![Halliburton Logging Services, Inc.]

SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

2" = 100'

FINAL PRINT

COMPANY ______ WELL ______ FIELD ______ COUNTY ______ ST __

COMPANY	NAHAMA AND WEAGANT ENERGY CO.
WELL	C.E.R. NO. 41-21-64
FIELD	MIST
COUNTY	COLUMBIA
STATE	OR

API NO. 36-009-00273
LOCATION :
1137.6 FEET SOUTH AND
485.9 FEET WEST FROM THE
NORTHEAST CORNER OF:
SEC. 21 TWP 6N RGE 4W

OTHER SERVICES
DIPMETER
DIG/AVL/GR

PERMANENT DATUM G.L. ELEV. 1089.9
LOG MEASURED FROM K.B. 11.5 FT.ABOVE PERM.DATUM
DRILLING MEASURED FROM KELLY BUSHING

ELEV.:K.B. 1101.4
D.F. ------
G.L. 1089.9

DATE	11/06/90			
RUN NO.	ONE			
DEPTH-DRILLER	2121			
DEPTH- LOGGER	2124			
BTM. LOG INTER.	2124			
TOP LOG INTER.	524			
CASING-DRILLER	9 5/8@524	@	@	@
CASING- LOGGER	524			
BIT SIZE	8 1/2			
TYPE FLUID IN HOLE	GEL/POLYMER			
DENS. : VISC	9.3 :35.	:	:	:
PH : FLUID LOSS	8.5 :5.6	:	:	:
SOURCE OF SAMPLE	CIRCULATED			
RM @ MEAS. TEMP.	6.0 @50.	@	@	@
RMF @ MEAS. TEMP.	5.5 @52.	@	@	@
RMC @ MEAS. TEMP.	4.5 @56.	@	@	@
SOURCE RMF : RMC	CIRC.:CIRC.	:	:	:
RM @ BHT	3.45 @92.	@	@	@
TIME SINCE CIRC.	6.5 HOURS			
TIME ON BOTTOM	10:06 PM			
MAX. REC. TEMP.	92. @BHT	@	@	@
EQUIP. : LOCATION	2890 :WDLND	:	:	:
RECORDED BY	D.MCDANIEL			
WITNESSED BY	J.VAUGHAN	M.CHALMERS	T.THOMAS	

Fold Here

Service Ticket No.: 44359 API Serial No.: 36-009-00273 PGM Version: 2.60 B

Change in Mud Type or Additional Samples			RESISTIVITY SCALE CHANGES			
Date/Sample No.	11/06/90:ONE	/ / :	Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller						
Type Fluid						
in Hole						
Dens. : Visc.	:	:				
pH. : Fluid Loss	:	:				

			RESISTIVITY EQUIPMENT DATA				
Source of Sample			Run No	Tool Type & No	Pad Type	Tool Pos.	Other
Rm @ Meas.Temp.	@	@					
Rmf @ Meas.Temp.	@	@	ONE	DUAL #W109437	N/A	1.5"S.O.	M412
Rmc @ Meas.Temp.	@	@	ONE	SGRD #W108946	N/A	1.5"S.O.	M405
Source: Rmf:Rmc	:	:					
Rm @ BHT	3.45 @92.	@					
Rmf @ BHT	3.27 @92.	@					
Rmc @ BHT	2.86 @92.	@					

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	N/A	Run No.	ONE	Run No.	ONE
Serial No.	W108580	Serial No.	W109088	Serial No.	W109740	Serial No.	W108749
Model No.	M432	Model No.	M305	Model No.	M465	Model No.	M434
Diameter	3 5/8	No.of Cent.	FOUR	Diameter	4 1/2	Diameter	3 5/8
Detector Model No.	M432	Spacing	1 FOOT	Log Type	GAMMA	Log Type	THERMAL
Type	SCINT.			Source Type	CS137	Source Type	AM241BE
Length	4 IN.	LSA	YES	Serial No.	047	Serial No.	25
Distance To Source	N/A	FWDA	NO	Strength	1.5 CU	Strength	19 CU

LOGGING DATA

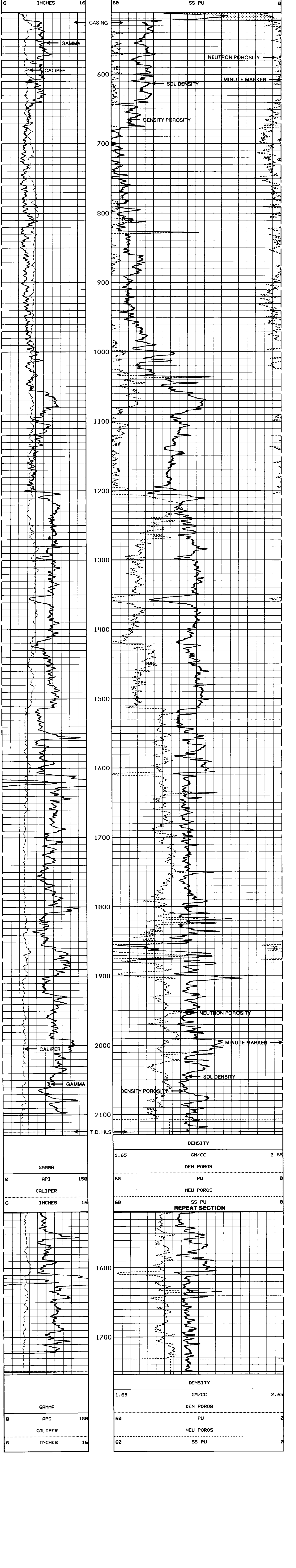
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale			Scale			Scale		
No.	From	To	Ft/Min	L	R	L	R	Matrix	L	R	Matrix	L	R	Matrix
ONE	2124	524	30	0	150				1.65	2.65	2.65	60.	0.	SAND
					GAPI						GM/CC	P.U.	P.U.	
									60.	0.	2.65			
									P.U.	P.U.	GM/CC			

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 4 1/2 INCH CASING.
REPEAT SECTION 1 FOOT OFF DEPTH TO DIG/AVL/GR LOG.

CREW ON LOCATION:EMERSON,PORTMAN, AND WELLS.
THANK YOU FOR USING HALLIBURTON LOGGING SERVICES!

Halliburton Logging Services, Inc. does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that HLS is not responsible except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.

GAMMA	DENSITY
	1.65 GM/CC 2.65
0 API 150	DEN POROS
CALIPER	60 PU 0
6 INCHES 16	NEU POROS
	60 SS PU 0



GAMMA	DENSITY
	1.65 GM/CC 2.65
0 API 150	DEN POROS
CALIPER	60 PU 0
6 INCHES 16	NEU POROS
	60 SS PU 0

REPEAT SECTION

GAMMA	DENSITY
	1.65 GM/CC 2.65
0 API 150	DEN POROS
CALIPER	60 PU 0
6 INCHES 16	NEU POROS
	60 SS PU 0