SAFETY INSTRUCTIONS: The possibility of toxic gases in confined spaces or of fuel leaks should be recognized as a potential hazard.

CAUTION: The primary purpose of the report is to advise of the condition of the facility for immediate continued use/occupancy. REINSPECTION OF THE FACILITY IS RECOMMENDED. AFTERSHOCKS MAY CAUSE DAMAGE THAT REQUIRES REINSPECTION. The conclusions reached by engineers who re-examine the facility later should take precedence. The assessment team will not render further advice in the event of conflict of engineering recommendations.

A. CONDITION:

Existing: None O Recommended: Green O Posted at this assessment: Yes O

Green O Yellow O No O

Yellow O Red O

Red O

B. RECOMMENDATIONS

Monitor_________________________ O Continue in service, repair ASAP_______ O

Remove from service___________ O Drain and repair____________________ O

Continue in service___________ O Lower water level and continue service____ O

. _________ ft

C. COMMENTS

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________
### STEEL RESERVOIR

**D. RESERVOIR DESCRIPTION**

- Capacity ______ MG  
- Wall Height ______ ft  
- O/S Diameter ______ ft

- Roof Type  
  - Wood  
  - Steel  
  - Flat  
  - Conical  
  - Knuckled Edge

- Shell  
  - Welded  
  - Bolted  
  - Riveted

- Floor support  
  - Footing ring  
  - Oiled sand  
  - A.C.  
  - Other _________________

- Footing  
  - Concrete ring  
  - Other _________________  
  - None

- Pipe connection  
  - Rigid  
  - Flexible

- Anchorage to foundation ______ Dia. ____________ Spacing

### DAMAGE OBSERVED (D.O.)

<table>
<thead>
<tr>
<th>Damage Scale:</th>
<th>0 (0%)</th>
<th>1 (1-10%)</th>
<th>2-3-4 (11-40%)</th>
<th>5 (41-60%)</th>
<th>6 (over 60%)</th>
<th>NA</th>
<th>Not</th>
<th>Not</th>
<th>Applicable</th>
<th>Observed</th>
</tr>
</thead>
</table>

- Damage Scale:
  - None
  - Slight
  - Moderate
  - Severe
  - Total
  - Not Applicable
  - Not Observed

### E. SHELL

- D.O.
  - Elephant's foot
    - a. Height ______ ft
    - b. Circumferential extent ______ ft
  - Other buckling
  - Horizontal joints broken
  - Vertical joints broken
  - Plate split
  - Seismic anchors
  - Rocking of reservoir evidenced
  - Sliding of reservoir evidenced
  - Leaks evident. Rate ______ gpm

### F. VALVE PIT

- D.O.
  - Access
  - Control Piping
  - Gauges
  - Hatches
  - Inlet-outlet piping
  - Pit flooded
  - Roof
  - Walls
  - Charts
  - Valving

### G. ROOF

- Unexplained wet spots on adjacent ground
- Shell penetrations damaged
- Other attachments to shell damaged
- Pipe Connections to Tank

### H. FOOTING

- Floor
- Aboveground Piping
- Underground Piping

### I. FLOOR

### J. ABOVEGROUND PIPING

### K. UNDERGROUND PIPING

### L. REMARKS

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
**M. RESERVOIR DESCRIPTION:**

<table>
<thead>
<tr>
<th>Wire or Strand Wrapped</th>
<th>Buttress Type using individual Tendons, usually inside wall</th>
<th>Bar Tendons on Tank Surface</th>
</tr>
</thead>
</table>

**TENDONS:**
- 220 ksi - 0.142" or 0.172" dia
- 270 ksi - 3/8" dia

**WALL CONSTRUCTION:**
- Cast-in-place
- Shotcrete
- Shotcrete with steel diaphragm
- Precast
- Precast with steel diaphragm

**TENDON PROTECTION SYSTEMS:**
- Shotcrete
- Corrosion inhibiting grease
- Galvanizing protected by plastic sheath
- Grout

