

James C. Musgrove  
Petroleum Geologist

# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Parkey Oil Co.  
 LEASE Katrida #1  
 FIELD Stoltzberg  
 LOCATION W/2-se-SW SW (330' FSH) (890' FWH)  
 SEC 15 TWP 16S RGE 10W  
 COUNTY Ellsworth STATE Kansas  
 CONTRACTOR Ninescath Drilling  
 SPUD 3-7-2013 COMP \_\_\_\_\_  
 RTD \_\_\_\_\_ LTD No log \_\_\_\_\_  
 MUD UP 2540' TYPE MUD Chemical displaced  
 SURFACE CASING PRODUCTION \_\_\_\_\_  
 ELECTRICAL SURVEYS \_\_\_\_\_  
 ELEVATIONS  
 KB 1893  
 DF \_\_\_\_\_  
 GL 1880  
 Measurements Are All From KB

SAMPLES SAVED FROM 2800 TO \_\_\_\_\_  
 DRILLING TIME KEPT FROM 2800 TO \_\_\_\_\_ RTD  
 SAMPLES EXAMINED FROM 2800 TO \_\_\_\_\_  
 GEOLOGICAL SUPERVISION FROM 3000 TO \_\_\_\_\_  
 GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS	LOG	SAMPLES
<u>HEBBER</u>	<u>No log</u>	<u>2905 - 1012</u>
<u>Toronto</u>	}	<u>2920 - 1027</u>
<u>Douglas</u>		<u>2937 - 1044</u>
<u>Broadw Lime</u>	}	<u>3010 - 1117</u>
<u>Unsing</u>		<u>3031 - 1148</u>
<u>Base Kansas City</u>	}	<u>3300 - 1407</u>
<u>Simpson Shale</u>		<u>3332 - 1439</u>
<u>Atbecke</u>	}	<u>3363 - 1470</u>
<u>RTD</u>		<u>3366 - 1473</u>

REMARKS

5/2" production casing was set & cemented at the RTD (3360')

Respectfully submitted,  
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LEGEND

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

DRILLING TIME  
Logarithmic Scale)

HTP3  
AG0701H

5052

2022 001

LITHO  
DEF

.5 1 2 3 4 5 10 15 20 30

SAMPLE DESCRIPTIONS

REMARKS

20

40

60

80

2900

20

40

60

80

3000

LS grey wh. dol. Cherty,  
slat'g, brown - blue stain  
also; no odor

v.c. soft p.p. fine wavy  
blue brown stain, also;  
no odor

LS grey wh. cherty - 4'g  
(dense)

32  
grey g. Δ

-1893 KB-

slaty dol. carb sh  
(2900 sample)

LS, wh, con. cherty n/s  
+ wh chert

v.c. soft silty sh.

Sand; grey, quartz grains,  
v. fine, silty, some fine  
mica; calc. sh part n/s

ditto sh / sand a-b

Heedon  
2905  
A 205

2900

Douglas 2937

3000

20

40

60

80

3100

20

40

60

80

3200

Brown lime  
3010

lansing  
3031

LS, gray/tan, (x-l) slightly  
ob (dsc)

gray/green sh

LS wh/gy, (x-l) few  
ob / sub-obl, (?) stn,  
nife, no odor

LS, gray, com, good com  
light brown / golden brown  
stn, s.c., ??? odor

LS, wh, (x-l) few foss  
ob, nife

LS, tan, brown, (x-l) few  
ob, dense

LS, tan, com, good com  
(barren)

