

CURRENT WELLBORE SCHEMATIC

CHESAPEAKE OPERATING INC.

WELL : MERCHANT FEDERAL 1-8

FIELD : SAPPHIRE PROSPECT

LOCATION : 880' FSL & 1,760' FWL OF SEC. 8-T22S-R33E

COUNTY : LEA

STATE : NM

ELEVATION : GL - 3,571' RKB - 3,594'

API #: 30-025-36318

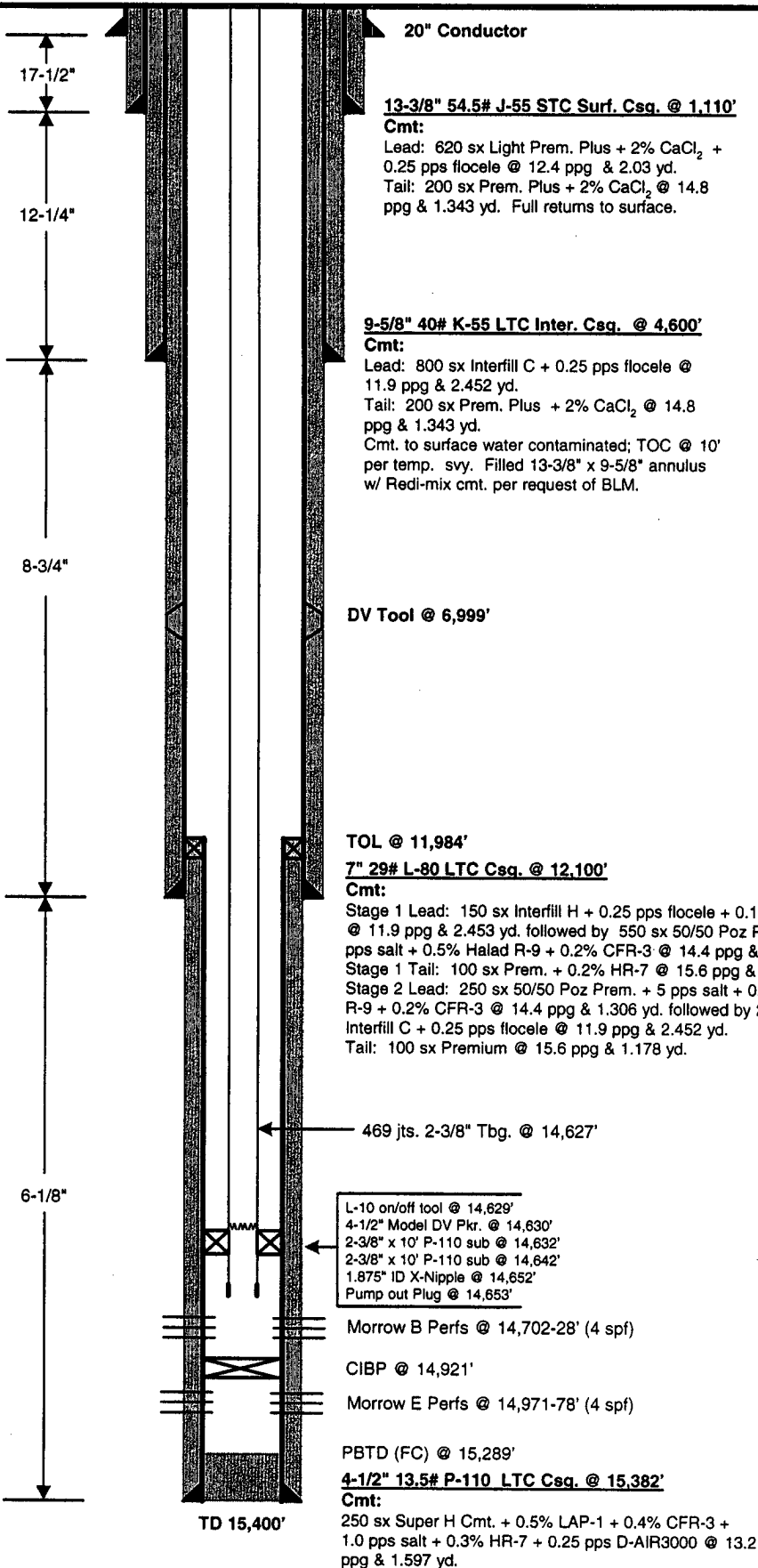
SPUD DATE: 8/25/03

RIG RELEASED: 10/28/03

FIRST SALES: 12/23/03



HOLE
SIZE



Well History:

