9WSC-1049-B

SCHLUMBERGER

SONIC LOG GAMMA RAY

WITH CALIPER

SCHLUMBERGER WELL SURVEYING CORPORATION
Houston, Texas

NAUTI-LUS #1

COUNTY ____
FIELD or LOCATION ____
WELL ____
COMPANY ____

COMPANY STANDARD - UNION
TERMINATED
WELL NAUTILUS #1
FIELD OFFSHORE OREGON
COUNTY LINCOLN STATE OREGON
LOCATION OCS-PO-103
Other Services:
Sec. ____ Twp. ____ Rge. ____

USGS

GEOLOGICAL SURVEY RECEIVED LOS ANGELES

NOTED SEP 14 1965 FACKLER

Permanent Datum: Sea Level, Elev. 0
Log Measured From D.F., 33 Ft. Above Perm. Datum
Drilling Measured From D.F.
Elev.: K.B. ____ D.F. 33' G.L. ____

Date	6-1-65	6-27-65	7-30-65	
Run No.	1	2	3	
Depth—Driller	3260	8041	12,627	
Depth—Logger	3264	8009	12,612	
Btm. Log Interval	3260	8001	12,603	
Top Log Interval	1424	3258	7800	
Casing—Driller	13⅜ @ 1414	10¾ @ 3235	10¾ @ 3235	@
Casing—Logger	1424	3237		
Bit Size	12¼	9⅞"	9⅝	
Type Fluid in Hole	Fresh	Fresh	Fresh	
Dens. | Visc.	78 | 51	81 | 46	80 | 61	
pH | Fluid Loss	9.5 | 7.8 ml	9.5 | 3.6 ml	9.0 | 4.2 ml	ml
Source of Sample	Flowline	CIRC	Flowline	
R_m @ Meas. Temp.	1.79 @ 62 °F	1.83 @ 57 °F	0.91 @ 85 °F	@ °F
R_{mf} @ Meas. Temp.	.75 @ 112 °F	0.44 @ 168 °F	0.30 @ 171 °F	@ °F
R_{mc} @ Meas. Temp.	.135 @ 112 °F	0.85 @ 168 °F	0.80 @ 171 °F	@ °F
Source: R_{mf} | R_{mc}	C | C	C | C	C | C	
R_m @ BHT	.99 @ 112 °F	0.64 @ 168 °F	0.46 @ 171 °F	@ °F
Time Since Circ.	4 HRS	14 HRS	13 HRS	
Max. Rec. Temp.	112 °F	168 °F	171 °F	°F
Equip. | Location	C-103 | SAC	C-103 | SAC	OSUC-100 | SAC	
Recorded By	Andersen	Andersen	Collins	
Witnessed By	Johnson	Helmuth	Helmuth	

FOLD HERE

REMARKS Run #3 Borehole Compensated - SP rather than Gamma Ray

Changes in Mud Type or Additional Samples

Date | Sample No.		
Depth—Driller		
Type Fluid in Hole		
Dens. | Visc.		
ph | Fluid Loss	ml	
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} | R_{mc}		
R_m @ BHT	@ °F	@ °F
R_{mf} @ BHT	@ °F	@ °F
R_{mc} @ BHT	@ °F	@ °F

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole
GR	540	8-28	12-32
GR	1150	12-32	16-36
GR	1400	16-36	16-56
GR	5670	16-56	18-78
SL	3250	75-125-175	50-100-150

Equipment Data

Run No.	Tool Type	Pad Type	Tool Pos.	Other
1	SL-C		Centered	
2	SL		Centered	
3	BSL-C		Centered	

