# BEREXCO, LLC. SATURIN UNIT # 1 EW2W2E2 SECTION 9 14S-17W ELLIS COUNTY, KANSAS

GEOLOGIST WILLIAM B. BYNOG

# RESUME

**OPERATOR:** 

BEREXCO, INC.

WELL NAME & NUMBER:

SATURIN UNIT # 1

LOCATION:

**E2W2E2 SECTION 9 14S-17W** 

COUNTY:

**ELLIS** 

STATE:

**KANSAS** 

SPUD DATE: 10-11-2010

COMPLETION DATE: 10-21-2010

**ELEVATIONS:** 

GL: 2023' KB: 2034'

CONTRACTOR:

**BEREDCO RIG 10** 

LOGS: LOG TECH

TYPES: RAG, MICROLOG

WELLSITE ENGINEER:

NONE

MUD COMPANY:

ANDY'S

MUD TYPE & ENGINEER:

FRESH CHEMICAL

GEOLOGIST:

**WILLIAM B.BYNOG** 

HOLE SIZE:

7 7/8

MUD LOGGING BY:

NONE

DRILL STEM TEST COMPANY:

TRILOBITE

DRILL STEM TEST:

DST#1 3324-48, DST#2 3416-3500, DST#3

3515-60, DST#4 3560-75, DST#5 3560-91,

DST#6 3591-3606

WELL STATUS:

SET PRODUCTION PIPE

## SUMMARY AND CONCLUSION

Saturin Unit # 1 was drilled a depth of 3656 testing the Lansing Kansas City and Arbuckle Formations in Ellis County, Kansas. There primary objective was the Arbuckle zone. Saturin Unit # 1 was a direct offset to Simon # 4, productive in the Lansing B, C and Arbuckle formations.

Structurally, Saturin Unit # 1 came in twelve feet low to Simon # 4 but still had many good oil shows in the Lansing Kansas City and Arbuckle formations. The Lansing B zone had good shows and was tested on drill stem test # 1 recovering only eight feet of mud with oil spots. The C, F and G zones all had fair shows but weren't tested, since we were running low. The H and I zones had fair shows but appeared to be tight. These zones were tested on drill stem test # 2 recovering only twelve feet of mud with oil spots.

The Arbuckle had very good shows and was tested on drill stem test # 3, 4, 5 and 6. Drill stem test # 3, 3515-60 feet in the very top recovered only fifteen feet of oil cut mud, no water. Drill stem tests # 4 & # 5 recovered gas in pipe and hundreds of feet of oil and no water in the more permeable upper Arbuckle from 3560-90 feet. Drill stem test # 6 recovered only eight feet of oil cut mud from 3591-3606 feet.

Electric logs agreed with drill stem test indicating tight zones in the Lansing Kansas formation with the exception of the G zone and a permeable Arbuckle with high resistivity from 3552-85 feet.

# SATURIN UNIT # 1 SAMPLES DESCRIPTIONS.txt SAMPLE DESCRIPTIONS

SATURIN UNIT #1

ANHYDRITE 1217(+817) S 1212(+822) L

BASE 1255(+779) S

1252(+882) L

2850-80 SHALE gray, green, firm, argillaceous

2880-2910 LIMESTONE buff, tan, hard, slightly fossils, sandy poor porosity

2910-30 SHALE as above abundant pyrite

2930-60 LIMESTONE buff, gray, tan, very hard, dense, slightly fossils

2960-3020 SHALE gray, green, firm, slightly pyritic

**TOPEKA** 

3020-50 LIMESTONE buff,tan,very hard,dense, fossils,poor porosity,with thin SHALE as above

35' ZONE

3050-60 LIMESTONE white, firm, chalky, fossils, poor vis porosity, no shows

3060-85 LIMESTONE tan, very hard, very dense, cryptocrystalline

3085-3100 SHALE gray, green, firm, fissile, argillaceous

3100-40 LIMESTONE buff,tan,very hard,dense,slightly fossils,cryptocrystalline,abundant Chert white,tan with thin SHALE black,firm,fissile,carbonaceous

# SATÚRIN ÚNIT # 1 SAMPLES DESCRIPTIONS.txt 3140-50 SHALE green,soft to firm,very argillaceous

- 3150-75 LIMESTONE buff,tan,very hard,very dense,cryptocrystalline,abundant Chert white,gray
- 3175-3205 LIMESTONE as above abundant Chert white, gray, thin SHALE black, carbonaceous
- 3205-10 LIMESTONE white, firm, micro crystalline, poor vis porosity, no shows
- 3210-25 LIMESTONE buff,tan,very hard,very dense,cryptocrystalline,abundant Chert as above
- 3225-35 SHALE green, black, firm, silty, in part, some carbonaceous PLATTSMOUTH
- 3235-40 LIMESTONE buff, very hard, very dense, cryptocrystalline, Chert as above
- 3240-50 LIMESTONE white, firm, chlky, microcrystalline, poor vis porosity, no shows, slightly gas odor
- 3250-68 LIMESTONE as above very dense, abundant Chert white HEBNER
- 3268-72 SHALE black, firm, blocky, carbonaceous
- 3272-76 LIMESTONE as above very dense, cryptocrystalline
- 3376-90 SHALE green, gray black, black, firm, slightly carbonaceous
- 3290-3305 LIMESTONE buff, very hard, dense, slightly fossils, abundant Chert brown, tan
- 3305-15 SHALE green, rounded, firm, argillaceous LANSING A

