



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

**75 Hawthorne Street
San Francisco, CA 94105-3901**

**MINOR MODIFICATION TO PERMIT NO. R9UIC-AZ3-FY16-1
ISSUED TO EXCELSIOR MINING ARIZONA, INC.**

In accordance with 40 CFR §144.41, this permit is hereby modified to include additional groundwater monitoring and reporting of such monitoring for the Gunnison Copper Project, under the authority of the Underground Injection Control (UIC) program. This permit modification includes the addition of three monitoring wells that exist south of the project outside the Area of Review (AOR). The AOR is described in Part I of the Authorization to Construct and Inject and depicted in Figure A7-A in Appendix A of the permit.

The modification of the monitoring program section of the permit, identified below, is to incorporate additional monitoring requirements at the permittees request.

Page 34, PART II.F. MONITORING PROGRAM - add the following new requirement:

11. Additional Monitoring

The Permittee shall monitor at three existing wells, identified as wells CS-31, NSD-018, and SD-114. These wells are located and constructed as depicted in the additional monitoring wells and core hole completion diagrams in Appendix A. The Permittee will conduct a workover at Well SD-114 to perforate the casing to connect it hydraulically with the basin fill aquifer. If any of the selected wells are not suitable, the Permittee may submit the location and construction details of another selected monitoring well for EPA review and approval. The Permittee shall install and maintain in good operating condition a downhole Electrical Conductivity (EC) sensor in each of the selected wells to monitor continuously and record daily specific conductance measurements. The Permittee shall collect conductivity measurements to establish a representative baseline. The Permittee shall submit the results of the baseline and daily measurements in a table and graph for each monitoring well over the reporting period in the quarterly report required in Part II.G of this permit.

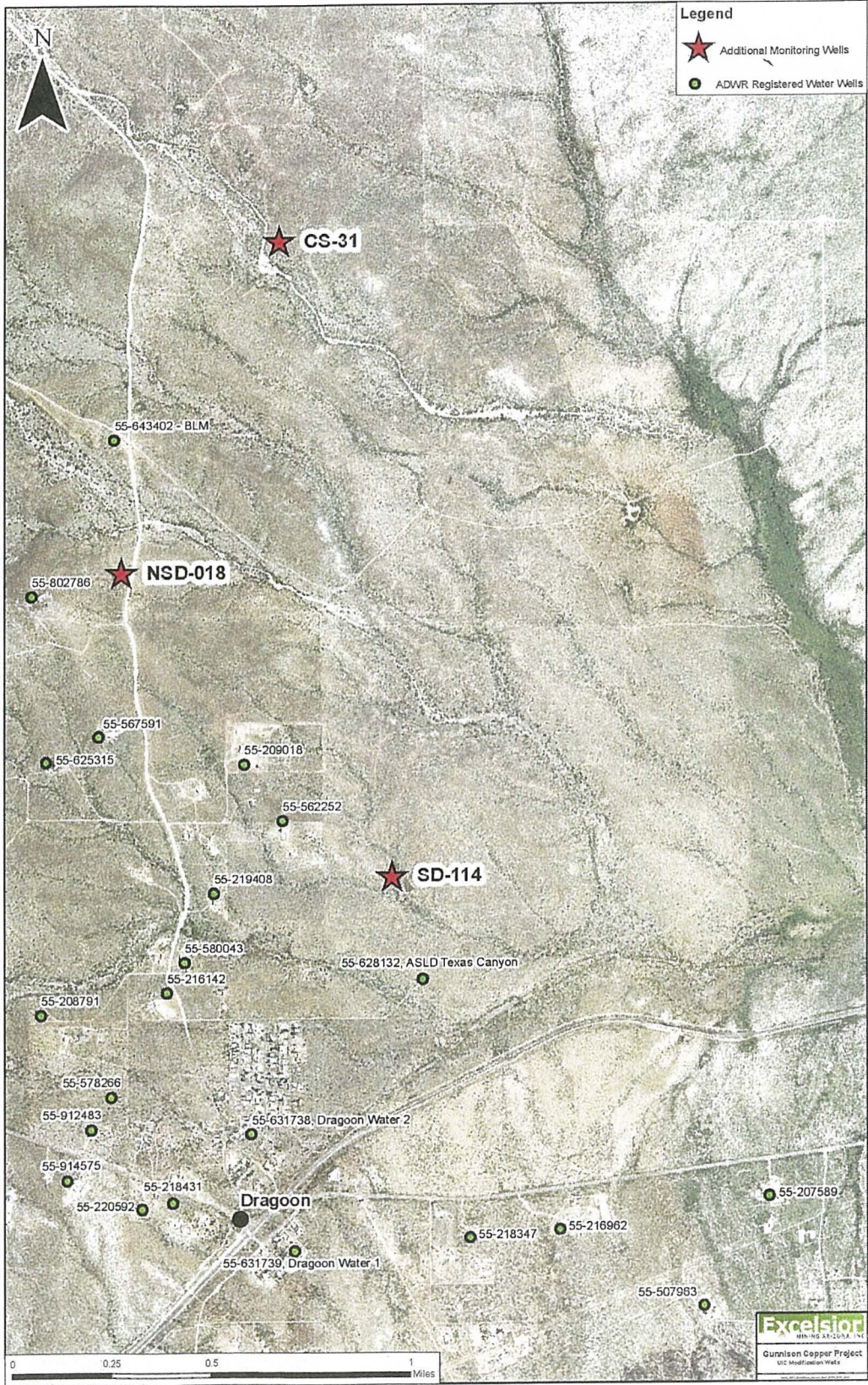
The Permittee shall measure groundwater elevation in feet relative to mean sea level in each of the additional monitoring wells on a quarterly basis and report the data in accordance with Part II.G of this permit.

