IMCC Benchmarking Workshop On Mine Mapping

February 15, 2012

Accuracy and Reliability of Mine Maps

A Perspective from the Mining Industry

Why Be Accurate?

- Mine Accidents
- Gas Wells
- Future Permits
- Site Development
- Subsidence
- Liability

Mine Permitting

Challenges

- No Gravy
- Smaller Reserves
  - Mines above, below and adjacent
  - Project profitability
- Map Identification
  - Bad data input
  - Seam correlation
  - Final map?

Process

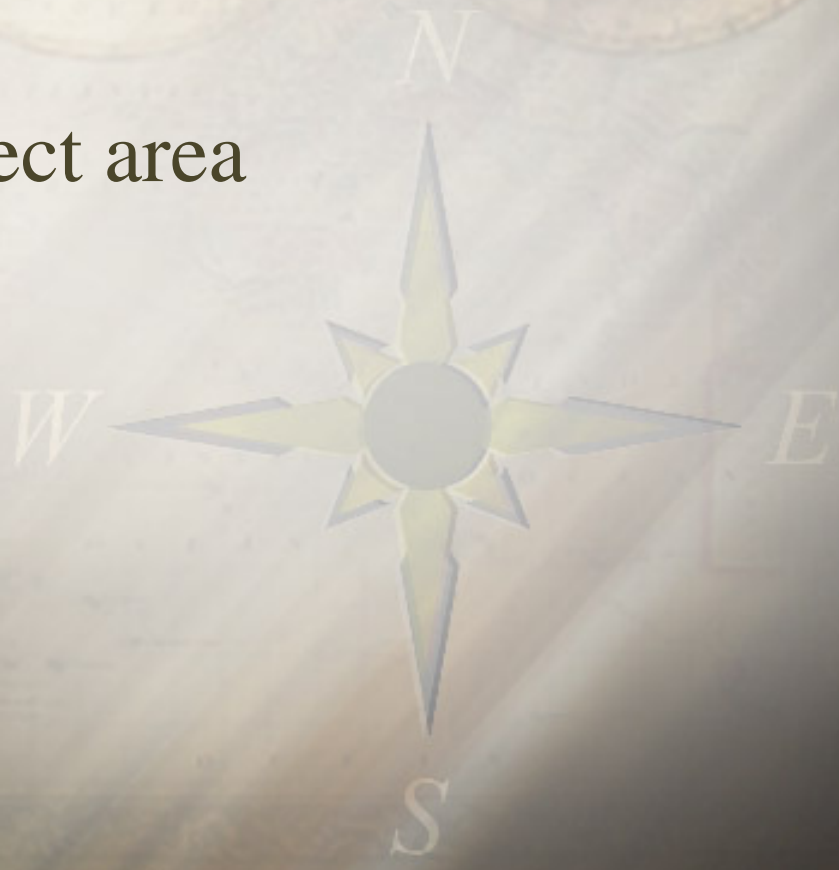
- Define search area
- Identify Mines
- Locate mapping
- Map Confirmation
- Map Placement
- Barriers

