

EAST MEREENIE No. 1 WELL

S U M M A R Y

The East Mereenie No. 1 Well was drilled approximately 154 miles west-south-west of Alice Springs in the Northern Territory to a total depth of 4710'. It is a four mile stepout from the Mereenie No. 1 discovery well.

The well spudded in the Ordovician Mereenie Sandstone and terminated in the lower part of the Lower Ordovician/Pacoota Sandstone. The Stairway Sandstone flowed a total of 570 m.c.f.d. from two Drill Stem Tests. The Horn Valley, whilst having excellent hydrocarbon source characteristics, was proved too tight to produce any gas on drill stem tests. The Pacoota Sandstone flowed an accumulative total of 19,970 m.c.f.d. from 14 drill stem tests. The net feet of permeable zones indicated on the microlog tool in the Pacoota Sandstone is 270 feet.

The East Mereenie No. 1 is the confirmation well of the Mereenie No. 1 discovery well. The similarity of stratigraphic section in the two wells indicate very uniform deposition of the sediments.

Exoil and its partners elected to terminate drilling on the East Mereenie No. 1 Well at 4710 feet due to the potential formation damage and the possibility of lost circulation in lower sediments which, in conjunction with the high pressure Stairway gas cutting the mud, could have resulted in serious mechanical difficulty. Seven inch production casing was run to 3580 feet and the well completed as a gas-condensate producer in the 1130 feet of open hole from 3580 feet to 4710 feet. Completion tests will be run when the testing equipment arrives from overseas.

Subsidy offered by the Subsidy Branch of the Bureau of Mineral Resources was £30,175 to a depth of 6500 feet. Subsidy was only offered from 100 feet above the top

of the Pacoota to total depth. In view of the small amount of subsidy that presumably would have been granted due to the termination of this well and other considerations subsidy has not been claimed by the company.

RESUME OF DRILLING OPERATIONS

Drilled 12 $\frac{1}{4}$ " hole to 175' with mud. Reamed 12 $\frac{1}{4}$ " hole to 17 $\frac{1}{2}$ " to 175'. Set 13 $\frac{3}{8}$ " casing to 170'. Drilled out with 12 $\frac{1}{4}$ " bit using mud. Severe lost circulation encountered below 647'. Overcame lost circulation by running thick mud with L.C.M. and setting cement plugs when necessary. Drilled 12 $\frac{1}{4}$ " hole to 1920'. Ran Schlumberger Electrical Log, Microlog, Sonic Log. Set 9 $\frac{5}{8}$ " casing to 1920'. Ran Schlumberger Temperature Survey, drilled out using 8 $\frac{3}{4}$ " bits and mud. Drilled ahead coring and testing hydrocarbon shows in prospective intervals to 3158'. Lost circulation due to hole in casing at 1452' (casing parted at collar). Ran Schlumberger Electrical Log and Microlog. Repaired hole in casing by squeezing cement. Drilled ahead with 8 $\frac{3}{4}$ " bits, to 4180' coring and testing when necessary, adding Barytes to mud system when conditions warranted. At 4180' ran Schlumberger Electrical Log, Microlog, Sonic Log, drilled ahead to 4710' (T.D.) with 8 $\frac{3}{4}$ " hole coring and testing when necessary. Ran Schlumberger Electrical Log, Microlog, Sonic and Gamma Ray, ran 7" casing to 3582', ran 2 $\frac{3}{8}$ " 6.5 lbs. tubing to 4660' completed well as a gas producer.

I N T R O D U C T I O N

The East Mereenie No. 1 Well is the fourth well to be drilled in the Amadeus Basin, all by Exoil (N.T.) Pty. Ltd. and its partners.

The well was drilled on Oil Permit 43 issued by the Northern Territory of Australia to Magellan Petroleum Corporation. The operation was conducted by Exoil (N.T.) Pty. Ltd. under a farmout agreement with Magellan Petroleum Corporation. Partners with Exoil were Farmout Drillers N.L. and Krewliff Investments Pty. Ltd..

The well, sited four miles southeast from the Mereenie No. 1 along the crest of the large Mereenie anticline, was drilled to confirm the large natural flows of gas encountered in the Mereenie No. 1 Well, the discovery well for the Mereenie Anticline. The well was programmed to also explore the Lower Pacoota and Cambrian sediments.