

## Who is ProDelta?



#### What is Our Passion

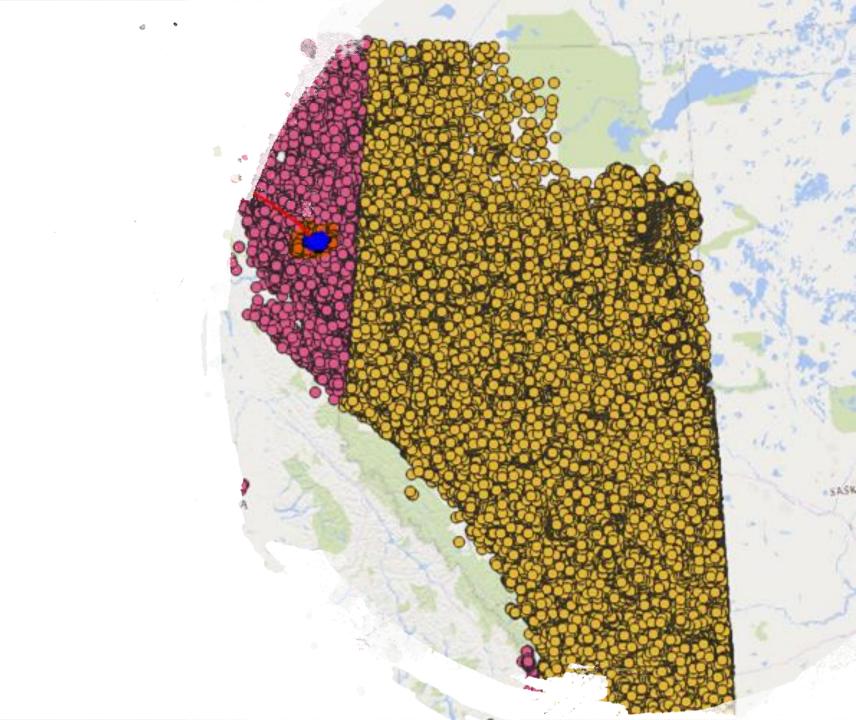
- Remote sensing (Photogrammetry)
- Data Analytics
- Geographical Information Systems
- 3D Modelling and Analysis
- 4D/5D Interactive Environments





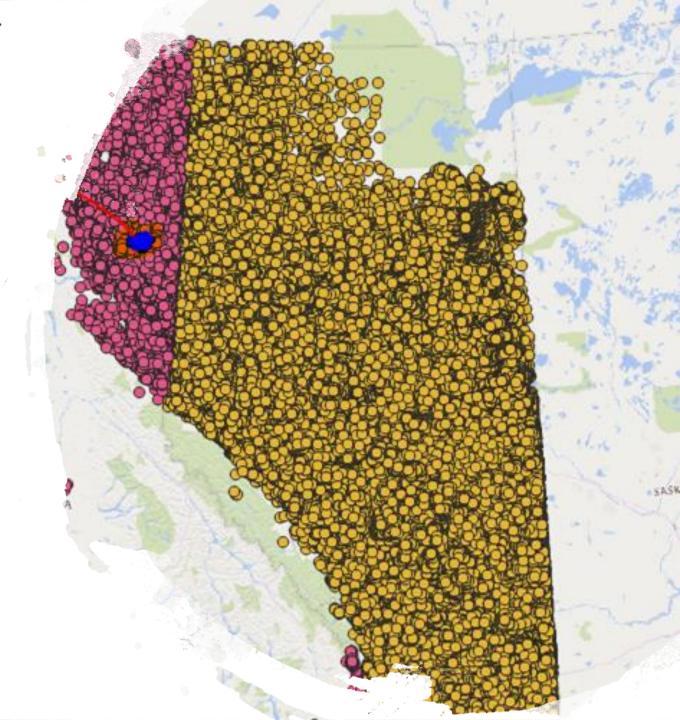
## What is the Problem?







Too many assets and not enough resources.





