Schlumberger

DUAL INDUCTION-LATEROLOG

COUNTY LOS ANGELES
FIELD or LOCATION WILMINGTON
WELL NWU 4-2
COMPANY SUN OIL COMPANY

COMP... Warren E & P, Inc.
WELL NWU 4-2 037-21604
FIELD WILMINGTON
COUNTY LOS ANGELES -CALIFORNIA

Location: NOT AVAILABLE
Sec. 34 Twp. 4 S Rge. 13 W

Other Services:
FDC-CNL-GR.
F LOG.
CALIPER

Permanent Datum: GL, Elev.: 9
Log Measured From KB, 14 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 23
D.F.
G.L. 9

Date	11-28-75	12-2-75		
Run No.	ONE	TWO		
Depth—Driller	3165	3579		
Depth—Logger	3160	3578		
Btm. Log Interval	3156	3572		
Top Log Interval	564	3140		
Casing—Driller	10¾" @ 565	7" @ 3140	@	@
Casing—Logger	564	3140		
Bit Size	9⅞"	6¼"		
Type Fluid in Hole	FGM	POLYMER		
Fluid Level	SURFACE	SURFACE		
Dens. | Visc.	10.0 | 40	---- | --		
pH | Fluid Los	9.5 | 6.4 ml	---- | -- ml	ml	ml
Source of Sample	PIT	CIRCULATED		
Rm @ Meas. Temp.	2.00 @ 81 °F	.12 @ 90 °F	@ °F	@ °F
Rmf @ Meas. Temp.	2.50 @ 59 °F	.13 @ 72 °F	@ °F	@ °F
Rmc @ Meas. Temp.	1.60 @ 81 °F	.14 @ 85 °F	@ °F	@ °F
Source: Rmf | Rmc	M | C	M | C		
Rm @ BHT	1.23 @ 110 °F	.085 @ 118 °F	@ °F	@ °F
Time Since Circ.	4 HOURS	0600		
Max. Rec. Temp.	118 °F	118 °F	°F	°F
Equip. | Location	5614 | LB	5618 | VTA		
Recorded By	JOHNSON	MC CREA		
Witnessed By	HINDLE	HINDLE		

SWS-902-K

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES

Date | Sample No.				
Depth - Driller				
Type Fluid in Hole				
Dens. | Visc.				
ph | Fluid Loss		ml		ml
Source of Sample				
Rm @ Meas. Temp.	@	°F	@	°F
Rmf @ Meas. Temp.	@	°F	@	°F
Rmc @ Meas. Temp.	@	°F	@	°F
Source: Rmf | Rmc				
Rm @ BHT	@	°F	@	°F
Rmf @ BHT	@	°F	@	°F
Rmc @ BHT	@	°F	@	°F

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

EQUIPMENT DATA

Run No.	ONE	TWO
Panel No.	DC-338	DC-279
Cart. No.	B-229	B-209
Sonde No.	DB-222	DB-148
Mem. Panel No.	ILP-AC-228/	AC-224
G.R. Cart. No.	----	EC-75
G.R. Panel No.	----	DC-279
TTR No.	----	----
Cent. Device	USED	USED
Stand off - Inches	1½"	1½"
Time Const - Sec.	----	----
Speed - F.P.M.	90	30
MCD-B	203	----

