

SAGO MINE EXPLOSION

JANUARY 2, 2006

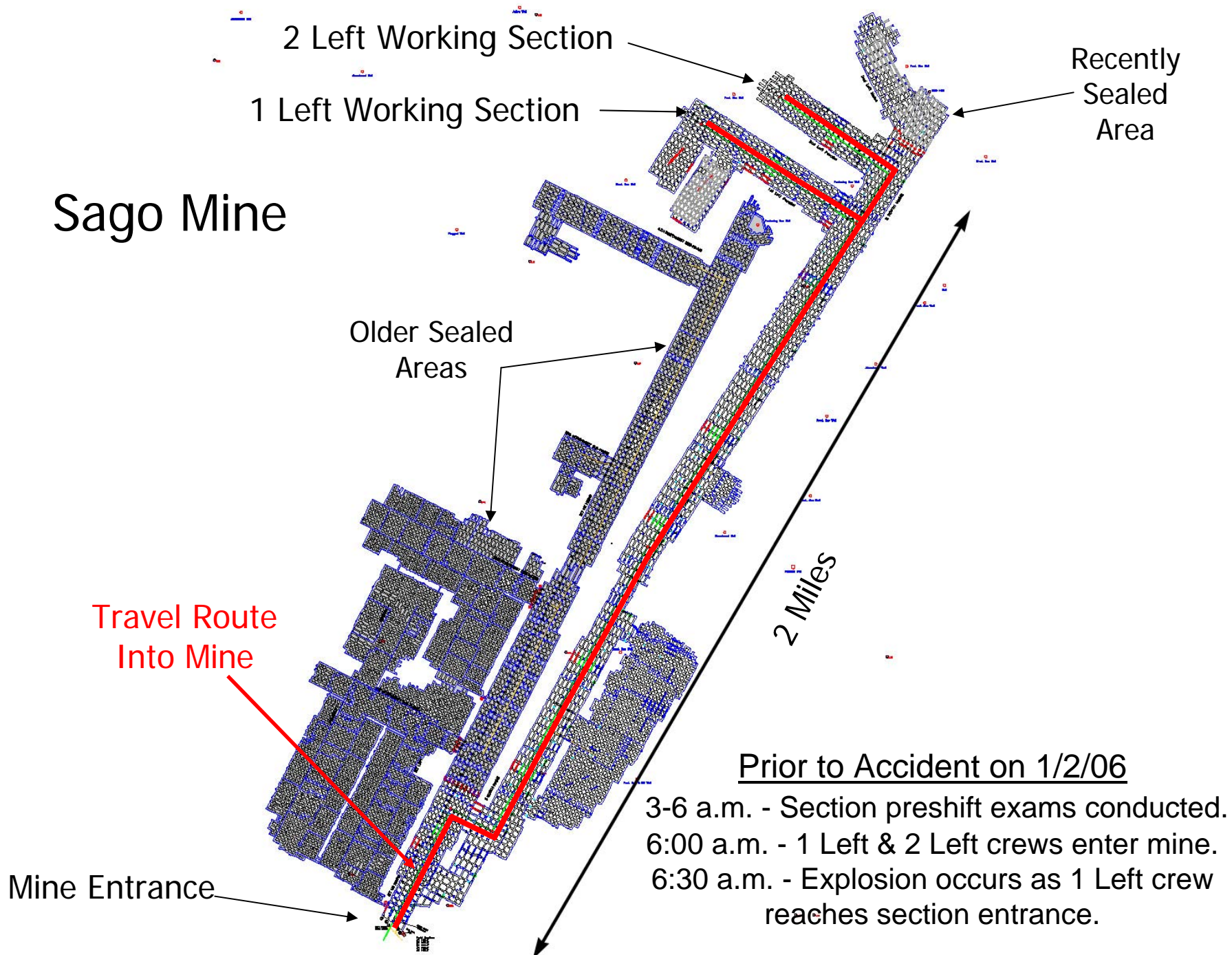
DRIFT
OPENING

INTERNATIONAL COAL GROUP
SAGO MINE

MSHA I.D. No. 46-08791



Sago Mine



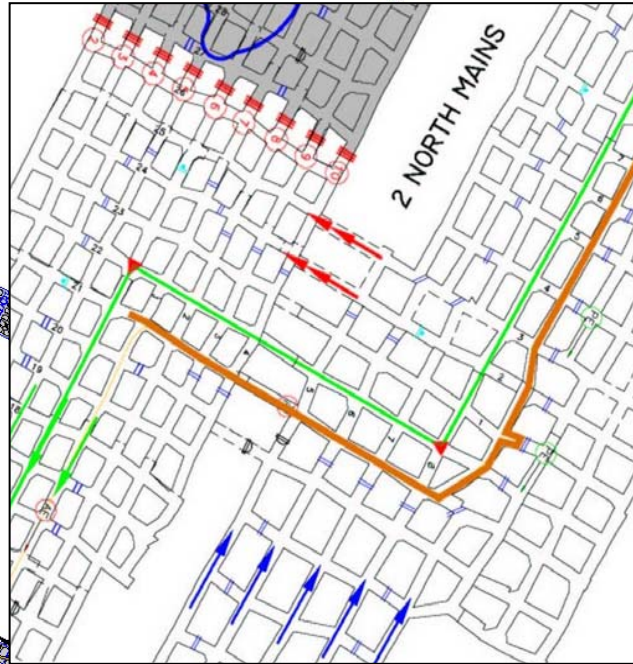


CSE SR100 SCSR

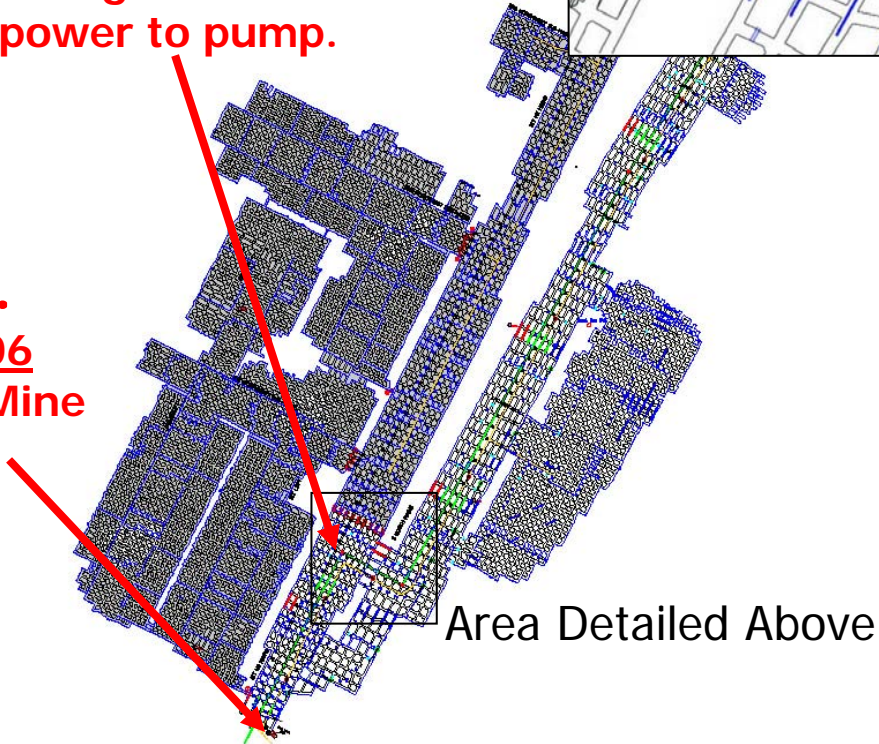


**Mine Rescue Teams
Wearing full
apparatus.**

6:57 p.m.
January 2, 2006
Water entering return entry.
Work begins to restore
