

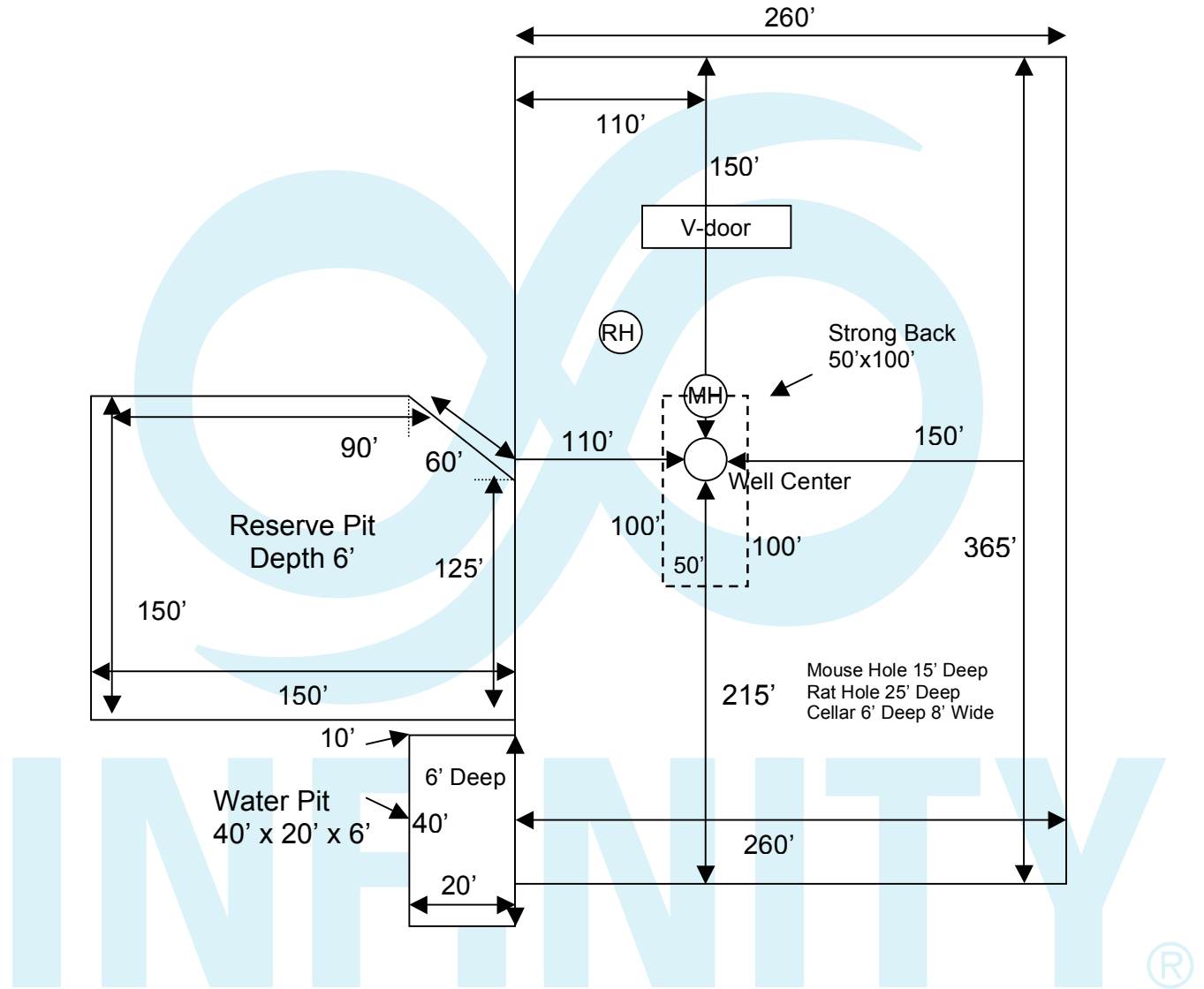
# **BIG DIPPER**<sup>TM</sup>

**MERCURY CLASS** by ORION

- DRAWWORKS:** Continental Emsco C-1, 1500HP powered by two, 800HP DC traction motors. The drawworks has an auxiliary Wichita Brake for primary braking and to interface with Varco Electronic Drilling System.
- ENGINES / GENERATOR:** Three Caterpillar 3512DITA diesel engines each rated at 1321HP, unitized with WEG 1050KW generators supplying AC power to IDM SCR house powering mud pumps, rotary table and auxiliary equipment. 12,000 Gallon fuel tank.
- MAST:** National Oilwell 136' telescoping mast with 750,000# hook load. Can accommodate 350 ton top drive.
- SUB STRUCTURE:** IDM 22' hydraulically telescoping substructure rated at 735,000# rotary load with 400,000# simultaneous setback. Rig floor and substructure use an integrated drainage system for maximum fluid containment.
- ROTARY:** Emsco Type 37½" Rotary independently driven by one 800 HP DC traction motor.
- BOP:** One 13-5/8" 10M double ram BOP, one 13-5/8" 10M single ram  
One 13-5/8" 5M annular. All are Shaffer type BOP's and meet API 16D.  
One Koomey 6 station accumulator, API 16E. A 10M flexible choke line and 4" X 4" 10M choke manifold.
- MUD PUMPS:** Two (2) F-1600 triplex mud pumps each pump is equipped DC traction motors rated at 1600HP
- MUD SYSTEM** 848 barrels total active capacity. Two covered 424barrel tanks with round bottoms and electric agitators for optimum mixing/blending and ease of clean out. Each tank contains two 5 X 6 X 75HP centrifugal pumps. Hopper is remote for ease of use with bulk tanks. Three Brandt King Cobra shale shakers, Brandt DG-10 degasser and Brandt 16 cone desilter are all unitized on a hydraulically raised mud processing skid. A separate skid incorporates one 106 barrel trip tank with 2 X 3 X 25HP centrifugal pump.
- TOP DRIVE:** Canrig 350 Ton AC
- OVERHEAD STRING:** One 400 ton, six sheave Block, with a 12 line string up of 1-3/8"
- DRILLER CONTROLS:** Varco Electronic Driller and Block Control System enable near steady state WOB while drilling. Block speed controls minimize swab and surge pressures and increase tripping efficiency. Drawworks speed is joystick controlled with touch screen and manual control of E-Drill and SCR. System is located in an air conditioned driller's cabin.
- DRILL PIPE:** 10,500' 5" drill pipe of sufficient grade and weight to provide 100,000# margin of over pull.
- DRILL COLLARS:** 3-8" 21-6 ½" drill collars.
- AUXILIARY EQUIPMENT:** Mathey wireline unit with 25,000' of .092 wireline  
18" high catwalk and pipe racks  
Motorized drill line spool  
Toolpusher and crew quarters  
Meeting and changehouse combo with A/C  
Hydraulic pipe and kelly spinner  
0-7 degree drift indicator  
Varco electronic drilling recorder  
Hot water power washer

# BIG DIPPER™

MERCURY CLASS by ORION



# **BIG DIPPER**<sup>TM</sup>

**MERCURY CLASS** by ORION



For more information - [oriondrilling.com](http://oriondrilling.com)

**ORION**<sup>®</sup>  
DRILLING COMPANY  
brighter thinking.<sup>™</sup>