REMARKS

Service Order No. - 16292

RUN ONE: CIRCULATION STOPPED - 0400
LOGGER ON BOTTOM - 0800

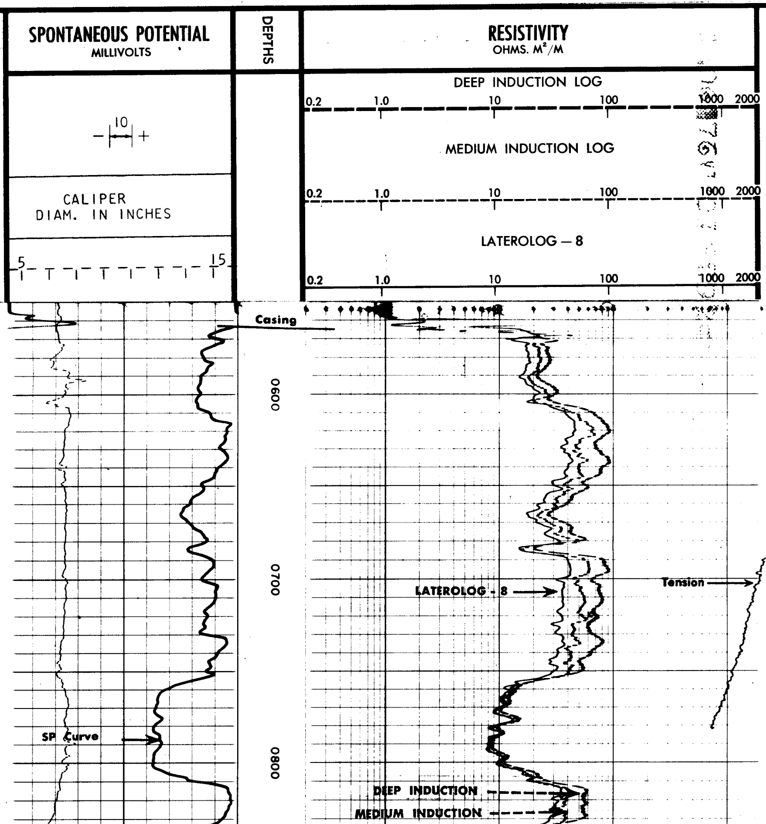
INLINE CALIPER READING EFFECTED
BY HOLE ANGLE AND ARE INVALID.

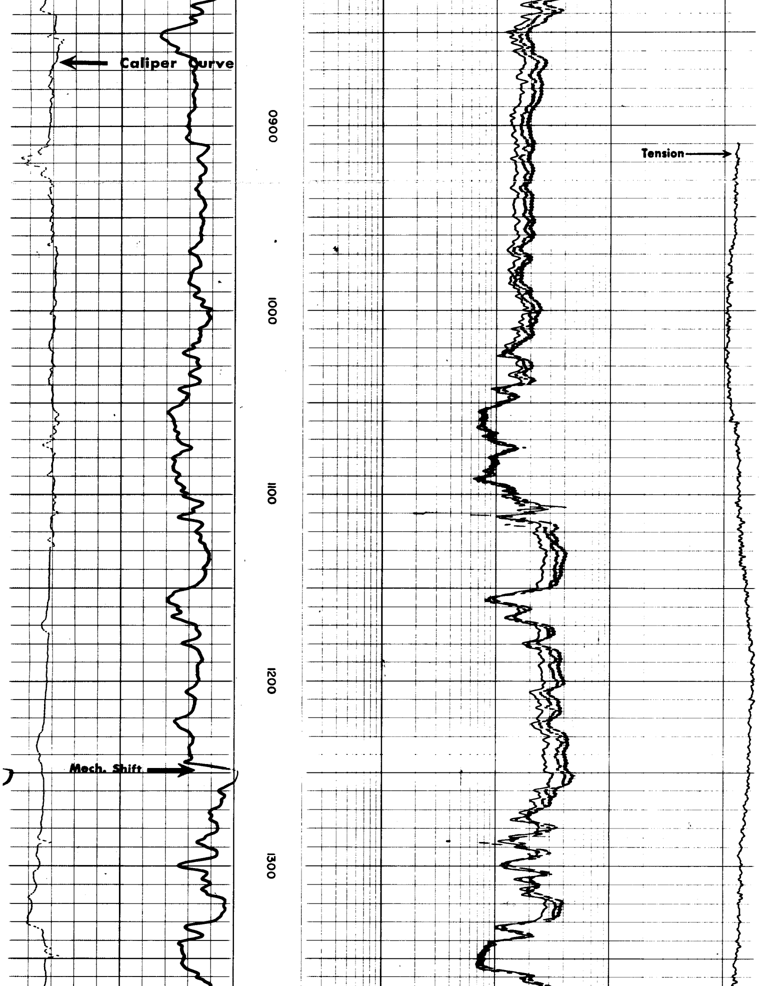
☒ Surface determined sonde errors used.
☐ Sonde error corrected for inch
borehole signed at R_m = .
☐ Induction zero set in hole at depth of feet.