LS, etc

gr. gy A

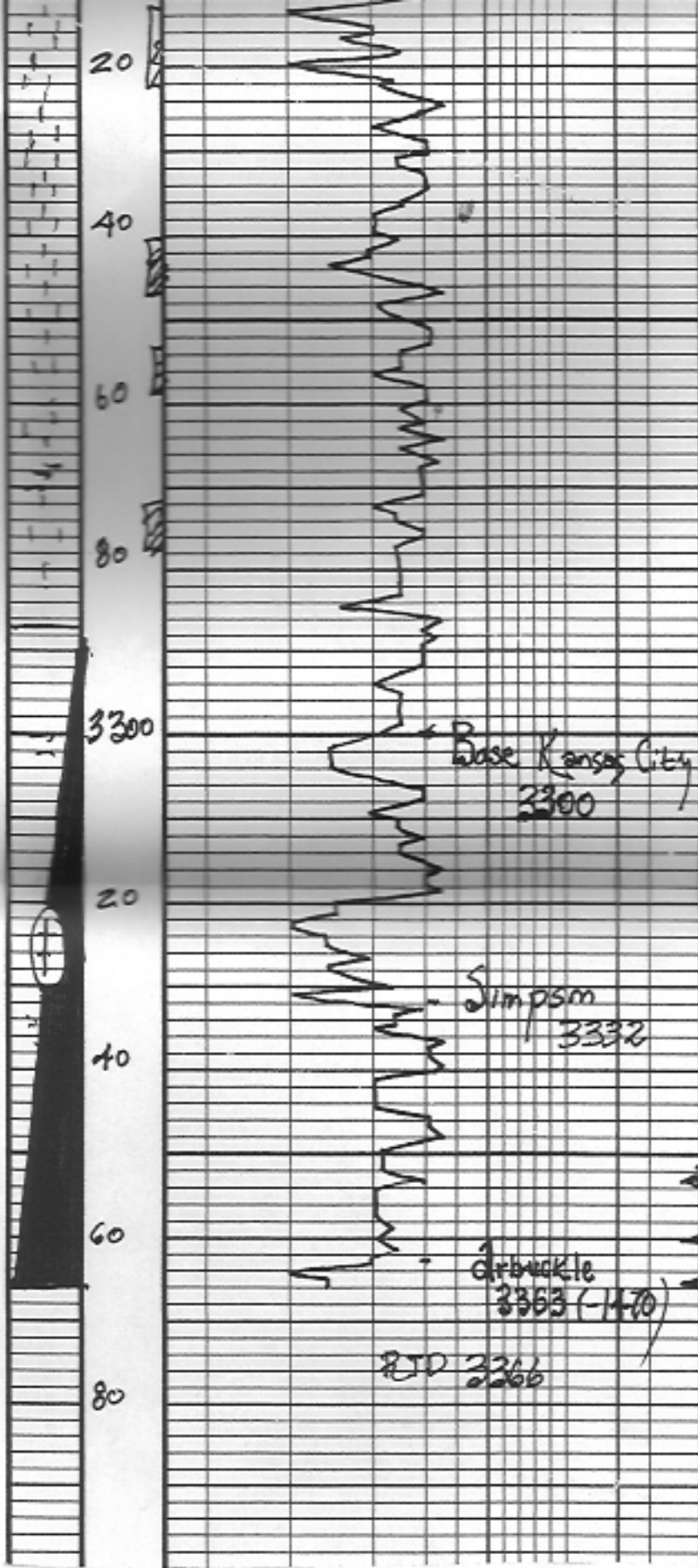
gr. blk carb

LS, gy, foss, cherty

LS, gy, wh, (x-l) ob,  
sparry calcite cement,  
brown stn, nife, no odor

LS, gray, wh, ob, com,  
good cherty, nife





good, some, 75  
 and  
 ls gm/wh, cherty -  
 can few foss, cherty  
 Jr. blk/green ss  
 med  
 ls, gm, med xch  
 few foss, cherty  
 v.c. sh.  
 ls, gm, wh, green tinted  
 cherty  
 ls, tan, (xch) few med vch  
 (good dens)  
 v.c. sh.  
 sand, gm, wh, (med xch)  
 scatt; fr stn; no odor.  
 Jr. blue green / tan. sub water sh.  
 blue green sh - a.  
 no odor.  
 no odor  
 (dd) tan, med xch scatt incl of  
 poor stn, st, no odor

Dst #1 3290-33  
 10-20-20-30  
 Blow string  
 (BOB 48 sec)  
 2nd opening  
 string (BOB 1 min)  
 Rec: 240' OGCMW  
 (10% gas, 30% oil;  
 20% mud, 40% w  
 240' OGCMW  
 (10% gas, 20% oil;  
 20% mud, 60% wat  
 540' OCMW  
 (20% oil) 10% mud  
 (10% water)  
 1026' OGCMW  
 (10% oil, 10% mud, 80%  
 120' water  
 pressures) Jslp 1131  
 Jslp 1131  
 Jfp 546-7  
 (-1460) Jfp 818-10  
 1154  
 (-1467) 1744-168