

**EXH. JPH-15
DOCKETS UE-240004/UG-240005
2024 PSE GENERAL RATE CASE
WITNESS: JAMES P. HOGAN**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-240004
Docket UG-240005**

**FOURTEENTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF**

JAMES P. HOGAN

ON BEHALF OF PUGET SOUND ENERGY

FEBRUARY 15, 2024

Baker River Operations
Board of Consultants Meeting
August 29, 2023



Project Update

- Work Platform Nearly Complete
- Test Grouting Program Nearly Complete
- Phase 2B Grouting Program
 - Continuation of Left Abutment Grouting
 - Riser Pipe Installation on Right Abutment
 - Preparing for MPSP Installation
 - Instrumentation Monitoring



Project Schedule

Phase	Duration (weeks)	Start	End	% Complete
1A, Preconstruction Submittals	14	11/01/21	02/04/22	100
1B, Mobilization & Site Preparation (clearing & grubbing)	18	02/07/22	06/08/22	100
2A, Work Access Construction <ul style="list-style-type: none"> • <i>Diversion Tunnel Plug – 100% Complete</i> • <i>Woody Debris Reshaping – 100% Complete</i> • <i>Right Abutment Seepage Seal – 100% complete</i> • <i>Temporary Work Platform Installation – 100% complete</i> • <i>Drill/Grout Test Program – 99% complete</i> 	60	06/09/22	08/11/23	100
2B, Drill/Grout Abutments & Foundations	69	08/14/23	12/13/24	2%
2C, Work Access Removal <ul style="list-style-type: none"> • Remove Temporary Work Platform 	22	12/16/24	05/02/25	n/a
3, Site Restoration	9	05/05/25	08/01/25	n/a
Total	192			



Work Platform and Work Access Pad



Work Access Pad (Left Abutment)

- Completed in June 2023
- Used for Test Grouting Program

Work Platform

- Primary structure (brackets, guide frames, deck support) complete
- Remaining items to complete:
 - Grout Hole Collars
 - Guide Pipe Turnbuckles
 - Higher-Order Hole Sleeves
 - Deck Waterproofing

