

AVIATION SAFETY:

A PRACTICAL APPROACH TO CRITICAL CONTROL IMPLEMENTATION

Teck  **NEWMONT™** PARTNERSHIP



Value Share

- Aviation represents one of the highest risk activities across mining and mining exploration
- The remote and difficult to access areas where mining and mining exploration occur results in high utilization of aircraft to operate effectively
 - Passenger transport
 - Moving fuel and equipment by helicopter & fixed wing aircraft
 - Exploration, including extensive helicopter external load operations
 - Environmental studies
 - Avalanche control
 - Emergency Medivacs
- It is critical that companies implement effective controls to mitigate the hazards associated with aviation and minimize the risk of incident to keep workers safe

Helicopter Accidents in Canadian Mining Exploration (2000 – 2020)*

- **15 accidents caused 24 fatalities**
 - Majority of fatalities were caused by human error, not airworthiness issues
- 13% caused by mechanical failure (2 total)
- 7% caused by engine failure (1 total)
- **80% caused by human error (12 total)**
 - Judgment errors – poor pilot decision making (PDM)
 - Loss of control (LOC)
 - Controlled flight into terrain - CFIT

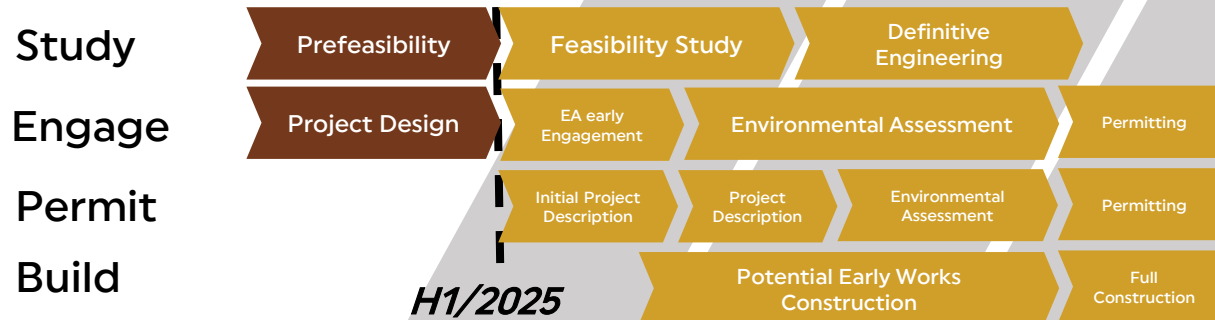
Galore Creek Project

Location & Key Features

- **Joint-Venture Partnership:** 50:50 ownership by Teck and Newmont. Project team established in 2018. Scoping Study completed in 2020. Pre-Feasibility Study scheduled for completion in H1 2025.
- **World-Class Resource:** Amongst the highest-grade undeveloped Cu-Au porphyry deposits in the world. M+I resource estimate of 1,196 Mt @ 0.46% Cu, 0.25 g/t Au, 4.5 g/t Ag (2023) with long mine life (24 years). Clean hydropower and copper production supporting Canada's strategy for critical metals and a green economy.
- **Exceptional Discovery Potential:** 160,000-hectare tenure amongst the largest in western Canada. Encompasses an under-explored porphyry district with multiple mineralized zones. Recent improvements to targeting datasets (geophysics, geochemistry, geology, hyperspectral).
- **Strong Relationships:** Situated entirely within the territory of the Tahltan Nation. Long-standing relationships with Tahltan and supportive Participation Agreement signed in 2006. In 2023 Approximately 32% person-days worked on site were by Tahltan and the program was supported by 21 Tahltan-owned and Tahltan-partnered businesses.



*~70 km West of the Bob Quinn airstrip, and
150 km Northwest of the Port of Stewart*



GALORE CREEK OPERATIONS, TERRAIN, & ENVIRONMENT



Operations & Environment



- Activities include: Diamond drilling, sonic drilling, ground and airborne geophysics, test-pitting, prospecting/mapping, earthworks, environmental baseline studies, engineering studies
- Elevations range from 500' – 8,500' ASL
- Summer temperatures range 3°C to 27°C



- Environmental baseline studies continue through winter months
- Temperatures range from -35°C to +10°C
- Strong coastal influence causing rapidly changing weather
- Steep mountainous terrain

