CC 41-36-75

DUAL INDUCTION-SFL-SONIC

Schlumberger

COUNTY	COLUMBIA
FIELD	MIST
LOCATION	1135'S & 795'W
WELL	"ROARING CREEK" C.C. #41-36-75
COMPANY	NAHAMA AND WEAGANT ENERGY CO

COMPANY NAHAMA AND WEAGANT ENERGY CO.

WELL "ROARING CREEK" C.C. #41 36-75

FIELD MIST

COUNTY COLUMBIA **STATE** OREGON

LOCATION 1135'S & 795'W
FROM NE CORNER OF

Other Services:

API SERIAL NO.	SECT.	TWP.	RANGE
36-009-003007	36	7N	5W

Permanent Datum	GL	**Elev.**		**Elev.:** K.B. 979.6 F
Log Measured From	KB	10.0 F	**above Perm. Datum**	D.F. 978.6 F
Drilling Measured From	KB			G.L. 969.6 F

Date	9-JULY-93			
Run No.	ONE			
Depth Driller	1792.0 F			
Depth Logger (Schl.)	1792.0 F			
Btm. Log Interval	1786.0 F			
Top Log Interval	493.0 F			
Casing-Driller	8 5/8 @ 493.0 F	@	@	
Casing-Logger	493.0 F			
Bit Size	7 7/8 @ 1792.0 F	@	@	
Type Fluid in Hole	DRISPAC/POLYMER			
Dens. | Visc.	8.90 LB/G	41.0 S		
pH | Fld. Loss	7.0	6.8 C3		
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	3.510 OHMM @ 78.0 DEGF		@	
Rmf @ Meas. Temp.	4.640 OHMM @ 60.0 DEGF		@	
Rmc @ Meas. Temp.	2.900 OHMM @ 60.0 DEGF		@	
Source: Rmf | Rmc	MEASURED	MEASURED		
Rm @ BHT	3.141 OHMM @ 88.0 DEGF		@	
TIME Circulation Ended	22:00 9-JULY-93			
TIME Logger on Bottom	00:30 10-JULY-93			
Max. Rec. Temp.	88.0 DEGF			
Equip. | Location	8271	SACRAMENTO		
Recorded By	MIKE DEMSKIE			
Witnessed By	VAUGHN/HUGGINS/LUCAS			

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

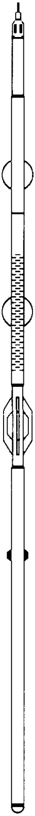
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.	624362		
Drilling Fluid Level	5.0 F		
Salinity	100.0 PPM		
Rmf @ BHT	3.272 OHMM @ 88.0 DEGF		@
Rmc @ BHT	2.045 OHMM @ 88.0 DEGF		@
Logging Speed	3200.0 F/HR		
EQUIPMENT DATA			
Tool Number 1	DIS-EC 1342		
Tool Number 2	DIC-DA 1386		
Tool Number 3	MCD-DA 668		
Tool Number 4	SLS-WC 1335		
Tool Number 5	SLC-MA		
Tool Number 6	SGC-JC		
Tool Number 7	IEM-BD 645		
Tool Number 8	SLM-DA 383		
Tool Number 9	NLM-BC 456		
Tool Number 10			
Tool Number 11			
Tool Number 12			

REMARKS:

TWO CMEZ CENTRALIZERS RUN ON SONIC
TWO 1.5" STANDOFFS RUN ON INDUCTION TOOL
REPEAT SECTION CHOSEN BY CLIENT

LOGGING TOOL STRING SKETCH



SGTE, 3 3/8" OD

GR 65.6 F
64.7 F

SLTL, 3 5/8" OD

60.6 F

DT 41.7 F

MCDB, 3" OD

35.9 F

CALI 31.9 F

DITD, 3 5/8" OD

28.9 F

SP 10.2 F
ILD CILD 9.9 F

SFLU SFLA 6.8 F
ILM 6.1 F

TOOL ZERO

TOTAL TOOL STRING LENGTH IS 69.2 F.
TOTAL TOOL STRING WEIGHT IS 993. LB IN AIR.