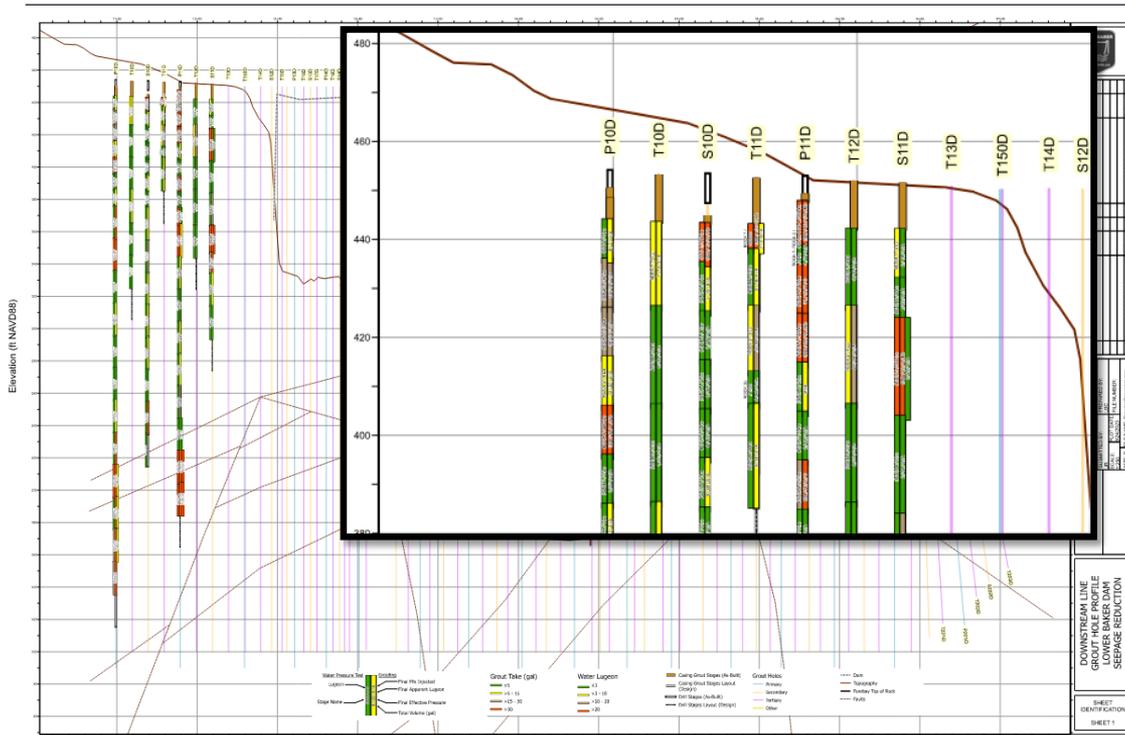
Work Platform and Work Access Pad



Work Platform – Static Load Test

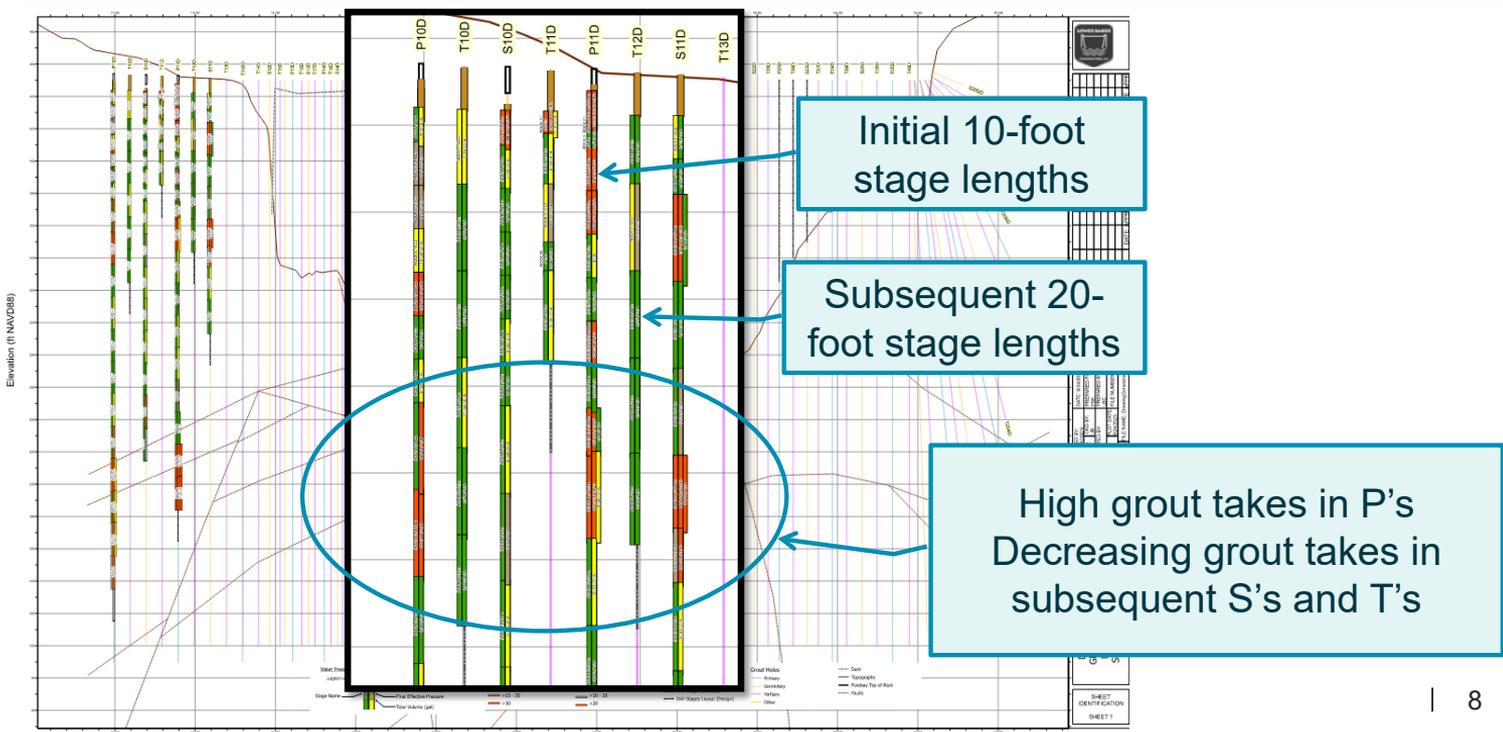


Test Grouting Program – Left Abutment



- Began mid-June with downstream holes: P10D, S10D, P11D
- Added T10D, T11D, T12D, and S11D July 2023
- Added P10U, S10U, P11U, S11U August 2023
- 10-foot P/S/T spacing

