### GEOLOGIC WELL PROGNOSIS

**COMPANY:** Methane Energy  
**WELL NAME:** Fat Elk Corehole

**ANTICIPATE SPUD DATE:** November 2004  
**TWIN:** NA

**SURFACE LOCATION:** Approx. 2000’ FSL, 2000’ FEL  
**ESTIMATED TD:** 3950 Feet

**LEGAL LOCATION:** SEC 4, T28S-R13W  
**ELEV. & TOPO:** 50’ ASL

**COUNTY:** Coos  
**STATE:** Oregon

**TERRAIN & ACCESS:** Lowland drainage course; access good near paved road;

**OBJECTIVE FORMATION:** Upper & Lower Coaledo Fms.  
**HIGHEST DIP:** 20° @ 3000’

**TYPE OF WELL:** Vertical

### FORMATIONS TO BE PENETRATED:

<table>
<thead>
<tr>
<th>Formation</th>
<th>TOPS</th>
<th>EST. THICKNESS</th>
<th>DOM. LITHOS.</th>
<th>POSSIBLE TEST. CORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface gravels</td>
<td>Surface</td>
<td>10’</td>
<td>Sand, gravel, clay</td>
<td></td>
</tr>
<tr>
<td>Bastendorff Fm.</td>
<td>10’</td>
<td>190’</td>
<td>Sandstone, siltstone</td>
<td></td>
</tr>
<tr>
<td>Upper Coaledo Fm.</td>
<td>200’</td>
<td></td>
<td>Sandstone, siltstone</td>
<td></td>
</tr>
<tr>
<td>#5 Bed</td>
<td>420’</td>
<td>16’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>#4 Bed</td>
<td>500’</td>
<td>6’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>#3 Bed</td>
<td>620’</td>
<td>10’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>#2 Bed</td>
<td>710’</td>
<td>8’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>#1 Bed</td>
<td>840’</td>
<td>5’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>Middle Coaledo Fm.</td>
<td>1100’</td>
<td>1600’</td>
<td>Sandstone, siltstone</td>
<td></td>
</tr>
<tr>
<td>Lower Coaledo Fm.</td>
<td>2700’</td>
<td>To TD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘F’ Coal Zone</td>
<td>3100’</td>
<td>2’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>‘E’ Coal Zone</td>
<td>2825’</td>
<td>8’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>‘D’ Coal Zone</td>
<td>3500’</td>
<td>8’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>‘C’ Coal Zone</td>
<td>3690’</td>
<td>6’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>‘B’ Coal Zone</td>
<td>3840’</td>
<td>15’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>‘A’ Coal Zone</td>
<td>3930’</td>
<td>15’</td>
<td>coal</td>
<td></td>
</tr>
<tr>
<td>TD</td>
<td>(3950’)</td>
<td></td>
<td>Sandstone, siltstone</td>
<td></td>
</tr>
</tbody>
</table>

**UNUSUAL CONDITIONS (LOST CIRC., SHALLOW BLOW-OUTS, WATER FLOWS, H2S, ETC.):**
Unstable hole conditions;

**MUD UNIT (DEPTHS & TYPE):** Two-man logging unit with gas detection, chromatograph, etc.

**LOGGING PROGRAM:** State required minimum

**SPEC. SURVEYS:** Continuous core through coal intervals. Desorption sampling in coals. Sample produced gas and water

**REFERENCE WELLS:** Northwest Exploration Fat Elk #1

**COMMENTS:**

**PREPARED BY:** S. Pappajohn, G. Hampton