ARCADIS
Infrastructure, environment, buildings

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Ms. Carol C. Minsk
Project Manager

Mr. Lucas Berresford
Engineering Associate
Division of Site Assessment and Remediation
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject:
Monthly Progress Report – February 2010
AVX Corporation, Myrtle Beach Facility
801 17th Avenue South
Horry County, Myrtle Beach, South Carolina
SCD 062 690 557

Date:
March 16, 2010

Contact:
Mark B. Hanish

Phone:
724.742.9180, ext. 518

Email:
mark.hanish@arcadis-us.com

Our ref:
B0007393.0000

Dear Ms. Minsk and Mr. Berresford:

On behalf of AVX Corporation (AVX), ARCADIS respectfully submits five copies of this Monthly Progress Report for February 2010 to the South Carolina Department of Health and Environmental Control (SCDHEC) for the AVX site located at 801 17th Avenue South in Horry County, Myrtle Beach, South Carolina (site).

Activities Performed During This Reporting Period

The following activities were performed by AVX or ARCADIS during this reporting period:

- Performed post-injection groundwater monitoring following the second injection event of the enhanced reductive dechlorination (ERD) pilot study.
- Continued analysis of post-injection groundwater monitoring data for the ERD pilot study.
- Uploaded post-injection groundwater monitoring data into the database, tabulated the data, and updated trend graphs of monitored parameters.
- Completed and submitted the air stripper construction permit application to the SCDHEC.

- Performed air stripper operational checks and adjustments.
- Completed preparation of an update of the results of interpretation of the ERD post-injection data. The results of that interpretation are summarized in Attachment A.
- Completed laboratory analysis of soil samples collected following demolition of the PDG Building concrete slab.
- Completed preparation of the PDG Building Post Demolition Sampling Report.

Activities Planned for the Next Reporting Period

The following activities are expected to occur during the next reporting period:

- Continue performing ERD pilot study post-injection groundwater monitoring.
- Continue evaluation of the ERD pilot study post-injection groundwater monitoring data.
- Complete preparation of the PDG Building Post Demolition Sampling Report and submit that report to the SCDHEC.
- Continue preparatory activities for performing the third ERD injection event, tentatively scheduled for the week of April 12, 2010.

If you have any questions, please contact me at 724.742.9180, ext. 518.

Respectfully,

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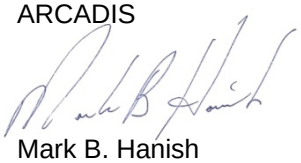

Mark B. Hanish
Project Manager

Copies:
Ms. Myra Reece, South Carolina Department of Health and Environmental Control
Mr. Larry Ragsdale, South Carolina Department of Health and Environmental Control
Mr. Larry Blue, CHMM, REM, AVX Corporation
Mr. Max Justice, Parker, Poe, Adams & Bernstein LLP
Mr. William Popham, ARCADIS

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Attachment A

Enhanced Reductive
Dechlorination Pilot Study Upate

Performance Evaluation Update

Enhanced Reductive Dechlorination Pilot Study

February 2010

AVX Corporation Facility
Myrtle Beach, South Carolina

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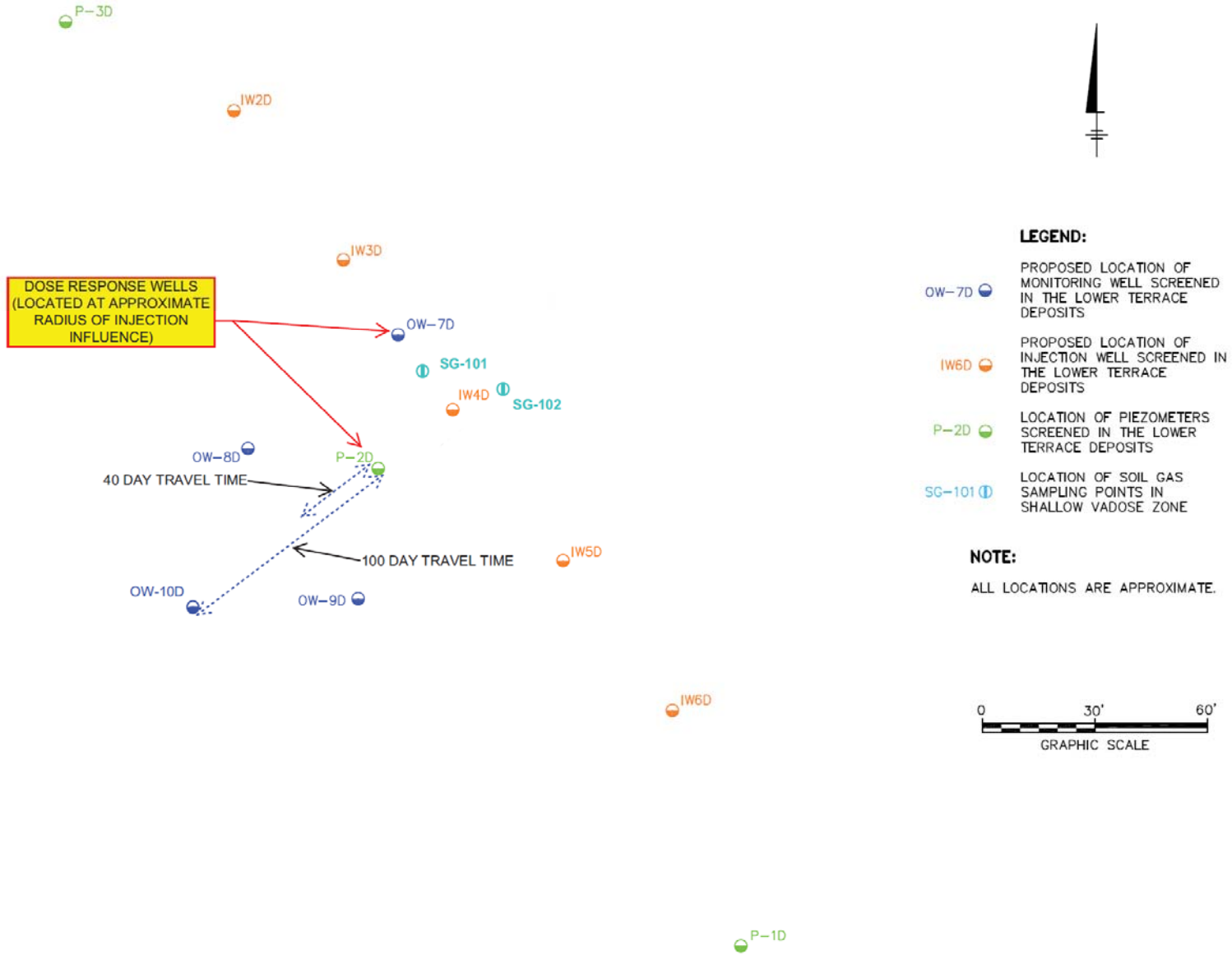
Pilot Study Layout



