Schlumberger

DUAL DIPMETER

COUNTY
FIELD
LOCATION
WELL
COMPANY

COMPANY NAHAMA AND WEAGANT ENERGY CO

WELL "SOCKEYE" C.C. #31-15-65

FIELD MIST

COUNTY COLUMBIA **STATE** OREGON

LOCATION
832' FS AND [illegible] FW
FROM NE CORNER

Other Services:
DIL BHC GR
SHDT

API SERIAL NO.	SECT	TWP.	RANGE
36-009-00294	15	6N	5W

Permanent Datum	GL	Elev.	723.2 F	Elev.: K.B. 734.2 F
Log Measured From	KB	11.0 F	above Perm. Datum	D.F.
Drilling Measured From	KB			G.L. 723.2 F

Date	3 NOV 1992	
Run No.	ONE	
Depth Driller	2795.0 F	
Depth Logger (Schl.)	2795.0 F	
Btm. Log Interval	2793.0 F	
Top Log Interval	1700.0 F	
Casing-Driller	8 5/8" @ 501.0 F	
Casing-Logger	502.0 F	
Bit Size	7 7/8" @ 2795.0 F	
Type Fluid in Hole	GEL DRISPAC	
Dens. | Visc.	9.80 LB/G	40.0 S
pH | Fld. Loss	8.0	5.6 C3
Source of Sample	FLOWLINE	
Rm @ Meas. Temp.	3.100 OHMM	@ 64.0 DEGF
Rmf @ Meas. Temp.	3.740 OHMM	@ 62.0 DEGF
Rmc @ Meas. Temp.	3.000 OHMM	@ 62.0 DEGF
Source: Rmf | Rmc	MEASURED	MEASURED
Rm @ BHT	2.096 OHMM	@ 98.0 DEGF
TIME Circulation Ended	22:00 11 3	
TIME Logger on Bottom	2:54 11 3	
Max. Rec. Temp.	98.0 DEGF	
Equip. | Location	8504	SACRAMENTO
Recorded By	SCOTT PILCH	
Witnessed By	LUCAS - PINOTTI	

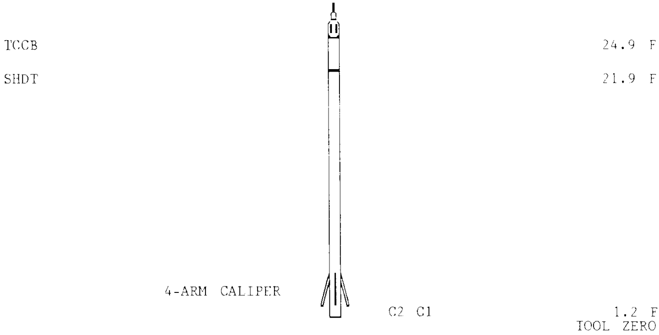
The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	ONE	
Service Order No	62451	
Drilling Fluid Level	5.0 F	
Salinity	700.0 PPM	
Rmf @ BHT	2.458 OHMM	@ 98.0 DEGF
Rmc @ BHT	1.971 OHMM	@ 98.0 DEGF
Logging Speed	3600.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	SHDS-B 946	
Tool Number 2	SHDC-A 964	
Tool Number 3	TCM-AB 1317	
Tool Number 4	TCC-B 663	
Tool Number 5		
Tool Number 6		
Tool Number 7		
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

REMARKS:

LOGGING TOOL STRING SKETCH



TOTAL TOOL STRING LENGTH IS [illegible] F.

[illegible]

MAIN LOG

SPEED CORRECTION NOT APPLIED

NO KNUCKLE JOINT IS USED (SOFF = -1)

[illegible]