MAIN LOG

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ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume:   467.746 F3    FROM 1792.00 F    TO 493.000 F
Integrated Cement Volume: 324.277 F3    FROM 1792.00 F    TO 493.000 F
  (ASSUMING 4.50000 IN   O.D. CASING)
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EVENT MARK SUMMARY:

OUTPUT                         INTERVAL        DEPTH TRACK
                               BETWEEN PIPS    EDGE

Integrated Hole Volume         10.0000 F3      LEFT EDGE
Integrated Cement Volume       10.0000 F3      RIGHT EDGE
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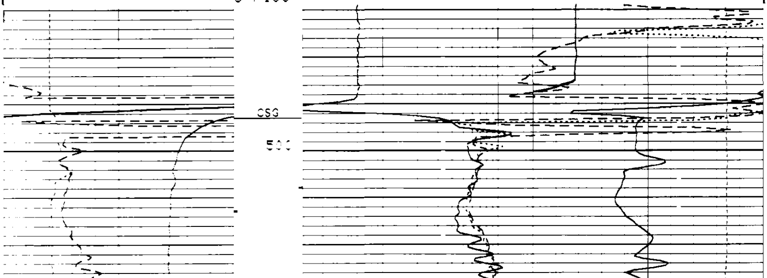
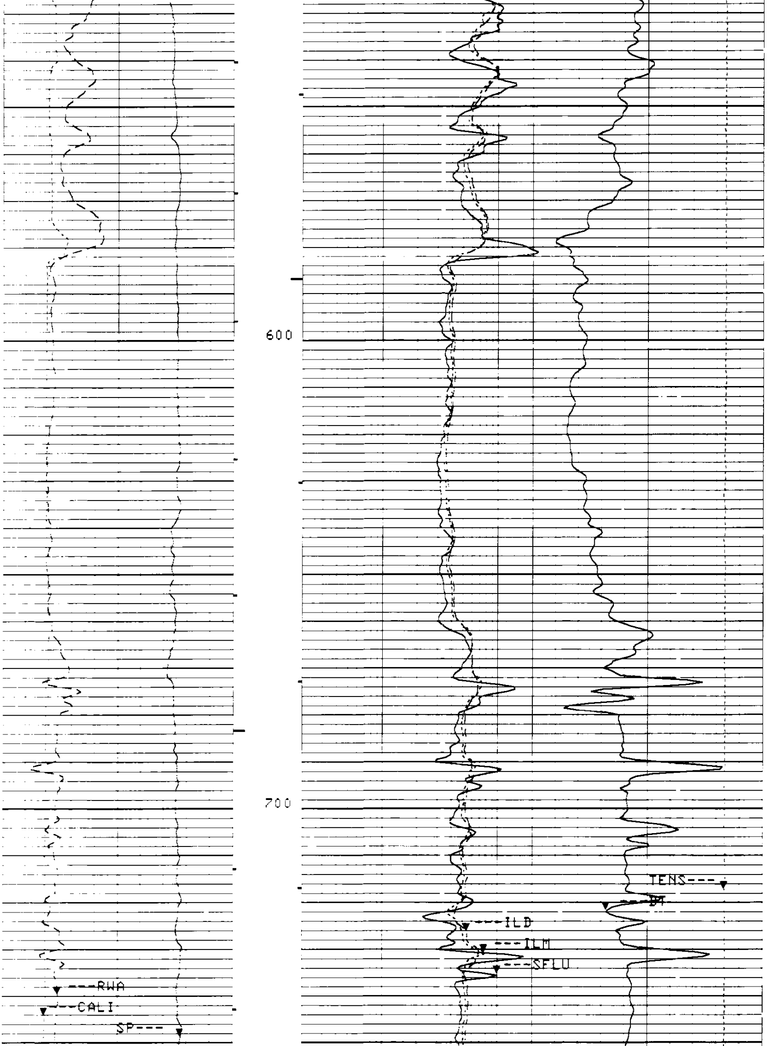
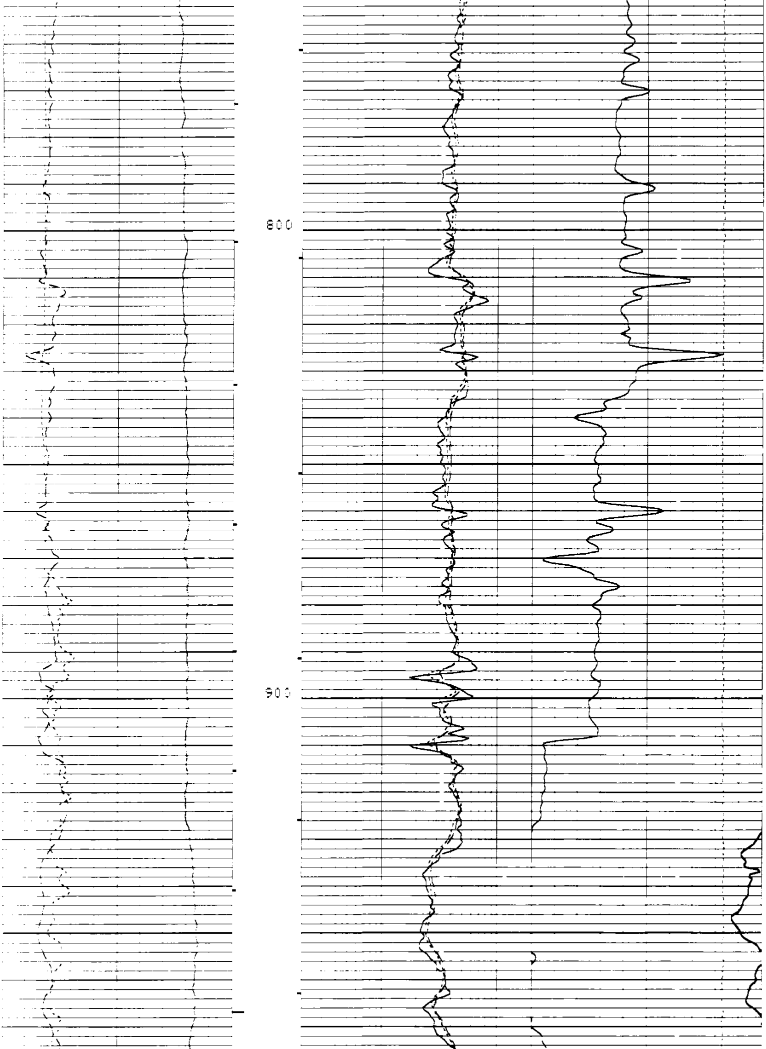
Curve	Left	Right
TENS(LBF)	10000.	0.0
DT(US/F)	175.00	75.000
RWA(OHMM)	0.0	3.0000
CALI(IN)	6.0000	16.000
SP(MV)	-100.0	0.0
ILD(OHMM)	.20000	2000.0
ILM(OHMM)	.20000	2000.0
SFLU(OHMM)	20000	2000.0