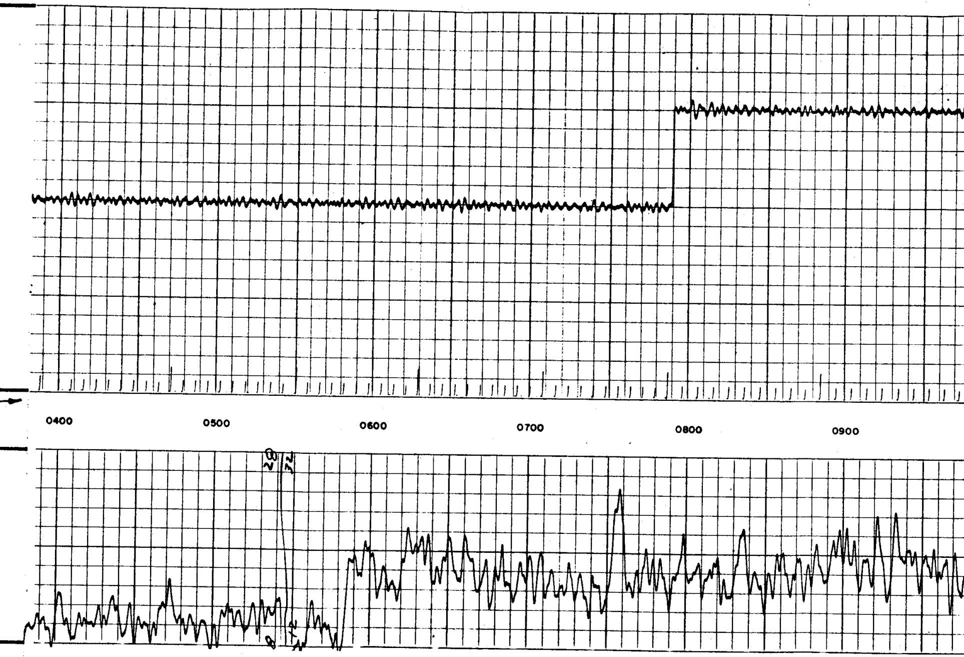
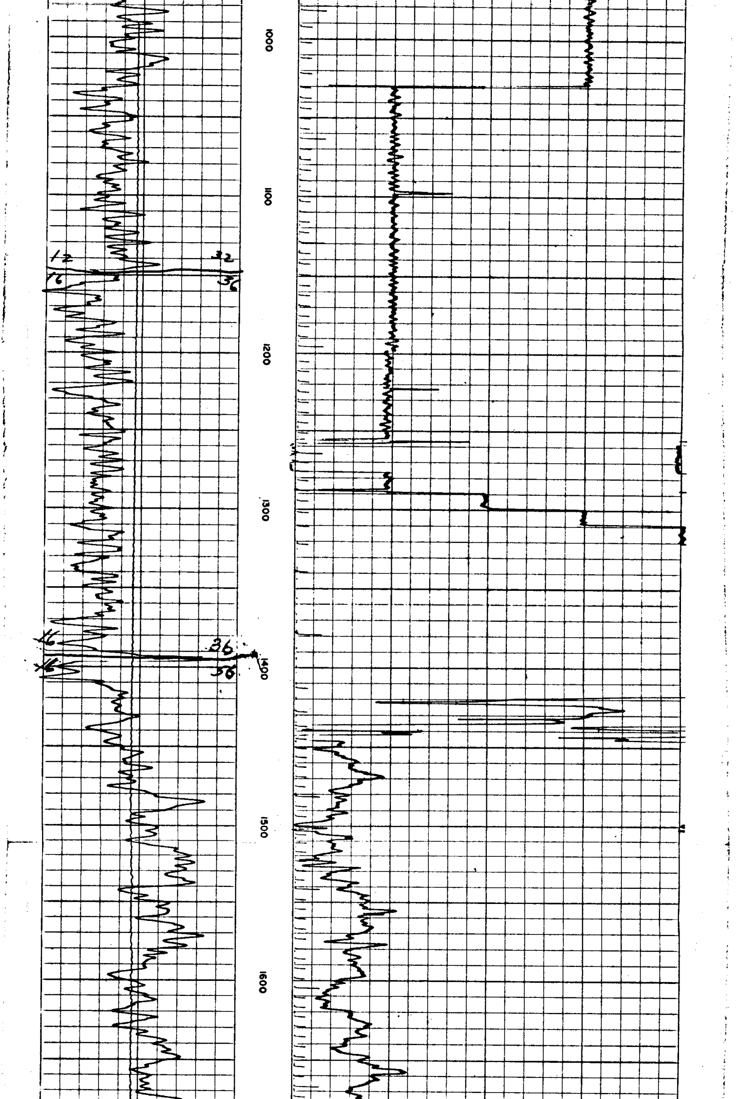
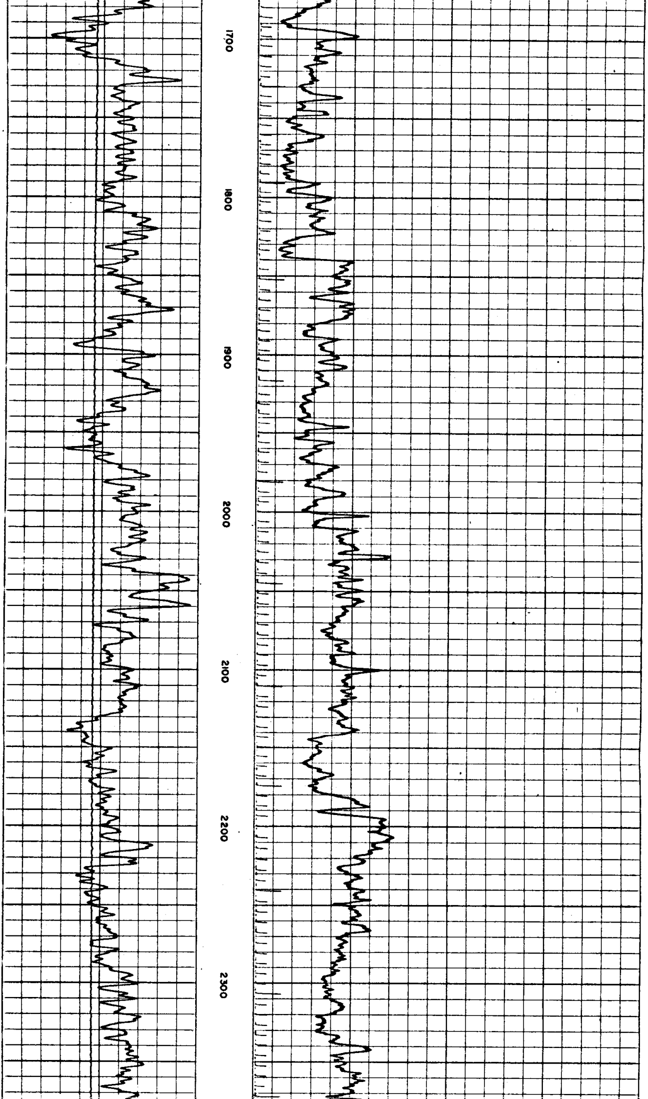
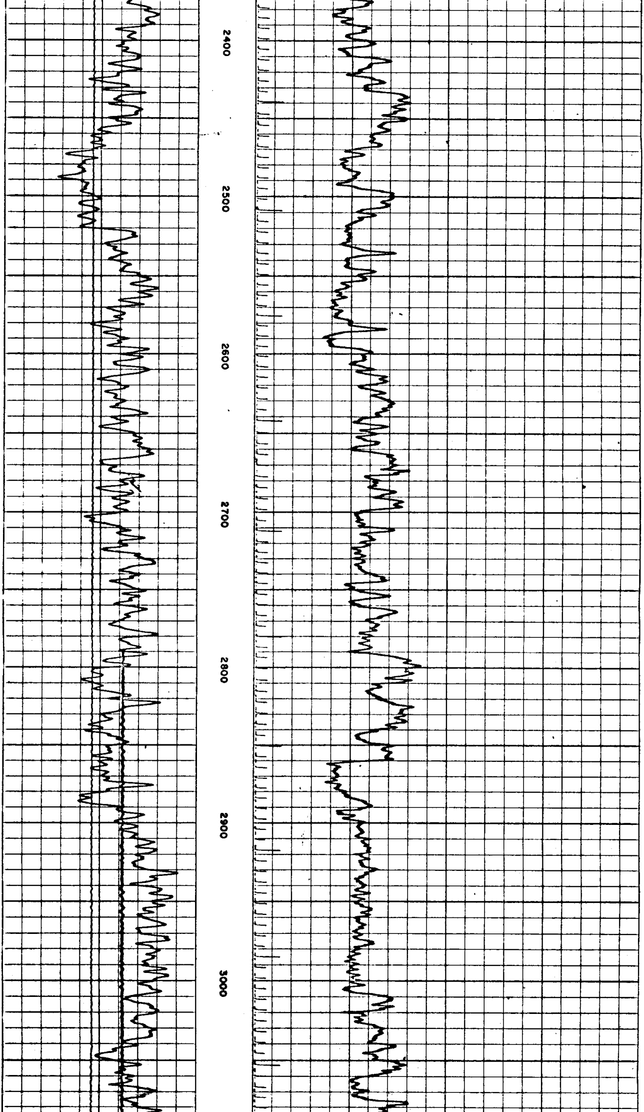
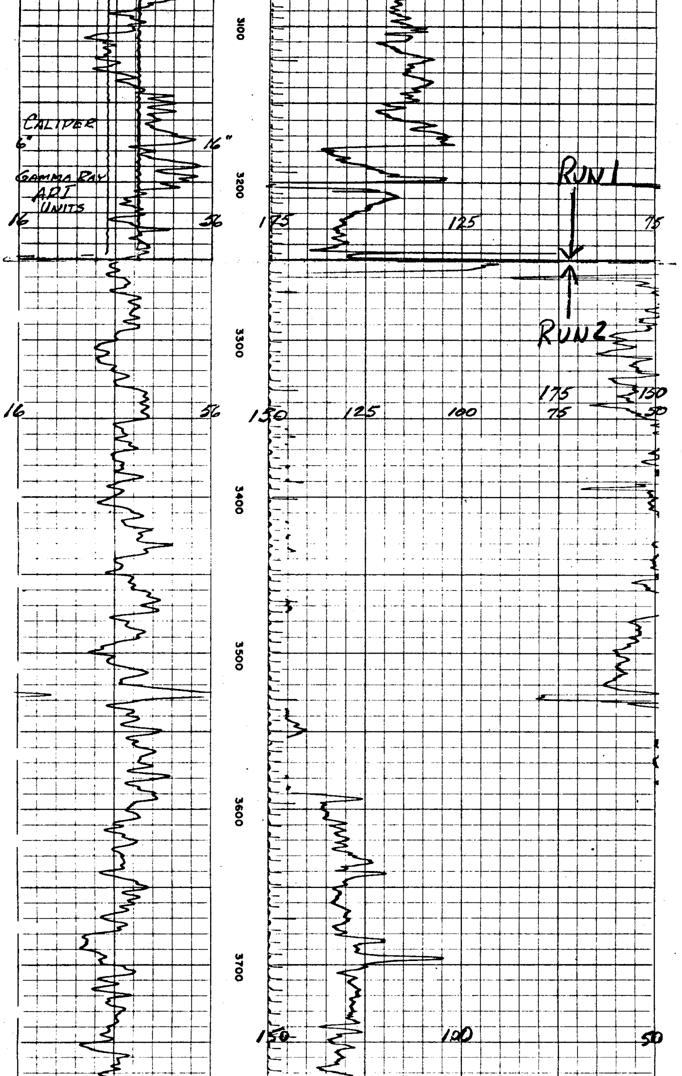
