HALLIBURTON LOGGING SERVICES, INC.

FINAL PRINT

SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

2" = 100'

COMPANY ______________
WELL ______________
FIELD ______________
COUNTY __________ ST __

COMPANY	ARCO OIL AND GAS COMPANY
WELL	LUNGREN CREEK NO. 24-18-64 CER
FIELD	MIST
COUNTY	COLUMBIA
STATE OR	
API NO	N/A
OTHER SERVICES	DIG/AVL
LOCATION	NW B 1135.70 FEET NORTH AND 2181.19 FEET EAST FROM THE SOUTHWEST CORNER OF: SEC 18 TWP 6N RGE 4W
PERMANENT DATUM G.L.	ELEV. 636.1
LOG MEASURED FROM K.B	11.5FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM	KELLY BUSHING
ELEV.: K.B.	647.6
D.F.	------
G.L.	636.1

DATE	09/19/89		
RUN NO	ONE		
DEPTH-DRILLER	1810		
DEPTH-LOGGER	1808		
BTM. LOG INTER.	1805		
TOP LOG INTER.	456		
CASING-DRILLER	8 5/8@460	@	@
CASING-LOGGER	456		
BIT SIZE	6 1/4		
TYPE FLUID IN HOLE	POLYMER	LS,ND	
DENS. : VISC	10.0 :46	:	:
PH : FLUID LOSS	7.5 :6.0	:	:
SOURCE OF SAMPLE	CIRCULATED		
RM @ MEAS TEMP	2.8 @75	@	@
RMF @ MEAS TEMP	2.9 @75	@	@
RMC @ MEAS. TEMP.	3.0 @64	@	@
SOURCE RMF : RMC	MEAS.:MEAS.	:	:
RM @ BHT	1.93 @112	@	@
TIME SINCE CIRC	6.5 HOURS		
TIME ON BOTTOM	1:36 PM		
MAX. REC. TEMP	112 @BHT	@	@
EQUIP. : LOCATION	2890 :WOLND	:	:
RECORDED BY	B. JOHNSON		
WITNESSED BY	JIM EASTES		

Fold Here

Service Ticket No.: 12306	API Serial No.: N/A	PGM Version: 1.31 PC					
Change in Mud Type or Additional Samples			RESISTIVITY SCALE CHANGES				
Date/Sample No.	09/19/89:ONE	/ / :	Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller							
Type Fluid							
in Hole							
Dens. : Visc.	:	:					
pH. : Fluid Loss	:	:					
Source of Sample			RESISTIVITY EQUIPMENT DATA				
Rm @ Meas.Temp.	@	@	Run No	Tool Type & No	Pad Type	Tool Pos.	Other
Rmf @ Meas.Temp.	@	@	ONE	DUAL W109432	N/A	1.5"S.O.	M412
Rmc @ Meas.Temp.	@	@	ONE	SGRD W108932	N/A	1.5"S.O.	M416
Source: Rmf:Rmc	:	:					
Rm @ BHT	1.93 @112	@					
Rmf @ BHT	2.00 @112	@					
Rmc @ BHT	1.79 @112	@					

