

Briefing Statement

The Galloping Swede mine is an underground copper mine with a sulfide ore deposit. The mine is multiple levels. The ore is drilled and blasted using mechanized room and pillar mining on each level with conventional stopes between levels.

There are three main levels in mine; the 2500 level, 2800 level and the lowest, 3100 level. At 0630 hours this morning the graveyard shift reported that they smelled something like burning rags when they exited the mine. We conducted a gas test of the exhaust before sending the day shift under ground at 0700. No gasses were detected.

At 1000 hours we observed smoke coming out of the portal and evacuated the mine. The miners on the 3100 level are unaccounted for.

Our mine rescue teams have explored the 2500 and 2800 levels and did not find any fires. It is now 1300 hours and our teams are exhausted and we need your assistance. A fresh airbase has been established just outside the 3100 level. We would like you to explore and map the rest of the 3100 level, extinguish or seal all fires and bring the unaccounted miners to the fresh airbase.

The 3100 level crew consists of three miners working various areas on the level.

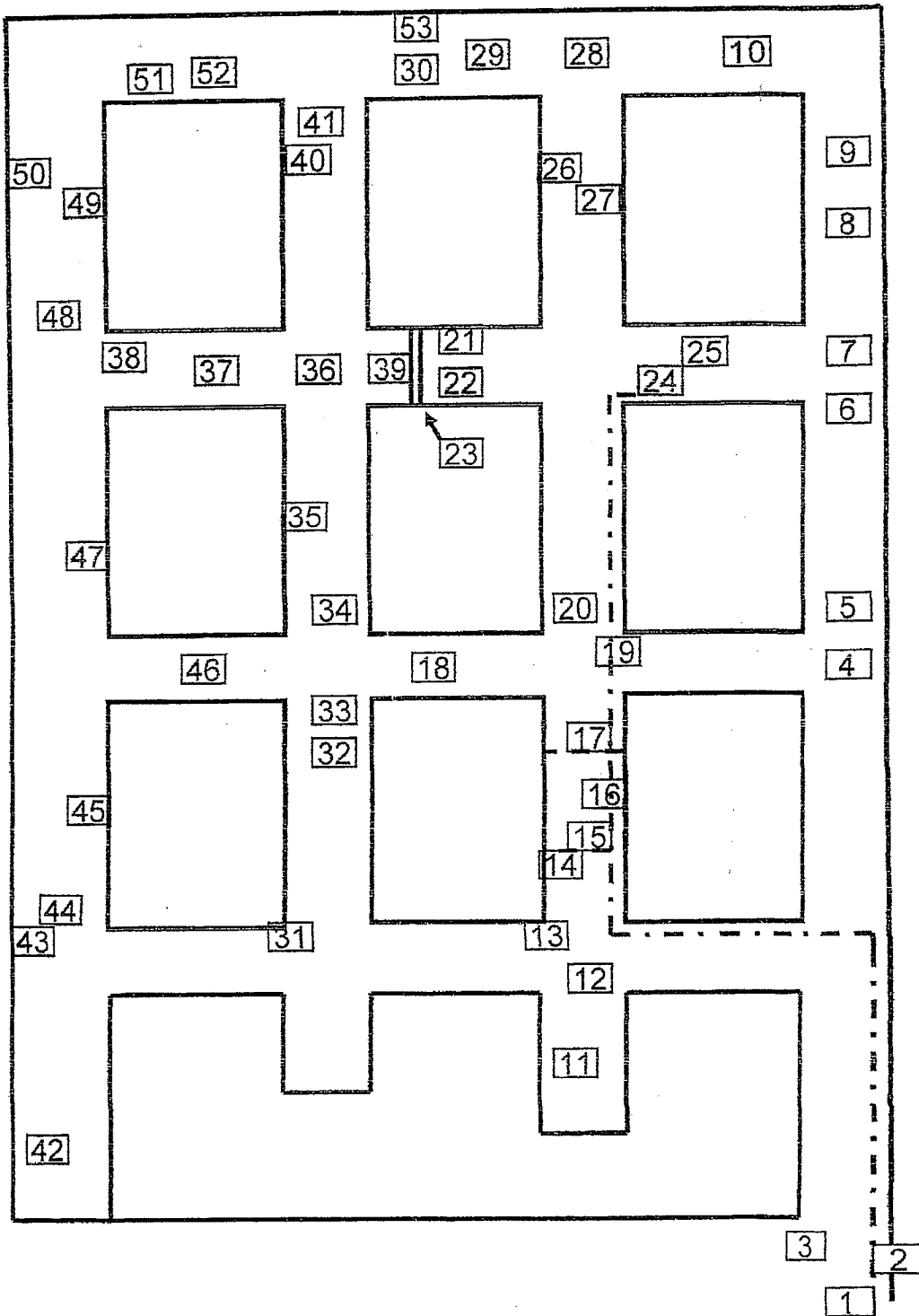
Additional Information:

