

APPENDIX VII: DRILLING RECORD AND SUMMARY

EAST MEREENIE 37 **DRILLING SUMMARY**

The well East Mereenie 37, was spudded at 2300 hours on 27th, May, 1995. A 9 7/8" pilot hole was drilled to 34 m and was then opened to 17.5" size hole. The 16" welded conductor pipe was set at approximately 23.47m KB, (the water well drilling contractor was not available to perform this work) and cemented in place. The 13-5/8" rotating head was flanged up to the conductor and the blowline rigged up, complete with primary jet, deduster jet, sample catcher and gas detector valves and lines.

A 13-9/16" Impax diamond enhanced hammer bit was then made up on a 12" Mission SD-12 industrial type air hammer with an open choke, and the 13-9/16" hole was air hammer drilled, with surveys, to 302m in 17 hrs drilling/connection time. Because of the high volume of water produced towards the end of the bit run, the air hammer was laid out, and the 13.5" hole was then conventionally air drilled to casing point at 692m using three tricone bits in 69.5 hrs drilling / connection time. A multi-shot survey was run at casing point to determine hole azimuth and deviation. A 10 3/4" 40.5 lb/ft H40 casing string was then run and cemented in place with 306 sacks of class "A" cement, followed by a 56 sacks class "A" cement top up job to ensure cement between the cement baskets at 60m and surface.

The BOP stack and rotary head were then nipped up and successfully pressure tested, together with the choke manifold, flare line and associated equipment. The cement track, float, shoe and 3m of formation were drilled out with water using a 9-7/8" tricone bit. A formation pressure integrity test was then performed to 16.7 ppg equivalent mud weight without any breakdown.

The 9-7/8" hole was directionally drilled ahead with air/ mist and regular surveys to 1245m where a well flow test was performed. The well was filled with 2% NaCl brine and a FMS-AMS-GR log was run to confirm formation tops and target level. The inclination at 1238m MD was 30.50° at an azimuth of 203.5°. A 9 7/8" drilling assembly was run and air / mist drilled to 1258m after reaming from 968m. A trip was made to change the BHA and the 8 1/2" hole was air/ mist drilled, with frequent surveys to 1379m where a well flow test operation was carried out to 3.12mmcf/d.

The 8 1/2" hole was air/ mist drilled with frequent surveys to 1465m where the well was shut in for a build up and then flow test was performed. The well was then killed with a 8.7ppg mud and after conditioning the mud a trip was made to change the bit. The 8 1/2" hole was then drilled with mud to TD 1600m MD. The hole was conditioned prior to running logs and casing. The target was intersected as required.

After logging, 5½" casing was run and cemented in place with 700 sacks of class "G" cement and 1% Halad 322.

The rig was handed over to Production for completion, at 1800 hrs on 20th, June 1995, which was 24 days after spud, one day longer than predicted.