# Photogrammetry Overview

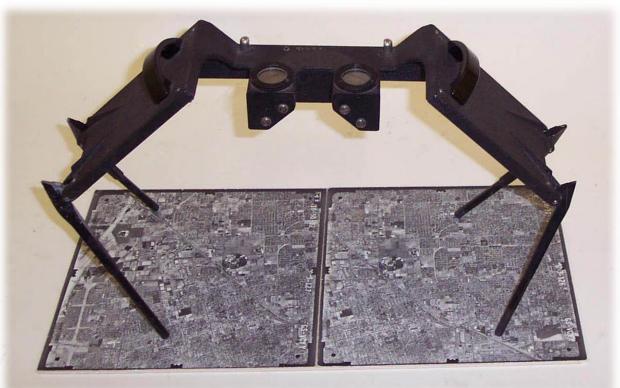




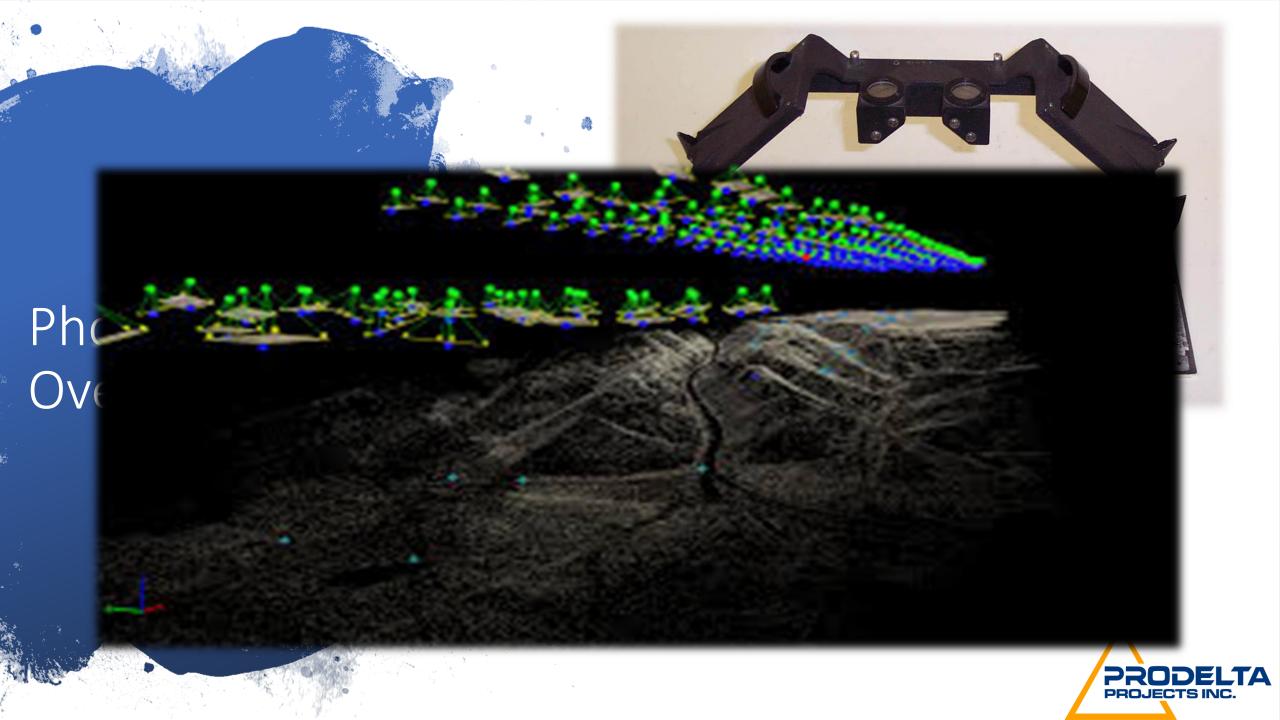
















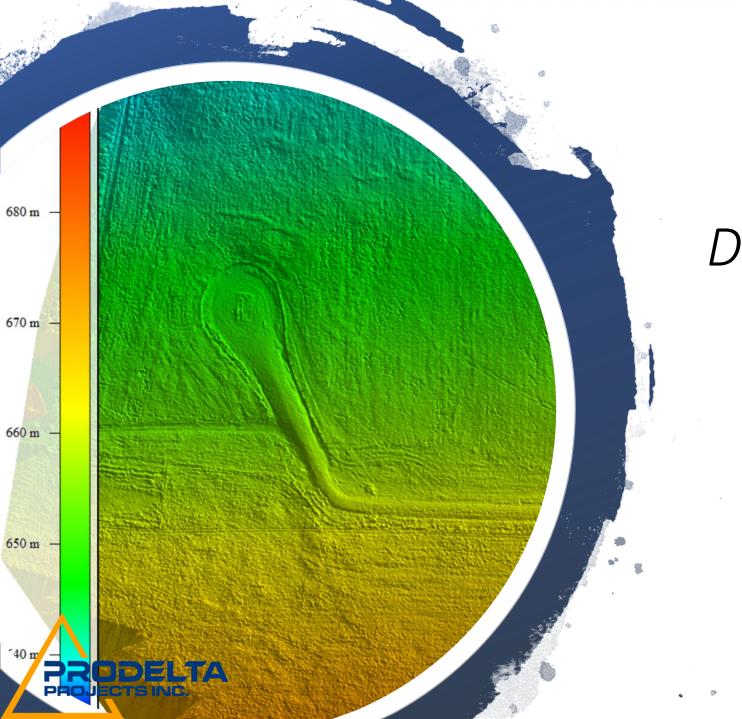


# Data Analytics and Uses





### High Resolution Orthomosaic



### Digital