

List of possible locations (existing locations are not included; see below for maps):

800-1 and 800-2: We have not seen these sites, but would like to have at least one station on this level near Yates.

1700-1: This is a blind alley, located at a 4-way intersection. Air flow is strong, but could be reduced by placing a door nearby. Some water is present, and may increase with future drain. A lot of rubble will be removed from intersection, and placed at the end of the blind alley (making the alley shorter, which is fine for us). Some additional rubble may need to be moved to get to bedrock. Power and network may already be available (not sure). Need concrete. Should know more about this location in a week.

1700-2: This is a blind alley behind a transformer that could be moved elsewhere. No water, but strong air-flow through the drift. The alley is off of the drift, at a large angle, so this may help with the air flow. Probably need concrete (not sure), power, network.

1700-3: This is a large quiet alcove, but has a lot of rubble that would need to be cleaned up. Not sure about concrete, needs power/network.

1700-4: This is a powder magazine room, off of the drift, just before the Y that separates toward the 17-ledge. Has concrete, no water, may need 10-20 bolts. Otherwise looks very good. Needs power/network.

1700-5: This is another good alcove off of the drift (maybe powder magazine?). It is behind the door along the drift going north-west (beyond the Y that separates toward the 17 ledge). Has concrete. Needs power/network.

2000-1: This is a location near a stope, a little off of the drift going north-west. Very quiet and dry, but needs concrete pad, removing rails, and probably some bolting. Also needs power/network. We would construct nested huts here, placing walls appears impractical and probably unnecessary.

4100-1: This is an air lock, located between two doors. So the air flow is minimal when the two doors are closed. It is quiet, has concrete, has network, but needs power (from one of the nearby stations).

4100-2: This is the location used by Bill Roggenthen. Nice room, concrete floor, has power and network. Would have to cover the door with insulation.

4850-1: This is the mechanic tool room (blind alley), in the back of a large area. Has concrete, dry, quiet, needs power/network. There is also a doghouse nearby (featuring a large stone in the middle of the room), which could be a backup at this location.

4850-2: This is the old motor repair area, near the back of the rescue chamber, and across from the Majorana clean room. It is a large area, has little air flow, but it is close to the drift that has major air flow. So it is a bit noisy, but has concrete, power and network. We would select a corner and construct 2-3 nested huts (i.e. there is no room to wall-off).

4850-3: This is the electrical room, at the Y-intersection. It has concrete, power and network, ground support also seems fine. There is some old equipment that may need to be moved slightly, but not much since we would need only a corner to place 2-3 nested huts. We could also cover the door with insulation,

but would probably need SURF help with it (large opening). There is some air flow, but the room is off of the drift.

4850-4: This is inside the Davis campus. There are actually two locations of interest. One is an alcove off of the LN drift, across from the stairs/incline. The other is an alcove off of the hallway leading to the clean room entrance. Both are noisy (acoustically) and are about 200-300 feet from the Yates shaft. Both have concrete, power, and network, so easy installation.

Our preferences, listed from highest to lowest priority:

- 1) On 4850L we are interested in all 4 listed locations.
- 2) On 1700L, our preferred option is to reach 1700-5 if costs are manageable. In this case, we would like to install a couple more stations along the way, preferably 1700-4 and either 1700-1 or 1700-2 (1700-1 may be better, but the fate of this location is yet to be decided). 1700-3 is of lowest priority on this level, it appears to be just above the existing locations at 2000L, so we probably won't pursue it. If the power and ground control costs associated with 1700-5 turn out to be prohibitively expensive, we would like to consider building 1700-4, and another 1 or 2 stations along the way to 1700-4, similarly to above.
- 3) On 800L, one of the two stations should suffice, preferably the one nearer Yates.
- 4) On 4100L, the 4100-2 location should be an easy and cheap installation so we will pursue it. 4100-1 will be pursued if the associated costs are sufficiently low.
- 5) On 2000L we are interested in only one location. However, if we go for 1700-5 and 1700-4, then 2000-1 location would be of limited use to us, and we would pursue it only if the costs are sufficiently low to fit the budget.

