



# BORDEN PROJECT

September 2016

 GOLDCORP

## Design for safety from day 1

Current safety performance RIF = 0

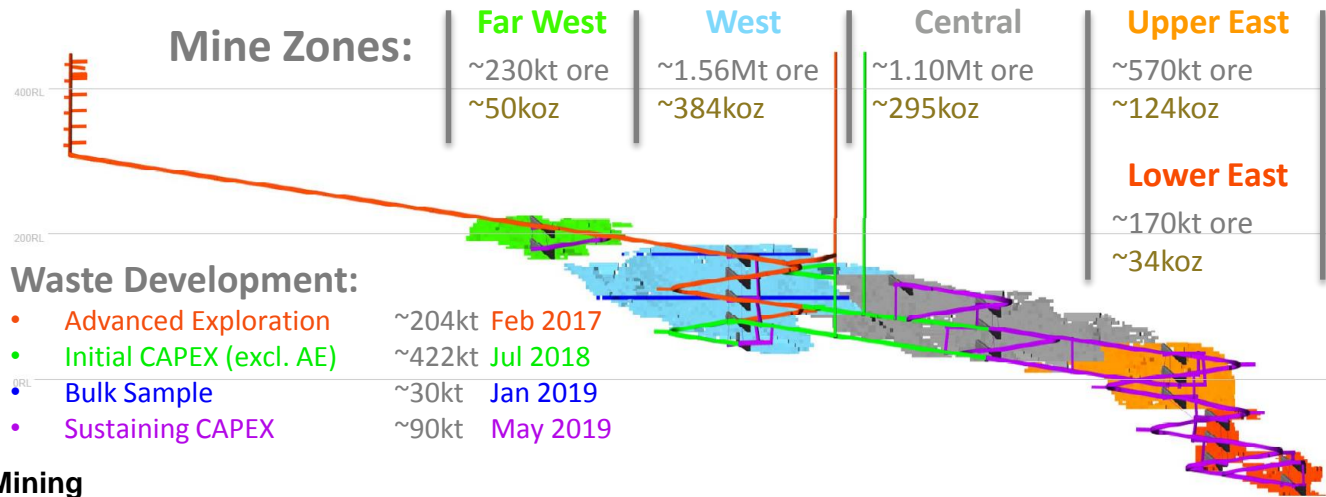
Project envisions safety into the design

- No portable ladders on site
- All raises to be excavated via raise bore or drop raise
- No hand held drill (jack leg and stopper)
- No compressed air (reduce risk of accident)
- Emergency response measures incorporated in design philosophy
- Contractor selection based on safety
- Tagging and tracking system
- Closed cabs on equipment
- No or little diesel combustion
- Network of gas sensors
- Proximity detection



# What is Borden? 5 distinct mining zones – developed in 3 phases

3

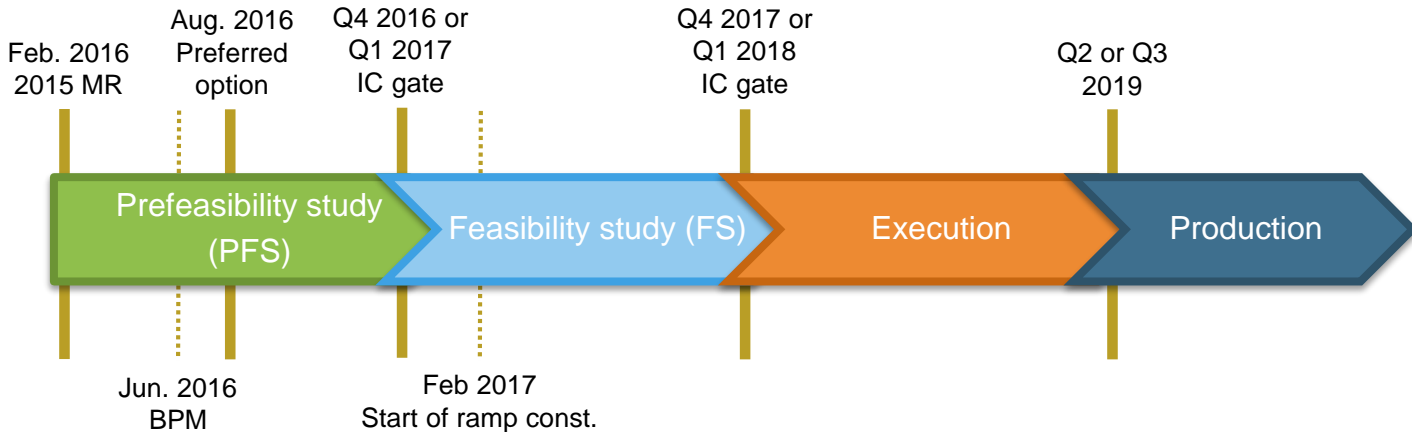


## Mining

- 15m longhole retreat – factored 24% dilution
- ~2000tpd ore @ 7gpt to mill using proven production rates
- 5x5m main haulage drifts
- Diesel trucks & tethered (electric) scoops until quick-charge battery alternate is viable.
- Battery electric equipment
- Lom: 9 years based on current indicated resources only
- Economic cutoff range 3.25-3.75 gpt, indicated resources 1.5 MOz/7 Mt @ 6.8 gpt
- Cemented rock fill with waste backhaul from PGM for waste requirement

# Current stage of the project studies

4



- Project still in study phases.

