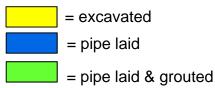


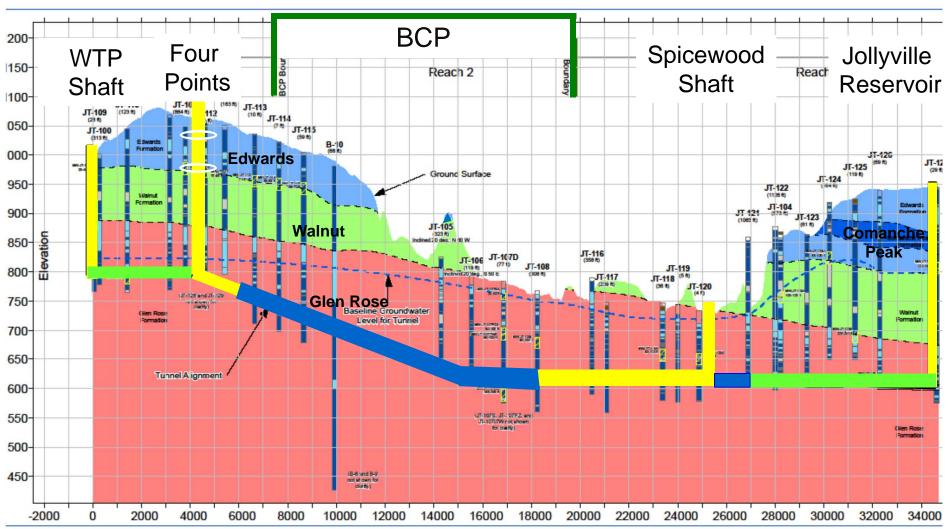
# JOLLYVILLE TRANSMISSION MAIN: Environmental Commissioning Monthly Report

Presented to the Austin Environmental Board January 15, 2014

Thais Perkins, Watershed Protection Department David Johns, Watershed Protection Department

#### Jollyville Transmission Main Project as of 1/6/14







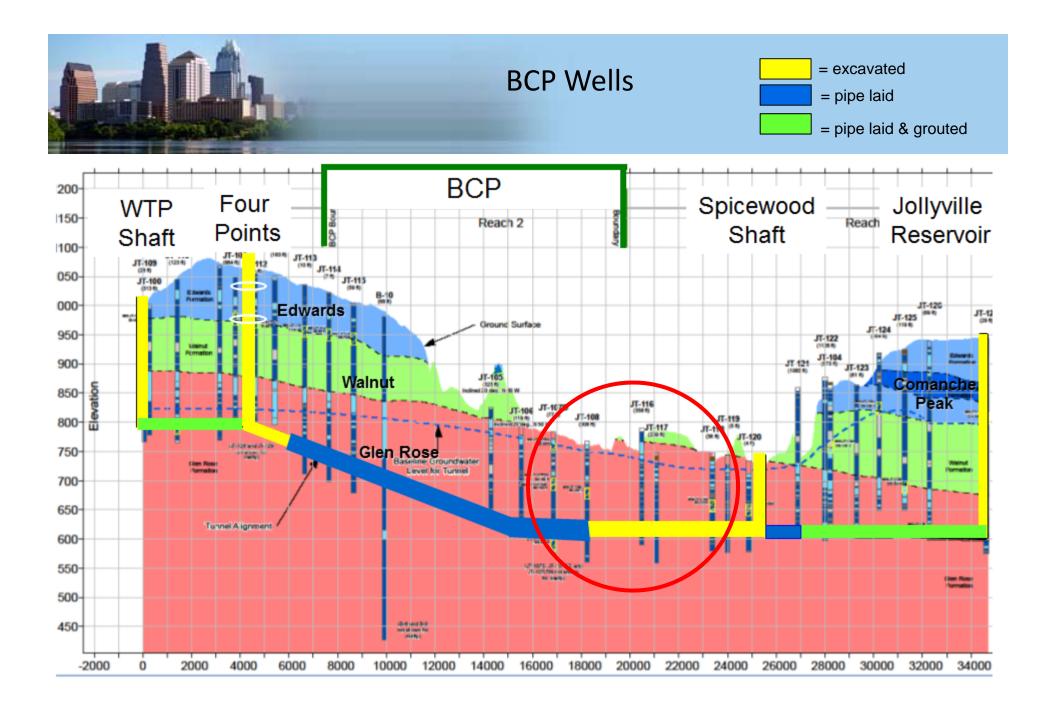
# **Environmental Commissioning Activities - JVTM**

