

Massey-Smith
Fox # 1
SESW Sec. 34 - 34S - 30W

Elev. 2592 D.F.
RTD 6140'
5 1/2" @ 5975'

Perforation 5832-36 & 5918-24 (four shots per ft.)
2 3/8" EUE 8 rd. @ 5892'

- 2/11/66 MI & RUCT
- 2/13/66 Blew down well. Pulled rods and pump. Pulled tubing. (Laid down rods in singles.)
- 2/14/66 Ran tubing with FFC packer set at 5816' K.B. Squeezed perforations 5832-36 and 5918-24 with 125 sacks common cement. (Inj. rate prior to cementing - 4 BPM at 1800#.) Stayed 40 min. Max. press. 3000#. Reversed out 5 sacks. Completed at 1:00 P.M. Pulled tubing and packer. Picked up 4 3/4" bit, casing scraper, and drillcollars. Ran tubing.
- 2/15/66 Finished running tubing. Drilled cement from 5805' to 5836'. Lost circulation (20 bbls. Pumped into hole at 500# (5 bbls.)). Pulled tubing, drill collars, casing scraper, and bit. Ran FFC packer and tubing. Set packer at 5875'. Press. annulus to 1000# - tubing press. to 3500#. Could not pump in. Reset packer at 5805'. Press. annulus to 1000# - tubing press. to 3500#. Could not pump in. Pulled tubing and packer. Ran new 4 3/4" OW bit, drill collars, and tubing.
- 2/16/66 Finished running tubing. Washed down to 5964'. Repaired pump. Cleaned tank and displaced water in hole. Mixed salt gel mud. Drilled shoe and washed down to 6015'. Washed and drilled to 6140'. Circulated hole. Started drilling new hole at 4:15 P.M. Drilled to 6177'.
- 2/17/66 Drilled to 6212'. Started off bottom at 2:45 A.M. On bottom with new bit at 2:15 P.M. Drilled to 6241'.
- 2/18/66 Drilled to 6248' at 1:30 A.M. Out of hole. On bottom at 7:30 A.M. with bit #3. Drilled to 6280'. Tripped on bottom at 12:21 A.M.
- 2/19/66 Drilled to 6318'. Tripped, on bottom at 7:37 P.M. Drilled to 6323'.
- 2/20/66 Drilled to 6341'. Tripped. On bottom 10:52 A.M. Drilled to 6365'. Pulled tubing.
- 2/21/66 Finished pulling tubing. Ran 2 jts. tubing. Drapped 2 joints. in hole. Fished with spear. Out of hole with fish at 8:15 A.M. Ran tubing with packer. Set packer at 5910', tubing at 6316'. Could not swab. Unseated packer. Pulled 8 stands, circulated with mud, reran 8 stands. Spotted 22 bbls. water. Reset packer. Swabbed down. Recovered 15.5 bbls.
- 2/22/66 Swabbed 3.7 bbls. mud in 3 hrs. Show oil with very strong show of gas. Loaded tubing with 22 bbls. mud. Unseated packer and pulled tubing. Ran tubing with 4 3/4" bit. On bottom at 6:05 P.M. (Hole bridged at 6145' - reamed and washed to bottom.) Drilled to 6380'.
- 2/23/66 Drilled to 6405'. Tripped, on bottom at 3:55 P.M. Drilled to 6314'. Circ. 2 1/2 hrs. Pulled tubing to log.
- 2/24/66 Log stopped at 6145' (3 1/2" tool). Ran 1 11/16" tool. Stopped at 6149'. Ran D.C. and tubing with 4 3/4" bit. Reamed and washed to bottom. On bottom at 10:55 A.M. Mixed mud - raised MS to 63 from 43, and dropped water loss to 3. Circulated, 1 3/4 hrs. Pulled 8 stands. Repaired pump. Ran 8 stands. Circ. 4 hrs. Raised vis. to 110 with beutonite - circ. til 10:30 P.M. Pulled 10 stands. Waited one hour.
- 2/25/66 Ran to bottom. Circ. until 4 A.M. Pulled tubing and D.C. Ran 466.61' of 4" liner on tubing. Top liner 5947'. Cement with 750 sacks common. Lost circulation with 1 - 1

cement 500' from shoe. Regained circ. with cement around shoe. Lost circ. with 50 bbls displaced. Pumped 80 bbls. Casing on vacuum. Shut down. Completed at 1:30 P.M. Pull tubing. Cement on outside tubing 10 stands off bottom. Broke down D.C. Waited on cmt.

