

# PATRICK J. DEENIHAN

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## GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

OPERATOR SHAKESPEARE OIL CO., INC.

LEASE B OTTLEY # 2-25

FIELD WILDCAT

LOCATION 1815' FSL & 1050' FEL

SEC. 25 TWP. 13<sup>s</sup> RGE. 32<sup>w</sup>

COUNTY LOGAN STATE KANSAS

CONTRACTOR H.D. DRILLING, L.L.C. Rig # 2

COILS: 6-04-11 COMP: 6-16-11

RTD 4850' LOG TO 4844'

SAMPLES SAVED FROM 3700' TO RTD

DRILLING TIME KEPT FROM 3700' TO RTD

SAMPLES EVALUATED FROM 3700' TO RTD

GEOLOGICAL SUPERVISION FROM 3850' TO RTD

END UP 3475' TYPE MUD CHEMICAL

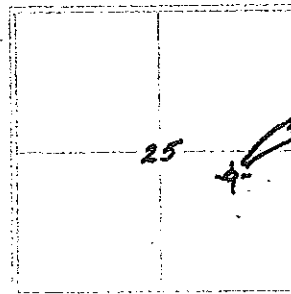
API # 15-109-21007-00-00

FORMATION	LOG		SAMPLE		STRUCT. CORP.
	TOP	DATUM	TOP	DATUM	
ANHYDRITE	2419	(+507)	2425	(+501)	
B/ANHYDRITE	2440	(+486)	2447	(+479)	-8
HEEBNER	3946	(-1020)	3952	(-1026)	-43
LANSING	3993	(-1069)	3996	(-1070)	-46
MUNCIE CREEK	4155	(-1229)	4161	(-1235)	-51
STARK SHALE	4242	(-1376)	4248	(-1322)	-41
PAWNEE	4460	(-1534)	4466	(-1540)	-73
FORT SCOTT	4516	(-1590)	4522	(-1596)	-74
CHEROKEE SH.	4544	(-1618)	4550	(-1624)	-76
JOHNSON ZONE	4589	(-1663)	4593	(-1669)	-77
MORROW SD	4689	(-1763)	4696	(-1770)	-93

ELEVATION  
KB 2926'  
DF \_\_\_\_\_  
GL 2916'  
Measurements Are At  
From KB=2926

CASING RECORD  
SURFACE 8 5/8" @ 22  
170 SX, 3% CC, 2  
PRODUCTION N/A

WELL LOG SURVEYS  
CND / CDL - D.I.L.  
MICRO & SONIC  
WEATHER FORD

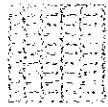





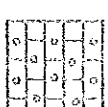
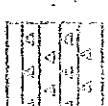
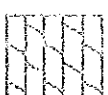



REFERENCE WELL FOR STRUCTURAL COMPARISON SHAKESPEARE OIL CO., INC.  
B. OTTLEY # 1-25 (1415' FSL & 2230 FWL) SEC. 25-13<sup>s</sup>-32<sup>w</sup>  
LOGAN CO., KS.

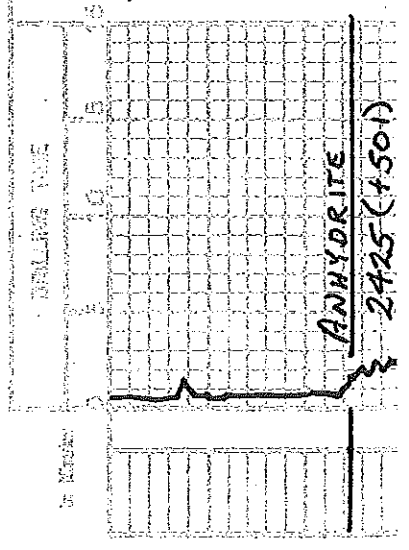
REMARKS: AS A RESULT OF POOR STRUCTURAL POSITION, E-LOG EVALUATION POOR ZONE DEVELOPMENT, & NEGATIVE DRILL STEM RESULTS, IT WAS RECOMMENDED AND AGREED UPON BY ALL PARTIES CONSIDERED THAT THIS WELL BE PLUGGED AND ABANDONED ON 6-16-11.

