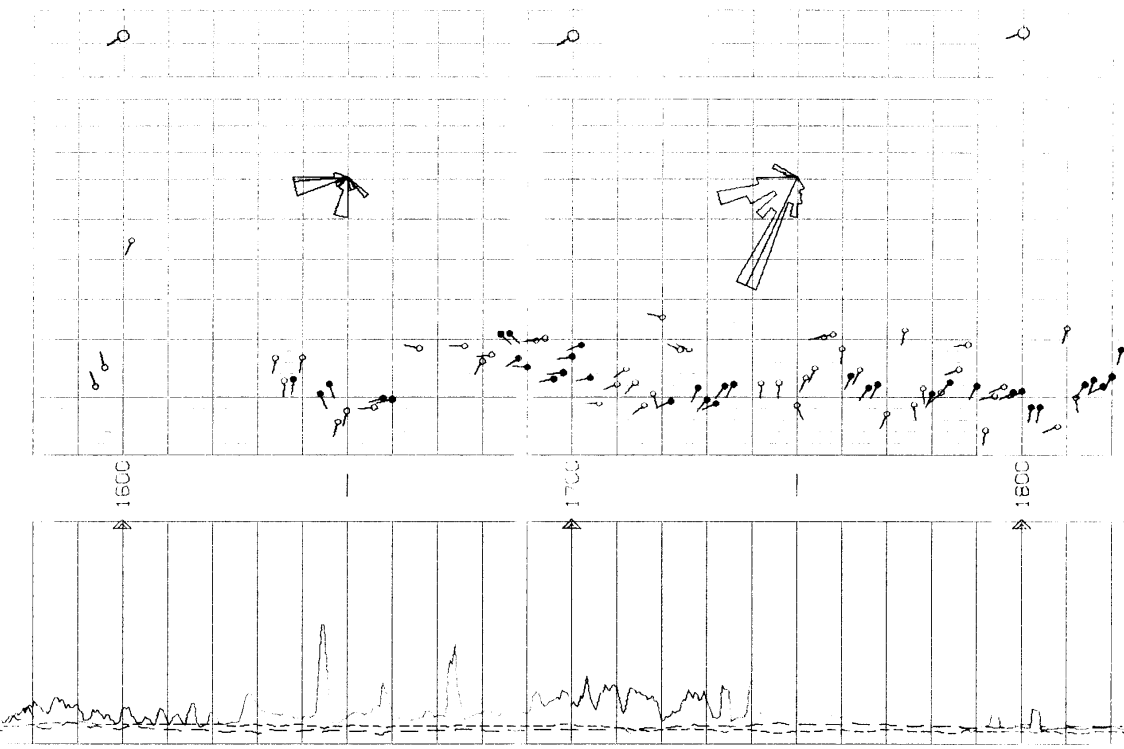
SCHLUMBERGER DIPMETER ARROW PLOT



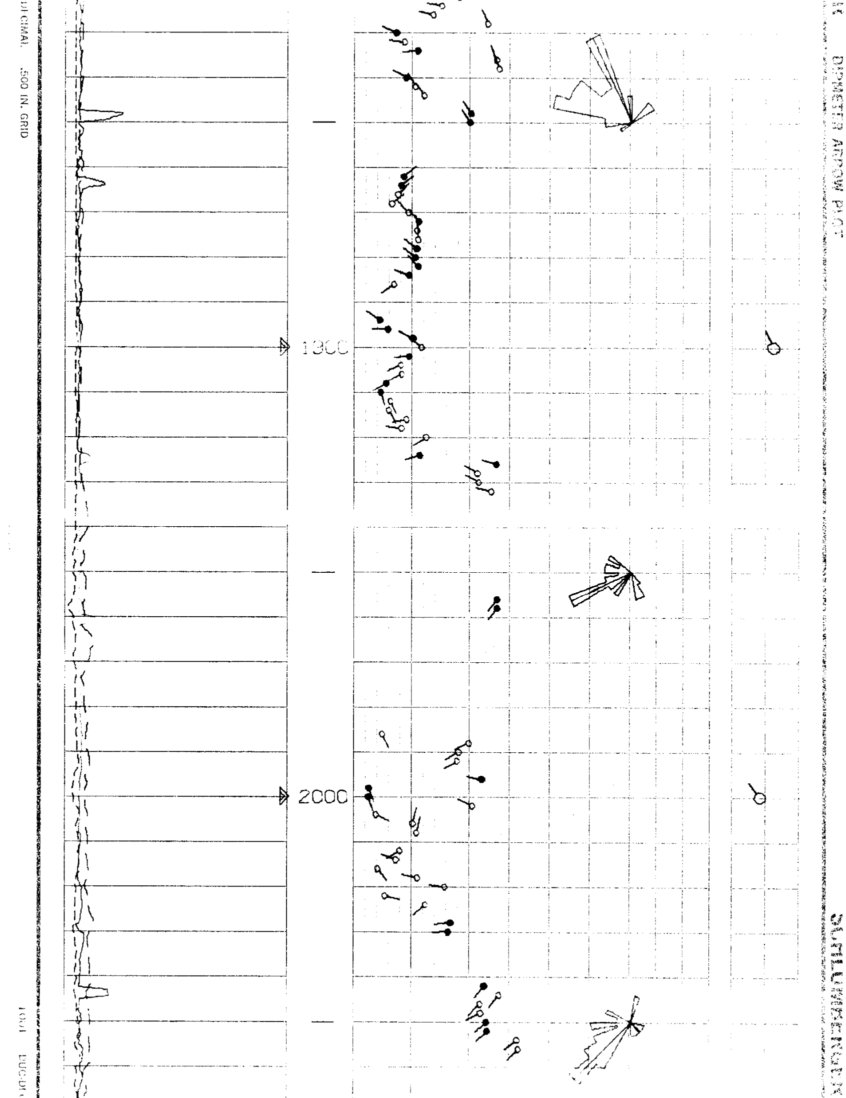
FOOT DUO-DECIMAL .500 IN. GRID

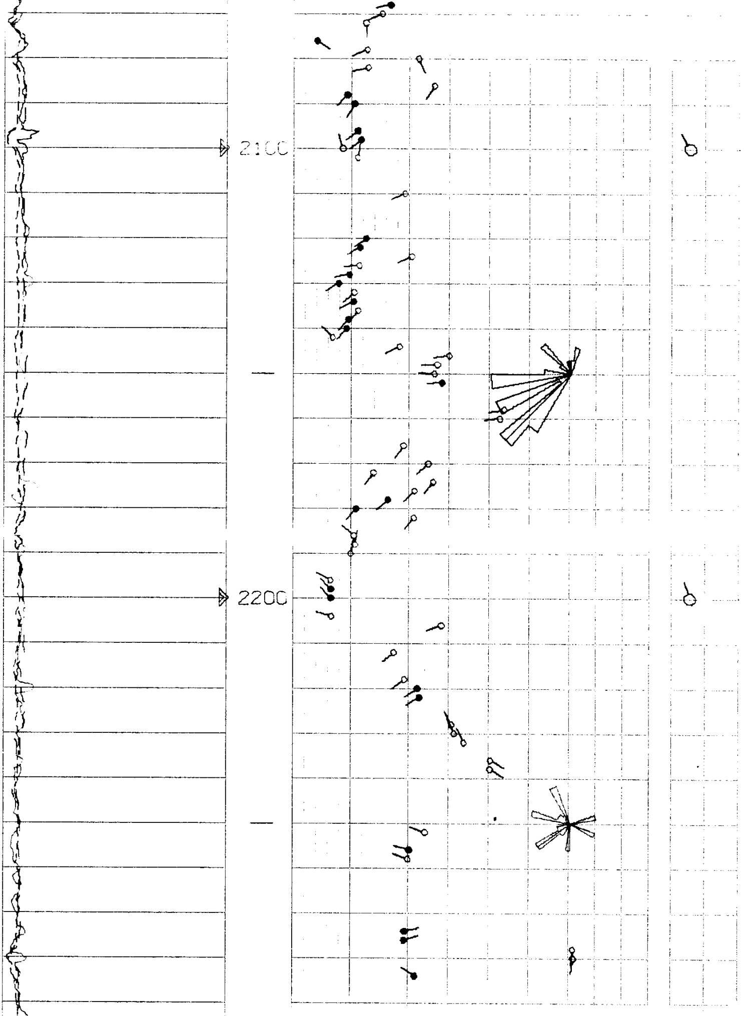


