

Farmington Annual Mine Rescue Contest

Statement

Welcome to the Farmington Contest

Thank You for coming.

We are located at the Three Rivers Coal Mine. This mine produces coal on a 3 shift schedule, Midnight, Days and Afternoons. We produce large amounts of Methane.

Last night on the Midnight shift we had an event and we do not know what happened.

A four man maintenance crew was working in the 3rd Right development section.

You are located at the Fresh-Air-Base of 3rd Right. Intake air is going into the #2 entry and returning out the #1 Entry. There is an air tight cave in the #3 entry. The Mine Map is up to date.

The Fan is operating and is guarded at this time. The fan cannot be stopped or reversed at this time. There is a pump that keeps the water down in all 3 entries; it is located in # 3 entry. Once the pump is running it cannot be turned off.

All agencies have been notified and we have additional teams arriving. We have a competent back-up MSHA Mine rescue team on site to back you up.

They cannot do any work out-by.

Farmington Mine Rescue Contest

2014

Problem

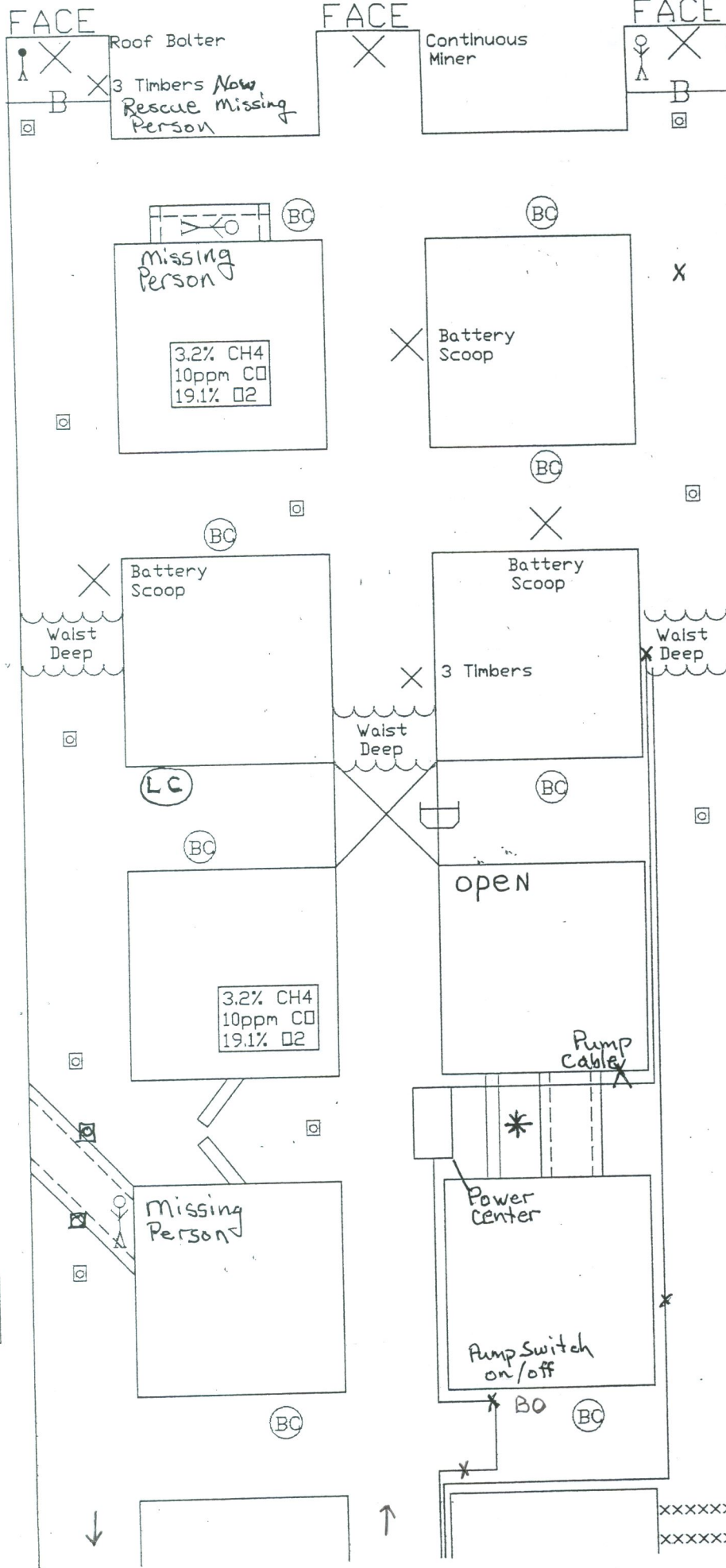
Explore the entire mine that can be done safely.