Test Grouting Program – Left Abutment

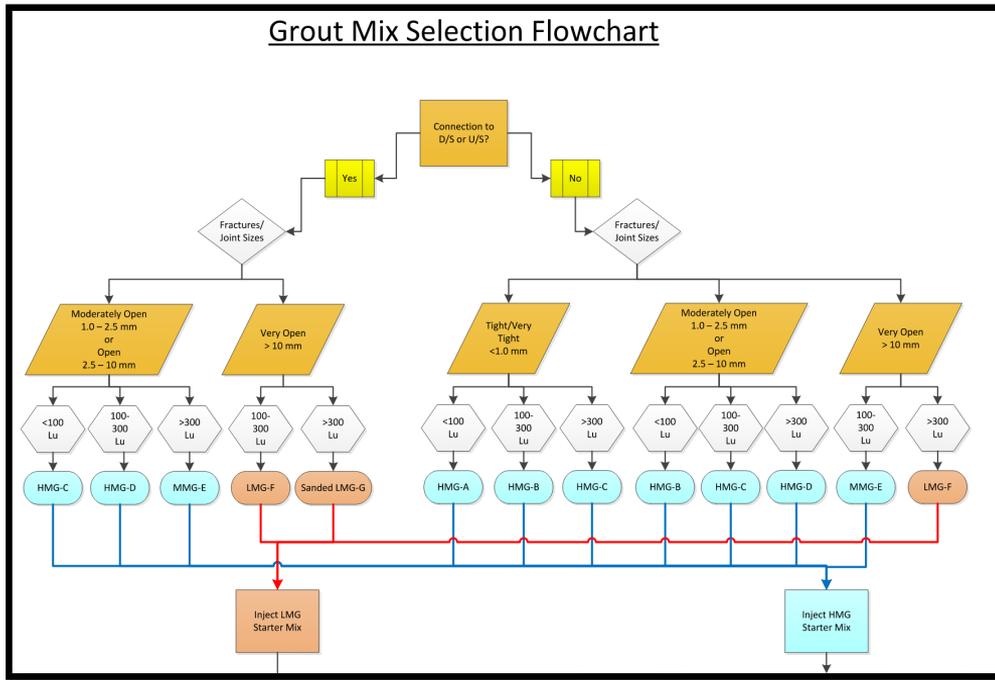
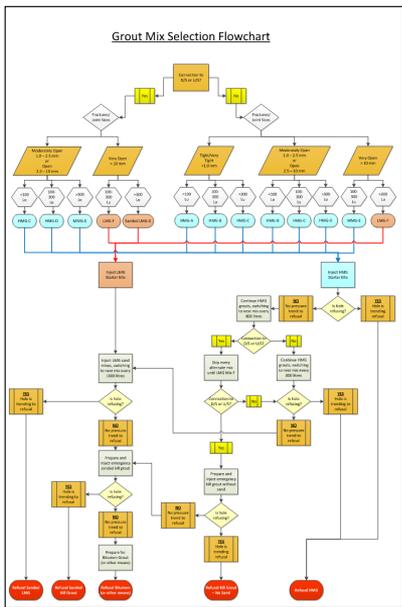


Initial 10-foot stage lengths

Subsequent 20-foot stage lengths

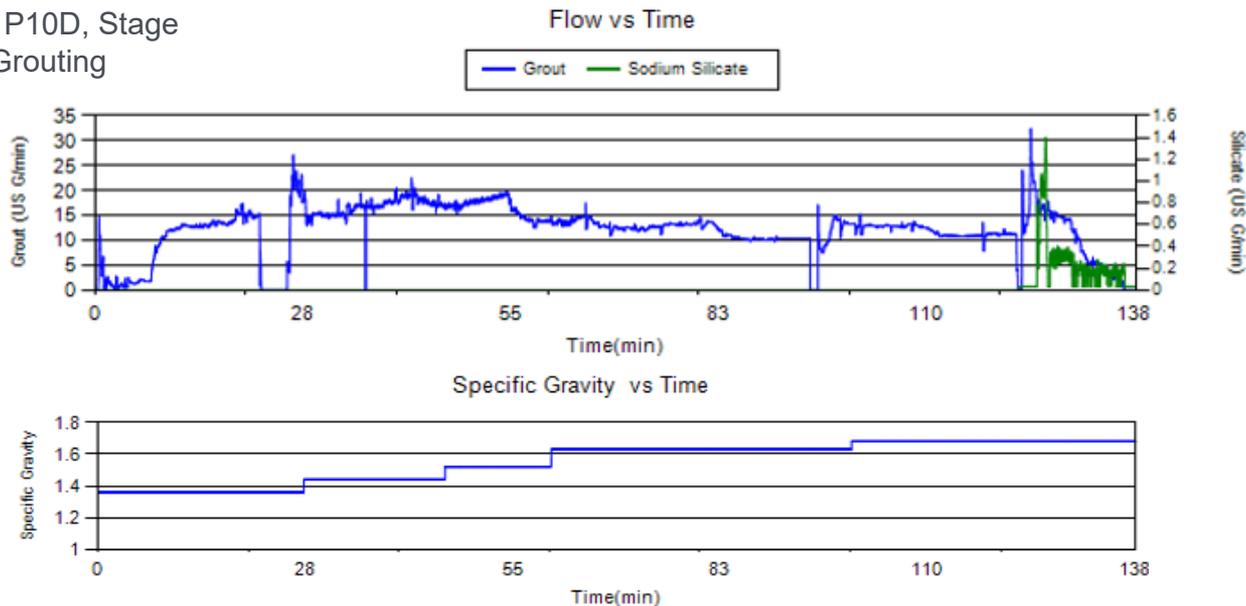
High grout takes in P's
Decreasing grout takes in subsequent S's and T's

