‘SMARTGAS – Connect’
Mine Trending Software Project

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Project scope
- Develop a cost effective mine gas monitoring software package
- Ability to interface with various mine monitoring systems and collect gas data from gas monitoring locations
- Display gas monitoring locations on imported mine plan
- Display live data from the gas monitoring points
- Set security level access for authorised personnel
- Allow alarm setting for each monitoring point by authorised personnel
- Allow acknowledgement of alarms by authorised personnel
- Trend/ graph data from monitoring points
- Trend/ graph relevant ratios and indices
- Ability to produce relevant reports
- Comply with relevant regulatory requirements

Typical data displayed
- Gas data/ trending for each monitoring point for:
  - Oxygen
  - Methane
  - Carbon monoxide
  - Carbon dioxide
- Air flow/ quantities
- Barometric pressure
- Ratios/ indices including:
  - CO make
  - Graham’s ratio
  - CO/CO2 ratio
  - Explosibility trending
  - User defined

Mine plan display

Alarm point setting

Alarm point acknowledgement
Typical trending of data

Ongoing project development

- Refine graphics and user operation
- Import gas chromatographic data
- Maintenance reminder system for gas sensors
- Format for International market (i.e. China, USA)
- CCTV display from U/G locations
- Greenhouse emission calculations