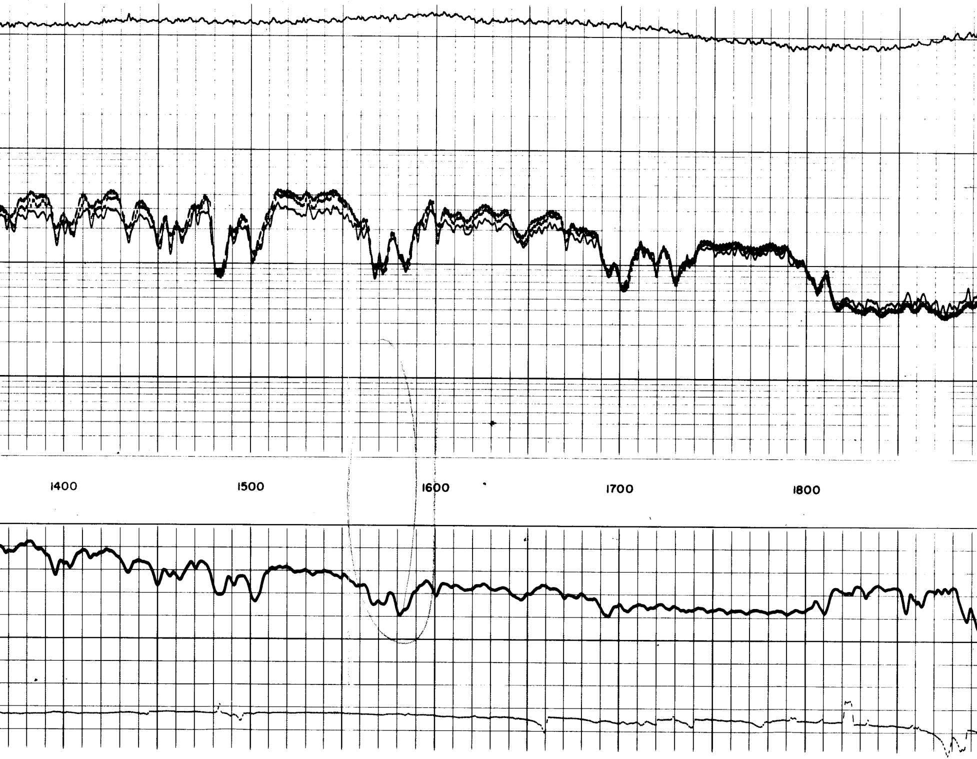
CALIBRATION DATA

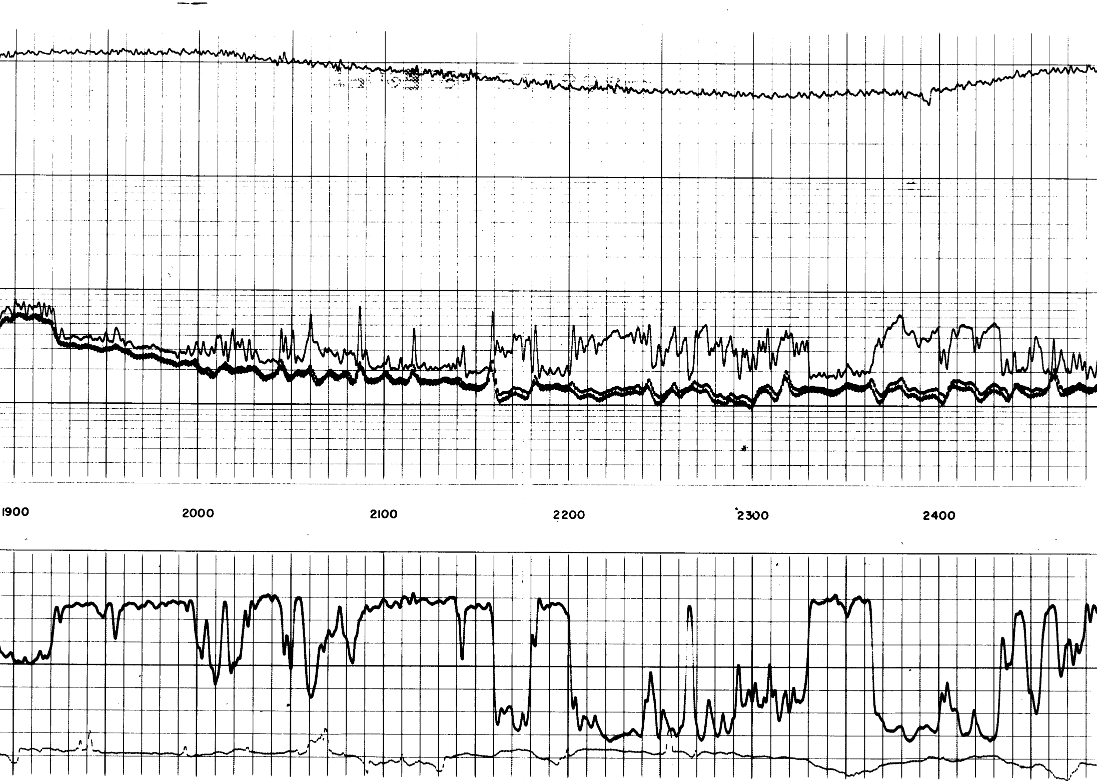
CALIBRATION:	BACKGND. CPS.	SOURCE CPS.	GALV. INCR. DIVISION	SENS. TAP (FOR CAL.)	