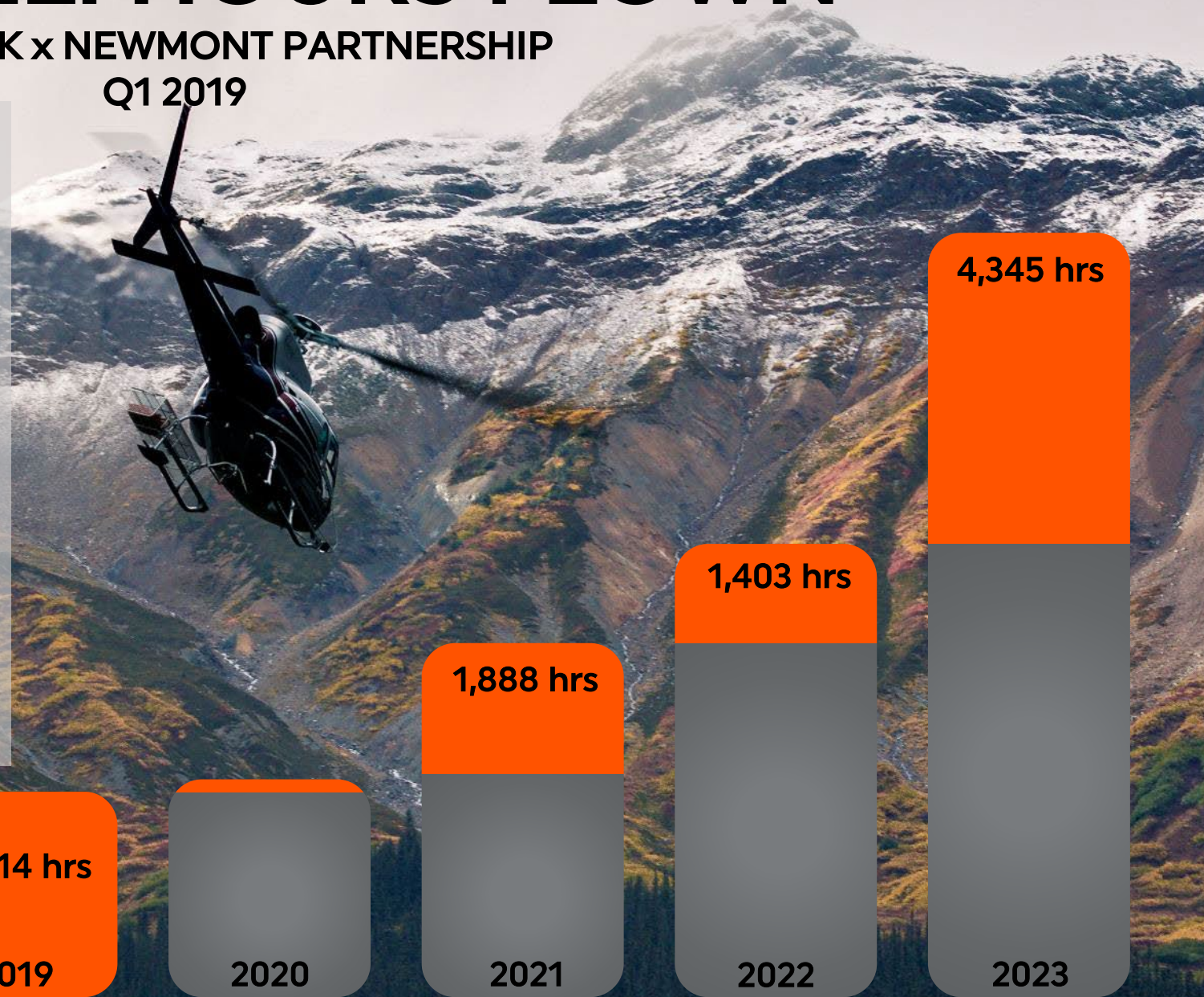



>10,695 HELI HOURS FLOWN

SINCE TECK x NEWMONT PARTNERSHIP

Q1 2019

- No major aviation incidents or LTI's over 5 years of operation
- Concurrent operation of up to 6 helicopters in 2023 + 1 fixed-wing aircraft + drone + commercial charter flights
- 15,041 passenger movements over 5 months in 2023 (avg 93.5/day)
- >2M lbs of external cargo moved in 2023
- Recipient of 2023 AMEBC David Barr Safety Award



A photograph of two men in safety gear (hard hats, high-visibility vests) looking at a computer screen in an office. The man in the foreground is wearing a blue hoodie and a black cap, while the man behind him is wearing a grey hoodie and a black cap. They are both looking intently at the screen. The background shows a large map on the wall and various office supplies.

"Aviation safety is a journey, not a destination. It requires constant vigilance, attention to detail, and commitment to excellence"

Managing Contracted Aviation Risk

To manage the risk of these aviation activities, GCMC works in collaboration with our contracted Aircraft Operators to maintain a Basic Aviation Risk Standard (BARS) compliant Aviation Program.