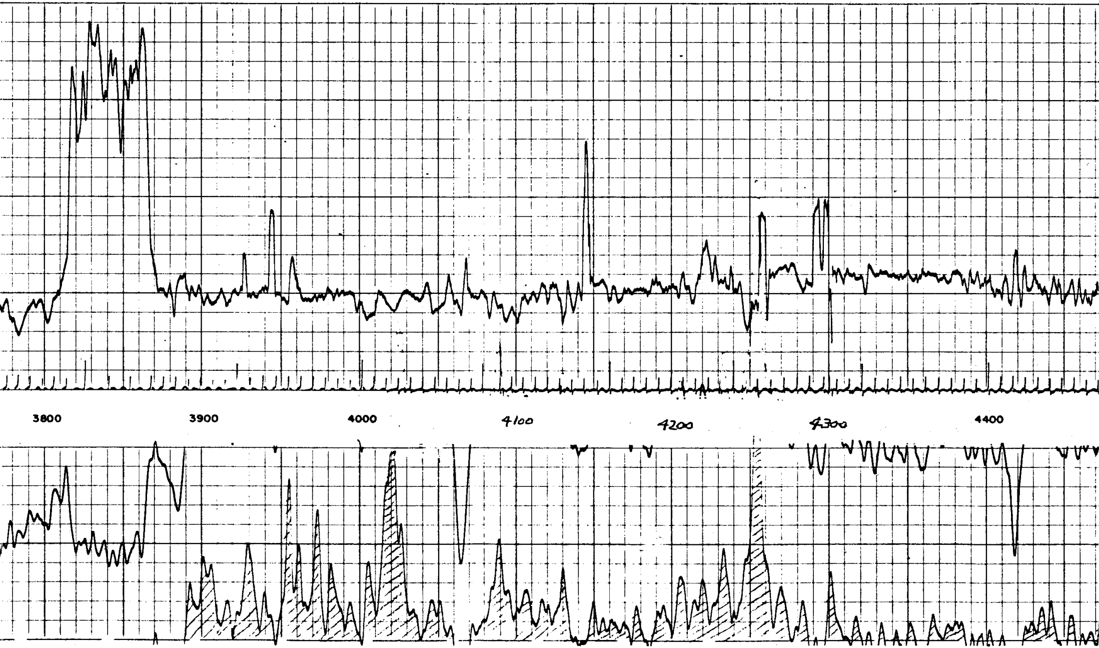
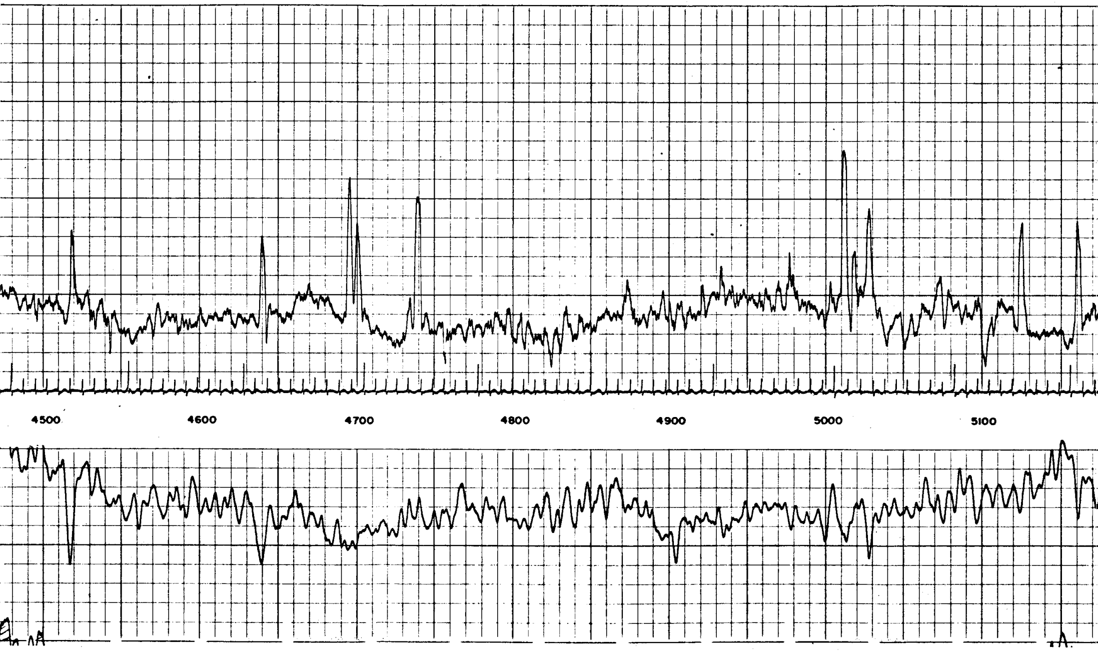
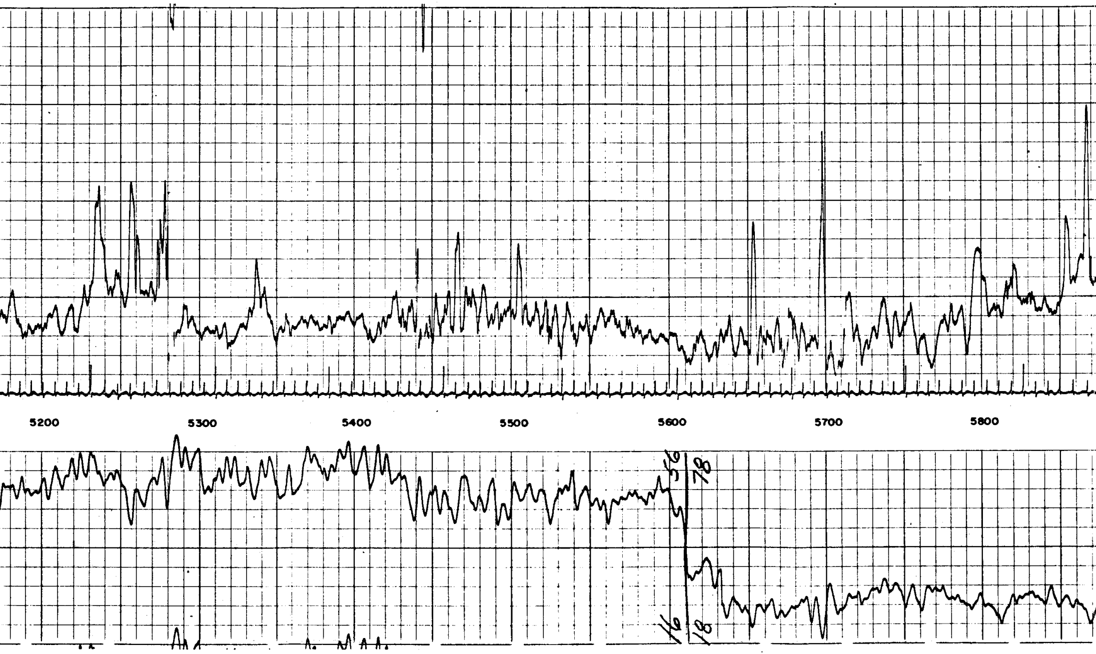
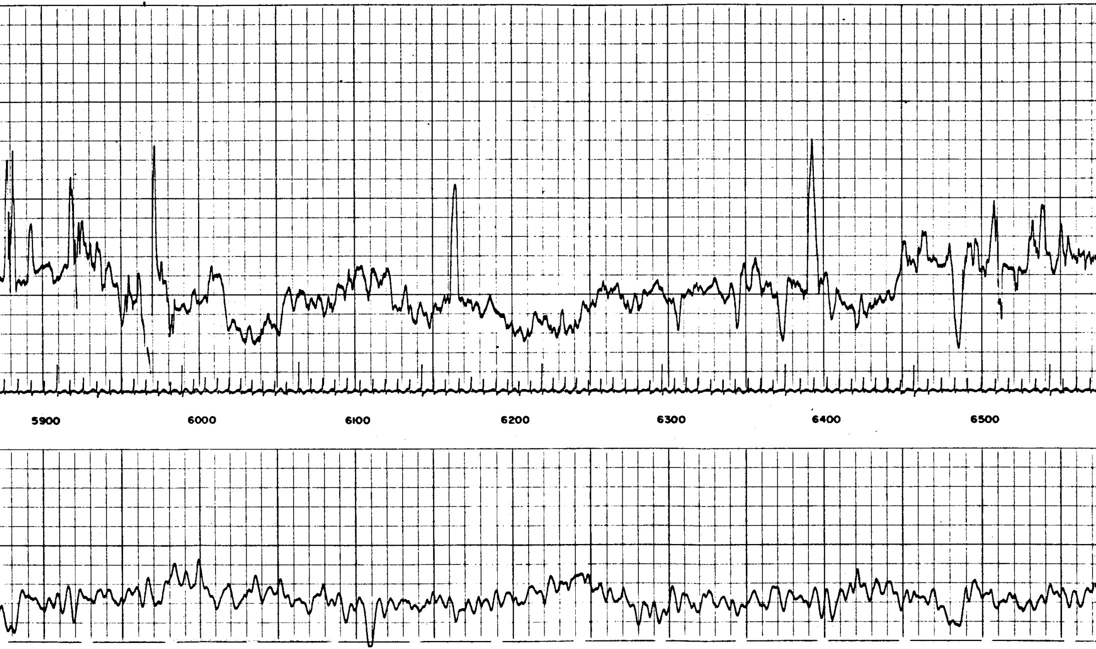
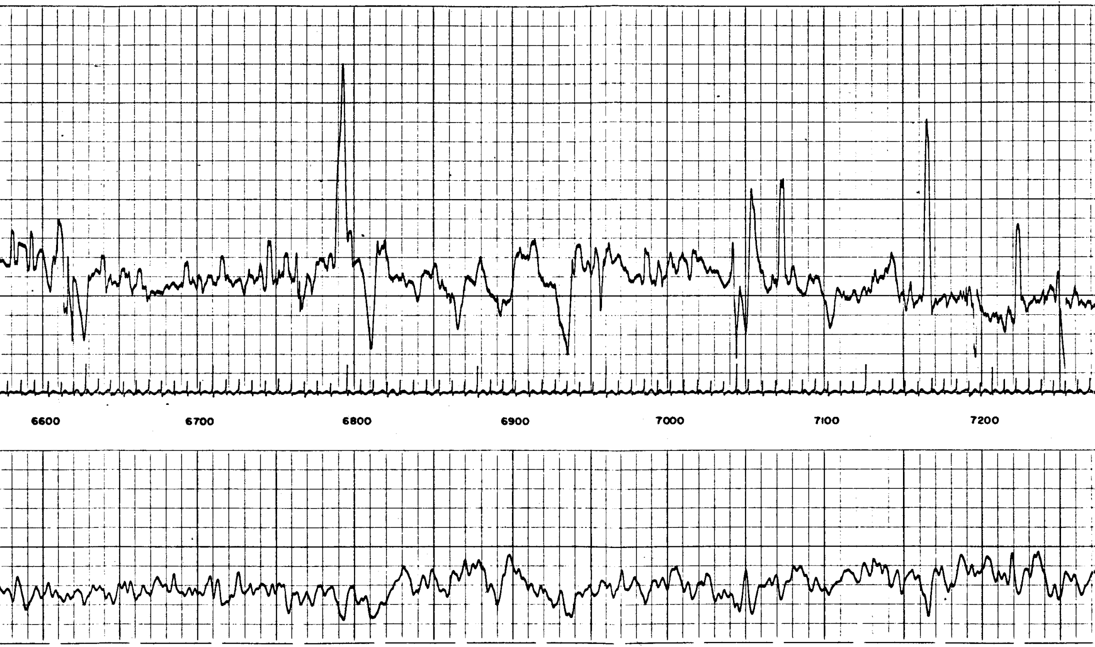