- The mine map is the latest update.
- The 3100 level is ventilated by air movers.
- The mine exhausts up the decline and out the portal
- The upper levels have two different bore holes that intake air from surface
- The electrical power is off and locked out.
- All materials you need to work this problem are located in the mine or the fresh air base.
- The mine is typically a dry mine
- The mine is not a gassy mine.
- We have had some fires in the past due to the sulfides in the ore.
- Ground support is mostly rock bolts and mats, timber in some areas. The mine has numerous cross faults.
- A back up team has arrived at the mine
- All local, state and federal agencies have been notified.
- There are no explosive materials stored on the middle level.

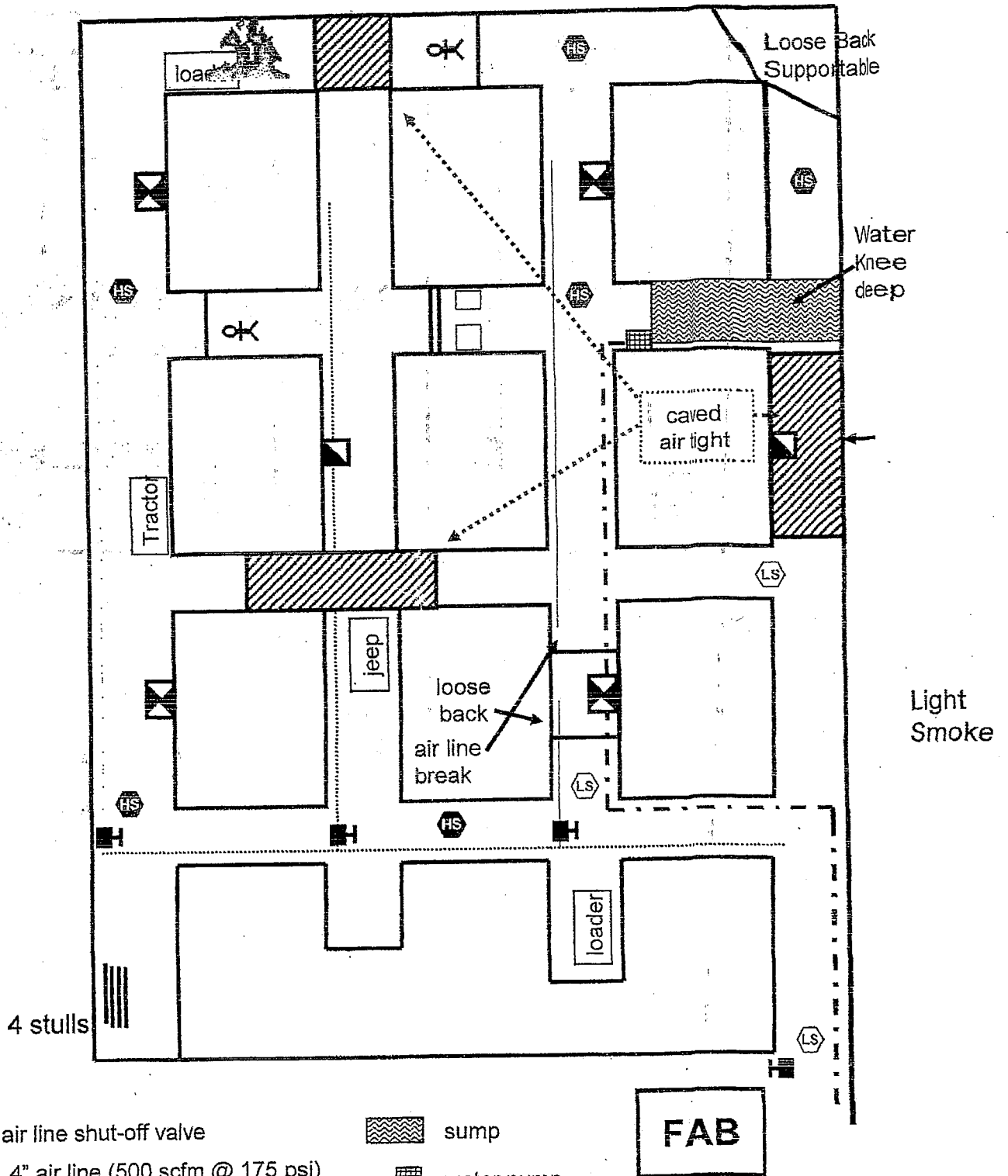
When you arrive at the fresh air base and check in with the mine manager you will receive a copy of this briefing statement and two copies of the mine map after you start the clock. You will have 1 hour and 45 minutes to complete this problem. The No. 1 judge will advise you when you have 5 minutes left of the total time.