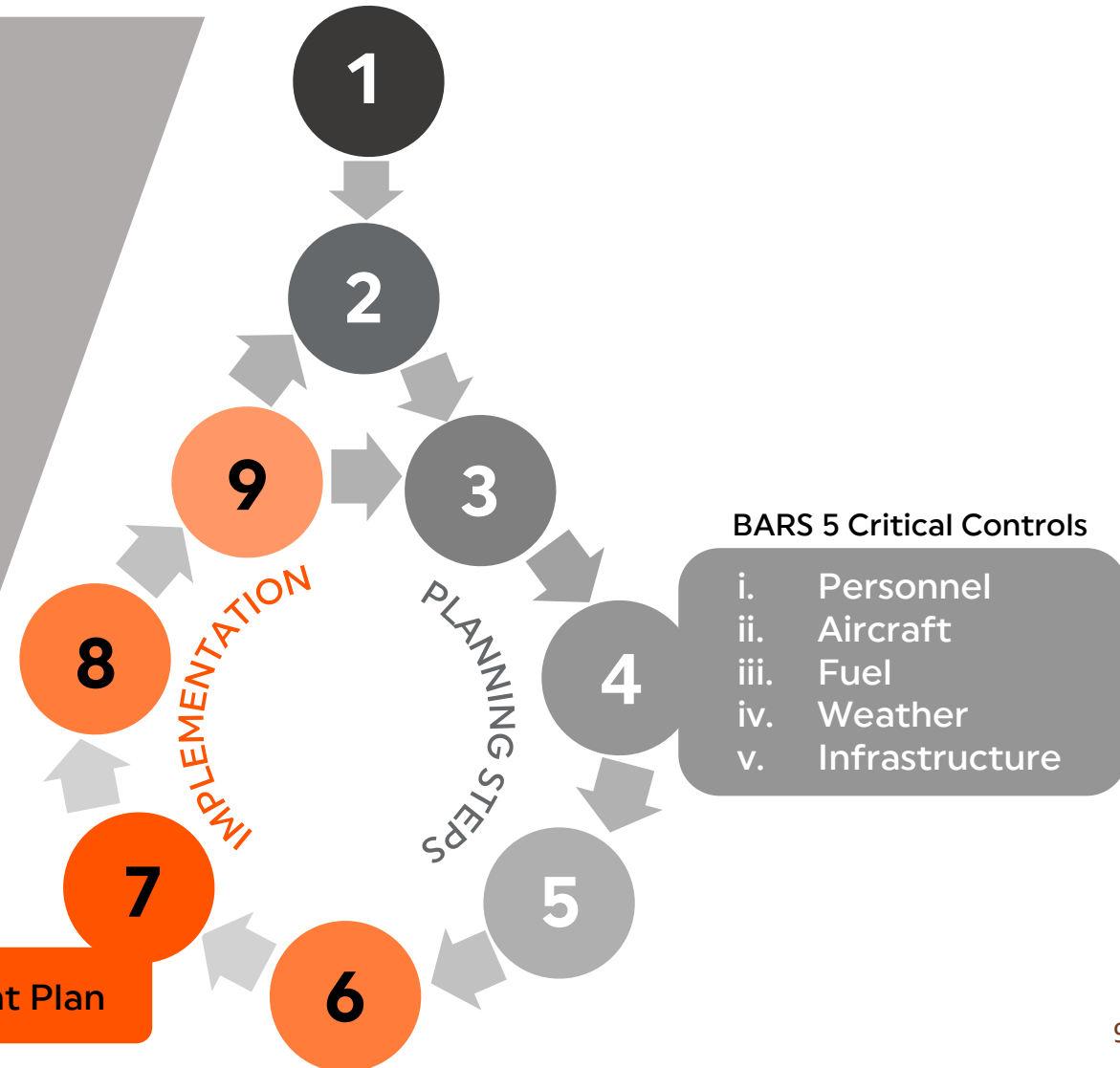
- The Basic Aviation Risk Standard (BARS) Program is an internationally recognized and evidence-based set of aviation standards and tools developed specifically for the resource sector.
- The program has many members internationally who use the BARS program to manage their aviation risks.



