

Priorities for our September trip:

- 1) SURF to prepare all four stations at 4850, the 1700-1, and the 4100-2 station by Sep 22. This includes rebolting, pouring concrete pads as necessary, cutting a groove in concrete at 1700-1, clearing up the access to 4850-1 (17-ledge location). See below for more detail on each of these locations. We do NOT need to have fibers installed at these locations in September, but it would certainly help to have them if possible.
- 2) By Sep 22, we will have delivered to SURF: foam panels and granite tiles if necessary. It would be great to have them delivered to our underground sites before we arrive, more on that later.
- 3) Our plan is to build foam panel huts (and walls in some locations) at the above 6 stations in September. We will also grout the granite tiles to the concrete pads.
- 4) We will also order the fiber and the GPS units asap. We need the fiber installed at all our locations by Dec 2014, but if some of it is installed by Sep 22 we could also test the GPS system during our September trip.
- 5) We plan to start installing the surface locations during the Sept trip as well.
- 6) Note: underground access possible 09/22-25, but Friday 9/26 is off. Could work on the surface sites on Friday 9/26.

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

1700-1: This is on a large concrete square, located at a 4-way intersection. Air flow is strong, but could be reduced by closing the nearby door well. Some water is present, and it drains through a hole in the middle of the concrete square. There is substantial dripping, try to reduce it with gutters etc. Power available, fiber cable needs to be installed. Need to cut a groove (channel) in the concrete so that the water level never reaches the surface of the square. Plan to install the instrument huts at a corner of this square. Also need a small pad (2'x2' or so, wood or cinder blocks would do) to place the digitizer, about 15-20' away from the square.

1700-3: This is in the 26 cross cut drift. Have to remove the rails, dig to bedrock and pour a 2'x2' square concrete pad for the instrument. Also needs a concrete pad (not necessarily on bedrock), or cinder blocks, or some wood blocks, on which we would place the batteries and the digitizer. Pad of size 5'x4' or 2.5'x8.5' should work. Need power and fiber cable. Since the rails don't reach to the main drift, try to keep the battery pad about 50' from the main drift. The 2'x2' instrument pad should be further away from the main drift, 15-20' away from the batteries.

1700-4: This is a powder magazine room, off of the drift, just before the Y that separates from the drift toward the motor barn. Has concrete, sufficient for instrument, digitizer and batteries. Needs power and fiber cable. Needs to be cleaned a bit. Will install walls (probably 2 foam panels walls) to separate it from the outside.

1700-5: This is another good alcove off of the drift (maybe powder magazine?, "9-ledge"). It is behind the door along the drift going north-west (beyond the Y that separates from the drift toward the motor barn). Rails need to be removed, have to dig to reach bedrock and pour a 2'x2' concrete pad for the instrument (pad should be toward the back of the alcove). Also need some cinder blocks or wood blocks to make a pad for the batteries and the digitizer (5'x4' near the entrance to the alcove would be best). Needs power and fiber.

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. Plan to cover the door with insulation (foam panels). Also, Bill mentions that the floor has buckled, so need to cut it and pour a new 2'x2' pad for the instrument.

4850-1: This is the mechanic tool room (blind alley), in the back of a large area. Has concrete, dry, quiet, needs power and fiber. Currently rubble in front of the room, need to clear a passage through the rubble to access the room. Don't know the size of the room, but should be large enough for instrument and batteries. Plan to cover the entrance with foam panels.

4850-2: This is the room with a roll-up door, used by Jamey. It is dry, but near a noisy filter down the drift (better than other options in the area). 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, but could place panels to cover some of the holes in the entrance wall).

4850-3: This is the electrical room, at the Y-intersection. It has concrete, power and network, ground support also seems fine. Plan to place 2-3 nested huts in a corner. 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, an alcove off of the LN drift, across from the stairs/incline (a backup location could be an alcove off of the hallway leading to the clean room entrance). Needs a concrete pad 2'x2' toward the back of the alcove. Will use nested huts for insulation (wall would be difficult). Power and network are available nearby.