RGER DIPMETER ARROW PLOT [illegible] SCHLUMBERGER



DUO-DECIMAL .500 IN. GRID FOOT DUO



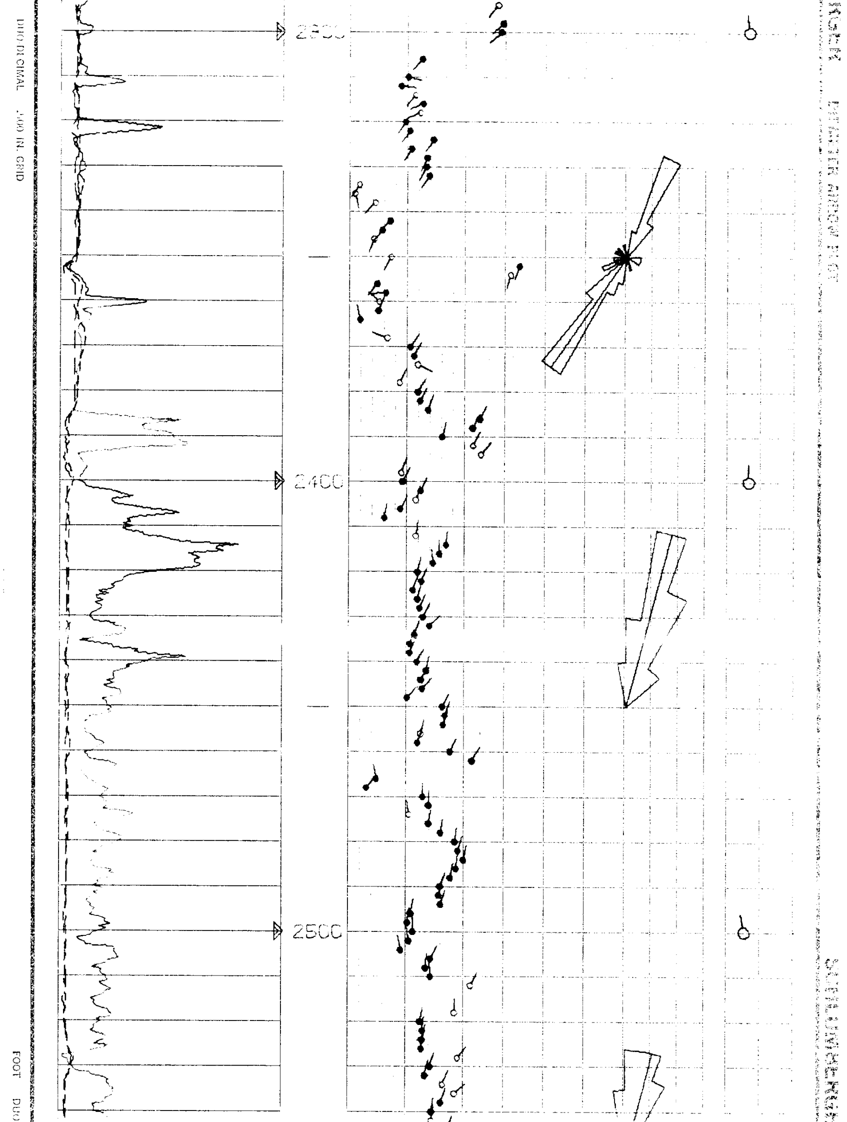


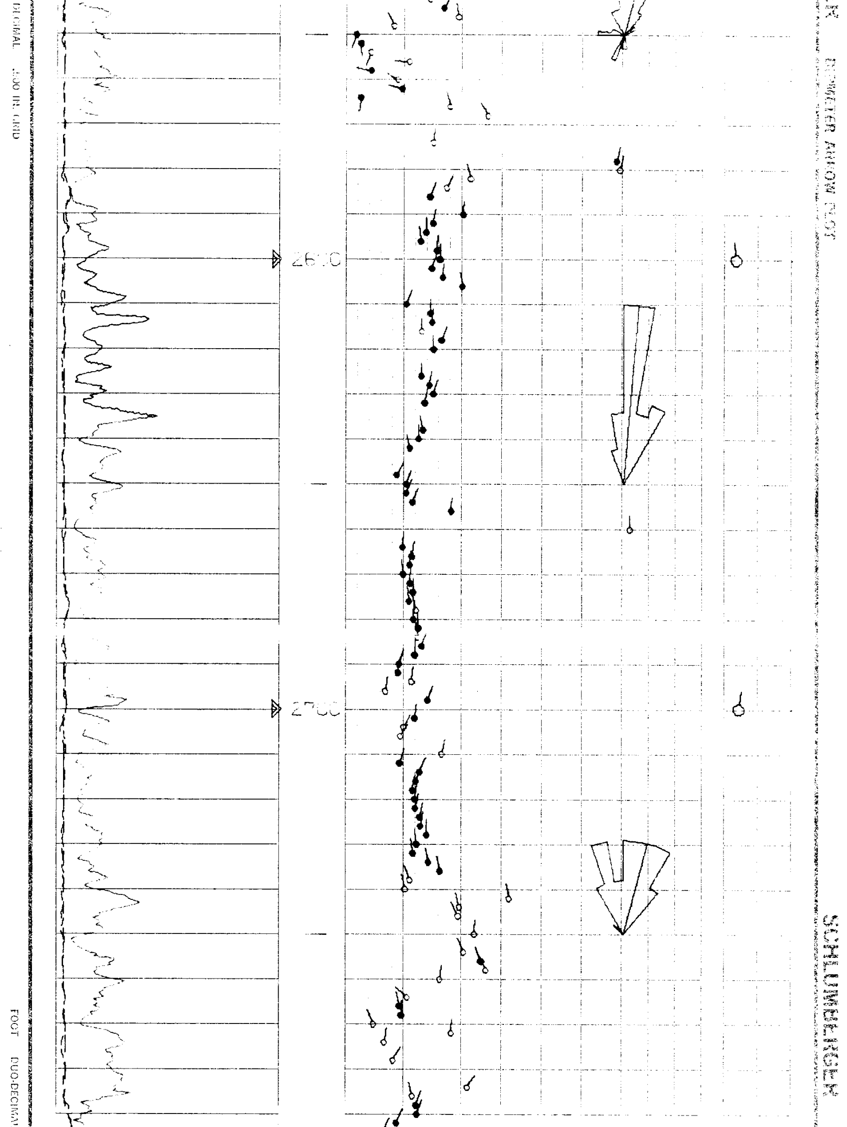
DIPMETER ARROW PLOT