- 2/26/66 Waited on cement.
- 2/27/66 Ran 2" tubing with packer set at 5938'. Squeezed top liner with 75 sacks. common with small amount of flo seal. Max. press. 3000#, reversed out 15 sacks. Completed at 4:45 A.M. Washed down to top of liner. Pulled tubing and packer. Shut down and waited on cement.
- 2/28/66 Ran tubing with 3 1/4" bit and 3.5" casing scraper. Drilled out 3' cement, scraped line and washed out to bottom. Pulled tubing. Ran Gamma Ray Neutron and bond log. No bond from 6050' to 6352'. Perf. from 6384' to 6390', with 4 spf. Ran 2" tubing with Baker 3.5" packer. Packer set at 6365'.
- 3/1/66 Swabbed down. No show. Acidized with 500 gals. 15% mud acid. Max. press. 1800#, broke to 400# and finished at 200#. ISDP 50#. On vacuum in 1 min. I.R. 1 BPM. Swabbed down. Recovered load. No show oil or gas. (Load 37 bbls.) Recovered 77 bbls. fluid (8 BFPH), strong show of gas, good show of oil. Swabbed from 5000'. Squeezed with 100 sacks common. Max press 3000# reversed out 15 sacks. Completed at 11:30 P.M.
- 3/2/66 Pulled tubing and packer. Waited on cement, 12 hrs. Perforated from 6348' to 53' with 4 spf (PBTD 6368') Ran 2" tubing with Baker packer set at 6335' K.B. Swabbed down. Tested. No show of oil or gas.
- 3/3/66 Acidized with 500 gals. 15% mud acid. Press. casing to 500#. Inc. tubing press. to 1500# in 30 min. Casing press. increased to 600#. Inc. tubing press. to 2000# in 1 hr. Casing press. increased to 1200#. Shut down treatment. Swabbed acid to pit. Pulled tubing. Threads washed out on 10th stand of tubing above packer. Re-perforated with 4 spf from 6348'-53'. Reran tubing with packer and seating nipple with standing valve. Testing. No shows.
- 3/4/66 Acidized with 500 gals. 15% mud acid. Acid on formation 40 min. with press. inc. to 1500#. Broke to 1200#, then to 0#. I.R. 1/2 BPM. Swabbed down. Recovered 47 bbls. fluid (37 bbl. load). Tested 1/4 bbl. fluid, 80% water with strong show gas. Acidized with 2000 gals. 15% reg. Max. press. 1800# I.R. 5 BPM. On vacuum when pumps shut down. Swabbed down. Recovered 40 bbls of load (72 bbl. load).
- 3/5/66 Recovered 73 bbls. (72 bbl. load). in 12 hrs. Swabbed 1 bbl. fluid 1 hr, 90% water. Squeezed with 100 sacks. Annulus taking fluid at 500#. Perf. 6348'-53'. Took cement on vacuum. Resqueezed with 150 sacks. Reversed out 15 sacks. Max. press. 2000 #. Required 80 bbls. to reverse out short way. Completed at 5:30 P.M. Broke drive line on unit after pulling 8 stands tubing. Shut down at 6:00 P.M.
- 3/6/66 Finished repairs on unit at 6:30 P.M. Finished pulling tubing. Ran measuring line with flag. Pumped into casing hole at 5833'.
- 3/7/66 Ran tubing with FFC packer set at 5872'. Press. tubing to 1700#. O.K. Reset packer at 5806', tubing at 5812'. Press. annulus to 1000#. Squeezed with 75 sacks. Max. press. 2500#. Reversed out 10 sacks. Completed at 11:50 A.M. Washed through perforations and to 5872'. Laid down tubing and packer. W.O.C. 8 hrs. Perforated with 4 spf from 6166'-70'; 6173'-75'; and 6180'-86'.
- 3/8/66 Ran 2" tubing with Baker packer set at 6149'. Swabbed down, recovered 22.7 bbls. fluid. Tested 5 hrs. Show slightly oil and mud. Acidize with 500 gals. 15% mud acid. Max. press. 1400#, broke to 200#, and finished at 400#. ISDP 100# and on vacuum in 1/2 min. I.R. 1.1 BPM avg. Swabbed down. Recovered load of 36 bbls. Then swabbed 1.8 bbls. fluid 1 hr. 95% water with strong show gas.

Water analysis: Sp. Grtg. 1.110; Cl 100,000; Water none; Ph 4; and st. tr. Fe.

