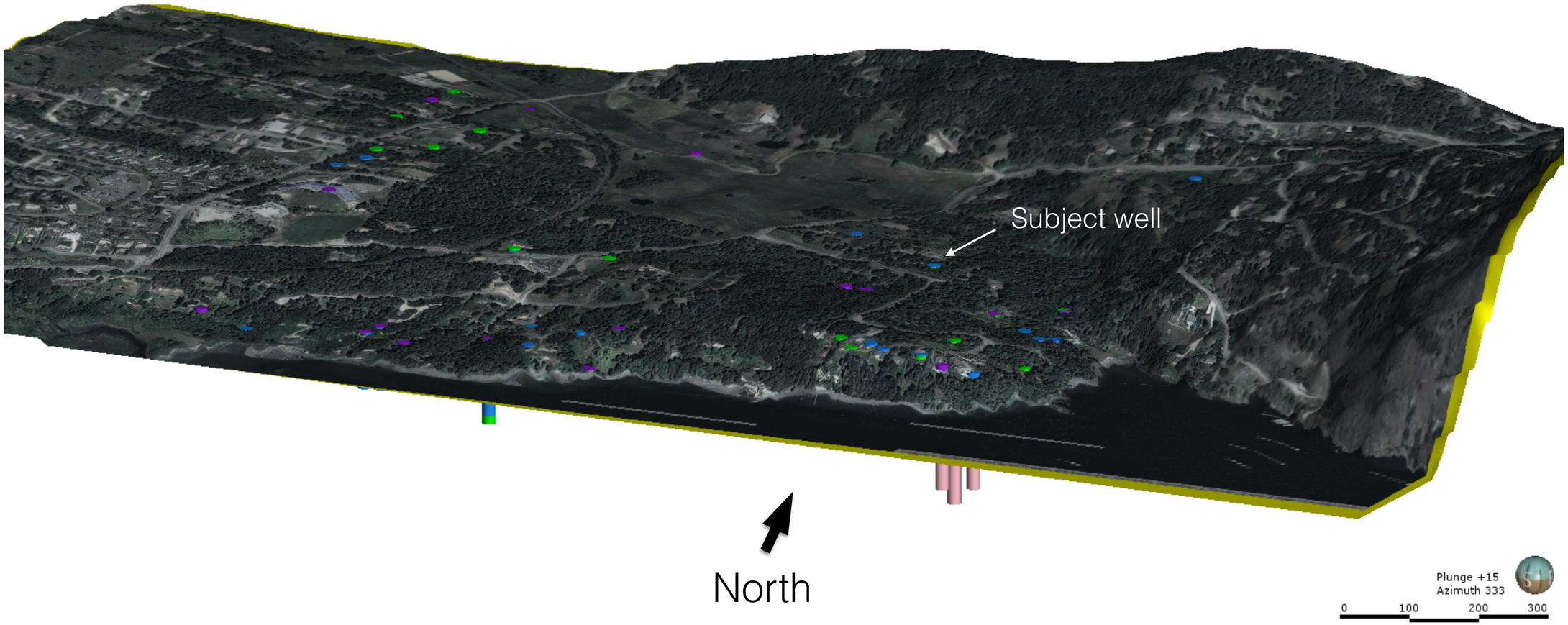
Parker Road - RDN well Hydrogeological Model and Proposed Monitoring Program