All other permit conditions remain unchanged.

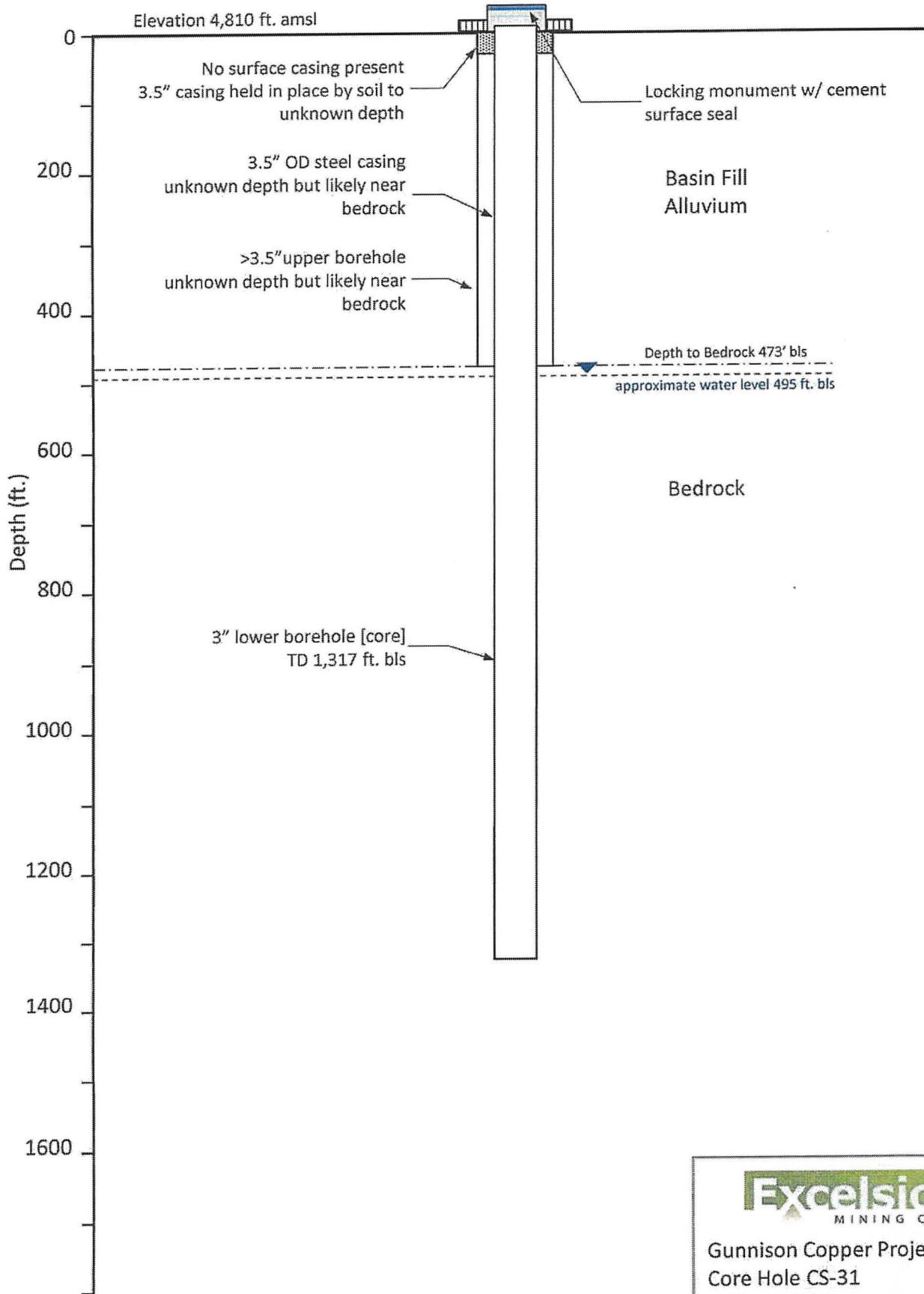
This minor modification is effective on June 21, 2019.