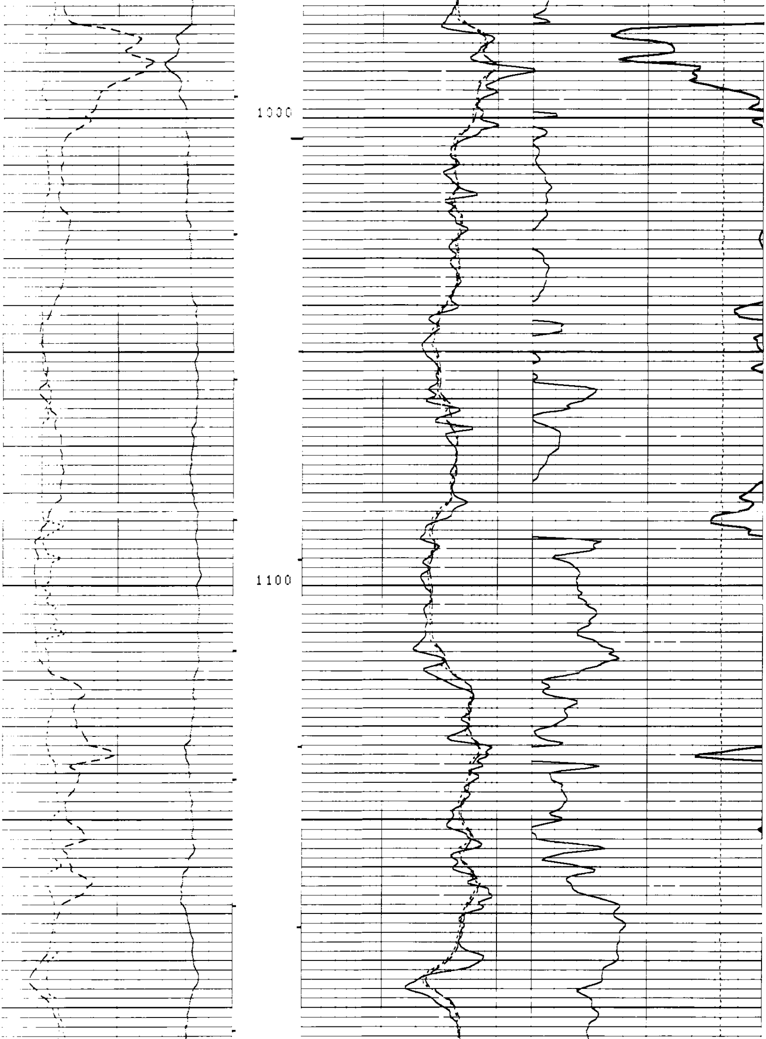
CP 38.2   FILE 9   09-JUL-1993 13:04   (UP)

