

TOPS:                      Sample    Elec.

Blue Hill Shale                      347'

Greenhorn Fm.                      594'

Ganeros

    Bentonite                      706'

Gurley SS                      774'

Kiowa Fm.                      957'

Permian                      1305'

Blaine Gyp                      1382'

B/Cim. Anhy.                      2356'    2354'

Krider                      2739'    2706'

Winfield                      2781'    2748'

L/Ft. Riley                      2883'    2844'

Total Depth                      3010'

Company    Mack Oil Company

Name       Eubank Unit #1

Desc.       C SW NE Sec. 20-21S-42W

County      Hamilton County, Kansas

Elev.       3768 KB, 3766 DF

Geol.       Bill Atkinson

Est. TD      3100'

9-2-61                      8 5/8" at 171' w/125 sacks

9-5-61                      Drilling @ 2920'

9-6-61                      Running Log

9-7-61                      4 1/2" set at 2930' w/150 sacks.

#### Calculations

595 - 97

599 - 602

613 - 15

619 - 21

624 - 28

6634 - 37

2670 - 74

2706 - 09

2716 - 21

2724 - 30

2734 - 38

2796 - 2804

2812 - 22

2830 - 38

2844 - 50

#### Porosity

18

26

33

29

33

36

15

6

13.5

14.5

16.5

21

20

18.5

14

#### Water Saturation

Not reliable

Not reliable

Not reliable

Not reliable

Not reliable

Not reliable

41

95

Not reliable

28-42

48

63

65

75

100



9-7-61 Set 2934' of 4½" 9.5# J-55 casing at 2930 w/150 sax Pozmix w/4% added gell. Float at 2899. DV tool in casing string at 712'. Cemented w/75 sax Pozmix w/4% gell.  
 9-13-61 Moved in spudder. Drill out DV tool at 712'. Run Cement Bond log. Good bond indicated thru all zones of interest  
 9-14-61 Perf. Up. Ft. Riley 2813-18' w/20 holes. Swab down for no show. Slight amount of fluid.  
 9-15-61 2000' fluid in hole on vacuum. Swab down for no show. Treat w/500 gal. of mud acid by Dowell. No breakdown. Swab down to recover unspent acid water and no sho of fluid  
 9-16-61 SITP 10#, 300' SW in hole. Have slight show of gas when swab is pulled.  
 Winfield zone - Jet perf 2755-60 with crack jet. Swab down Run tubing w/Howco type RA-3 packer set at 2782'. Treat Winfield down annulus w/500 gals mud acid. Breakdown 2600-200# on vacuum. Unseat packer.  
 9-17-61 Swab down through tubing. Recovered all load & acid water w/slight increase in gas. Both Winfield and Ft. Riley open.  
 9-18-61 SIP 6# Approx. 800' water in hole, showing increase in fluid with Winfield w/Ft. Riley. Treated w/12000# 20/40 sand and 12000 gal. gelled water, 1% HCL, ½ gal. Howco suds/1000 Breakdown pressure 1000-600 Max. Treating pressure 1425#. SI 70-0 Used 30 rubber balls injected in 3 batches. Pr. increase noted each time balls were injected. Total load 385 bbls. Average injection rate 36 B/M.  
 9-19-61 ~~Off~~ Pressure. 1200' fluid in hole. Swab down to 2000' and unable to swab fluid below this depth. Returning fluid becoming more salty after 6 hrs. swabbing. Slight trace of gas, decreasing w/continued swabbing.  
 9-20-61 ~~Off~~ pressure. Running 2" tubing w/type RA packer set between Winfield and Ft. Riley zones. Swabbing Ft. Riley zone thru tubing. Swabbing from approx. 2000' unable to lower fluid. Very very slight show of gas when swab was pulled.  
 9-21-61 SIP 138# Set CI drillable plug at 2800. Swab Winfield to show cons. salt water. Unable to swab completely down. Showing approx. same amount of gas as before. SI. WOO  
 10-4-61 SI 510# Require 20-25 minutes to blow well down. Fluid level at 2400'. Swab well to recover 10-12 bbls. salt water per hour. Showing slight increase in gas ahead of swab.  
 10-5-61 SI 350#. Open well blow down immediately. Testing well after blow down making 30-40 MCF per day to continue testing.  
 10-7-61 SI 230# after 36 hrs.  
 10-8-61 SI 285# after 60 hrs. Open well w/1" choke. Flow rate 210 MCF down to 150 in 30 min. Change choke. Flow rate 77 MCF per day down to 0 in 2 hrs.  
 10-9-61 SI 115# after 24 hrs.  
 10-10-61 SIP 190# after 48 hrs. MIU Fluid at 1450' Very slight show of gas above fluid after blowing down. Perf. 2718½ - 19½ & 2672½ - 73½ w/8 holes per ft. Running tubing w/Baker retrievable plug to test.