power to pump.



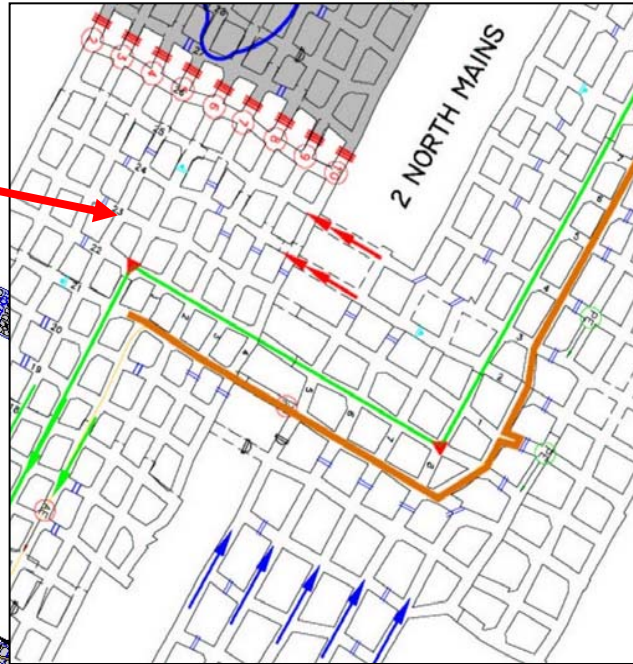
5:25 p.m.
January 2, 2006
1st Team Enters Mine



8:10 p.m.

January 2, 2006

Pump is energized at X-23.



Midnight

January 3, 2006

Ventilation controls damaged.

Explored to X-8 of 4 Belt

8:50 p.m.

January 2, 2006

Explored to X-33 of 3 Belt

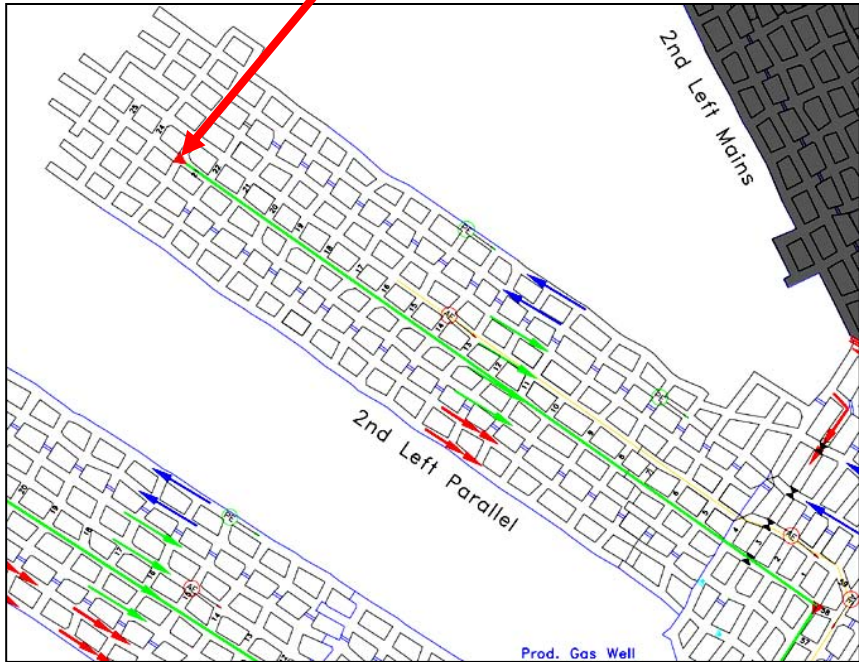
Area Detailed Above

2:45 a.m.