- Borden a future mine.... a mine of the future
  - Jumbo's equipped to drill 6m round with 25kW drills
  - Automated jumbo, drill and tele operated scoop from day 1
  - Tethered scoops offer more power than diesel
  - All mobile equipment on 1000V
  - Compressor less mine
  - Most equipment is battery operated with fast charge battery
  - Ventilation on demand with fans on VFD
  - Consideration for LNG for long term mine air heating
  - Pump stations on VFDs
  - No hand held drill



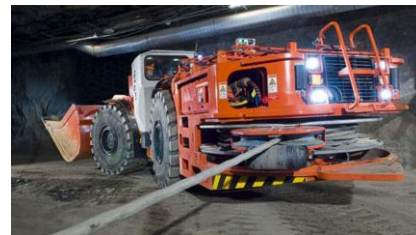
## 2017 fleet purchase

# of Units	Equipment
2	Truck 42 T Sandvik diesel
2	LHD 14T Sandvik
2	Electrical jumbo
2	MacLean bolter
1	Cassette carrier CS3
1	Magnum crane cassette
2	McLean scissor lift
1	Maclean E-Concrete mixer
2	Electrical land cruiser
1	CS3 Emulsion carrier
1	Flat Deck Cassette for Orica Maxiloader 5344
1	Man Basket Cassette for Orica 1240
1	McLean block holer
1	Electrical grader
1	Minecat tractors - face prep
1	Minecat tractors - electrician
9	Batteries Maclean
2	Batteries Sandvik



Ordered

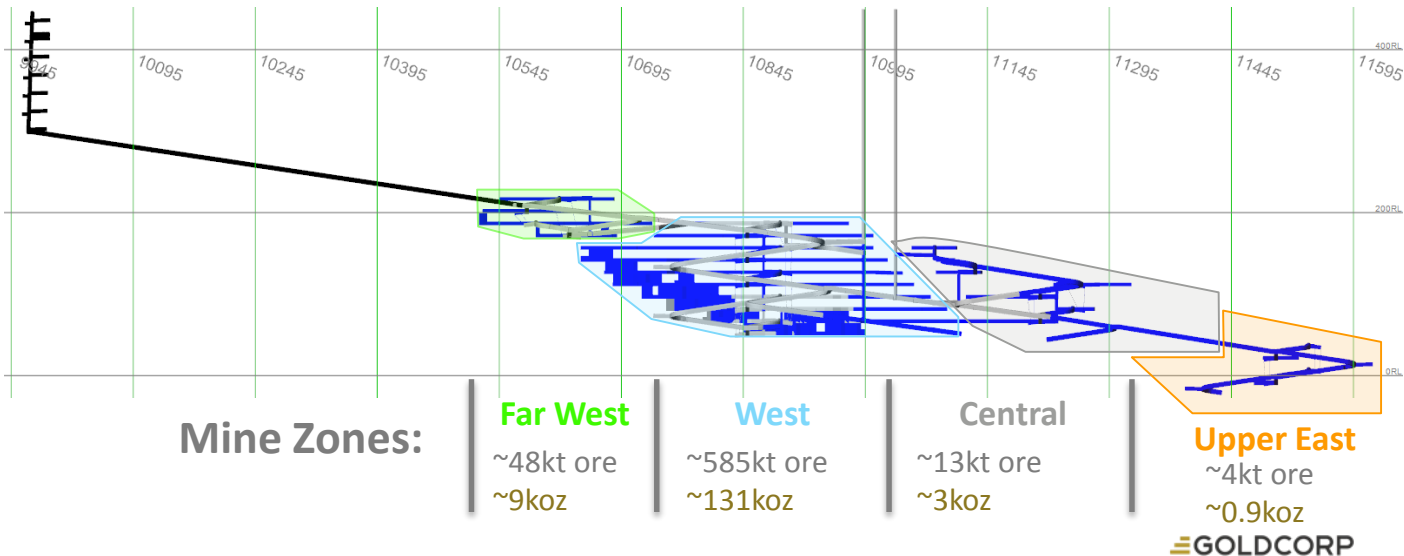
To be ordered



# Development and Stope Sequence: 2017 - 2019

Legend	Year (Start)	Waste		Ore (Development)			Ore (Stopes)	
	<b>2017</b>	1,700m	110 kt	-	-	-	-	-
	<b>2018</b>	4,400m	340 kt	750 m	45 kt	11 koz	5 kt	0.7 koz
	<b>2019</b>	6,500m	460 kt	4,100 m	250 kt	58 koz	350 kt	74 koz

Longsection View Looking North



## Key Insights

### Focus:

- First nation inclusion
- Local employment
- Providing sufficient training to create local opportunities

### Use of contractors (labour rental):

- In the initial steps of development
- Specific selection process from Goldcorp's management

### Gradual transition from contractors to Goldcorp personnel

- From 2017 through 2019 move employees from contractors status to Goldcorp status
- Allows to evaluate and recruit best performers

## Number of Employees + Contractors