ERD Pilot Study Activities

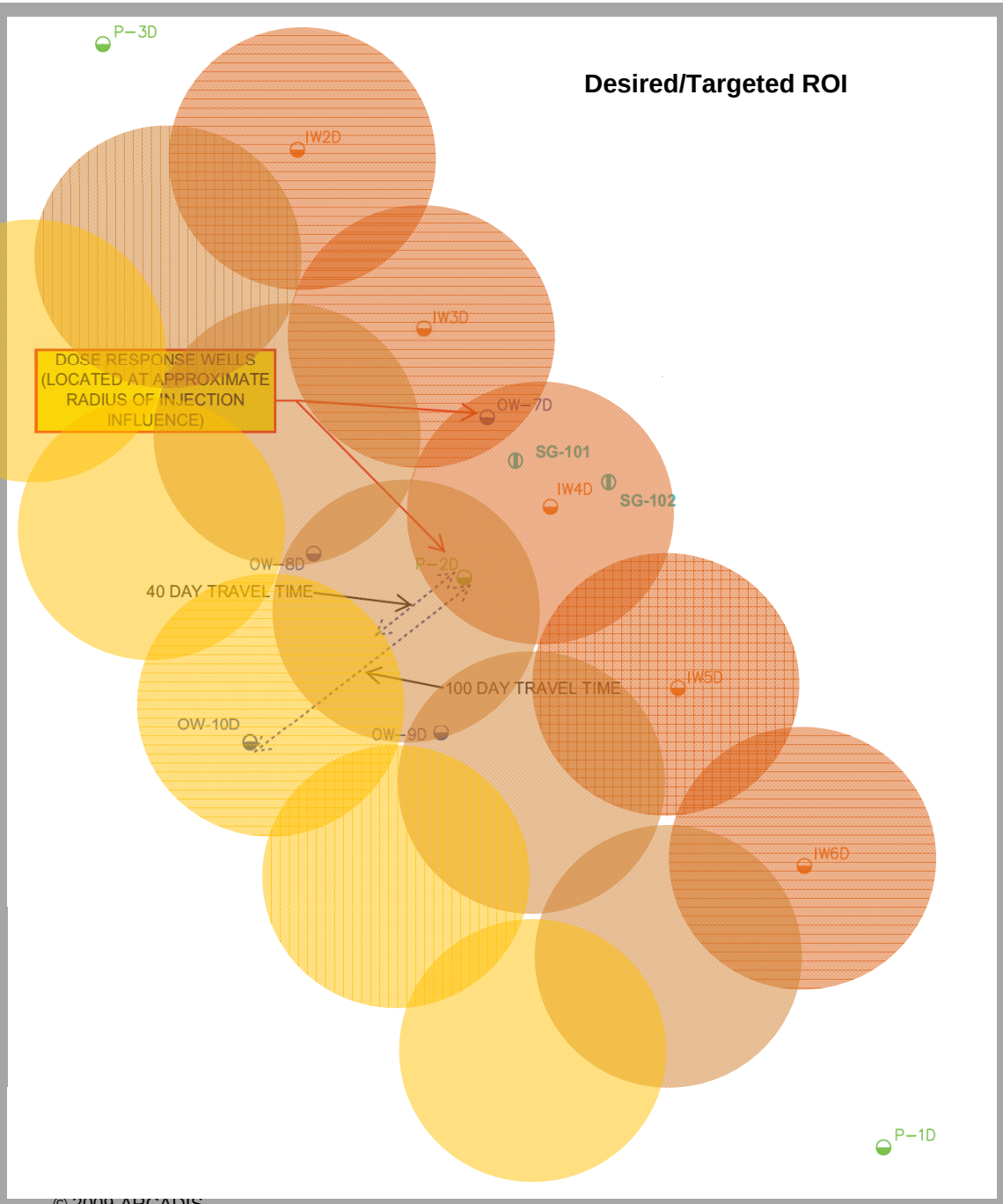
- Baseline samples collected on July 20, 2009
- Two injection events of 2% molasses (July 21, 2009 and November 2, 2009) into five injection wells (IW-2D through IW-6D)
- Injected ~ 65,000 gallons of solution per injection well (~325,000 gallons total) per injection event:

Injection Well	Volume July Inj	Volume Nov Inj
IW-2D	64,805	64,800
IW-3D	64,425	64,425
IW-4D	64,478	60,321
IW-5D	64,030	61,492
IW-6D	64,803	64,687