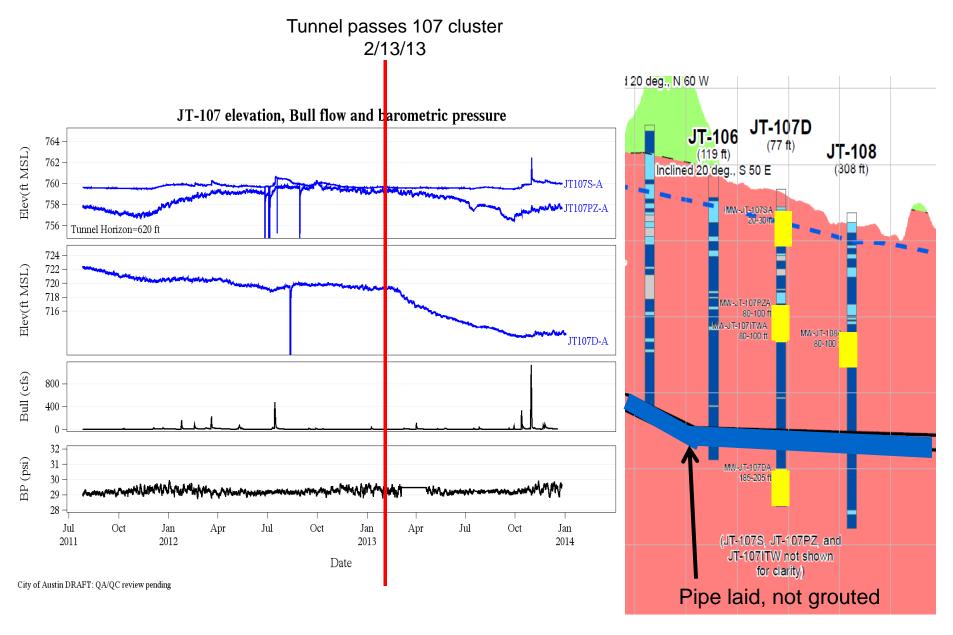
- Monthly shaft site (surface) visits concurrent with plant site visits
- Excavation and tunnel mapping complete.
- Meetings of the Environmental Commissioning Coordination Group (ECCG) to as needed resolve potential issues
  - Reviewed Water Management Plan
  - Reviewed shaft backfill requirements and shift to use of Controlled Low-Strength Material
- Environmental Monitoring
  - With exception of remotely monitored wells, most sites on a monthly monitoring interval (point data or continuous data)
  - Completed JVTM Monitoring report #5



#### Environmental Cost Summary

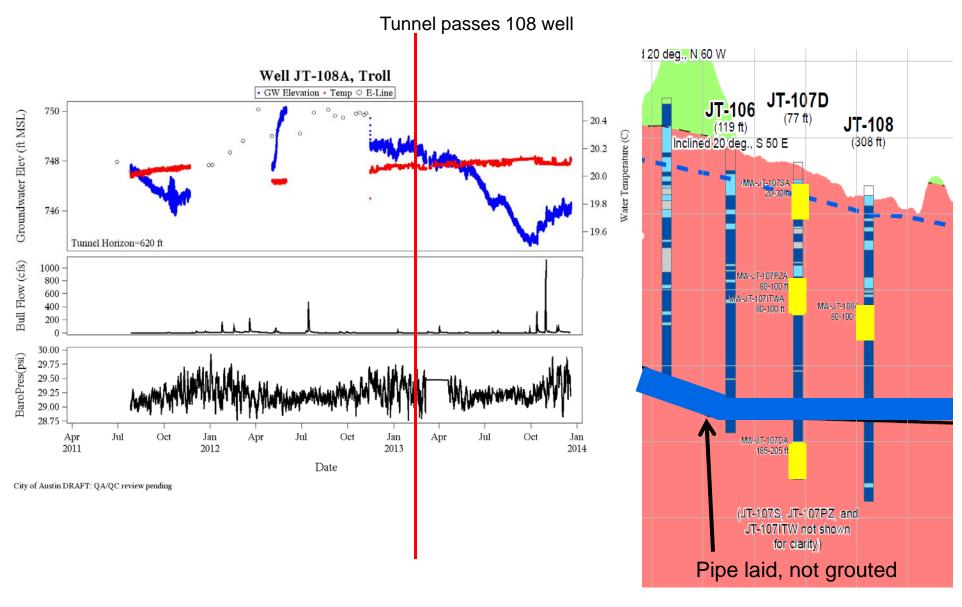
Initial INTERA Contract Amount	\$ 1,773,890
Total Amount Billed to Date (to October 2013)	\$ 1,424,962
Total Remaining	\$ 324,624