February 26, 2015

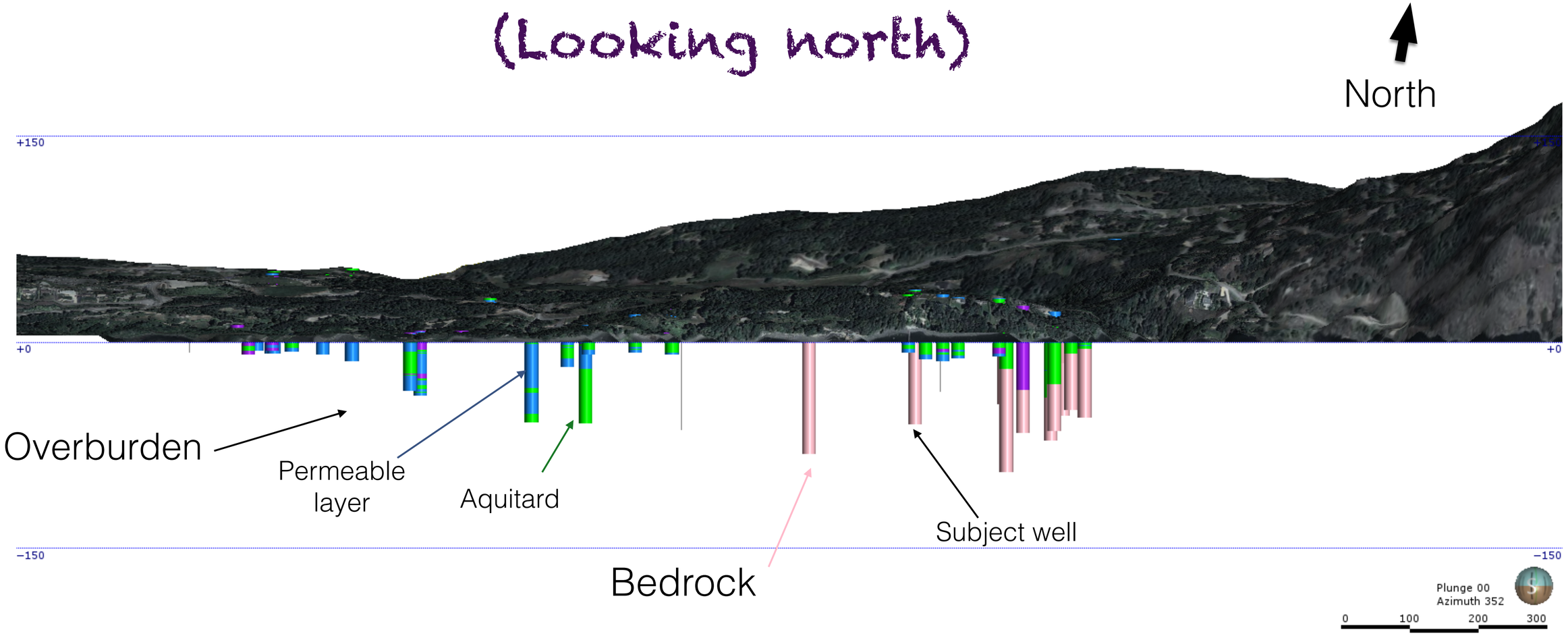
Work completed

- Inventory of wells (with RDN)
- Local hydrogeology 3D model/visualisation
- Draft Monitoring Program
- Stream Gauging planning