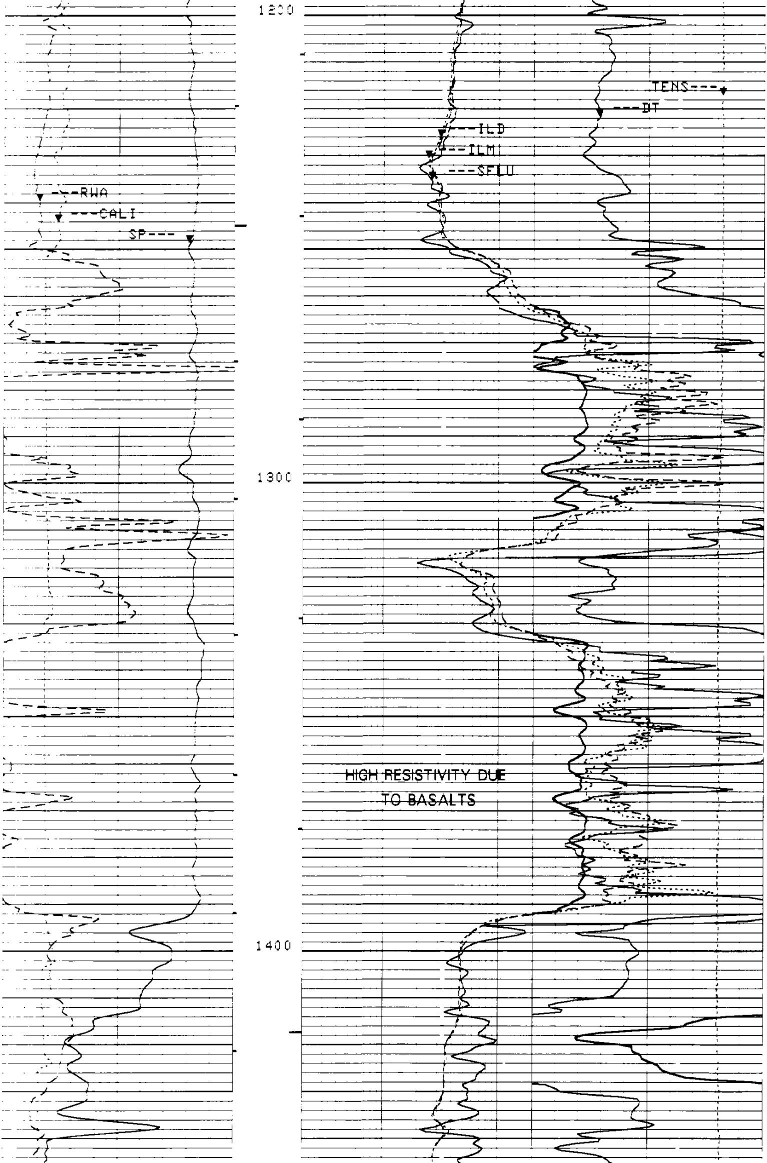
5"/100'