January 3, 2006

Drilling Begins for 2 Left
Borehole (258 ft)

Area Detailed Below



2:40 a.m.

January 3, 2006

Explored to X-34 of 4 Belt

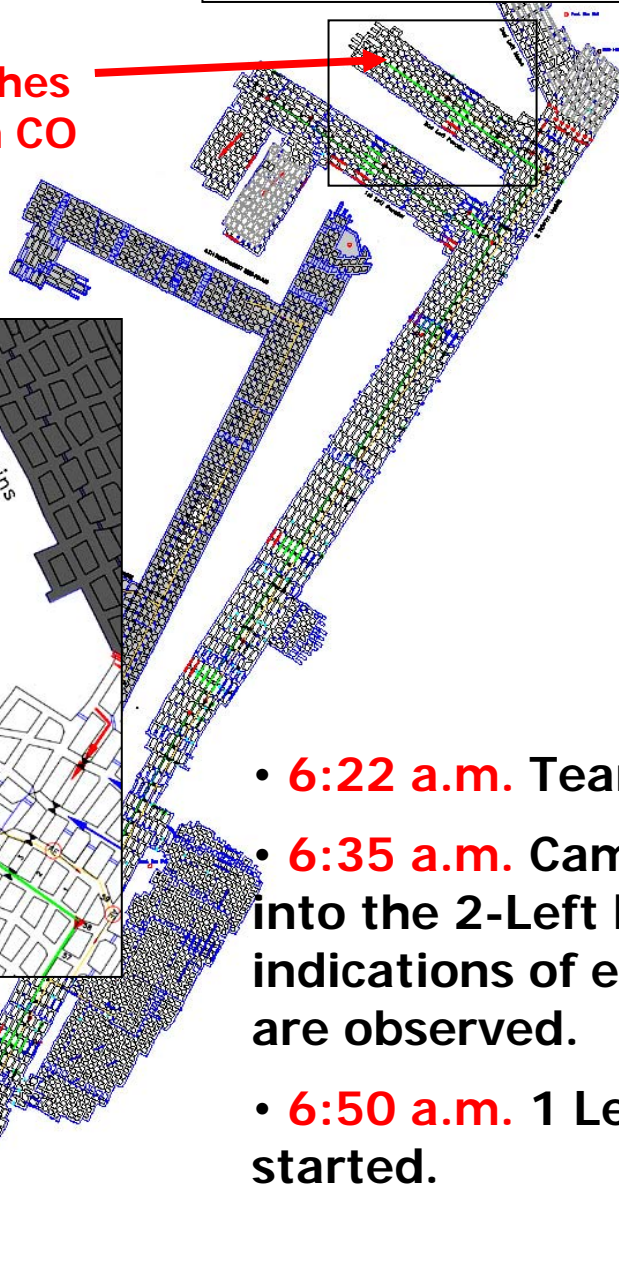
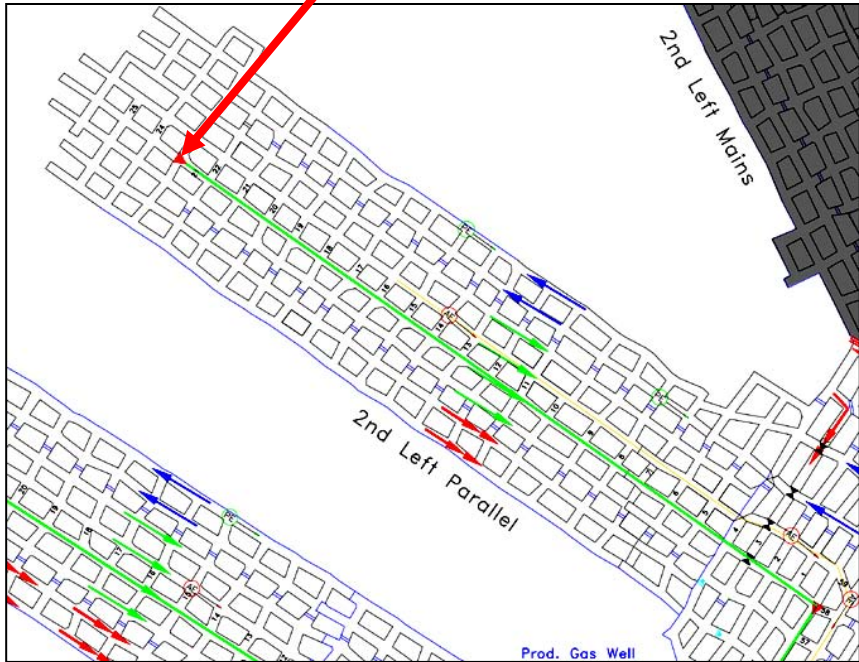
- Teams observe a red light, indicating that the AMS was still energized.
- Teams withdrawn. Mine rescue teams reach the surface at **3:40 a.m.**
- The CO monitoring system is de-energized at approximately **3:57 a.m.**

5:35 a.m.

January 3, 2006

**2 Left Borehole punches
into mine. 1200 ppm CO
detected.**

Area Detailed Below



- **6:22 a.m.** Teams re-enter mine.
- **6:35 a.m.** Camera is lowered into the 2-Left borehole. No indications of explosive forces are observed.
- **6:50 a.m.** 1 Left borehole started.

