

NOTE: All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetration of the first zone containing or reasonable expected to contain H<sub>2</sub>S.

1. Well Control Equipment:
  - A. Flare line with flare igniter.
  - B. Choke manifold with 1 remote hydraulic choke installed.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment to include: Annular Preventor.
2. Protective equipment for essential personnel:
  - A. 5-minute escape units located in the dog house and 30-minute are units at briefing areas, as indicated on well site diagram.
3. H<sub>2</sub>S detection and monitoring equipment:
  - A. 3 – portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S levels of 20 PPM are reached.
  - B. 1 – portable SO<sub>2</sub> monitor positioned near flare line during H<sub>2</sub>S flaring operations.
4. Visual warning systems:
  - A. Wind direction indicators as shown on well site diagram.
  - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be a readable distance from the immediate location.
5. Mud program:

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weight safe drilling practices and the use of H<sub>2</sub>S scavengers when necessary will minimize hazards when penetrating H<sub>2</sub>S bearing zones.