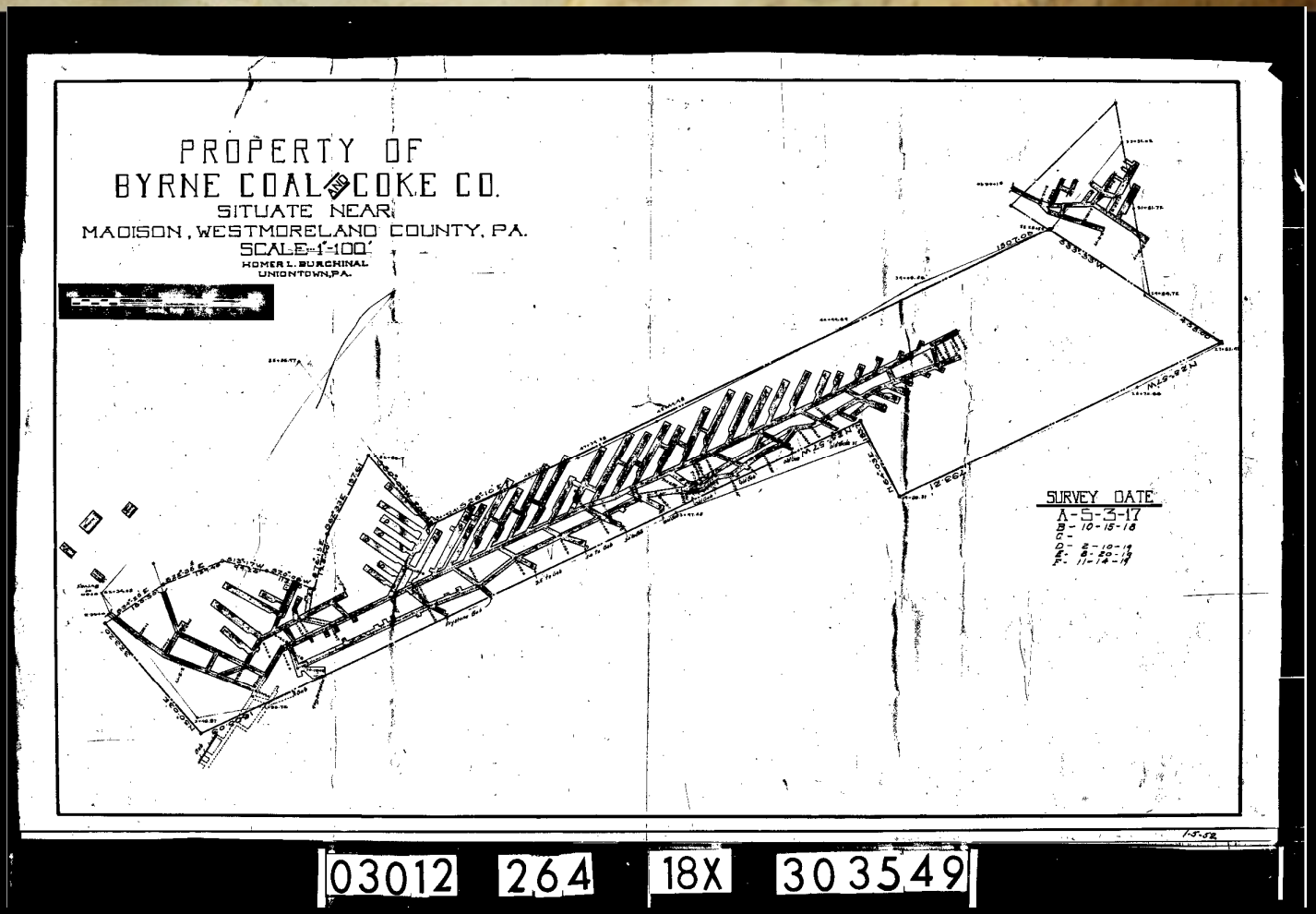
Identify Mines

- Sources
- Mine Names
- Operator Names

Locate Mapping

- Collections
- Cross References
- Mines outside project area





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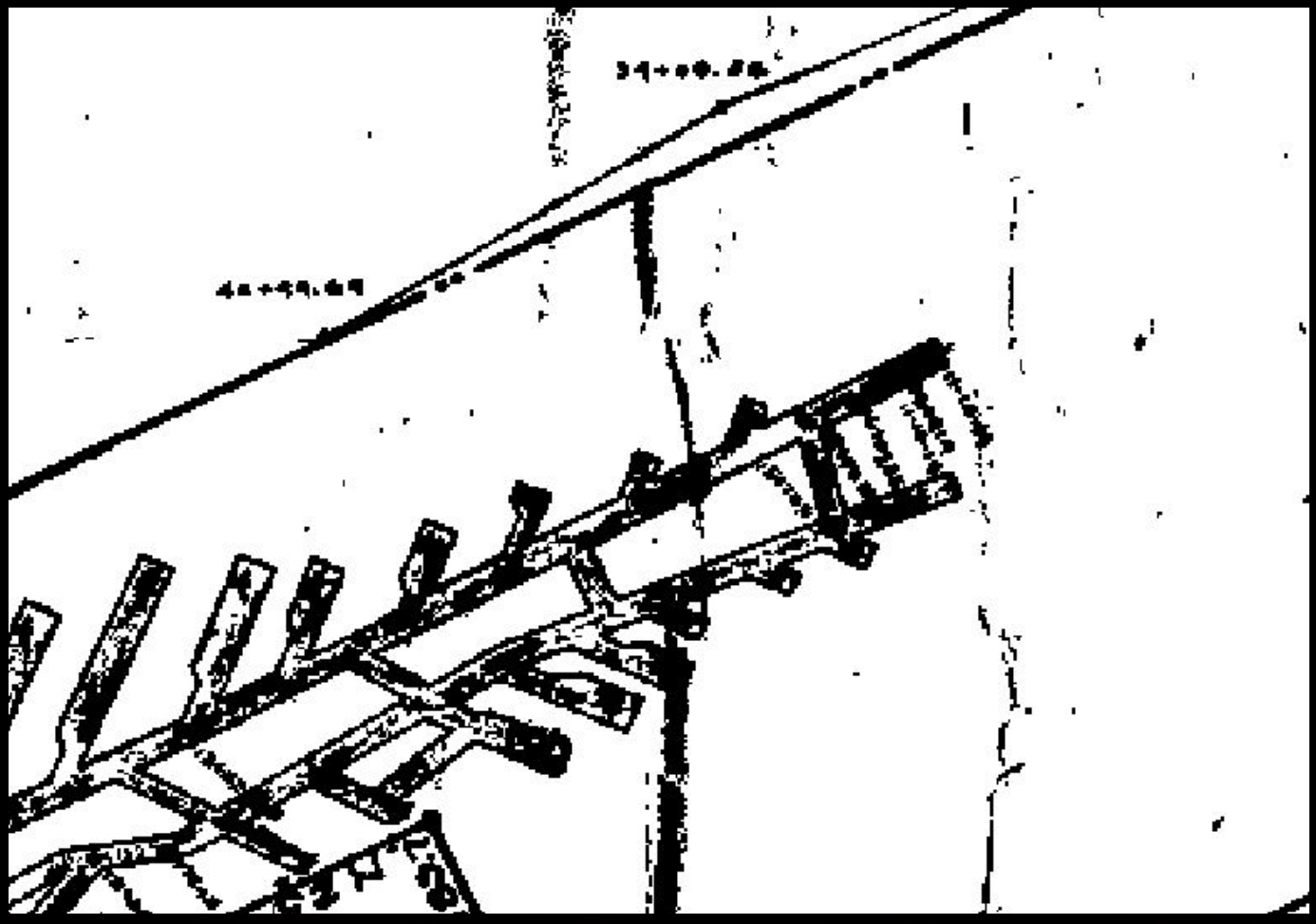

