

15-055-21242

GARDEN CITY #4-16
NW SE NW SECTION 16, T23S-R34W
FINNEY COUNTY, KANSAS

KCC

MAY 13 1994

DAILY COMPLETION REPORT

- 10-21-93 Ran bond log - Found PBD @ 4790 - Good bond across top of cement - Top of cement @ 3650.
- 10-22-93 Moved in and rigged up completion rig - Ran shifting tool, 98 joints 2 3/8 tubing - 8' and 6' subs - Located port collar @ 3048 - Psi casing to 1000# - Opened port collar - Broke circulation w/ 8 bbls pumped - Cemented w/ 200 sx lite w/ 1/4# flocele - Good circulation throughout - Closed port collar - Psi to 1000# - Held ok - Ran tubing TD 3110' - Circulate hole clean - TOOH w/ 2 3/8 tubing - Shut down for night - 8:00 a.m. prep to run temperature survey.
- 10-23-93 Ran temperature survey - Found TOC @ 1800' - 8:00 a.m. prep to swab down and perforate 10-25-93.
- 10-25-93 Swab hole down to 4000' - Perforated Morrow 4646-4653 w/ 3 1/8" casing gun - 4 s/ft. - Ran casing swab - Fluid level @ 3500' - Recovered 300' of oil - 100' of water - Reran swab - Recovered 400' of oil - Ran Arrowset II packer, 1 25/32 SN 146 joints tubing - Packer hanging @ 4604 - Ran swab, Fluid level @ 2500' - Good show of oil on 1st run - 2nd run 90% water - Recovered total 54.7 BBLs 1st 4 hrs. - 99% water 1% oil - Last 2 hrs. recovered 11.6 B/hr. - Slight scum of oil, Fluid level @ 4000' - Lite blow on casing - Shut down for night - 8:00 a.m. SITP - Lite blow - SICP 10# - FL @ 2600' - 300' free oil on top - Continue to swab test.
- 10-26-93 Recovered total 33 1/2 BBLs in 3 hrs. - Last 2 hrs. recovered 10 1/2 B/hr. - Scum of oil - Fluid level @ 3900' - Pulled 2 joints - Set packer @ 4544 - Psi casing to 500# - Established injection rate - 1 1/2 BPM @ 70# - Squeezed w/ 100 sx Class H w/ 2% CC - Squeezed to 1500# w/ 2 BBL cement in formation - Psi casing, unable to reverse out @ 2400# - Pumped 3 BBL - Hooked up to tubing - Pumping 1/2 BPM on vac - Circ. out casing - Pulled 1000' of tubing - Circulate clean - Set packer @ 3497 - 8:00 am - Prep to TOOH and drill out cement.
- 10-27-93 TOOH w/ tubing and packer - Ran 3 7/8" bit, scraper 2 3/8" tubing - Tag top of cement @ 3590 - Drilled from to hard - Circulate hole clean - Shut down for night.
- 10-28-93 Drilled cement to 4512' (542') Drilling hard - Circulate clean - Shut down for night.
- 10-29-93 Drilled cement from 4512 to 4653 (141') - fell free - Psi to 1200# - Held ok for 10 minutes - Clean out cement to 4855 - Circulate hole clean - Made 1 swab run - Shut down for night. 8:00 AM - Prep to swab down and perforate.
- 11-1-93 Swab hole down - TOOH with bit and scraper - Perforated St. Louis 4823-28 w/ 3 1/8" casing gun - 4 s/ft. - No show - Ran Arrowset II packer, 1 25/32 SN, 151 joints 2 3/8" tubing - Set packer @ 4773 - Swab hole down - Set 1 hr. - Recovered 1 bbl - Next 2 hrs. - Recovered 1/2 b/hr. - FL @ 4600' - Very slight scum of oil - Water check: sp.gr. 1065 - ph 9.9 - cl 48,751 - res .12 @ 74 degrees - Shut down for night - 8:00 am - SITP lite blow - FL @ 3500' - Very slight show of oil on top - Continue to swab test.