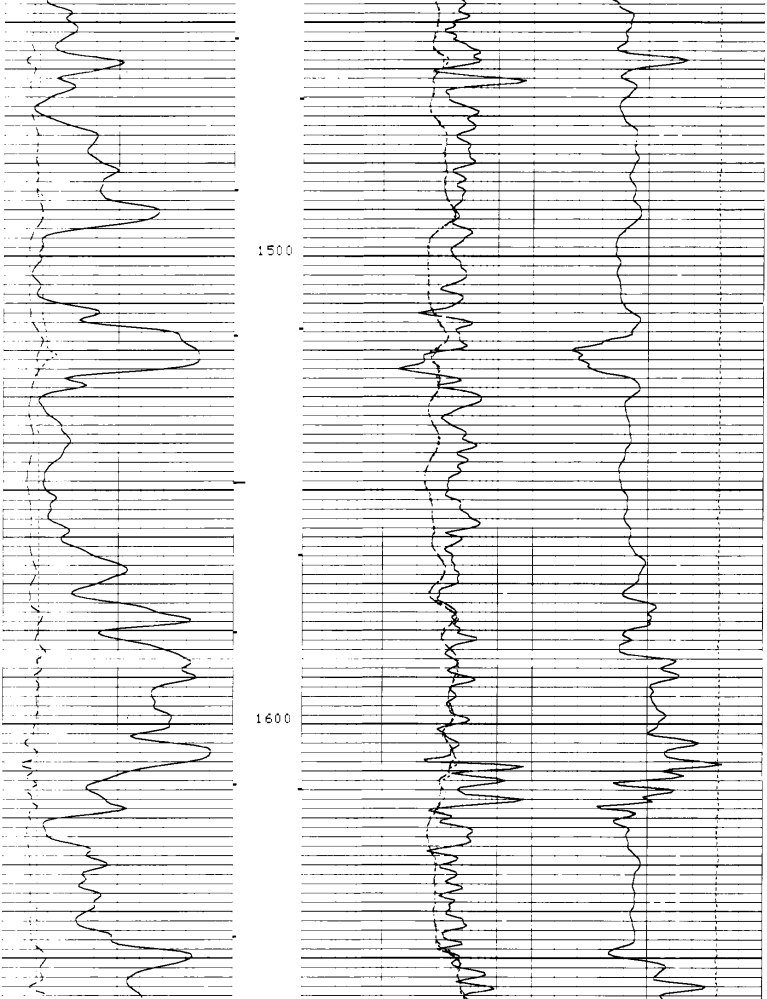


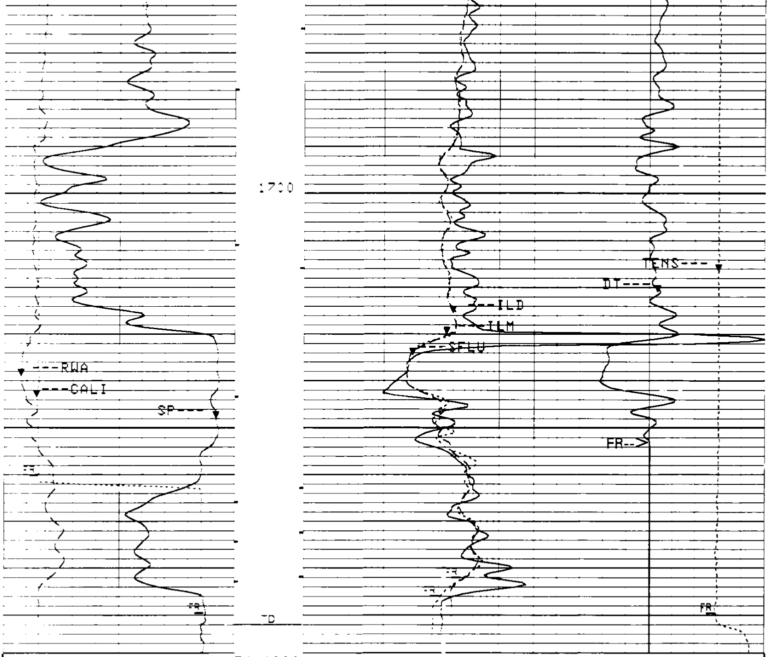






HIGH RESISTIVITY DUE TO BASALTS





5"/100'