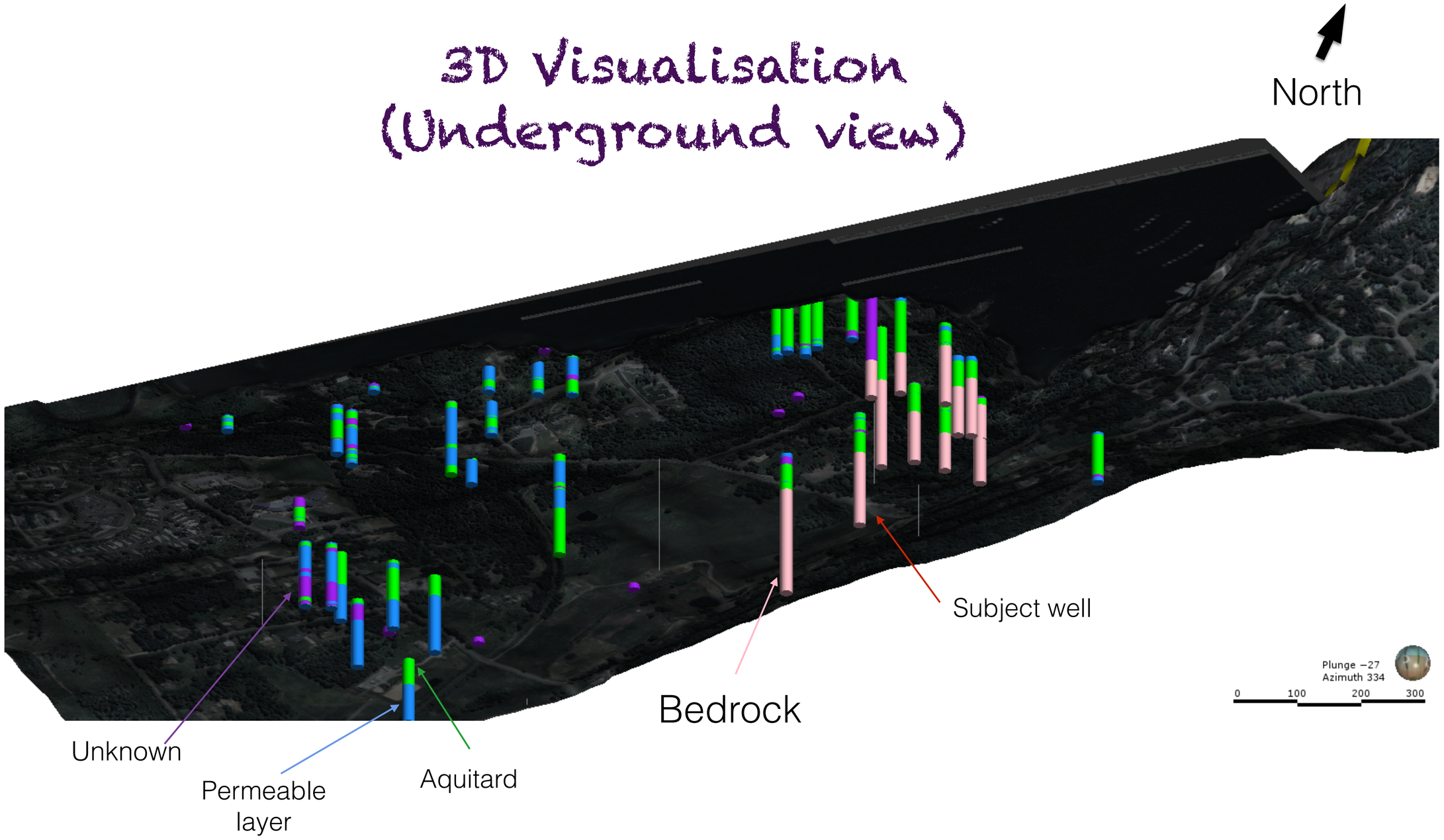
3D Visualisation (leapfrog - Looking north)