RESPECTFULLY SUBMITTED  
 BY: PATRICK J. DEENIHAN  
 PETROLEUM GEOLOGIST

LEGEND

-  Anhydrite
-  Sandstone
-  Sand
-  Siltstone
-  Shale
-  Gyps. sh
-  Limestone
-  Dol. Lime
-  West
-  Dolomite

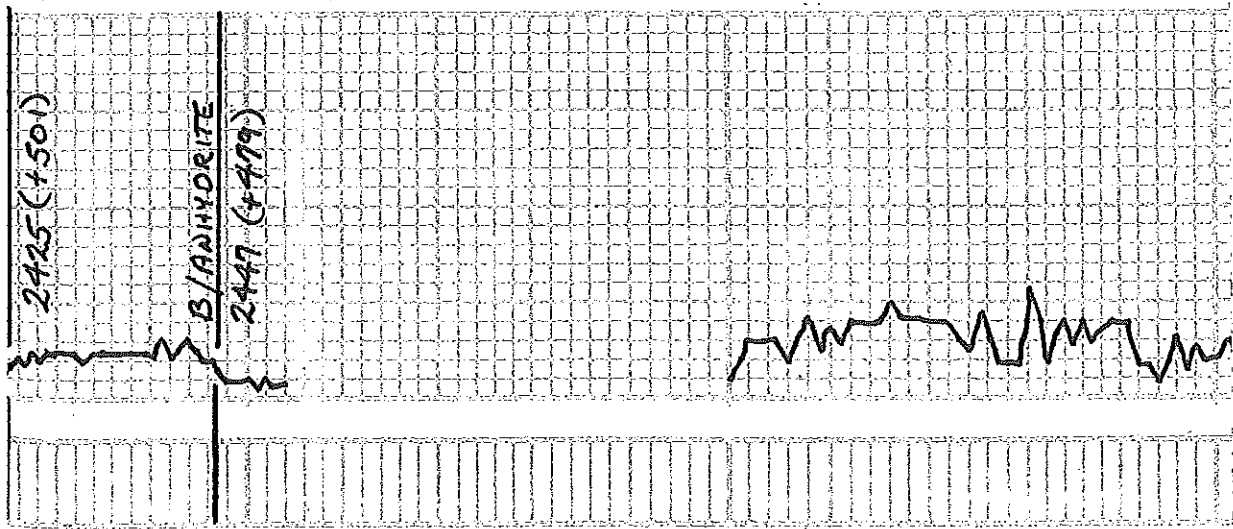
SCALE 1" = 100'



