CDM Smith

Draft Technical Memorandum

To: *Jay Krauss, Sammamish Plateau Water and Sewer District General Manager*

From: *CDM Smith*

Date: *June 18, 2026*

Subject: *Technical Comments on Farallon Letter Regarding Additional Deep Monitoring Well – EFR HQ IVES Site, Issaquah, WA*

CDM Smith has reviewed the April 8, 2026 Farallon Consulting letter that responds to the Washington State Department of Ecology's request for installation of an additional deep monitoring well in the identified data gap area between City of Issaquah and District production wells. This letter was provided to the District by Ecology on June 4, 2026.

Based on our review, the Farallon letter contains several technical and regulatory deficiencies that warrant clarification as Ecology determines how to proceed in light of its March 26, 2026 letter to the District.

Failure to Meet Fundamental MTCA Remedial Investigation Objectives

The Farallon letter does not align with a core requirement of a Remedial Investigation (RI) under the Model Toxics Control Act (MTCA), which is to define the nature and extent of contamination within a facility to allow evaluation of cleanup alternatives.

MTCA defines a facility broadly as: "Any site or area where a hazardous substance… has been deposited, stored, disposed of, or placed, or otherwise come to be located." (WAC 173-340-200)

The RI process is inherently focused on delineating existing contamination first, then evaluating cleanup alternatives, not limiting investigation based on assumptions about potential remedies or the perceived importance of distal plume areas.

Farallon's conclusion that additional data collection is unlikely to change cleanup actions therefore improperly places remedy considerations ahead of site characterization, which is inconsistent with MTCA requirements and standard RI practice.

Misplaced Emphasis on Future Conditions Rather Than Existing Plume Delineation

The Farallon letter places substantial emphasis on:

- Hypothetical future pumping scenarios
- Likelihood of flow path development

However, the purpose of the RI is to determine where contamination currently exists (nature and extent) and how it became distributed, including impacts from historical pumping conditions (conceptual site model).

The District's concern and the basis for the requested monitoring well is that:

- The District's public water supply wells are currently impacted by PFAS at concentrations above cleanup levels and have been for over a decade.
- Historical hydraulic conditions resulted in plume migration east of the primary axis of the plume toward the District wells
- Residual contamination may persist in the aquifer (including lower permeability units such as silts), regardless of current pumping conditions

By focusing on future scenarios, Farallon does not adequately address existing plume extent, which is central to a MTCA RI.

Incorrect Representation of Groundwater Model Inputs

Farallon's critique of the District's groundwater modeling is based on incorrect interpretations of model inputs:

- **Pumping Rates:**
  Farallon does not use the appropriate historical pumping dataset (e.g., long-term monthly averages during the period of contaminant release). These historical conditions are essential for reconstructing plume migration.
- **Well Capacities:**
  Farallon misstates District well pumping capacities. Actual operations demonstrate substantially higher seasonal pumping rates (e.g., Well 7 and Well 8), which significantly influence hydraulic gradients and plume behavior.

These inaccuracies undermine Farallon's conclusions regarding plume migration and connectivity.

Failure to Consider Established Hydraulic Mechanisms

The Farallon evaluation does not adequately account for the combined influence of natural gradients and anthropogenic pumping on plume migration.

Conceptually, plume behavior in this system can be understood through two primary hydraulic vectors:

- **Vector 1:** Regional north/northwest groundwater flow toward Lake Sammamish, influenced by City well pumping
- **Vector 2:** Historical high-capacity pumping at District wells creating an eastward hydraulic influence

Under historical conditions, sustained high pumping rates at District wells were sufficient to:

- Alter regional gradients
- Create a curving, focused plume pathway toward Wells 7 and 8

Farallon's analysis does not adequately incorporate these hydraulic dynamics, leading to an incomplete conceptual site model.

Selective Use of Monitoring Data Outside Modeled Flow Paths

Farallon relies on sampling results from a limited number of monitoring wells (e.g., COI-MW03 and RBN-MW01) to conclude that contamination does not extend between City and District wells.

However:

- These wells are not located within the modeled plume pathway identified by both the District and the City
- As such, they are not suitable for delineating the eastern extent of the plume between the main axis of the plume and District Well 7 and 8.

Using data from outside the relevant flow path to draw conclusions about plume absence is not technically supportable and does not meet RI standards for delineation.

Inconsistency with Existing Modeling and Regulatory Decisions

Farallon's conclusions are inconsistent with:

- The City's own groundwater modeling (e.g., CARA updates), which indicates plausible plume migration pathways in the area between the City's and District's production wells
- Ecology's prior acceptance of modeled plume behavior in permitting decisions (e.g., approval of Well 9 as an additional withdrawal point for Wells 7 and 8)

These inconsistencies suggest that Farallon's conclusions are not aligned with the broader technical and regulatory record.