P1AZ DEG

RB DEG

HAZ DEG

DEVI DEG

5000.0 0.0

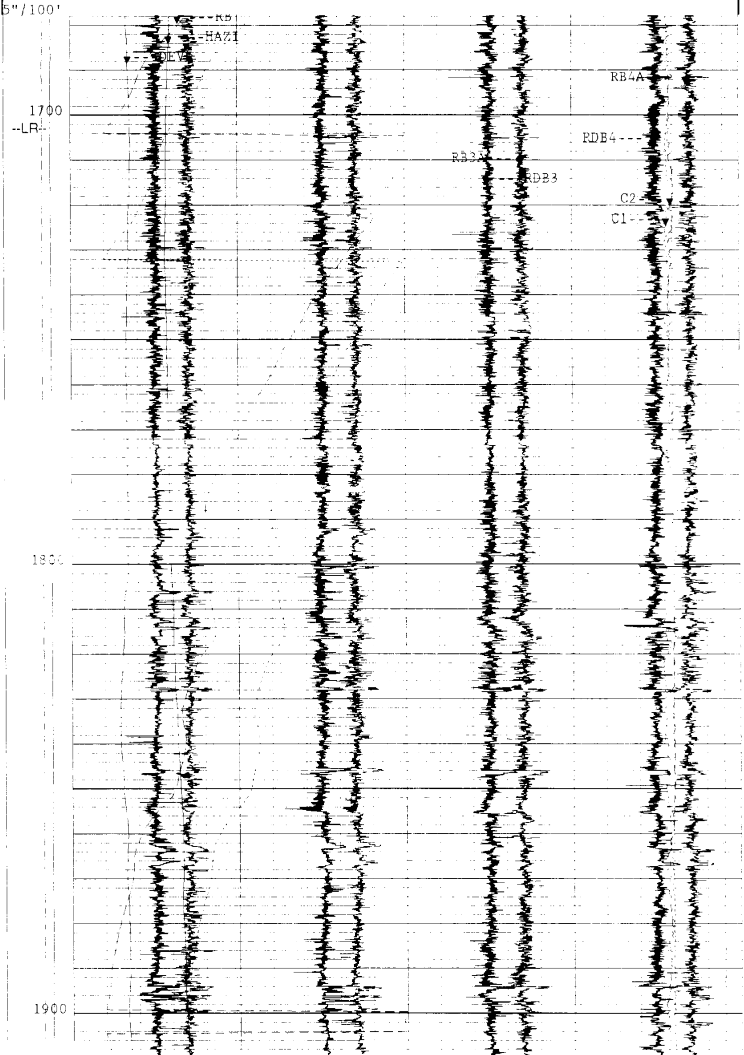
24.000

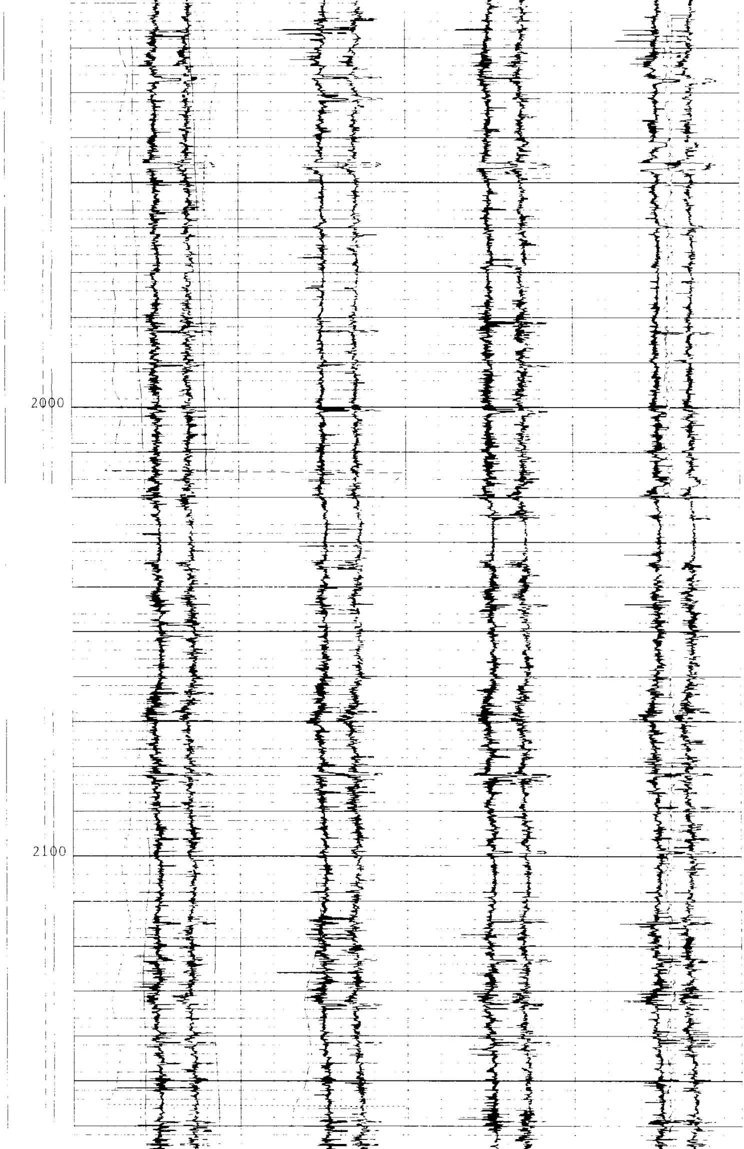
4.0000

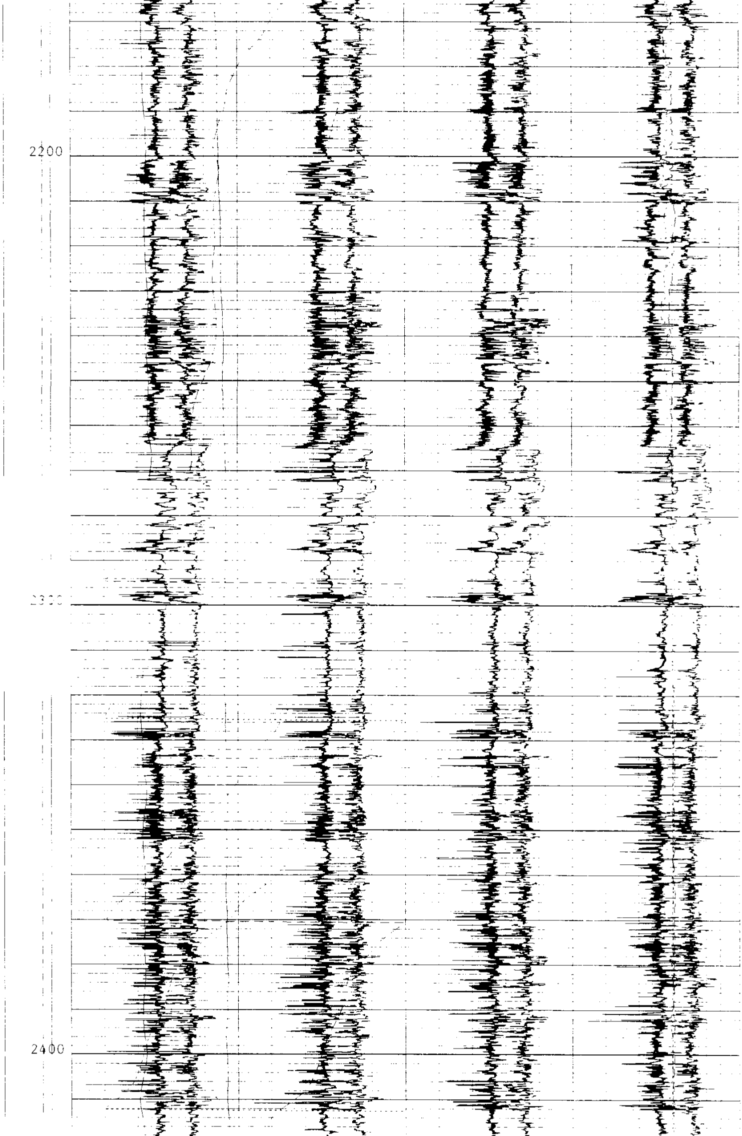
C2 C1

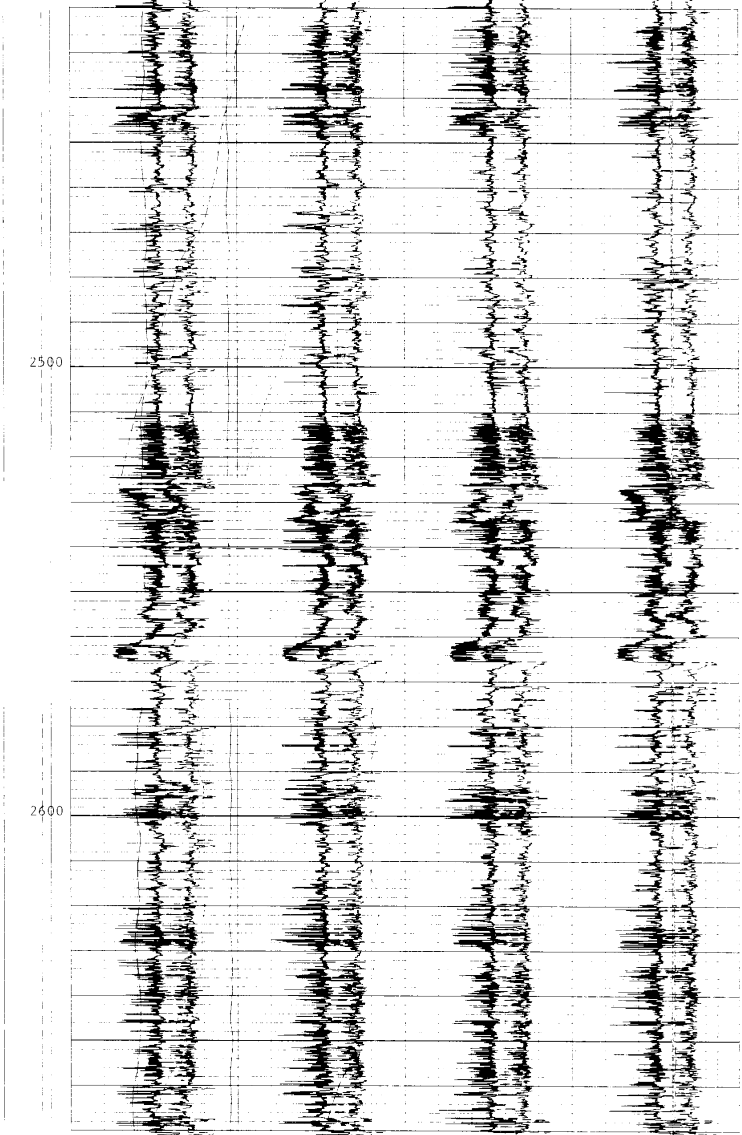
C1 C2

