

GEOLOGIC REPORT

The primary objective of the NAOMI #1 was the Morrow Keyes Sand with a secondary objective being a possible development in the Upper Morrow.

The Morrow Formation was encountered at 4944 (-1566). At 5065, a light gray, sandy siltstone was drilled. The sandy portion was very fine grained, micaceous, with shale laminations. No shows were seen and wireline logs indicate the zone is very shaly. Future drilling in the area may encounter a better developed sand body with the capabilities for production.

A Lower Morrow Sand was found at 5299 (-1921) and is described as light brown to gray, fine grained, no visible porosity, mostly firm, consolidated, stained in part, very glauconitic, with a scattered bright yellowish green fluorescence yielding a slow streaming at fluorescence. Wireline logs indicate the sands to be shaly and tight.

The Lower Morrow Keyes Sand was drilled at 5360 (-1982). A sand at 5360 to 84 is described as off white to grayish, mostly medium to coarse grained with some very coarse grains, subround to subangular, well sorted, unconsolidated in part, calcareous, some gray to greenish gray interstitial clay, glauconitic in part, no visible porosity, no fluorescence or cut. With depth, the sand appeared to become mostly coarse to very coarse, subround to round, hard to firm consolidated clusters, no visible porosity, with a scattered blue fluorescence cutting upon crushing. Electric log calculations indicate a zone with porosities from 15 to 22% and water saturations of 30 to 35%. A second sand, from 5384 to 98 essentially contiguous with the one above, is described as light brown to tan, medium grained, traces fine and coarse grained, subangular to angular, clear, good sorting, non-calcareous, very slight trace of visible clay material, firm to very friable, some with very good visible porosity, exhibiting a bright yellowish-green to blue fluorescence yielding a slow to good stream cut fluorescence. Wireline logs indicate this zone has porosities from 14 to 18% and water saturations of 18 to 28%. A third sand, separated from those above by a thin shale layer, is described as light gray, clear, fine to medium grained, subangular, fair

sorting, unconsolidated in part, some with visible porosity, glauconitic, abundant black and dark gray interstitial material, traces with slight staining, some scattered light greenish gray clasts, scattered dull to bright yellowish green fluorescence yielding slow cut fluorescence.

Electric logs show this sand to have porosities from 16 to 18% and an average water saturation of 18%. Two successful drill stem tests were taken over these sands. The results are included on a separate page of this report.

The St. Genevieve was encountered at 5430 (-2052). No shows were seen from the limestone which is described as off white to cream, traces slightly greenish in color, very sandy, with an abundance of micro-oolites. Wire-line logs show the zone to be tight.

The St. Louis was drilled at 5497 (-2119). Samples revealed limestone, light gray brown to cream, medium crystalline, firm, some intercrystalline porosity, traces of orange chert, no shows. E-Logs indicate the zone is tight.

DAILY DRILLING REPORT

PROSPECT Beauchamp YEAR 1974 COUNTY Stanton STATE Kansas
 LEASE Naomi WELL# 1 API# 15-187-20,377
 WELL LOCATION S/2 NW SW SEC. 14 TWSP 30s RGE 4lw
 OPERATOR BEREXCO/Beren ELEVATION: GR 3382' KB
 CONTRACTOR Beredco GEOLOGIST Jim Crawford
 DEVELOPMENT WELL XX PROSPECT TEST WELL
 OWNERSHIP 1974 Beren Program IDENTIFICATION

SPECIAL TERMS

SAMPLE TOPS:

Lans 3717(- 339)
 Marm 4273(- 895)
 Cher 4490(-1112)
 Morrow 4941(-1563)
 KeyesSd 5358(-1980)
 Ches 5422(-2044)
 SteGen 5446(-2068)

MOVING IN & RIGGING UP 11/24/84 SPUD 11/24/84
 SET 39jts 24# 8-5/8" @ 1558' CEMENT w/ 600sx lite 1/4#/sk flocele,
2% CaCl, 150sx class H, 2% CaCl. Cmt did circ. PD 12:45pm 11/24/84 by
Halliburton.