Implications of Not Investigating the Data Gap

As identified in the District's Data Gap Memorandum (CDM Smith, 2025) failure to install a monitoring well in the identified area will likely result in:

- Incomplete understanding of plume extent and magnitude
- Inability to evaluate exposure pathways
- Incomplete information for evaluating cleanup alternatives
- Delays in feasibility study (FS) development, remedy selection, and implementation of remedial actions

This outcome would be inconsistent with Ecology's stated commitment to:

"full identification of the lateral and vertical extent of soil and groundwater contamination for each site in the Remedial Investigations." (August 2024 Response to Comments on Agreed Orders)

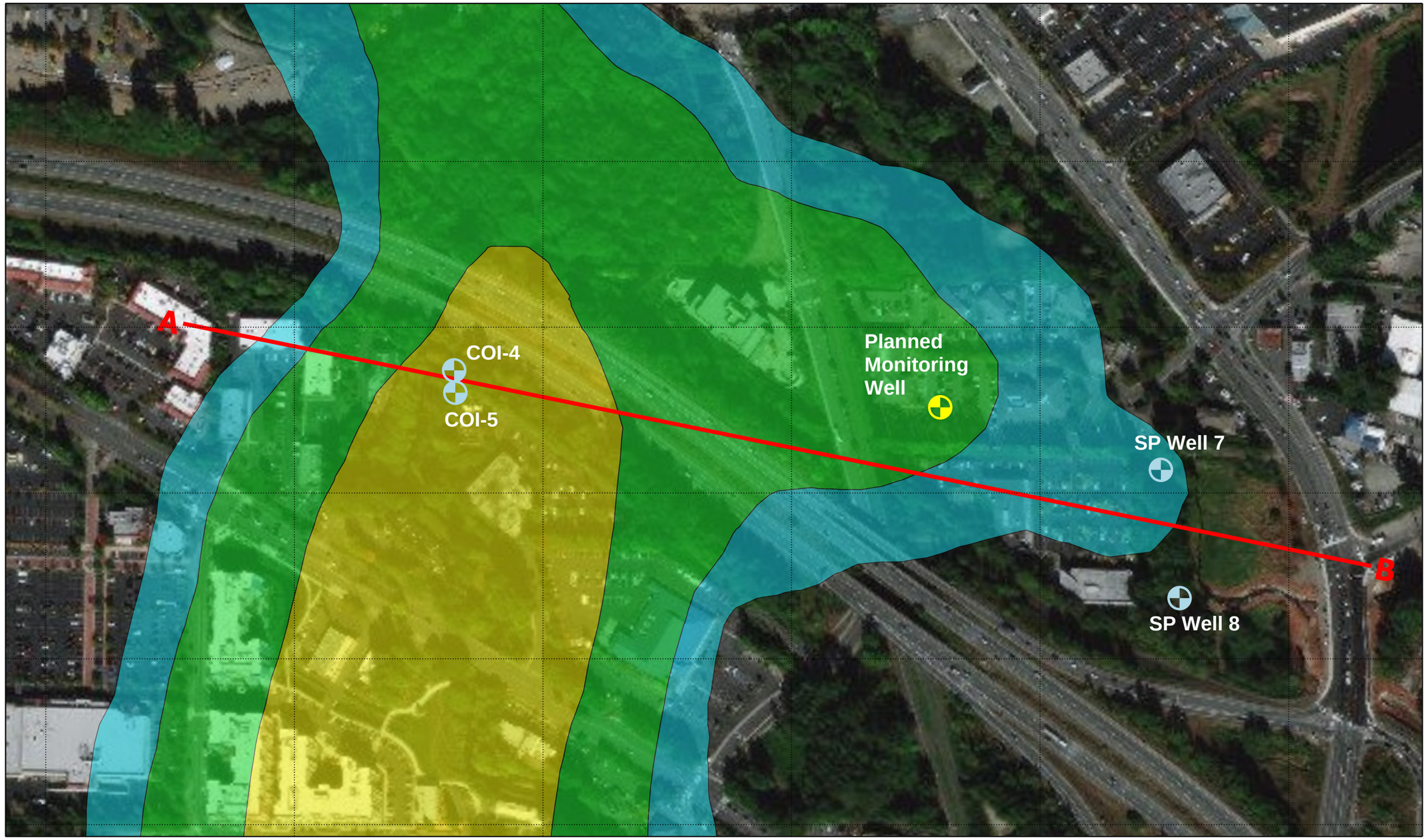
Consideration for the Remedial Investigation

For the reasons outlined above, exploration in the identified data gap area is a necessary next step for the MTCA RI. This exploration would be conducted via a temporary borehole to approximately 250 feet that would grab groundwater samples at 3 to 5 discrete depth intervals in the upper and intermediate water bearing zones as well as the intervening silt unit between the water bearing zones. After sampling results from the temporary boring are reported and validated, a permanent monitoring well at a depth where the greatest concentration of PFAS plume contamination is discovered will be installed for future monitoring. This next step is necessary to fulfill MTCA RI requirements and to ensure a complete and defensible understanding of PFAS plume extent before proceeding with evaluation of cleanup alternatives.