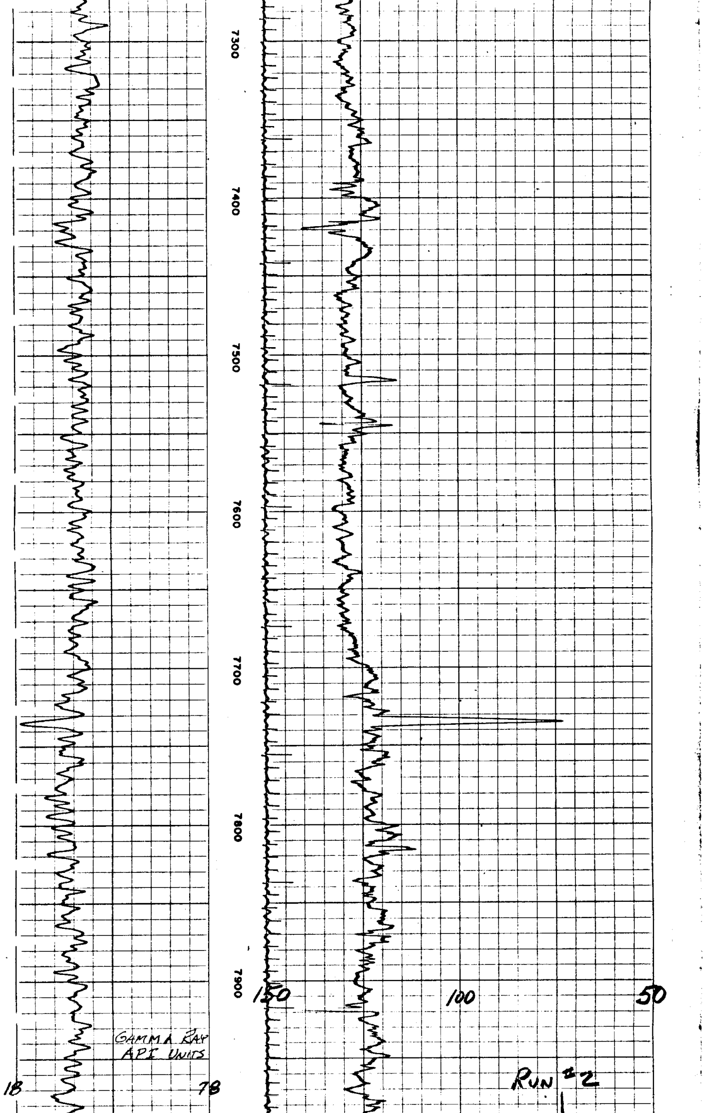
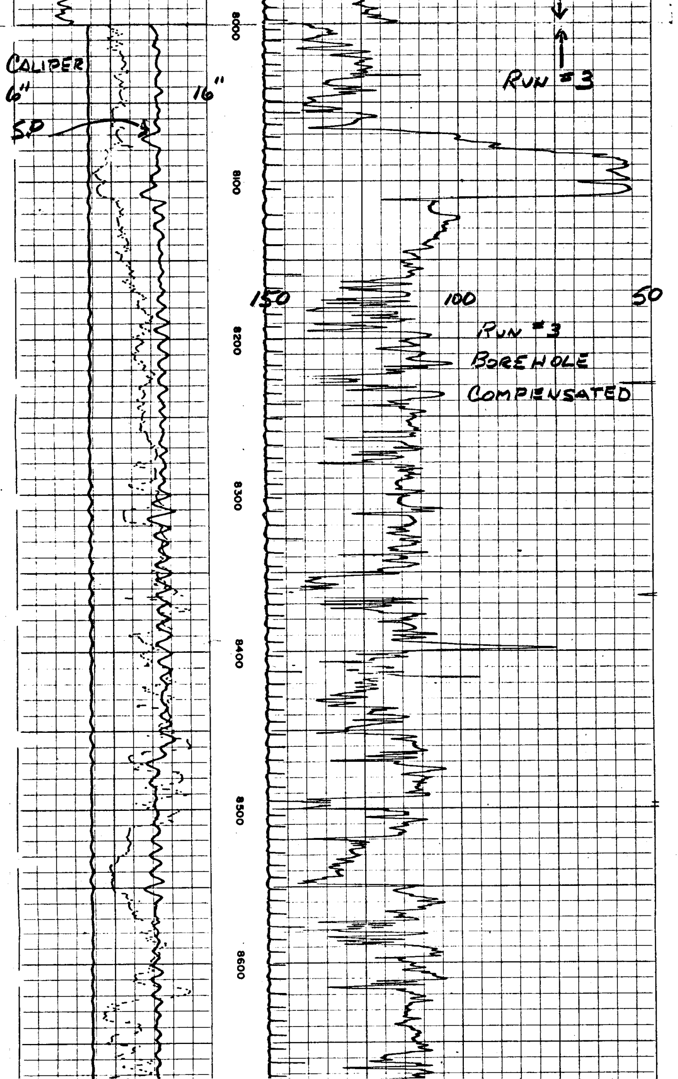
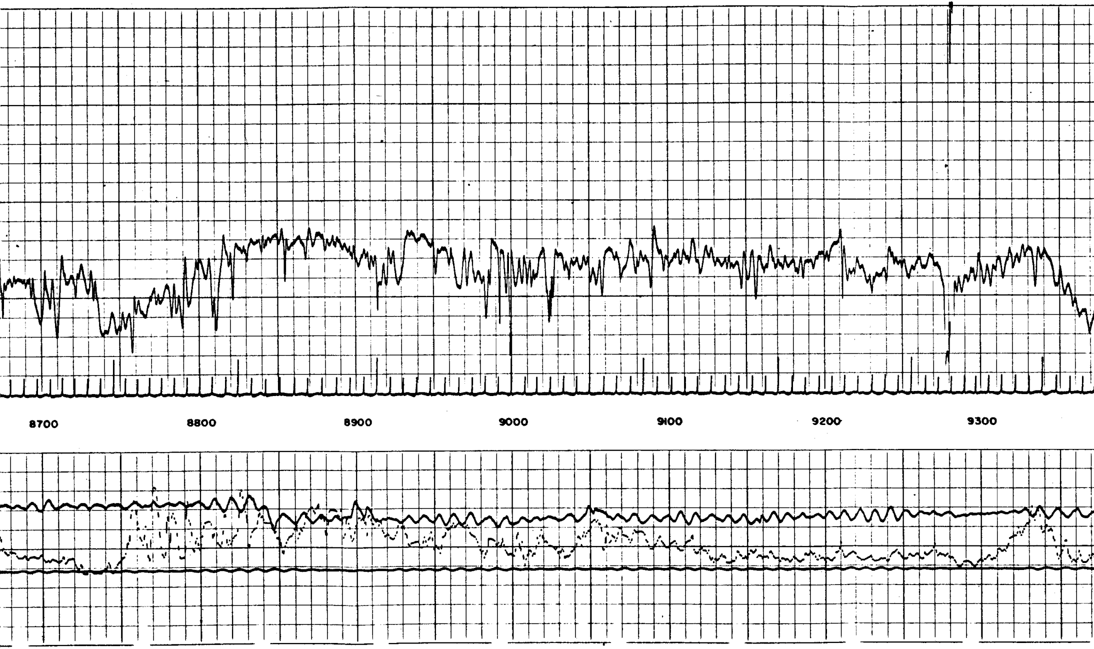
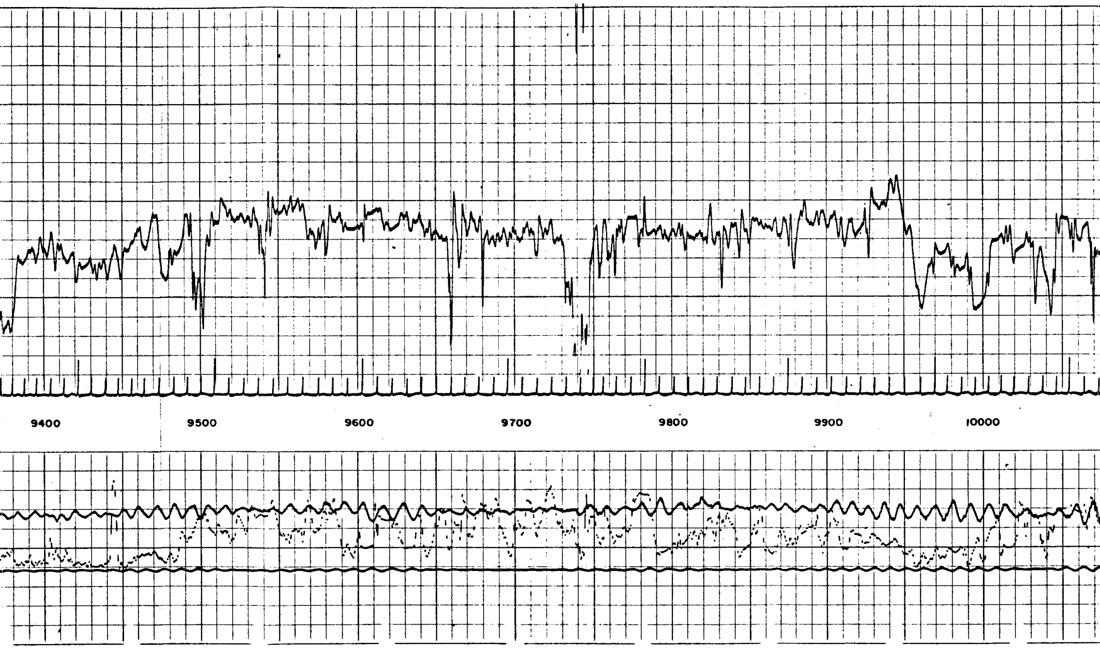
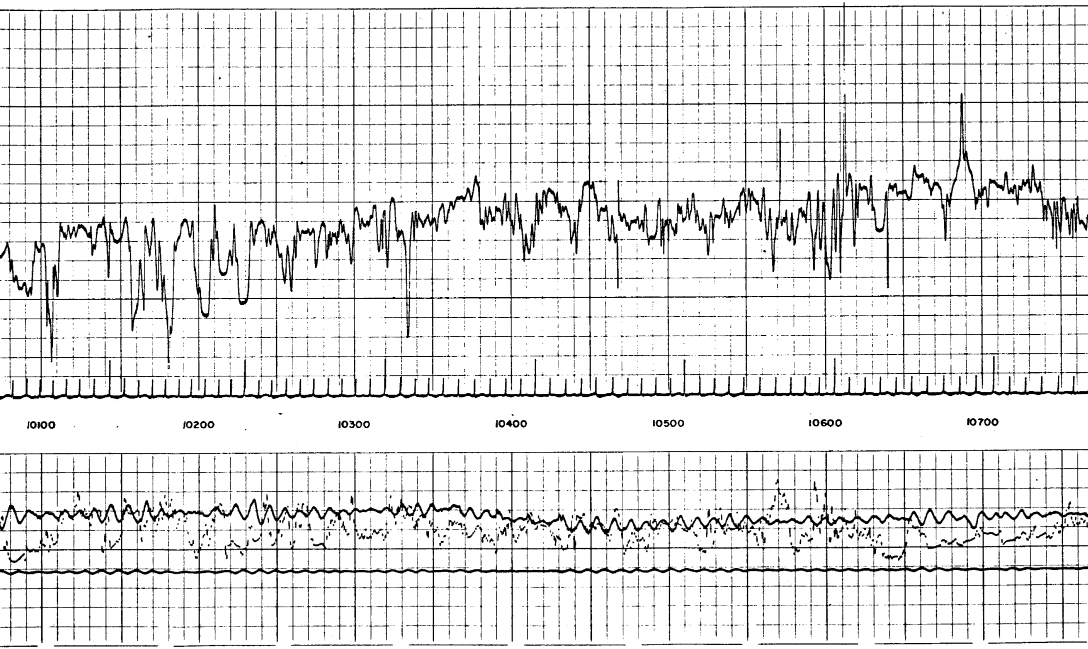