Test Grouting Program – Grout Progression



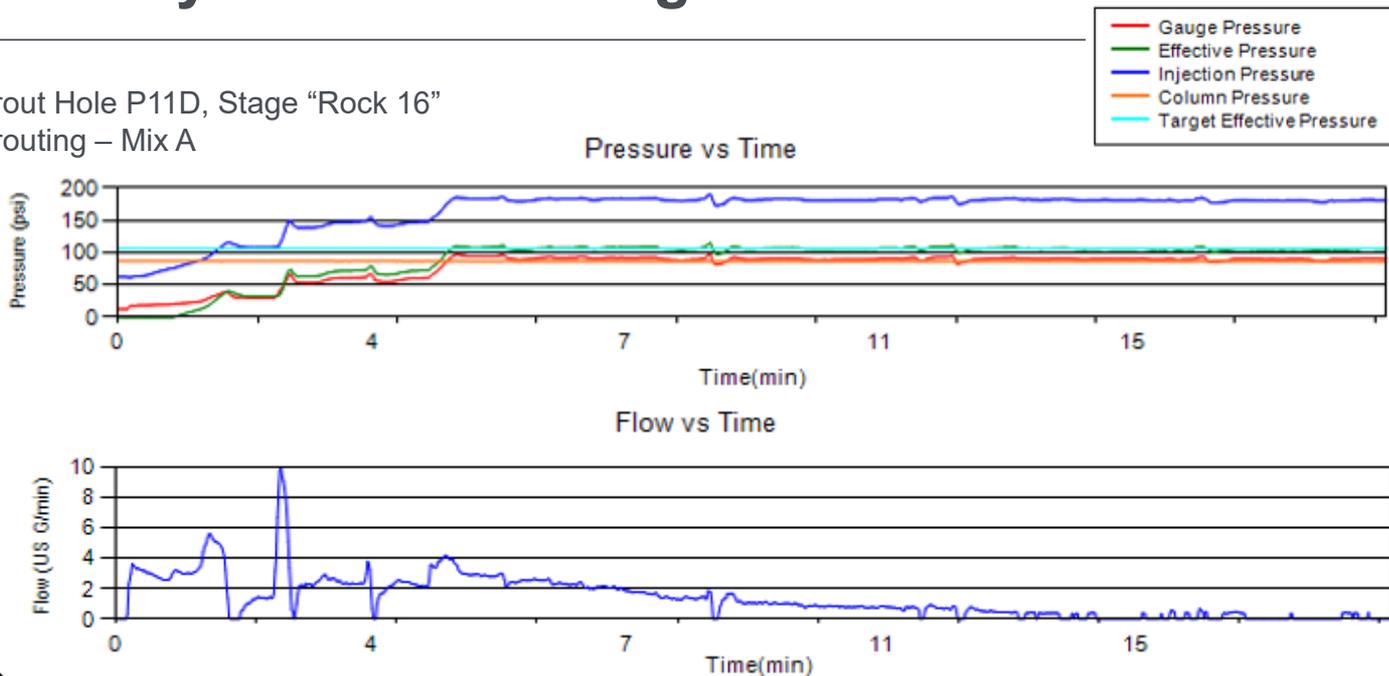
Test Grouting Program – Grout Progression