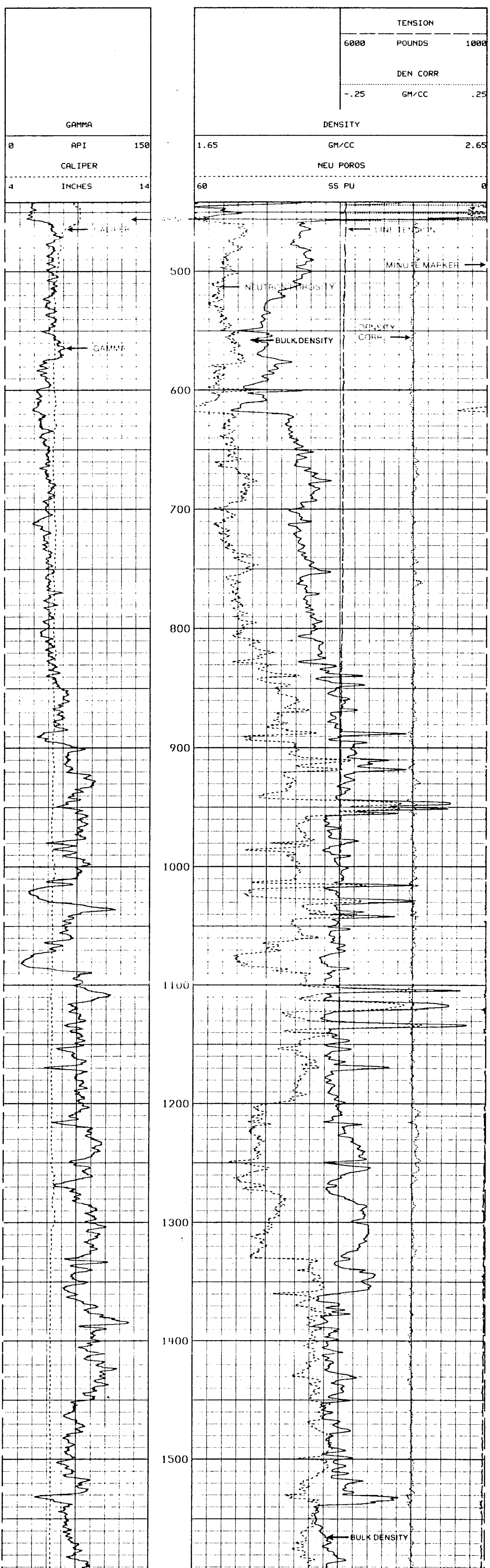
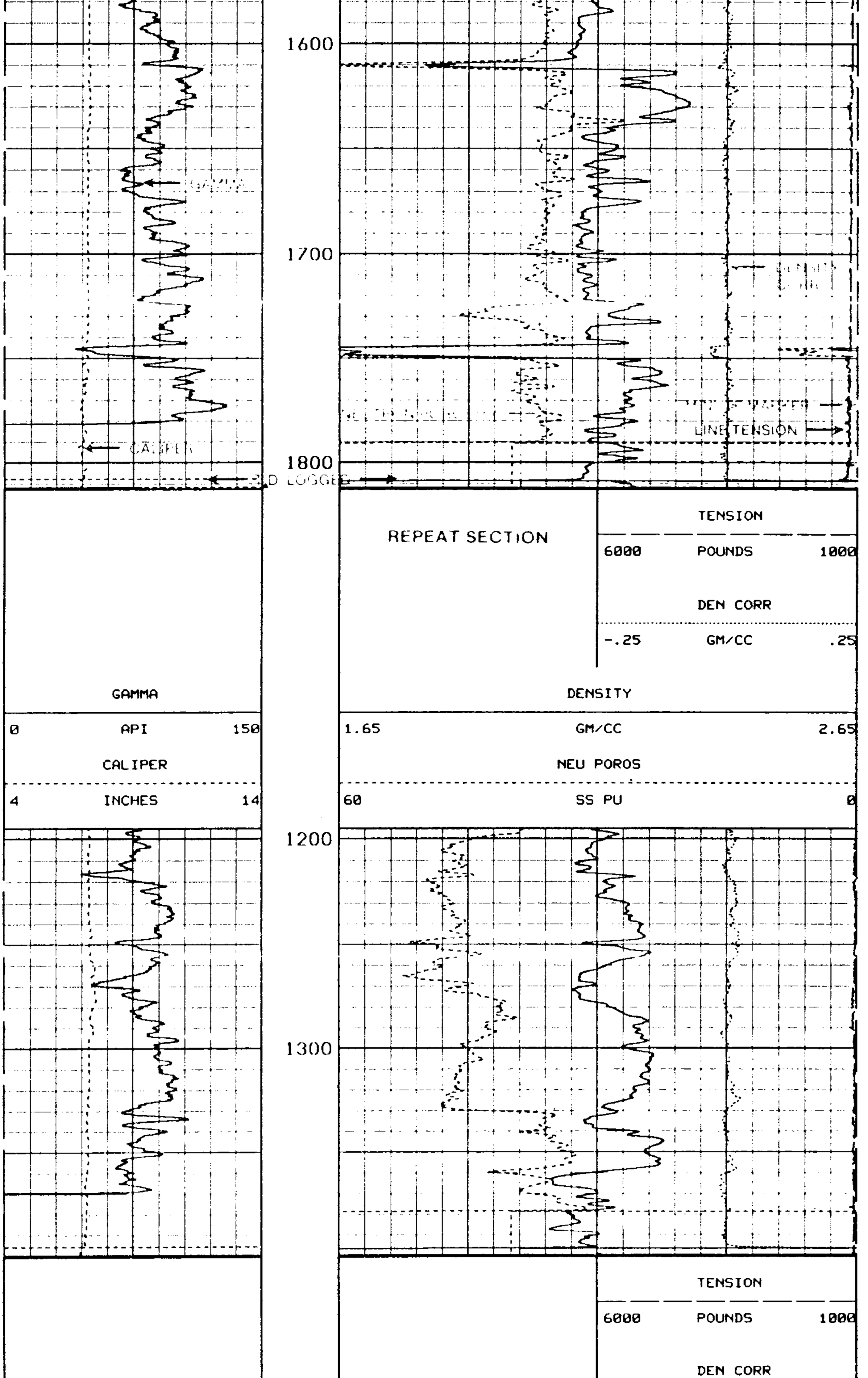
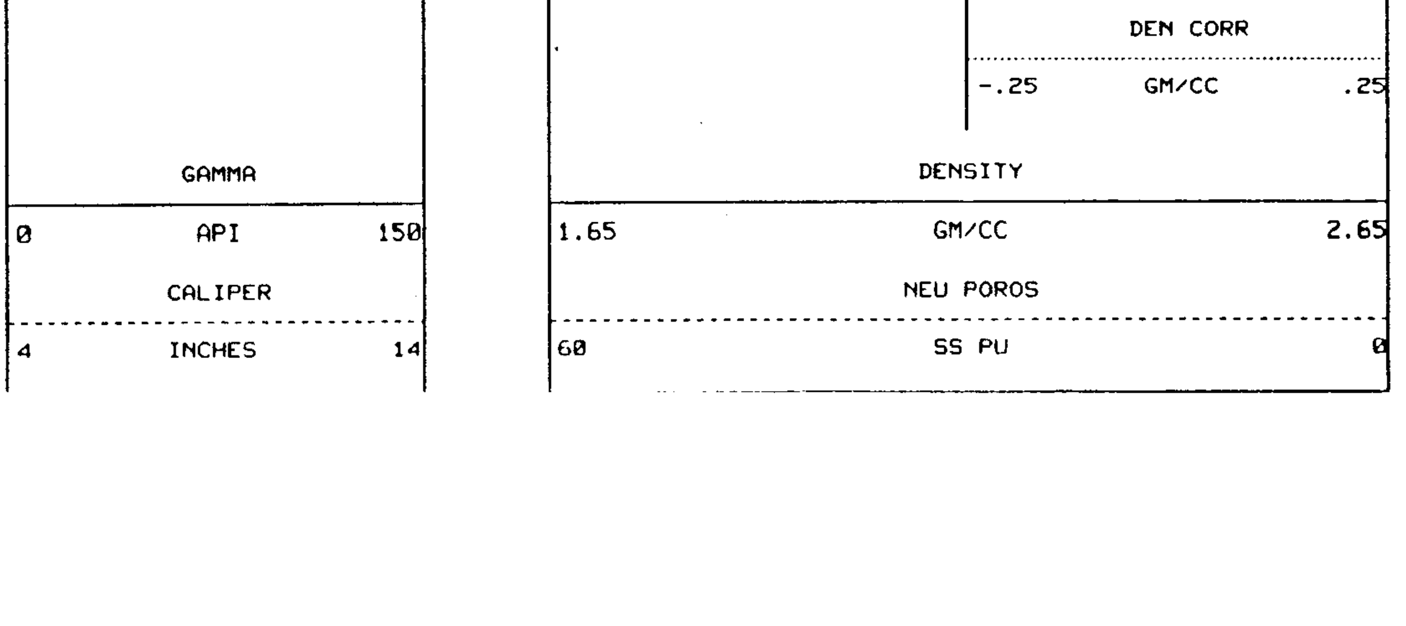
EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
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 5/8
Detector Model No.	N/A	Spacing	1 FOOT	Log Type	GAMMA	Log Type	NEUTRON
Type	SCINT.			Source Type	CS137	Source Type	AM241BE
Length	4 IN.	LSA	Y	Serial No.	118	Serial No.	66
Distance To Source	N/A	FWDA	N	Strength	1.5 CU.	Strength	19.5 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	1808	456	30.	0	50	150	50	57	1.65	2.65	2.65	60PU	0PU	SAND
								US/FT			G/CC			

Remarks: REPEAT RUN OVER INTERVAL FROM 1400 TO 1200 AT REQUEST OF COMPANY MAN.

CREW ON LOCATION: J.JOHNSON, R.JEFFERY
THANK YOU FOR USING HALLIBURTON LOGGING SERVICES!

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