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# INTEROFFICE MEMORANDUM

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**DATE:** 6 June 2000  
**TO:** LYNDA TOWNSEND  
**FROM:** ROBERT A. HEFNER IV  
  
**RE:** UNORTHODOX WELL LOCATION APPLICATION  
Boyce 3-15  
2,350' FNL & 341' FEL  
Section 15 of T17S-R37E  
Lea County, New Mexico

The referenced wellbore was drilled as a Strawn formation test, an 80-acre unit comprising the S/2 NE/4. While drilling the Strawn formation the samples indicated the gross thickness was thin to what was prognosed, and they did not yield any sample and mud gas shows through the interval. Therefore we felt we had a bust in our seismic interpretation and the plans were to log the borehole and re-evaluate. Our standard pick for total depth is to drill 150' beyond the Atoka shale top.

In this particular case the mud-logger failed to identify the Atoka shale. It was believed that the clastic section being drilled was of Strawn age. This was not totally out of the realm of possibility since we were drilling close to a fault plane where there exists approximately 250' of throw at the top Strawn formation. When we started cutting limestone, and the section had stretched out too far, it was believed we had tagged the top of the Morrow limestone and, therefore, we stopped and logged the borehole.

Logs indicated the section is normal and the well had reached total depth in the Morrow formation. Therefore, the well needs to be dedicated to the Townsend Morrow Field. The field rules for a Morrow producer require setbacks of 660'. The well was permitted based upon the NW Shoe Bar Strawn Field and setbacks of 330'. Therefore, we will need to file for an unorthodox location. We are 319' too far east for a unit comprised of the E/2 of section 15. We will need to seek a waiver from Arrington and it's partners.