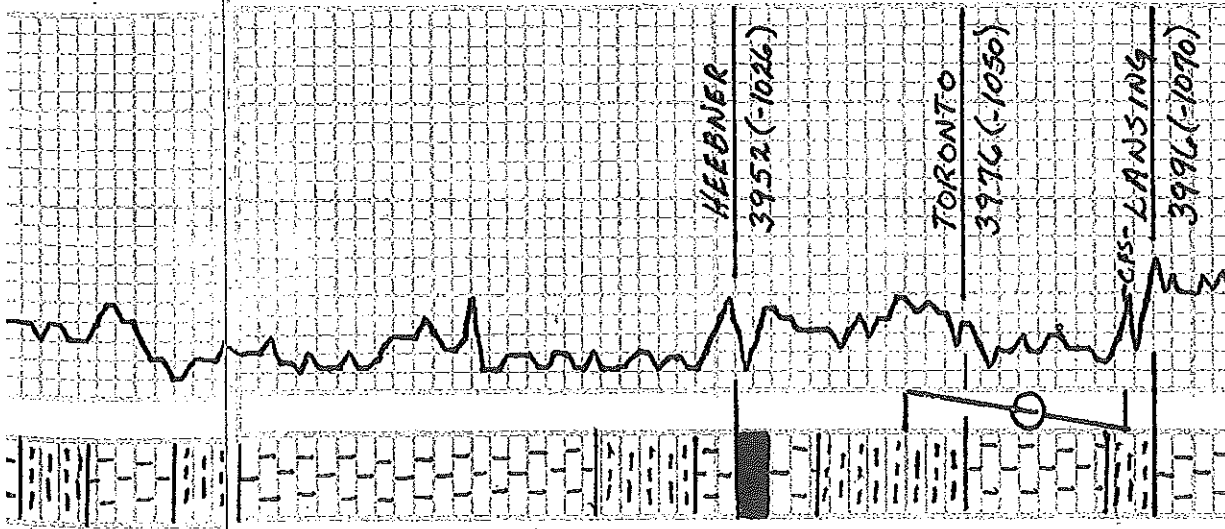
DEPTH	SAMPLE DESCRIPTION	REMARKS
7:00 AM DEPTH		
MIRU - 6-04-11		
6-05-11 = 228'		
6-06-11 = 1,750'		
6-07-11 = 2,820'		
6-08-11 = 3,457'		
6-09-11 = 3,701'		
6-10-11 = 4,013'		

6-07-11 = 3101
6-10-11 = 4015'
6-11-11 = 4190'
6-12-11 = 4283'
6-13-11 = 4347'
6-14-11 = 4448'
6-15-11 = 4553'
6-16-11 = 4856'
PIPE STRAP @ 3640 = .02' S.T.R.

3700







SH, VARI-COLOR	SH, VARI-COLOR - ARGIL
LS, WHIT-SING - SUB-CHARLY-SET-FSS	LS, WHIT-TAN-SING-FSSL-FN-XLN-F-SUB-CHALK-LT BRN TO BUE-EDGE-STR-VSS TO ND-FLO-SH-ODOR-ND-FUDR
SH, GRV-DRN BRN-F-ORANGE	SH, GRV BRN-F GRN, TRC OF BRN-ARGIL
LS, WHIT CRM - SING-FN-XLN-FSSL-FSSL TO CHALKY	LS, LT GRV TO CRM-SING-FSSL-SH-ODOR-FORM-TRC OF P-FN-XLN-ND SH-DW
LS, A/A (W) INCREASE IN CHALK	
SH, VARI-COLOR - AROUND GRYS-FISSLE TO ARGIL	
SH, BLACK CARB	
SH, BLK, DK GRV-F GRV, DRN-ARGIL	
SH, VARI-COLOR - ARGIL	
SH, VARI-COLOR - ARGIL	

3900

4000

DST # 1 (3970'-3993')  
 30" - 30" - 30" - 30"  
 1FP: 808 IN 45 SEC - No BB.  
 FFP: 808 IN 2 MIN - No B.B.  
 REC: 310' MW (50% W, 50% M)  
 2140' MW (95% W, 5% M)  
 120' MW (85% W, 15% M)  
 1HP: 1937 FHP: 1934

