







## **History**

- MAPTS has a long history of providing Industrial compliance training.
- ➤ MAPTS also has a long history of providing basic Introduction to mine training.

## **Today**

- ➤ MAPTS has gone to the next level by providing actual hands on "in the seat training" or what's known as... Hard Skills.
- The success of this program would also require an employability component or what we call...
  Employability Skills.



Daren Case



Mike Azzara



Jim (Smitty) Smith



Peter (Boise) Alexie

## Instructors

130 years of combined mining experience



William Bieber



## Curriculum

#### MAPTS Underground New Miner Camp Syllabus MAPTS Training Plan Overview of Modules 1 - 16 Ex Objectives Segment Module 1 Overview of four Origination to week program UG New Miner Camp at DMTC Develop/Strengthen Working Behaviors Module 2 & Personal Management Skills Softskills Review of students Module 3 comprehension of Regulatory compliance Compliance requirements. Review Module 4 Knowledge of UG Introduction to areas of DMTC and the DMTC functions Work Environment Maintenance of workplace in a safe Modwie 5 and efficient manner Housekeeping Knowledge of safe rigging in Module 6 underground Rigging environment Knowledge of UG mine systems and Module 7 maintenance Mine Utilities Inspection of groun buzard recognition Module 8 ground control Ground Control methods Orientation to L Module 9 environment wi Mine Maps & mine waps Vertilation

#### PERFORMANCE EVALUATOR CHECKLIST JACK LEG DRILLING Student Name:

Evaluator: \_\_

\_-\_\_- 01 Demonstrate an understanding of company policy regarding drilling policies, rules, and regulations

- · Properly identifies mechanical parts relevant to Jackleg operations
- · Assemble all required components for the job to be done
- · Visually inspect workplace for any hazards
- · Thoroughly scale the area to be drilled

#### \_\_-\_ 03 Ready face

- · Shoot line and grade
- Paint face

#### \_\_--\_ 04 Set-Up Jackleg

- . Blow out airlines before connecting to the machine
- · Wash out water line
- · Fill lubricator with proper weight rock drill oil
- . Connect air and water lines security to machine. Whip checks are required on the airline connection for hand-operated drills
- · Put all machine controls into neutral and slowly open air and water headers
- . Check for proper operation of all drill functions. If drill does not function properly tag it for
- . Demonstrate proper lifting techniques and body alignment; agility and situational awarene
- · Position drill for accurate and efficient drilling

#### \_-\_\_- 05 Select proper steel and bits

· Demonstrates proper selection of steels and bits

#### 06 Collar hole

Monitors activity around drill and rotating steel:

- . Ensures no one comes into contact or touches a rotating drill steel
- . Ensures no person is allowed to stand in front of the machine while it is on

#### Maintains control of Jackleg while collaring:

- · Checks air connections frequently, vibration can cause lines to loosen and come off · Properly lifts the jackleg into position while keeping back straight and maintaining a
- position . Ensures the leg is securely anchored so it will not kick out
- . Inserts the desired length of steel into the chuck of the drill. Typically a 4-foot steel but a 2 ft steel can also be used
- · Positions the bit on the rock in the location to be drill the hole
- . Slowly turns the leg pressure control on until the leg starts to extend. Using the th on the water and slow rotation, holds the drill in position against the rock until the
- . Is prepared to release the leg pressure or let the jackleg go in case the bit slips on the face

## Drilling with a Jackleg - Certificate of Co

| l | Participants Name: | Competency           |      |  |
|---|--------------------|----------------------|------|--|
|   | Last Name          |                      |      |  |
|   | Location           | First Name           | //_  |  |
| 1 | Competent Person   | Class                | Date |  |
| _ |                    | Yukon College (CNIM) |      |  |

|     | TAS      | SK #  |      |              |             |
|-----|----------|---|------|--------------|-------------|
| - 1 | 0        | SPECIFIC DUTIES/TASKS   | _    |              |             |
| - 1 | 02       |   | DATE | Monts        | Needs Mor   |
| - [ | 03       | Readles Face properly   |      | Requirements | Instruction |
| 1   | 04       | Set-up Jacking  |      |              |             |
| 1   | 05       | Proper selection of steel and bits  |      |              |             |
|     | 06       | Collar Hole skillfully  |      |              |             |
| П   | 07       | Accurately drills holes   |      |              |             |
| 1   | 08       | Proper tear down  |      |              |             |
| 1   | 09       | Heath, sales  |      |              |             |
| L   | 10       | Heatin, safety and environmental aspects of Tasks Essential Equipment Knowledge |      |              |             |
| Cor | nsent/Re |   |      |              |             |

I, the undersigned, hereby authorize Mining and Petroleum Training Service (MAPTS). I, the undersigned, hereby authorize Mining and Petroleum Training Service (MAP).

