A Technology-Enabled Revolution in Mineral Exploration: ‘Prospecting Drilling’

Richard Hillis
Exploration 17, Toronto
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Technologies Will Enable ‘Prospecting Drilling’
AutoSonde & AutoShuttle
Coiled Tubing Drilling
• ~0.8 metre in 2 mins
• ~24 metres per hour
- ~18 metres in 1 min
- ~1,100 metres per hour
• safety: no rod handling therefore eliminate >50% minex injuries
• environment: BHA driven by recycled fluids, no sump
• easily road transported: ~15 tonnes (including drill string)
• tripping in and out at ~1 km per hour

• Port Augusta Trial March 2017
  - hard rocks (including quartzites) drilled at ~92 m per 12 hour shift across four shifts (DD 25m/shift)
  - consistent with $50/metre model
  - excellent sample return and assay match
  - temperatures approaching 40ºC
  - hole straight and vertical
Horsham Trial June 2017

- unconsolidated cover and underlying basement
- averaged 42.5 m/shift
- previous sonic/diamond hole ~12 m/shift or ~$620/m
- could not be RC drilled (CT only cost-effective alternative)
- sub-freezing temperatures
- hole straight and vertical

- still tuning downhole motors, hammers and bits
- potential for coring
- technology has opened the Gawler Craton, Murray Basin and similar areas of extensive cover to ‘prospecting drilling’
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