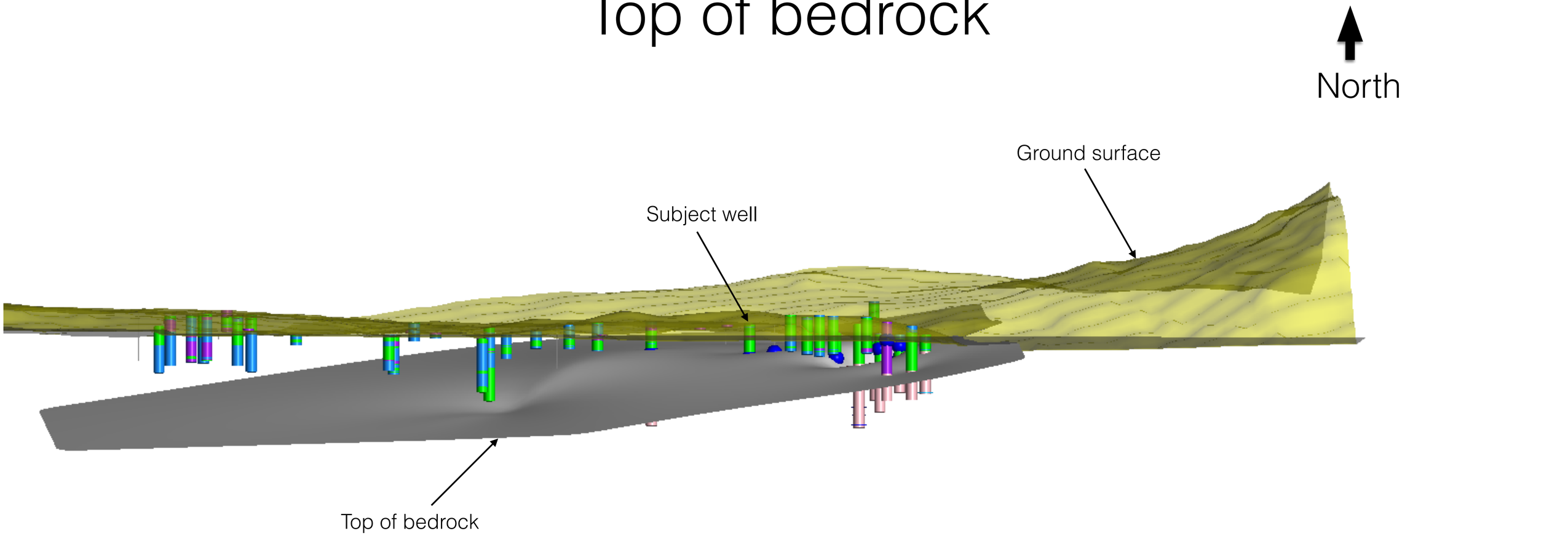
3D Visualisation (Looking north)