SENS. TAP (RECORD)	TIME CONST.	
GAMMA RAY:	120	560	----	50-150	50-150	2	RUN TWO ONLY

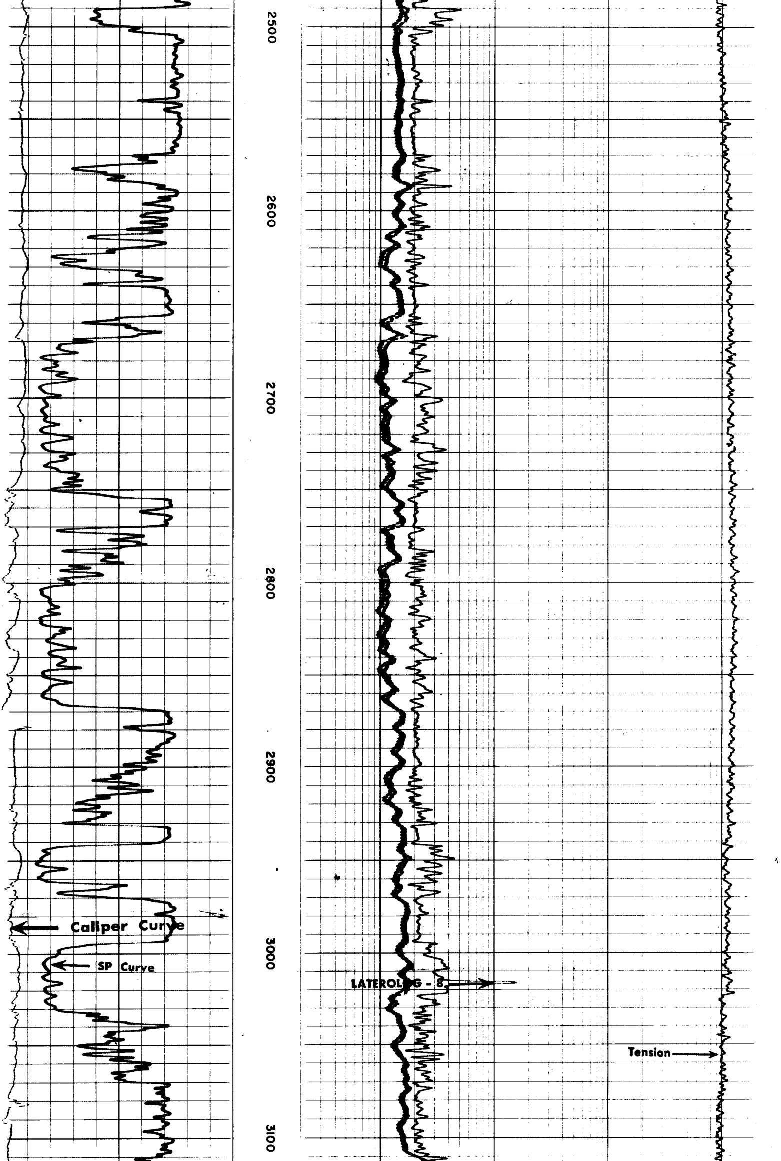
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