IFP: 360/1967 FFP: 208/1166  
 KSP: 1214 FS/P: 1218  
 CHL: 40,000 BHT: 1210

1/15: 57 WT: 8.9 WL: 8.0  
 CHL: 4400 LCM: 24

LS, AS ABOVE

SH, GRAY GRN, & BRN, TRC OF BLACK

LS, GRN-AT GRAY-SING - FESSL-COOLY  
 P-00M - NO SHAW

SH, GRAY'S

LS, LI GRAY TO GRN-SING - CRIPPLE  
 XLN - NO SHAW

LS, AS ABOVE

SH, BLACK CLARS

LS, WHT GRN, AT GRAY-SING - FESSL  
 P-00M - UN CHERT - GRN - WHT  
 FRESH SHARP - OPAQ & TRANS  
 NO SHAW

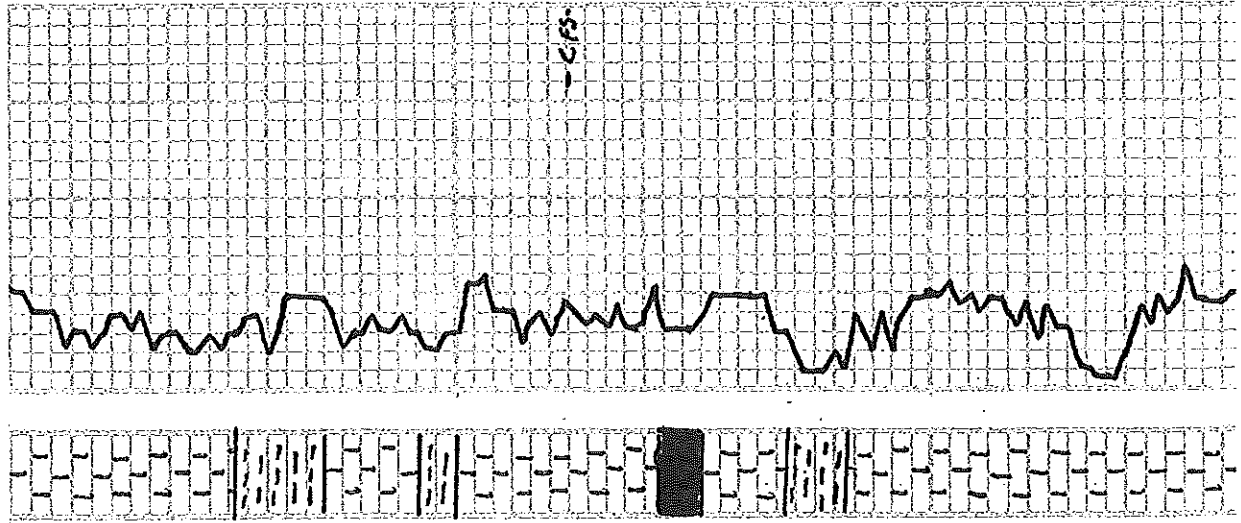
SH, BLACK, GRAY & GRN - ARGIL

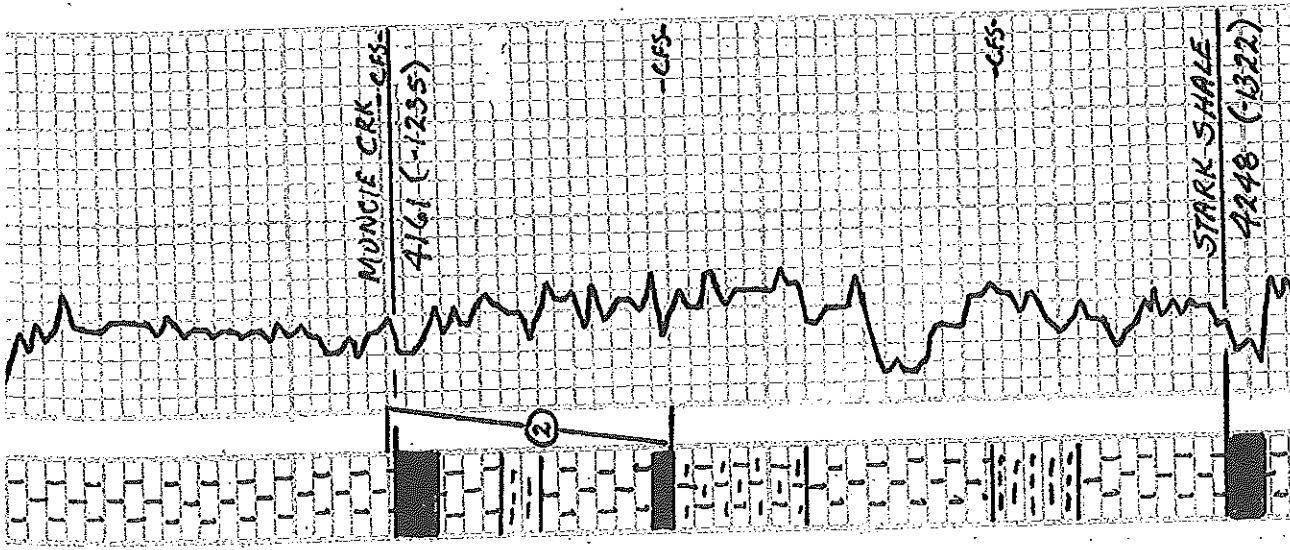
LS, GRN TAN, MDTY/SING - OOL  
 TO FO - XLN - P-MINERAL STN  
 V-DENSE - NO SHAW