Surface Model

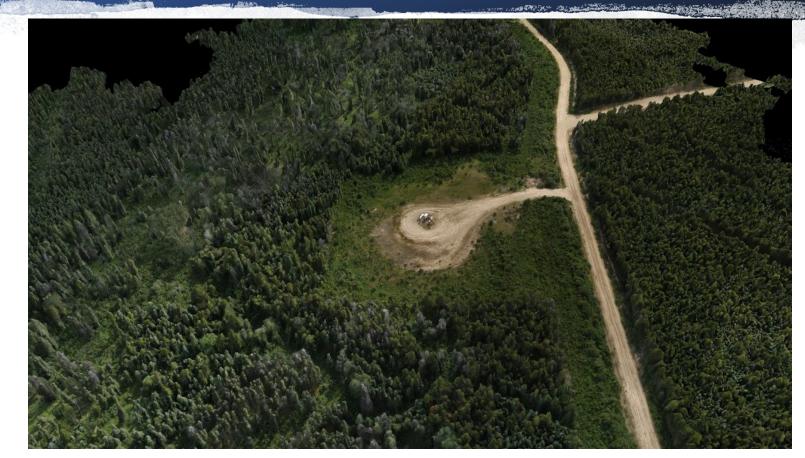


#### Point Cloud Data

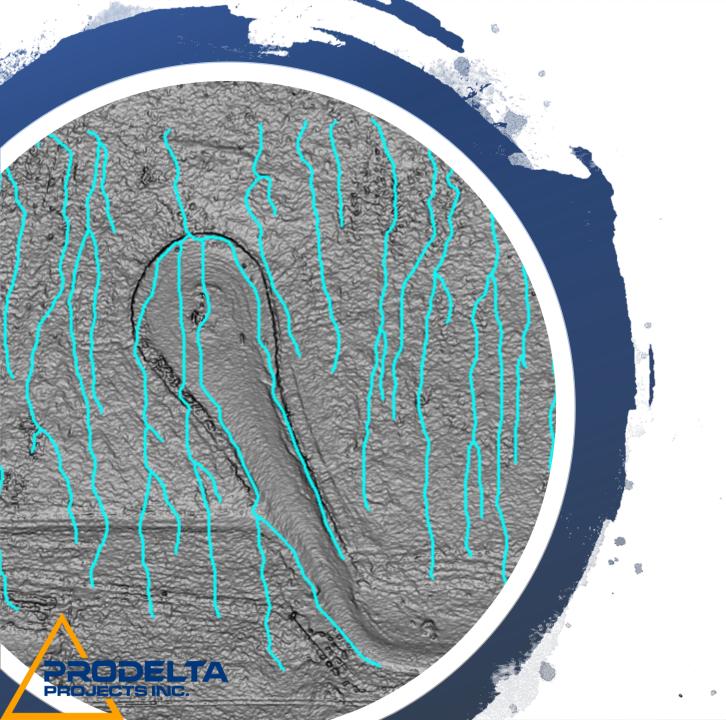


### 3D Mesh

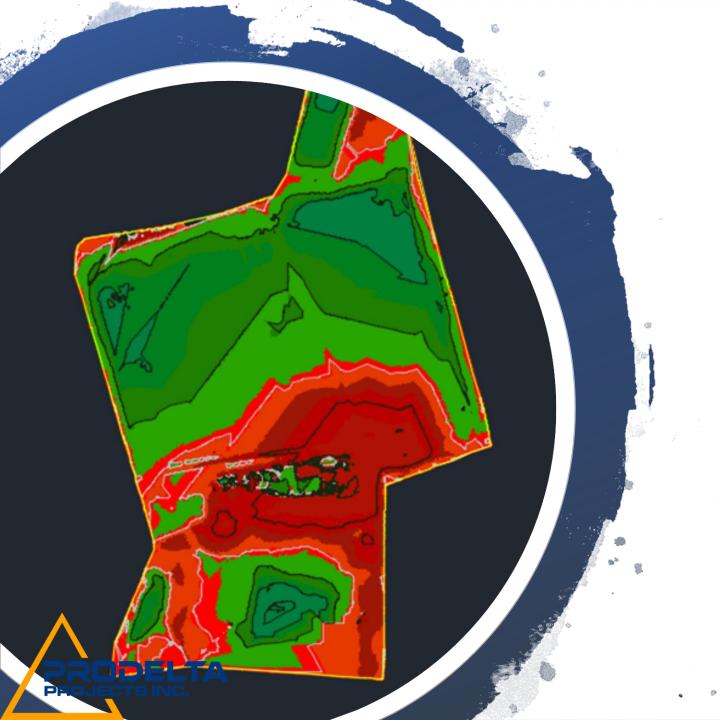








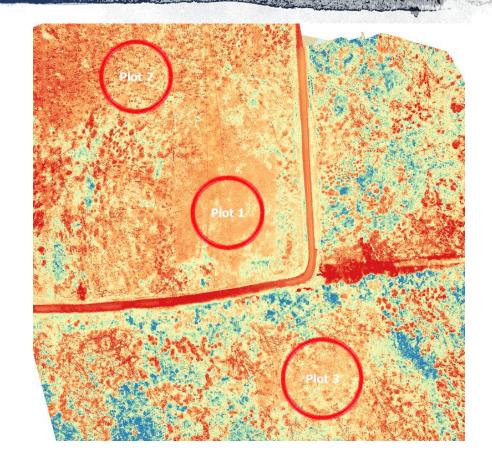
### Surface Drainage



### Cut/Fill Analytics

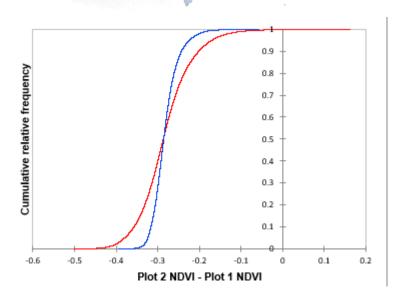
#### Vegetation Health

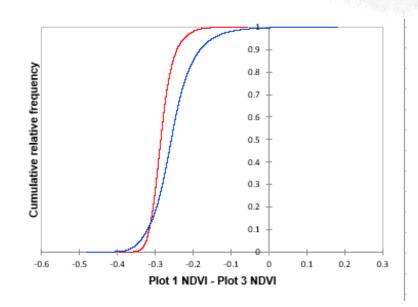
| Plots       | DELTA |
|-------------|-------|
| Plot 1 vs 2 | 0.190 |
| Plot 1 vs 3 | 0.329 |
| Plot 2 vs 3 | 0.243 |

