Marathon Oil Company Hansen State No. 3 C-103 Attachment August 2, 1996

- MIRU drilling rig. Drld from 3889-7984'. RU Schlumberger, RIH w/platform express, NGT, sonic, SP (109.5). Tagged btm at 7984'. Pulled logs from 7984-3700'. LD tools. Finish logging w/FMI from 7986-5100'.
- 2. RIH w/4.5" float shoe, 2 jts csg and float collar. RIH w/193 jts csg, cemet 2 stages, total cmt 730 sxs. Circulate cemet on both stages.
- 3. ND BOPE. Set slips w/93,000#, cut off csg and NU 11" 3M x 7 1/16" 5M tbg head and test to 3000 psi. RD drilling rig.
- 4. MIRU PU. ND wellhead and install BOPE. TIH w/193 jts 2 3/8" and tag plug at 6173'. Drill plug and stage tool. PU 54 jts 2 3/8" tbg and drill soft cement from 7854' to 7940'. Circulate hole clean.
- 5. RU wireline and run cemet bond log, CCL from 7926-5000'.
- 6. Perforate Penn formation w/3 1/8" slick guns, 4 JSPF from 7848-65'. RIH w/RTTS pkr and swab well. Zone was uneconomical.
- 7. RU wireline and run 4 1/2" CIBP, set at 7815'. Pressure tested to 2000 psi.
- 8. Perforated Penn formation w/3 1/8" guns, 4 JSPF from 7758-7780', 92 holes. RD wireline. RIH w/4 1/2" RTTS pkr to 7665'. Swab well. Zone uneconomical.
- 9. RU wireline RIH and set 4 1/2" Alpha CIBP at 7680', tested to 2000 psi. RIH w/3 1/8" dump bailer, dump 35' cement from 7680-7645'. Pressure test plug to 5000 psi.
- Perforate Abo formation w/3 1/8" guns, 4 JSPF, 120 deg. phasing, from 7042-7052', 44 shots. RD wireline. TIH w/RTTS pkr to 6969'. Acidized Abo perfs from 7042-52' w/3300 gals 15% HCL acid. RU swab and kicked well off flowing. Kill well and POOH w/pkr.
- 11. TIH w/RTTS pkr and RBP. Set RBP at 6966'. Pull pkr to 6950' and test RBP to 4000 psi.
- 12. POOH w/pkr. RU wireline.
- Perforate Drinkard w/3 1/8" guns, 2 JSPF, 120 deg. phasing from 6808-6816', 6832-6840', 6697-6701'. 3 1/8" slick guns, 2 JSPF from 6630-6660', 6664-6689', 6706-6715', 6718-6729', 6746-6751', 6756-6760', 6764-6766', 6790-6802', 258 total shots.
- 14. RD Wedge.