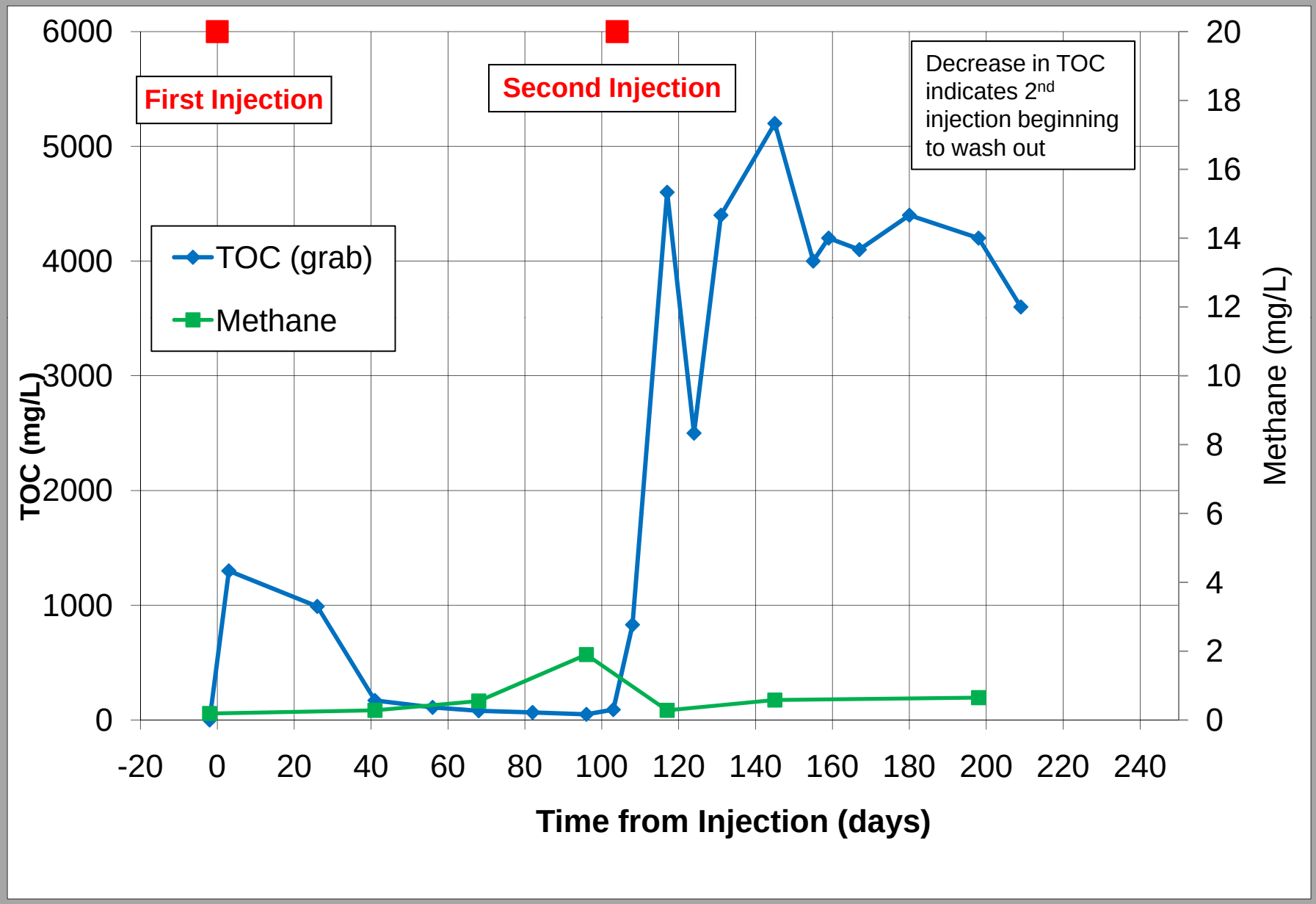
ERD Pilot Study Results - TOC

- The TOC distribution >100 days after the injection events has been generally inconsistent with previous numeric model prediction, i.e.:
  - OW-7D, OW-8D and OW-9D have not shown consistent TOC loading, indicating potential lack of full treatment of narrow strips of aquifer or “striping” is occurring through the injection zone and in the direction of groundwater flow.
  - OW-10D – other than one spike in TOC concentrations (@145-day post injection) TOC loading has been inconsistent with the pre-pilot modeling effort
- TOC dataset currently being analyzed to optimize TOC distribution