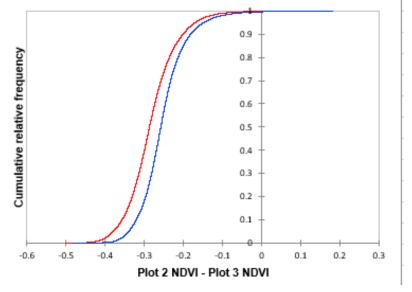




#### Vegetation Health Curves

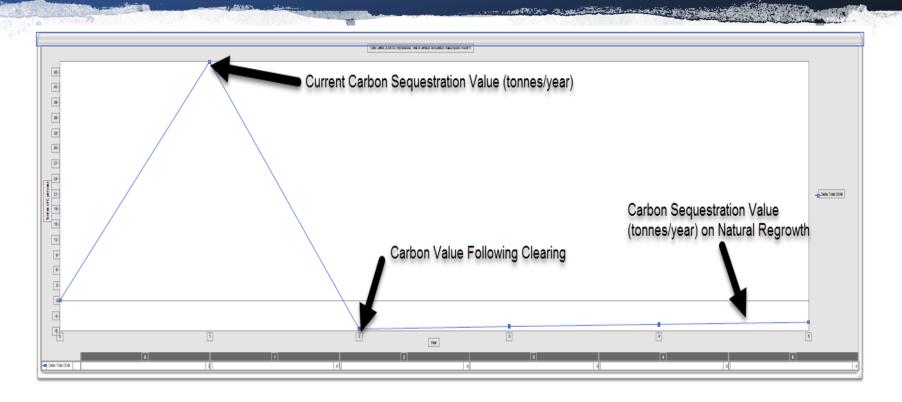








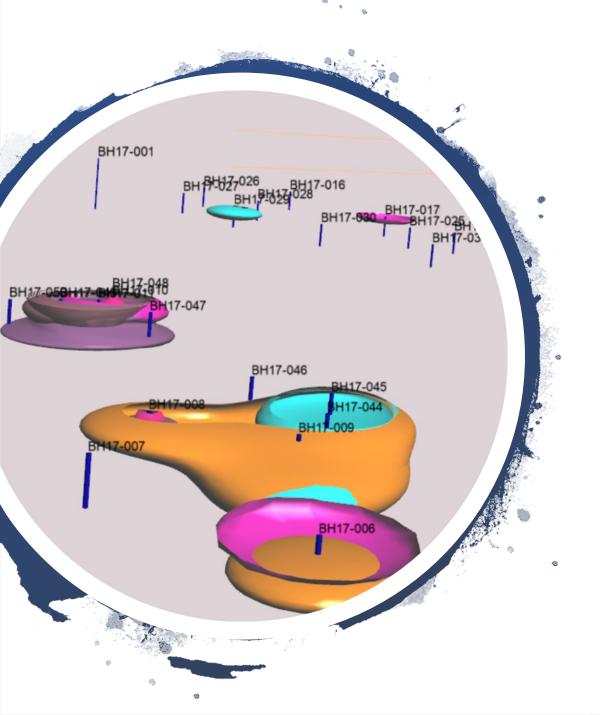
#### Carbon Sequestration Potential





# Sub-surface Analytics

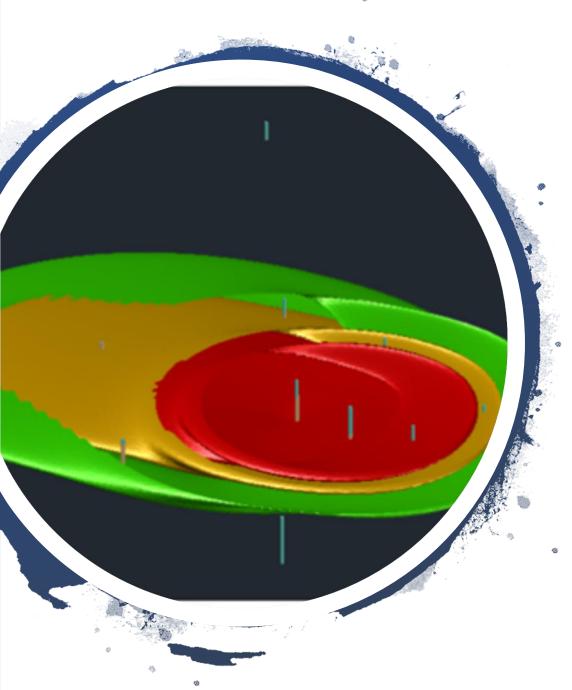




#### 3D Modelling

- Utilize Previous Investigation
- Complete a 3D Plume Model
- Calculate Depth Dependent Volumes
- Utilize Site Specific Standards Boreholes
  - Sample Locations
  - Plumes
  - Applicable Standards
- Transparent for All Stakeholders





#### **Environmental Information Model**

- Different Classifications of Models
  - Desktop
  - Detailed
- Complete Field Survey for more complicated models.
- Can model based on preferential pathways
- Determine areas that require further investigation.

















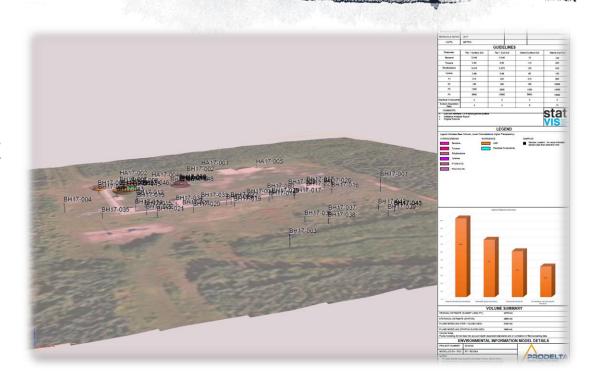
# Power Through Visualization



#### New Level of Insight

#### 4D – You Control your View

- Turn Layers On and Off
- Move around the model on your PC
- Review all data in one simple to use model.
- No special software required.





