

**BEREXCO, LLC.
MICHAEL #10-22
NESENWSW 22 1S-36W
RAWLINS COUNTY, KANSAS**

**GEOLOGIST
WILLIAM B. BYNOG**

RESUME

OPERATOR: BEREXCO, LLC.

WELL NAME & NUMBER: MICHAEL #10-22

LOCATION: NESENWSW 22-1S-36W

COUNTY: RAWLINS

STATE: KANSAS

SPUD DATE: 1-15-2015 COMPLETION DATE: 1-25-2015

ELEVATIONS: GL: 3109 KB: 3120

CONTRACTOR: BEREDCO RIG 10

LOGS: LOG TECH TYPES: RAG, MICROLOG

WELLSITE ENGINEER: NONE

MUD COMPANY: MORGAN MUD

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 3990-4100, DST#2 4075-4180,
DST#3 4134-4200, DST#4 4190-4300

WELL STATUS: P & A

DISCUSSION

Michael #10-22 1S-36W was drilled a total depth of 4400 feet testing the Lansing Kansas City in Rawlins County, Kansas. This well was drilled with the help of seismic data and well control.

Structurally, Michael #10-22 came in 6 feet high to the prognosis and low to productive wells in the area.

As a result of running low there were poor sample shows of dead oil stain and poor porosity development in Foraker, Topeka and Oread. The Lansing A zone was the first quality show and was tested on drill stem test #1 recovering only 5 feet of mud with depleted pressures. The B zone was associated with a good drilling break and good sample shows. Drill stem test # 2 on the B zone recovered 188 feet of total fluid, 283 feet of oil cut mud (20% oil), 441 feet of oil cut mud (10% oil) and 464 feet of mud cut water. The C zone also had a good drilling break with good oil shows. Drill stem test #3 only recovered 5 feet of mud cut oil (55% oil). The D and E had poor shows and were tested on drill stem test #4 recovering 836 feet of water with some oil spots.

Logs agreed with sample evaluation recording fair porosity development but low resistive porous zones indicating water or depleted reservoirs.

A decision was made to plug and abandon due to the lack of favorable drill stem test recoveries.

MICHAEL #10-22 SAMPLE DESCRIPTIONS
BEREDCO DRILLING RIG 10 HOLE SIZE 7 7/8

3600-30 SHALE red,firm,very argillaceous,silty in part

FORAKER

3630-44 LIMESTONE white,firm,chalky,fossils,poor vis porosity,rare black dead stain,no free oil

3644-68 LIMESTONE tan,very hard,dense,slightly fossils,sandy in part,no shows with thin SHALE gray,gray green,firm,fissile

3668-80 LIMESTONE buff,firm,very sandy,chalky in part,poor vis porosity,no shows

3680-3710 SHALE gray green,red,,firm,sandy in part,with thin LIMESTONE as above

3710-24 LIMESTONE buff,very hard,dense,blocky,crptoxln

3724-3800 SHALE red,firm,silty in part with thin LIMESTONE as above very dense,no shows

3800-30 LIMESTONE buff,pale yell,hard,slightly fossils,slightly chalky in part,few pieces with poor vis pinpoint porosity,very spotty black dead stain,no free oil

3830-48 SHALE red,firm,argillaceous

TOPEKA

MICHAEL #10-22 SAMPLE DESCRIPTIONS

3848-80 LIMESTONE buff,pale yell,hard,chalky in part,microcrystalline,poor porosity,no shows

3880-88 SHALE as above

3888-3906 SANDSTONE white,friable,very fine grained,wsrtd,chalky cement,fair porosity,no shows

3906-62 SHALE red,maroon,green,firm,very silty with thin LIMESTONE buff,very hard,dense,no shows

OREAD

3962-68 LIMESTONE buff,hard,blocky,sbchky in part,poor porosity,no shows

3968-78 LIMESTONE white,firm,very chalky,slightly oolitic,sandy in part,poor vis porosity,trace rare black dead stain,no free oil

3978-4016 LIMESTONE buff,pale gray,very hard,dense,crptoxln

4016-44 SHALE dark gray black,black,slightly hard,fissile,slightly carbonaceous with thin LIMESTONE tan,very hard,very dense

4044-64 SHALE red,very soft,very argillaceous

LANSING A

4064-72 LIMESTONE,white,firm,chalky in part,fossils,poor to fair intergranular porosity,spotty live brown stain,fair strmg cut,no show free oil

MICHAEL #10-22 SAMPLE DESCRIPTIONS

4072-82 LIMESTONE buff,very hard,very dense,crptoxln texture,no shows with thin SHALE as above

4082-90 SANDSTONE white,friable,very fine grained,chalk cement,poor vis porosity,very spotty live brown stain,slightly fair cut,trace free oil

4090-4122 SHALE red,very soft,very argillaceous

B

4122-32 GRAINSTONE white,firm,oolitic,chalky,fair intergranular porosity,spotty thick live stain,slightly gd milky cut,no free oil

4132-40 LIMESTONE buff,pale gray,hard,shchky in part,dense,poor vis porosity

4240-60 SHALE red,green,firm,waxy in part with thin LIMESTONE buff,hard,dense,no shows

4160-80 SHALE red,firm,chalky,argillaceous

C

4180-86 GRAINSTONE white,firm,oolitic,chalky in part,poor some fair intergranular porosity,spotty live brown stain,good cut,fair show free oil

4186-96 LIMESTONE buff,hard,blocky,dense,crptoxln,no shows

4196-4228 SHALE pale green,firm,argillaceous,waxy in part

MICHAEL #10-22 SAMPLE DESCRIPTIONS

D

4228-34 LIMESTONE white, slightly hard, fossils, chalky in part, poor vis porosity, no shows

4234-44 LIMESTONE buff, very hard, dense, blocky, crptoxln, no shows with thin SHALE as above

4244-66 SHALE red, firm, chalky, argillaceous

E

4266-74 LIMESTONE white, firm, chalky, slightly fossils, poor microcrystalline porosity, very spotty live brown stain, good cut, fair show free oil

4274-82 LIMESTONE white, firm, very chalky, poor vis porosity, no shows

4282-4306 SHALE red, firm, very silty in part

F

4306-36 LIMESTONE buff, hard, blocky, dense, chalky in part, poor porosity, no shows with thin SHALE as above

4336-4400 SHALE red, green, firm, chalky, silty in part with thin LIMESTONE as above

RTD 4400'

MICHAEL #10-22 SAMPLE DESCRIPTIONS

LTD 4395'