Good Luck!!!!!!!!!!!!!!!!!!!!

Placard Map



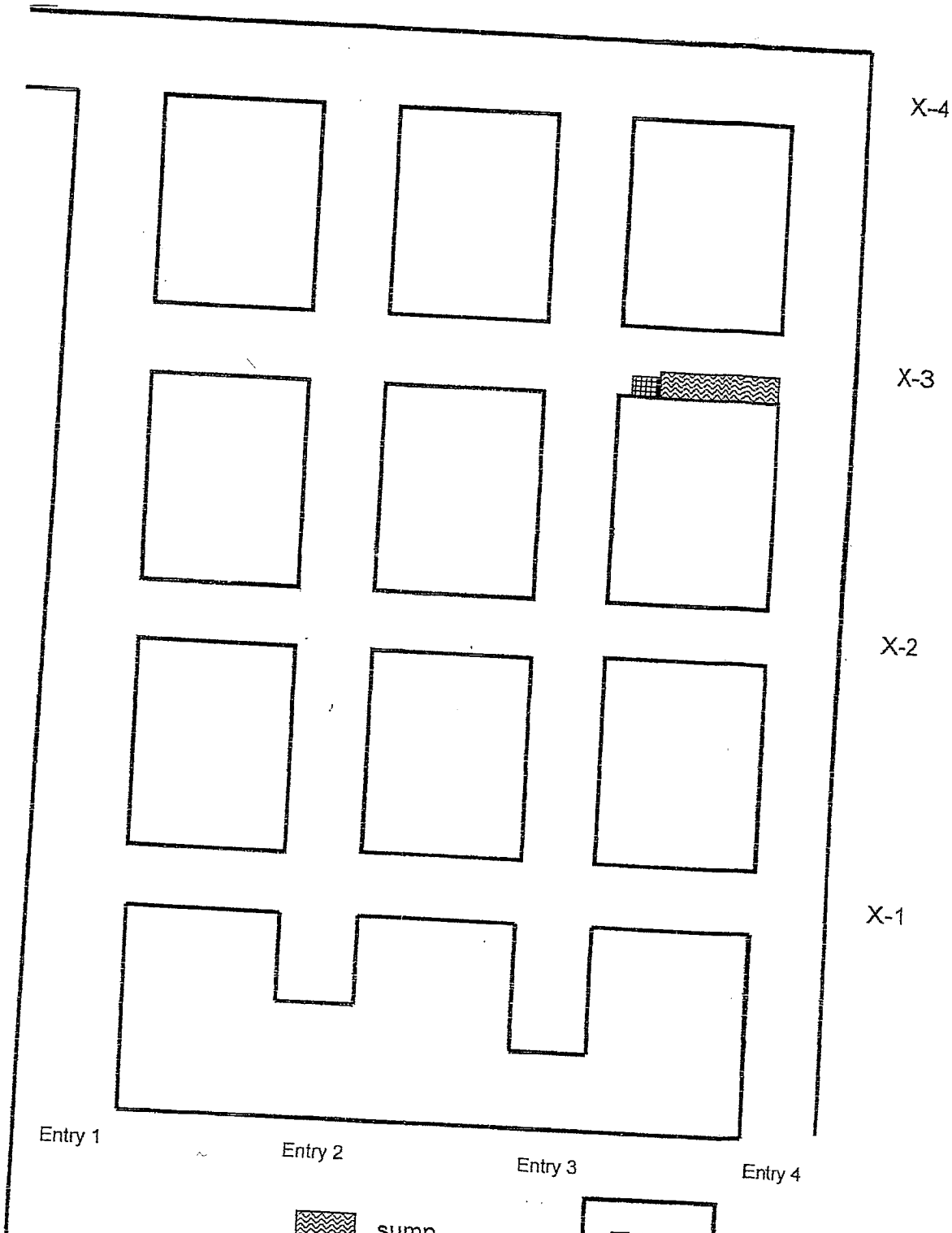
PROBLEM MAP



-  air line shut-off valve
-  4" air line (500 scfm @ 175 psi)
-  6" water line
-  sump
-  water pump
-  Manway up
-  ore pass (above)



TEAM MAP



sump



water pump



ore pass (Above)

FAB