We respectfully request that Ecology proceed with the additional data collection described in its March 26. 2026 letter to the District and require monitoring well installation needed to adequately characterize the site. A proposed plan view and cross section showing the District's recommended location and sampling proposal are attached.

References

CDM Smith, 2025. Draft Technical Memorandum, Critical Data Gap in Remedial Investigation Work Plan for Ecology Cleanup Site ID: 16581, December 16, 2025.



Legend

Concentration 05082026 Export

- 1.0 – 10.0
- 10.0 – 100.0
- 100.0 – 500.0

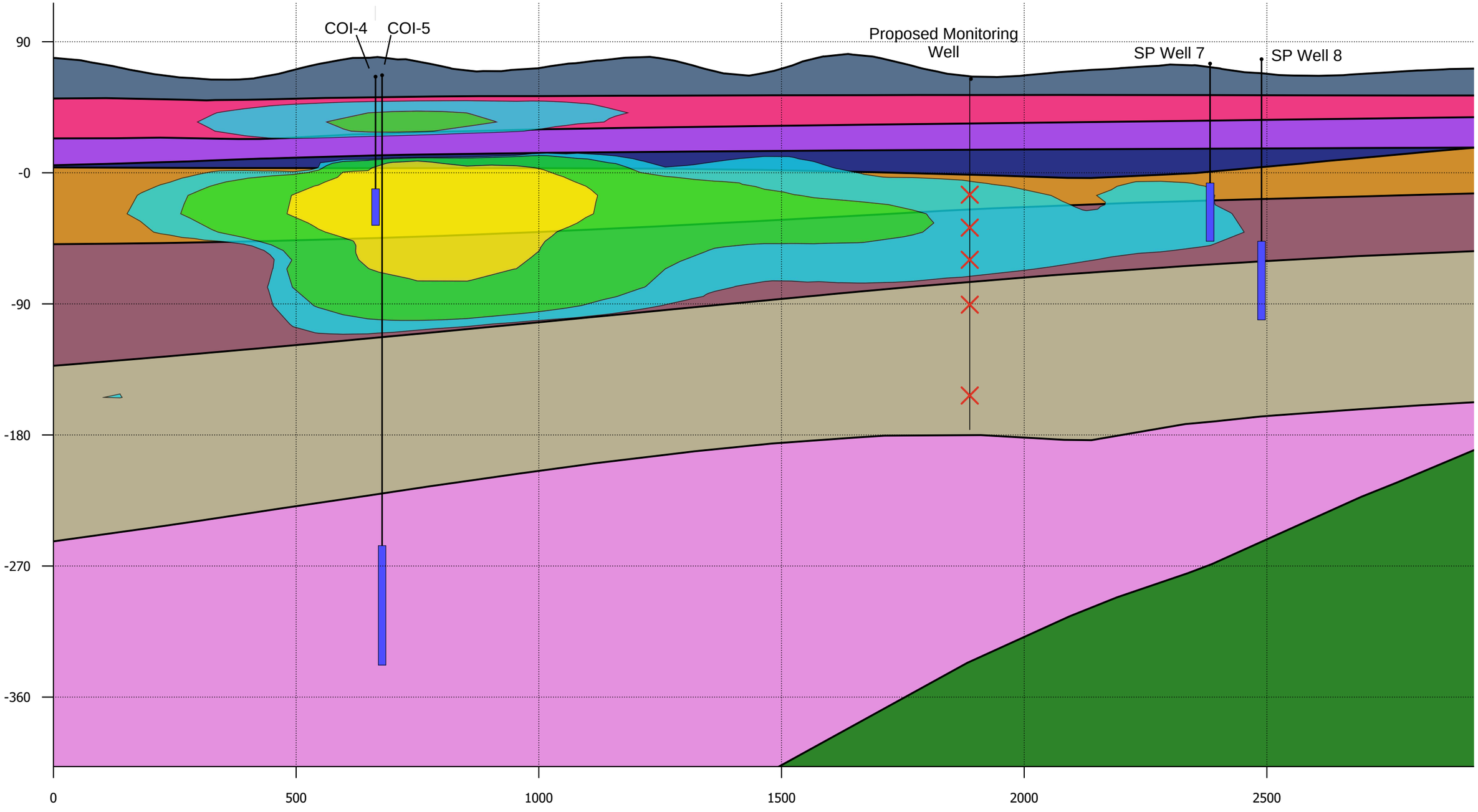
Scale: 1:3,000

0ft — 1000ft

Temporary/Exploratory Borehole with Discrete
GW and Soil Samples at X depth locations

A

B



Legend

GM

- Aquitard 1
- Aquitard 2
- Aquitard 3
- Aquitard 4
- Bedrock
- Brown Silty Sand
- Grey Sand
- Sand A
- Sand B

Well Type

- Temp Well
  Grab GW Sample
- Supply

2017 GW Modeled Concentrations

- 1.0 – 10.0
- 10.0 – 100.0
- 100.0 – 500.0

Scale: 1:2,400

Vertical exaggeration: 3x

0ft 1000ft