University of Alaska or Yukon College CNIM to release the information and results. University of Alaska or Yukon College UNIM to release the information and results attained through the administration of the Delta Mine Training Center Underground attained through the administration of the Units Filler Framing Center Underground New Miner Camp program to any organization or company that requests these results.

### Accredited Assessment Center(s):

Yukon College CNIM Shelagh Rowles, Executive Director 500 College Drive, PO Box 2799 Whitehorse, Yukon Y1A 5K4 Canada

Mining and Petroleum Training Service William Bieber, Executive Director

Participant's Signature: Soldotna, Alaska USA 99669 Performance Evaluator Signature: \_ MAPTS Executive Director Signature: YCCNIM Executive Director Signature:

MAPTS, UA - 2014





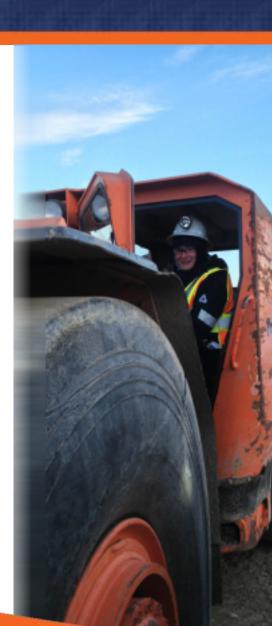
# New Mine Training Camp Employability Skills

- Employer expectations
- > Team work
- Job readiness and personal preparation
- Working in a multicultural workforce
- Life Balance and quality time with the family
- > Finance and money management
- > Prepare for the long term employment
- Be ready when opportunities present themselves
- Camp life
- Prepare yourself and your family to be away from home on rotation
- Focus on student weaknesses and build on the strengths

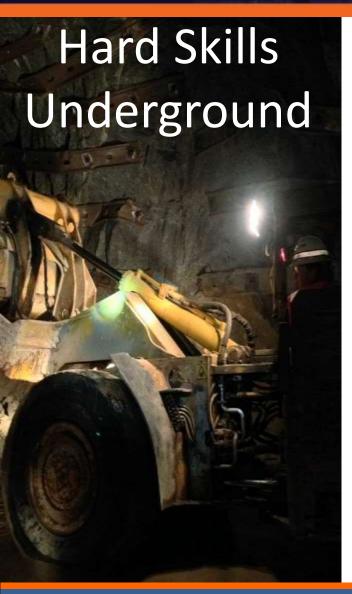


## **Safety & Environmental Compliance**

- ➤ MSHA Part 48
- ➤ MAPTS Mine Training Facility Safety and Environmental Compliance
- ➤ Field Level Risk Assessment (FLRA)
- Emergency Medical Response and Procedures
- ➤ Incident/Accident Reporting





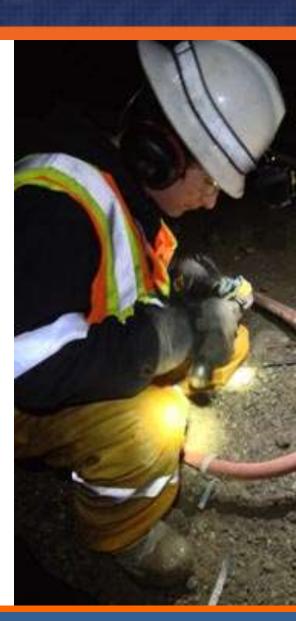


- General mining theory
- Ground control (barring down)
- Utilities and nipper duties
- Jackleg drilling/rock bolting & mat placement
- LHD simulation, pre-shift and operation
- Underground loading, hauling and dumping LHD
- Underground haul truck simulation, pre-shift inspection and operation
- Underground hauling and dumping
- Hauling to surface and surface dump operations
- Dozer operation on the surface