Grout Hole P10D, Stage
“Rock 18” Grouting

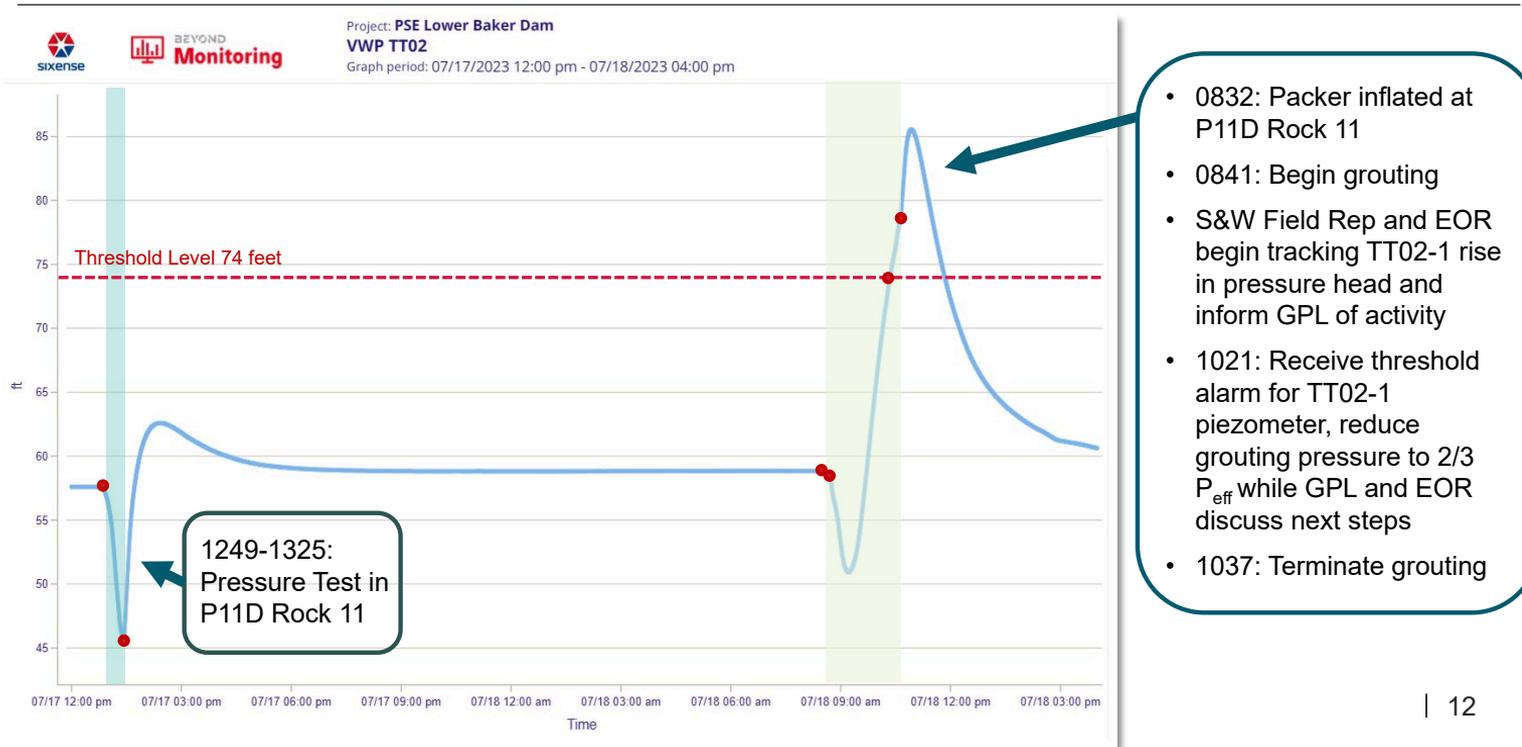


IntelliSystem Monitoring

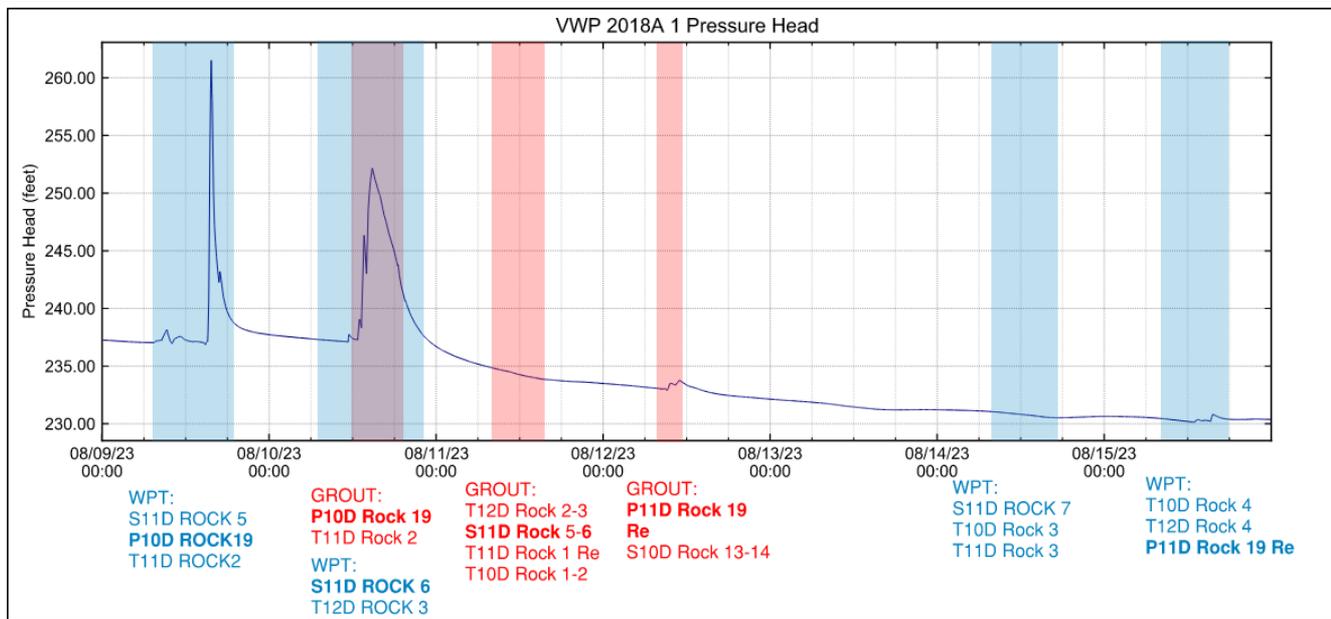
Grout Hole P11D, Stage "Rock 16"
Grouting – Mix A



