

GEOLOGISTS

J.C. MUSGROVE
 JAMES C. MUSGROVE
 BRAD J. HUTCHISON
 BOBBY J. BEARD
 HOWELL R. GRENSHAW JR.

THE

ROXANA

CORPORATION

OFFICE

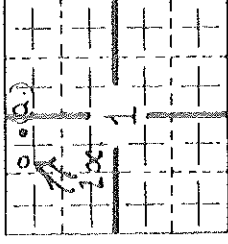
1925 MAIN STREET
 P.O. BOX 1162 67530
 GREAT BEND KS.
 PH. 316-792-1383

GEOLOGICAL REPORT / DRILLING TIME SAMPLE LOG

GEOLOGY BY


COMPANY RIEF OIL OPERATIONSWELL (LEASE) FREES # 2

FIELD

LOCATION NW NE NWSEC. 4 TWP. 17S RNG. 11WCOUNTY BARTON STATE KANSAS

GENERAL WELL DATA

OPER RIEF OIL OPERATIONS CASING RECORDCONTR DUKE DRILLING, INC. SURFACE 8 5/8" @ 330'COMM 1-9-82 PRODUCTION 4 1/2 @ 3377'COMP 1-14-82 TD DRLG. 3381ELECT SURVEY TD LOG

PRODUCTION

ELEVATIONS

MEASUREMENTS ARE

CRS USE KB 927 DF 924 GL 922 ALL FROM S.D.

FORMATION TOPS AND STRUCTURAL POSITION

FORMATIONS	SAMPLE TOP	ELEC LOG TOP	SUB SEADATUM	A	B	C
ANHYDRITE	717			+1220	-7	
HERBNER	2958			-1031	-10	
TORONTO	2979			-1052	-9	
DOUGLAS	2987			-1060	-6	
BEN. LIME	3061			-1134	-13	
LANSING	3075			-1148	-13	
Base K.C.	3344			-1417	-3	
ARBuckle	3364			-1437	-8	
R.T.D.	3381			-1454	+27	

REFERENCE WELLS

A. RIEF OIL OPERATIONS FREES # NENE NW SEC 1-17S-11W (25.8.0.P.D.)

B. _____

C. _____ (20.6.N.P.D.)

RECOMMENDATIONS / REMARKS

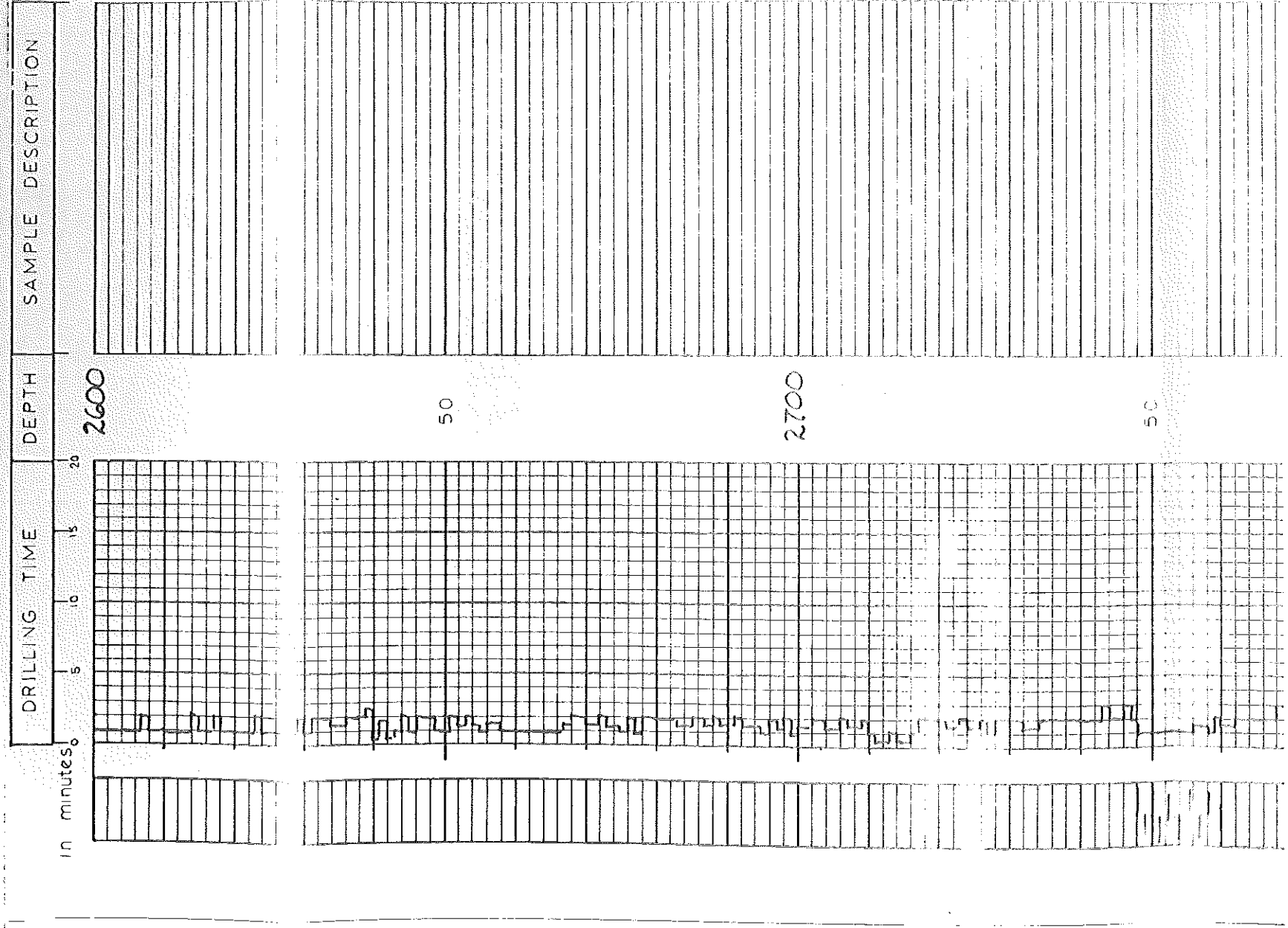
FORMATION	PERFORATE INTERVAL	LOG ANALYSIS % POR	% SW	TREATMENT AND REMARKS
				IT WAS RECOMMENDED
				THAT 4 1/2" COSSIDE BE SET
				AND CEMENTED BY 3377.
				FOUR FOOT OFF BOTTOM AND
				THE FOLLOWING ZONE TO BE
				TESTED.