GCMC's Journey to Develop a Safe Aviation Program

Critical Control Management Process

1. Recruited specialist involvement (Aviation SME)
2. Completed an **Operational Risk Assessment** to identify hazards
3. Identified controls to hazards- FSF BAR Standard
4. Selected Critical Controls (BARS 5 CC as a minimum)
5. Defined Performance Standard (minimum identified)
6. Assign Accountabilities
7. Developed site specific implementation - **Aviation Management Plan (AMP)**
8. Verify controls are in place and effective - **Aviation Operational Reviews (OR)**
9. Continuous Improvement



Personnel

- Established roles and responsibilities for all project personnel interacting with helicopters
- Ensure appropriate Flight Crew
 - Pilot qualifications and experience
 - Audit training requirements and certification
 - Implement pilot approval process based on activities
 - Provide pilot development & mentorship opportunities
 - Observe Flight and Duty limitations
- Provide appropriate training, competency assessment, and approval, for personnel based on roles
 - Dispatcher
 - Ground crew and helipad landing officers (HLO)
 - Aircrew
 - Medics
 - Passengers
- Collaborative engagement with helicopter services provider



Aircraft

"Ensuring the right tool for the Job"

- Establish use case for aircraft
 - Activities and payload requirements
 - Terrain and operating environment
 - Performance requirements
 - Passenger capacity requirements
- Aircraft selection based on use case and standards
 - Multi engine requirements
 - Single engine – with variance
 - Ancillary equipment compatibility
 - Aircraft & Pilot availability
- Approval process for aircraft & equipment
- Flight Data Monitoring (Appareo)
- Electronic Flight Bag (EFB)