15-055-21242

GARDEN CITY #4-16
NW SE NW SECTION 16, T238-R34W
FINNEY COUNTY, KANSAS

DAILY COMPLETION REPORT

- 11-2-93 Swab down - Recovered 5 bbls - Recovered 2 bbls next 5 hrs - Last 2 hrs. recovered 1/4 to 1/2 B/hr. - Various light scum of oil - FL @ 4650' - Released packer - TOOH - Set CIBP @ 4160' - Dumped 1/2 sx cement on top - Perforate Chrokee 4405-08 and Ft. Scott 4392-95' w/ 3 1/8" casing gun - 4 s/ft. - No show - Shut down for night - 7:00 am prep to run tubing and packer.
- 11-3-93 139 joints tubing - Packer hanging @ 4398 - Ran swab - No fluid - Wait 2 hrs. - No fluid - Set packer @ 4337 - Acidized 750 gal 15% Non-E acid and 25 ball sealers - Pressure to 920# - 1/2 BPM - Broke to 500# - Increased to 650#@ 3 BPM - Good ball action to 850# - ISIP' 150° - 5 min 90# - Total load 36 BBLs - Recovered 23 bbls - Good show of oil on last run - Hook up to swab tank - Next run recovered 1.16 bbls estimated 50% oil - Swab dry - Lower packer to 4398 - Recovered 3 bbls next 4 hrs. - Last 2 hrs. recovered 1/2 BPM - 75% oil - Lack 11 BBLs, 7 loads recovered - Oil Sample: API gr. 29.9 @ 60 degrees - 7:00 AM SITP 0 - FL @ 3800' - Continue to swab.
- 11-4-93 Swab down recovered 6 bbls - Est 60% oil - Next 2 hrs. recovered 1 b/hr. - 75% oil - FL @ 4300' - Reset packer @4337 - Acidized w/ 3000 gal 15% Non-E acid and 12 ball sealers - Psi to 25# @ 1.3 BPM - Psi to 2070 @ 5.9 BPM - Increased to 2100 and fell to 2050 @ 5.9 BPM - ISIP 160 - 5 min - 120, 10 min - 90, 15 min - 0, total load 90 bbls - Opened well - Flowed back 2 bbls - Ran swab - Recovered 34 bbls - Show of oil - Strong blow of acid gas - Hooked up to swab tank - Recovered total 54 1/4 bbls - Recovered 20 1/4 bbls - Last 5 hrs. Est 50% oil - FL @ 4100' - Lack 46 BHLR - Fluid sample: 50% oil API gr. 28.4 @ 60 degrees - Water - Sp gr. 1.110 - ph 5.8 - cl 95625 - Res .07 @ 72 degrees - Iron 500.
- 11-5-93 Starting FL @ 2600' - SITP 25# - Recovered total 25 BBLs in 9 hrs. - Estimated 15 B/O - 10 B/W - Lack 36 BHLR - Last 3 hrs. recovered 1.16 B/hr. - 75% oil - FL @ 4250' - Fluid sample: 75% oil - 29.2 Gravity @ 60° - Sp.gr. 1.10, ph 7.13, cl 82628, res. .08 @ 72 degrees, iron 400 - SDFN. 7:30 AM - SITP 15# - FL @ 3200'.
- 11-6-93 Recovered 4 1/2 bbls - 75% oil - FL @ 4000' - TOOH w/ tubing and packer - Perforate Marmaton 4292-97 w/ 3 3/8" casing gun - 4 s/ft. - FL came up to 3600' - Ran BP, Packer, 137 joints 2 3/8" tubing - Set BP @ 4339 - Set packer @ 4274 w/ 135 joints - Recovered 1 3/4 bbls - 75% oil - Swab down next 3 hrs. recovered 1/2 B/hr. - Oil percentage was 75, 40, 5 respectively - FL @ 4200' - Water sample: sp.gr. 1.05, ph 7.2, cl 46420, res. .12 @ 74 degrees, iron 100 - Skim of oil in sample - SDFN - 7:30 AM - 40 hr. SITP - Lite blow - FL @ 3100' - 1000' free oil on top - Continue to swab test.
- 11/8/93 Swab down - Recovered 3 1/2 bbls - Last run had 5% oil - Recovered total 3 1/4 bbls next 8 hrs. - Last 4 hrs. recovered 1/4 b/hr. - 100% water with lite specks of oil - FL @ 4200' - Vacuum behind swab - Water Check: Sp.gr. 1.06, ph 7.4, cl 55240, Res .10 @ 72 degrees, iron 25. 7:30 AM - SITP - 0, FL @ 3500' - Various light scum of oil on top - Continue to swab test.