2:00 p.m.

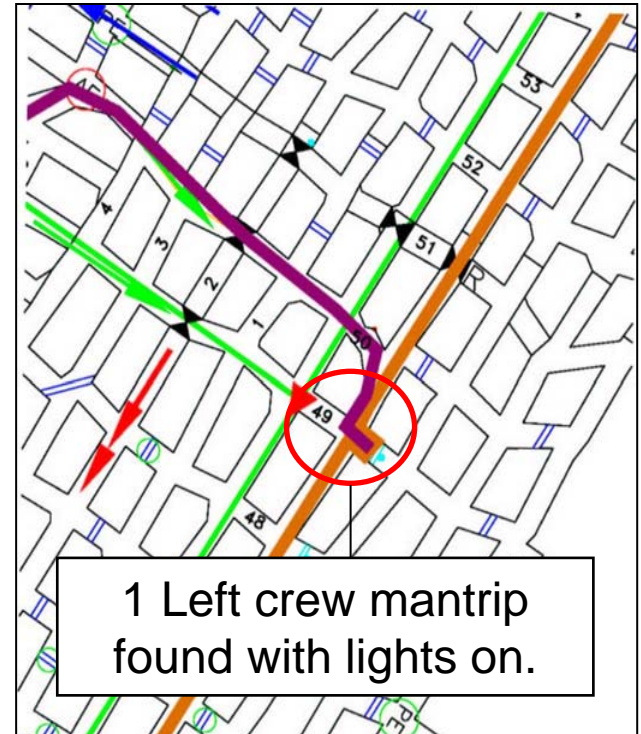
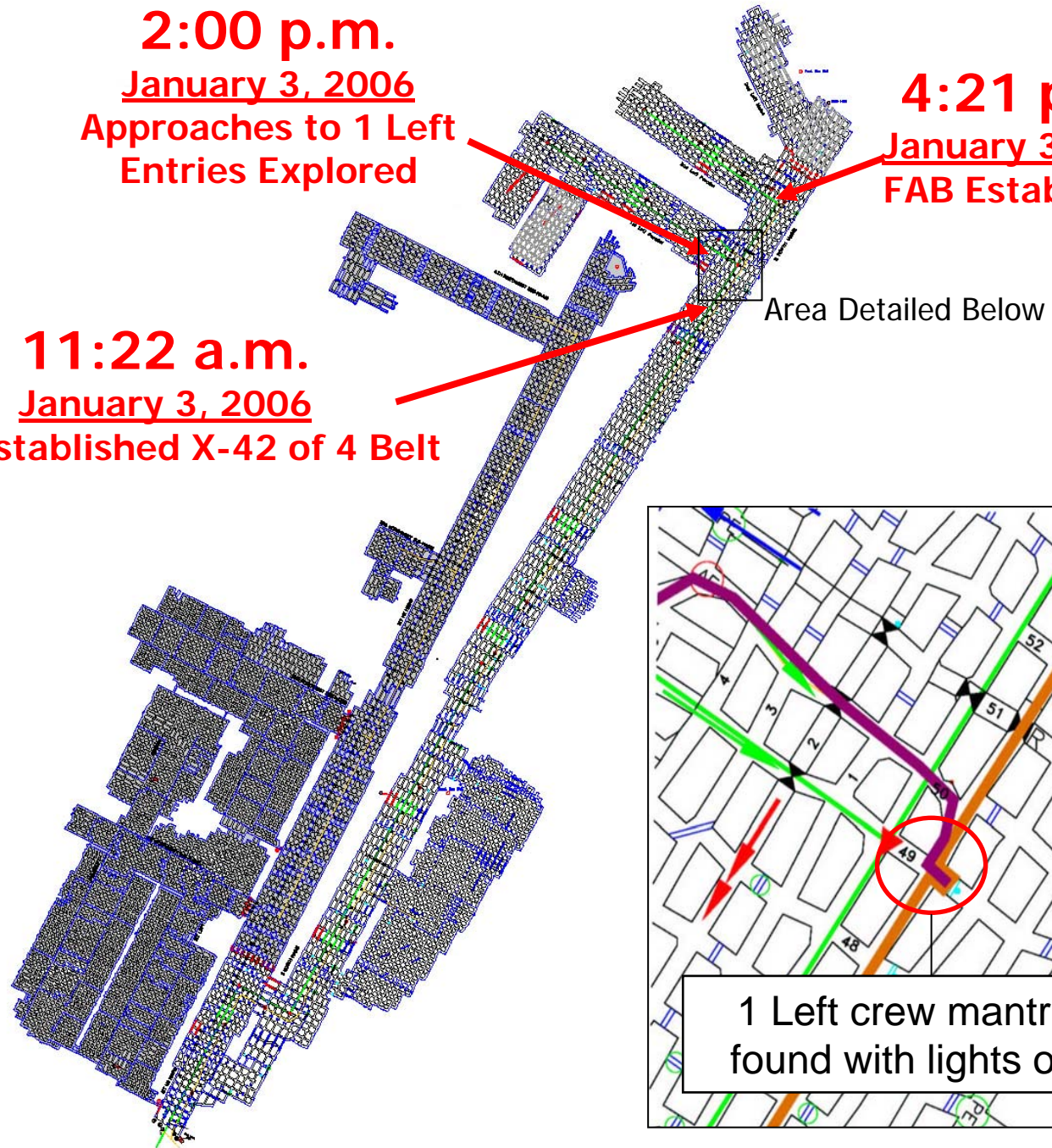
January 3, 2006
Approaches to 1 Left
Entries Explored

4:21 p.m.