LS, AS ABOVE - INCR IN CHALKY LS.

LS, WHT GRN - FESSL - OOL OOM  
 SHAWLOW 109 - P-P-EN-244  
 NO SHAW

4100





4200

LS, WHI. CRM. TAN. SING. - SU FSSL - TO SUB - CHALKY NO. SHOWN	LS, AS ABOVE	LS, WHI. CRM. TAN. SING. - SU FSSL - TO SUB - CHALKY NO. SHOWN	LS, WHI. CRM. TAN. SING. - SU FSSL - TO SUB - CHALKY NO. SHOWN
SH, BLACK CARB	SH, BLACK CARB	SH, BLACK CARB	SH, BLACK CARB
LS, LT. GR. SING. - SH - FSSL, FSSL - FU - XIN - BUKEOGE STN - N.F.O. SH, VAR. COLOR	LS, LT. GR. CRM - SING. - A) A. SH - PAORASE. IN STN - BECOMING SUB - CHALKY W/ DEPTH.	LS, LT. GR. SING. - SH - FSSL, FSSL - FU - XIN - BUKEOGE STN - N.F.O. SH, VAR. COLOR	LS, LT. GR. SING. - SH - FSSL, FSSL - FU - XIN - BUKEOGE STN - N.F.O. SH, VAR. COLOR
LS, A) A) ABUND FSSL & CHALKY LS	LS, A) A) ABUND FSSL & CHALKY LS	LS, A) A) ABUND FSSL & CHALKY LS	LS, A) A) ABUND FSSL & CHALKY LS
SH, BLK. GRY, GRN & ORANGE - ARGIL	SH, BLK. GRY, GRN & ORANGE - ARGIL	SH, BLK. GRY, GRN & ORANGE - ARGIL	SH, BLK. GRY, GRN & ORANGE - ARGIL
LS, WHI. CRM. TAN. SING. - FU - XIN TO FSSL - CHALKY W/ DEPTH - NO SHOWN	LS, WHI. CRM. TAN. SING. - FU - XIN TO FSSL - CHALKY W/ DEPTH - NO SHOWN	LS, WHI. CRM. TAN. SING. - FU - XIN TO FSSL - CHALKY W/ DEPTH - NO SHOWN	LS, WHI. CRM. TAN. SING. - FU - XIN TO FSSL - CHALKY W/ DEPTH - NO SHOWN
SH, BLACK CARB	SH, BLACK CARB	SH, BLACK CARB	SH, BLACK CARB

DST # 2 (4160' - 4190')  
 30" - 30" - 30" - 30"  
 IFP: 44" BLOW-OUT IN 10 MIN  
 FFP: NO BLOW  
 REV: 1' MUD  
 IHP: 2112  
 FHP: 2056  
 TFP: 19/20  
 FFP: 18/19  
 FSIP: 28  
 ISIP: 27  
 GHT: 112°  
 CNL: 4500

