Exhibit #1

Avalon 10 Federal #23/2 3/42 Minimum Blow-Out Preventer Requirements All 3000 PSI WP Equipment (Except Casinghead & Spools as Noted Below)





## Exhibit #3 H2S SAFETY PLAN 8-Point Drilling Plan

## Avalon 10 Federal #43 Well

#### WELL-SITE SCHEMATIC:

A well-site schematic (Exhibit #3a) is attached. This schematic indicates:

1. The prevailing winds at this site are out of the NW and SW.

2. Briefing Area #1 (the principle briefing area) is located generally upwind at the western entrance where you drive onto the location. Briefing Area #1 will have a sign indicating the condition of the site (**Green- OK:** no H2S; **Yellow-Caution:** H2S encountered previously at levels greater than 10 PPM and/or currently at levels less than 10 PPM; **Red- Hazard:** H2S encountered or present on site at levels greater than 10 PPM - Cascade system required for work).

3. Briefing Area #2 (the secondary briefing area) will be located at the SE corner of the SW corner of the adjacent Lake Shore Fed. S.C. 10- #2 wellsite. This site is +200' SE of the well.

4. Three (3) windsocks will be placed on location with one at Briefing Area #1, one at Briefing Area #2, and one on the NE corner of the location. This should allow anyone at any position on the location to determine wind direction and move upwind and/or uphill in the event of an H2S release.

5. A 4-channel alarm system will be installed to detect H2S concentrations greater than 10 PPM with individual monitors at the shaker pit, in the substructure of the rig, on the drilling floor and on the mud tanks.

## TRAINING AND EQUIPMENT FAMILIARITY REQUIRED:

All of the rig crew, mud loggers, geologists, company supervisors, and the mud engineer and all other regular on-site personnel will be required to undergo H2S training and pass a certification test. All of these personnel will be aware of H2S release procedures and MUST BE familiar and comfortable with donning 5-minute escape masks/packs and donning 30-minute self-contained rescue units.

All personnel MUST understand the fundamentals of rescue in an H2S environment - you cannot help anyone UNLESS you have a rescue unit ON.

The importance of visual contact between on-site personnel (the "buddy" system) will be emphasized. ALL REGULAR ON-SITE PERSONNEL WILL HAVE AT LEAST ONE "BUDDY".

LOCATION OF RESCUE AND ESCAPE AIR MASKS/UNITS and Other H2S Equipment:

- Rescue units will be located as follows on the location:
  2: 30-minute rescue units will be kept at Briefing Area #1.
  1: 30-minute rescue unit will be kept at Briefing Area #2.
- 2. 5-minute escape units will be kept at the following locations:
  - 5 at the drill floor or in the dog house.
    - 1 in each trailer on location.
    - 2 at the shale pit.
    - 1 at the base of the gas buster.
    - 1 at the choke manifold.
    - 2 at the pill pit.
    - 1 at the pump shed.
    - 1 at the generator house.
    - 1 at the accumulator.

3. A hand-held portable H2S detector kit and a flare gun will be kept at Briefing Area #1 or in the Site Supervisor's Trailer for emergency use.

Page 2 Exhibit #3: H2S Safety Plan: Continued: Avalon 10 Federal #43 Well

# PERIOD OF OPERATION UNDER H2S PLAN AT THIS WELL SITE:

All of the H2S equipment identified above will be installed and operational, and all of the site personnel H2S Training and Certification will be completed, PRIOR TO the drilling out of the Surface Casing at 600'. All new site personnel, after this time, will be H2S Trained and Certified PRIOR TO entering location. This H2S plan will be adhered to until this well is either successfully drilled to Total Depth, Cased and Cemented or Plugged and Abandoned.

### H2S SAFETY DRILLS REQUIRED:

Each crew will be required to conduct an H2S Release safety drill at least once a week. Each of these drills and the time/quality of each drill will be recorded on the appropriate IADC Tour Sheet. Each of these drills will require all location personnel to pick up their nearest upwind 5-minute escape pack and assemble at either Briefing Area #1 or Briefing Area #2, whichever is upwind. Personnel will then be tallied and a rescue party assembled (with 30-minute rescue packs) to recover any "missing" personnel.

# H2S RELEASE DURING WELL CONTROL OPERATIONS:

Personnel will be briefed on the complications that can occur as a result of an H2S Release DURING a well control operation. Some H2S and Well Control Drills will be conducted simultaneously in order to emphasize the proper procedure to follow should an H2S Release occur during a Well Control Operation.

Should an H2S Release occur simultaneous with a kick being detected:

1. Immediately don Up-Wind and Dog House 5-minute escape packs. Keep your buddy in sight.

2. Pick-up the kelly to the slip-set position and set the slips and continue to circulate the well with strokes reduced to the preferred kill rate.

3. Open the Hydraulic Master Valve and the Hydraulic Master Choke. Put choke discharge through the gas buster with fluid returns to the mud pits.

