



James C. Musgrove
Petroleum Geologist

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GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY American Warrior Inc.

ELEVATIONS

LEASE Delbert #1-15

KB 1774

FIELD _____

DF _____

LOCATION SW-NE-NE-NE (349' FUL-339' FEL)

GL 1766

SEC 15 TWP 18S RGE 10W

Measurements Are All From -KB-

COUNTY Rice STATE Kansas

CONTRACTOR Duke Drilling (rig #8)

SPUD 9/19/2014 COMP 9/25/2014

RTD 3400 LTD 3400

MUD UP 2600 TYPE MUD Chemical displaced

SURFACE CASING 858' 412'
PRODUCTION 5211' 3599'
ELECTRICAL SURVEYS
Pioneer Dual Induction,
Dual Compensated Resistivity
log & micro log.

SAMPLES SAVED FROM 2700

DRILLING TIME KEPT FROM 2700

SAMPLES EXAMINED FROM 2700

GEOLOGICAL SUPERVISION FROM 2820

GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS

LOG

SAMPLES

Anhydrite 484 +1290

Base anhydrite 501 +1273

Hebner 2807 -1033

Toron to 2824 -1050

Douglas 2836 -1062

Brown lime 2926 -1152

Lansing 2947 -1173

Base Kansas (Lb) 3212 -1438

Anglomerate 3257 -1483

Ar buckle 3273 -1499

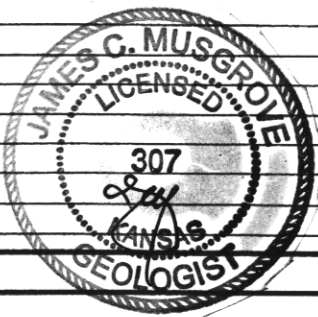
RTD 3400 -1676

RTD

REMARKS

5 1/2" production casing was set & cemented on the Delbert #1-15.

Respectfully Submitted,
James C. Musgrove
Petroleum Geologist



LEGEND

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

DRILLING TIME

LOG

HL

LITHO

DEP

.5 1 2 3 4 5 10 15 20 30

SAMPLE DESCRIPTIONS

REMARKS



20

~ blk carb. sh.

40

ls, wh/gry, fxl, ch. kn; few green. nls

1774 KB-

} 2

60

ls; tan/gry. foss; finely com.
Poor fr/good com/fossiliferous
(barren)

80

fr. gry/dk gry ls

2800

Heebner
2805
(-1031)

~ blk carb. sh
ls; tan, fxl; few dy (ds)
gry/green sh

20

Toronto

ls; tan, slightly dolomitic,
poor vis. nls
(fr. sub com ls) Poor vis. nls

40

Douglas

Sand; gry/guish green, vfg,
mica; shaly; sub rounded
few cal & shaly; Poor fr
nls

60

} ?

80

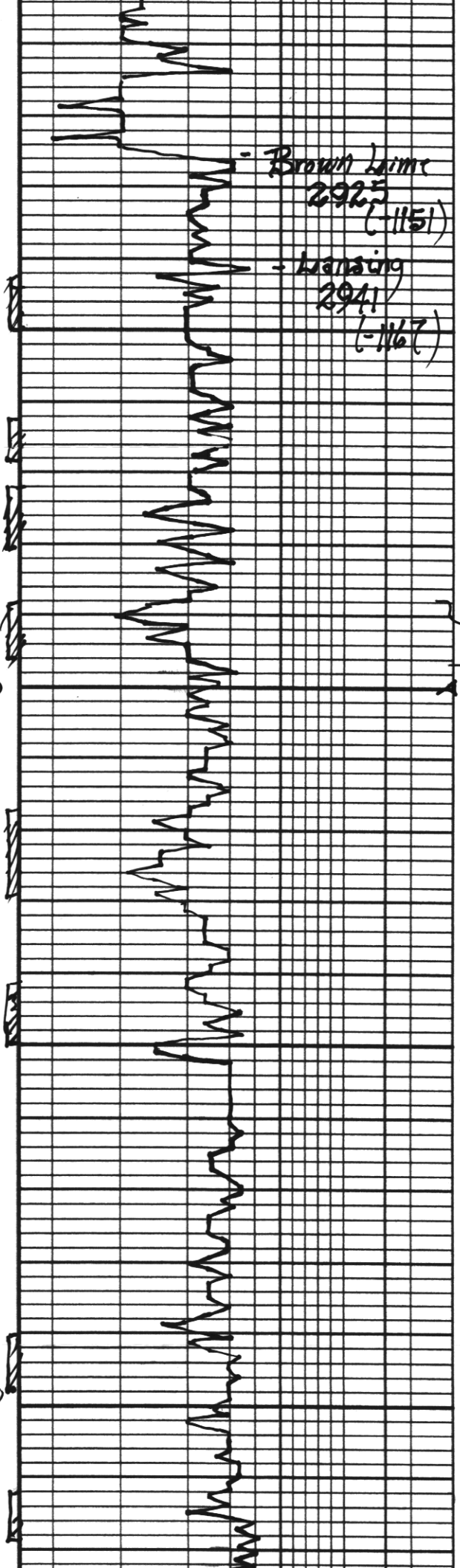
sd + gry/guish green
silty sh.