-decline (~8 feet) in deepest well as tunnel passes with some recovery after rain

- -small decline in PZ-A (~3 ft) with some recovery after rain
- -no decline in 107S-A.

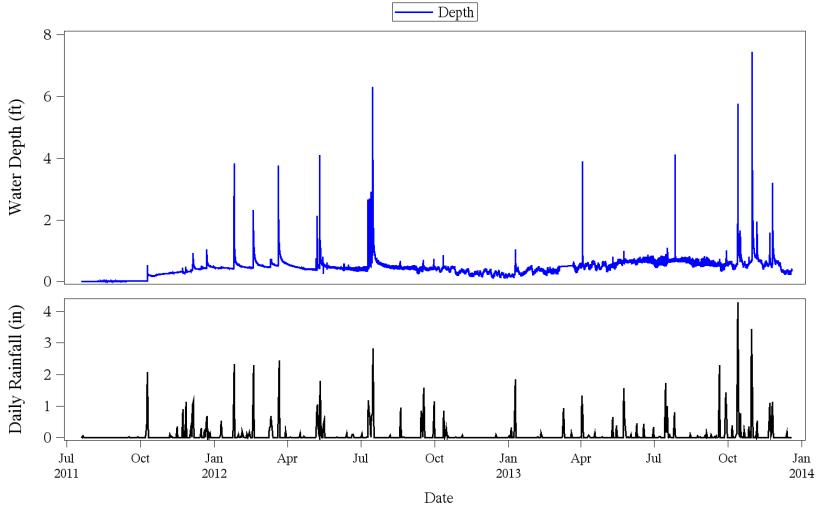


Decline seen in well after tunnel passes, dropped below 2011 minimum in September and then recovered with October rain events



## Bull Creek @ Trib 7 (Pit Spring proxy)

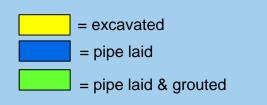
#### **Bull Creek Spicewood Springs 7th Crossing, Troll**