COMPLETION

11/17-11/23/03: MIRU. RIH w/ 474 jts. 2-3/8" tbg, tag up @ 15,154'. RU Cudd, wash down to 15,236'. Run CBL/GR/ CCL from 12,100-11,600' & across DV fr. 7100'-6900'. RU BOP, MU seal assy. RIH w/ 4-1/2" tbg. and set 80K# on liner top. Test seal assy. to 1000 psi, NU tree & BOP & test to 5000 psi. Perf Morrow E from 14,971-78' w/ 4 spf. Well on vacuum. RIH w/ pkr & tbg, set @ 14,888'. Test to 1000 psi. 11/24/03: Swab well down to 11,000', no show of gas or oil, no fluid entry. Swab back total 70 bbls. wtr. SDON. 11/25/03: Load hole w/ 48 bbls 7% KCl. Pump into frmn. @ 1.5 bpm @ 7260 psi, total 109 bbls. Acidize w/ 36 bbls 7.5% NeFe w/ claystay @ 0.6 bpm @ 7500 psi. Flush w/ 70 bbls 7% KCl; ISIP 5200 psi, 5 min 4647 psi, 10 min 4473 psi, 15 min 4390 psi. Well died after 1 hr. TLTR 213 bbls. 11/26/03: SITP 2150 psi. Open well, died in 5 min. RIH w/ swab, fluid @ surf. Swab to 5000', little show of gas. SISD. 12/1/03: SITP 2100 psi. Bled down, RIH w/ swab. IFL 1500', swab down to 11,500'. GSOG after each run past 11,000'. Rec. 61 BW. SISD. 12/2/03: SITP 2150 psi. RIH w/ swab, IFL 8700'. Load hole w/ 50 bbls 7% KCl; Rel Pkr., pump 80 bbls KCl to circ gas out. TOH w/ pkr., ND BOP, NU tree & test to 10K psi. SD. 12/3/03: Frac Morrow E perfs w/ proppant & CO₂. Flush w/ 7% KCl. ISIP 8950 psi, 15 min 8060 psi. Hook up to FB. TP 6000 psi; FB well, took 20 min to go to 0 psi. TLTR 352 bbl. 12/4/03: SICP 4000 psi. Bled off, RIH w/ pkr. & tbg. to 14614'. Well KO; kill w/ 20 bbl 7% KCl. Set pkr, RU to swab. IFL 4000'; swab down to 8000' (21 bbl), wouldn't flow. SISD. 12/5/03: SITP 2000 psi. RIH w/ swab to 4000'. Swab down to 11,500', no show of gas. Rec. 47 bbls fluid. SISD. 12/6/03: SITP 1000 psi, bled down, would not burn. POOH w/ tbg. & pkr. Set CIBP @ 14,921'. Perf Morrow B @ 14,702-28' w/ 4 spf (104 holes). SISD until Monday. 12/8/03: SICP 800 psi. Bled off, TIH w/ pkr & set @ 14,644. Swab 61 bbls fluid back, swab down to 8000'. Well blowing sandline up hole. Hook up and FB on 12/64 ck @ 1100 psi. 12/9/03: Well still flowing @ 5 am; Est. 1.3 MMCFD @ 600 psi on 22/64 ck. Leave with flowtesters overnight. 12/10/03: Well flowed thru nite at 1.3 MMCFD. Pump 7% KCl. Rel. Pkr. & TOH. RD BOP, RU frac tree; SD. 12/12/03: Frac down csg. w/ 24,000 gal. pad plus 38,750 gal. w/ 20/40 bauxite staged from 0.25 to 3 ppg (screened out w/ 54K# in frmn, left 6K# in csg). ISIP 10,325 psi, 5 min 9543 psi, 10 min. 9228 psi, 15 min 9025 psi. TLTR 427 bbl. 12/13/03: FB sand for 2 hrs. Well cleaned up, pressure up to 1800 psi. Rec. 42 BW, 2 BO. Making 1.8 MMCF. 12/14/03: Flwg. 2.9 MMCFD & 2 BW/hr. w/ 1300 psi FCP. 12/16/03: FCP 3100 psi; Baker pkr. wouldn't fit in 15.5# csg. 12/17/03: RU Halliburton; CP 3300 psi. RIH w/ pkr. & seal assy. Set Pkr. @ 14,360'. SWI & SD. 12/18/03: RIH w/ Baker BP; set @ 14,437'. Displ w/ 7% KCl. 12/19-22/03: ND bottom frac valve. LD 4-1/2" work string. RIH w/ tbg. & on/off tool. Release RPB & POH w/ tbg. & BP. RIH w/ on/off tool & 2-3/8" tbg, hydrotesting in hole. Space well out. RU CTU, blow out water to 10,000'. Press. N₂ up to 6700 psi, pop out plug. RD Cudd, FB N₂ overnight. 12/24/03: SITP 3800 psi. Hook up to well stabilized on 17/64 ck. Spot rate 1.499 mcf 200 psi FTL. List gas sales to Conoco & 1st oil sales to Teco on 12/23/03. 12/26/03: 24 Hr. Rate: 84 BO, 15 BW, 1,998 MCF w/ 1800 psi FTP on 16/64" ck.

4-1/2" Liner Detail:

Baker ZXP Liner Pkr. w/ 10' Type III Tieback Extn, RH Profile & HD, 5" LTC Box down (ID: 4.312")
Baker CMC RH set Liner Hanger, 5" LTC Pin x Pin (ID: 4.312")
X-over Bushing 5" 8RL Box X 4-1/2" 13.5# LTC Pin (ID: 3.937")
74 Jts. 4-1/2" 13.5# P-110 LTC Liner (ID: 3.992")
Baker Type 1 Landing Collar w/ 5" LTC Box X Pin (ID: 3.937")
2 Jts. 4-1/2" 13.5# P-110 LTC Liner (ID: 3.992")
Baker 4-1/2" Type V Set Shoe, 4-1/2" LTC Box up (ID: 4.062")

PREPARED BY: Ginni A. Kennedy

UPDATED BY: Ginni A. Kennedy

DATE: 10/28/03

DATE: 1/5/04