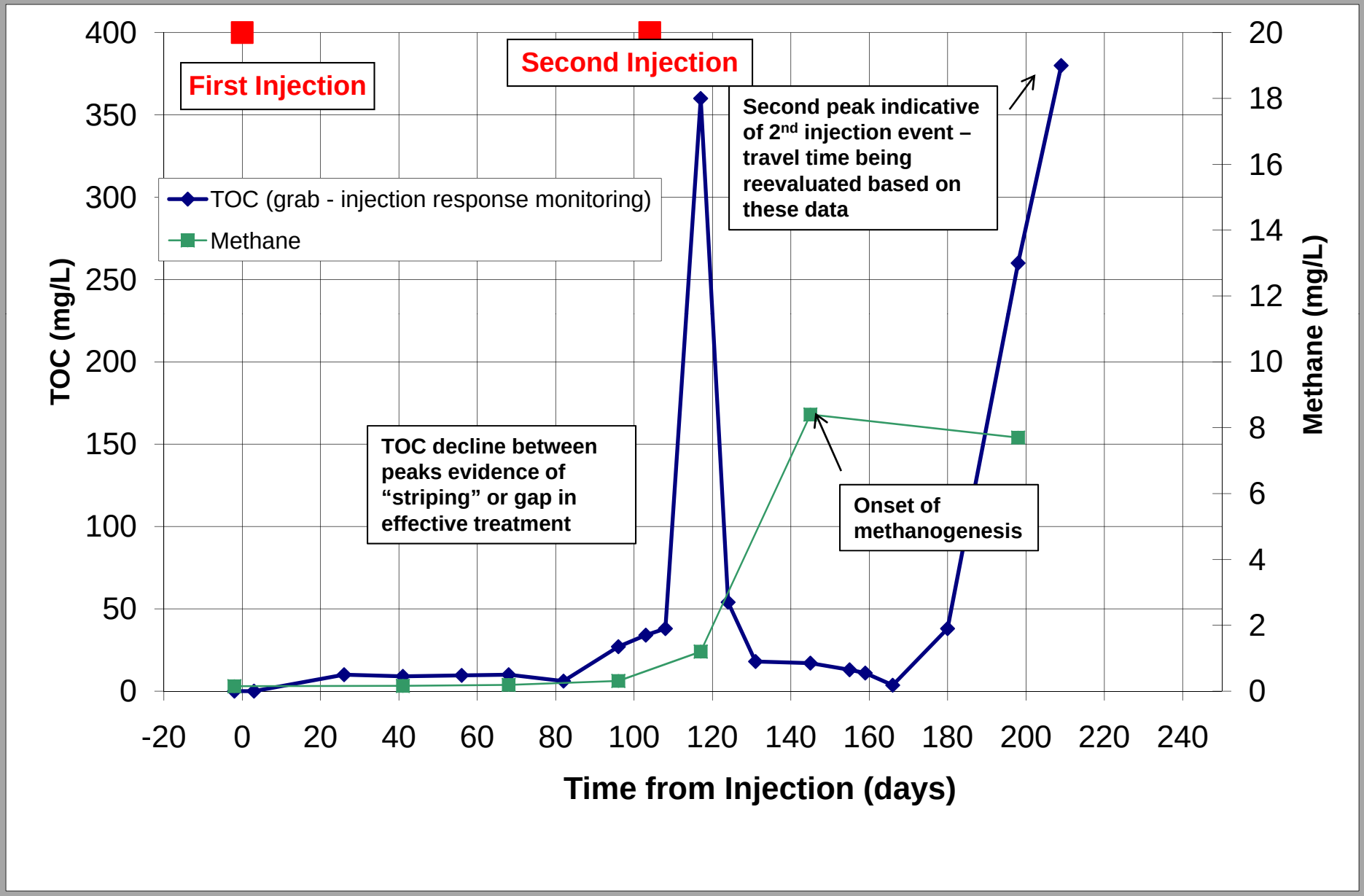
Schematic of current ROI



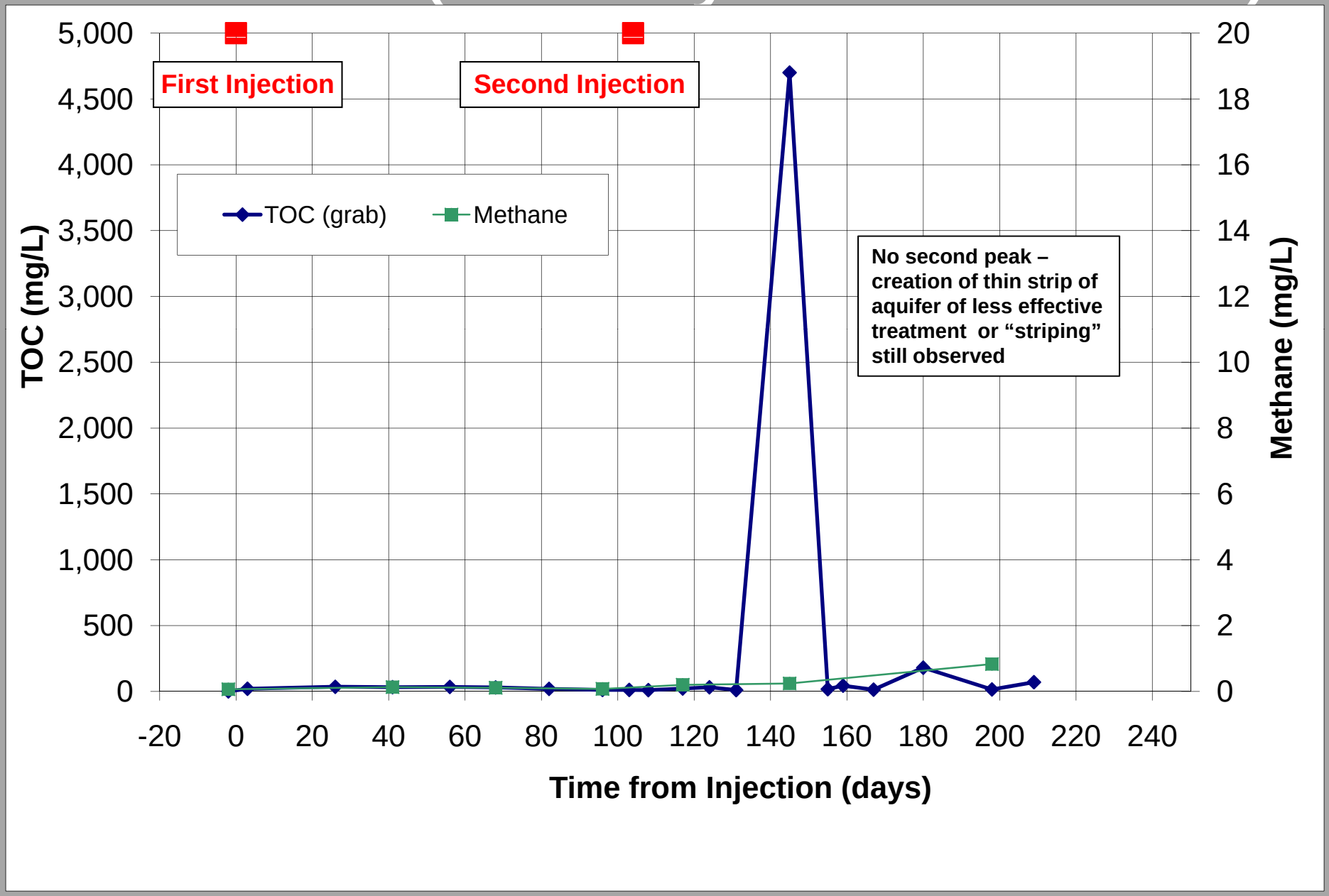
PZ-2D (ROI Well)