DATE	DEPTH	REPORT
11/23/84	632'	- Drilling. Daily mud cost \$167, total \$167.
11/24/84	1560'	- Drilling. Daily mud cost \$581, total \$749.
11/25/84	1610'	- Drilling. Total mud cost \$749.
11/26/84	2600'	- Drilling. Daily mud cost \$304, total \$1053.
11/27/84	3110'	- Drilling. Daily mud cost \$502, total \$1362.
11/28/84	3700'	- Drilling. Daily mud cost \$883, total \$2245.
11/29/84	4208'	- Drilling. Daily mud cost \$850, total \$3095.
11/30/84	4576'	- Drilling. Daily mud cost \$1368, total \$4463. Mud wt 9.2, visc 32, PV 6, WL 15.6, FC 2, P Filler 4, sol 6.3, Sand (trace), Chl 600, Ca 80, pH 9, Gel 1/3, YP 5.
12/01/84	4957'	- Drilling. Daily mud cost \$1829, total \$6293. Mud wt 9.2, visc 42, PV 19, WL 8.8, FC 2, P Filler 8, Sol 6.2, Sand(trace), Chl 1100, Ca 120, pH 9.5, gel 4/15, YP 15.
12/02/84	5200'	- Drilling. Daily mud cost \$693, total \$6986. Mud wt 9.2, visc 45, PV 17, WL 8.2, FC 2, P Filler 6, Sol 6.3, Chl 700, Ca 80, pH 9.5, gel 3/11, YP 12.
12/03/84	5377'	- Drilling. Daily mud cost \$774, total \$7761. Mud wt 9.2, visc 44, PV 17, WL 8.8, FC 2, P Filler 8, Sol 6.3, Chl 700, Ca 60, pH 9.5, gel 3/10, YP 11. - Testing. DST #1) 5348-5377 Miss run.
12/04/84	5382'	- Short trip. Daily mud cost \$240, total \$8001. Mud wt 9.3, visc 56, PV 23, WL 6.8, FC 2, P Filler 8, Sol 7, Sand .05, Chl 1100, Ca 60, pH 9.5, gel 7/19, YP 17.
12/05/84	5402'	- Testing. DST #2) 5314-5402 (Morrow(Keyes)) 30-60-30-120 1st open: Strong blow immed. w/GTS 3" 10"-58 psi 1 1/2" ck 2630 MCF 20"-74 psi 1 1/2" ck 3207 MCF 30"-90 psi 1 1/2" ck 3786 MCF 2cd open: 10"-58 psi 1 1/2" ck 4230 MCF 20"-64 psi 1 1/2" ck 4588 MCF 30"-70 psi 1 1/2" ck 4946 MCF (Heavy mist of oil at surface-shut well in) Rec: 90' FO, 90' MCO, 270' OCM (450' TF) Oil 44 gravity @ 60° F 1327/1327 918/1000 967/1000

DAILY DRILLING REPORT

PROSPECT Beauchamp YEAR 1974 COUNTY Stanton STATE Kansas
 LEASE Naomi WELL# 1 API# 15-187-20,377
 WELL LOCATION S/2 NW SW SEC. 14 TWSP 30s RGE 41w
 OPERATOR BEREXCO/Beren ELEVATION: GR 3382' KB _____
 CONTRACTOR Beredco GEOLOGIST Jim Crawford
 DEVELOPMENT WELL XX PROSPECT TEST WELL _____
 OWNERSHIP 1974 Beren Program IDENTIFICATION _____

SPECIAL TERMS

DATE	DEPTH	REPORT
12/06/84	5419'	- Testing. Daily mud cost \$238, total \$8523. Mud wt 9.4, visc 102, PV 39, WL 6, FC 2, P Filler 6#, sand .05, Chl 800, Ca 60 pH 9.5, gel 11/27, YP 33. DST #3) 5404-5419 Morrow (Keyes) 30-60-85-170
12/07/84	5456'	1st Open: Weak blow incr. to strong w/GTS 8" 10 min 2psi 3/4" ck 108 MCF 20 min 2 psi 1/2" ck 47.7 MCF 30 min 7 psi 1/4" ck 25.0 MCF 2cd Open: GTS immediately 10 min 6 psi 1/4" ck 6.93 MCF 20 min 6 psi 1/4" ck 6.93 MCF 30 min 6 psi 1/4" ck 6.93 MCF 40 min 6 psi 1/4" ck 6.93 MCF 50 min 6 psi 1/4" ck 6.93 MCF Note: Tool left open add. 30 min. Oil to surface 76 min into final flow. Rec: 3920' GCO, 270' M&GCO, 90' O&GCM (4280' TF) Note: 1110' oil & gas unloaded while test tool was being pulled. No wtr in rec fluid. Bottom sample taken just above test tool showed 15% wtr w/11,500ppm Chl versus pit Chl of 800 ppm. Rec oil was 44# gravity @ 60°F. 1313/1323 164/426 525/1016
12/08/84	5550'	- Logging. Daily mud cost \$ 321, total \$8877. Mud wt 9.4, visc 103, PV 45, WL 5.8, FC 2, PF 8#, Sol 7.8, Chl 900, Ca 40, pH 9.5, Gel 15/42, YP 42.
12/09/84		- Laydown pipe.
12/10/84		- Set 130 jts new 14# 5 1/2" @ 5549' w/200sx.60/40 poz, 2% gel, 10% salt, 10# gils/sk, 3/4% CFR-2. Did not circ. PD @ 1:45 pm, 12/09/84 by Halliburton.