4. Close the Annular Preventer.

5. Move Up-Wind ASAP to the Up-Wind Briefing Area.

6. Tally personnel and assemble a rescue party with 30-minute rescue packs to search for any missing personnel.

7. CALL IMMEDIATELY FOR A CASCADE SAFETY SYSTEM TO WORK UNDER.

Should an H2S release occur during a well control operation after the well control operation is underway:

1. Immediately don Up-Wind and Dog House 5-minute escape packs. Keep your buddy in sight.

2. Put choke discharge through the gas buster with fluid returns to the mud pits. DO NOT CHANGE CHOKE SETTINGS OR CIRCULATION RATE.

3. Move Up-Wind ASAP to the Up-Wind Briefing Area.

4. Tally personnel and assemble a rescue party with 30-minute rescue packs to search for any missing personnel.

5. CALL IMMEDIATELY FOR A CASCADE SAFETY SYSTEM TO WORK UNDER

Page 3 Exhibit #3: H2S Safety Plan: Continued: Avalon 10 Federal #43 Well

## IGNITION OF THE WELL:

IN THE CASE OF AN UNCONTROLLED RELEASE OF H2S AT THE DRILL-SITE:

A FLARE PISTOL WILL BE MAINTAINED AT BRIEFING AREA #1 AND/OR IN THE BONNEVILLE FUELS CORPORATION SUPERVISORS TRAILER (ON THE DESK) AT ALL TIMES FOR THE IGNITION OF THE WELL IN THE CASE OF AN UNCONTROLLED RELEASE OF H2S AT THE SITE.

# CRITICAL PERSONNEL DEFINED - LOCATION ENTRY PROSCRIBED:

Bonneville Fuels Drilling Supervisors and Rig Contractor Supervisors, Rig Crewmen, the Mud Engineer, and Safety Company Personnel are hereby defined as CRITICAL PERSONNEL. NO personnel other than CRITICAL PERSONNEL will be permitted to enter location should a Red Hazard Sign (ambient greater than 10 PPM H2S) concentration be encountered - until such release is controlled and ended, except for critical material delivery personnel as outlined below.

### H2S SCAVENGER REQUIRED IN STORAGE:

An H2S scavenger for water based drilling fluids will be kept in storage at the mude vendor warehouse facilities in sufficient quantity to provide a base concentration in the drilling fluid of 1/2 Pound Per Barrel of drilling fluid in the hole & steel tank mud system.

# PERSONNEL ADMISSION AND SITE REGISTRATION REQUIREMENTS:

If H2S is encountered at the site and the site is functioning under a Yellow Caution Sign (H2S encountered):

1. SITE VISITATION BY NON-CRITICAL PERSONNEL WILL BE DISCOURAGED.

2. ALL ON-SITE PERSONNEL WILL BE REQUIRED TO SIGN-IN AND SIGN-OUT AT BRIEFING AREA ACCESS CONTROL STATION.

3. During Yellow Caution periods Geological and Service Company personnel will be allowed on location ONLY if properly trained and certified for H2S and ONLY to perform work. All such personnel must sign-in and sign-out as above.

If an H2S release with an ambient concentration greater than 10 PPM then the well-site will be operating under the Red Hazard Sign (H2S present):

1. SITE VISITATION BY NON-CRITICAL PERSONNEL IS PROHIBITED. No Geological or Non-Delivery Service Company Personnel will be allowed on location until a Yellow (Caution) condition has been restored to the location.

2. WORK MAY OCCUR ONLY WHEN A CASCADE AIR SYSTEM IS OPERATIONAL, IN PLACE, and IN USE - Except for necessary well control work IF well control operations are already underway. Work to control the H2S release will continue at the site until a Yellow (Caution) Condition is established/achieved.

3. ALL ON-SITE PERSONNEL WILL BE REQUIRED TO SIGN-IN AND SIGN-OUT AT BRIEFING AREA ACCESS CONTROL STATION.

4. REQUIRED MATERIAL DELIVERIES MAY ONLY BE MADE BY H2S TRAINED AND CERTIFIED SERVICE COMPANY PERSONNEL WORKING UNDER A CASCADE SYSTEM WITH THE DIRECT SUPERVISION AND ASSISTANCE OF SAFETY Page 4 Exhibit #3: H2S Safety Plan: Continued: Avalon 10 Federal #43 Well

# H2S PLAN MAY NOT BE REDUCED IN SCOPE:

The aforementioned is an H2S plan which takes into consideration MOST but not ALL of the training, equipment and operational planning issues associated with Potential H2S occurrence at this well-site. No well control or H2S plan can be comprehensive enough to address all possible operational outcomes. This plan may be subsequently modified or improved to fit site, wellbore or drilling equipment constraints with MORE stringent, numerous and comprehensive provision of Safety Equipment, Safety Training, and Safety Personnel requirements. This plan may not be weakened or in any way reduced in the provision of Safety Equipment, Safety Training, or Safety Personnel, however. This plan provides for the MINIMUM required provision of Safety Equipment, Safety Equipment, Personnel for the drilling of the Avalon 10 Federal #43 well.

1. J. Mill

Ronald L. Millet Drilling Manager Bonneville Fuels Corporation