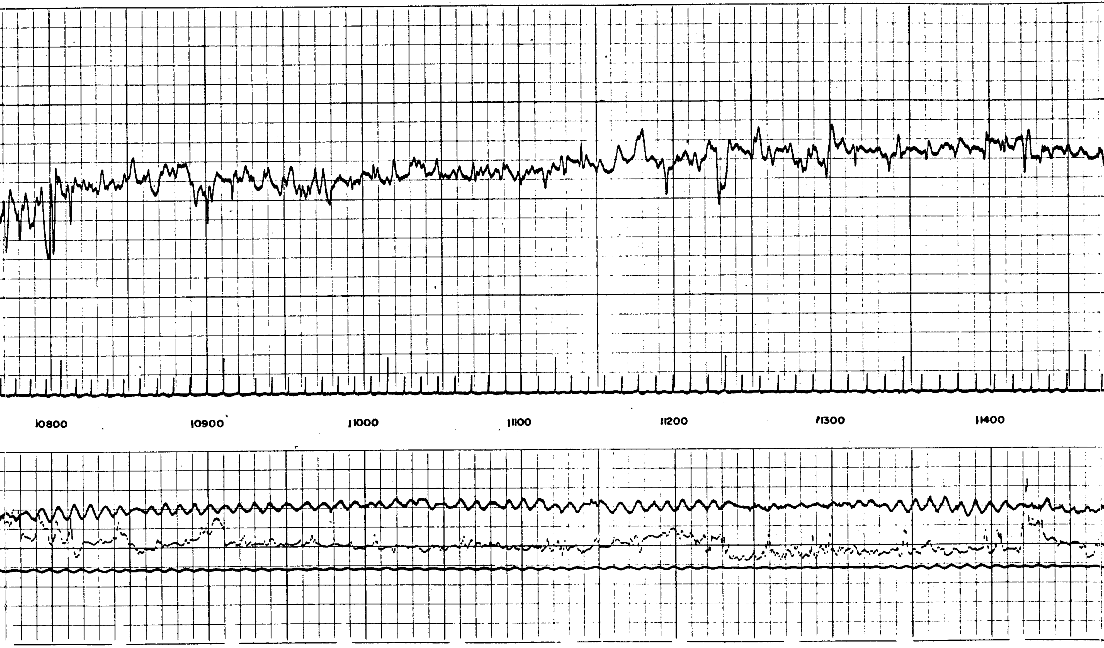
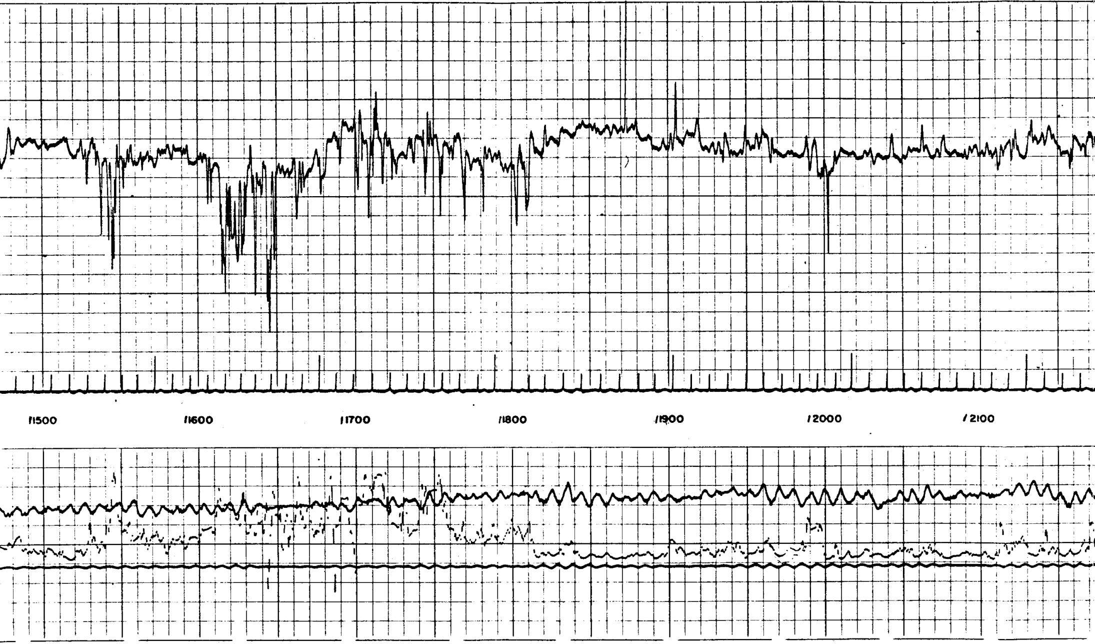
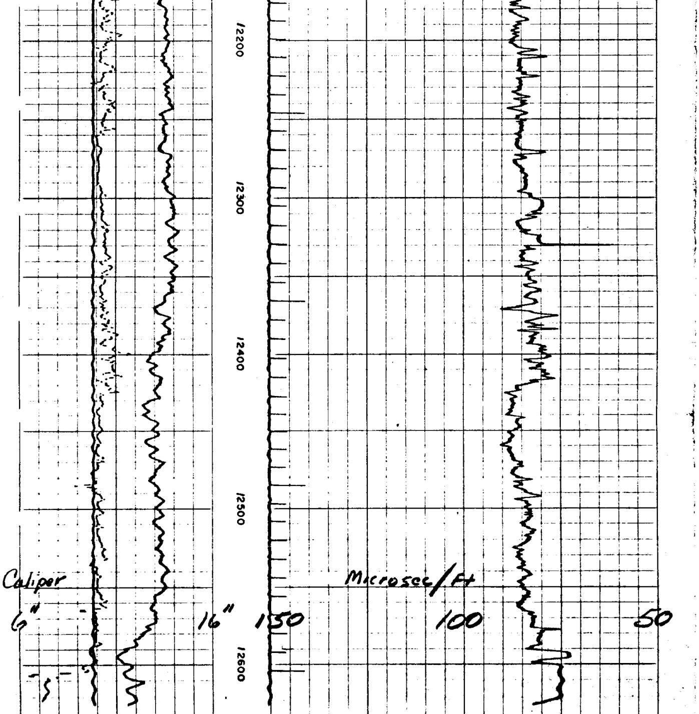
C.D.: USED S.O.:

Equip. Used:	RUN #1	RUN #2	RUN #3
CART. No.	VAC C 176	VAC-C-208	A 72
PANEL No.	VLP B 195	VLP-B-195	A 76
SONDE No.		VLS-M-264	A 80

CALIBRATION:

GAMMA RAY:	BACKGND. CPS.	SOURCE CPS.	GALV. INCR. DIVISIONS	SENS. TAP (FOR CAL.)	SENS. TAP (RECORD)	TIME CONST.	RECORDING SPEED (FT./MIN.)
1	4	340	82.5	500	100 50	2	50
2	20	380	82.5	500	150 100	2 2	50 50

$$\text{Velocity (feet per second)} = \frac{1{,}000{,}000}{\text{Interval Transit Time (microseconds per foot)}}$$

GAMMA RAY API UNITS	DEPTHS	INTERVAL TRANSIT TIME MICROSECONDS PER FOOT
8 RUN #1 28 RECORDED 21' DEEP	SONIC INTEGRATION - MILLISEC.	T 3' R₁ 3' R₂ 175 125 75
CALIPER HOLE DIAM. IN INCHES 6" 16"