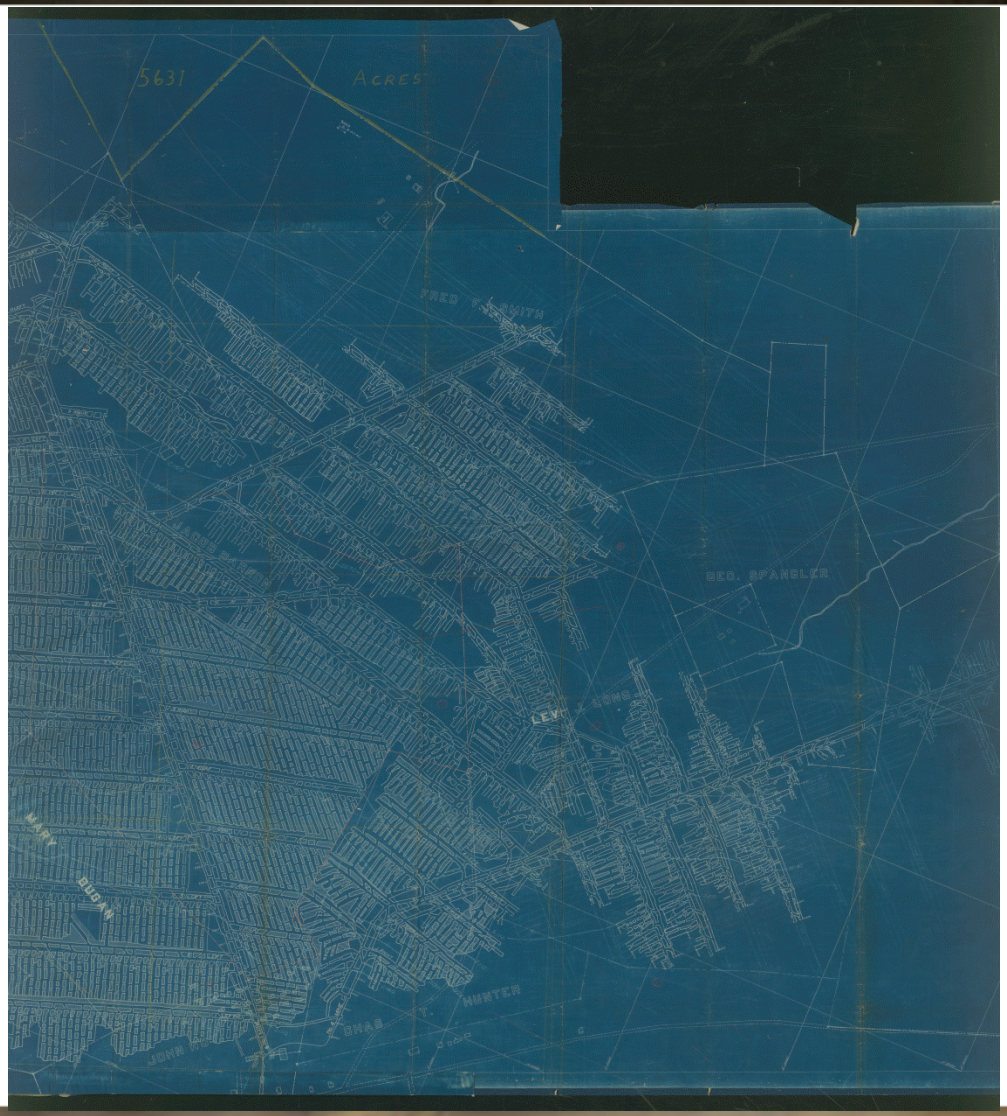
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ACRES
FRED F. SMITH
BEO. SPANGLER
MARY
DUGAN
HUNTER
CHAS
JOHN

Map Placement

- CAD vs. GIS
- Coordinate system
- Surface Features
- Historical Aerials
- Field Surveys

Mine Barriers

- 500 foot minimum
- Hydraulic
- Safety Zones

Liability

- Who assumes liability of mine placements?

WISH LIST

- Smaller file size
- More efficiency
- Cross referencing