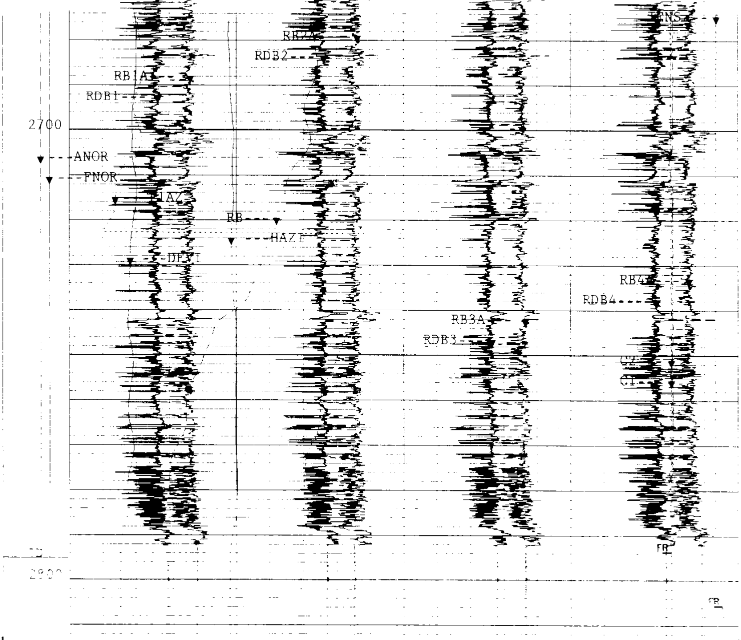
CP 32.6 FILE 27 04-NOV-1992 00:21 (UP)











5"/100'

CP 32.6 FILE 27 03-NOV-1992 23:54 (UP)

C2 -- C1

C1 C2

ANOR(M/S2)
8.0000 11.000
FNOR(CER)
40000 60000

RB1A RB2A
-1000 4000.0 -1000 4000.0
RDB1 RDB2
0.0 5000.0 0.0 5000.0
TENS(LBF)
10000 0.0
P1AZ(DEG) RB3A RB4A
-40.00 360.00 -1000 4000.0 -1000 4000.0
RB(DEG) RDB3 RDB4
-40.00 360.00 0.0 5000.0 0.0 5000.0
HAZI(DEG) C2(IN)
-40.00 360.00 24.000 4.0000
DEVI(DEG) C1(IN)
0.0 10.000 24.000 4.0000