} ?

2900

ditto

20
40
60
80
3000
20
40
60
80
3100
20



Brown Limestone
2925
(-1151)
- Lansing
2941
(-1167)

LS, wh/ gm; cherty - Poor
vis

~ v.l. silty soft mica. sh.

LS, tan, (x) slightly dry
(dse)

LS, crm, wh, (x) foss in
part, cherty; poor vis

??
a.s.; Poor vis

LS, gm/tan/wh; foss;
cherty; Poor brown
str. info - ?? odor
(Poor vis)

LS, tan/gry; foss/ool
scat, cherty; Poor vis
LS, gm; wh; tan; ool; cherty
Poor vis; ledge str. info
no odor

LS, crm, wh, ool; cherty; n/s

??
LS, tan, (x) dense

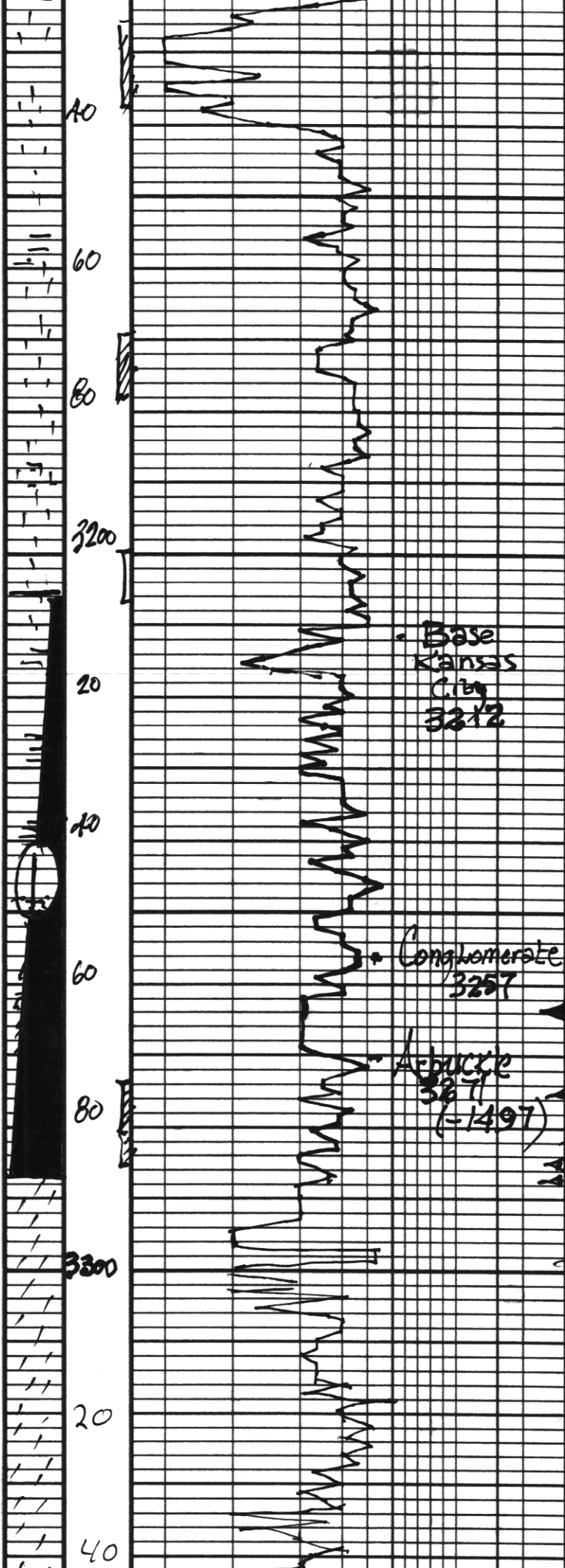
LS, wh/ gm; sub ool,
cherty; Poorly dev vis

LS, tan, (x) dry
+ wh d

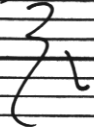
~ blk carb. sh.