VIS: 56 WT: 9.1 WL: 8.8  
 CHL: 4500 LCM: 2\*

1 K. UNIT NOW 700 18700 - 18710



LS, WHT-CRM-SING-DOE TO 300-ROOM NO SHAW
LS, A7A-V-CHALKY
SH, BLACK CARB.
LS, CRM-SING-CRYPTO-XLN
SH, VARI-COLOR
LS, TAN-GAY-SING-CRYPTO-XLN TO P-FN-XLN-NO SHAW
LS, A7A
SH, VARI-COLOR
LS, CRM TAN-SING-DENSE-XLN NO VS & NO SHAW
SH, GRYS-ARGIL
LS, GRYSING-FN-XLN
SH, BLACK & VARI-COLOR
LS, CRALT. GRY, FN-XLN, ESSE & CHALKY
SH, VARI-COLOR
LS, HMT CRM-SING-FN-XLN TO MICRO-XLN-NO SHAW
SH, BLACK CARB.
SH, BLACK CARB & VARI-COLOR ARGIL

4300

50



SH, BLACK CARB & VARI-COLOR

VIS: 52 WT: 9.5 WL: 9.6  
CML: 4000 LCM: 2R

LS, LT GRAY & CRN-SING - DENSE - XAN  
NO. SHOW

LS, A)A W/P-FSSE P

LS, LT GRAY, DMT - SING - P-MICRO-3EA  
TO CHALKY

SH, VARI-COLOR

LS, DMT TO LT GRV - FSSE & SUB-CHD  
NO. SHOW

SH, VARI-COLOR

LS, WHT-CRM - SING - P-FU-XLN - NO.  
SHOW

SH, VARI-COLOR

LS, DMT-LT GRV, CRN-SING - CRYPD -  
XLN - NO. SHOW

SH, BLACK CARB

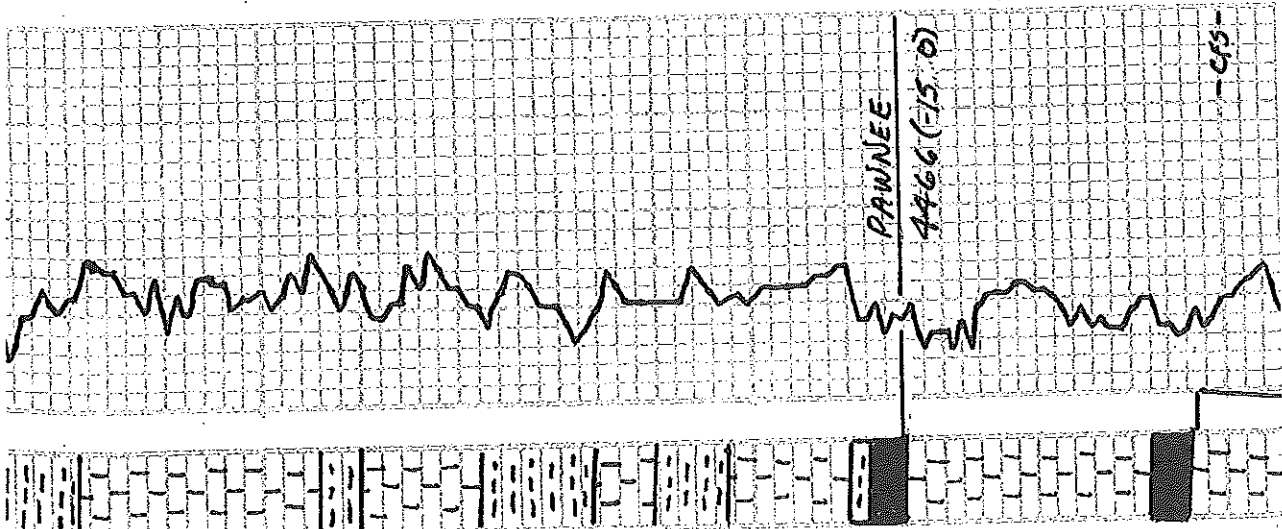
LS, WHT-CRM - SING - (CHERT)  
FRESH, SHARP OPAC