CP 38.2　　FILE 9　　09-JUL-1993 12:37　　(UP)

TENS(LBF)	10000.	0.0
DT(US/F)	175.00	75.000
RWA(OHMM)	0.0	3.0000
CALI(IN)	6.0000	16.000
SP(MV)	-100.0	0.0
ILD(OHMM)	20000	2000.0
ILM(OHMM)	.20000	2000.0
SFLU(OHMM)	.20000	2000.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	41.7	FEET	AMPL	44.1	FEET
CBFS	43.1	FEET	CBL	44.1	FEET
TT2	44.1	FEET	TT1	43.1	FEET
TT4	39.3	FEET	TT3	40.3	FEET
TT	44.1	FEET	TO	44.1	FEET
CBSL	44.1	FEET	TTSL	44.1	FEET
CALI	31.9	FEET	GR	62.7	FEET
ILM	6.1	FEET	ILD	9.9	FEET
SP	2.5	FEET	SFL	6.8	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	2.5	FEET			

PARAMETERS

PARAMETER	VALUE	UNIT
SMB - Sonic Memory Board	DISA	
VDLR - Defn not found	2IN	
TOCA - TO Correction Status	DISA	
RATE - Firing Rate	15	HZ
DG - Downhole Gain	/5	
DETE - Detection	E2	
NMSG - Near Minimum Sliding Gate	180	US
CBLG - CBL Gate Width	35	US
AMPL - Sonic Amplitude	2	
CBL - Cement Bond Log Amplitude	UT	
WFM - Waveform Mode	1	
SS - Sweep Speed	FAST	
TOD - TO Delay	DISA	
DTF - Delta-T Fluid	189.000	US/F
DTM - Delta-T Matrix	56.0000	US/F
CDTS - Correction for Delta-T Shale, Empirical	100.000	
SPFS - Sonic Porosity Formula Select	R-H	
WMUD - Weight of Mud	8.90000	LB/G
MSEC - Medium Sonde Error Correction	7.60000	MM/M
SBR - Shoulder Bed Resistivity	1.00000	OHMM
DSEC - Deep Sonde Error Correction	5.60000	MM/M
FCD - Future Casing Diameter	4.50000	IN
NCJT - NGT Calibration Jig Type	GSRY	
FPHI - Formation Factor Formula Porosity	SPHI	
DWCO - Digitizer Word Count	512	
DSIN - Digitizer Sample Interval	5	US
DDEL - Digitizing Delay	200	US
BS - Bit Size	7.87500	IN
BHS - BoreHole Status (Open or Cased)	OPEN	

REPEAT SECTION

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume:	82.3686 F3	FROM 1594.00 F	TO 1335.50 F
Integrated Cement Volume:	53.8733 F3	FROM 1594.00 F	TO 1335.50 F

