Schlumberger

DUAL INDUCTION-SFL-SONIC

TRUE VERTICAL DEPTH

COMPANY: NAHAMA AND WARSHAM ENERGY CO.

WELL: "WAVERLY WCA-33-7S"

FIELD: MIST

COUNTY: COLUMBIA STATE: OREGON

"Data acquired, quality and operation witnessed only as noted furnished by the customer."

"I, the undersigned, do certify that the above mentioned information is true and correct to the best of my knowledge. I understand that Schlumberger will not be responsible for any damages arising out of the use of this information. Schlumberger's liability for any of its negligent acts, errors or omissions in connection with the above mentioned information shall not exceed the amount of the charges for the service."

Run No.	ONE
Service Order No.	93498
Depth Driller	6502 FAM
Depth Logger	6502 FAM
Bot. & Bit	2.687 DIAM @ 9413 DEP @
Top & Bit	1.50" DIAM @ 9413 DEP @
Logging Speed	INDUCTION
Recorded Data	
Tool Number 1	TDI 160
Tool Number 2	TDC 146
Tool Number 3	SLS 1060
Tool Number 4	SLS 1060
Tool Number 5	1603 A
Tool Number 6	1501 C
Tool Number 7	SNAP 883
Tool Number 8	SLS 1060
Tool Number 9	SLS-SC 455
Tool Number 10	
Tool Number 11	
Tool Number 12	
REMARKS	

"ALL LOG STANDOFFS RUN ON INDUCTION."
"ALL DOG DEPTHS DERIVE RUN ON SONIC."
"ALL LOGS RUN WITH CENTRALIZERS AND CONDITIONS DEPTH DISCREPANCY BETWEEN DRILLER'S CASING DEPTH AND LOGGER'S CASING DEPTH VERIFIED."

LOGGING TOOL STRING SKETCH

TOTAL TOOL LENGTH (ABOVE 45 F.) =
TOTAL WEIGHT (ABOVE 45 F.) =

CP 38.2 FILE 24 27-MAY-1993 03:24

INPUT FILE(S): CREATION DATE
18 27-MAY-1993 03:47

CP 38.2 FILE 24 27-MAY-1993 03:19

INPUT FILE(S): CREATION DATE
18 27-MAY-1993 03:47

SEVEN PAVILNE POINT TO TOOL ZERO

CASE 41.7	FEET	HORN 44.1	FEET
CBFD 39.6	FEET	TCD 44.1	FEET
TTA 44.1	FEET	TTI 43.1	FEET
TT 44.1	FEET	TTS 44.1	FEET
TT 44.1	FEET	TTS 44.1	FEET
CBIL 44.1	FEET	TTS 44.1	FEET
TT 44.1	FEET	TTS 44.1	FEET
TP 0.0	FEET	IFA 0.0	FEET
TP 0.0	FEET	IFA 0.0	FEET
HOTI 2.5	FEET	SPAR 0.0	FEET

PARAMETERS

PARAMETER	VALUE	UNIT
SPCM - Spontaneous Potential Drift	0.0	
SPBL - SP Baseline Value	DISH	
HCS - Hole Size	DISH	
TECM - TT Correction Status	DISH	
FREQ - Frequency	20	HZ
DFD - Density Fluid	8.70	
DETC - Detection	EE	
TAS - Time Analysis Starting Gate	100	US
TAG - Time Analysis Length	100	US
HMPL - Sonic Amplitude	0	
AT - Sonic Delta Time Amplitude	0	
SS - Sonic Status	1	
SS - Sweep Speed	FAST	
SS - Sweep Time	0.00000	
STM - Sensor Metric	56.2000	US/F
STM - Sensor Metric for Sensor Status Enginrical	56.2000	US/F
CMFS - Caliper Mud Filtrate Status	DISH	
PP - Pseudo Processing	NORM	
SD - Depth Offset for Logging Unit LIS	0	F
MSEC - Mantis Shape Error	0.00000	LB/G
MSEC - Mantis Shape Error Correction	0.00000	DEVM
PCOR - Pressure Dep Parameters	0.00000	DEVM
PTCO - Pressure Temperature Correction	0.00000	DEVM
PTCO - Pressure Casing Diameter	0.00000	IN
TOLS - Tool Size	SDBT	
TOLS - Standoff Caliper Formula Porosity	STND	
CSCS - Standoff Caliper Correction	STND	
CSCS - Standoff Caliper Interval	0.00	US
CSCS - Standoff Caliper Interval	0.00	US
CSCS - Standoff Caliper Vertical Depth	0.00	FT
CSCS - Standoff Caliper Vertical Depth Deviation-Logging Facility	0.00	FT
BHC - Borehole Compensation	0.00000	IN
BHC - Borehole Status (Open or Cased)	OPEN	