

## **ROTARY DRIVE SYSTEM**

Emsco 27.5" rotary table powered by the drawworks.

## TRAVELING EQUIPMENT

- Mud King model BHU-350 ton traveling block hook combination with five 1 1/4" sheaves.
- Oilwell PC-300 swivel.
- 4 1/4" x 41' square kelly.
- Baash Ross 2RCS4 square.
  drive kelly bushings

# HANDLING EQUIPMENT

PGDS HydraCat system for makeup and breakout. Varco SSW40 drillpipe spinner International Tool A6C Kelly Spinner. Pullmaster M18, 18000 lb. hydraulic winch for the main line. Pullmaster M12, 12000 lb. hydraulic winch for the high line. Pullmaster M5, 5000 lb. hydraulic winch for the boom line.

### **MUD PUMPS**

Pumps 1 and 2 are identical. They are Mud King MZ-9 triplex pump powered by (1) MTU 12V-2000, electronically controlled engines. Pump is complete with a 20 gallon pulsation dampener and 5 by 6 charging pumps. All piping and valves are 4" 5000 lb. test pressure. Pumps come standard with 6" liners. Other liner sizes are available upon request.

# **MUD SYSTEM**

Shaker tank is 45' x 8' x 6' high, 385-barrel capacity with 9 ft. porch walkway with handrails. (2) PGDS model 44 Magnum linear shale shakers. Gun system is pumped by a 6 x 8 centrifugal pump powered by 75 hp electric motor.

Mixing tank is 45' x 8'x 6' high, 385-barrel capacity. Gun system is pumped by a 6 x 8 centrifugal pump powered by 75 hp electric motor, walkway with handrails, and a Geolograph Pioneer model 400 mud hopper.

## **GENERATORS:**

(2) Spectrum 475 kw generators powered by computer controlled Detroit Diesel Series 60 engines. The generators are enclosed in an 8' x 40' house with switchgear and 75 kva transformer.

### STORAGE TANK:

Water tank is 40' x 8' x 8' high with a 450-barrel capacity. Water is supplied by (2) 1 ½" x 2" centrifugal pumps. Integrally mounted is a 650 gallon closed circuit cooling system with (2) 1 ½" x 2" centrifugal pumps for brake water filtering and cooling.

Fuel storage tank is 5000 gallon capacity with an environmentally safe lube rack including four 105 gal oil tanks, one 225 gal waste oil tank, and one spill prevention materials cabinet.

Secondary and tertiary containment is available upon request.

#### HOUSES

Doghouse is 40' x 8' x 8' high with lockers, drinking water, first aid station, tool room, and Tool Pusher's Office.

Driller's Shack is 25' x 8' x 8' high with knowledge box, drinking water, first aid station, and safety equipment.

Machinery Shed is 35' x 8' x 8' high and houses (2) Gardner Denver Electra-Saver II 30 hp rotary screw air compressors. (2) 70 gpm hydraulic pumps and (1) 20 gpm hydraulic cooling pump.

### **MISCELLANEOUS**

15000 feet of .092" slickline is spooled on the sandline drum.