



ESTIMATED EARTHWORK QUANTITIES		
PAD TOPSOIL (6" DEPTH)	3,760	C.Y.
ROAD TOPSOIL (6" DEPTH)	120	C.Y.
VISUAL BERM TOPSOIL (3" DEPTH)	170	C.Y.
RELOCATE EXISTING TOPSOIL	120	C.Y.
PAD EXCAVATION	14,790	C.Y.
ROAD EXCAVATION	10	C.Y.
PAD EMBANKMENT (10% SHRINK ASSUMED)	7,380	C.Y.
ROAD EMBANKMENT (10% SHRINK ASSUMED)	740	C.Y.
VISUAL BARRIER BERM EMBANKMENT	2,490	C.Y.
WASTE MATERIAL	4,190	C.Y.
TOTAL EARTHWORK VOLUME	18,970	C.Y.

**WELL SITE DESIGN AND CONSTRUCTION NOTES:**

1. The graded well pad elevation was selected to place the drilling rig on cut earth at the maximum possible elevation.
2. No frac water pit is planned on this site.
3. The approximate volume of the water storage pit is 930 C.Y. Material for the pit reclamation will be obtained from the waste material stockpile.
4. Within the computed catch lines, the area of the proposed pad is 4.66 acres, and the area of the waste material stockpile is 0.34 acres, and the area the visual barrier berm is 0.41 acres. The berm is to be permanent and is not to be disturbed during interim reclamation. This area does not include the area of the topsoil stockpile nor the small additional area required for grading machine travel. The estimated area enclosed by the disturbance limits as shown is 6.51 acres.
5. The area of the road within the computed catch lines is 0.12 acres.
6. The well will be drilled with a semi-closed loop mud system. During the drilling of the well, the cuttings will be placed in the temporary cuttings storage area shown. This area will be constructed on the pad surface elevation with dikes of a 5-foot height. The interior of the area and berm inslopes will be lined with a liner meeting BLM specifications.
7. Immediately after completion of drilling of the proposed well, the cuttings will be removed from the temporary storage area and buried in the permanent storage area shown for that well. This area will be excavated with nearly vertical slopes to a 10-foot depth. A liner meeting BLM specifications will be installed in the excavation. The cuttings will then be placed in the excavation. The liner will be closed over the cuttings and covered with earth. This will be a short duration operation requiring perhaps one day of work.