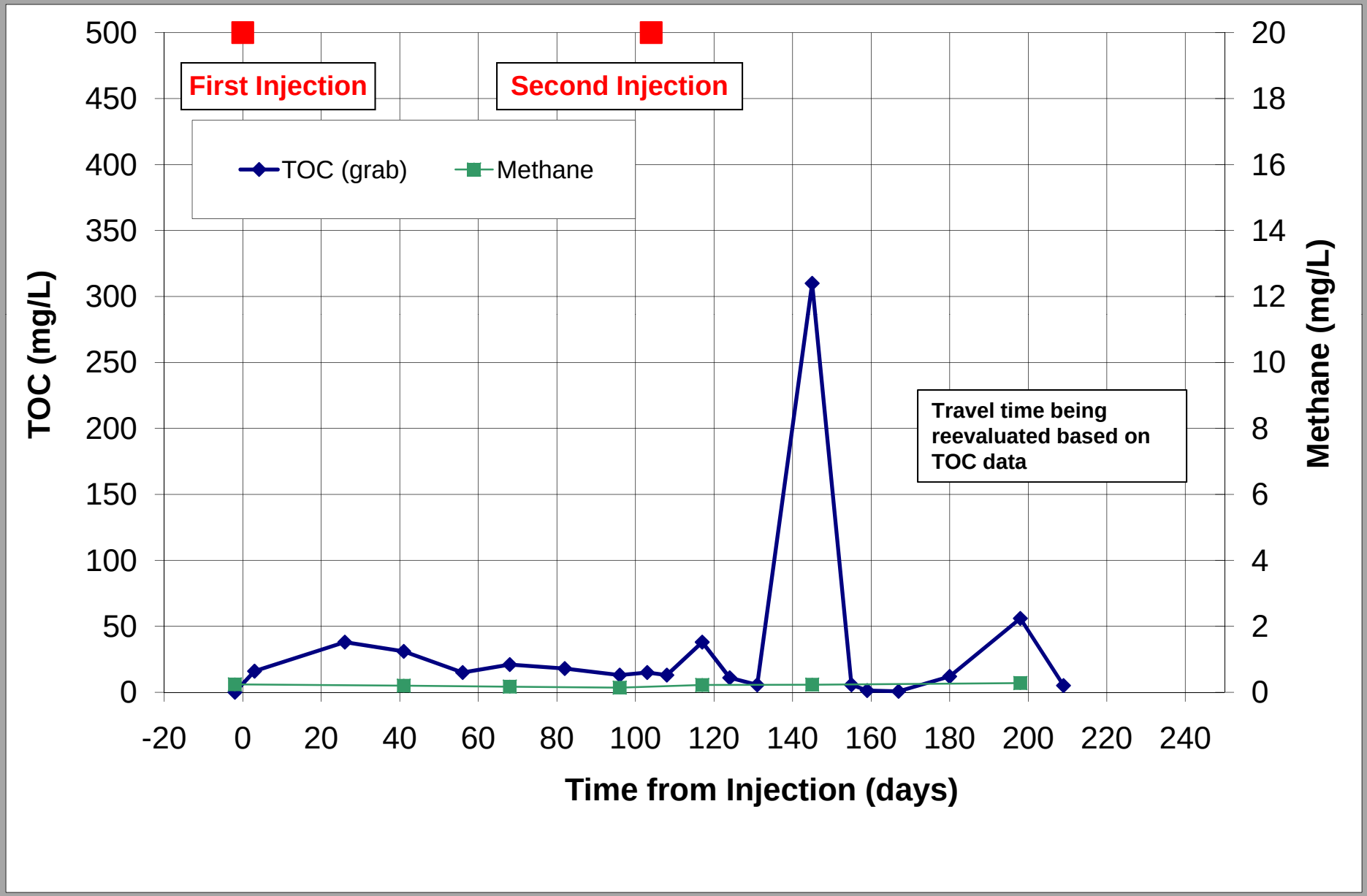
OW-8D (40 Day Travel Time)



OW-9D (40 Day Travel Time)



OW-10D (100 Day Travel Time)