SENSOR MEASURE POINT TO TOOL ZERO

SHDW 1.3 FEET
RSHD 1.3 FEET
TENS [illegible] FEET
ZB 1.3 FEET

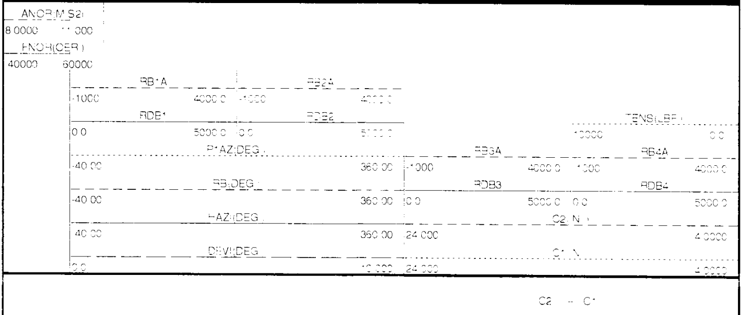
PARAMETERS

PARAMETER	VALUE	UNIT
PADT - Presentation Allow Disallow Threshold	.500000	DEG
MFIN - Magnetic Field Intensity	.540000	OER
MDEC - Magnetic Field Declination	19.5000	DEG
MINC - Magnetic Field Inclination	68.0000	DEG
SHDS - Stratigraphic HiRes Dipmeter Sonde	B	
SHDI - SHDT Inclinometer	BB	
VREF - Voltage Reference	-5.00000	V
FCDD - Fast Channel Depth Definition	1.	
SOFF - Stand Off	-1.00000	IN
IDFO - Input Data Format	RAW	
ODFO - Output Data Format	RAW	
ICMO - Inclinometry Computation Mode	AUTO	
AFMO - Accelerometer Filtering Mode	HAMM	
XMOD - EMEX Voltage Regulation Mode	AUTO	
XGAI - Gain Setting	1	
XOFF - Offset Setting	0	
FCD - Future Casing Diameter	4.50000	IN
SPCR - Speed Correction Constant	DISA	
DSCA - Deviation Scale	10	DEG
SBUT - Set of Buttons Selected	ALL	
INT - Correlation Interval Length	4.00000	F
STEP - Step Length between Correlations	2.00000	F
SPAN - Span of Correlation Sample	4	
SANG - S Wave Arrival Angle	60.0000	
DPAD - Disallowed Pad	AUTO	
DMAX - Maximum Dip Plotted	90	DEG
ELRA - Electrical Radius	.500000	IN
SDFA - Side-By-Side Distance Factor	.900000	
HQUA - High Quality Dip	14	
LQUA - Low Quality Dip	6	
STDI - Structural Dip	0.0	DEG
STDA - Structural Azimuth Value	[illegible]	
CSBL - CSB Number of Levels	2	
BS - Bit Size	7.87500	IN
BHS - BoreHole Status (Open or Cased)	OPEN	

