HALLIBURTON LOGGING SERVICES, INC.

ACOUSTIC VELOCITY GAMMA RAY LOG

FINAL PRINT

2" = 100'

COMPANY ____ WELL ____ FIELD ____ COUNTY ____ ST __

COMPANY	ARCO OIL AND GAS COMPANY
WELL	HAMLIN 33-17-65
FIELD	MIST
COUNTY	COLUMBIA
STATE OR	
API NO.	
LOCATION	1637.77 FEET NORTH AND 1583.61 FEET WEST FROM THE SOUTHEAST CORNER OF: SEC. 17 TWP 6N RGE 5W
OTHER SERVICES	DIG
PERMANENT DATUM G.L.	ELEV. 535.65
LOG MEASURED FROM K.B.	11.5FT.ABOVE PERM.DATUM
DRILLING MEASURED FROM KELLY BUSHING	
ELEV.: K.B.	547.15
D.F.	-----
G.L.	535.65

DATE	10/08/89			
RUN NO.	ONE			
DEPTH-DRILLER	3150			
DEPTH- LOGGER	3157			
BTM. LOG INTER.	3154			
TOP LOG INTER.	450			
CASING-DRILLER	9 5/8@450	@	@	@
CASING- LOGGER	450			
BIT SIZE	6 1/4			
TYPE FLUID IN HOLE	LS.ND POLY.			
DENS. ¦ VISC	10.3 ¦46.	¦	¦	¦
PH ¦ FLUID LOSS	9.0 ¦15.0	¦	¦	¦
SOURCE OF SAMPLE	CIRCULATED			
RM @ MEAS. TEMP.	2.20 @75.	@	@	@
RMF @ MEAS. TEMP.	2.38 @75.	@	@	@
RMC @ MEAS. TEMP.	2.42 @75.	@	@	@
SOURCE RMF ¦ RMC	MEAS.¦MEAS.	¦	¦	¦
RM @ BHT	1.53 @111.	@	@	@
TIME SINCE CIRC.	4.50 HOURS			
TIME ON BOTTOM	11:30 PM			
MAX. REC. TEMP.	111. @BHT	@	@	@
EQUIP. ¦ LOCATION	2890 ¦MDLND	¦	¦	¦
RECORDED BY	D.MCDANIEL			
WITNESSED BY	J.EASTES			

Service Ticket No.: 12330 API Serial No.: PGM Version: 1.31 PC

Change in Mud Type or Additional Samples		
Date/Sample No.	10/08/89¦ONE	/ / ¦
Depth-Driller		
Type Fluid in Hole		
Dens. ¦ Visc.	¦	¦
pH. ¦ Fluid Loss	¦	¦
Source of Sample		
Rm @ Meas.Temp.	@	@
Rmf @ Meas.Temp.	@	@
Rmc @ Meas.Temp.	@	@
Source: Rmf¦Rmc	¦	¦
Rm @ BHT	1.53 @111.	@
Rmf @ BHT	1.65 @111.	@
Rmc @ BHT	1.68 @111.	@

RESISTIVITY SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA

Run No	Tool Type & No	Pad Type	Tool Pos.	Other
N/A	DUAL W109432	N/A	1.5"S.O.	M412
N/A	SGRD W108932	N/A	1.5"S.O.	M416

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	N/A	Run No.	N/A
Serial No.	W108581	Serial No.	W112458	Serial No.	W109740	Serial No.	W108749
Model No.	432	Model No.	305	Model No.	465	Model No.	434
Diameter	3 5/8	No.of Cent.	FOUR	Diameter	4 1/2	Diameter	3 3/8
Detector Model No.	N/A	Spacing	1 FOOT	Log Type	SDL	Log Type	DSN
Type	SCINT.			Source Type	CS 137	Source Type	AM241BE
Length	4 IN.	LSA	YES	Serial No.	129	Serial No.	66
Distance To Source	N/A	FWDA	NO	Strength	1.5 CU	Strength	19. CU

LOGGING DATA

GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run No.	Depth From	Depth To	Speed Ft/Min	Scale L	Scale R	Scale L	Scale R	Matrix	Scale L	Scale R	Matrix	Scale L	Scale R	Matrix
ONE	3154.	450.	30	0	150	150.	50	57						
					API			US/FT						

Remarks: REPEAT RUN OVER ZONE OF INTEREST AT CUSTOMER REQUEST.
ANNULAR HOLE VOLUME CALCULATED FOR 3 1/2 INCH CASING.

CREW ON LOCATION: EMERSON AND JEFFREY.
THANK YOU FOR USING HALLIBURTON LOGGING SERVICES!!

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