

**BEREXCO, LLC.
IVALEE # 1-16
SWSW SECTION 16 1S-37W
CHEYENNE COUNTY, KANSAS**

**GEOLOGIST
WILLIAM B. BYNOG**

RESUME

OPERATOR: BEREXCO, LLC.

WELL NAME & NUMBER: IVALEE # 1-16

LOCATION: SWSW SECTION 16 1S-37W

COUNTY: CHEYENNE

STATE: KANSAS

SPUD DATE: 3-28-2013 COMPLETION DATE: 4-8-2012

ELEVATIONS: GL: 3185' KB:3196'

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 4175-4250, DST # 2 4252-4310,
DST #3 4325-4380, and DST #4 45440-
4580

WELL STATUS: P & A

Ivalee # 1-16 Sample Descriptions

ANHYDRITE 3151(+45) S

3152(+44) L

BASE 3186(+10) S

3182(+14) L

3500-3606 SHALE red,soft,very argillaceous

3606-32 LIMESTONE pale gray,fair,.very sandy,argillaceous,poor porosity,no shows

3632-80 SHALE as above

3680-3700 LIMESTONE as above

3700-24 SHALE red,very soft,very argillaceous

FORAKER

3724-58 LIMESTONE off white,slightly hard,fossils, chalky in part,pn porosity,no shows

3758-70 LIMESTONE off white,firm,very sandy,chalky,poor vis porosity,no shows

Ivalee # 1-16 Sample Descriptions

3770-3864 Shale red,firm,very argillaceous with thin LIMESTONE pale gray,hard,blocky, dense,no shows

3864-72 LIMESTONE off white,pale gray,slightly hard,oolitic,chalky in part,poor intg porosity, spotty dead black stain

3872-3900 LIMESTONE buff,very hard,dense,blocky, slightly fossils,very rare black dead stain

3900-10 LIMESTONE white,firm,oolitic, chalky in part.poor porosity,spotty dead black stain,no live oil

3910-46 SHALE red,soft,very argillaceous with very thin LIMESTONE white,hard,slightly oolitic,poor intg porosity,spotty thick black tar stain,good cut,no free oil

TOPEKA

3946 60 LIMESTONE pale gray,very hard,dense,poor porosity,trace dead black stain with stringers
SHALE as above

3960-75 SHALE as above

3975-4000 LIMESTONE white,slightly hard,blocky,dense, chalky in part,poor porosity,no shows

4000-25 SHALE as above

4025-40 LIMESTONE off white,firm,oolitic,good oomoldic porosity,no shows

Ivalee # 1-16 Sample Descriptions

4040-81 SHALE red,firm,silty,

OREAD

4081-97 LIMESTONE white,pale gray,firm, chalky in part,slightly fossils,poor porosity,trace dead black stain,no free oil

4097-4120 LIMESTONE pale gray,very hard,dense, crptoxln,chalky in part,no shows

4120-56 SHALE red,black,dark green,firm, fissile,slightly carbonaceous

A

4156-88 LIMESTONE buff,very hard,dense, crptoxln,blocky,no shows

4188-98 SANDSTONE white,friable,clay fled, poor porosity,no shows

4198-4224 SHALE as above

B

4224-34 GRAINSTONE white, soft,very fossils,chalky in part,fair to good intg and vuggy porosity,spotty to even live brown stain,very good milky cut,good show free oil

4234-50 LIMESTONE pale gray,buff,very hard,dense,poor porosity,no shows

Ivaley # 1-16 Sample Descriptions

4250-80 SHALE red,firm,argillaceous

C

4280-86 GRAINSTONE white, firm,very fossils,chalky in part,poor to fair intg and vuggy porosity,spotty live brown stain, good cut,fair show free oil

4286-4298 LIMESTONE pale gray,buff,very hard,dense,no shows

4298-4212 SHALE red,very soft,very argillaceous

D

4312-36 LIMESTONE pale gray,very hard,dense,chalky in part, poor porosity,trace black dead stain

4336-60 SHALE as above

E

4360-66 LIMESTONE white,firm,slightly oolitic, very chalky,poor pinpoint vuggy porosity,spotty live brown stain,good cut,no free oil

4366-74 LIMESTONE pale gray,hard,dense, blocky,no shows

4374 to SHALE red,firm,fissile,very argillaceous

F

Ivaley # 1-16 Sample Descriptions

4404-30 LIMESTONE pale gray, buff, very hard, dense, blocky, slightly fossils, poor porosity, no shows with thin SHALE as above

4430-50 SHALE red, green, firm, becoming very silty

4450-60 LIMESTONE as above, dense, no shows

4460-4512 SHALE as above with thin LIMESTONE as above

4512-42 LIMESTONE buff, pale gray, hard, sandy in part, poor porosity, no shows

4542-62 SHALE red, green, gray, firm, blocky

PAWNEE

4562-70 GRAINSTONE white, buff, slightly hard, very oolitic, poor to fair intg vuggy porosity, spotty live brown stain, very good milky cut, good show free oil

4570-90 LIMESTONE buff, very hard, dense, blocky, no shows

4590-4644 SHALE red, green, dark gray, firm, blocky, argillaceous with thin LIMESTONE buff, pale gray, very hard, dense

4644-60 LIMESTONE buff, very hard, dense, crptoxln, no shows

Ivalee # 1-16 Sample Descriptions

4660-4706 SHALE and LIMESTONE as above,dense,no shows

4706-20 SANDSTONE translucent,white,friable,vg m sorted,fair intg porosity,no shows

4720-30 SHALE red,very soft,very argillaceous, sandy in part

RTD 4730'

LTD 4734'