Bring all survivors to the fresh air base.

There will be a 90 minute time limit.

GOOD LUCK

BE CAREFUL!!



Help! Help!
as soon as team
Recognize permissable
Pump or get to
BC in X-cut

3.2% CH4
10ppm CO
15.4% O2

Permissable Pump

5.1% CH4
10ppm CO
19.5% O2

Sump Pump

All water changes
to Ankal Deep when
Pump starts

5.1% CH4
10ppm CO
15.4% O2

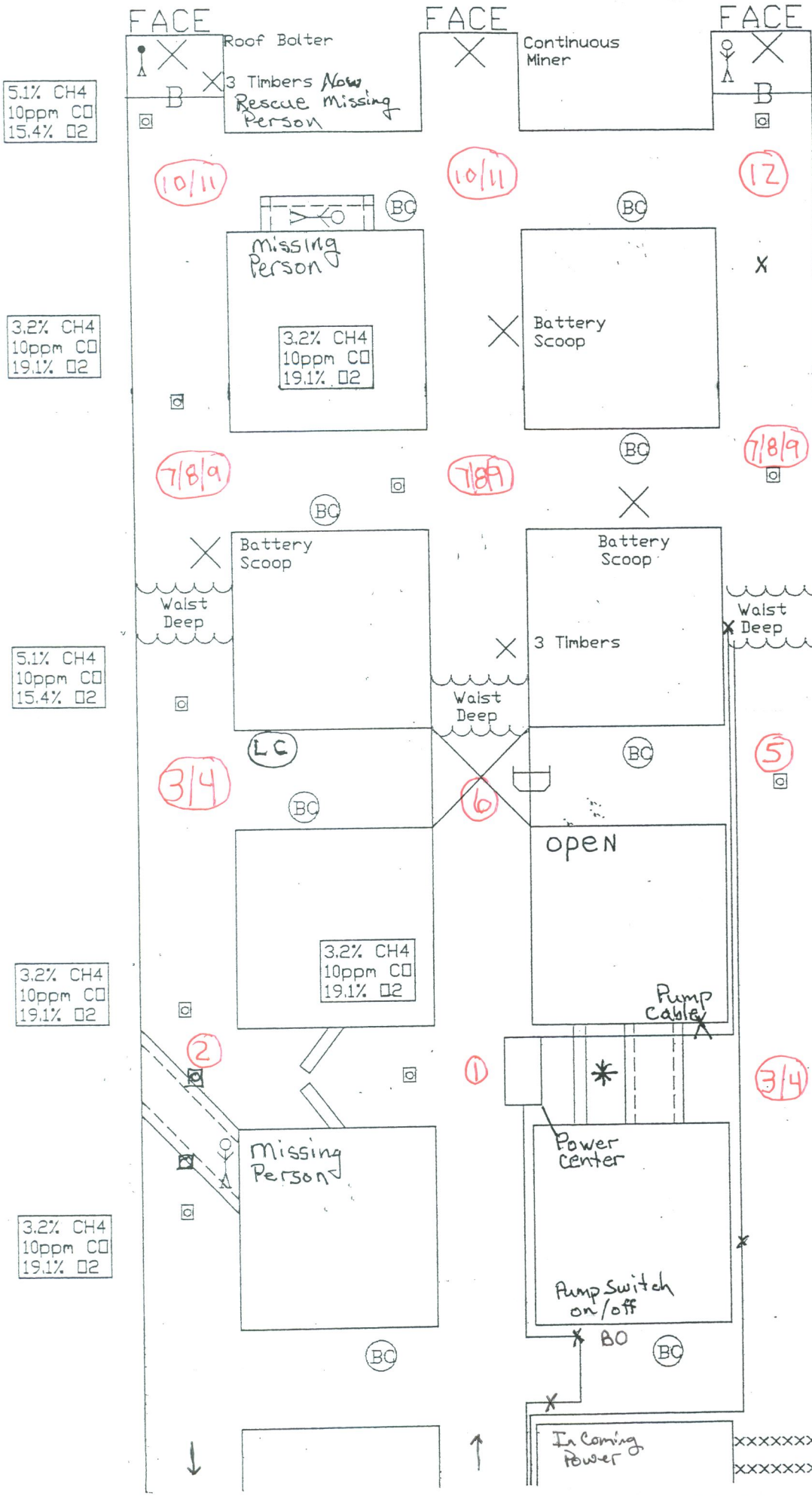
Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut

Discharge
Line

Problem

Caved Airtight



Help! Help!
as soon as team
Recognize permissible
Pump or get to
BC in X-cut

Permissible Pump

Sump Pump

All water changes
to Ankel Deep when
Pump starts

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut

Discharge
Line

Team Stops

Caved Airtight

FACE

FACE

FACE

Help! Help!
as soon as team
Recognize permissible
Pump or get to
(BC) in X-cut

5.1% CH₄
10ppm CO
15.4% O₂

3.2% CH₄
10ppm CO
15.4% O₂

3.2% CH₄
10ppm CO
19.1% O₂

5.1% CH₄
10ppm CO
19.5% O₂

5.1% CH₄
10ppm CO
15.4% O₂

3.2% CH₄
10ppm CO
19.1% O₂

3.2% CH₄
10ppm CO
19.1% O₂

RR GT DI Roof Bolter
3 Timbers Now
Rescue Missing
Person

RR GT DI Continuous
Miner

RR GT DI

missing Person
3.2% CH₄
10ppm CO
19.1% O₂

Battery
Scoop

Battery
Scoop

Battery
Scoop

Waist
Deep

Waist
Deep

3 Timbers

Waist
Deep

open

3.2% CH₄
10ppm CO
19.1% O₂

Pump
Cable

Power
Center

Pump Switch
on/off

Missing
Person

Sign
in

Permissible Pump

Sump Pump

All water changes
to Ankel Deep when
Pump starts

5.1% CH₄
10ppm CO
15.4% O₂

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut

Discharge
Line

GT Gas Test

DI D&I

RR Roof Rib test

Caved Airtight

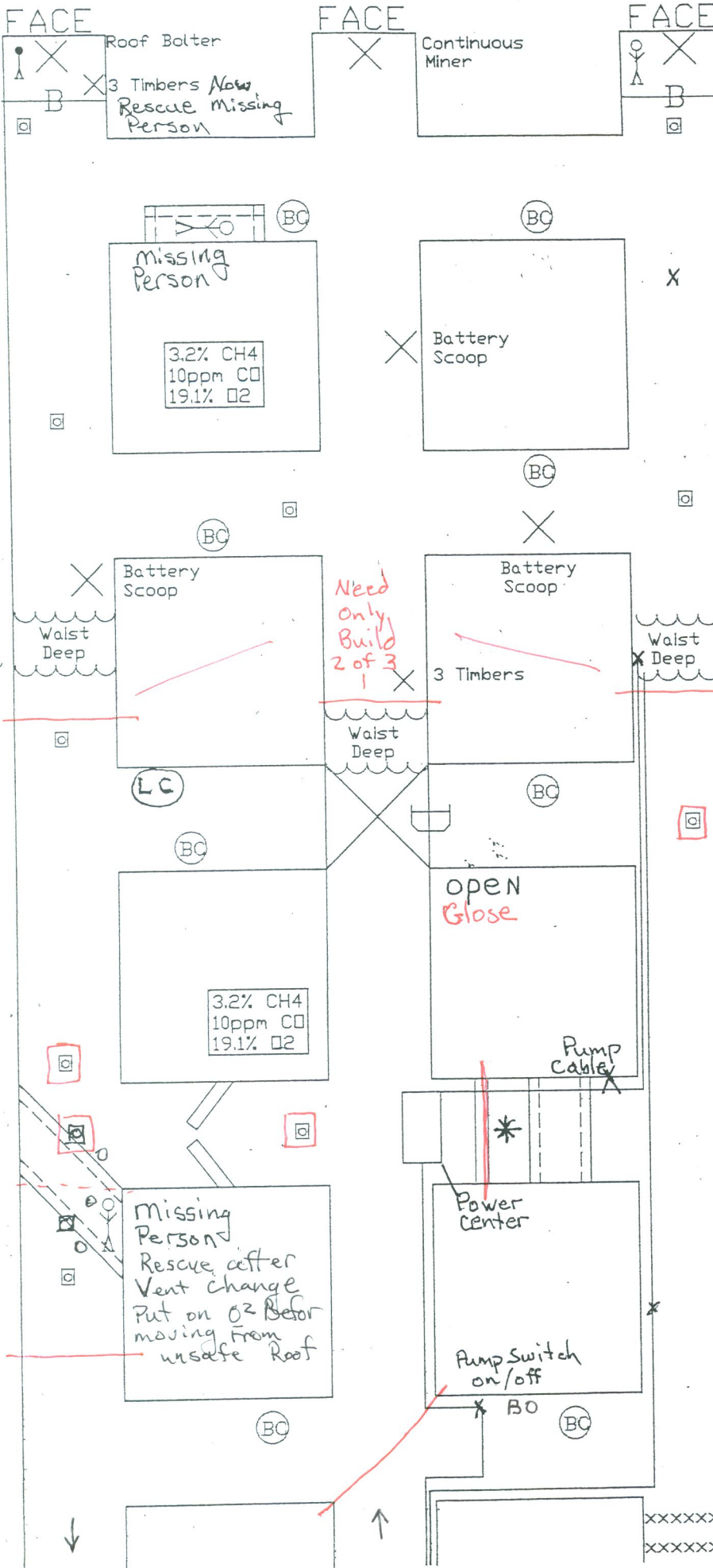
5.1% CH4
10ppm CO
15.4% O2

3.2% CH4
10ppm CO
19.1% O2

5.1% CH4
10ppm CO
15.4% O2

3.2% CH4
10ppm CO
19.1% O2

3.2% CH4
10ppm CO
19.1% O2



Help! Help!
as soon as team
Recognize permissible
Pump or get to
(BC) in X-cut

Permissible Pump

5.1% CH4
10ppm CO
19.5% O2

Sump Pump

All water changes
to Ankel Deep when
Pump starts

5.1% CH4
10ppm CO
15.4% O2

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* must be explored
Before going in to
#3 X-cut