CHERT - A)A

LS, LT GRV-SING - P-FU-XLN FSSE P  
NO. FLDR

SH, BLACK CARB

DST # 3 (4497 - 4541)  
30" - 30" - 30" - 30"

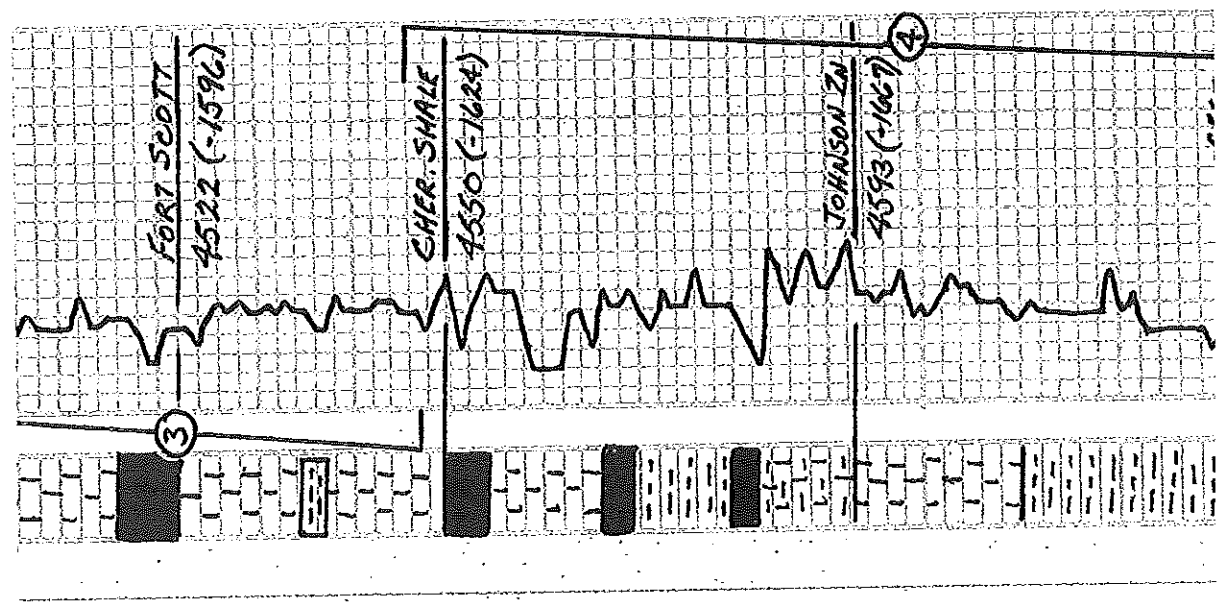


4400

4500

-CF3-

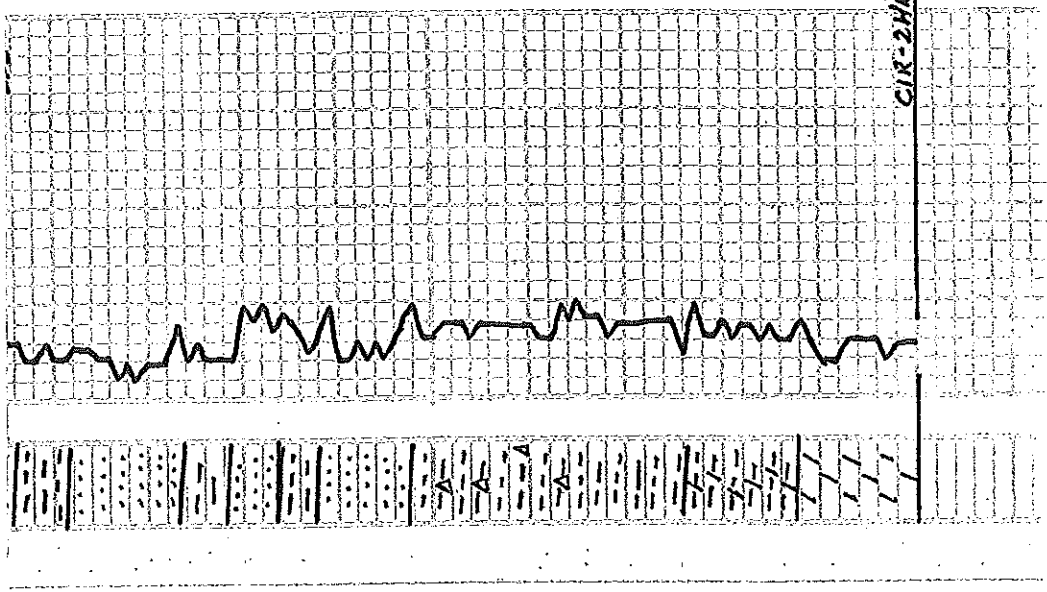
IFF: WK SURF-DIED IN 14 MIN FFP: NO BLOW REC: 2' MUD IHP: 2347 FHP: 2233 IFP: 1719 FFP: 1820 ISIP: 52 FSIP: 62 CML: 4000 BHT: 1190	SH, BLACK CARB LS, TAN GRAY-SING-FN-XLN, SL-BL P-COL & DOM - TRC OF WHY-ORBA S GRN TRANS. CHRT. NO SHAP	VIS: 59 WT: 8.3 WL: 8.0 CML: 4500 LCM: 2.8
SH, GRYS LS, A7A SH, A BUND BLACK CARB LS, WHI-GRM STAG-CRYPTO-XLN TO SLI-COL, SUB CHARLY NO SHAW SH, BLACK CARB SM, BLACK CARB & VARI-COLOR SH, BLACK CARB LS, F SH - 43 IS GRM OF GRY-SING CRYPTO-XLN SH, GRYS LS, WHI-GRY & TAN-SING-SLI-FSL SUB - CHALKY SCUM GRN LOGG SW F. OOR - NO F.C., NO REOR	SH, BLACK