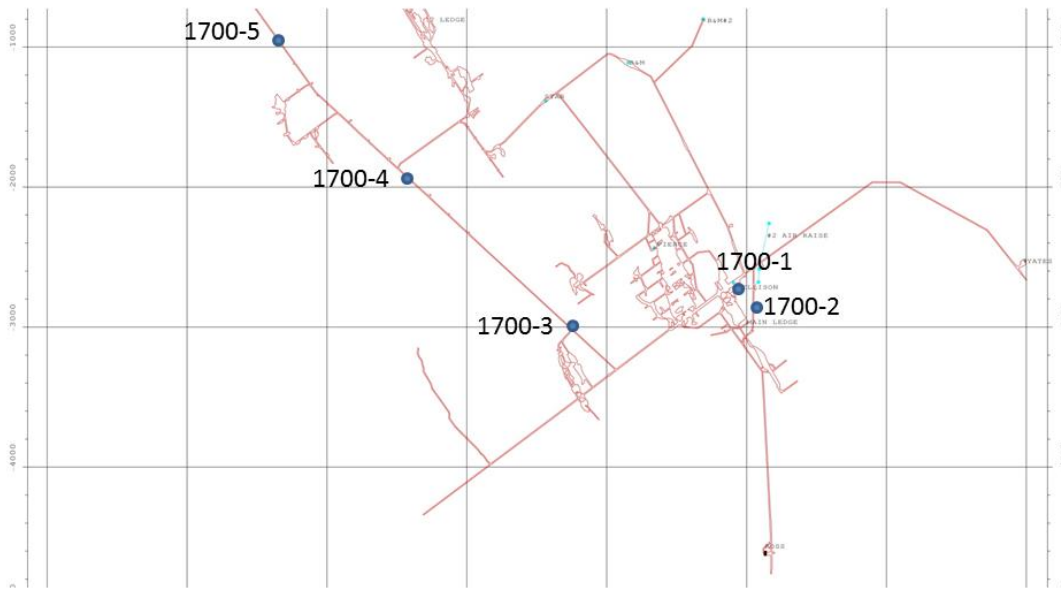


Fig 1: 1700 level possible locations.

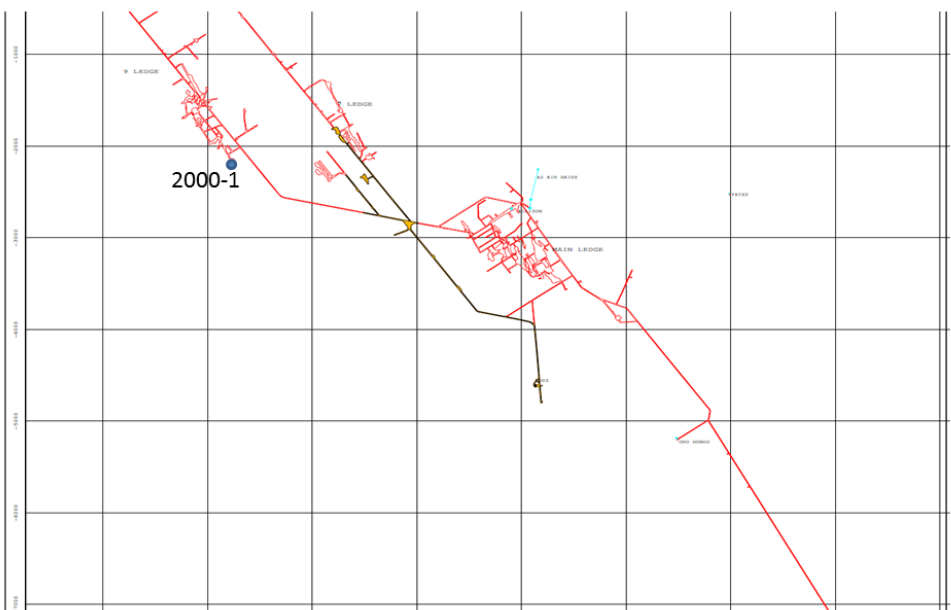


Fig 2: 2000 level possible locations.

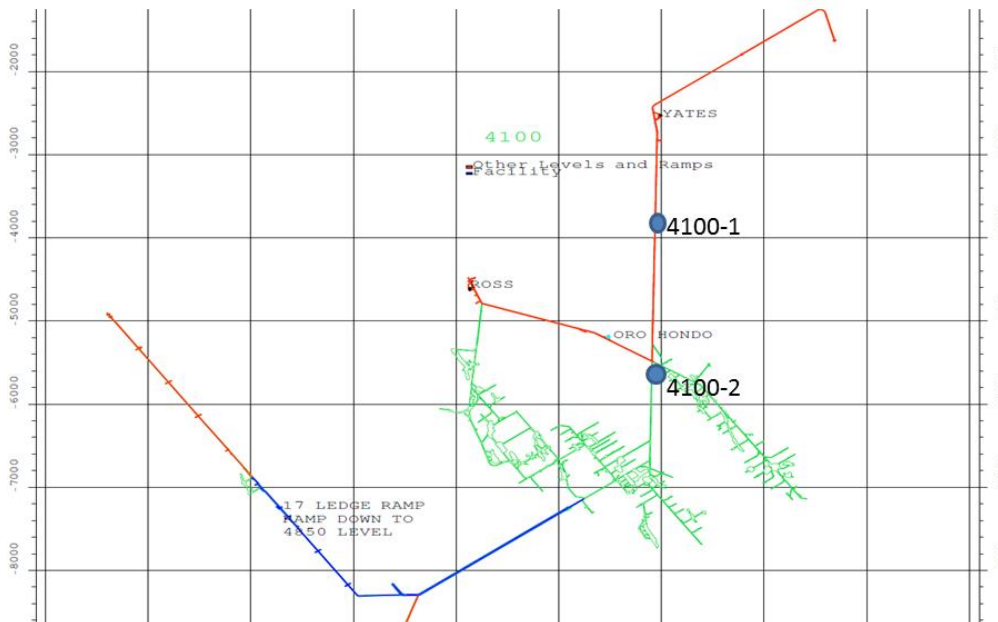


Fig 3: 4100 level possible locations.