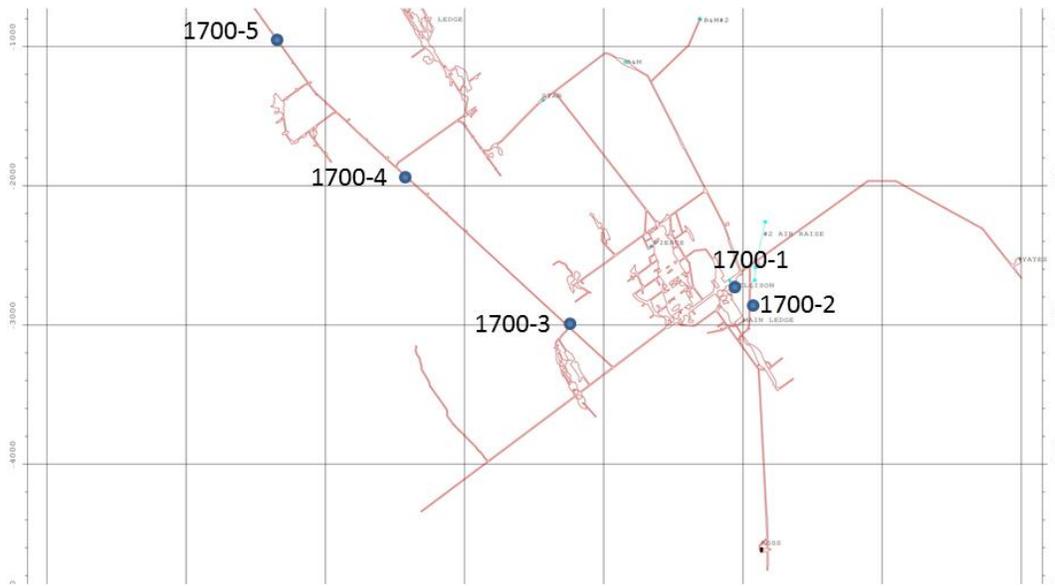


Fig 1: 1700 level possible locations.

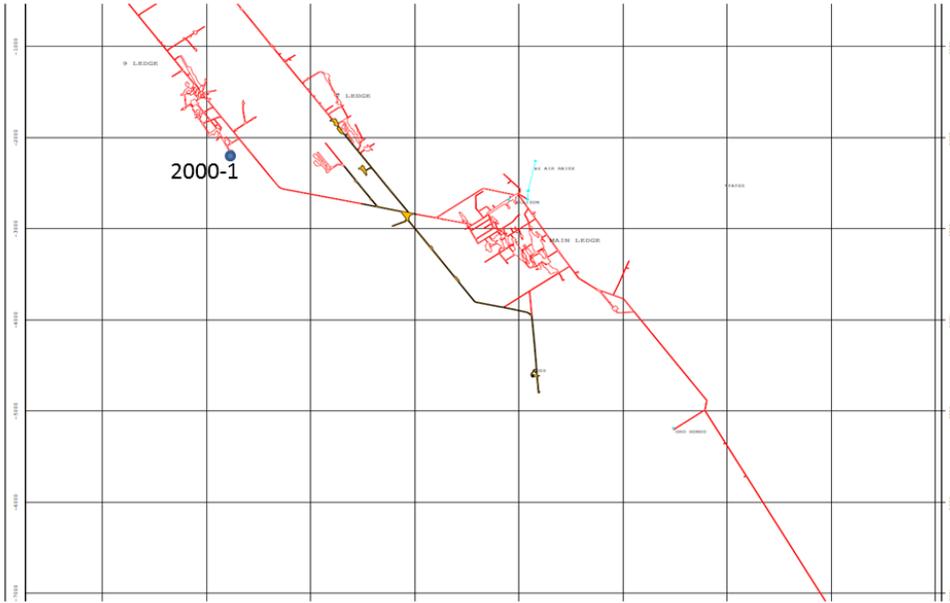


Fig 2: 2000 level possible locations.

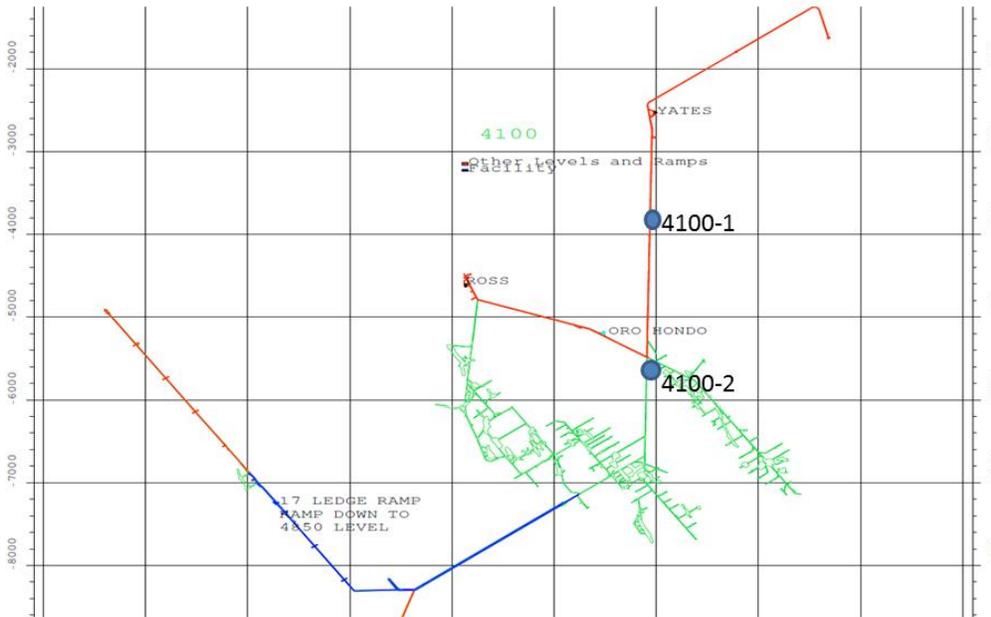


Fig 3: 4100 level possible locations.