CARB LS, A/A SH, BLACK, DK GRY S GRY SH, A/A	DST # 4 (4546 - 4648) 30" - 30" - 30" - 30" IFF: 1/2 BLOW-DIED IN 9 MIN FFP: NO BLOW REC: 20' MUD IHP: 2441 FHP: 2304 IFP: 2328 FFP: 2936 ISIP: 795 FSIP: 692 CML: 4500 BHT: 1180





SH, GRYS	SS, CLEAR TO-MED GRN - KSA-SHOW OF BAK TRARY OIL - NO ODR - NO FLUR - AROUND SH-A/A
SH, A/A	
SS, A/A	
SH, BLACK & GRV	
SS, CLEAR - SUB-RO TO SUB-ANG CLUSTERS SS, LITTLE SHOW OF BLACK TRARY OIL - SOME CLUSTERS, SEL-CALIFYA	
SH, BLACK & GRYS - CARRYING SS AS ABOVE - TRC OF FRESH A NO SHOW	
SH, BLACK & GRYS - RARE SS AS ABOVE	
SH, BLACK & GRYS - TRC OF GRM - SUCROSIC DOLO - SHALLOO INTER-KU F. W. g. No SHOW	
DOLO - GRM - SUCROSIC P. AS ABOVE - ABUND. BLACK & GRV MOTT-CRIPPE XUN. SS - NO SHOW	

4800



RTD = 4850 (-1924)  
LTD = 4844 (-1918)

CIR-2HRS TO CLEAN HOLE FOR LOG