TOC Summary

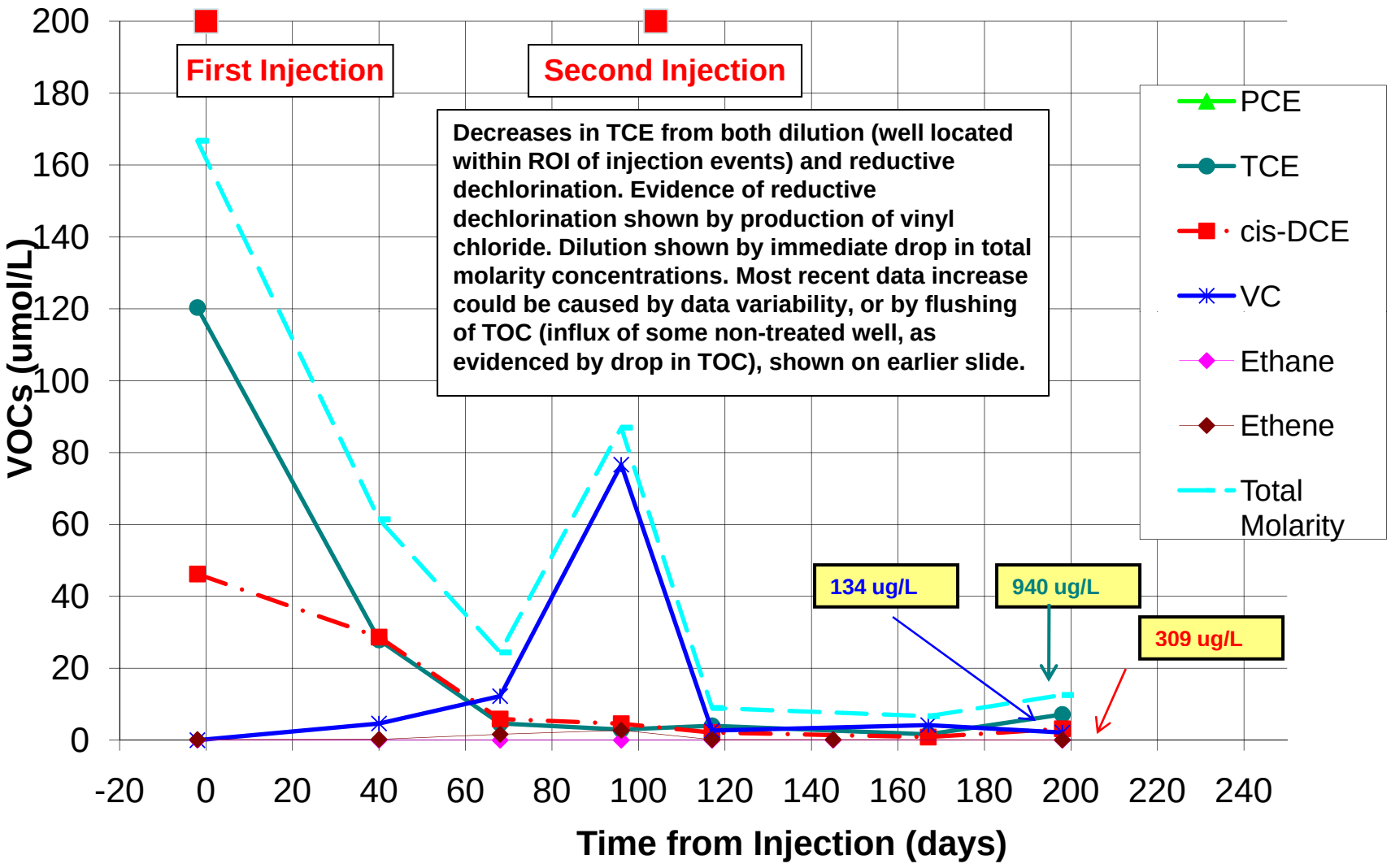
- PZ-2D concentrations beginning to decline, nearing time for third injection event.
- Data still indicate that injection volumes for neither injection events were sufficient create sustained overlap between injection well ROI (no sustained TOC observed in OW-7D, OW-8D, or OW-9D)
- TOC data currently being analyzed to make adjustments to groundwater velocity and well travel times (if warranted)