- 10-11-61 Set Baker plug at 2743' and type R3 packer at 2693'. Swab perfs between plug and packer for no show of gas. Very small amount of fluid. Treat w/200 gal. mud acid. Breakdown 3500-1000, Final pumping pressure 0#. Swab down for no show. Move plug to 2710 and reseal packer at 2664'. Swab down for no show. Very small amount of fluid. Treat w/200 gal. MCA. Breakdown 2500. Treating pressure 200#, Final pressure 100#. Flow back slight amount when open. Swab completely down to recover considerable unspent acid. Very slight amount of new fluid. Slight blow ahead of swab. No odor.
- 10-12-61 Opened well-some blow. Loaded tubing w/water. Unseated packer and lowered plug to 2709. Swab tubing and annulus until fluid level was down to 2200'. Set packer at 2664 and swab tubing. Water increased. Lefel up to 1900'. Getting very salty.
- 10-13-61 Had no pressure on casing. Tubing had 408#. Blew down tubing thru 1" Orfus at rate of 400. Blew down in 15 min. Pulled swab from bottom w/approx. 1000' of broken gas cut fluid. Unseated packer. Latched on plug and pulled tubing. Plug had slipped 6' down hole. It is possible that the bottom of plug was in Winfield perf. Plug would not come thru DV tool. Released plug and came out of hole w/packer. Went back in w/retrieving tool. Jarred on packer for approx. 2 hrs. It is apparent that the slips are hung. Top slips will jar thru but bottom slips will not. Lowered plug approx. 30' below DV tool. Set and came out of hole. Put on valve and moved off.
- 10-28-61 SIP 160# above plug. Fluid 1800'. Perf 2632-35 w/12, 2638-44 w/24 and 2612-16 w/16. Run tubing. Set retrievable Plug at 2660 and packer at 2631.
- 10-29-61 SIP 75#. Swab interval 2632-44 for no fluid entry. Treat zone w/500 MCA. Breakdown 625-500#, Max. 950#, Min. 500#, Final 950#, SI 400#. 0 in 2 min. Swab load water thru tubing. No additional fluid entry. No show of gas. Reset plug at 2624' w/packer at 2604. Treat interval 2612-16 2/500 gal. MCA. Breakdown 600, Max. 750, Final 0. Swab load water thru tubing. Then swab approx. 26 bbls. salt water per hour w/slight show of gas in water.
- 10-30-61 SIP 40#. Fluid at 1600'. Pull tubing and packer w/Baker Retrivable plug from hole. Set Baker C.I. Plug at 690'. Jet perf Greenhorn 596-602' w/24 holes. Run tubing w/packer Swab down for no show or fluid entry. Treat w/250 gals. MCA. Breakdown 500-300#. Swab load for very slight show of gas. No fluid.
- 10-31-61 Perf 613-15; 624-28; 634-37. Set packer at 608'. Swab down. N.S. Treat w/250 gals. MCA. Breakdown 450-250. Swab load. N.S. Recovered some acid water.
- 11-1-61 SIP 5#. Pull tubing and packer. 150' acid water in hole. Swab casing. No show. No fluid. Shut-in.