Discharge
Line

1st Vent

Caved Airtight

FACE

FACE

FACE

5.1% CH₄
10ppm CO
15.4% O₂

Roof Bolter

3 Timbers Now
Rescue Missing
Person

Continuous Miner

Help! Help!
as soon as team
Recognize permissable
Pump or get to
BC in X-cut

3.2% CH₄
10ppm CO
15.4% O₂

3.2% CH₄
10ppm CO
19.1% O₂

Missing Person

3.2% CH₄
10ppm CO
19.1% O₂

Battery Scoop

Permissable Pump

5.1% CH₄
10ppm CO
19.5% O₂

Battery Scoop

Waist Deep

5.1% CH₄
10ppm CO
15.4% O₂

Battery Scoop

3 Timbers

Waist Deep

Sump Pump

All water changes
to Ankel Deep when
Pump starts

5.1% CH₄
10ppm CO
15.4% O₂

3.2% CH₄
10ppm CO
19.1% O₂

3.2% CH₄
10ppm CO
19.1% O₂

open

Pump Cable

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut

3.2% CH₄
10ppm CO
19.1% O₂

Missing Person

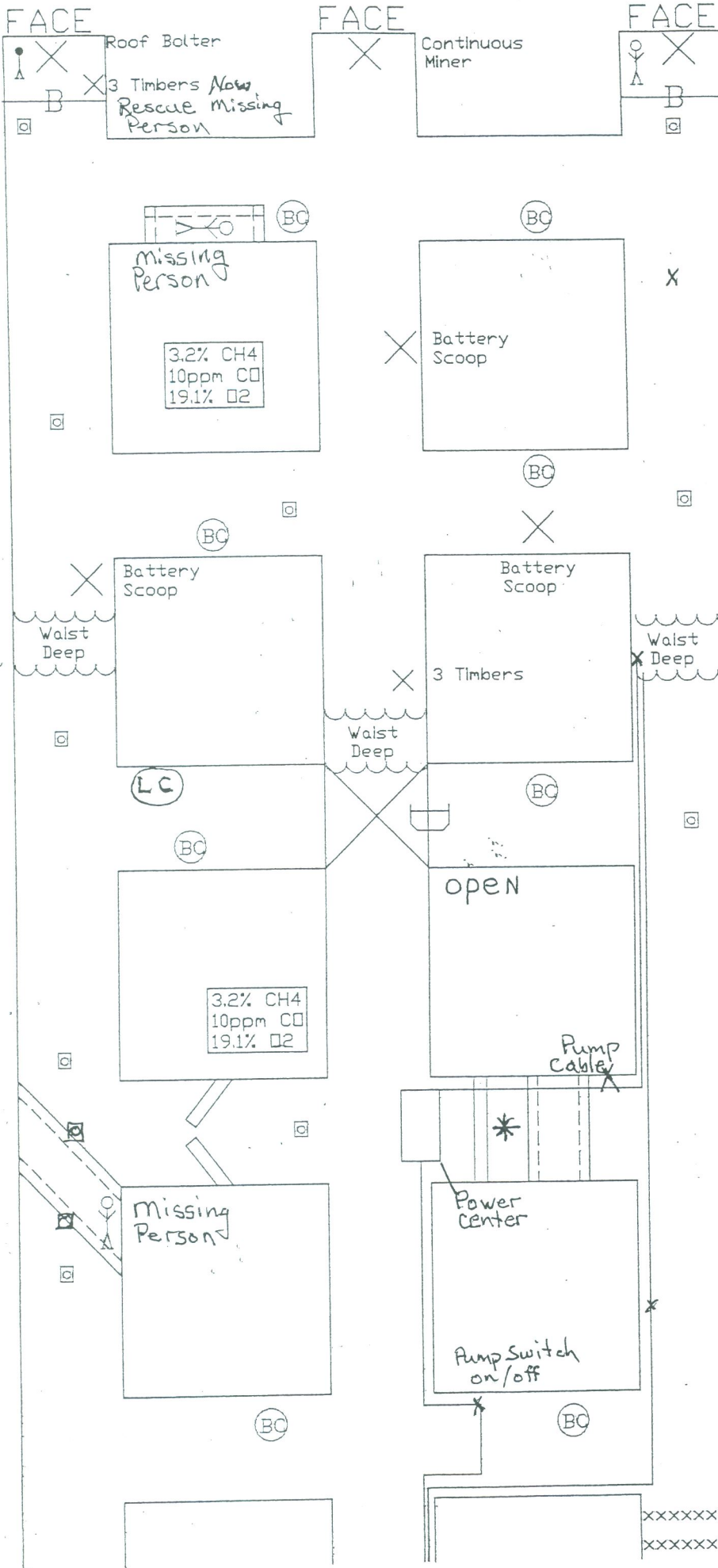
Power Center

Pump Switch on/off

Discharge Line

4th Vent

Caved Airtight



Help! Help!
as soon as team
Recognize permissible
Pump or get to
BC in X-cut

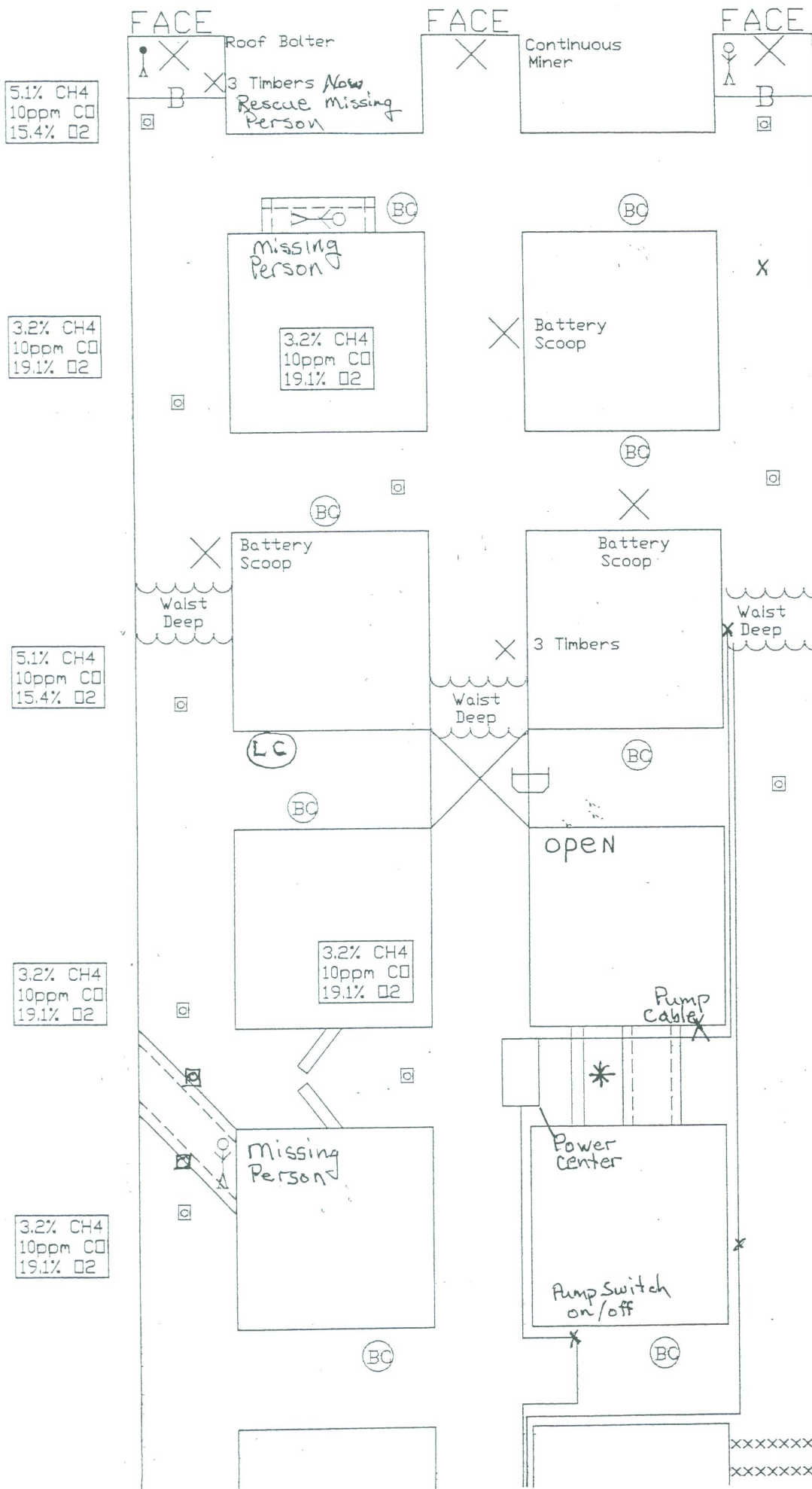
Permissible Pump

Sump Pump

All water changes
to Ankel Deep when
Pump starts

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut



Help! Help!
as soon as team
Recognize permissable
Pump or get to
BC in X-cut

Permissable Pump

5.1% CH4
10ppm CO
19.5% O2

Sump Pump

All water changes
to Ankel Deep when
Pump starts

5.1% CH4
10ppm CO
15.4% O2

Team must set timbers
and rescue Miner in
#1 Entry when 3 timbers
in #2 are found
Team must not Continue
to Explore

* Must be explored
Before going in to
#3 X-cut

Discharge
Line