ERD Pilot Study Results – VOCs

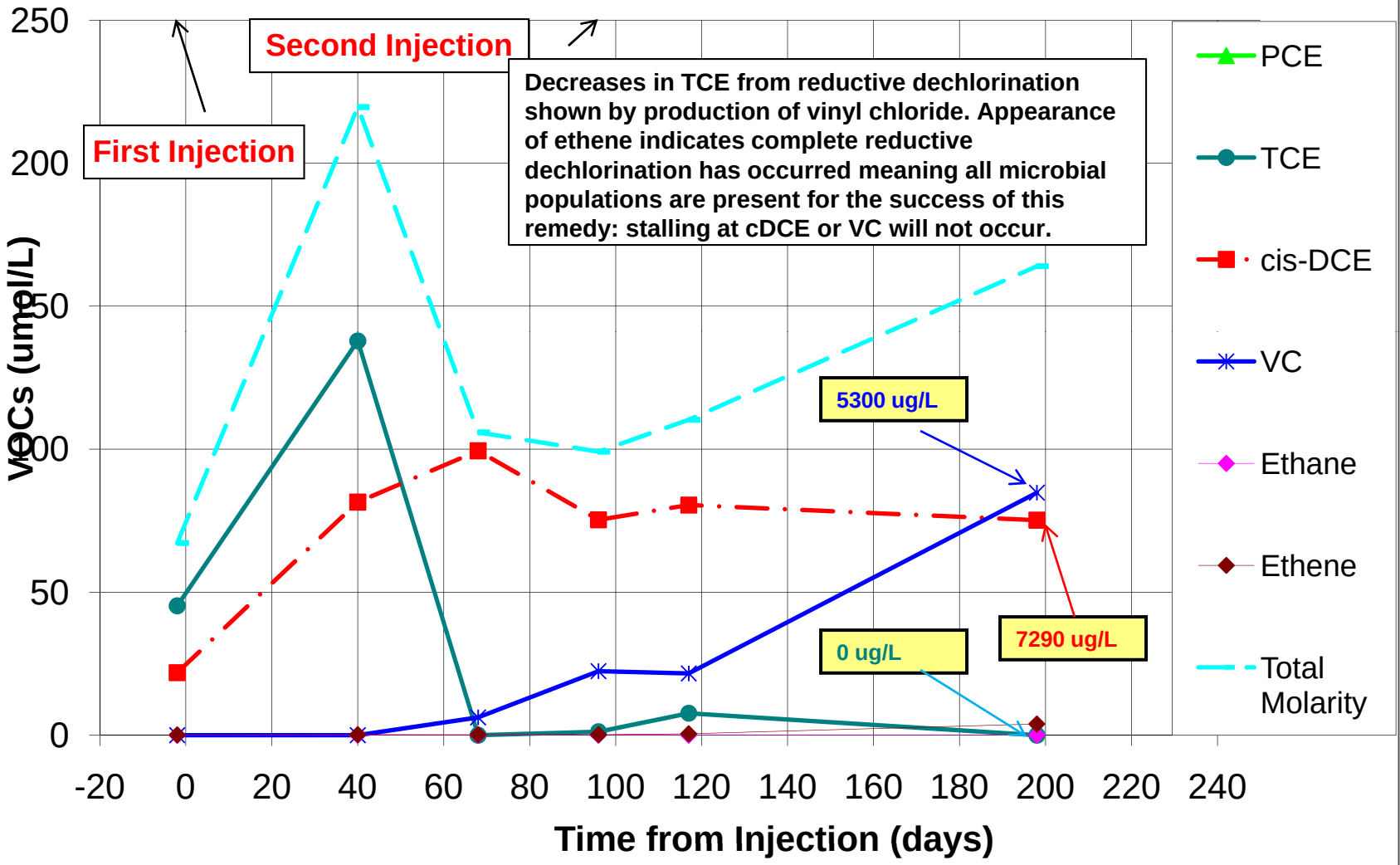
- Pilot Test Results strongly indicate ERD will be successful at this site:
  - Formation of all daughter products

    TCE – cDCE – vinyl chloride (VC) - Ethene
  - Overall reductions in TCE concentrations
    - ROI well P-2D shows signs of reduction from both dilution and biodegradation
  - Formation of cDCE and VC (biodegradation) in all wells
  - Ethene generated in OW-8D – first evidence of complete reductive dechlorination
    - Important to demonstrate no “stalling” of ERD at cDCE or VC

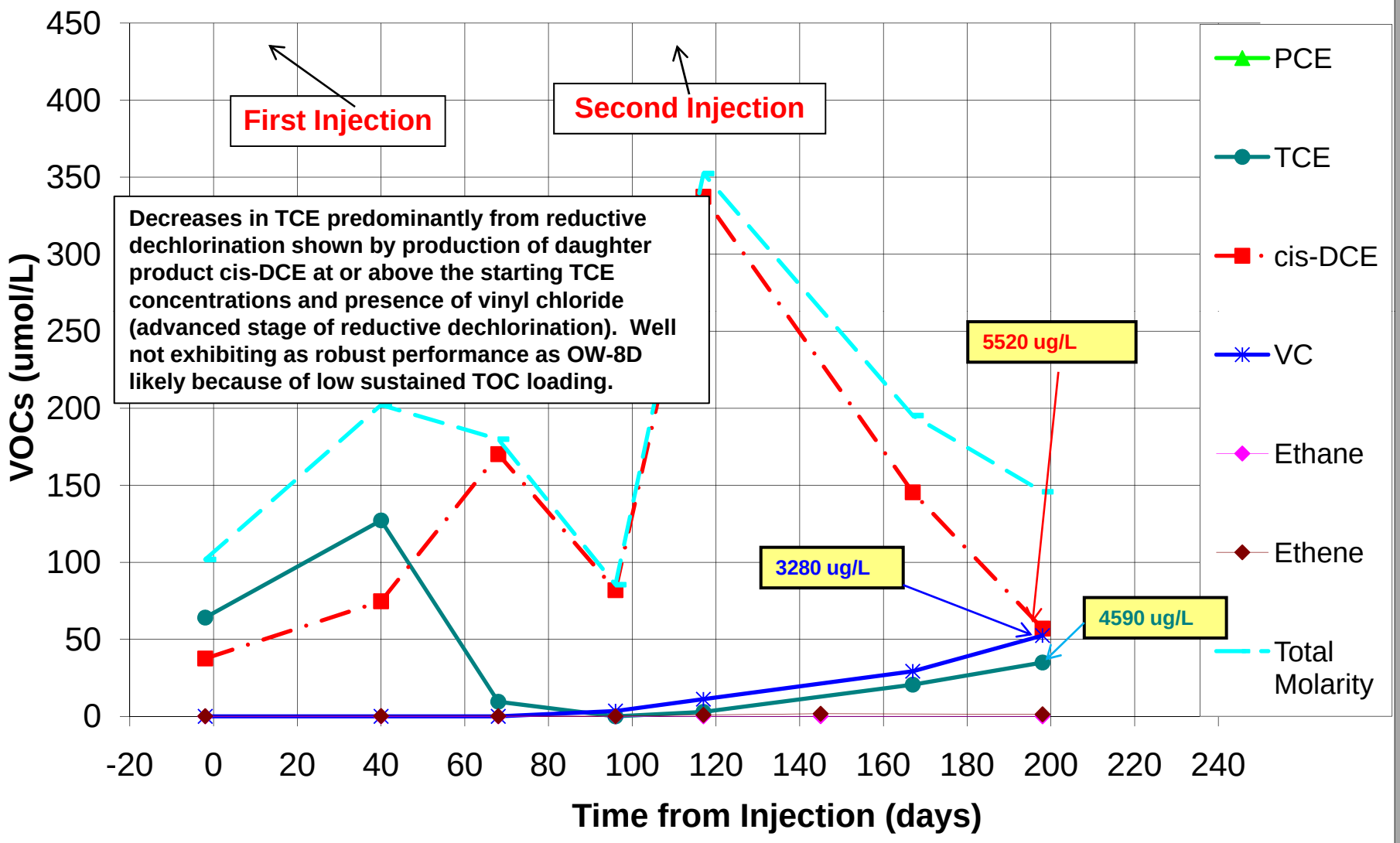
PZ-2D (ROI Well)



