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Petroleum Geologist

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GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY LD Drilling Inc.
LEASE Ellinwood Hand & Cattle Inc.
FIELD Maybach
LOCATION ne-sw-nw-se (1928' FSL; 2123' FEL)
SEC 24 TWSP 20^s RGE 14^w
COUNTY Barton STATE Kansas
CONTRACTOR Petromark Drilling (rig #2)
SPUD 8/19/2014 COMP 8/26/2014
RTD 3666 LTD -no log-
MUD UP 2600' TYPE MUD Chemical displaced

ELEVATIONS
KB 1891
DF _____
GL 1886
Measurements Are All From -KB-

CASING
SURFACE 8 3/8" @ 813'
PRODUCTION -none-
ELECTRICAL SURVEYS
-none-

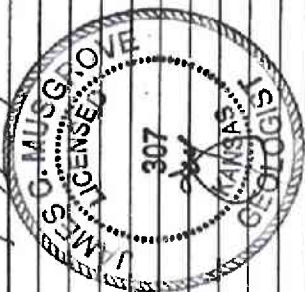
SAMPLES SAVED FROM 3000' TO _____
DRILLING TIME KEPT FROM 3000' TO _____
SAMPLES EXAMINED FROM 3100' TO _____
GEOLOGICAL SUPERVISION FROM 3150' TO _____
GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS	LOG	SAMPLES
anhydrite	No log	787 +1104
Base anhydrite		813 +1078
Heebner	~	3148 -1257
Toronto	~	3158 -1267
Douglas	~	3170 -1279
Brown lime	~	3245 -1354
Mansing	~	3255 -1364
Base Kansan City	~	3469 -1578
conglomerate	~	3497 -1606
Arbuckle	~	3505 -1614
RTD		3666 -1675

REMARKS


The Ellinwood Hand & Cattle Inc. was plugged & abandoned at the Rotary Totals Depth 3566