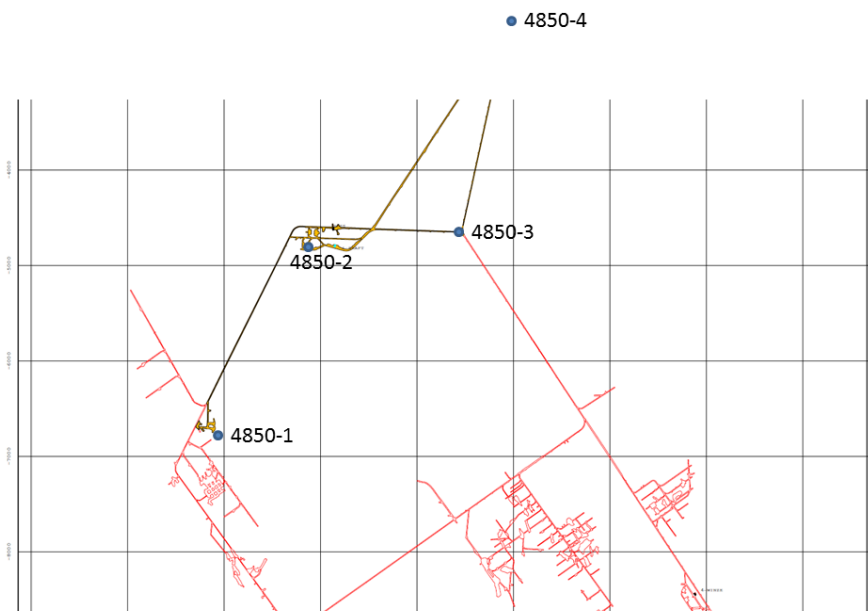


Fig 4: 4850 level possible locations.

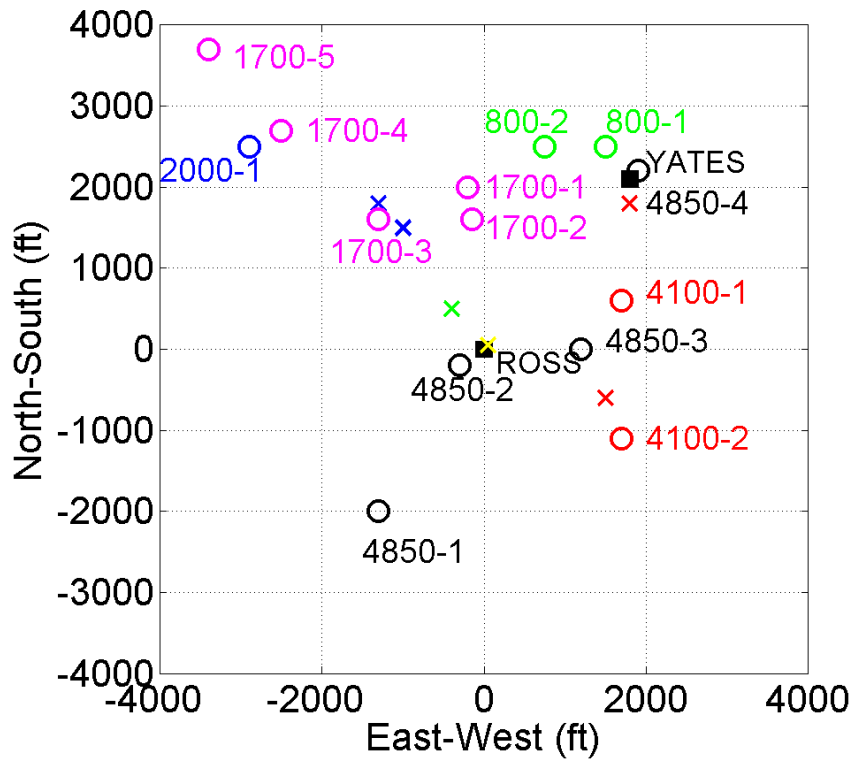


Fig 5: x's denote existing stations and o's are possible locations discussed above. Color code: 4850 (black), 4100 (red), 2000 (blue), 1700 (magenta), 800 (green), and 300 (yellow).