January 3, 2006
FAB Established

11:22 a.m.

January 3, 2006
FAB Established X-42 of 4 Belt



1 Left crew mantrip
found with lights on.

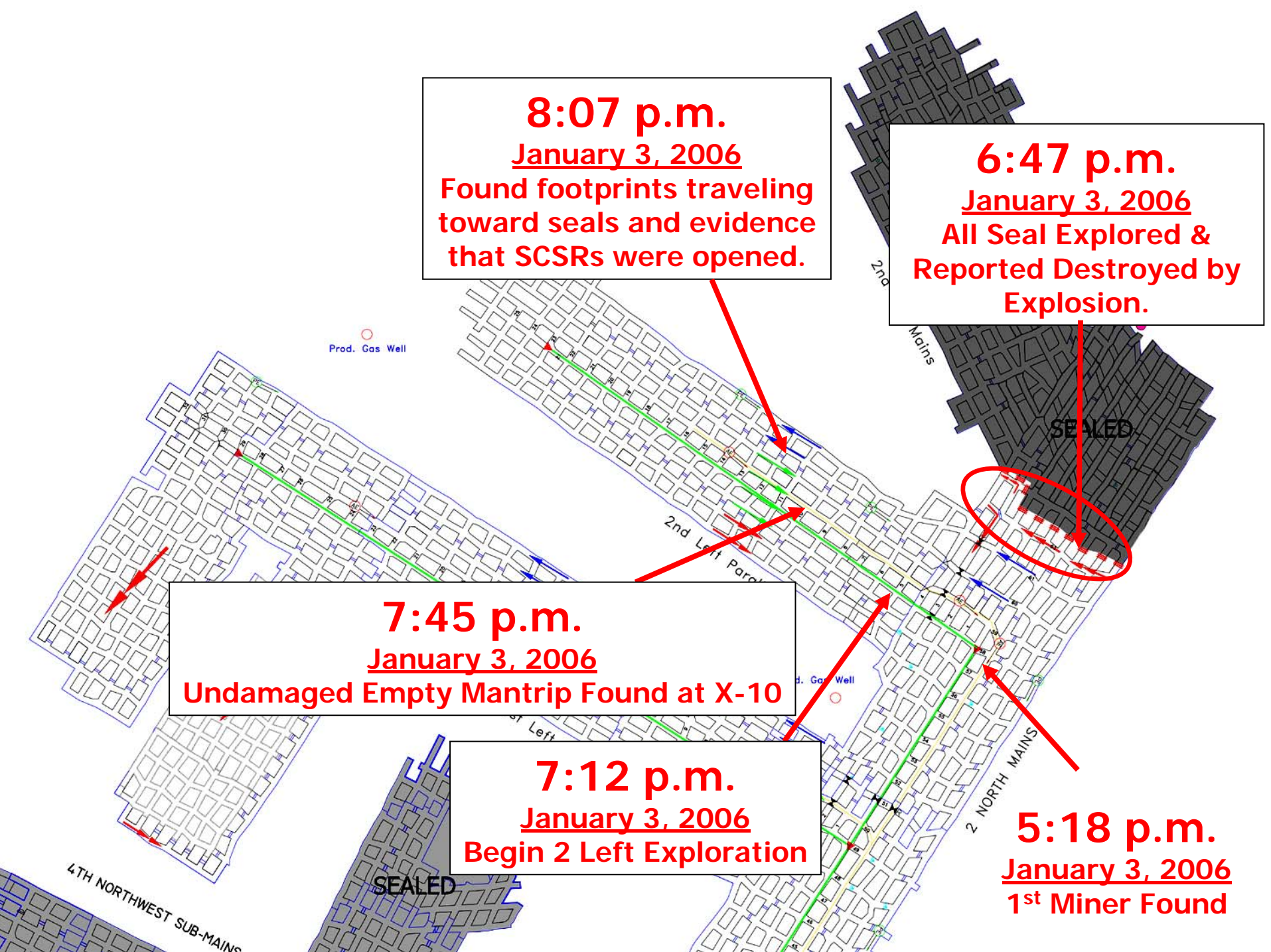
8:07 p.m.
January 3, 2006
Found footprints traveling toward seals and evidence that SCSRs were opened.

6:47 p.m.
January 3, 2006
All Seal Explored & Reported Destroyed by Explosion.

