RIG-11 INVENTORY

CDLC Rig #11: 24 hour rotary drilling rig rated to 11,000' with 4 1/2" drill pipe.

<u>Drawworks & Carrier</u>: Franks 2042 drawworks on 4-axle carrier. Eaton 324 water brake, Hydraulic Tong Cylinders for make up and break out. 2-engine compound.

Rig Power: 2 General Motors Series 60 Detroit engines, 475HP each. 2 Allison 5860, 6 speed transmissions.

<u>Mast:</u> New Crown Energy manufactured 117' hydraulically raise and telescoped. 350,000 hook load capacity. Mounted on drawworks carrier.

<u>Substructure & Back-On Ramp:</u> SEMCO Engineering, 300-ton capacity, 17ft. height substructure with integral rotary drive mechanism with driveline connection to drawworks. Mud boat-back-on ramp unitized for maximum stability.

<u>Traveling/Hoisting Equipment:</u> 150 ton block with 150 ton hook, strung with 8 lines, 1 1/8 ELPS drill line. 150 ton swivel with Foster Kelly spinner type 77. 5 ½ hex Kelly with Varco square drive bushings. Hydraulic pipe spinners from 3 ½ - 5 ½.

Rotary: 17 1/2" opening with split bushing drawworks driven 350,000 load capacity.

Mud Pumps: Two (2) F-800 mud pumps with belt drive. Driven by Cat 398 engines with 800 HP each. Equipped with 3" 5M relief valves and pulsation dampeners.

<u>Mud System:</u> Two tank 750 bbl total capacity with three Brandt type agitators, mixing gun lines, transfer and equalizer lines. Two (2) 6 x 8 centrifugals for mixing and stirring. Powered by electric motors. Two 10" Brandt Desander cones and a Brandt 12 cone Desilter. Brandt DG 5 Degasser.

Shale Shaker: Two (2) Brandt linear motion Cobra shakers.

Generators: Two (2) Caterpillar 3408 engines powering two (2) 350 KW gen sets.

<u>Blowout Prevention and Well Control Equipment:</u> 11" 5M Shaeffer LWS Double BOP's and 11" 5M Hydril Annular. Drilling spool with 3" 5M choke manifold and skid mounted gas buster. 5-station accumulator with air and electric charging system.

Measuring Line: .092 diameter x 10,000' length with Welltronics digital drift indicator.

Air Compressors: I.R. screw type air compressor mounted in generator house.

Water Pumps: Two (2) 3 x 4 centrifugal pumps powered by 20 HP motors.

Water Tank: 300 bbl. Water tank for cement water and brake water storage.

<u>Drill String:</u> 10,000' of 4 ½" 16.60 lb/ft. 18-6 ¼ D.C. Miscellaneous tool, torque gauge.

<u>Auxiliary and Miscellaneous Equipment:</u> Hydraulic hoist lines. Auto-driller, skid mounted toolhouse, elevated upper doghouse. Pipe racks and catwalk.

Fuel Storage: 8,000-gallon fuel tank on skid and oil lubester combination.