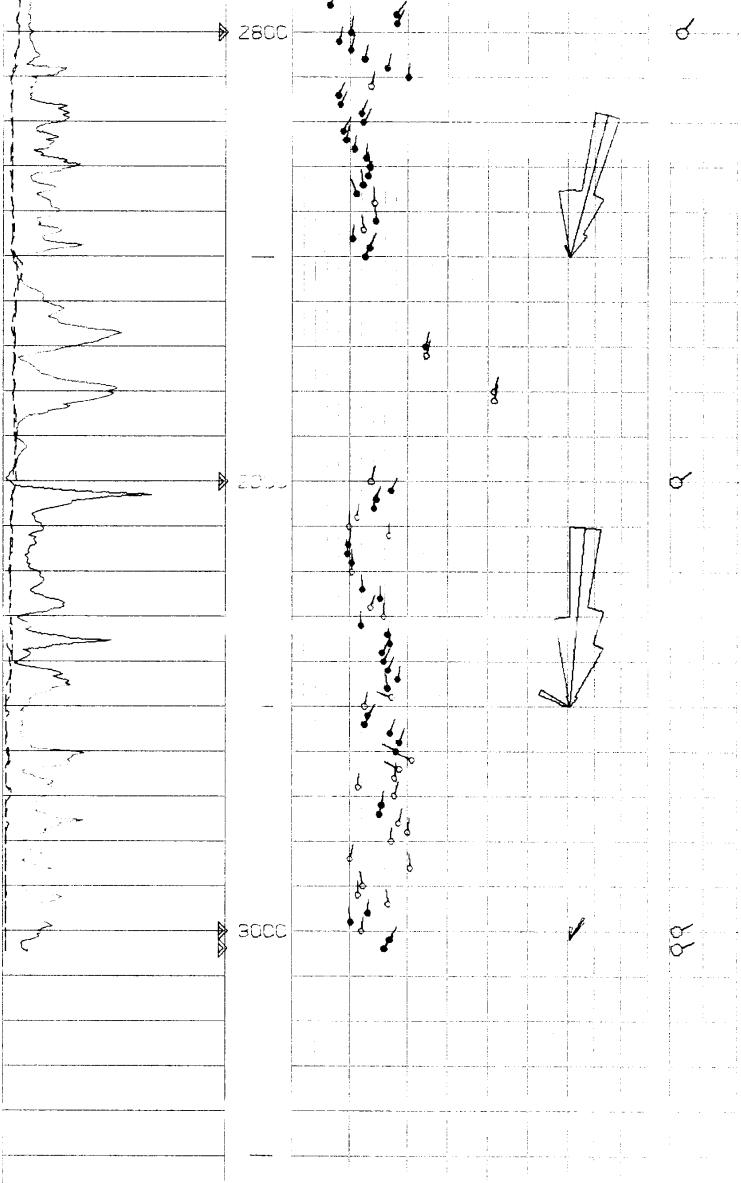
SCHLUMBERGER

NAL .500 IN. GRID

FOOT







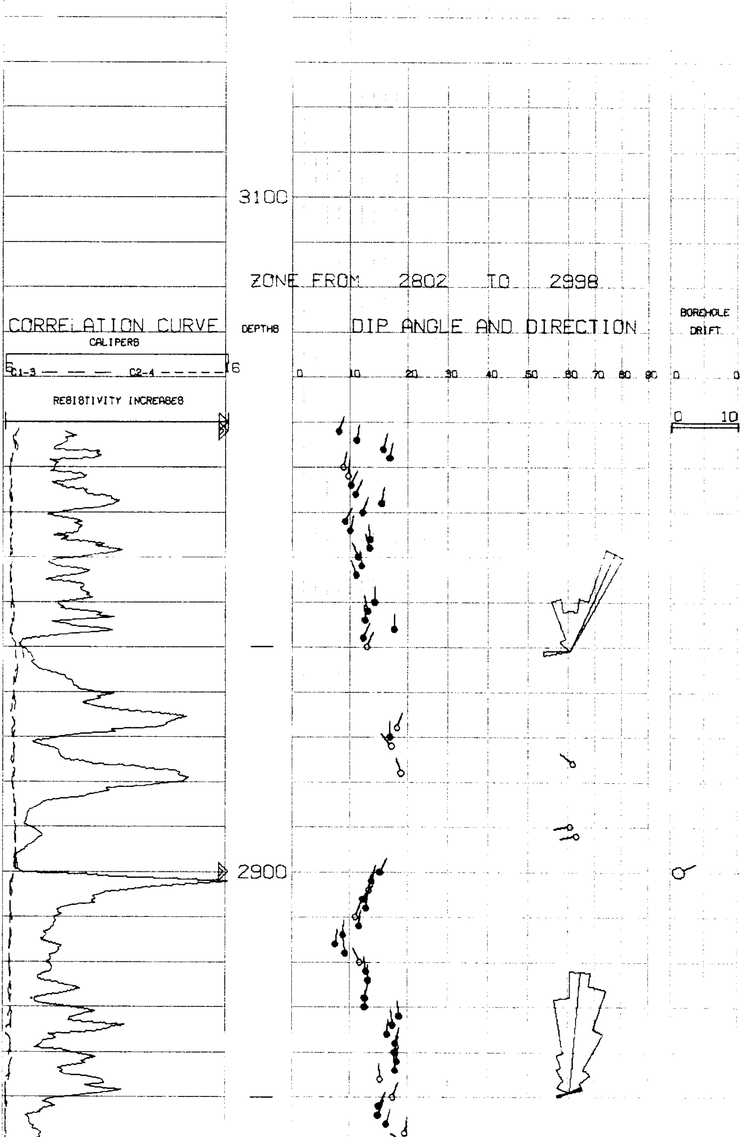
DIPMETER ARROW PLOT

SCHLUMBERGER

DIPMETER A

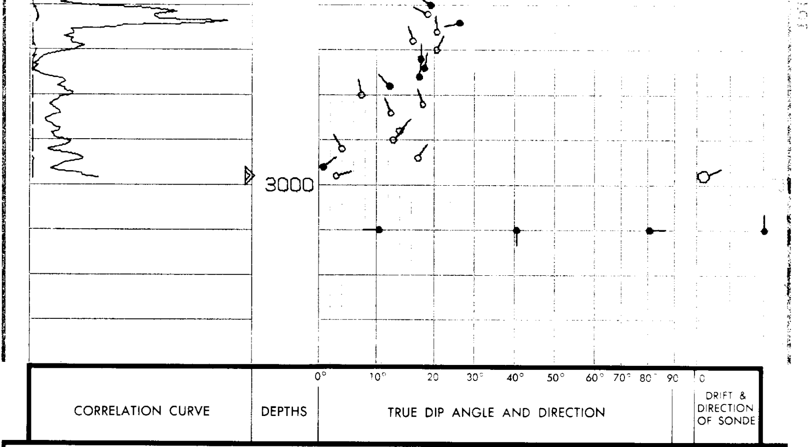
.100 IN. GRID

FOOT DUO-DECIMAL .100 IN. GRID



SCHLUMBERGER DIPMETER ARROW

FOOT DUO-DECIMAL .500 IN. GRID



COMPANY REICHHOLD ENERGY CORPORATION
WELL COLUMBIA COUNTY 13-1 RD 1
FIELD MIST
COUNTY COLUMBIA **STATE** OREGON

Rm 6.55 @ 58 °F
Rmf 6.93 @ 45 °F
Rmc 4.12 @ 45 °F
BHT 78 °F

SCHL. FR 3010.0
SCHL. TD 3015.0
DRLR TD 3028.0
Elev:
KB [illegible]
DF ------
GL 1163.2