7:45 p.m.
January 3, 2006
Undamaged Empty Mantrip Found at X-10

7:12 p.m.
January 3, 2006
Begin 2 Left Exploration

5:18 p.m.
January 3, 2006
1st Miner Found



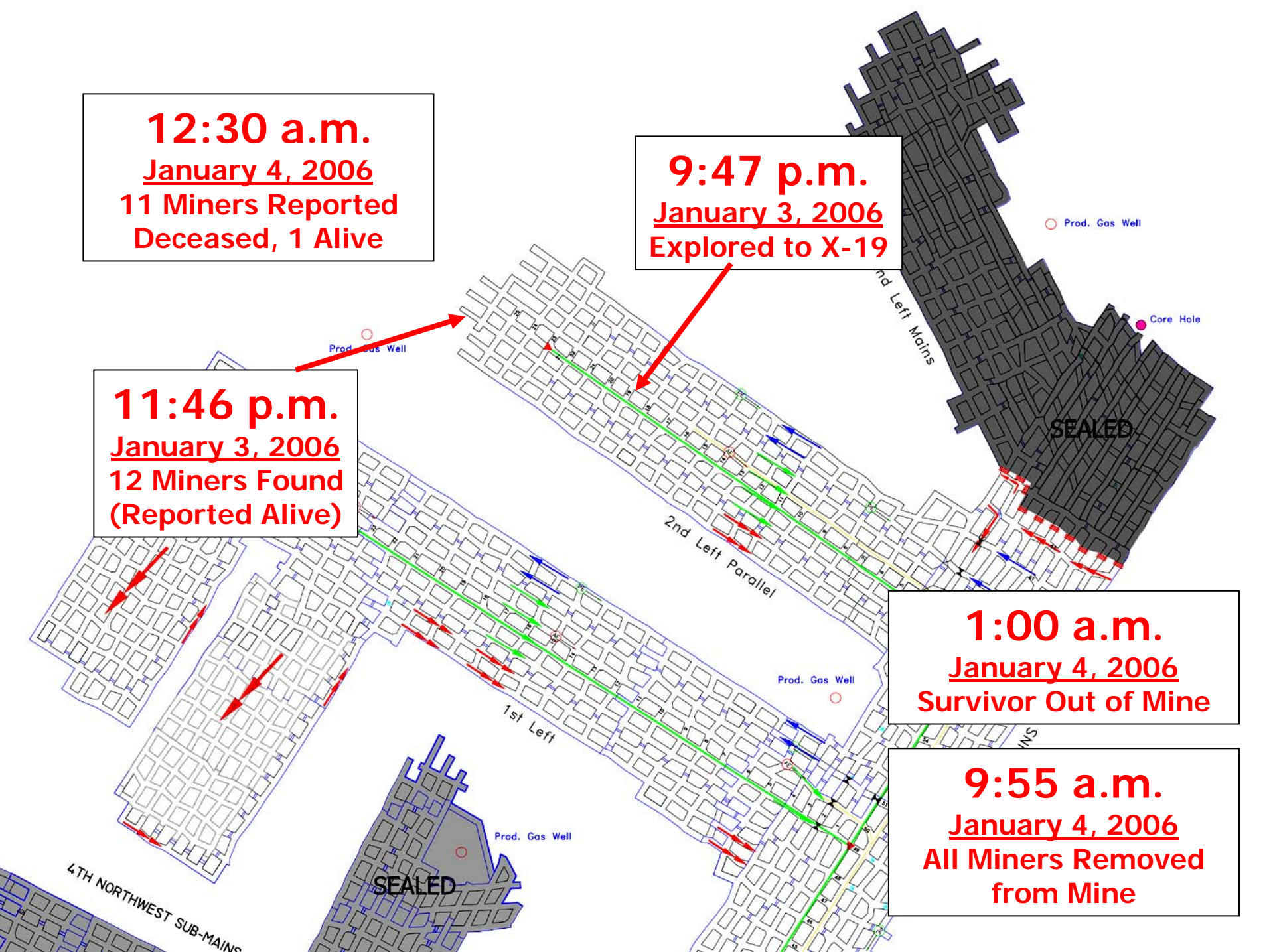
12:30 a.m.
January 4, 2006
11 Miners Reported
Deceased, 1 Alive

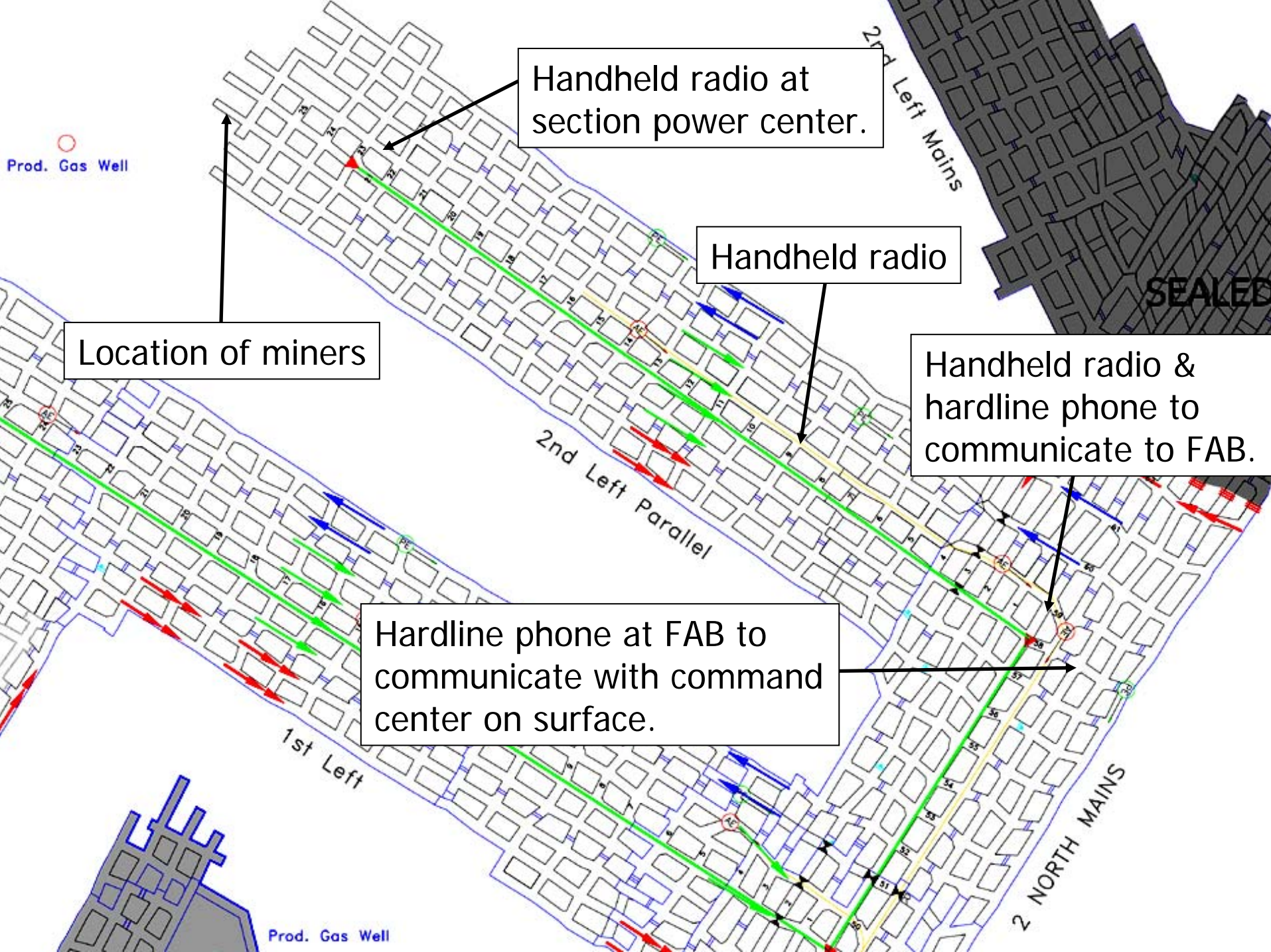
9:47 p.m.
January 3, 2006
Explored to X-19

