

<u>DRAWWORKS</u>: INGERSOLL-RAND (IRI) 1200 SERIES TRAILER MOUNTED RIG WITH IRI 2550 MECHANICAL DRAWWORKS WITH TWIN PARMAC V-80 HYDROMATIC BRAKES

<u>ENGINES:</u> TWO (2) CAT 3412 DITA ELECTRONIC CONTROLLED DIESEL ENGINES RATED 750 HP EACH AT 2100 RPM WITH ALLISON MODEL S6600 TRANSMISSIONS, COMPLETE WITH HYDRAULIC CONTROLS, POWERING THE 1500 HP DRAWWORKS

MAST: IRI 136' MAST WITH 700,000# HOOKLOAD. MAST HAS CAPABILITY TO ACCOMMODATE A 700 HP TOP DRIVE

SUBSTRUCTURE: IRI 22' TELESCOPING SUBSTRUCTURE RATED AT 700,000# ROATARY LOAD WITH 400,000# SIMULTANEOUS SETBACK

TOP DRIVE: TESCO 250 HXI 700 TOP DRIVE AND POWER UNIT, RATED 700HP, 250 TON, (2) SPEED/TORQUE RANGES, 24,000# MAX CONTINOUS TORQUE W/MAX 100 RPM AND 12,000# MAX CONTINOUS TORQUE W/MAX 200 RPM

MUD PUMPS: TWO (2) GARDNER DENVER PZ-11 TRIPLEX PUMPS, 1600HP, EACH POWERED BY 1864HP CATERPILLAR 3512C HD DIESEL ENGINES, EACH W/NATIONAL C-300 TORQUE CONVERTERS, FORGED STEEL FLUID END MODULES, QUICK CHANGE CAPS, K-20-5000 PULSATION DAMPER, OTECO 3" SHEAR RELIEF VALVE, 1 1/2" X 2" CENTRIFUGAL ROD COOLING PUMP, 5" X 6" CHARGE PUMP, 6,000 PSI PRESSURE GAUGE, CHAIN DRIVE ASSEMBLY

OPTIONAL THIRD MUD PUMP: ONE (1) GARDNER DENVER PZ10 TRIPLEX PUMP, 1350 HP, POWERED BY CAT D399 DIESEL ENGINE

## **RIG INVENTORY OF EQUIPMENT**

WELL CONTROL: 1) CIW 13 5/8 5M DOUBLE BOP, 13 5/8 Shaffer Annular CHOKE LINE- (1) 4-1/16" HOSE, KILL LINE – (1) 2 1/16" HOSE, (1) 2 1/16" GATE VALVE, (1) CHECK VALVE

CHOKE MANIFOLD: CAMERON TYPE 10M, W/5-WAY CROSS, (9) 3 1/16" X 10M GATE VALVES, (1) 2 1/16" 10M PSI PRESSURE GAUGE, DSI 36" ATMOSPHERIC DEGASSER, SKID MOUNTED

ACCUMULATOR: KOOMEY TYPE 80 (5) FIVE-STATION CLOSING UNIT, WITH (16) 11 GALLON ACCUMULATOR BOTTLES, (1) TRIPLEX PUMP, (2) AIR PUMPS WITH 120:1 RATIO

MUD SYSTEM: TWO (2) TANK MUD SYSTEM OF APPROXIMATELY 800 BBLS TOTAL CAPACITY

SHAKER TANK OF APPROXIMATELY 400 BBLS, (2) VORTEX FLUID SYSTEMS ORBITAL 3000 SHALE SHAKERS, DERRICK DESANDER W/(2) 12" CONES, DERRICK DESILTER W/(12) 4" CONES, DERRICK VACUFLO 500 DEGASSER, O'DRILL/MCM 15 HP MUD AGITATOR, (2) 5"x 6" SERIES 250 CENTRIFUGAL PUMPS POWERED BY A 75HP AC ELECTRIC MOTOR,

SUCTION TANK OF APPROXIMATELY 400 BBLS W/(2) 5" x 6" SERIES 250 CENTRIFUGAL PUMPS POWERED BY 75HP AC ELECTRIC MOTOR, (4) 15 HP MUD AGITATORS, VORTEX VENTURI SHEARING HOPPER, COVERED ROOF

TRIP TANK: 100 BBL W/(2) 50 BBL COMPARTMENTS W/2" X 3" CENTRIFUGAL PUMP

GENERATOR/UTILITY HOUSE: TWO (2) CATERPILLAR 350 KW AC GENERATORS, POWERED BY 475HP CAT C-15 DIESEL ENGINES W/ ELECTRIC START, AIR COMPRESSORS AND MCC PANEL

**BLOCK/HOOK:** 360 TON, 6 SHEAVE, TRAVELING BLOCK AND ONE 350 TON HOOK. 1 %" DRILLING LINE

ROTARY TABLE: CE 27 1/2" W/HYDRAULIC MOTOR

WATER TANK: 470 BBL COMPLETE W/(2) 3" x 2" SERIES 250 CENTRIFUGAL WATER PUMPS POWERED BY 20 HP AC ELECTRIC MOTORS

FUEL TANK: 12,000 GALLON W/(2) ROPER 3 HP FUEL TRANSFER PUMPS

**DRILLERS DOGHOUSE:** DSI 10' X 20'

AUXILIARY EQUIPMENT: TWO (2) PC12 HYDRAULIC WINCHES, (1) IR K4U AIR HOIST, VARCO SSW 30 HYDRAULIC DRILL PIPE SPINNER

INSTRUMENTATION: WEIGHT INDICATOR, W/TONG LINE PULL, PUMP PRESSURE & ROTARY TORQUE GAUGES, TYPE "D" 5,000 PSI MUD PRESSURE GAUGE

WIRELINE MACHINE: FIVE STAR RETRIEVER W/15,000' OF .092 WIRELINE

WELL SITE TRAILERS: ATCO RIG MANAGER TRAILER 54' X 12'6"X 11'8", CREW CHANGE HOUSE

**TUBULARS:** DRILL PIPE AND COLLARS PER CONTRACT REQUIREMENTS