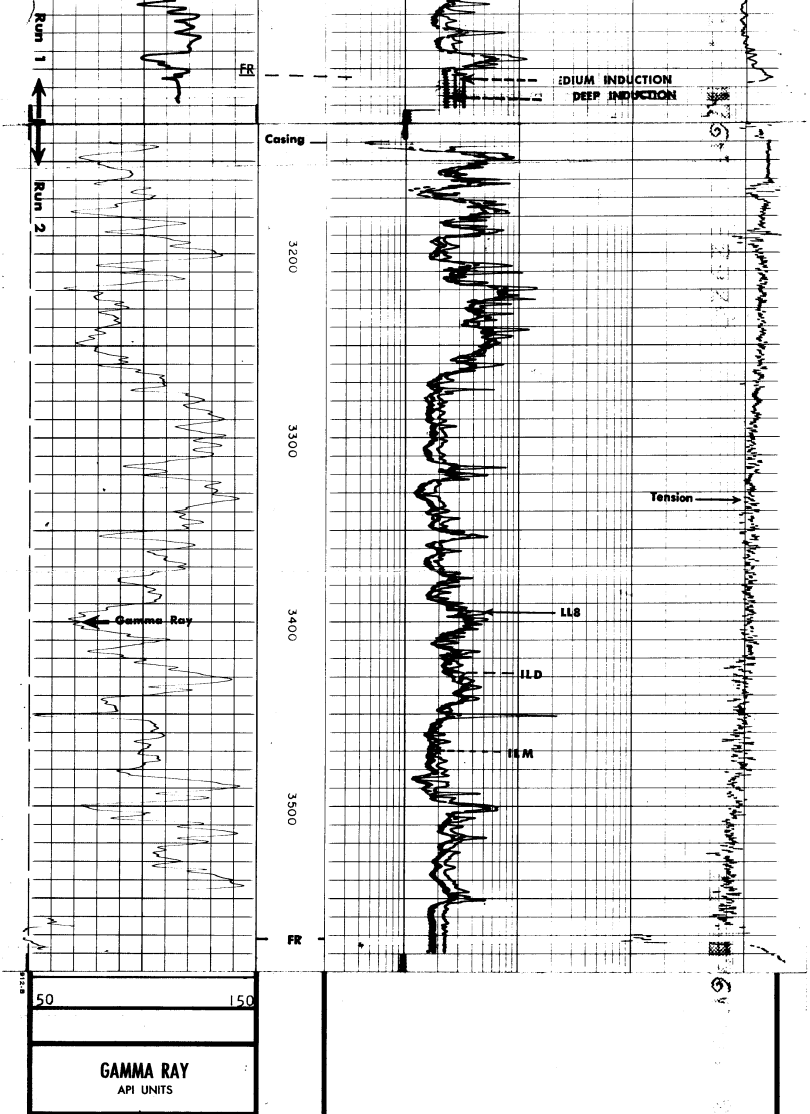












LATEROLOG — 8

0.2 1.0 10 100 1000 2000

MEDIUM INDUCTION LOG

0.2 1.0 10 100 1000 2000

DEEP INDUCTION LOG

0.2 1.0 10 100 1000 2000

— 10 +

SPONTANEOUS-POTENTIAL

MILLIVOLTS

DEPTHS

RESISTIVITY

OHMS. M^2/M

COMPANY SUN OIL COMPANY

WELL NWU 4-2

FIELD WILMINGTON

COUNTY LOS ANGELES STATE CALIFORNIA

SCHL. FR 3572
SCHL. TD 3578
DRLR TD 3579
Elev:
KB 23
DF
GL 9