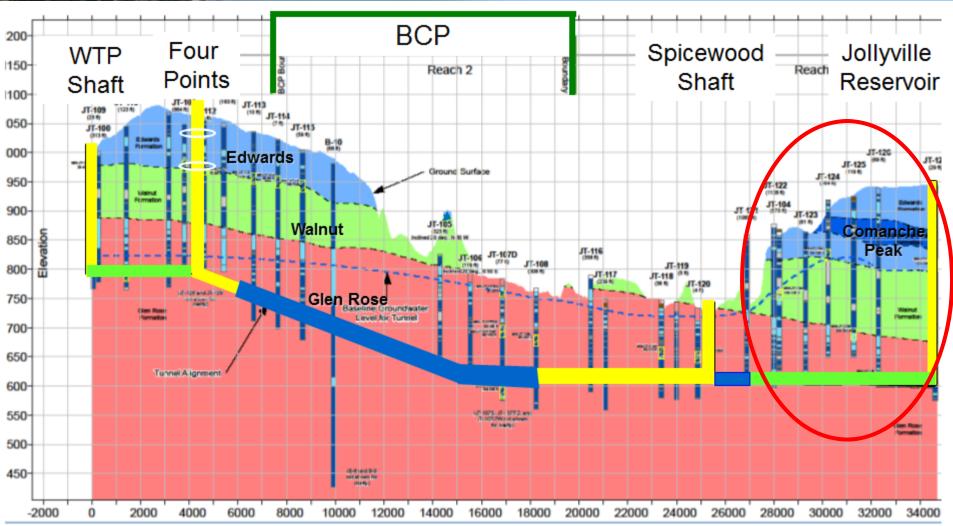


City of Austin DRAFT: QA/QC review pending

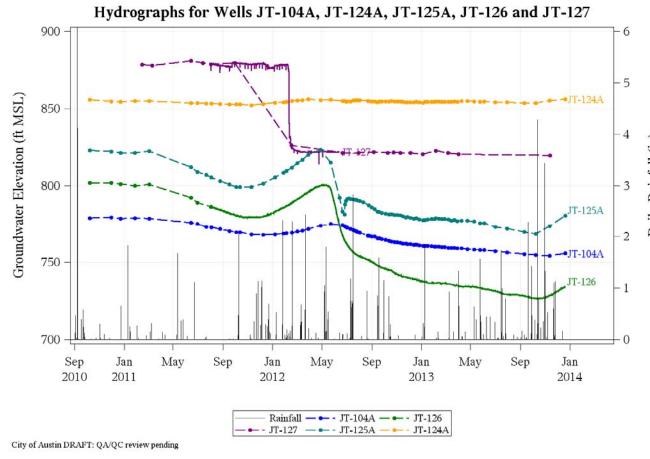


#### West Side Wells



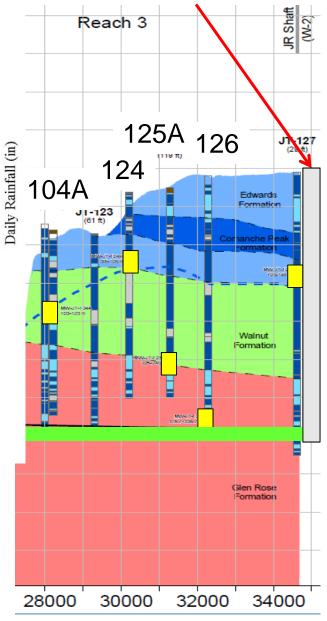


#### **East Side Wells**



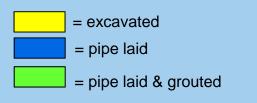
- Reach 3 excavation complete. Pipe laid and some grouting complete from west end.
- Most wells saw an uptick after October rain events (excluding 104A and 127)
- We expect groundwater levels to recover post-grouting of the shaft and are monitoring response

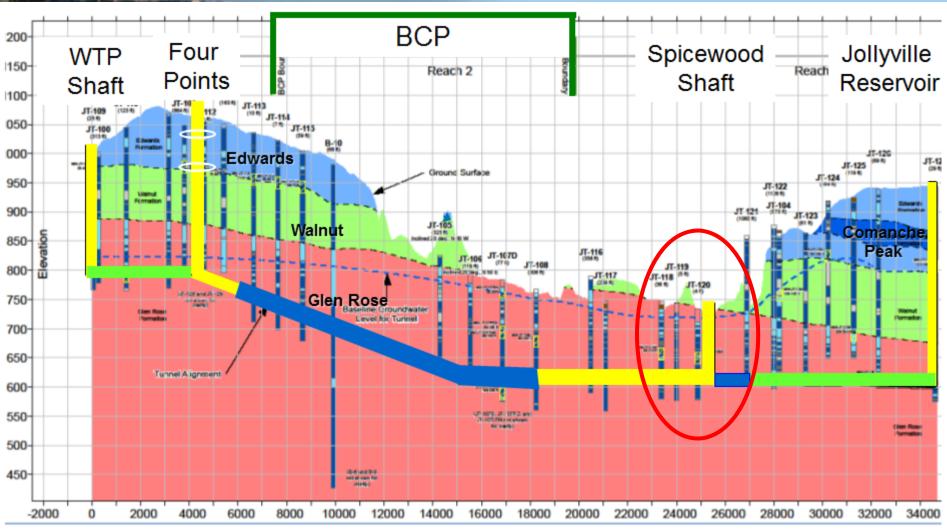
# Jollyville Reservoir Shaft (open)