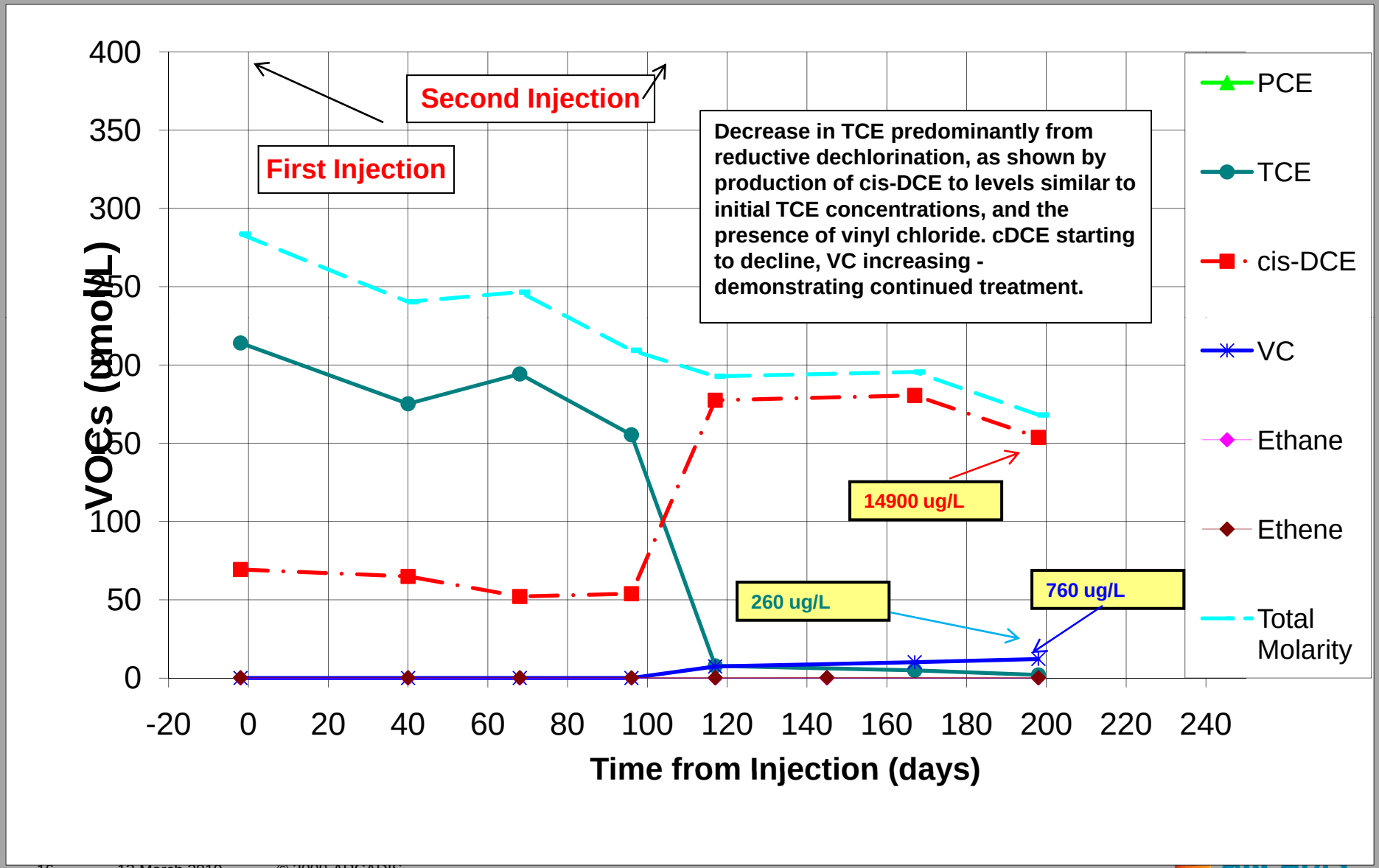
OW-8D (40 Day Travel Time)



OW-9D (40 Day Travel Time)



OW-10D (100 Day Travel Time)



Conclusions

- Presence of ethene demonstrates required microbes present at the site to successfully treat TCE to ethene
- TOC distribution critical to reaching TCE and daughter product remedial objectives.
    - Creation of strips of aquifer that are not fully treated or “Striping” is occurring between the injection wells, evidenced by low/not-sustained TOC loading in OW-7D, OW-8D and OW-9D.
    - The TOC data indicate an approximately quarterly injection frequency of 2% molasses is sufficient to maintain TOC levels in the injection zone (i.e. PZ-2D).

Path Forward

- Continue to monitor VOCs monthly.
- Focus on TOC distribution - perform next injection event using larger volume to ensure ROI sufficient for sustained TOC loading at OW-7D (i.e. .ensure overlap).
- Analysis of TOC data currently underway to verify/adjust groundwater velocity within pilot test area to verify travel times to performance monitoring wells.