Respectfully Submitted,
James C. Musgrove
Petroleum Geologist

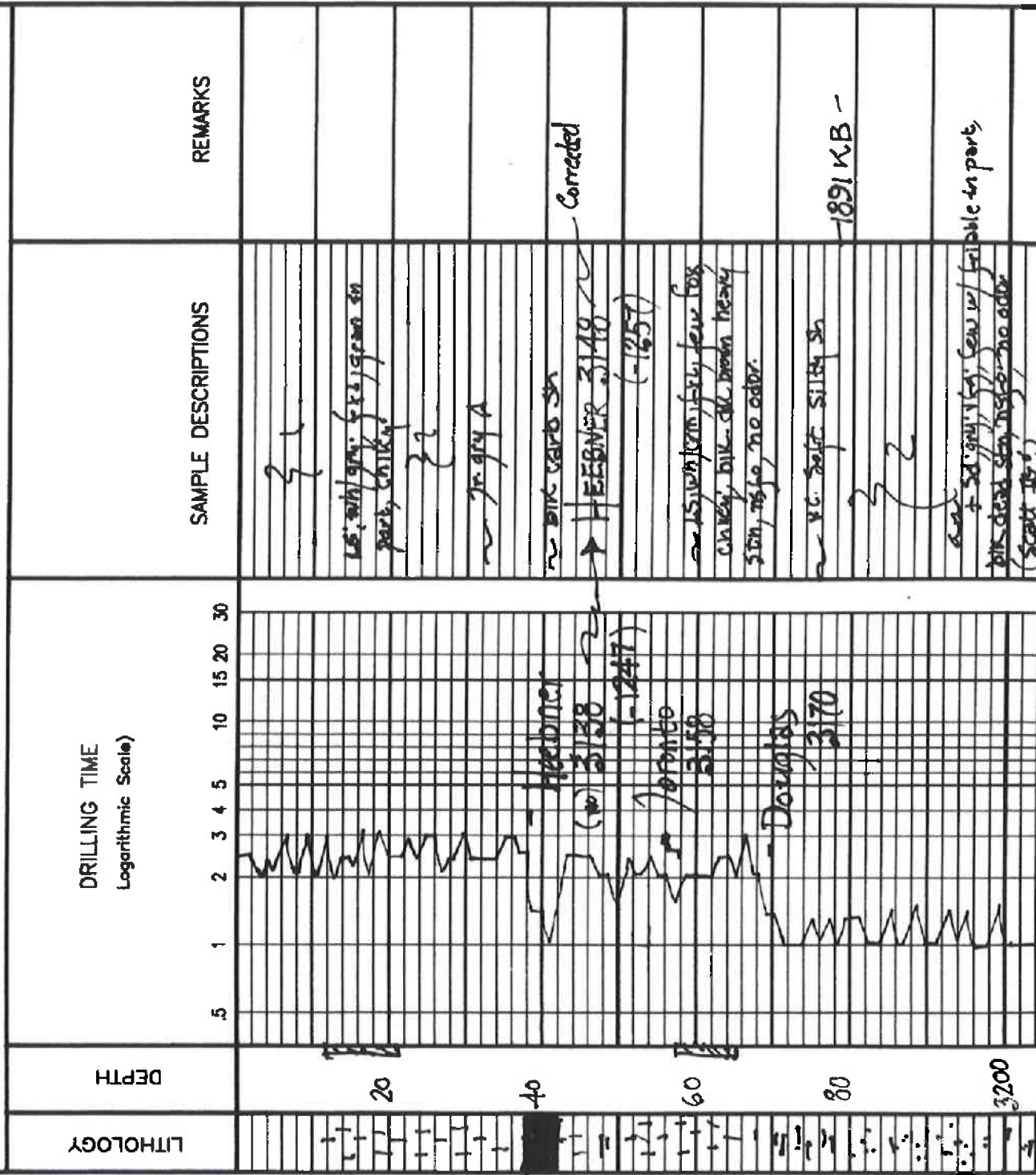


000 170

LEGEND

-  Anhydrite
-  Salt
-  Sandstone
-  Shale
-  Carb sh
-  Limestone
-  Ool.Lime
-  Chert
-  Dolomite

000 170



light grey
gm - greenish green silty sh
+ dr. v. gr. silty mica
sand m/s

Z
dubio

LS tan brown fxy, sandy (dense)
LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst

LS w/ tan, fxy, brown sh/sst, sst, sst, sst
LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst
LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst

LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst
LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst

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LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst

LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst
LS tan w/ fxl, cherty, sand p/p, brown sh/sst, sst, sst, sst

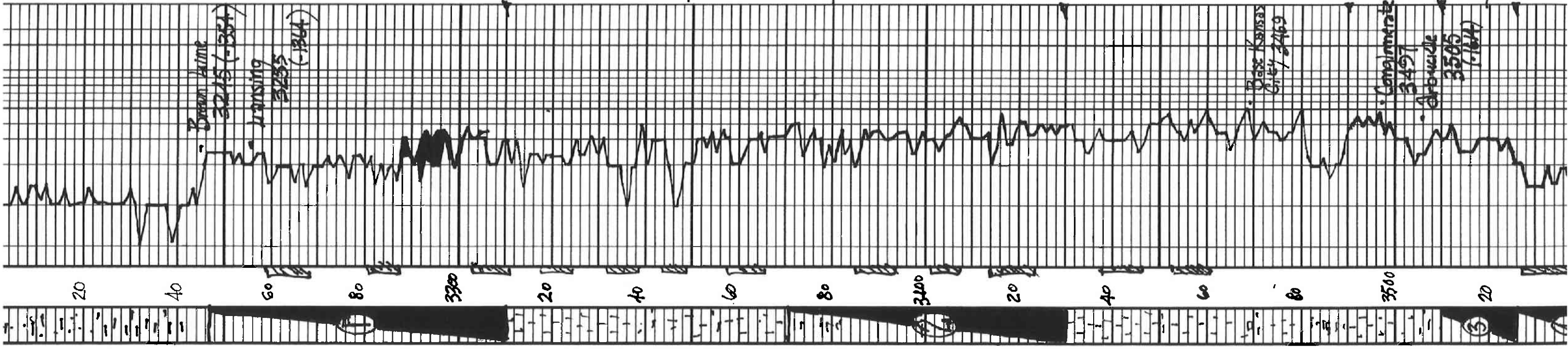
DST # 1 3247-3310
20-20-20-20
Bbu, weak (died 12 mins)
Rec 10 mud, few oil specks
pressures: ISIP 35 psi
ISIP 25
ISIP 10-16
ISIP 17-18
MSH
1643-1643