11:46 p.m.
January 3, 2006
12 Miners Found
(Reported Alive)

1:00 a.m.
January 4, 2006
Survivor Out of Mine

9:55 a.m.
January 4, 2006
All Miners Removed
from Mine





Handheld radio at section power center.

Handheld radio

Handheld radio & hardline phone to communicate to FAB.

Hardline phone at FAB to communicate with command center on surface.

Location of miners

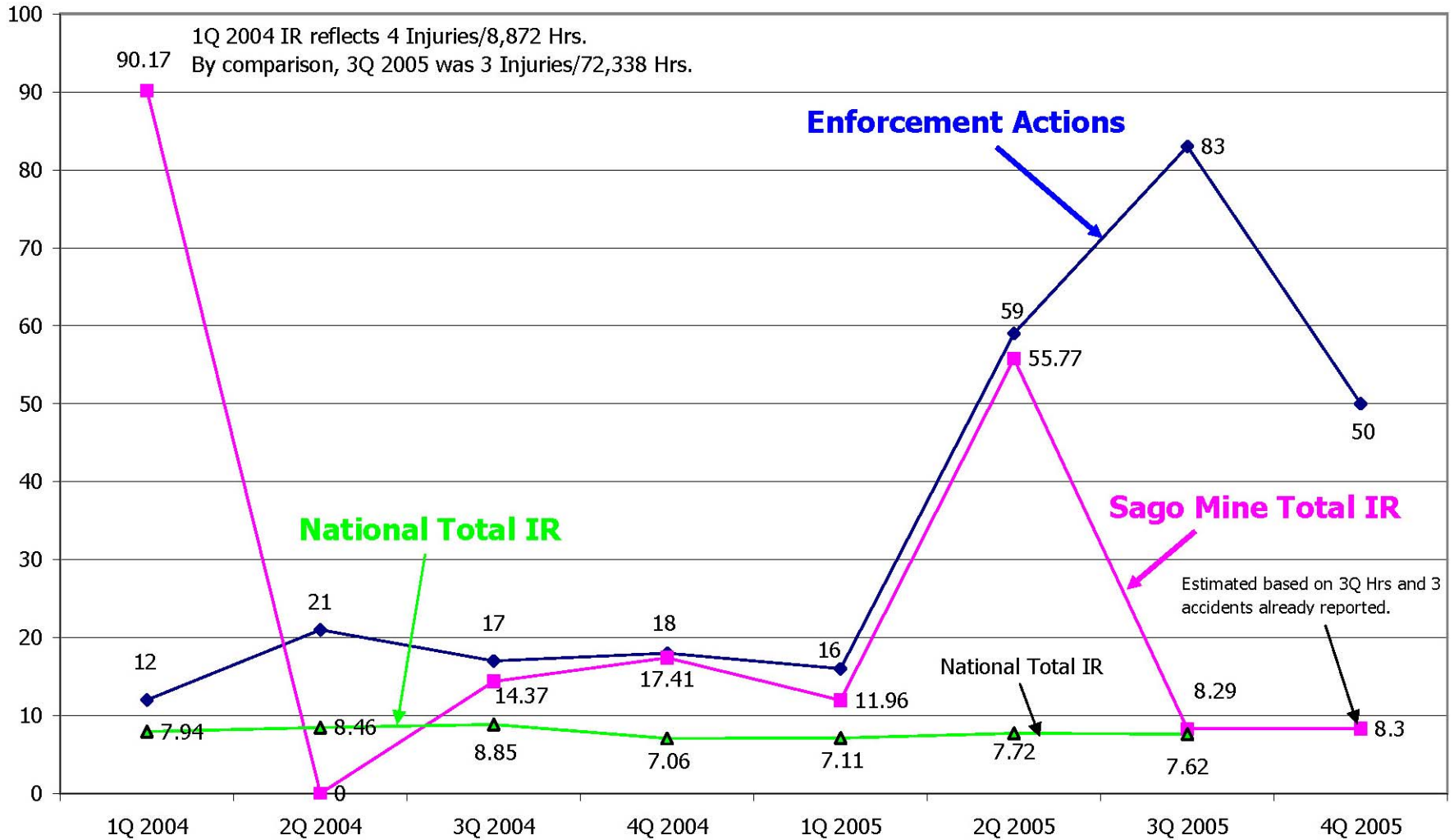
Prod. Gas Well

Prod. Gas Well

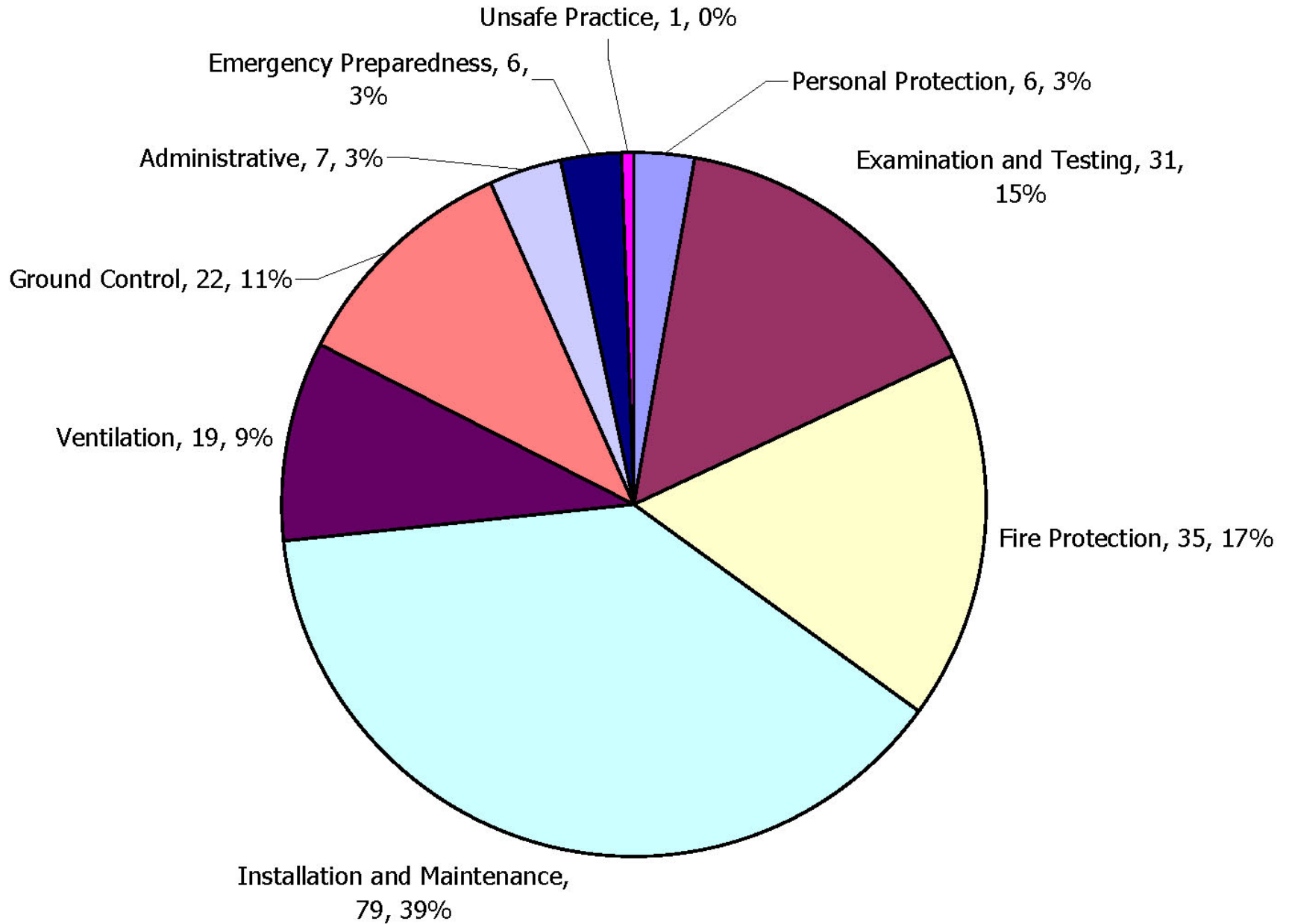
SEALED

Quarterly Enforcement Actions vs Total Incident Rate

Sago Mine 2004 - 2005



Sago Mine 2005 Violations by Type



- 7:30 am– All underground power circuits de-energized. The fan remained operational.
- 8:30 am – MSHA Field Office Supervisor notified. Mine personnel detect 500 ppm CO and 1.5% CH₄ at return drift opening.
- 10:30 am – MSHA personnel arrived at mine (1 hour from nearest office).
- 11:30 am – CO readings were constant and CH₄ decreased to 0.6%.
- 12:00 pm – Two mine rescue teams at site and fully ready to enter mine, but CO levels increased to 2600 ppm and elevated CO levels were detected in nearby office buildings.
- 1:00 pm – Mine rescue personnel began monitoring gases in the pit area. Various other mine rescue teams began to arrive.
- 3:00 pm – Consol set up a gas chromatograph and bottle samples analyzed to confirm the handheld gas readings.
- 3:30 pm – Mine rescue teams on site are briefed.
- 4:15 pm - Gas concentrations begin to trend down.
- 5:10 pm –Initial exploration plan approved and MSHA Technical support arrives with infrared instrumentation and a gas chromatograph.