A handwritten signature in blue ink, appearing to read "Tomás Torres", written over a horizontal line.

Tomás Torres
Director, Water Division



Corehole Completion: CS-31

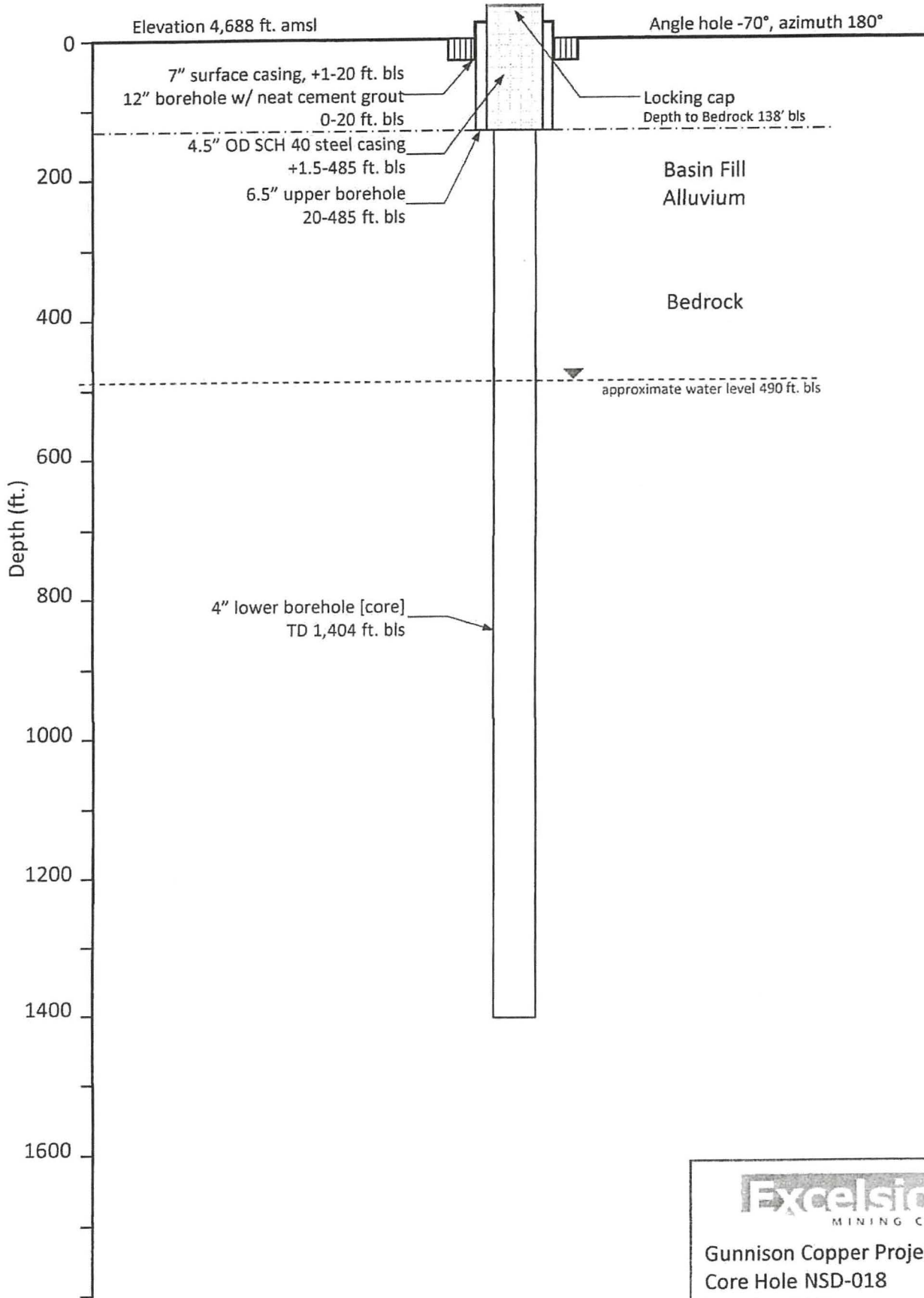


(illustration not to scale)