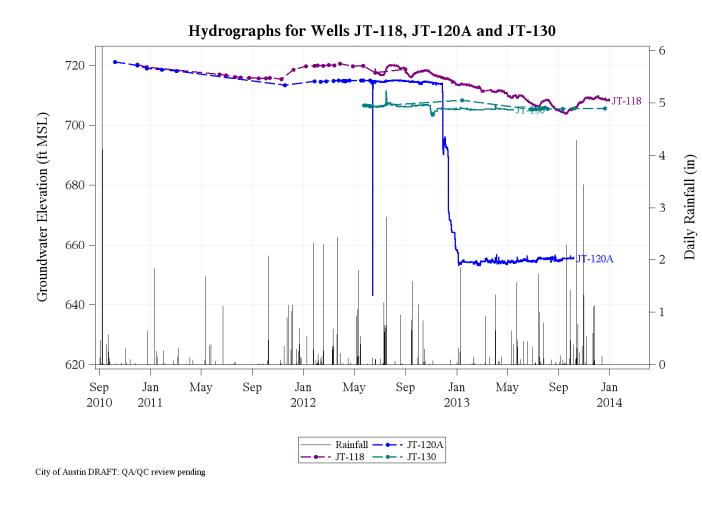


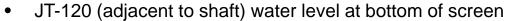
#### Spicewood Wells



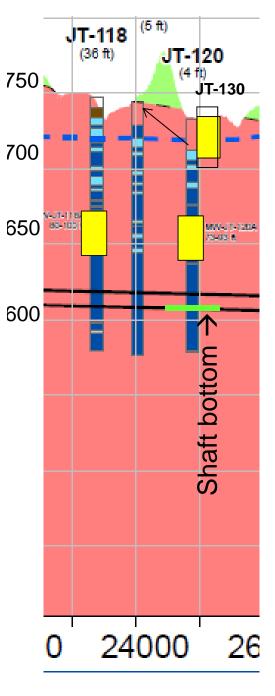


### Spicewood Shaft Wells





- JT-118 declines influenced by shaft and responsive to rainfall
- JT-130 relatively flat





# Environmental Monitoring Update – Surface flow

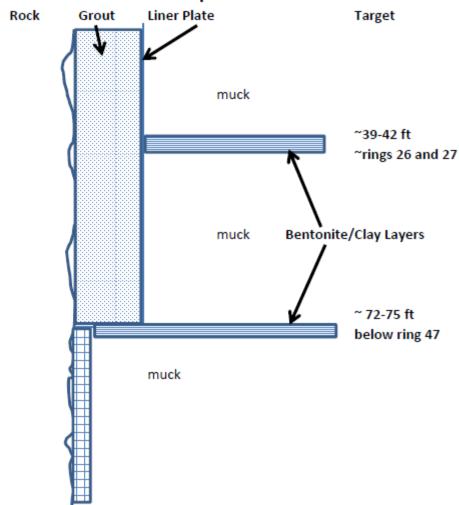
- Main stem of Bull Creek and all springs still flowing at high levels post-October rain
- Nondetects for indicators of mining, vehicular operation, and drilling (TPH, Cu, Cr, Zn)
- Nondetects for di-n-butyl grout compounds in JT-112, Gaas spring





## **Spicewood Shaft Backfill**

#### FIGURE 1 - Spicewood Shaft



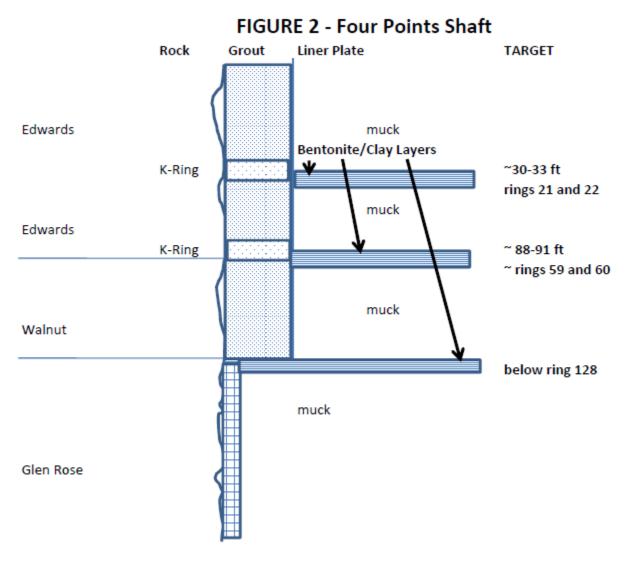
**Presented to the Environmental Board** 

Glen Rose

Glen Rose



#### **Four Pts Shaft Backfill**





## Jollyville Shaft Backfill

#### FIGURE 3 - Jollyville Reservoir Shaft **Liner Plate** Rock TARGET Edwards CLSM ~97-100 ft Comanche Pk ~ rings 65 and 66 Bentonite/Clay Layer CLSM Edwards Walnut CLSM Glen Rose CLSM



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