### SATURIN UNIT # 1 SAMPLES DESCRIPTIONS.txt

3315-30 LIMESTONE buff, very hard, very dense, cryptocrystalline, abundant Chert white, trace LIMESTONE white, hard, poor pinpoint porosity, very spotty stain, fair cut

3330-35 SHALE as above

B ZONE

3335-45 LIMESTONE buff, firm, ooclastic, good oomoldic porosity, spotty brown stain, good cut, faint odor, fair show free oil

3345-55 SHALE green, firm, argillaceous, blocky

C ZONE

3355-60 LIMESTONE buff,slightly hard,ooclastic,fair oomoldic and pinpoint vuggy porosity,spotty brown stain,good cut,fair odor,fair show free oil

3360-70 LIMESTONE buff, very hard, very dense, cryptocrystalline

3370-80 SHALE green, gray green, firm, slightly carbonaceous

3380-3390 LIMESTONE buff, very hard, dense, as above

F ZONE

3390-95 LIMESTONE tan, hard, oolitic, poor pinpoint vuggy porosity, spotty brown stain, good cut, poor show free oil

3395-3400 LIMESTONE buff, very hard, very dense, cryptocrystalline

G ZONE

3400-10 LIMESTONE buff,slightly hard,oolitic,ooclastic,fair oomoldic porosity,spotty brown stain,good cut,fair show free oil

3410-35 LIMESTONE buff, very hard, dense, cryptocrystalline, abundant Chert white

SATURIN UNIT # 1 SAMPLES DESCRIPTIONS.txt 3435-45 SHALE gray black, green, carbonaceous

H ZONE

3445-52 LIMESTONE buff, hard, oolitic, slightly chlky, poor to fair oomoldic porosity, spotty brown stain, good cut and odor, fair show free oil

3452-62 LIMESTONE buff, very hard, dense, cryptocrystalline, abundant Chert white

3462-65 SHALE gray green, as above

I ZONE

3465-80 LIMESTONE buff, very hard, dense, as above some LIMESTONE buff, hard, poor pinpoint vuggy porosity, spotty stain, good cut, fair show free oil

3480-85 SHALE as above

J ZONE

3485-3490 LIMESTONE pale gray, hard, slightly oolites, poor to fair oomoldic and vuggy porosity, spotty stain, good cut, poor show free oil

3490-3530 LIMESTONE buff, very hard, dense, cryptocrystalline, some Chert white

3530-50 SHALE green, firm, argillaceous, thin LIMESTONE as above ARBUCKLE

3550-60 DOLOMITE buff, firm, microsuc texture, fair to good intercrystalline and vuggy porosity, even brown stain, very good cut and odor, very good show free oil

3560-66 DOLOMITE buff,slightly hard,microxl,abundant Chert white,poor to fair crystalline and vuggy porosity,spotty to even stain,very good cut and odor,very good show free oil

3566-77 DOLOMITE as above firm, sucrosic, good crystalline and vuggy oomoldic porosity, even stain, very good cut and odor, very good show free oil

SATURIN UNIT # 1 SAMPLES DESCRIPTIONS.txt 3577-80 DOLOMITE buff,hard,microxl,poor to fair crystalline and vuggy porosity,spotty stain,good cut and odor,fair show free oil

3580-82 DOLOMITE as above firm, good porosity, even stain, very good cut and show free oil

3582-88 SHALE ble green, firm, fissile and DOLOMITE tan, very hard, dense, no shows

3588-95 DOLOMITE slightly hard, microsuc to sucrosic, fair to good crystalline and vuggy porosity, spotty to even stain, very good cut and odor, very good show free oil

3595-3610 DOLOMITE buff, hard, microsuc, chalky, poor to fair crystalline and vuggy porosity, spotty stain, good cut and odor, good show free oil

3610-30 DOLOMITE buff, firm, microsuc texture, fair to gd crystalline and vuggy porosity, very spotty dead black stain, fair cut, faint odor, no show free oil

3630-45 DOLOMITE buff, very hard, dense, cryptocrystalline, poor porosity, no shows, abundant Chert white

3645-56 DOLOMITE buff,firm,microsuc,good crystalline porosity,very spotty dead stain,fair cut,no free oil

RTD 3656'

LTD 3656'