Excelsior
MINING CORP

Gunnison Copper Project
Core Hole CS-31
June 28, 2015

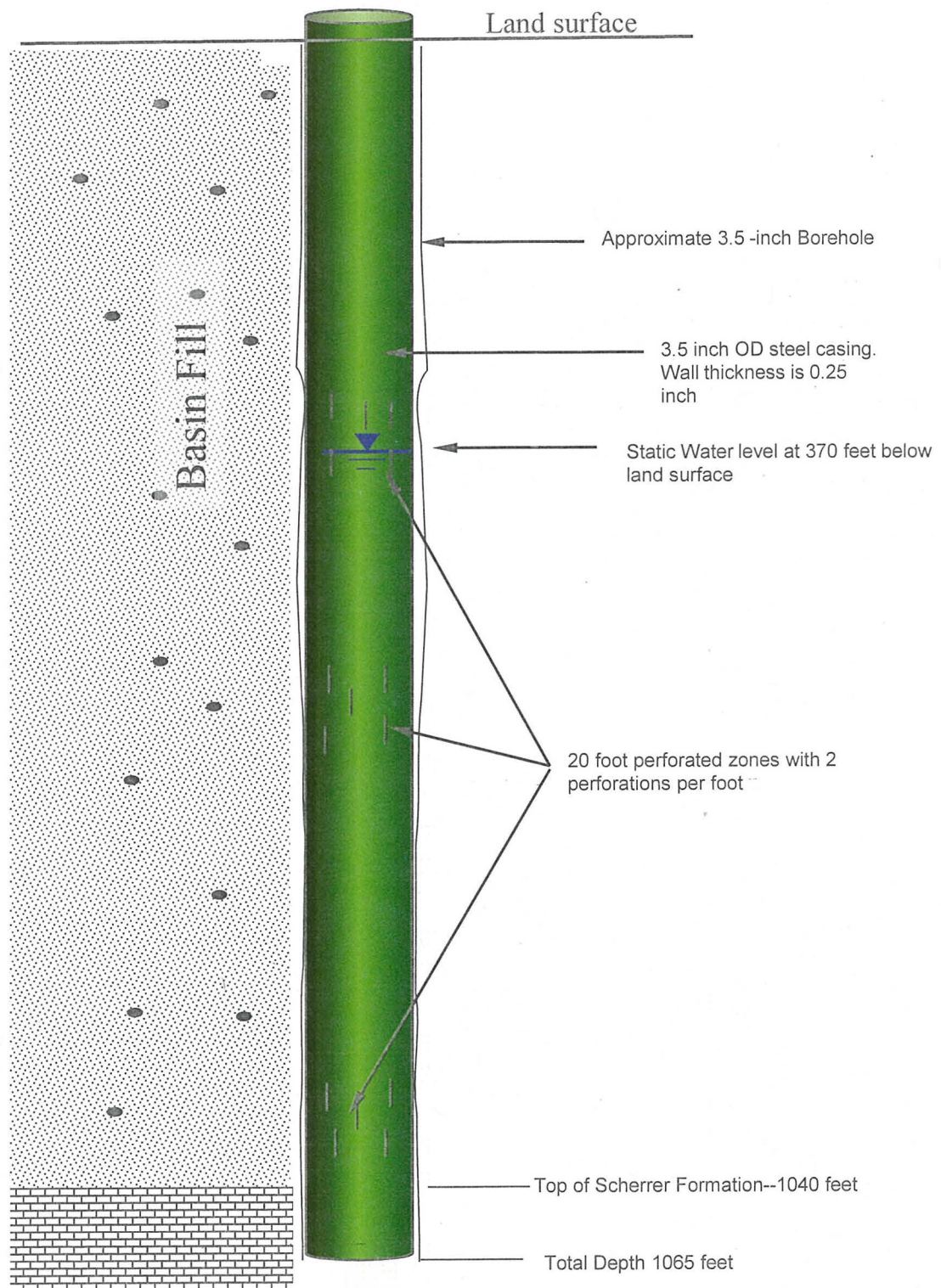
Corehole Completion: NSD-018



(illustration not to scale)

Excelsior
MINING CORP

Gunnison Copper Project
Core Hole NSD-018
June 14, 2015



Not To Scale

Notes: OD = outside diameter

FIGURE 1
SD-114 Schematic Drawing

Excelsior Arizona Mining, Inc.
Cochise County, Arizona