LS, wh, ool, cherty
fr. ool vis

LS, wh/crm, ool; cherty
in part / poor str. info
no odor



LS: tan, buff, com, good o' / n/s

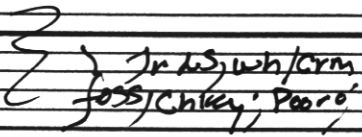


-1774 KB -
=

gray/green sh

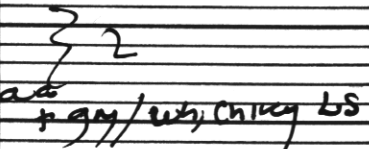
LS: tan, wh, col / foss,
Cherty; poor VISB n/s

LS: wh/gay; Cherty
+ amber A n/s



Jr LS: wh/crm
foss/Cherty; Poor o'

V.C. sh.



+ gray/wh, Cherty LS

gray/green soft sh/clay
+ Jr. tan, nodular LS n/s



med / purple sh gray sh
+ med tinted shaly LS
V.C. A

ana (V.C. sh + V.C. A)

dot wh/crm (v.l.) sue; Poor o'
sh

dot wh/crm/gay f-med kly
Scott Ex. l.g.; brown sh; Jr. fa.
ft. odor

dot, crm, wh, f, l. fa
med v.l.; com in part
fr. com / v. gray o' Jr. sh
ns fo. no odor



dot, crm/wh) f, l., slightly
d'y



DSt #1 3206-3287
45-30-45-45

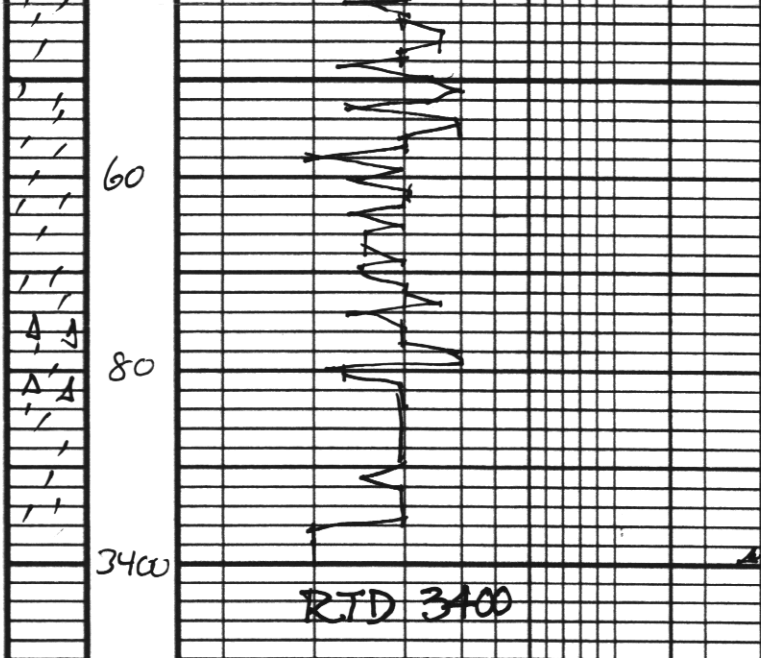
Blow; fair (10 inches)
2nd opening; fair (8 inches)

Rec; 74' clean oil
63' oil cut mud
(20% oil; 80% mud)

63' slightly oil cut
mud
(5% oil) 95% mud

pressures:
I sip 905 psi
f sip 826
I fp 91-106
f fp 114-132
HSH 1590

-1529 psi



aa; suc in part, fr. pp/IX-40'
(barren)

32

del; gry/wh; fr-med xl; fr IX-9'
n/s

32

debbaa + wh A

32