3D Visualisation (Underground view)

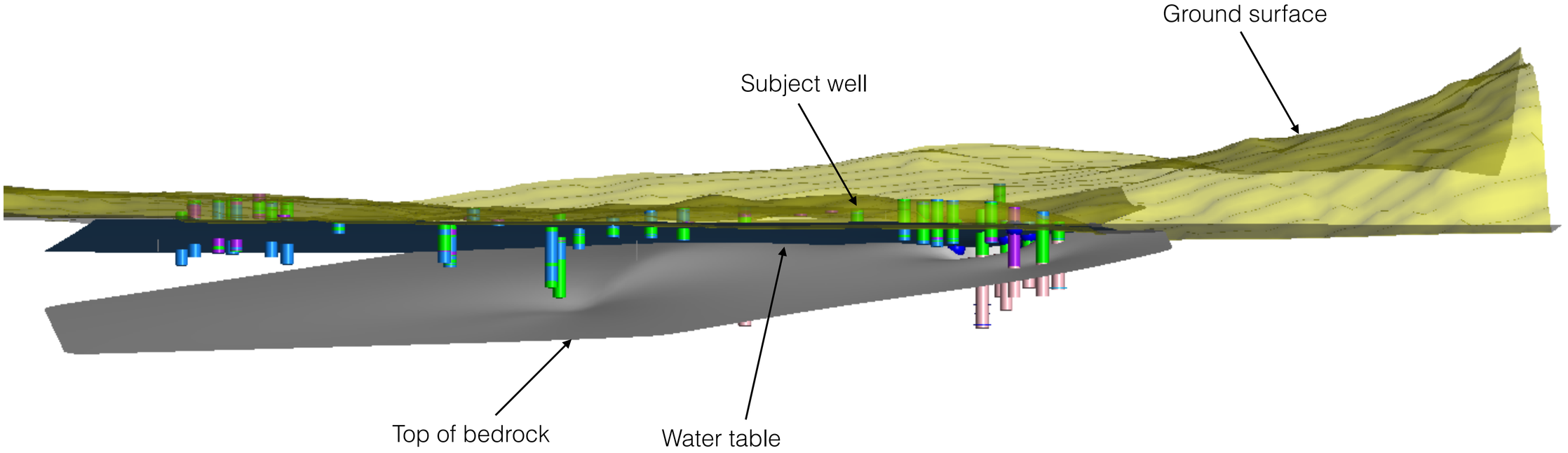


Top of bedrock



Top of bedrock and water table

North



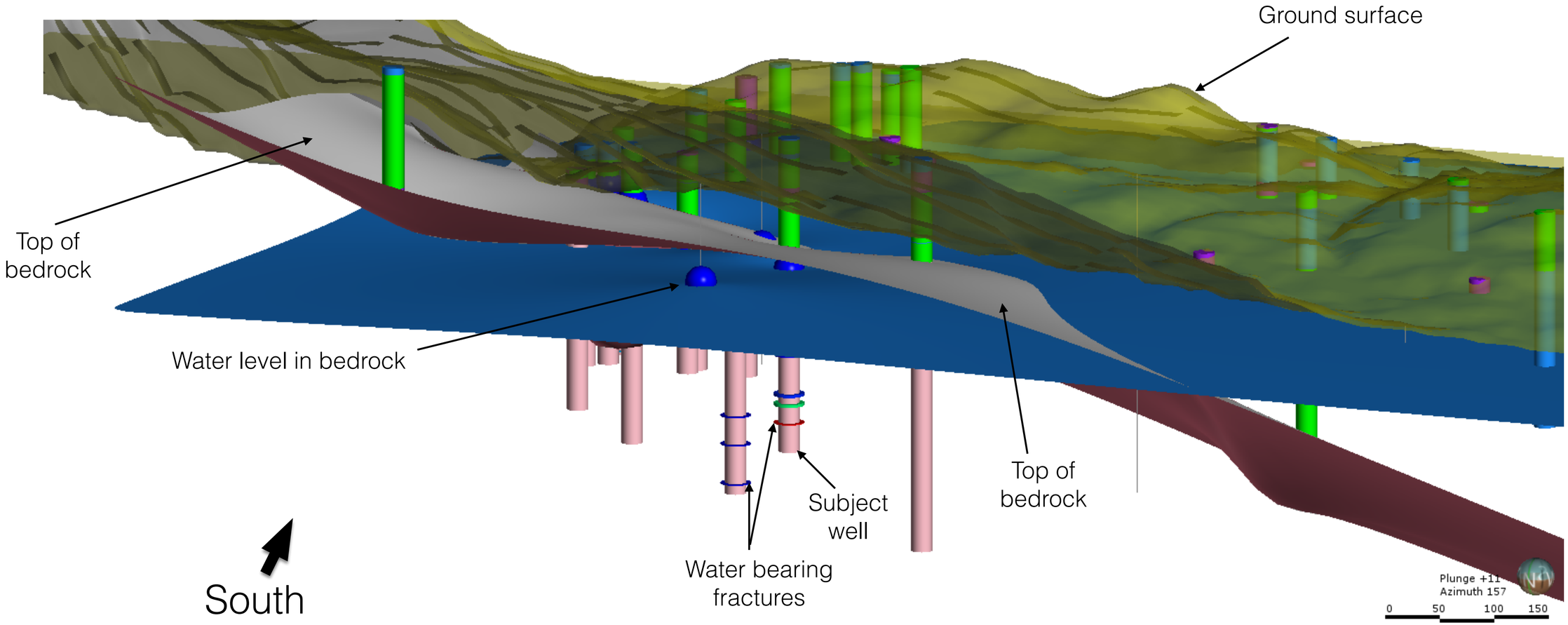
Plunge –03
Azimuth 004

0 100 200 300

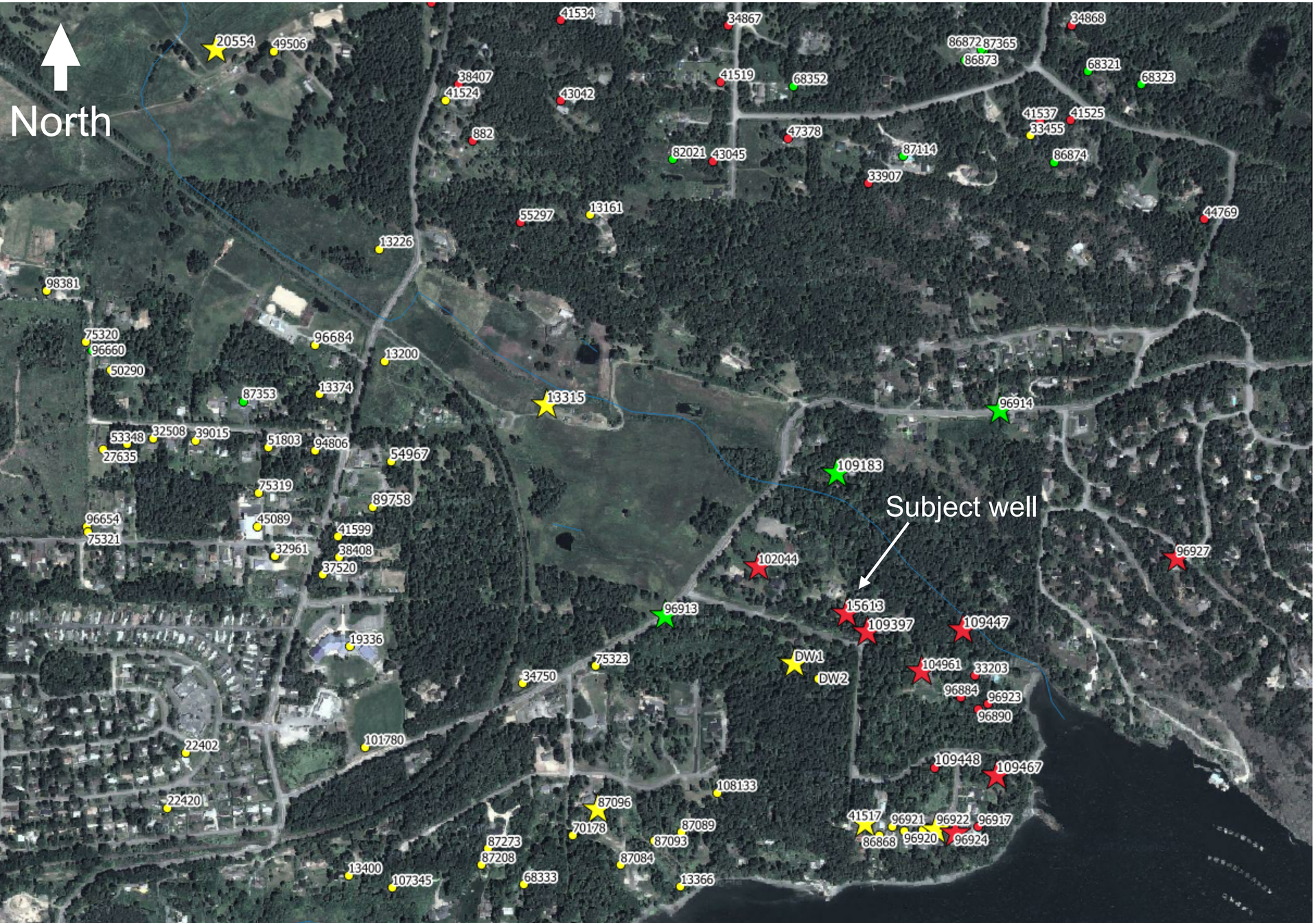
Aerial view (looking south)

South

Top of bedrock and water table (looking south)



Draft monitoring program



DRAFT

- Bedrock
- Overburden
- Unknown

Proposed monitored wells

- Bedrock
- Overburden
- Unknown

DRAFT

Pumping Test

- 6 hours pumping test in dry season (July or August) for a gross assessment of the aquifer behaviour. Water levels will be monitored in the selected wells.
- One month pumping test at an intermediate flow rate (50 USgpm ?).
  - to perform flowmeter test during this pump test to confirm locations and inflows along the borehole
  - increasing flow rate to 75 USgpm (in last few days of testing) to stress the aquifer and to monitor its reaction

GW Solutions

DRAFT

Pumping Test

- Interpretation of data: Assess long-term capacity of aquifer and compare observed drawdowns to modeled drawdowns.