AS350 B3e
Single-engine
requiring variance



BELL 212
Multi-engine



DHC-6 Twin Otter
Multi-engine

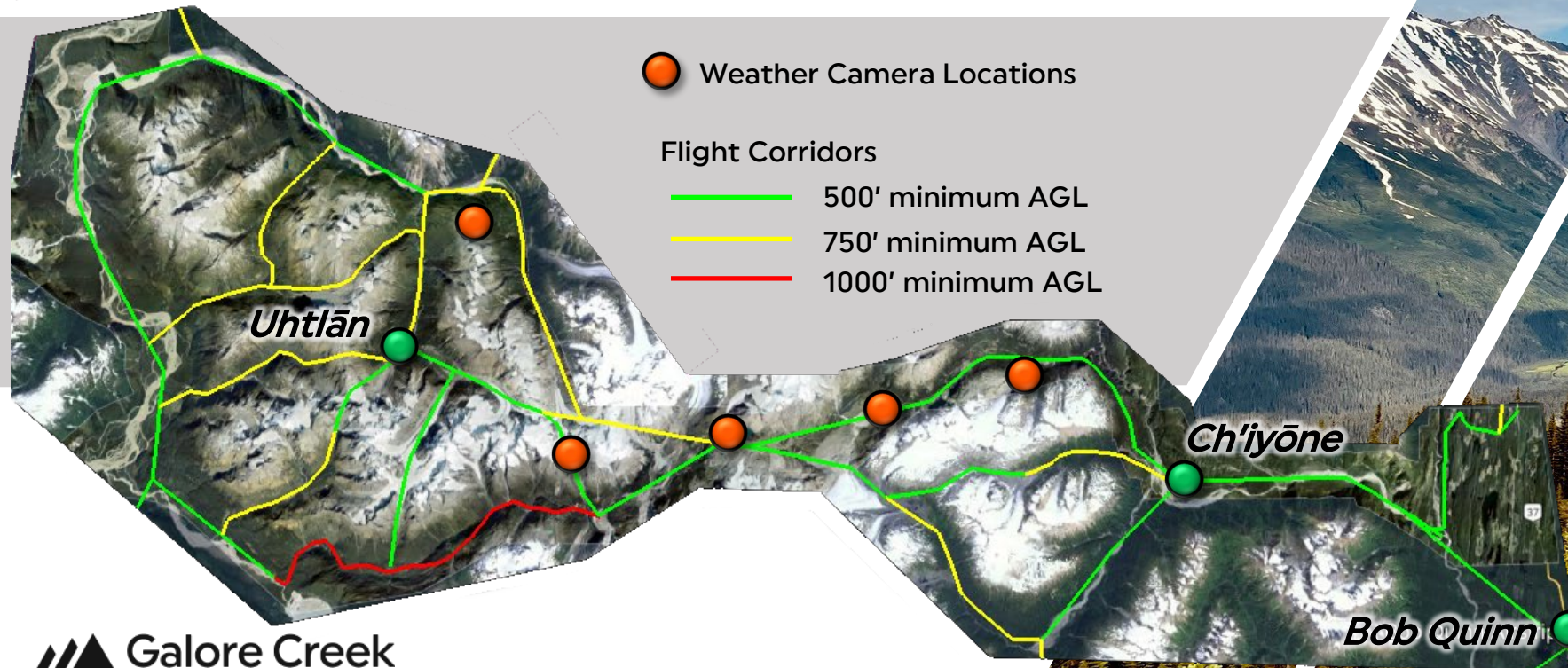
Fuel

- Bulk fuel delivery
 - Fuel transfer monitoring
 - Settling periods
 - Specific gravity testing
- Appropriate bulk fuel storage infrastructure
 - Double-walled top feed tanks
 - Spill berms
 - Fuel cabinets
 - Fuel filtration
- Regular fuel storage inspection and maintenance
- Designated fuelling personnel with Standard Operating Procedures
- Visual Flight Rules fuel plan
 - 30 mins fuel reserve + 10% variable
- Fuel Quality Assurance
 - Daily sampling & testing
- Hot refueling prohibited
- Drummed fuel standard



Weather Monitoring & Forecasting

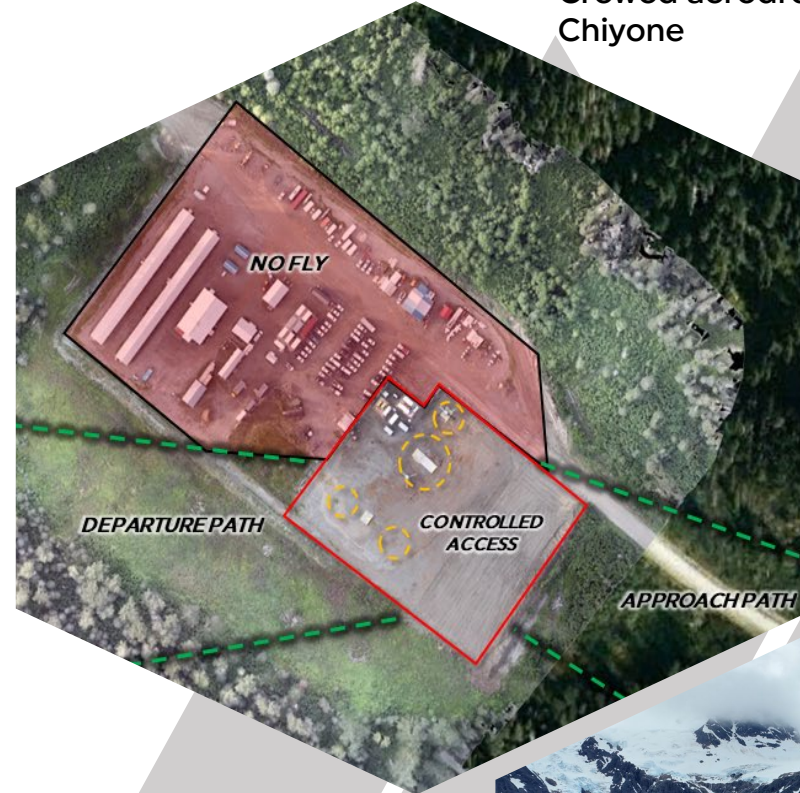
- Establish weather minimums and flight heights across project based on terrain assessment
- Accurate & frequent weather forecasting
- Weather camera network for live monitoring of conditions
- Communication and contingency planning
- Empowered risk-based decision making



Infrastructure

- Crewed Aerodromes
 - Uhtlān and Ch'iyōne camps
 - Approach and departure paths
 - Buffer area & controlled access
 - Sighting considerations
 - Marked helipads
 - Multiple aircraft operations
 - First/Emergency response
 - Dedicated external load areas
 - Passenger terminal areas
 - Fuel Infrastructure
- Uncrewed Helipads
 - Staging areas
 - Remote constructed helipads
 - Field landing zones
- Airstrips (Uhtlan & Bob Quinn)
- Flight Crew Accommodation
- Radio communication network
- Aircraft Operator maintenance and equipment infrastructure

Crewed aerodrome at Chiyone



Uncrewed helipad at drill site



Uhtlān airstrip

High Impact Controls – Low Barrier to Implement

Any project can implement simple controls to improve the safety of aviation operations.



PERSONNEL

Culture of Safety
Minimum pilot
experience
requirements



AIRCRAFT

The right aircraft
for the job



FUEL

Proper fuel
testing
Proper fuel
storage



WEATHER MONITORING

Established
weather minimas
Real-time weather
monitoring
(cameras)



INFRASTRUCTURE

Suitable helpads
Minimum landing
site dimensions
Flight crew
accommodations

Teck

Newmont™

THANK YOU



Galore Creek
MINING CORPORATION