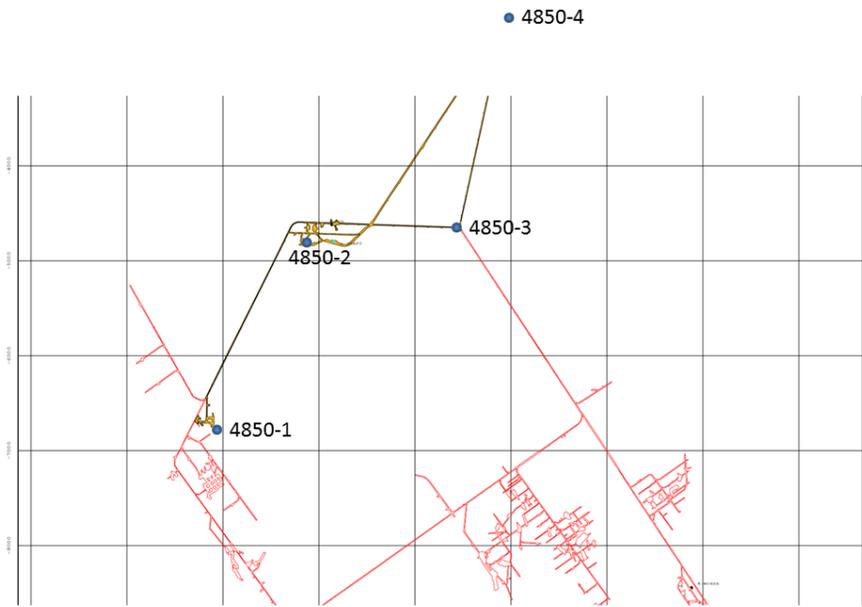


Fig 4: 4850 level possible locations.

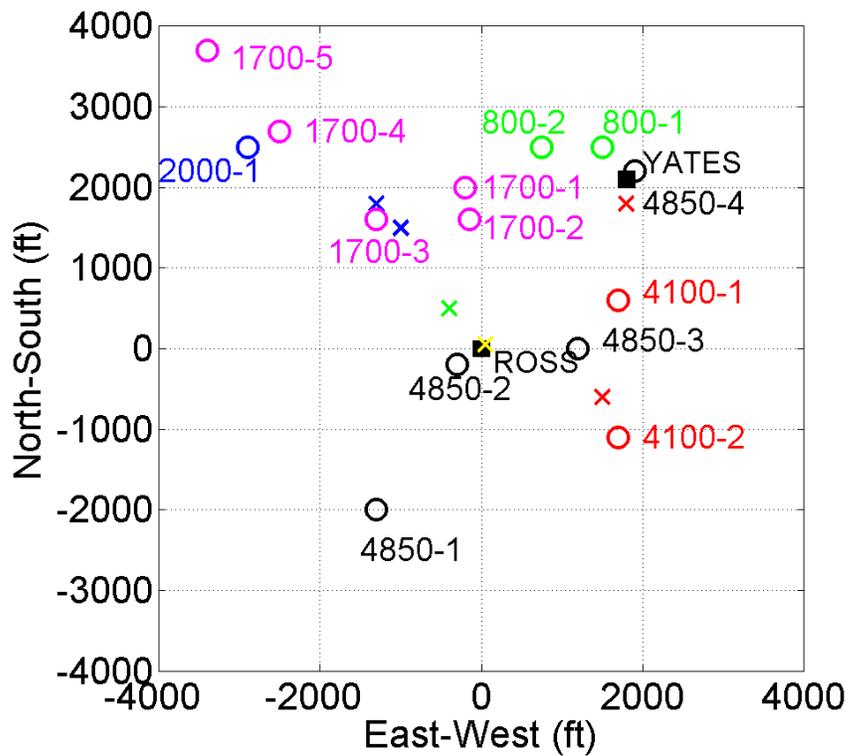


Fig 5: x's denote existing stations and o's are possible locations discussed above. Color code: 4850 (black), 4100 (red), 2000 (blue), 1700 (magenta), 800 (green), and 300 (yellow).

Other locations that will not be pursued:

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.

1700-2: NOT AN OPTION ~~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.~~

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.