

**BEREXCO, LLC.
BALHAZOR A # 3
N2SWNE SECTION 23 9S-21W
GRAHAM COUNTY, KANSAS**

**GEOLOGIST
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DISCUSSION

Balthazor A # 3 was drilled a total depth of 4189 feet testing the Lansing Kansas City and Arbuckle formations in Graham County, Kansas. It was planned that if Balthazor A # 3 was a dry hole drilling would continue to the Granite wash for a water disposal well.

Structurally, Balthazor A # 3 came in four feet low to a nearby producing well Balthazor A # 2 on the Lansing top and ten feet low on the Arbuckle.

The Lansing Kansas City formation had a few sample shows with poor to fair porosity development, none worthy of a drill stem test. The top four feet of the Arbuckle has good porosity development with good sample shows and was tested with poor results recovering 2405 feet of water and mud with a trace of oil. After logs, another drill stem straddle test was attempted on the second Arbuckle bench but the top packer failed. Drilling continued to the Granite wash in preparation for a water disposal well.

Logs agreed with sample evaluation recording poor to fair porosity development in the Lansing Kansas City. The Arbuckle has good porosity development and the second bench calculates productive with very good sample shows of free oil.

A decision was made to run production pipe for a disposal well and possible production from the Arbuckle second bench.

BALTHAZOR A #3 SAMPLE DESCRIPTIONS
BEREDCO DRILLING RIG 10 DRILLING 7 7/8 HOLE

ANHYDRITE 1716(+524) L

BASE 1748(+490) L

SAMPLE DESCRIPTIONS

3100-60 LIMESTONE buff,hard,micxln, slightly sandy,fossils,poor porosity,no shows

3160-95 SHALE gray,green,soft,argillaceous

TOPEKA

3195-3215 LIMESTONE buff,very hard,dense, blocky,poor porosity,no shows

35' TOPEKA

3215-25 LIMESTONE white,firm,very fossils, slightly chalky,poor to fair porosity,no shows

3225-66 LIMESTONE buff,hard,dense,as above

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

3266-80 LIMESTONE white, buff, firm, fossils, fair porosity, no shows

3280-3310 SHALE gray, as above

3310-38 LIMESTONE buff, hard, fossils, poor porosity, no shows,

PLATTSMOUTH

3338-50 LIMESTONE white, buff, firm, slightly chalky, very fossils, fair intg porosity, no shows with thin SHALE as above

3350-60 LIMESTONE as above dense

3360-84 LIMESTONE white, buff, soft, sandy, slightly chalky, fair porosity, no shows

3384-92 LIMESTONE buff, very hard, dense, abundant Chert white

HEEBNER

3392-96 SHALE black, green, carbonaceous

3396-3404 LIMESTONE buff, very hard, dense, black

3402-16 SHALE gray, green, red, firm, fissile

TORONTO

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

3416-24 LIMESTONE buff,very hard,dense, abundant Chert white,gray

3424-33 SHALE as above

LANSING A

3433-48 LIMESTONE buff,slightly hard,fossils, slightly chalky,poor to fair porosity,no shows some Chert white,gray

3448-60 LIMESTONE buff,hard,blocky, dense,fossils,poor porosity,no shows

3460-72 SHALE as above

B ZONE

3472-82 LIMESTONE as above dense,fossils,poor porosity,no shows,abundant Chert gray,white

3482-90 SHALE as above

C ZONE

3490-3510 LIMESTONE as above,no shows

F ZONE

3510-16 LIMESTONE buf,firm,fossils,poor to fair intg porosity,spotty brown live stain,good cut,poor

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

show free oil

3516-24 SHALE as above

G ZONE

3524-54 LIMESTONE buff,hard,blocky, dense,poor porosity,no shows

3554-62 SHALE color as above

H ZONE

3562-80 LIMESTONE buff,very hard,dense, trace micxln,poor porosity,no shows,abundant Chert
white,gray

3580-88 SHALE as above

I ZONE

3588-96 LIMESTONE buff,very hard,dense, with Chert as above

3596-3602 SHALE as above

J ZONE

3602-06 LIMESTONE buff,firm,fossils, slightly chalky,poor porosity,very spotty brown stain,poor cut

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

3606-20 LIMESTONE buff,very hard,dense,no shows

K ZONE

3620-30 LIMESTONE buff,hard,dense,poor pinpoint vuggy porosity,very spotty brown stain,poor cut

3630-40 LIMESTONE buff,very hard,dense, no shows

3640-62 SHALE red,soft,very argillaceous with thin LIMESTONE as above dense,no shows

BKC

3662-70 LIMESTONE white,buff,firm, oolitic,poor to fair intg porosity,spotty brown live stain,good cut and odor,nfo

3670-80 SHALE red,soft,argillaceous

3680-88 LIMESTONE buff,pale gray,very hard,dense,abundant Chert yell,translucent

3680-3715 SHALE red,green,yell,with very abundant Chert red,yell,translucent

3715-20 SANDSTONE translucent,firm,fine to mg, srnd,wsrtd,fair intg porosity,even live brown stain,very good cut and odor, good show free oil

3720-36 SHALE red,green,yell,ble,firm, fissile, with thin SANDSTONE translucent, friable, mg,rounded,fair porosity,abundant dead black flaky stain,poor cut

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

ARBUCKLE

3736-44 DOLOMITE buff,firm to slightly hard,micxln to micsuc texture,fair to good intxln porosity,even live brown stain,very good cut and odor,good show free oil

3744-66 DOLOMITE buff,hard,micsuc,good crystalline porosity,even live brown stain,very good cut and odor,good show free oil

3766-75 DOLOMITE buff,very hard,very dense,very spotty live brown stain,good cut,abundant Chert white,

3775-85 DOLOMITE buff,firm,micsuc,good crystalline porosity,spotty to even live brown stain,very good cut and odor,good show free oil

3785-3798 DOLOMITE buff,hard,dense,no shows, abundant Chert white

3798-05 DOLOMITE buff,slightly hard,micsuc, good crystalline porosity,spotty brown stain,good cut,fair show free oil

3805-60 DOLOMITE buff,very hard,dense,abundant Chert white

RTD 3830'

LTD 3833'

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

3860-72 DOLOMITE buff,slightly hard, fair to good micsuc porosity,no shows

3872-3910 DOLOMITE as above very hard,dense, abundant Chert white

3910-30 DOLOMITE buff,pale green,fair micsuc porosity,no shows

3930-78 DOLOMITE very hard,dense,abundant Chert white with thin DOLOMITE hard, micsuc,fair porosity,no shows

3978-90 DOLOMITE buff,firm,micsuc, good intg porosity,no shows

3990-40 DOLOMITE as above dense

4000-60 DOLOMITE buff,firm, good intxln micsuc to coarse crystalline porosity,no shows

4060-4100 DOLOMITE as above dense, with thin DOLOMITE buff,slightly hard,fair to good porosity,no shows

4100-36 DOLOMITE buff,firm,good crse crystalline porosity,no shows

GRANITE WASH

4136-63 GRANITE WASH red, some mica abundant very sandy

4163-89 SANDSTONE translucent,firm,m to cg, rounded,wsrtd,good intg porosity,no shows

BALTHAZOR A #3 SAMPLE DESCRIPTIONS

4189' RTD