THAT 4 1/2 CASINGS BE SET
 AND CEMENTED IN SITU
 FOUR FOOT OFF BOTTOM AND
 THE FOLLOWING ZONE TO BE
 TESTED.

1. ARBUCKLE-Open Hole
 COMPLETION METHODS
 RESPECTFULLY SUBMITTED,
Brad Hutchison
 BRAD HUTCHISON

LEGENDS

ANHYDRITE SALT	SANDSTONE	SHALE	CARB SH	LMESTONE	COL LIME	CHERT	DOLomite



50

15 GRM EX. SAND CO.
Soto coc. (barrel)

2800

GRY-GREEN
shale

ditto SAME O.O.

50

15 GRY-FINE
dense

15 GRM EX. / CHALKY
NOV 15 0

2900

15 GRM CHALKY CO.
45

15 GRM CHALKY 47-10
IF PALE (OCCAS) / SPICY STY
U.F.O. AT 2100

15 GRM CHALKY CO.
45

50

15 GRM CHALKY CO.
45

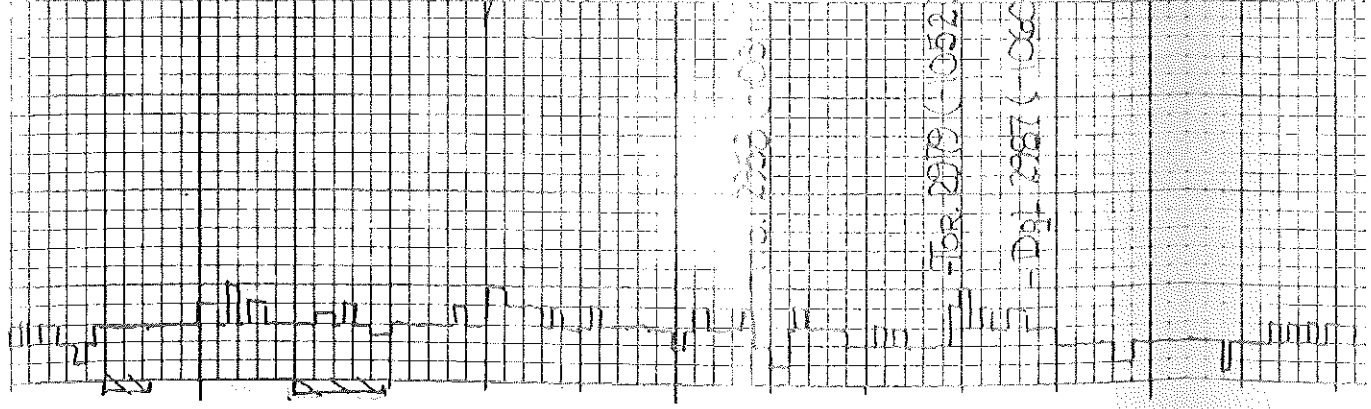
15 GRM CHALKY CO.
45

15 GRM EX. GESE

3000

shale at 2100
MICACEOUS

15 GRM CHALKY CO.
45



50



LS 6 SHARK 0.0
SHAIN 22

LS TAN DENSE
= NS 47

LS GRM EXLISE
= NS =

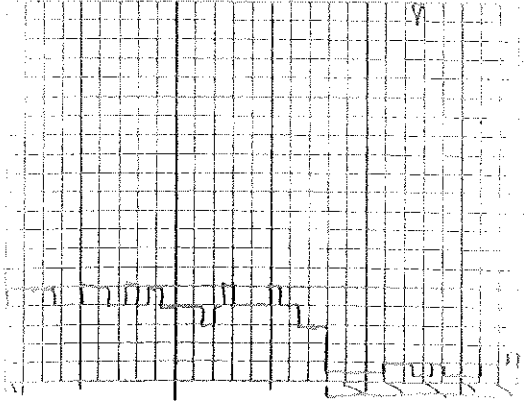
LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS BUFF EXLISE 51.67
RARE N.F.O. OF
POOR SPICY STW

LS GRAY 51.000
RARE 0.000
RARE SPICY STW
OR ODOOR
THIS ABOUT 1/4 CHALK

3100

50



LS TAN 0.000
N.F.O. OF ODOOR

LS GRAY 51.000
RARE 0.000
RARE SPICY STW
OR ODOOR

LS TAN 0.000
RARE 0.000
= NS =

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

LS GRM CHAUSY PASS
N.F.O. OF SPICY STW