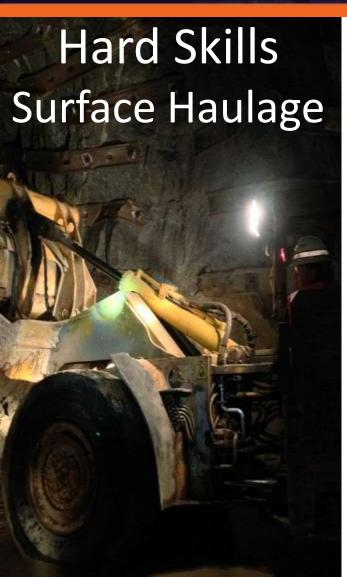


# Required Underground Competencies

- General Safety practices
- Soft Skills
- Reports and documentation
- Workplace inspections
- Ground Control
- Utilities placement and identification
- > Jackleg drilling and maintenance of machine
- Rock bolting (split sets, cable bolts, swellex bolts)
- > Haul truck simulation Toro 040
- Haul truck Pre-shift and operation
- > LHD simulation with Toro 007, pre-shift and operation
- > LHD Wagner pre-shift and operation
- D5G XL pre-shift and operation







- General mining theory
- Open pit mining and haulage safety
- Surface mine haul road and dump safety
- Haul truck simulation Cat 777 pre-shift and operation
- Haul truck operation 769D
- Haul truck Volvo Articulated
- Haul truck loading, hauling and dumping
- Surface dozer operation
- Dump maintenance and truck spotting



# Required Surface Competencies

- General safety practices
- > Soft Skills
- > Reports and documentation
- Workplace inspections
- Open pit mining and haulage safety
- Surface mine haul road and dump safety
- ➤ Haul truck simulation Cat 777 pre-shift and operation
- ➤ Haul truck operation 769D
- Haul truck operation Volvo Articulated
- Haul truck loading, hauling and dumping
- Surface dozer operation
- Dump maintenance and truck spotting



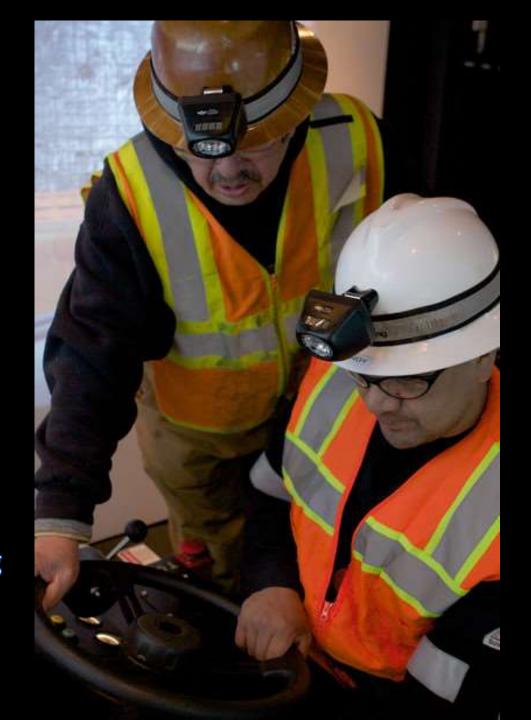
## **Simulator Training**

**Surface Equipment** 

Cat 777 Haul Truck
Cat D-10
Cat Loader

**Underground Equipment** 

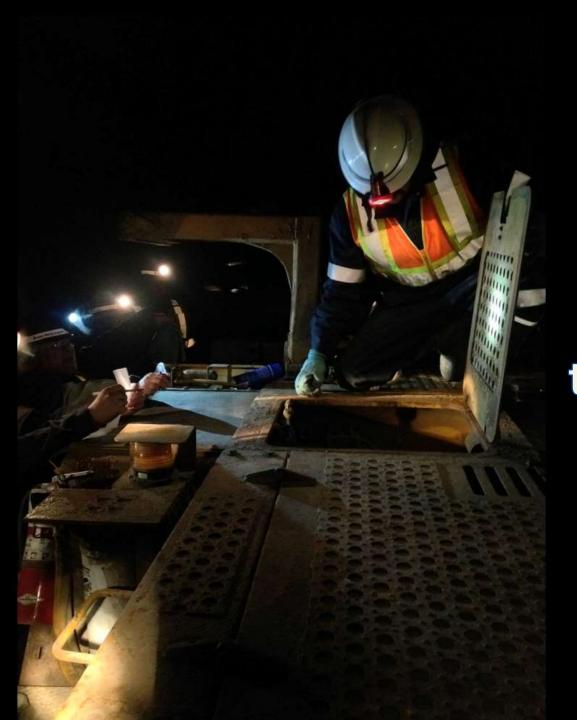
Toro 007 LHD
Scoop Tram/LHD/Mucking
DUX 20 ton UG Haul Truck