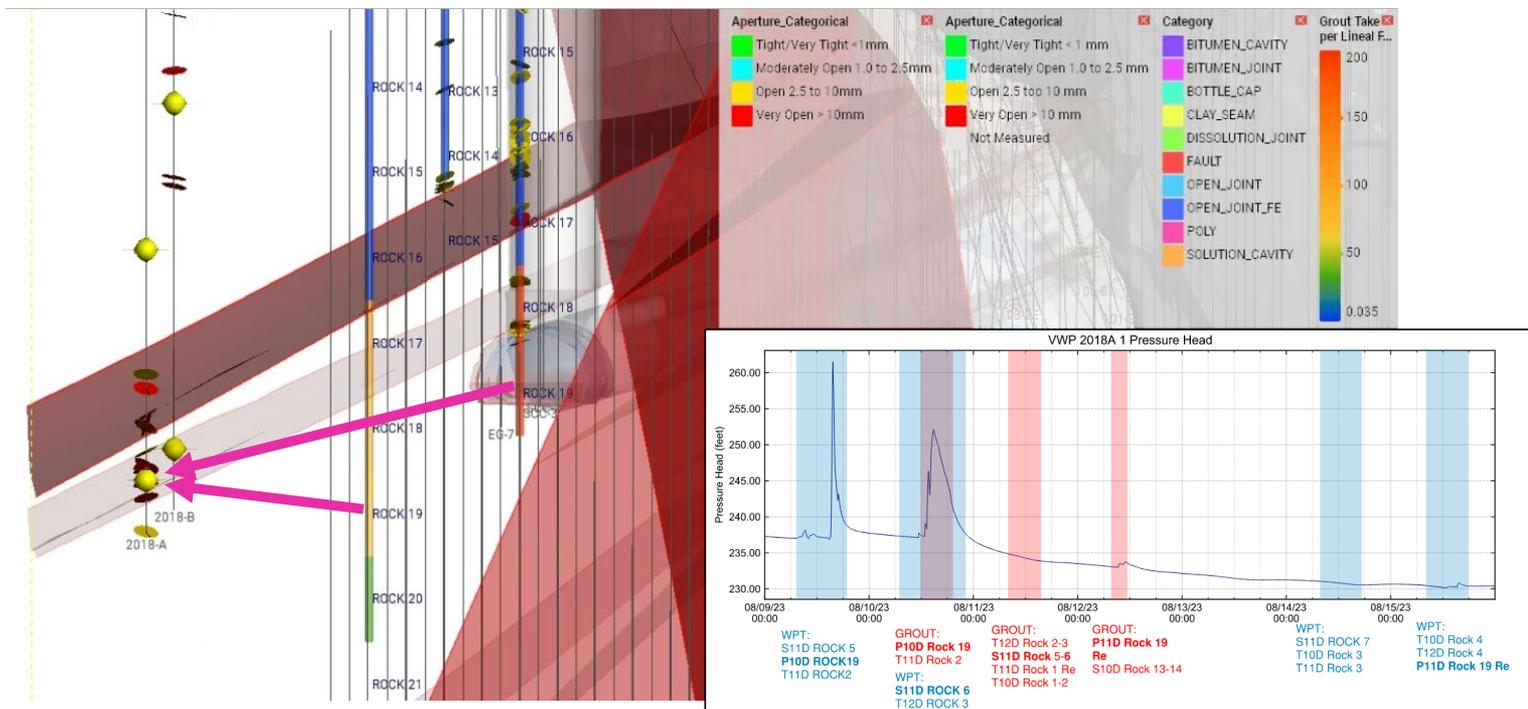
Instrumentation – Monitoring during Construction



