

15-181 20101

21-30S-41W

21-30s-41w

ORIGINAL

15-187-20934

Geological Report
BEREXCO INC.
G&G #4
990 FSL & 330 FEL
Sec. 21-T30S-R41W
Stanton County, Kansas

NE SE SE

Spud Date: 7/20/2000

Comp. Date: 8/2/2000

Report Date: 8/3/2000

Tops:

BEREXCO
G&G #4
990 FSL & 330 FEL
Sec. 21-T30S-R41W
KB 3397

BEREXCO
G&G #1
600 FNL & 2300 FEL
Sec. 28-T30S-R41W
KB 3408

	Sample	Log	Log
Base Heebner	3593	3603- 206	3613 - 205
Toronto	3614	3624 - 227	3634 - 226
Lansing	3704	3712 - 315	3724 - 316
Marmaton	4201	4180- 783	4197 - 789
Morrow Fm.	4933	4928 - 1531	4937 - 1529
U. Morrow	5066	5064 - 1667	5088 - 1680
BCP	5218	5218 - 1821	5242 - 1834
L. Morrow	5270	5263 - 1866	5280 - 1872
St. Genevieve	5361	5385 - 1988	5440 - 2032
St. Louis	5409	5470 - 2073	5523 - 2115
TD	5600	5581 - --	5647 - --

Sample and Gas Shows of Significance and DST's:

There were no shows of oil or gas in the Lansing-Kansas City or Cherokee Fms.

Marmaton

4085 - 4104

Lms. abn. wht. to crm. - chlk & tan; crypto. to v. v. fn. xln.; v. to extrly oolitic to sli. to v. oolitic; matrix chlk, sub-chlk; sub-sucro to sucro. & packstn.; dul. yel. to yel. & dul gldn. to gldn. yel. fluor.; no cut; abn. pr. to fr. & trs. gd. oolitic por. quest. perm.

Gas Increase

4085 - 4091

18 Total - 3 BG = 15 U Increase

drilled in 4 min chromatograph did not sample

Morrow Fm.

4928 - 4932

Sh. v. drk. gry. to black - carb.

4932 - 4950

Lms. gryish. tan to tan; crypto. to v. v. fn. xln.; sub-chlk, sub-sucro, packstn and sub-lithogr.; v. dul. yel. to dul. yel. flour, no cut; no vis porosity.

4590 - 5062

Shs. med. gry., soft, silky luster IP's, to drk. gry. to v. drk. gry; soft, blocky to splintery IP's

5062 – 5083 Upper Morrow Zn.

Siltstn lt. gry.; fn. to coarse silt grs w/trs v.v. fn. gr. qtz. grs. ang.; trs. to abn., blk. carb. specks.; trs. w/trs. to hvy trs. finely – disseminated pyrite; fair hydrocarbon oder.; no fluor; no cut; sli. dolo. IP's; trs. sli. micacious; trs w/pr. to fr. micro-pp por IP's

Gas Increase

5062 – 5079

640 Total – 20 BG = 620 U. Incr

before 7-C₁; 4-C₂; 3-C₃; ½-IC₄; 1-C₄

during 480-C₁; 120-C₂; 20-C₃; 10-IC₄; 15-C₄

after 50-C₁; 35-C₂; 10-C₃; 3-IC₄; 5-C₄

✕ DST #1 U. Mor Zn 5064 – 5093

IO strong blow BOB immediately

FO strong blow GTS 6 min

✕ Rec: 20 feet mud, GAS RATE - 120 MCF/D

✕ BHT 112° F

✕ IHP 2435#

✕ IFP 20 to 25# in 15 min

✕ ISIP 1174# in 30 min

✕ FFP 19-37# in 90 min

✕ FSIP 1173# in 120 min

✕ FHP 2405#

Flow Info.:

IO Min	Inchs Wtr.	Ch	MCF/D
10	14	¾"	53.3
20	24	¾"	69.5
30	32	¾"	80.3
40	40	¾"	89.8

50	17	1"	106.0
60	19	1"	113.0
70	21	1"	119.0
80	22	1"	121.0
90	22	1"	121.0

5093 – 5218

Sh med. gry. – soft – silky luster IP's and drk gry. – soft – splintery IP's w/trs.
pyrite IP's

5218 – 5233 BCP

Qtz. sdst. w/sli. trs. lm. grs. IP's, lt. gry; v. v. fn. grdng. to coarse gr.; ang. to abn.
sub-ang to sub-rnded; prly sort.; sli. trs. glauc.; trs. finely disseminated pyrite; no
fluor.; no cut; extra abn. loose qtz. grs – clear to sli. frosted & trs. milky wht. v.
sli. trs. v. pr. micro – p.p. por & poss. interxln. por IP's

No Gas Increase

5233 – 5263

Sh med. gry. – soft – silky luster and drk. gry. – soft – splintery IP's

5263 – 5382 L. Mor. Zn.

Qtz. sdstt. w/trs. lm. grs. & foss. frags, lt. gry. – tanish IP's; v. v. fn. to fn. gr.;
ang.; prly. sort.; hvy. trs. to abn. glauc calc cement IP's; no fluor; no cut no vis
por w/prob interbeds. shs. similar 5235-5270

No Gas Increase

5285 – 5358

Sh. med. gry. – soft – silky. luster IP's; & drk. gry. – soft – splintery IP's

5358 – 5385

Lms. mostly reds & maroons w/abn. lt. gry. to tan; crypto to v. v. fn. xln.; v. to extrly sdy – v. fn. qtz. grs – ang &/or miro-oolitic; matrix sub-chlk & sub-sucro; v. dul. yel. fluor IP's; no cut; no vis por.

There were no shows of oil or gas of significance in the St. Genevieve or St. Louis in this well.

Remarks:

1. Sample logs depths appear to be 4 feet low to E-log depths.
2. All zones of interest worthy of a test were tested.

Recommendation:

The Upper Morrow Zone from 5062 to 5083 appears to be economically productive. Therefore, it is recommended production casing be run and the zone from 5062 – 5083 should be completed & production tested.

Thank you,



Edwin H. Grieves
Geologist