



# HOME-STAKE OIL & GAS COMPANY

## Mozingo #1 Non-Standard Location Application

Surface Location: 365' FNL & 1593' FEL  
Approximate Bottom Hole Location: 150' FNL & 1470' FEL  
(215' north & 37' east of surface location)

### OIL IN PLACE & OIL RECOVERY CALCULATIONS

Based on data from HSOG #2: UL 'P' Section 22 - T22S - R37E

Specific gravity, Oil: 42.3 deg API  
Specific gravity, Gas: 0.882  
Gas Oil Ratio: 1,965

from crude analysis on HSOG #2 dated 11/9/99  
from gas analysis on HSOG #2 dated 11/9/99  
average GOR, HSOG #2

Temp, Reservoir: 110 deg  
Temp, Separator: 70 deg  
Pressure, Reservoir: 2560 psia  
Pressure, Separator: 100 psia

from HSOG #2 logs and S. Johnston #1 BHP test  
actual operating conditions  
from 72-hr Build-up test on HSOG #2 on 10/11/98  
actual operating conditions

Average Porosity: 9.5%  
Water Saturation: 30%  
Net Pay: 124 ft

Weighted average porosity from 7022-7146', HSOG #2  
Estimated  
Fusselman interval from 7022-7146', HSOG #2

| Drainage Area         | Estimated Oil<br>In Place | Percent<br>Recovery | Recoverable Oil |
|-----------------------|---------------------------|---------------------|-----------------|
| Section 22 - 20 acres | 850,500 bbls              | 20%                 | 170,000 bbls    |
| Section 27 - 10 acres | 425,200 bbls              | 20%                 | 85,000 bbls     |
| Total                 | 1,275,700 bbls            |                     | 255,000 bbls    |