- 3/9/66 Swabbed avg. of 1.1 bbls. fluid 1 hr. for 11 hrs. Squeezed perf. from 6166'-70', 73'-75', 80'-86' with 125 sacks. Max. press. 2500#. Reversed out and washed down to 6212'. Reset packer at 6140'. Pressure to 1250# Formation broke at 1800#. Pumped in at 2 BPM. Resqueezed with 125 sacks. Max. press. 3000#. Reversed out 20 sacks and washed down to 6212'. Reset packer at 6140'. Press. to 1500#, formation taking fluid. Input 2 BPM at 2800#. Resqueezed with 75 sacks. Max. press. 3000#. Reversed out 1 sack and washed down to 6200'. Reset packer at 6140'. Press. to 2000#. O.K. Completed at 11:45 P.M.
- 3/10/66 Pulled tubing and packer. Put on head. Shut in. W.O.C.
- 3/11/66 Reperf. with 4 spf from 6180' -86', 6173'-75', and 6166'-70'. Ran tubing with packer set at 6149'. Swabbed down. No shows. Acidized with 500 gals. mud acid. Max. press. 2000#. No break.
- 3/12/66 7:30 A.M. swabbed down to 2500'. Released packer. Reversed out acid into truck. Pull tubing and packer. Reperf. with 4 spf from 6180'-86', 6173'-75', and 6166'-70'. Ran tubing with packer set at 6149'. Swabbed down, no shows. Acidized with 500 gals. mud acid. Max. press. 3250# after acid on bottom 30 min., casing press. inc. to 1000#. Swabbed down to 2500'. Released packer, reversed out acid to pit. Tubing leak 3 jts. above packer. Tested tubing to 4000# Reran tubing with packer set at 6150'. Swabbed down. Pulled standing valve. No shows.
- 3/13/66 Acidized with 500 gals. MCA. Max. press. 3250#. Acid on bottom 30 min. Casing press. inc. from 450# to 1000#. Swabbed down to 2000'. Released packer. Reversed out acid. Pulled tubing and packer. Tubing lead 3 jts. above packer. Tested to 4000#. Laid down tubing in singles. Pulled collars and changed ends.
- 3/14/66 Put on new collars and seal with Baker lock. Completed at 9:30 A.M. Ran tubing with collar locator and sand jet tool. Sand perforate 6183', 6174', and 6167'. Reversed pit sand. Pulled tubing and tool. Ran tubing with packer set at 6158'. Swabbed down. Tested. No show.
- 3/15/66 Acidized with 500 gals. mud acid. Acid on bottom 3½ hrs. at 3500#. Broke to 500#, treated at 1400# at 3½ BPM I.R. ISDP 300#, on vacuum in 6 min. Swabbed down. Recovered load, tested ½ BWRH, show of gas. Frac. with 3000 gals. 3% gel acid with ½# sand per gal. Treated at 1700# at 5 BPM I.R. ISDP 600#, on vacuum in 4 min. Waited 4 hrs. Swabbed down. Recovered 22 bbls. (107 bbl. load.) Sand coming back.
- 3/16/66 Swabbed 11 bbls. water in 8 hrs. Last hour not enough fluid to gauge. Reset packer at 6000'. Squeezed with 150 sacks. Max. press. 3000#. 50 sacks in formation. Unseat packer. Pressure annulus to 1850#, taking fluid. Could not reverse out cement. Attempted to pump out the long way. With 35 bbls. to go, lost circulation. Came out of hole with tubing. Reran tubing with 4 3/4" bit and casing scraper. Top of cement, 3800'. Drilled out to 4600'. Reversed to top of liner (5940').
- 3/17/66 Pulled tubing, scraper and bit. Reran tubing with packer. Packer set at 5785' K.B. Tubing at 5935'. Spot 2000 gals. of 15% acid on bottom. Close annulus. Pressure to 1750#. Broke to and treated at 1000#. ISDP 0#. I.R. 3 BPM. Laid down 1 joint tubing and set packer at 5755' (bottom of tubing 5905'). Swabbed down. Dry. Unseated packer, fluid equalized. Reset packer. Swabbed raw acid. Unseated packer and swabbed 15 bbl. raw acid. Pulled 20 stands tubing and reset packer. Pumped into annulus 5 BPM at 300#. Pulled 20 additional stands. Annulus held 2000#.
- 3/18/66 Hold in 5½" casing at 4470' K.B. Pulled tubing and packer. Reran tubing with KV 30 Packer and hold down. Set packer at 5819' with seating nipple at 5850'. Acidized with 2000 gals. 15%. Max. pressure 2000#. Treated at 2000#. ISDP 500#. Dropped to 300# in 15 min. Shut in 30 min. Flow back 8 bbls. flush. Swabbed down. Good show gas after recovering 25 bbls. of load (load 107 bbls.). Swabbed 45 bbls., good show oil.

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Swabbed dry. No fluid or gas. Shut down at 10:00 P.M. Shut in.

3/19/66 Tore down.

Note: 4" liner has cement from 5940' to 6185'.