



MAR 5 1993
JERRY W. LONG
CONSULTANT

March 5, 1993

BUREAU OF LAND MANAGEMENT
Carlsbad Resource Area
P.O. Box 1778
Carlsbad, New Mexico 88220-1778

Attn: Mr. Shanan Shaw, Petroleum Engineer

Re: SOCORRO PETROLEUM COMPANY
Keel-West Waterflood Project

Dear Mr. Shaw:

Subsequent to the filing of Applications to Drill for the H.E. West "A" No.24 and No.25; and H.E. West "B" No.56 through No.71, you advised of your concern regarding danger from possible H₂S gas during drilling operations. We concur that there may be H₂S gas entrained in the oil from the producing zone. However, the gas volume from a well drilled in this Waterflood Project probably would be too small to measure, resulting in a very small 500 ppm radius of exposure. A Public Protection Plan is not deemed necessary.

Consequently, the enclosed Hydrogen Sulfide Drilling Operations Plan is submitted in order to comply with Onshore Oil and Gas Order No.6. Also enclosed are revised Well Site Layout diagrams for each well, indicating the location of H₂S equipment. Please note that Indian Fire and Safety Company has been contracted to install and maintain the H₂S safety system and train the crews regarding use of the equipment.

Please attach the H₂S Plan and Revised Well Site Layouts to each Application to Drill.

Sincerely yours,

JERRY W. LONG
Permit Agent for:
SOCORRO PETROLEUM COMPANY

Attach: (each well)
1c: H₂S Drilling Plan
9c: Revised Rig Layout

JWL/bl1

SOCORRO PETROLEUM COMPANY
KEEL-WEST WATERFLOOD

Drilling operations on the following wells will comply with this Hydrogen Sulfide Plan:

H.E. West "A" No.24 and No.25
H.E. West "B" No.56 thru No.71

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel will receive training from a qualified instructor in the following areas 24 hours prior to drilling into a probable H2S zone on this well:

1. Hazards and characteristics of H2S.
2. Proper use of personal protective equipment.
3. Proper use of H2S detectors, warning systems, briefing areas and evacuation procedures.
4. A copy of this plan will be available at the well site.

II. H2S SAFETY EQUIPMENT

H2S equipment and systems will be installed and maintained by Indian Fire and Safety Company. The system will be operational 24 hours prior to drilling into a probable H2S zone.

1. Double-ram BOP and choke manifold will be installed prior to drilling the surface casing plug.
2. 30-minute Air Pack breathing equipment will be located at the doghouse and briefing area, as indicated on the rig plat.
3. Four 5-minute Air Packs will located on the rig floor.
4. H2S monitors with audible warning devices will be located on
5. Wind direction indicators will be located on opposite sides of the drill pad.
6. H2S Danger sign will be installed on the well access road.
7. Rig radio and/or mobile car phones will be available at all times.
8. Indian Fire and Safety Company will instruct each crew regarding use of the protective equipment.

SOCORRO PETROLEUM COMPANY
KEEL-WEST WATERFLOOD

Drilling operations on the following wells will comply with this Hydrogen Sulfide Plan:

H.E. West "A" No.24 and No.25
H.E. West "B" No.56 thru No.71

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel will receive training from a qualified instructor in the following areas 24 hours prior to drilling into a probable H2S zone on this well:

1. Hazards and characteristics of H2S.
2. Proper use of personal protective equipment.
3. Proper use of H2S detectors, warning systems, briefing areas and evacuation procedures.
4. A copy of this plan will be available at the well site.

II. H2S SAFETY EQUIPMENT

H2S equipment and systems will be installed and maintained by Indian Fire and Safety Company. The system will be operational 24 hours prior to drilling into a probable H2S zone.

1. Double-ram BOP and choke manifold will be installed prior to drilling the surface casing plug.
2. 30-minute Air Pack breathing equipment will be located at the doghouse and briefing area, as indicated on the rig plat.
3. Four 5-minute Air Packs will be located on the rig floor.
4. H2S monitors with audible warning devices will be located on
5. Wind direction indicators will be located on opposite sides of the drill pad.
6. H2S Danger sign will be installed on the well access road.
7. Rig radio and/or mobile car phones will be available at all times.
8. Indian Fire and Safety Company will instruct each crew regarding use of the protective equipment.