Janet

NAOMI #1
SECTION 14-T30S-R41W
STANTON COUNTY, KANSAS

DST #2 MORROW (KEYES) 5314' - 5402'

TIMES 30/60/30/120

PRESSURES IH 2711#
IFP 918 - 1000# Strong blow immed. w/gas to surface 3 min.
10 min. 58 psi 1 1/4" choke 2630 MCF
20 min. 74 psi 1 1/4" choke 3207 MCF
30 min. 90 psi 1 1/4" choke 3786 MCF
ISIP 1327#
FF 967 - 1000#
10 min. 58 psi 1 1/2" choke 4230 MCF
20 min. 64 psi 1 1/2" choke 4588 MCF
30 min. 70 psi 1 1/2" choke 4946 MCF Oil started to
flow heavy mist of oil at surface - shut well in,
FSIP 1327#
FH 2549#
Oil 44 gravity @ 60°
RECOVERY 90' free oil + 90' mud cut oil + 270' oil cut mud, 450' total.

NAOMI #1
SECTION 14-T30S-R41W
STANTON COUNTY, KANSAS

DST #3 MORROW (KEYES) 5405' - 5419'

TIMES 30/60/85/170

PRESSURES IH 2743#
IFP 164 - 426# - Weak blow inc. to strong w/GTS 8 min.
10 min. 2 psi 3/4" choke 108 MCF
20 min. 2 psi 1/2" choke 47.7 MCF
30 min. 7 psi 1/4" choke 25.0 MCF
ISIP 1327#
FFP 525 - 1016# Gas to surface immediately.
10 min. 6 psi 1/4" choke 6.93 MCF
20 min. 6 psi 1/4" choke 6.93 MCF
30 min. 6 psi 1/4" choke 6.93 MCF
40 min. 6 psi 1/4" choke 6.93 MCF
50 min. 6 psi 1/4" choke 6.93 MCF
FSIP 1327#
FH 2646#
T 128° F

Call from Geol. told to leave tool open additional 30 min.
Oil to surface 76 min. into final flow.

RECOVERY 3920 Gas cut oil + 270 mud & gas cut oil + 90' oil & gas
cut mud - 4280' total. In addition (1110 oil & gas was
unloaded) while test tool was being pulled. No water in
recovery fluid.

NOTE: Phone report from Dean's Testers on DST #3 recovery fluid in-
dicated no formation water in either upper or middle sample;
however, bottom sample taken from just above test tool showed
15% water with 11,500 ppm chlorides versus pit chlorides of
.800 ppm. Recovery oil was 44° gravity at 60°F. A small
adjustment was also noted in initial and final shut-in pressure
values which are now reported As ISIP 1313# and FSIP 1323#.

Janet

NAOMI #1
SECTION 14-T30S-R41W
STANTON COUNTY, KANSAS

SAMPLE TOPS

KB: 3378'

LANSING	3717' (- 339)	Compared to Dickey Robb-	3' High
MARMATON	4273' (- 895)	" "	Flat
CHEROKEE	4490' (- 1112)	" "	1' High
MORROW FORMATION	4941' (- 1563)	" "	28' High
KEYES SAND	5358' (- 1980)	" "	20' High
CHESTER (EST.)	5422' (- 2044)	" "	9' Low-
STE. GEN.	5446' (- 2068)	" "	1' High