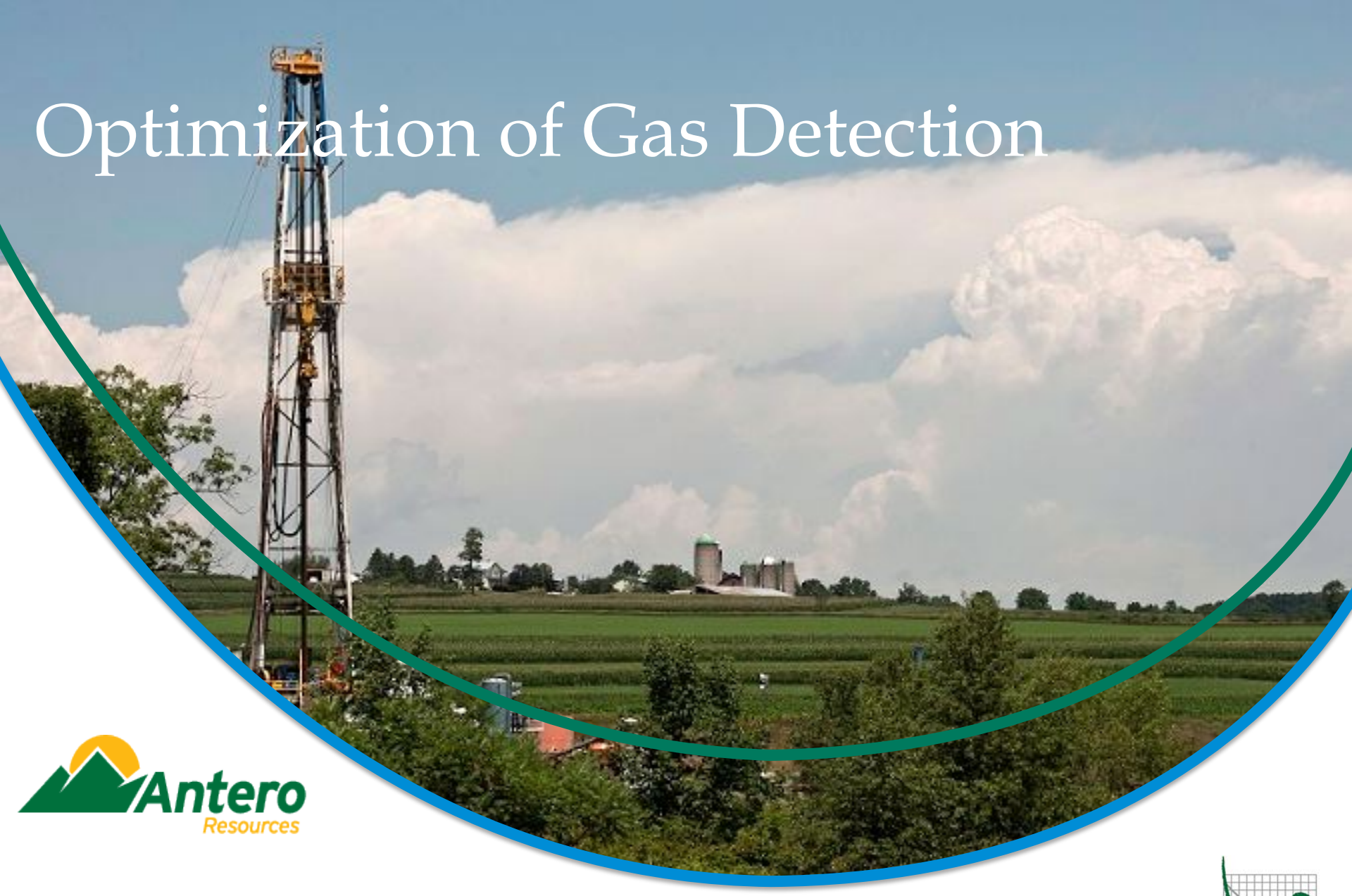
Optimization of Gas Detection



Antero Resources

ERM

The world's leading sustainability consultancy

Introducing ERM

ERM is a leading global provider of environmental, health and safety, risk, social consulting and sustainability related services

- 150 offices in 40 countries
- 5,000 employees
- Projects in more than 170 countries
- Over 40 years of experience
- Worked closely with over 50% of the Global Fortune 500 companies in the past 3 years
- Significant expertise on major capital projects

Global Risk Practice

Location	Risk Employees
USA (Houston, Montreal, Northern California, Nashville)	28
Europe, Middle East, Africa (UK, Norway, South Africa)	43
Asia Pacific (Kuala Lumpur, Hong Kong, Singapore, Jakarta, Perth, Korea)	79
Human Factors (UK)	15
Total	**165**

Steps in Risk Management

- Identification of the threats/hazards to Human Life, Environment and Business
- Identification of Controls and Mechanisms to prevent these threats/hazards
- Identification of the Risk associated
- Managing these Risks with appropriate mitigation

Background

Past - Issues with gas leaks and fires at well pad sites;

Present - Addressed with an aggressive gas detection program

Future - Desire to determine if the gas detection program is appropriate, aggressive enough, not to aggressive.

Objective

Review the existing gas detection locations at the well pads,

Collect existing gas detection data by phase (production, drilling, etc.)

Summarize and interpret existing gas detection data

Conduct an analysis of gas detector locations relative to industry best practices.

Develop criteria for short term and long term modifications to deployments including resources

Steps

1. High level verification of existing gas detection data in conjunction with the findings
2. Compare data with incident reports
3. Field visit
4. Data interpretation
5. Focused gap assessment on how detection is deployed in the field

Preliminary Observations

- Locations of the portable gas detectors
- Use of personal gas monitors
- Emergency Response

Questions