

NORTH KNOWLES UNIT WELL NO. 1

- DST #1 - 5400' to 5700' - 4½" DP, 5/8" bottom & 1" top chokes, 4 hr. test. Opened tool at 5 AM with weak blow of air that continued throughout test. Closed tool at 9 AM. Recovered 300' drilling fluid & 180' brackish formation water. No shows of oil or gas. Hydro, in 2465#, out 2435#, initial flow pressure 145#, final flow pressure 320#, 15 minute build up 1455#.
- DST #2 - 9050' to 9330' - 1 hr. & 5 minute test, 4½" DP, 5/8" bottom & 1" top chokes. Opened tool at 1:10 AM with few bubbles of air & died. Closed & reopened tool at 2:10 AM with few bubbles of air & died. Closed tool at 2:15 AM. Recovered 40' mud. Hydro, in 4250#, out 4220#, initial flow, final flow & 1/4 hr. build up 120#.
- DST #3 - 9330' to 9470' - 1 hr. & 23 minute test, 4½" DP, 5/8" bottom & 1" top chokes. Opened tool at 5:50 AM with light blow of air that died at 6:06 AM. Closed tool at 7:13 AM. Recovered 300' mud, no shows oil, gas or water. Hydro in 4395#, out 4335#, initial flow 120#, final flow 175#, 1/4 hr. build up 2530#.
- DST #4 - 9470' to 9700', 1 hr. & 20 minute test, 4½" DP, 5/8" bottom & 1" top chokes. Used 500' water blanket. Opened tool at 6:05 AM with light blow of air that died in 20 minutes. Left tool open 1 hr., closed tool at 7:25 AM. Recovered 500' water blanket & 155' mud. No shows oil, gas or water. Hydro in 4470#, out 4415#, initial flow 245#, final flow 270#, 1/4 hr. build up 1850#.
- DST #5 - 9700' to 9832', 1 hr. & 45 minute test, 4½" DP, 5/8" bottom & 1" top chokes. Used 800' water blanket. Opened tool at 7:45 AM with weak blow of air that died at 8:30 AM. Left tool open 1 hr. Closed tool at 9:30 AM. Recovered 800' water blanket & 110' mud with slight show of gas in mud. No shows of oil or water. Hydro in 4577#, out 4543#, initial flow 378#, final flow 410#, 1/4 hr. build up 2230#.
- DST #6 - 9832' to 9893', 4 hr. test, 4½" DP, 5/8" bottom & 1" top chokes. Used 800' water blanket. Opened tool at 6:20 AM with fair blow of air that continued throughout test. Closed tool at 10:20 AM. Recovered 800' water blanket, 90' slightly gas cut mud & 1060' salt water. Chloride content 55,000 PPM. Hydro in 4730#, out 4640#, initial flow pressure 660#, final flow pressure 840#, 2/4 hr. build up 3805#.
- DST #7 - 13,005' to 13,040' - First Run - Packer would not set.
- DST #7 - 12,970' to 13,040' - Second Run - Packer would not set.
- DST #7 - 12,956' to 13,040' - Third Run - Packer would not set.
- DST #7 - 12,864' to 13,040' - Fourth Run - 4 hr. test, 4½" drill pipe, 5/8" bottom & 1" top chokes, used 4000' water blanket. Opened tool at 2:50 AM with good blow of air that decreased to weak blow in 2 hrs. & continued throughout test. Closed tool at 6:50 AM. Had gas in drill pipe 2800' from surface. Recovered 1040' free oil, gravity 45.1 corrected, 4000' water blanket & 110' oil & gas cut mud, estimated 20% oil. Hydro in 6160#, out 6140#, initial flow 2070#, final flow 2115#, 1/2 hr. build up 3430#.
- DST #8 - 13,044' to 13,090', 4 hr. test, 4½" DP, 5/8" bottom & 1" top chokes. Used 4000' water blanket. Opened tool at 3 PM with weak blow of air that decreased to very weak blow in 1 hr. & continued throughout test. Closed tool at 7 PM. Recovered 4000' water blanket, 350' salt water & 50' water cut mud. No shows of oil or gas. Hydro in & out 6035#, initial flow 1840#, final flow 2020#, 1/2 hr. build up 3915#.
- ST #9 - 13,090' to 13,140', 3 hr. test, 4½" drill pipe, 5/8" bottom & 1" top chokes, used 4000' water blanket. Opened tool at 11:15 PM with weak blow of air that decreased to very weak blow and died in 1½ hrs. Left tool open 1½ hrs. Closed tool at 2:15 AM. Recovered 4000' water blanket, 465' salt water & 35' salt water cut mud. Hydro in 6225#, out 6150#, initial flow 1915#, final flow 1955#, 1/2 hr. build up 2425#.
- #10 - 13,280' to 13,368', 4 hr. test, 4½" drill pipe, 5/8" bottom & 1" top chokes, used 4200' water blanket. Opened tool at 8 PM with very strong blow of air that continued throughout test. Closed tool at 12 PM. Recovered 4200' water blanket, 5400' sulphur water with salty taste & 60' drilling fluid. No shows of oil or gas. Hydro in 6395#, out 6160#, initial flow 2585#, final flow 4025#, 1/2 hr. build up 4955#.

DEVIATION test

1 - 3/4	5205' - 1-3/4	7960' - 2	9735' - 1/2	11150' - 1-3/4	12465' - 2-3/4
1 - 1/2	5290' - 1½	8040' - 2	9780' - 1/2	11195' - 1-3/4	12540' - 3
1 - 3/4	5395' - 1½	8130' - 2½	9825' - 3/4	11270' - 1-3/4	12640' - 3
1 - 1¼	5540' - 3/4	8200' - 2	9860' - 1/2	11315' - 1-3/4	12715' - 3
1 - 1-3/4	5695' - 3/4	8275' - 1-3/4	9890' - 1/4	11435' - 2	12805' - 3
1 - 1/4	5895' - 1-3/4	8330' - 1-3/4	10253' - 2¼	11500' - 2	12880' - 3
1 - 1	6070' - 2	8395' - 2	10320' - 2½	11550' - 2½	13085' - 3½
1 - 3/4	6285' - 1	8445' - 2	10415' - 2	11615' - 2¼	
1 - 1½	6390' - 1	8540' - 1½	10510' - 1-3/4	11680' - 2	
1 - 3/4	6520' - 1	8600' - 1½	10610' - 2	11760' - 2½	
1 - 1	6700' - 3/4	8660' - 1¼	10690' - 1½	11850' - 2	
1 - 3/4	6805' - 1-3/4	8725' - 1¼	10760' - 1-3/4	11895' - 2½	
1 - 1	6930' - 1	8790' - 1½	10795' - 1-3/4	11925' - 2-3/4	
1 - 3/4	7100' - 1¼	8910' - 1	10835' - 1-3/4	11960' - 2¼	
1 - 1½	7240' - 1/4	9000' - 1	10880' - 1-3/4	11980' - 2½	
1 - 1	7340' - 1-3/4	9074' - 3/4	10930' - 1-3/4	12015' - 2½	
1 - 1/2	7440' - 1-3/4	9130' - 3/4	10980' - 1-3/4	12040' - 2½	
1 - 3/4	7535' - 1½	9190' - 3/4	11005' - 1-3/4	12100' - 2¼	
1 - 1	7630' - 1-3/4	9540' - 1½	11050' - 1	12170' - 2	
1 - 2	7800' - 1-3/4	9585' - 1/4	11075' - 1	12285' - 2-3/4	
1 - 1½	7890' - 2	9630' - 1/4			