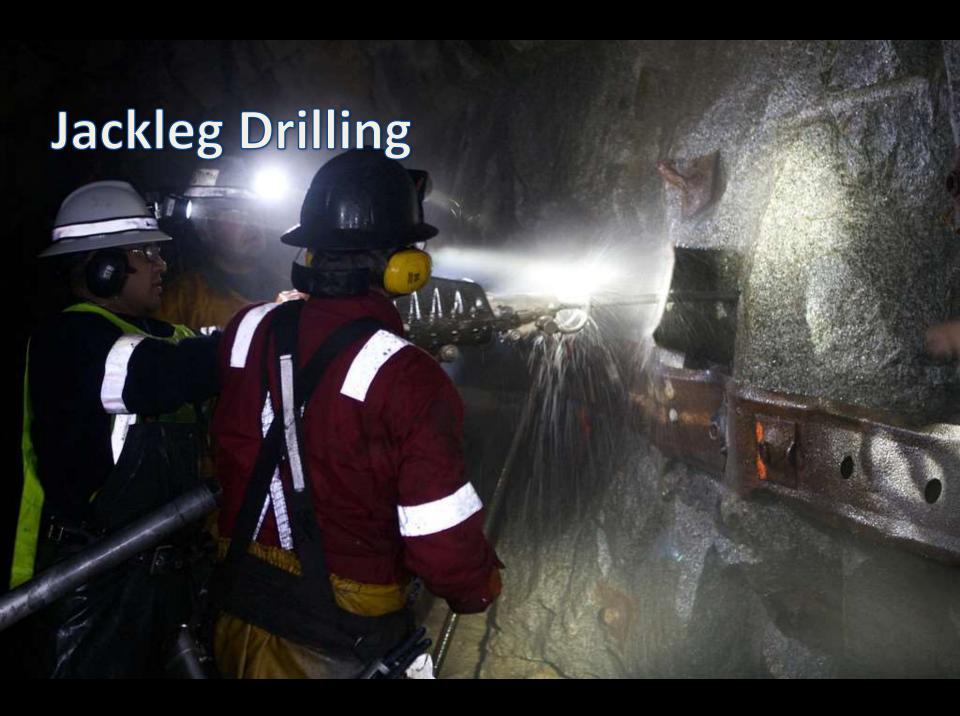


Initial operating skills on the surface...





# Transferring those skills to underground









# Newest addition to the fleet

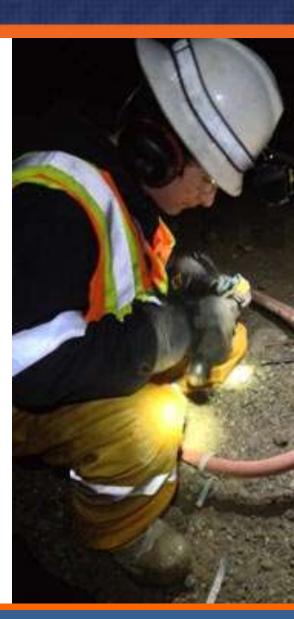


2008 Case Model 340B, 6WD 40 ton



# **Current Industry Partners and Contributors**

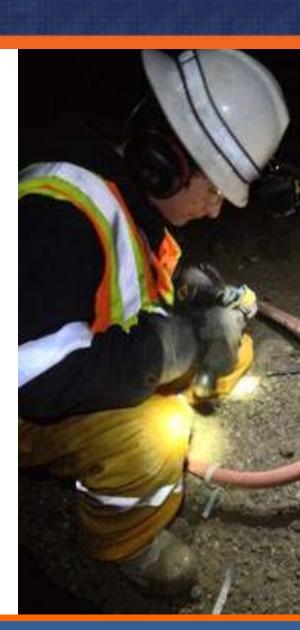
- University of Alaska
- Yukon College Whitehorse Canada (and their industry partners)
- > AK DOL Workforce Development
- Pogo Mine/Sumitomo Metal Mining LLC
- Greens Creek Mine/HECLA Mining Company
- Kensington Mine/COEUR Mining
- Donlin Gold
- Calista Native Corp and Subsidiaries
- Cruz Construction/mining division
- > Craig & Klawock Tribal Council in support of (Niblack & Bokan)
- Crooked Creek Village Tribal Council
- > Tanana Chiefs Conference
- Doyon Drilling
- Schlumberger Oil Field Services
- Alaska Miners Association
- Resource Development Council
- Arctic Fire and Safety
- > Techline Alaska LLC
- Craig Taylor Equipment (Fairbanks)
- Orica Blasting
- Interior Hardware (Delta Junction)





## Oil and Gas Roustabout Training

- ➤ Complete Well head on skids
- ➤ Slick line trailer mount unit
- ➤ Delta Crane
- ➤ Boom truck for rigging
- ➤ Injection pumps





Believe in yourself and great things will happen!