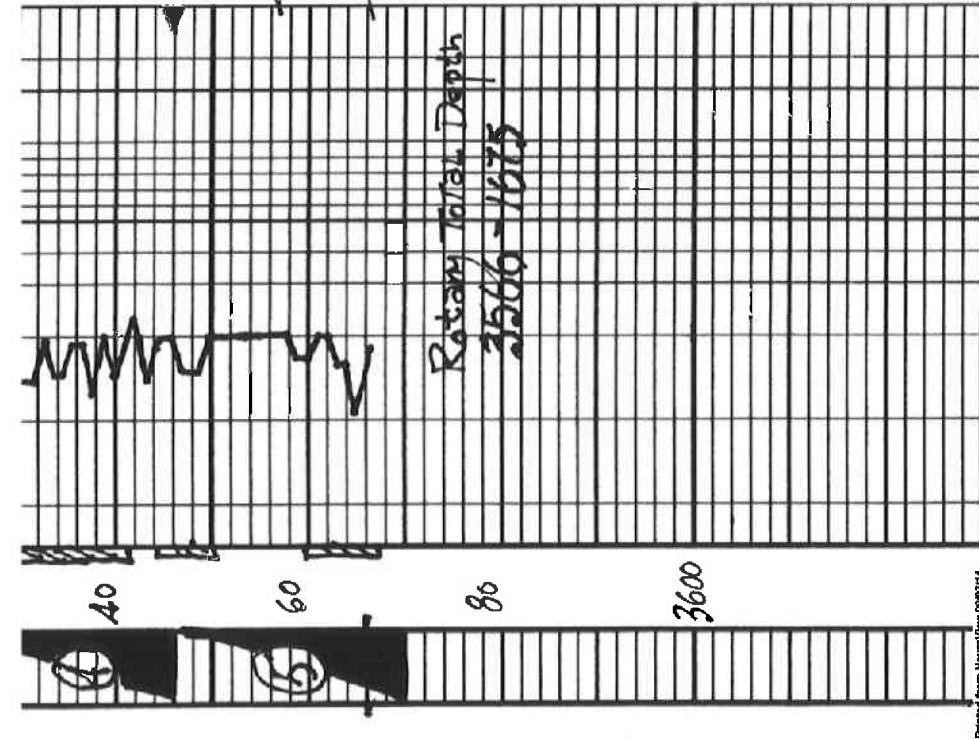
DST # 2 3371
-3430
30-30-45-45
Blow: weak
Rec: 26 Very slightly dil cut mud

(1900.4) 99% mud
pressures: ISIP 69 psi
ISIP 69
ISIP 10-19
ISIP 19-24
MSH
1615-1623

-1891KB-

DST # 3 3510
-3526
30-30-30-30
MSH





30-30-30-30 Blow weak	30-30-30-30 Blow weak
Recovery; 123 gas in pipe	Recovery; 123 gas in pipe
8' mud	8' mud
Pressures: Isp 41 ps fsp 45 Isp 12-16 fsp 14-16 MSH 1693-1693 ps	Pressures: Isp 41 ps fsp 45 Isp 12-16 fsp 14-16 MSH 1693-1693 ps
Dst # 4 3526-3546	Dst # 4 3526-3546
30-30-30-30 Blow weak	30-30-30-30 Blow weak
Rec: 60 gas in pipe	Rec: 60 gas in pipe
8' mud	8' mud
Pressures; Isp 101 ps fsp 21 Isp 15-20 fsp 26-23 MSH 1698 -1698 ps	Pressures; Isp 101 ps fsp 21 Isp 15-20 fsp 26-23 MSH 1698 -1698 ps