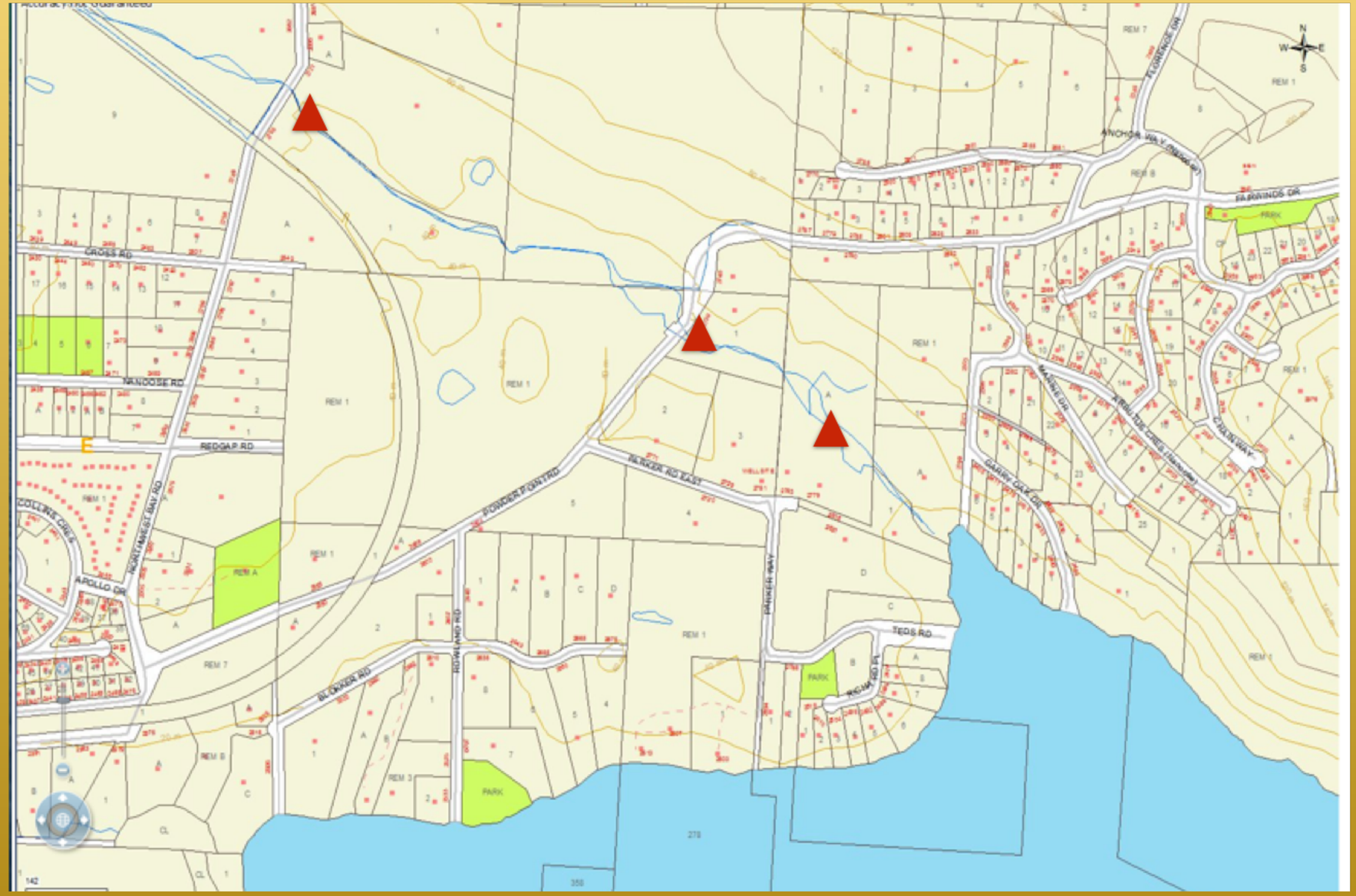
DRAFT

Water Quality Monitoring

- Subject well: to record real time in-situ parameters (pH, temperature, electrical conductivity, dissolved oxygen)
- In monitored wells (including subject well): to collect a water sample for potability analysis at the beginning of the test and at the end of the pumping test.

GW Solutions

DRAFT Monitoring of Maelstrom Creek



3 flow gauges

Level and flow monitoring

Thank You