BACKYARD EQUIPMENT PACKAGE

ITEMS	DESCRIPTION
SECTION 1.0	SUBSTRUCTURE & ACCESSORIES
SECTION 2.0	CATWALK
SECTION 3.0	OVERHEAD EQUIPMENT
SECTION 4.0	MUD PUMP
SECTION 5.0	MUD TANK
SECTION 6.0	GENERATORS/COMBINATION BUILDING
SECTION 7.0	WELL CONTROL
SECTION 8.0	CASING STABBING BOARD
SECTION 9.0	WATER / FUEL TANKS
SECTION 10.0	TUBULARS
SECTION 11.0	HANDLING TOOLS



"Your First Choice for Rigs & Equipment"

SPECIFICATIONS

SECTION 1 - SUBSTRUCTURE & ACCESSORIES

1.1 TELESCOPING SUBSTRUCTURE API 4F 4th EDITION

Rotary capacity 425,000 lbs
Setback capacity 300,000 lbs

• Height 16'

- Certified plaque engraved with A.P.I monogram 4F 4th Edition, PSL 1, E2/U2
- Four hydraulic rams to raise and lower sub structure
- Two hydraulic rams to raise and lower side floor wings
- Hydraulic controls six valve bank with flow divider
- Install two snub posts in between main hole and mouse hole
- Install BOP handling system for 11" x 5000 PSI stack

1.2 ROTARY TABLE

- Supply and install one 17 1/2"Hecker or American Block rotary table
- Rotary Table c/w split Master bushing and insert bowl.
- Supply and install rotary torque system

1.3 CHAIN CASE FOR ROTARY

Supply and install drop down chain case from rotary

1.4 ELECTRICAL

Supply and install (three) four foot explosion proof fluorescent lights in cellar area

"Your First Choice for Rigs & Equipment"

1.5 T SILL

• Fabricate and supply 40' t sill with all lugs to support the free standing mast

1.6 RAMP

Fabricate and supply ramp with 4" welded pump line running down the side

1.7 <u>PAINT</u>

• Substructure has been painted gray

SECTION 2 – CATWALK / V-DOOR

2.1 CATWALK /V-DOOR

Supply 45 ft. catwalk with fold up v-door with pipe cut out

<u>SECTION 3 – OVERHEAD EQUIPMENT</u>

3.1 BLOCK / HOOK

- Supply 160 TON TSM BLOCK / HOOK COMBINATION
- Four each 30" sheaves for 1" drill line

3.2 SWIVEL

- Supply 150 TON TSM Rotary Swivel
- Swivel c/w Kelly spinner stand
- Quill sub 4 ½" Reg. left hand thread 6 5/8" Reg. Left

SECTION 4 - MUD PUMP

4.1 DIESEL ENGINE

Supply (1) one Caterpillar C-15 series engines rated at 540 HP

4.2 PUMP DRIVE

Supply and install one Allison OFS 4700 Transmission

4.3 PUMP #1

Supply one new Gardner Denver PZ-7 mud pump

4.4 MUD PUMPS SKID & ACCESSORIES

- Total building dimensions to be 37' long 12' wide
- Supply one oilfield skid 40' X 12' using 4 beam 12"@50 lb
- Install ¾"X 7" strapping on bottom of skid runners
- Cross members 10" @ 33 LB flooring to be 3/16" checker plate
- Supply and install pump with 4" valve, 2" pop valve, 2" bleeder valve and type D mud gauge
- Supply one precharge pumps 60 hp 6 X 5 X 11 with suction screens
- Fabricate all precharge and suction lines from mud tank
- Fabricate all high pressure lines on skids. Pressure test chart and x-ray done on all high pressure lines
- Supply 5000 PSI shock hose in between pump and ramp with integral ends
- Supply one liner wash pump and liner wash tank with plumbing
- Supply one K20 dampener and cross
- Supply and install one diesel day tank with hosing for circulating system

4.5 ELECTRICAL

• Supply and install (4) four foot fluorescents in each building

• Supply and install one distribution panel

4.6 **PAINT**

• Mud Pump skid has been painted avocado green

SECTION 5 - MUD TANK

5.1 MUD TANK SPECIFICATIONS

- Total tank dimensions to be 50' long 12' wide
- One oilfield skids 53' X 7'10" using three beam 12" @ 50 lb.
- Cross members 10" @ 33 lb with 1/4" formed plate flooring
- Walls on tank corrugated 1/4" plate tank perimeter tbg frame
- Fabricate 11 gauge building over top of mixing hopper and pumps
- Fabricate and install hopper door access on side of mix building
- Supply and install exhaust fan
- Fabricate and install two doors on front of mud mix building
- All unions for piping on tanks will be hammer style
- All suction lines will have bridge gate valves and be sumped
- Supply and install 30" poor boy degasser
- Suction lines inside tank 10" for pump and 6" for mixing
- One 4" mud roll line with 2" mud guns
- One 6" hopper lines with buttery fly valves
- One discharge manifold for both pumps

5.2 TANK CAPACITIES

- Pill tank 30 bbls.
- Suction tank 120 bbls.
- Settling tank 105 bbls.
- Settling tank 110 bbls
- Shaker tank 100 bbls.
- Sand trap 10 bbls
- Trip tank 25 bbls.

