

BRUER
Schlumberger

FOUR-ARM HIGH RESOLUTION CONTINUOUS DIPMETER

COMPUTATION

COLUMBIA COUNTY HIST - NEHALEM BASIN CROWN ZELLERBACH 203-23 AMERICAN QUASAR

COMPANY AMERICAN QUASAR PETROL UNIT COMPANY
WELL CROWN ZELLERBACH 30-33
FIELD HIST-NEHALEM BASIN
COUNTY COLUMBIA STATE OREGON

LOCATION 1493 FUL 2179 FUL OF SE CORNER 3F
Twp. 6N Age. 400
Elev. 812.4
Elev. K.B. 412.3
Other Services:

Permanent Datum 38
Log Measured From 38 10.0 Ft. Above Perm Datum
Drilling Measured From 38 10.0 Ft. Above Perm Datum

Date 10-26-80

Run No. 14
Dipmeter 3150
Depth - Logger 3250
Btm. Log Interval 2550
Top Log Interval 345
Casing - Driller 2 1/2 41 525
Gauging - Driller 2 1/2 41 525
Bit Size 3 1/2
Type Fluid in Hole 3000
Dens. Visc. 6.3 1.1
PH Fluid Loss 1.5 5.5 ml
Source of Sample 2-22
R₁ @ Meas. Temp 2.41 4.51
R₂ @ Meas. Temp 2.23 4.11
R₃ @ Meas. Temp 2.53 4.11
R₄ @ Meas. Temp 2.53 4.11
R₅ @ Meas. Temp 2.53 4.11
R₆ @ Meas. Temp 2.53 4.11
R₇ @ Meas. Temp 2.53 4.11
R₈ @ Meas. Temp 2.53 4.11
R₉ @ Meas. Temp 2.53 4.11
R₁₀ @ Meas. Temp 2.53 4.11
R₁₁ @ Meas. Temp 2.53 4.11
R₁₂ @ Meas. Temp 2.53 4.11
R₁₃ @ Meas. Temp 2.53 4.11
R₁₄ @ Meas. Temp 2.53 4.11
R₁₅ @ Meas. Temp 2.53 4.11
R₁₆ @ Meas. Temp 2.53 4.11
R₁₇ @ Meas. Temp 2.53 4.11
R₁₈ @ Meas. Temp 2.53 4.11

Changes in Mud Type or Additional Samples

Date	Sample No.	Run No.
		1 2 3 4
		HDM No.
		Magnetic Declination
		Angle Panel No.

Computed By: J. L. ...
Plotted By: CAL CORN
Remarks: SD #123541
JOB #7632

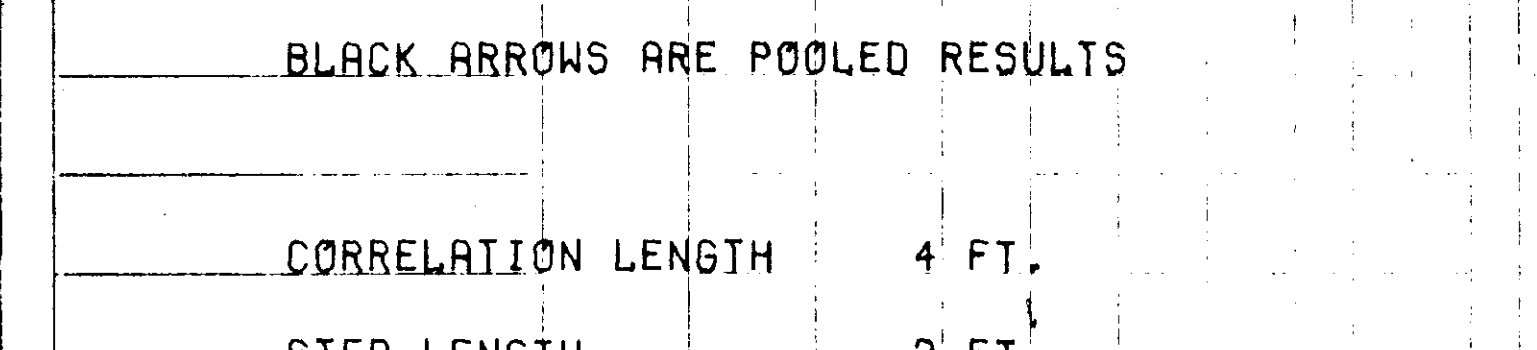
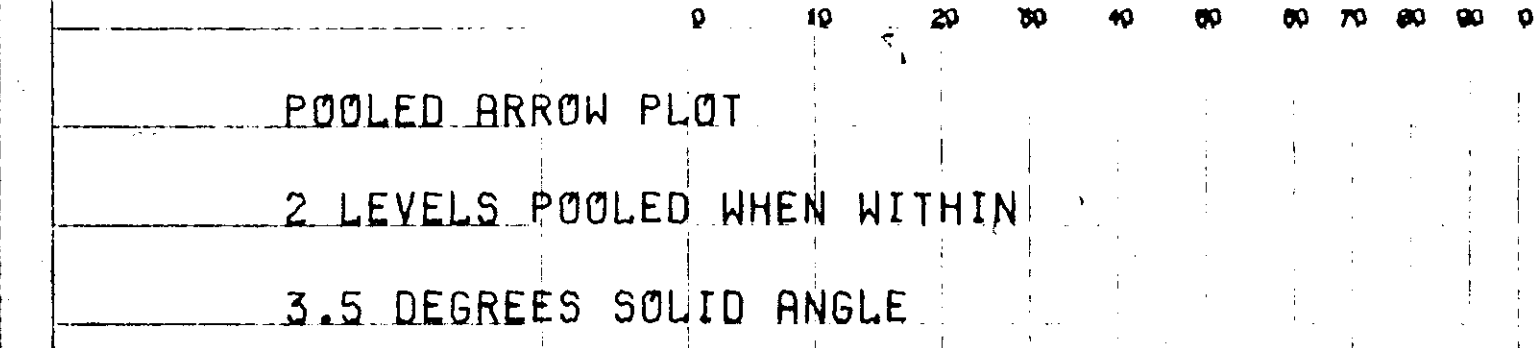
TABLE OF VERTICAL DISPLACEMENT IN FEET CORRESPONDING TO VARIOUS HORIZONTAL DISTANCES AND ANGLES OF DIP

VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF			VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF		
DIP ANGLES (degrees)	100	1000	DIP ANGLES (degrees)	100	1000
1	1.75	17.5	19	34.4	344
2	3.5	35	20	36.4	364
3	5.2	52	21	38.4	384
4	7.0	70	22	40.4	404
5	8.8	88	23	42.5	425
6	10.5	105	24	44.5	445
7	12.3	123	25	46.6	466
8	14.1	141	30	57.7	577
9	15.8	158	35	70.0	700
10	17.6	176	40	83.9	839
11	19.4	194	45	100.0	1000
12	21.3	213	50	119.2	1192
13	23.1	231	55	142.8	1428
14	24.9	249	60	173.2	1732
15	26.8	268	65	214.4	2144
16	28.7	287	70	274.8	2748
17	30.6	306	75	373.2	3732
18	32.5	325	80	567.1	5671

To obtain vertical displacements corresponding to thousands 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.

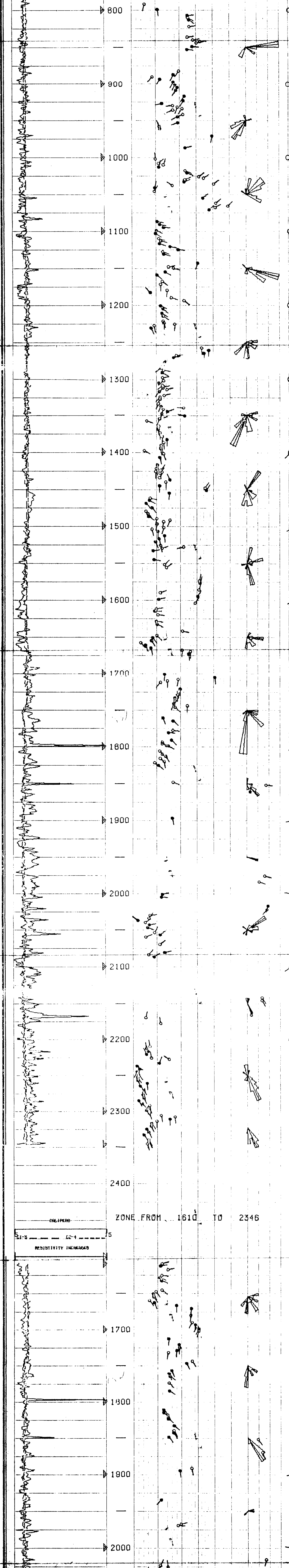
GRAPHIC PRESENTATION



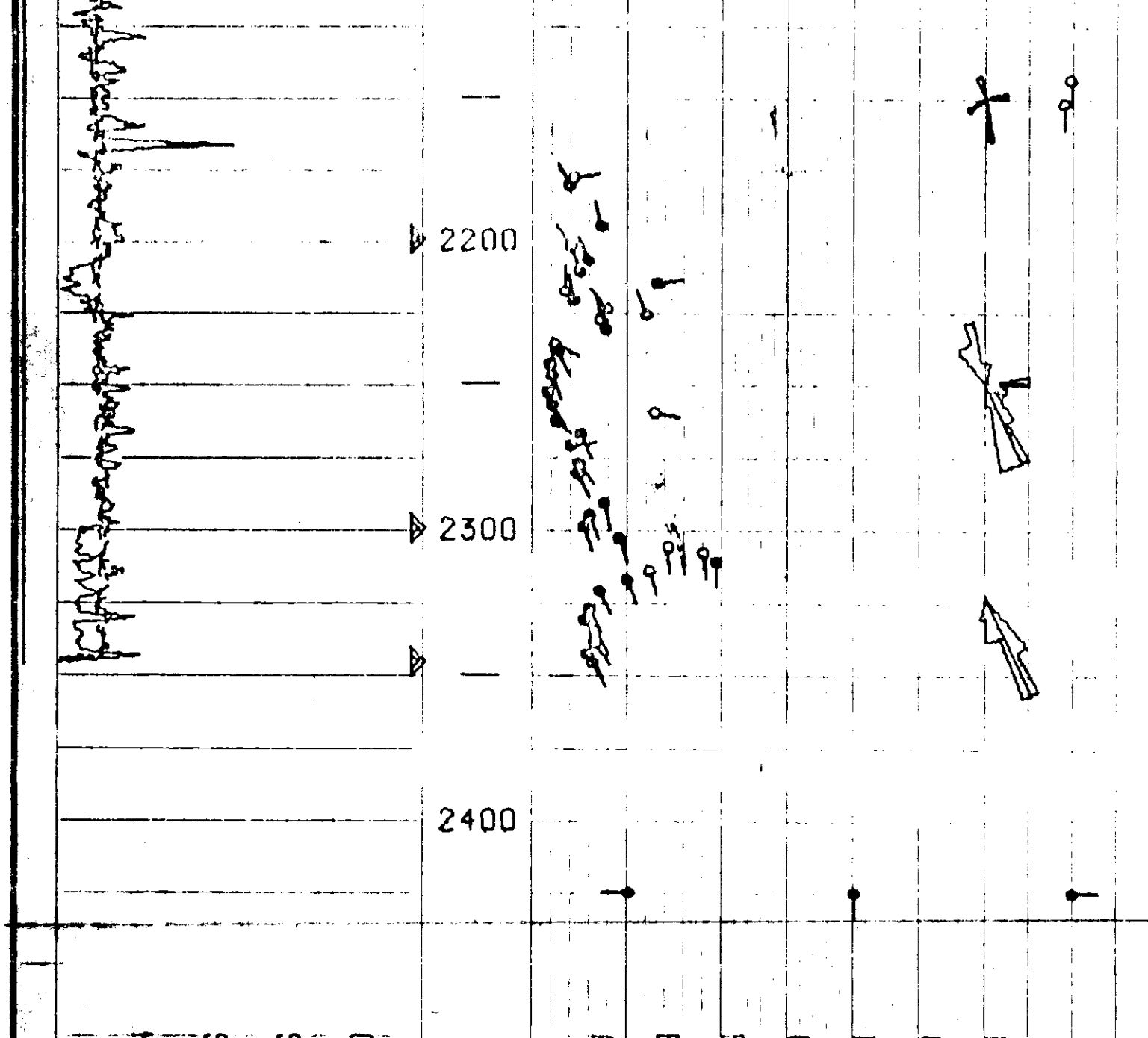
POOLED ARROW PLOT
2 LEVELS POOLED WHEN WITHIN
3.5 DEGREES SOLID ANGLE
BLACK ARROWS ARE POOLED RESULTS

CORRELATION LENGTH 4 FT.
STEP LENGTH 2 FT.
SEARCH ANGLE 40 DEGREES X2

ZONE FROM 536 TO 2346



ZONE FROM 1610 TO 2346



AMERICAN SUBSURFACE EQUIPMENT CO.
CROWN ZELLERBACH 30-33
HIST-NEHALEM BASIN FIELD
COLUMBIA COUNTY, OREGON
RUN NO. 286
R.M.D.C.C. SURVEYED: 27-OCT-80
AREA PLOT FEED CLUSTER PROGRAM
CORRELATION LENGTH 4 FT.
STEP LENGTH 2 FT.
SEARCH ANGLE 40 DEGREES X2
HOT-D TTR POS. ...
JOB #7632-00