In-hole Surveying – Where we are and where we are going

Mark MacCabe
Product Manager
Drill Guidance Systems
Advanced Mining Technologies

AMT Company

- 100% Australian company
- Established in 1993
- Part of the Industrea Group (ASX Listed – IDL) since 2005
- Located on the Central Coast, NSW, 100km North of Sydney, Australia
- Industry leader and specialist manufacturer of mining safety and operational efficiency systems
- Engineering based
- In-house research & development, manufacture and service facilities
- ISO 9001 Quality Assurance
- 17 years Mining industry experience

AMT Products & Services

ADVANCED MINING TECHNOLOGIES
Design, manufacture, sales and support of systems and technology for mine safety and operational efficiency:

* DGS™ Drilling Guidance System for drainage and exploration of gasy underground coal seams (E.i.d. Intrinsically Safe)
* CAS-CAM/RF™ Collision Avoidance System
* Integrated driver safety management and GPS-based tracking equipment for open cut mines

Industrea Products & Services

INDUSTREA MINING EQUIPMENT
- Design, manufacture, sales, and service of flameproof heavy equipment for underground coal mining
- Service, repair and spare parts

PJ BERRIMAN
- Design, manufacture, sales & service of specialised coal mining vehicles
- Flame / fire & explosion proof electrical equipment and accessories
- Service, repair and spare parts

KADE ENGINEERING
- Engineering & Fabrication

HUDDYS MINING SERVICES
- Contract open cut mining services
  - Mine planning and design
  - Mine management
  - Provision of equipment and operators
  - Earthmoving equipment hire
  - Drill and blast planning and operation
- Civil earthworks contracts

World-wide Optional Support
**Product Update**

**Uphole Monitor versus Uphole Computer**

**Drill Guidance System (DGS)**

**DDM MECCA**

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**Recent History of Ophore Occurrences**

- 1995: Recordable Ophore 92/3 only
- 1996: Minor Ophore since 1994

**What is the current status of the survey tools –**

- Their use?
- Accuracy?
- Any issues?

**Where are they being used –**

- How?
- Why?

**What can be done for the future –**

- How plausible?

**Screen Display**

**Product Update**

**Is AMT capable and planning incorporation of downhole logging –**

- Gamma?
- Temperature?
- Rig parameters such as thrust, drilling rate or bit advance rate?

**What would the industry like developed to add more value to drilled directional holes?**

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Thank You