GEO-INFORMATION MANAGEMENT AT ALAMOS GOLD

ALAMOS GOLD INC.
Exploration Department

By Fernando Lopez
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ALAMOS GOLD

BACKGROUND

NORTH PACIFIC OCEAN

USA

MEXICO

CANADA

LYNN LAKE

QUARTZ MOUNTAIN

YOUNG-DAVIDSON

TORONTO

EL CHANATE

MULATOS

ESPERANZA

KIRAZLI

AĞI DAĞI

TÜRKİYE

NORTH ATLANTIC OCEAN
GEO-INFORMATION GROUP

BACKGROUND

- TOHO
- HMO
- LLK
- TUR
- YD
- QMG
- EPZ
- MON
Stages of Mineral Exploration & Development

01. Prospecting
02. Advanced Exploration
03. Mine Construction
04. Operation
05. Closure
06. Remediation
Prospecting

01

10,000 - 1,000,000 km²

Up to 10 (million US$)

- Surface Datasets
- Databases
- Tech. reports

< 5 TB of information

Advanced Exploration

02

1,000 - 10,000 km²

Up to 100 (million US$)

- Surface Datasets
- Sub-Surface Datasets
- Databases
- Technical Reports

> 3 - 4 TB of information
THE CHALLENGE
2013
2013

What data are we capturing? Is this data enough? How to best collect data? Where to store our data? Can we all share it? Is it secure?
01 Prospecting

- Remote Sensing
- Geochemistry
- Geophysics
- Field Mapping
90% Spatial Data

- Data is not structured
- Different formats
- Paper maps
- Duplicated datasets
- Multiple locations
02 Advanced Exploration

Remote Sensing
Geochemistry
Geophysics
Field Mapping
Drilling
CHALLENGE

- Data is not structured
- Different formats
- Paper logs
- Duplicated datasets
- Multiple locations
CHALLENGE

Technology
- No standard software
- Outdated hardware
- Information silos

Process
- No workflows
- Missing key data processes
- Duplication of effort

People
- Lack of training
- No sharing culture
- No information specialists
Goal
Our mission is to organize AGI’s Exploration information and make it globally accessible and useful.

Scope
All exploration sites company-wide.

Time Frame
2 years

Budget
CA$ 500,000

Staff
01
**PROJECT DEFINITION**

1 - Drilling Data

**Sub-Surface Datasets**
- Geological Logging
- Sample collection
  - Various measurements (SG, PLT, REC)
- ...

2 - Spatial Data

**GIS Datasets**
- Surface in-house maps
- Geological Survey datasets
- Satellite Images
- ...

3 - Documents

**Files**
- Internal reports
- External files (lab. results, claims reports)
- Site photos
- ...

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**OUR PATH**
SYSTEM INTEGRATION

1 - Drilling Data
2 - Spatial Data

Same SQL Server

DB

GDB
OUR PATH

TORONTO

MON

EPZ

LLK

TUR
2016

What data are we capturing? Is this data enough? How to best collect data? Where to store our data? Can we all share it? Is it secure?
Data capture | COLLECTOR FOR ARCGIS
Data capture | COLLECTOR FOR ARCGIS
Data Management | ArcGIS ONLINE
Data Management | ArcGIS ONLINE
ESRI SOFTWARE

Vector Datasets (from GDB)

Raster Datasets (from GDB)

Drilling Datasets (from SQL DB)
Data Publication | WEBAPP
What’s next?