

# Arizona State Mine Inspector



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## ABANDONED MINES & WILDFIRES

### Maps:

If the maps available to you have mine sites marked on them, then you should assume there are unmarked sites in the area. Unmarked sites can be anywhere. Many of these sites whether marked or not can be very hard to see until you're right on them.

### Shafts:

Mine shafts may be vertical, as straight down, or inclined at an angle from nearly vertical to being nearly level. Open mine shafts are especially dangerous. The rock or soil around the shaft may be unstable and the shaft timbers may be rotten. Do not walk anywhere near a shaft opening. When you see an area enclosed fully or just partly with old fence posts with wire or fence attached---even if the fence and posts have fallen down---stay away from the area. Be suspicious. It may be a shaft opening. It is possible that a new cave-in or subsidence may have just taken place--and you are the first person to find it. You will have no idea how much undermining or caving may have taken place. The whole area may be ready and waiting to cave into the shaft or other mine which may be hundreds of feet deep. You may be on "thin ice". Look for indicators such as head frame footings they may be concrete or wood. That can give you a general idea where the shaft once was or should be. Look for old cans, rusted metal, corrugated metal or old pieces of milled wood. All can be an indicator of a mine feature.

### Adits:

Unlike shafts, are openings into a mine that are level or nearly level like a tunnel. These tunnels may be dangerous because rocks can fall from overhead. There may be holes in the tunnel called winzes that drop straight down hundreds of feet. Old boards or timbers over these winzes may obscure them and may not support your weight.

### Prospects:

Prospects can be shafts, adits, or trenches but still deep enough to cause injury or death. They can be very hard to see and are more likely to not be marked on your maps. There are many more prospects than any other mining feature.

### Waste piles:

Waste piles can be very small and the first sign you have that a mine feature is there. Waste piles can also be very large and the waste from one mine site or the waste from many mining sites in the area. In

some cases the waste was hauled off during the mining process and all you have is a Shaft or Adit. You do not have to have a waste pile to have a mine feature.

#### Stopes\Air vents:

A stope is where a miner followed a vein of ore from underground to the surface. Like an air vent there may be no sign on the surface that an opening is there. A surface area may be hollow underneath: it may be undermined by stopes or large caverns from mined-out areas underground. In old mine areas, these caverns may have been caving in slowly over the years. The hollowed area may have been slowly climbing higher towards the surface. The depth of ground over these caverns may have decreased. New cracks and crevices may be visible. If there are surface features of a former mine, such as shafts or adits, fences or signs, there may be shallow under-mined areas nearby. This is another reason to stay away from the area.

#### Cave-ins:

The ground area around abandoned mine openings and pits can be weak and cave-in without warning. Because there are old mines from the mid-1800s in Arizona, mine timbers or pillars may have taken all of these 150 years to finally fail and cause a cave-in. A minor disturbance, such as vibrations caused by walking or any noise, like speaking, may be just enough to cause an area to cave in under the surface or a hollowed out area to open up to the surface. In some cases, people have fallen into a cave-in and survived only to die from starvation, suffocation or drowning.

#### Roads:

Roads in the back country whether old or new can be a clue to where a mine site may be. Some mine sites never had a road; they were mined with mules, so look for trails.

#### Hi-Walls:

Hi-Walls are the high side of many adits, prospects, trenches, and roads. If working above any of these features, be careful not to get forced down to the top of a hi-wall.

#### Explosives\Chemicals:

In some cases the explosives used at mine site were left behind when the mining stopped. They may be inside the mine feature, or just lying about. You may find caps, primer cord, or explosives (old & new). The explosives may be in boxes, cans or wrap in wax paper or cloth. Explosives magazine used for storing explosives away from the mine site, may look like a hole in the side of a hill or actually camouflaged as a pile of rocks or a concrete box with a steel door.

Chemicals were also left behind like cyanide and mercury and others. Some are water soluble and reactive.

Please note location (GPS) and report as soon as possible any explosives or chemicals found.

Dump sites:

Many mine sites have been used for illegal dumping. There can be cars, animals, house trash, industrial trash, chemicals and more.

Keep in mind:

The most dangerous place to be when working around any mining features is on the HI-Side or uphill of the portal. It's the same for a hi-wall. Most of the ground around mining features is loose rock. It's like standing on marbles. If you stumble or fall you can easily go over the side.

Abandoned mine sites are used by snakes and other animals.

An abandoned mine site can be an attractive staging area. It may be the only flat open ground in the area. Keep in mind you do not know what's under your feet or wheels.

Stay out stay alive!

If you have any question please call. (602-542-5971)

Thank you for your service to the State of Arizona.



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