#### New Level of Insight

#### 5D – Virtual reality

- We put you into the model
- Virtual Walkaround
- Explain decision and process
- Multiple Stake holders can see the site

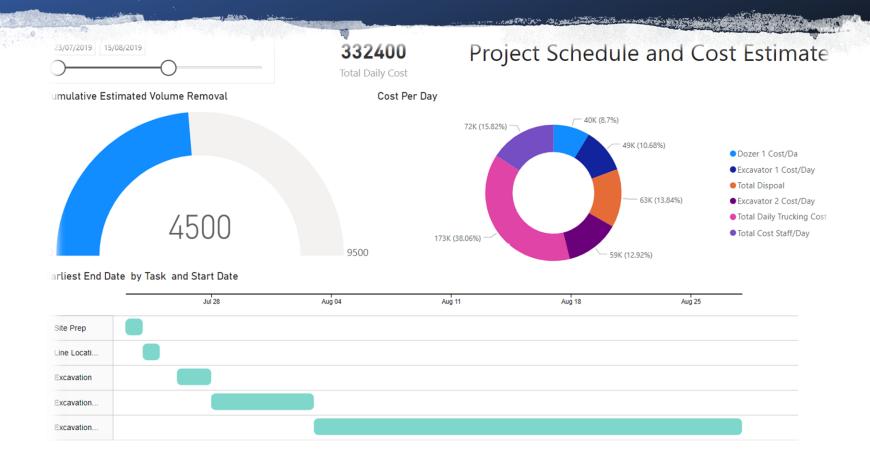




# Business Intelligence

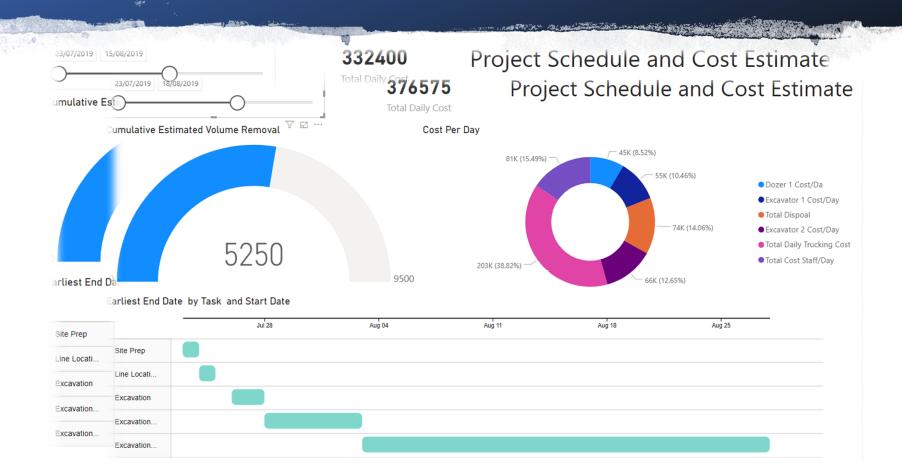


### Remediation/Reclamation Planning Ex



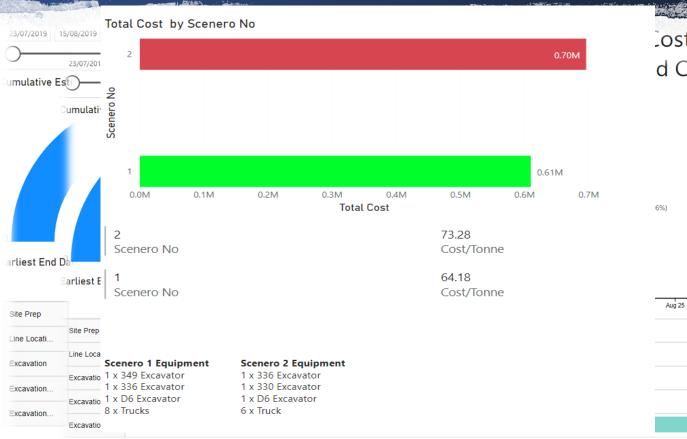


#### Dashboard and Analytics





#### Dashboard and Analytics





Dozer 1 Cost/Da
Excavator 1 Cost/Day
Total Dispoal
Excavator 2 Cost/Day
Total Daily Trucking Cost
Total Cost Staff/Day



• Financial Struggles





- Financial Struggles
- Constant New Challenges





- Financial Struggles
- Constant New Challenges
- Negative Input





- Financial Struggles
- Constant New Challenges
- Negative Input
- No one is More Invested Then You





#### Questions

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