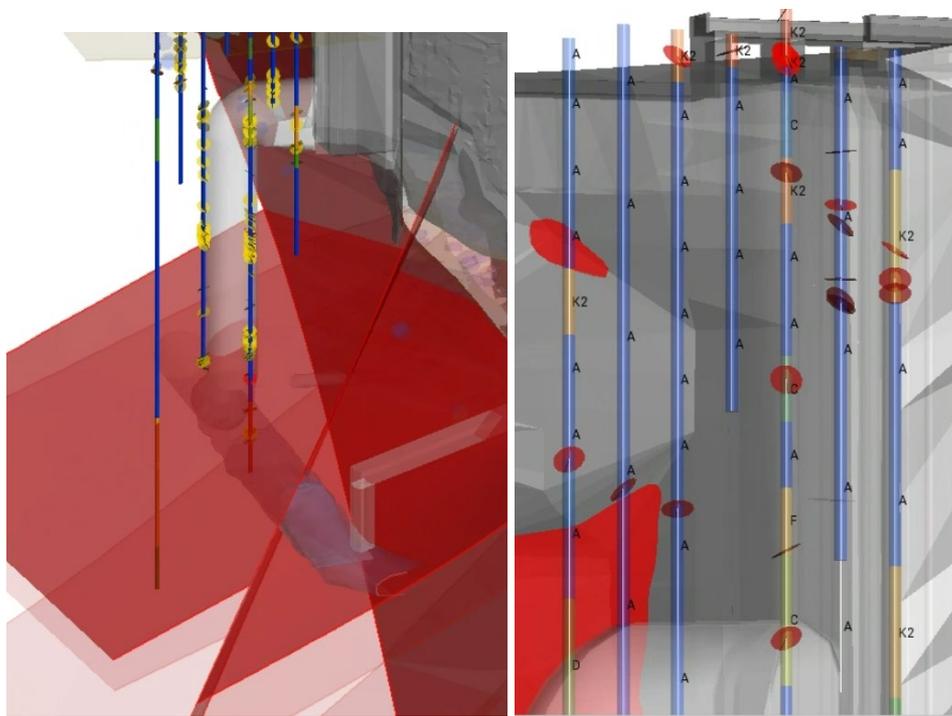
Instrumentation



Leapfrog Model



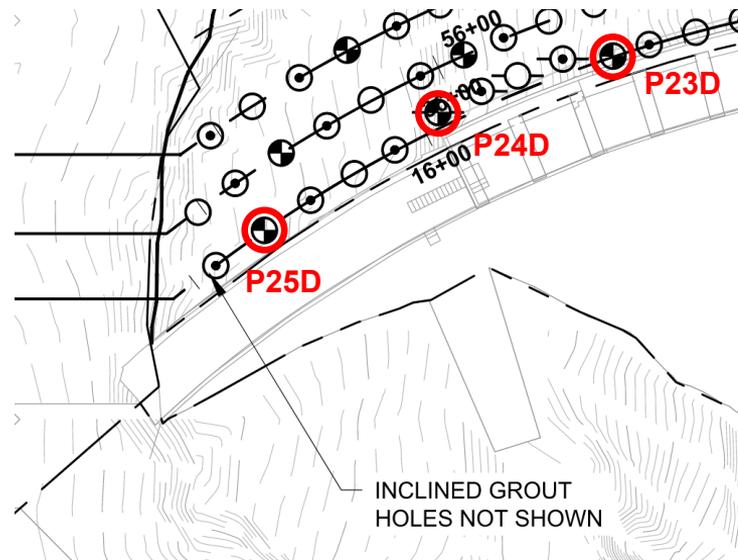
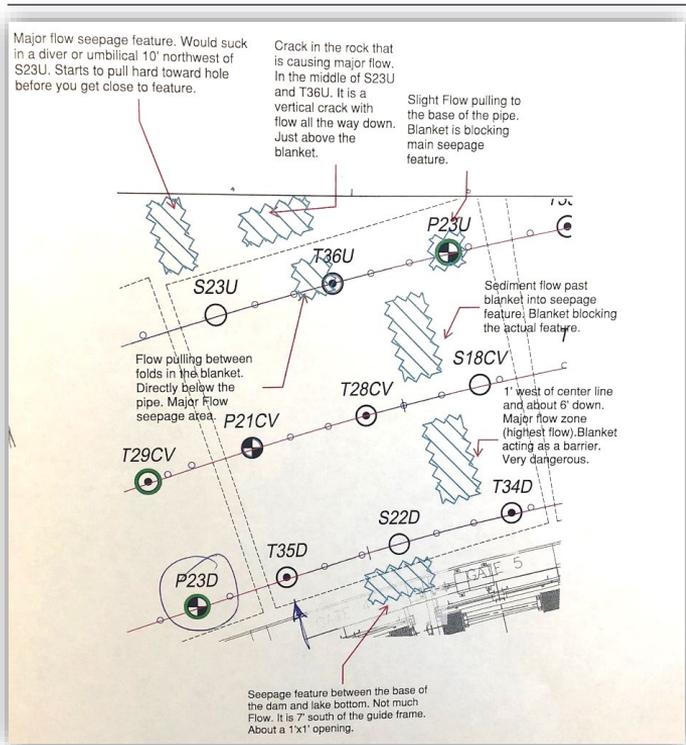
Leapfrog Model



Using Leapfrog

- Import and sort televue data
- View connections (grout hole communication, piezometer responses, downstream communication)
- Update of geological model

Right Abutment Exploratory Drilling & Grouting



Lessons Learned

- 10-foot Hole Spacing
- 10- to 20-foot Stage Lengths
- Use of Sodium Silicate
- Communication between project team members in IntelliSystem Trailer
- Monitoring of pressure changes in VVPs during WPT and Grouting
- 3D visualization with IntelliSystem and Leapfrog



Backup Slides – Additional Site Photographs



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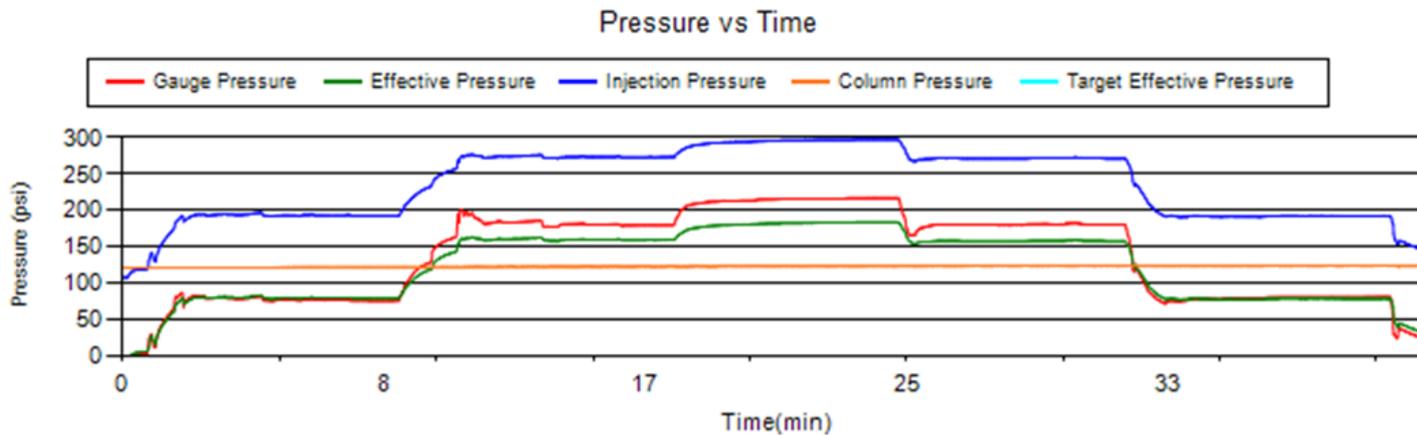