5.3 EQUIPMENT

- One DFTS mud conditioner
- Mud cleaner consist of 16 cone Desilter and 2 cone Desander
- Three MA 10 hp 380 volt RG mud agitators
- Supply and install five jet guns
- Supply and install single hopper mixing system
- One 8" X 6" X 14" 60 HP 460 volt overhead motor driven by belts for Mixing pump

'Your First Choice for Rigs & Equipment"

- Two 6" x 5" x 11" 50 HP 380 volt overhead motor driven by belts (Desilter & Desander pumps)
- One explosion proof 10 HP trip tank pump

5.4 ELECTRICAL

- Supply and install four fluorescent lighting on telescoping posts
- Supply and install all electrical hard wiring and jumper cords
- Supply and install distribution panel at mixing end of tank
- Supply remote switch for trip tank pump to driller's panel

5.5 <u>PAINT</u>

• Mud Tank skid has been painted avocado green

SECTION 6 - GENERATORS / COMBINATION BUILDING

6.1 DIESEL ENGINE

Supply Two Caterpillar C-15 engine rated at 540 HP

6.2 GENERATORS

• Supply Caterpillar generator prime power is (50Hz) 355 kW

6.3 ELECTRICAL

- Supply one transfer switch 600 amps
- Supply one 380 Volt panels with pin and sleeve plugs
- Supply one 380/222 panel with pin and sleeve plugs with 100 amp outlet for lease accommodation shacks
- Supply and install plug box on building for cord ends
- Supply spare starters and plug in for 60 HP and 30 HP
- Supply and install four foot fluorescents inside building
- Supply and install two sodium vapour lights on roof
- Supply all extension cords from gen building to outside support buildings

6.4 BUILDING

- Fabricate triple beam skid 48' long x 16'-6" wide from 12" beam
- Install 6" roll ends and cover entire skid with 3/16" checker plate
- Shear, form and stand building 45' long x 12'-6" wide x 8'6" high
- Install tubing roof perimeter and sloped roof panels
- Install (3) divider walls inside building for (3) separate rooms
- Supply and install steel doors/frames into each room
- Fabricate 2 ft. wide cable tray on top of combination building
- Install 6x4 bumper posts on both ends of skid

6.5 LIGHTPLANT ROOM

- Lightplant room is 12' wide x 20" long
- Supply and install (2) two Caterpillar C-15 355 kW, 380V, 3 phase diesel generators
- Fabricate and install 140 gallon fuel tank in corner of room
- Supply and install Sullivan Palatek 30 hp rotary screw air compressor with 120 gallon tank
- Install hinged door on side of building for electrical cabling access.

6.6 ACCUMULATOR ROOM

- Accumulator room is 12' 6" long x 12' wide and 8' 6"
- Supply and install 4 station 120 gallon Control Technology Accumulator
- 10 each 11 gallon accumulator bottles
- One T-25 Weatherford triplex charge pump
- Two 8 ½", 40:1 air pumps

6.7 **PAINT**

Combination building has been painted gray

<u>SECTION 7 - WELL CONTROL</u>

7.1 CHOKE MANIFOLD

- Oilfield skid dimensions to be 10' long 6' wide.
- Supply one single gut 2" X 3" choke manifold c/w manual choke

7.2 BLOWOUT PREVENTORS

 Supply one 11" 5000 PSI new Cameron Townsend T-84 double ram preventer with one set 3 ½" rams and one set of blind rams

"Your First Choice for Rigs & Equipment"

7.3 ANNULAR

Supply one 11" 3000 PSI new Cameron (Townsend) T-90 Annular

7.4 BOP ACCESSORIES

- Supply one 3 1/8" SS flanged 30' 5000 PSI choke hose
- Supply one adapter spool 11" x 5,000 psi 11" x 3,000 psi
- Supply one 11" 5000 PSI drilling spool with 3 1/8" outlets
- Supply one 3 1/8" 5000 PSI HCR gate valve (hydraulic)
- Supply and install 3 1/8" 5000 PSI manual gate valve
- Supply two 2 1/16" 5000 PSI manual gate valve
- Supply one 2 1 /16" 5000 PSI check valve

- Supply one DSA 2 1/16" X 3 1/8"
- Supply all studs and ring gaskets

<u>SECTION 8 – CASING STABBING BOARD</u>

8.1 CASING STABBING BOARD

• Air operated casing stabbing board.

SECTION 9 - WATER / FUEL /CHANGE HOUSE SKID

9.1 WATER TANK

- Supply 100 barrel skid mounted water tank
- Supply and install two 4 x 3 Centrifugal transfer pumps
- Supply and install discharge and suction manifolds
- Tank will be built from 1/4" plate
- Tank access hatch and drain plug

9.2 FUEL TANK

- Supply skid mounted fuel tank 100 barrels
- Supply and install two 3/4 hp 110v fuel pumps 1 ½" X 1"
- Supply and install discharge and suction manifolds
- Supply one fuel water and solids separator
- Tank will be built from 1/4" plate
- Tank access hatch, drain plug and sight glass

9.3 CHANGE HOUSE

- Change room is 12' wide x 12' 6" long
- Fabricate and install fold down lunch table
- Supply and install padded bench
- Supply and install 12 change lockers

<u>SECTION 10 – KELLY BAR & BUSHINGS</u>

10.1 KELLY BAR & KELLY DRIVE BUSHINGS

- 4 1/4" Hex Kelly 37' overall c/w shipping scabbard.
- Square Drive Bushing for 4 ¼" Hex Kelly & 17 ½" rotary table.