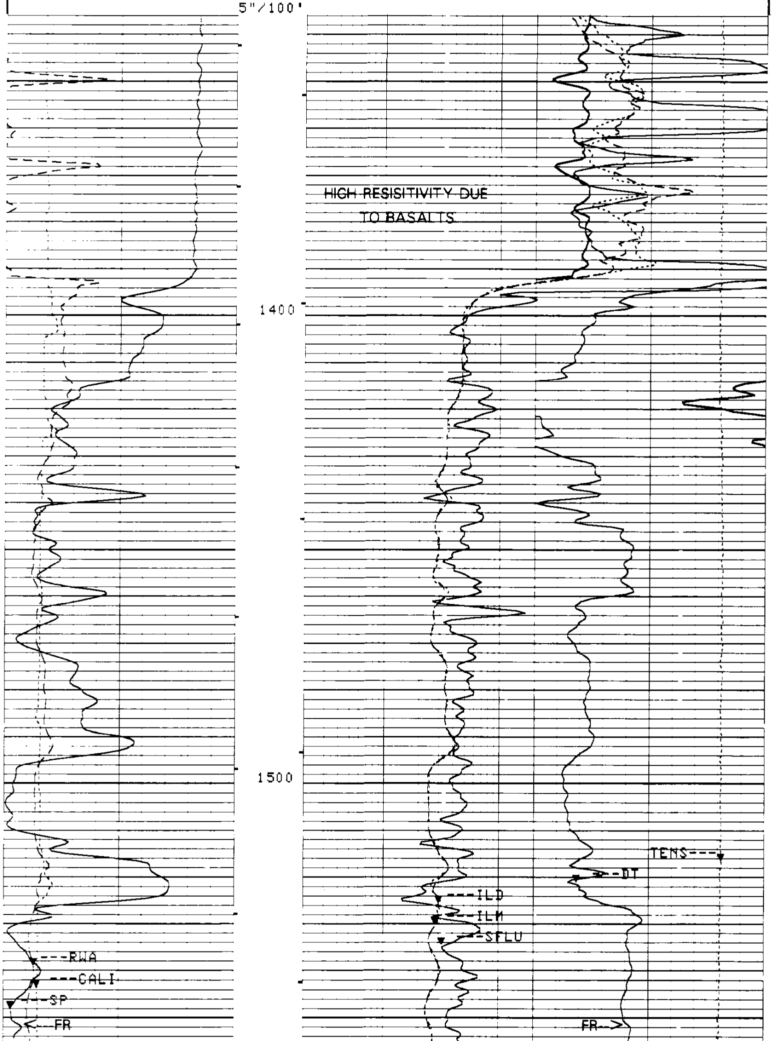
(ASSUMING 4.50000 IN O.D. CASING)

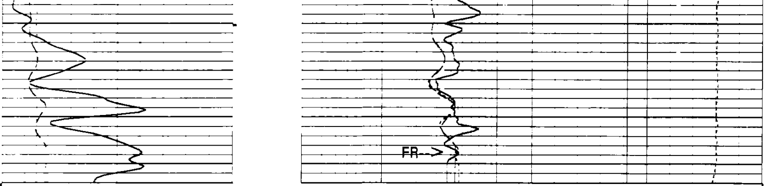
EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE

Curve	Left	Right
TENS(LBF)	10000.	0.0
DT(US/F)	176.00	76.000
RWA(OHMM)	0.0	3.0000
CALI(IN)	6.0000	16.000
SP(MV)	-100.0	0.0
ILD(OHMM)	.20000	2000.0
ILM(OHMM)	.20000	2000.0
SFLU(OHMM)	.20000	2000.0

CP 38.2 FILE 7 09-JUL-1993 12:22 (UP)





5"/100'

CP 38.2 FILE 7 09-JUL-1993 12:16 (UP)

TENS(LBF)
10000. 0.0
DT(US/F)
175.00 75.000

RWA(OHMM)
0.0 3.0000
CALI(IN)
6.0000 16.000
SP(MV)
-100.0 0.0

ILD(OHMM)
.20000 2000.0
ILM(OHMM)
.20000 2000.0
SFLU(OHMM)
.20000 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	41.7	FEET	AMPL	44.1	FEET
CBFS	43.1	FEET	CBL	44.1	FEET
TT2	44.1	FEET	TT1	43.1	FEET
TT4	39.3	FEET	TT3	40.3	FEET
TT	44.1	FEET	T0	44.1	FEET
CBSL	44.1	FEET	TTSL	44.1	FEET
CALI	31.9	FEET	GR	62.7	FEET
ILM	6.1	FEET	ILD	9.9	FEET
SP	2.5	FEET	SFL	6.8	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	2.5	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SMB	DISA		VDLR	2IN	
TOCA	DISA		RATE	15	HZ
DG	AUTO		DETE	E2	
NMSG	180	US	CBLG	35	US
AMPL	2		CBL	UT	
WFM	1		SS	FAST	
TOD	DISA		DTF	189.000	US/F
DTM	56.0000	US/F	CDTS	100.000	
SPFS	R-H		WMUD	8.90000	LB/G
MSEC	7.60000	MM/M	SBR	1.00000	OHMM
DSEC	5.60000	MM/M	FCD	4.50000	IN
NCJT	GSRY		FPHI	SPHI	
DWCO	512		DSIN	5	US
DDEL	200	US	BS	7.87500	IN
BHS	OPEN				