REPEAT SECTION

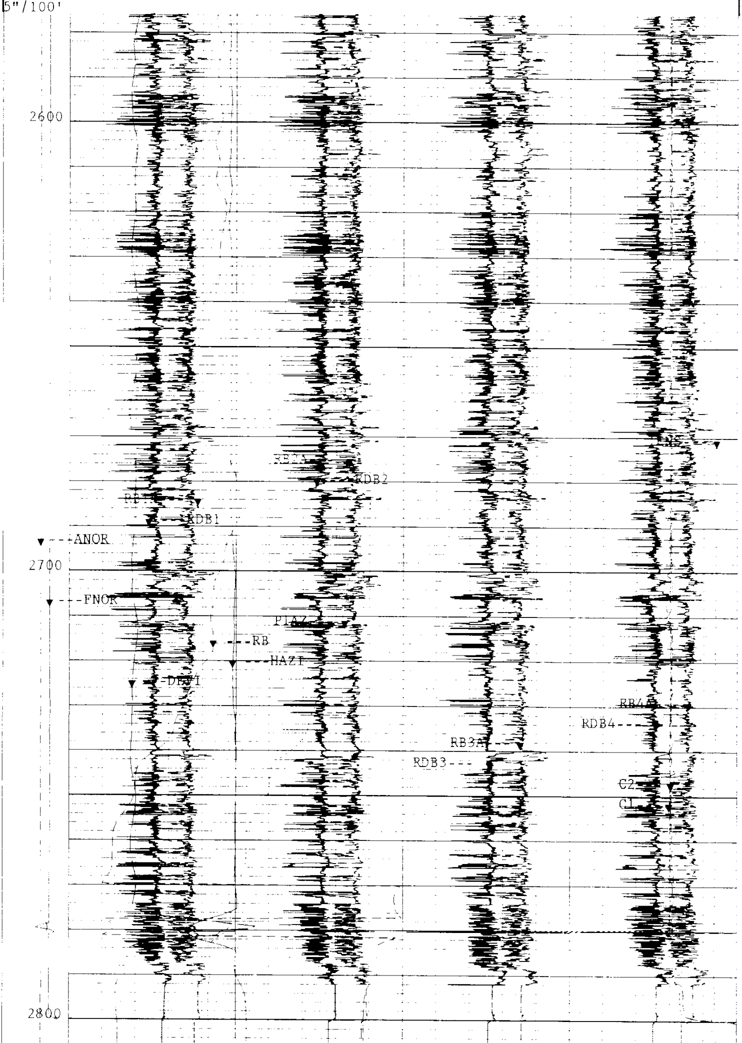
SPEED CORRECTION NOT APPLIED

NO KNUCKLE JOINT IS USED (SOFF = -1)



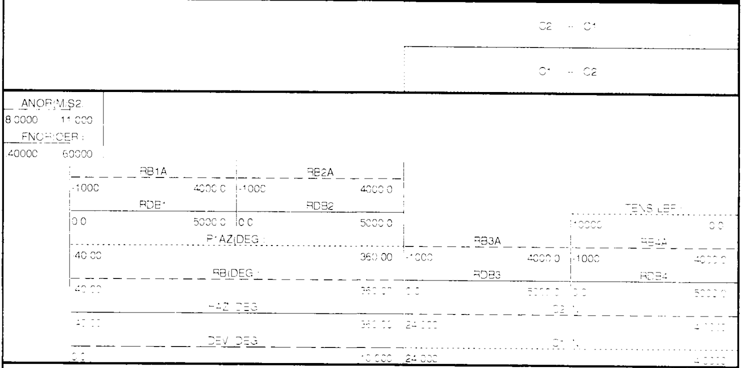
C1 -- C2

CP 32.6 FILE 26 03-NOV-1992 23:39 (UP)



5"/100'

CP 32.6 FILE 26 03-NOV-1992 23:33 (UP)



SENSOR MEASURE POINT TO TOOL ZERO

SHDW 1.3 FEET
RSHD 1.3 FEET

TENS -10.8 FEET
ZB 1.3 FEET

PARAMETERS

PARAMETER	VALUE	UNIT
PADT - Presentation Allow Disallow Threshold	.500000	DEG
MFIN - Magnetic Field Intensity	.540000	OER
MDEC - Magnetic Field Declination	19.5000	DEG
MINC - Magnetic Field Inclination	68.0000	DEG
SHDS - Stratigraphic HiRes Dipmeter Sonde	B	
SHDI - SHDT Inclinometer	BB	
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FCDD - Fast Channel Depth Definition	1.	
SOFF - Stand Off	-1.00000	IN
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ODFO - Output Data Format	RAW	
ICMO - Inclinometry Computation Mode	AUTO	
AFMO - Accelerometer Filtering Mode	HAMM	
XMOD - EMEX Voltage Regulation Mode	AUTO	
XGAI - Gain Setting	1	
XOFF - Offset Setting	0	
FCD - Future Casing Diameter	4.50000	IN
SPCR - Speed Correction Constant	DISA	
DSCA - Deviation Scale	10	DEG
SBUT - Set of Buttons Selected	ALL	
INT - Correlation Interval Length	4.00000	F
STEP - Step Length between Correlations	2.00000	F
SPAN - Span of Correlation Sample	4	
SANG - S Wave Arrival Angle	60.0000	
DPAD - Disallowed Pad	AUTO	
DMAX - Maximum Dip Plotted	90	DEG
ELRA - Electrical Radius	.500000	IN
SBFA - Side-By-Side Distance Factor	[illegible]	
HQUA - High Quality Dip	14	
LQUA - Low Quality Dip	6	
STDI - Structural Dip	0.0	DEG
STDA - Structural Azimuth Value	0.0	DEG
CSBL - CSB Number of Levels	2	
BS - Bit Size	7.87500	IN
BHS - BoreHole Status (Open or Cased)	OPEN	