Backup Slides – Additional Site Photographs



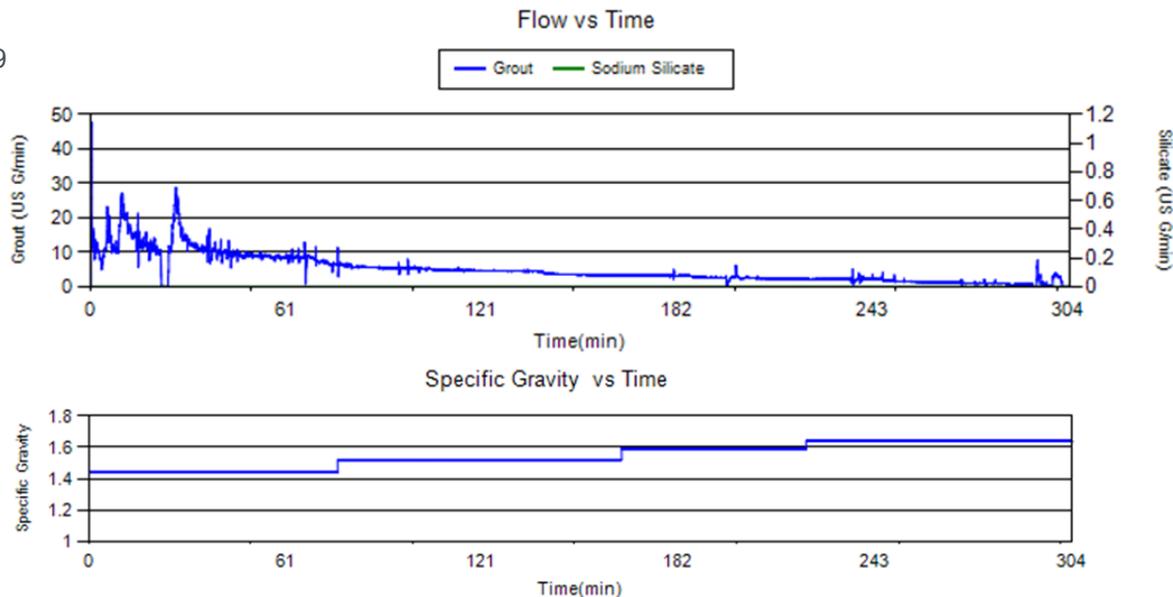
Backup Slides – Water Pressure Test

P10D Rock 19

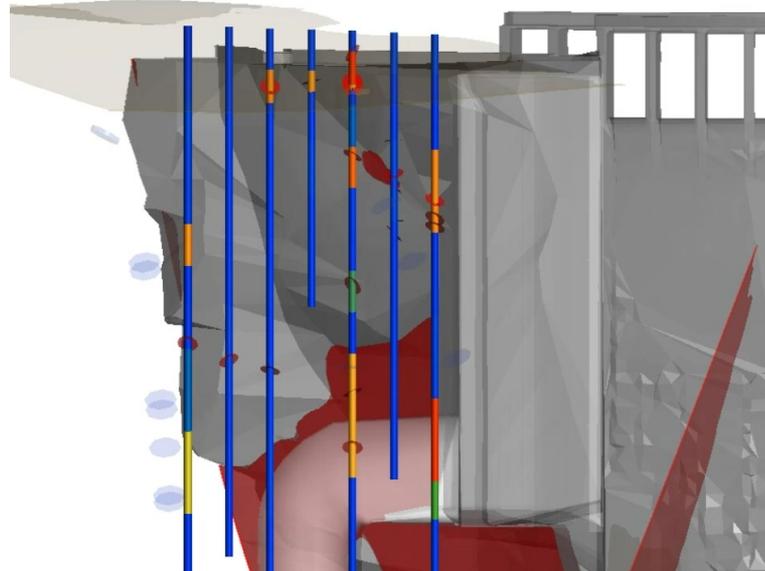
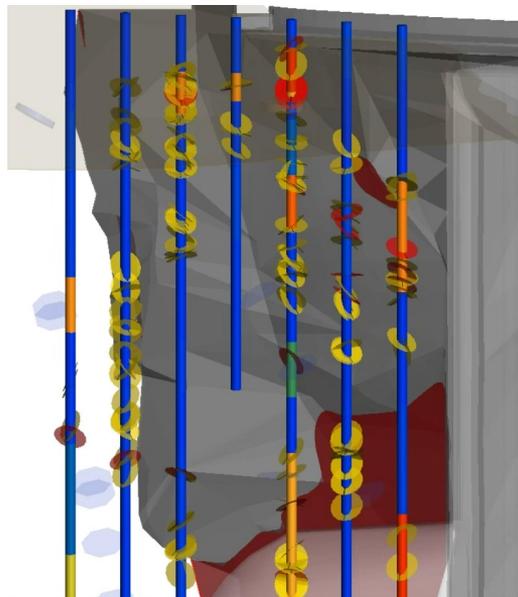


Backup Slides – Grouting Trend

P10D Rock 19



Backup Slides



Backup Slides