CALIBRATION SUMMARY

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                AFTER SURVEY TOOL CHECK SUMMARY

   PERFORMED:     09-JUL-1993 13:07
   PROGRAM FILE: ISN    (VERSION    38.2    92/10/12  92/10/12)

 DITD                       TOOL  CHECK

                    ZERO                        PLUS
            BEFORE        AFTER         BEFORE       AFTER     UNITS
    ILD       0.0           .3          504.9        503.9     MM/M
    ILM       0.0           .5          503.1        501.8     MM/M
    SFL       0.0           .9          500.0        490.9     MM/M

 ILD SONDE ERROR CORRECTION :        5.6 MM/M
 ILM SONDE ERROR CORRECTION :        7.6 MM/M

 BEFORE SURVEY:             ZERO: 09-JUL-1993 12:13  PLUS: 09-JUL-1993 12:14
 AFTER SURVEY CHECK:        ZERO: 09-JUL-1993 13:06  PLUS: 09-JUL-1993 13:07

    CP 38.2             FILE   11       09-JUL-1993 13:07


                BEFORE SURVEY CALIBRATION SUMMARY

   PERFORMED:     09-JUL-1993 12:14
   PROGRAM FILE: ISN    (VERSION    38.2    92/10/12  92/10/12)

 DITD           ELECTRONICS CALIBRATION SUMMARY

             MEASURED                       CALIBRATED
           ZERO    PLUS                 ZERO        PLUS          UNITS
    ILD     .38    519.2                0.0         504.9          MM/M
    ILM     .02    511.9                0.0         503.1          MM/M
    SFL     .27    500.2                0.0         500.0          MM/M

 ILD SONDE ERROR CORRECTION :        5.6 MM/M
 ILM SONDE ERROR CORRECTION :        7.6 MM/M

 ZERO: 09-JUL-1993 12:13  PLUS: 09-JUL-1993 12:14  COMP: 09-JUL-1993 12:14


 SGTE           DETECTOR CALIBRATION SUMMARY

             MEASURED
           BKGD     JIG         CALIBRATED        UNITS
     GR     38      188            165            GAPI

 BACK: 09-JUL-1993 11:51   JIG: 09-JUL-1993 11:54  COMP: 09-JUL-1993 11:54


 MCDB           CALIPER CALIBRATION SUMMARY

             MEASURED                       CALIBRATED
           SMALL   LARGE                SMALL       LARGE         UNITS
   CALI     7.57   12.55                8.00        12.00          IN

 SMALL: 09-JUL-1993 11:21 LARGE: 09-JUL-1993 11:22 COMP: 09-JUL-1993 11:22

    CP 38.2             FILE    6       09-JUL-1993 12:14


                SHOP SUMMARY
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  PERFORMED:    07-JUL-1993 19:57
  PROGRAM FILE: SHOP   (VERSION    38.2    92/10/12  92/10/12)


DITD             ELECTRONICS CALIBRATION SUMMARY

                TEST LOOP CALIBRATION          TOOL CHECK
             MEASURED         CALIBRATED       CALIBRATED
           ZERO     PLUS     ZERO      PLUS      ZERO      PLUS    UNITS
   ILD     -4.8     510.2     0.0      500.0      0.0      504.9   MM/M
   ILM     -8.4     500.7     0.0      500.0      0.0      503.1   MM/M
ILD  SONDE ERROR CORRECTION :        5.6 MM/M
ILM  SONDE ERROR CORRECTION :        7.6 MM/M

                        (IS:1342, IC:1386)

   CP 38.2          FILE    7      07-JUL-1993 19:57
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COMPANY	NAHAMA AND WEAGANT ENERGY CO.			**SCHL.**	**FR**	1786.0 F
				SCHL.	**TD**	1792.0 F
VELL	"ROARING CREEK" C.C. #41-36-75			**DRLR.**	**TD**	1792.0 F
IELD	MIST			**Elev:**	**KB**	979.5 F
					DF	978.5 F
COUNTY	COLUMBIA	**STATE**	OREGON		**GL**	969.5 F

Schlumberger

DUAL INDUCTION-SFL-SONIC

-End-