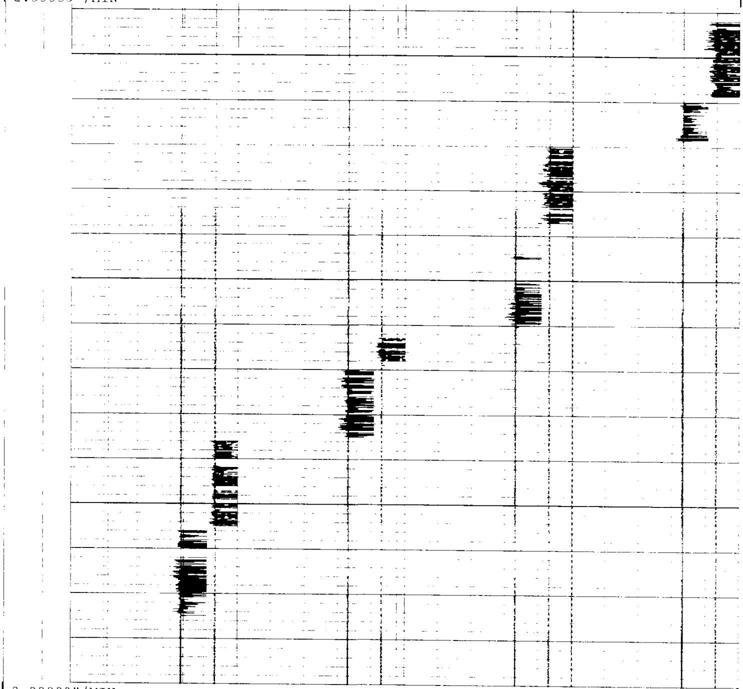
PAD CHECK

C2 - C1

C1 - C2

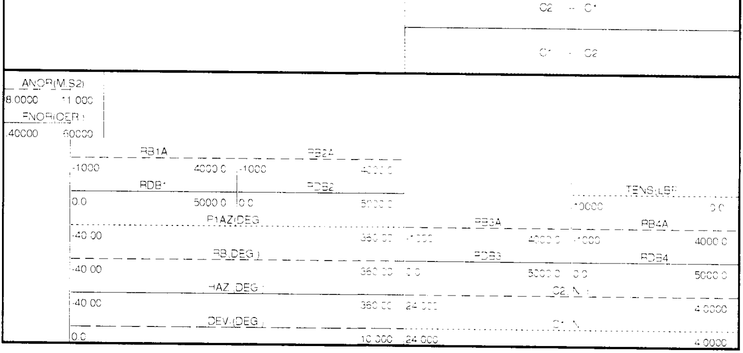
CP 32.6 FILE 6 03-NOV-1992 10:18 (UP)

2.33333"/MIN



2.33333"/MIN

CP 32.6 FILE 6 03-NOV-1992 10:15 (UP)



CALIBRATION SUMMARY

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                 PRE-SURVEY CALIBRATION SUMMARY


   PERFORMED:      03-NOV-1992 10:09
   PROGRAM FILE: TDIP   (VERSION    32.6    91.08.23  91.08.23)


 SHDT                 CALIPER CALIBRATION SUMMARY

                MEASURED                      CALIBRATED
              SMALL    LARGE                SMALL      LARGE        UNITS
      C1      6.53     10.45                8.00       12.00         IN
      C2      6.94     10.93                8.00       12.00         IN

 SMALL: 03-NOV-1992 10:07 LARGE: 03-NOV-1992 10:08 COMP: 03-NOV-1992 10:08

     CP 32.6           FILE    3        03-NOV-1992 10:08
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COMPANY	NAHAMA AND WEAGANT ENERGY CO.		SCHL.	FR	2793.0 F
			SCHL.	TD	2795.0 F
WELL	SOCKEYE C.C. #31-15-65		DRLR.	TD	2795.0 F
FIELD	MIST		Elev:	KB	734.2 F
				DF	
COUNTY	COLUMBIA	**STATE** OREGON		GL	723.2 F

DUAL DIPMETER

Schlumberger