GARDEN CITY #4-16
NW SE NW SECTION 16, T23S-R34W
FINNEY COUNTY, KANSAS

DAILY COMPLETION REPORT

- 11-9-93 Swab down - Recovered 3 bbls - Very lite show of oil - Recovered 1/4 b/hr. - Next 3 hrs. very lite show of oil - Released packer - latched onto BP - Released same - Layed down tubing, packer and plug - Rig down - Released rig.
- 1-3-94 Moved in and rigged up Service rig - 7:30 AM prep to drill out CIBP.
- 1-4-94 P.U. sand line drill - Drilled out CIBP @ 4610 - Perforated Morrow 4646-48 with 3 3/8" casing gun - 4 s/ft. - Ran RBP, Packer, 1 25/32 SN, 2 3/8" tubing - Set BP @ 4669, Set packer @ 4592 - Ran Swab - FL @ 800' - Swab down - Shut down for night. 8:00 AM - SITP lite blow - FL @ 3500 - Continue to swab test.
- 1-5-94 Rig up flow line to swab tank - SITP lite blow - FL @ 3500, swab down - Recovered 6 BBLS (40% oil) next run - Dry - Recovered 7 bbls next 8 hrs. - Last 3 hrs. recovered 1/4, 1/2 b/hr. 100% oil - 200' of fluid in hole - Shut down for night - 7:30 AM SICP lite blow - FL @ 3600' - Recovered est. 4 bbls - 80% oil - Continue to swab test.
- 1-6-94 Recovered total 7 bbls in 8 hrs. - Last 3 hrs. recovered 1/2, 1/2 B/hr. - FL @ 4560 - 100% oil - Shut down for night. 8:00 AM SITP lite blow - FL @ 3500' - 95 to 100% oil.
- 1-7-94 Recovered 2 3/4 BBLS, 100% oil - Released packer - Ran 1 joint tubing - Packer @ 4623 - Treat well w/ 250 gal mutual solvent - Flush w/ diesel - Pumped to 100# - Shut down - Staged treatment several times - Flushed treatment - ISIP 0 - Total load 26 1/2 BBLS - Rec. 22 bbls load in 4 hrs. - Last 2 hrs. recovered 1/2 B/hr. - No water, show of oil - Lack 4 1/2 BHLR - Shut down for night. 8:00 AM SITP lite blow - FL @ 3700' - Continue to test.
- 1-8-94 Recovered 4 bbls in 3 hrs. - Treat well w/ 250 gal 5% FE acid - Loaded hole - Psi to 200# - Would not take fluid - Loaded casing w/ 2% KCL water - Lower packer to 4655 - Spotted acid across perms - Reset packer @ 4623 - PSI to 200# - Would not take acid - Reset packer @ 4558 - Shut down for weekend. 8:00 AM - SITP vacuum - FL @ 1800' - Continue to test.
- 1-9-94 Swab down - Recovered 12.4 bbls load water w/ show of oil - Next 8 hrs. recovered 15 bbls - 3-5% oil - Recovered total 17.4 bbls - 1 BOLR - Shut down for night.
- 1-11-94 SITP lite blow - FL @ 3800' - 300' free oil on top - Released packer - Latched onto RBP - TOOH with packer and plug - Ran 1 25/32 SN, 2 joints 2 3/8" tubing - Anchor Catcher, 146 joints tubing - SN @ 4684, Anchor @ 4620 Set with 10,000 tension - Ran 2x1 1/4 x 10 x 14 x 16 pump, 1 - 3/4 x 2' pony rod 185 - 3/4 x 25 used rods 10' pony rod - 16' polish rod with 8' line - Good pump action - Rig down - Released rig.
- 1-14-94 Set and assembled pumping unit - Set 4120 treater, water tank and stock tank - Prep to hook up same.
- 1-15-94 Start battery hook up - Shut down due to cold weather.
- 1-17-94 Hooked up tank battery and flow line. 8:00 AM prep to start up.