**Tank Restraints:**
- Seismic cables
- Curb (restraining sliding)

**Capacity:** _______ MG  **Wall height:** _______ ft  **O/S diameter:** _______ ft

**Roof Type:**
- Flat
- Dome
- Exposed
- Fill depth _______  **Surface usage:** _______________

<table>
<thead>
<tr>
<th>Damage Scale</th>
<th>None</th>
<th>Slight</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
<th>Not</th>
<th>Not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0%)</td>
<td>(1-10%)</td>
<td>(11 - 40%)</td>
<td>(41 - 60%)</td>
<td>(over 60%)</td>
<td>Applicable</td>
<td>Observed</td>
</tr>
</tbody>
</table>

**N. SHELL**

<table>
<thead>
<tr>
<th>D.O.</th>
<th>Shell or shotcrete cracked</th>
</tr>
</thead>
<tbody>
<tr>
<td>____</td>
<td>Vertical cracks more than 2 feet long</td>
</tr>
<tr>
<td>____</td>
<td>Unexplained excessive loss of contents</td>
</tr>
<tr>
<td>____</td>
<td>Bulging observable</td>
</tr>
<tr>
<td>____</td>
<td>Visible construction joints</td>
</tr>
<tr>
<td>____</td>
<td>Wall leaking</td>
</tr>
<tr>
<td>____</td>
<td>Wet spots</td>
</tr>
<tr>
<td>____</td>
<td>Spouts</td>
</tr>
<tr>
<td>____</td>
<td>Horizontal cracks more than 25% of perimeter</td>
</tr>
<tr>
<td>____</td>
<td>Corrosion at horizontal cracks</td>
</tr>
<tr>
<td>____</td>
<td>Shotcrete delaminated at cracks</td>
</tr>
<tr>
<td>____</td>
<td>Attachments to shell loose</td>
</tr>
<tr>
<td>____</td>
<td>Leaks at rust stains</td>
</tr>
<tr>
<td>____</td>
<td>Major leaks at shell/foundation joint</td>
</tr>
<tr>
<td>____</td>
<td>Unexplained wet spots on adjacent ground</td>
</tr>
<tr>
<td>____</td>
<td>Corrosion at manholes/other penetrations</td>
</tr>
</tbody>
</table>

**O. HORIZONTAL PRESTRESSING**

<table>
<thead>
<tr>
<th>D.O.</th>
<th>1. Wrapping:</th>
</tr>
</thead>
<tbody>
<tr>
<td>____</td>
<td>Corrosion</td>
</tr>
<tr>
<td>____</td>
<td>Corrosion at horizontal cracks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Individual tendons:</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Corrosion products</td>
</tr>
<tr>
<td>____ Leaks @ tendon locations</td>
</tr>
<tr>
<td>____ Leaks @ tendon anchorages</td>
</tr>
<tr>
<td>____ Tendon anchorage distressed</td>
</tr>
<tr>
<td>____ Tendon anchorage disrupted/loose</td>
</tr>
<tr>
<td>____ Cracking in vicinity of tendon anchorage</td>
</tr>
<tr>
<td>____ Tendon location visually observable</td>
</tr>
<tr>
<td>____ Discoloration of concrete in line w/tendons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Bar tendons on surface:</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Tendons failed</td>
</tr>
<tr>
<td>____ Tendons sound loose</td>
</tr>
<tr>
<td>____ Evidence of rust</td>
</tr>
</tbody>
</table>

Leakage rate _______ gpm
### Damage Observed (D.O.)

<table>
<thead>
<tr>
<th>Damage Scale</th>
<th>0</th>
<th>1</th>
<th>2-3-4</th>
<th>5</th>
<th>6</th>
<th>NA</th>
<th>NO</th>
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<tr>
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<table>
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<tr>
<th>Damage Scale</th>
<th>0%</th>
<th>1-10%</th>
<th>11-40%</th>
<th>41-60%</th>
<th>over 60%</th>
<th>Applicable</th>
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<td>Applicable</td>
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</tr>
</tbody>
</table>

### P. Roof

- **D.O.**
- **Flat or conical**
  - Displaced with respect to wall
  - Sagging
- **Cracked at edges**
- **Cracked at interior supports**
- **Supporting column spalled**

### Q. Footing

- **D.O.**

### R. Floor

- **D.O.**

### S. Aboveground Piping

- **D.O.**

### T. Valve Pit

- **D.O.**

### U. Remarks

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________