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NAS JACKSONVILLE
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MINUTES FROM 20 TO 21 MAY 2013 PARTNERING TEAM MEETING WITH ATTACHMENTS
PARTNERING TEAM MEETING NAS JACKSONVILLE FL
5/21/2013
NAVFAC SOUTHEAST

NAS JACKSONVILLE PARTNERING TEAM MEETING MINUTES

May 20-21, 2013

Jacksonville, Florida

Attendees:

David Grabka, FDEP
Adrienne Wilson, NAVFAC SE
Tim Curtin, NAVFAC SE
Tim Flood, Facilitator
Mike Singletary, NAVFAC SE (Day 1)
Todd Haverkost, Resolution Consultants – Chair, Timekeeper
Jennifer Conklin, FDEP
Eric Davis, CH2M HILL (Day 1)
Pete Dao, USEPA
Sarah Reed, NAVFAC SE (Day 2)

Barb Becker, Tetra Tech (via telephone Day 1)
Rachel Klinger, Geosyntec (Day 1)
James Wang, Geosyntec (via telephone Day 1)
Alan Pate, Tetra Tech (Day 2)
Libby Claggett, Tetra Tech – Scribe
Donald Hardison, Tetra Tech
Mike Maughon, Tetra Tech

1.0 Team Meeting and Introduction

1.1 Team member greeting, introductions, and check in – Done
1.2 Assignment of Team Roles: Chair – Todd Haverkost;
Gate/Timekeeper – Todd Haverkost; Scribe – Libby Claggett
1.3 Read Team Ground Rules – Ground rules were read by team members and attendees.

2.0 Initial Agenda Items

2.1 Review, submit revisions to, and reach consensus on previous meeting minutes. Done

Consensus: Team members approved the minutes (with changes from Dave Grabka) from the March 2013 meeting.

2.2 Report on Assigned Action Items and Parking Lot Items. Done

2.3 NAVFAC presents current budget execution plan. Adrienne said she and Mark negotiated some follow on work for OU 3, which will not be funded until June. The mowing at OU 1 and PSC 51 is left. Tim put in a new request for PSC 51, and it should be done. Adrienne said need to request the money from Margaret. The award for the Polishing Pond for next year has yet to be issued.

Action Item: Julie is to provide a 1- to 2-page summary of each site to Team members.

Tim asked if there was a way to pay for the falling tree at OU 1 with a credit card; Adrienne said this was not an option. According to Adrienne, IDW money needs to be used for the tree. Tim said there is someone that has a NAVFAC credit card, and Adrienne said she will check on it during this meeting.

3.0 Agenda

3.1 Schedules/SCAP/Exit Strategy/FDEP Document Tracker/FFA SMP/ Petroleum SMP: Pete stated there have been no changes to the SCAP. Dave provided the FDEP Facility Document Reviews to Team members. A copy of the FDEP tracker will be added to the minutes.

Action Item: Julie is to send the Document Status Tracker to Eric, Mark, and Todd to be updated.

3.1.1 Team Development – Tim Flood – Team members welcome Jennifer to the Team and provided their final thoughts regarding having Dave on the Team.

3.2 OU 1

3.2.1 LTM Update and Landfill Maintenance – Tim Curtin – The landfill (OU 1) is being mowed by the RBOS II contractor. Terns have found a home on top of some of the buildings at OU 3, and there are over 1,000 nests. The birds fly (thousands at a time) from the top of the hangars down to where the helicopters take off. The Terns are endangered; therefore, nesting areas are being built on top of OU 1 to encourage the Terns to move on their own. The Navy is also looking into buying a barge and putting nesting materials on top of it to have the Terns nest there instead of at OU 3. Fencing will be put around nesting areas. There is also a dying tree that needs to be cut down at OU 1.

Action Item: Adrienne is to send the Solutions IES document tracker to Team members.

3.2.2 Update on System Decommissioning LNAPL Structures at OU 1 – Eric Davis – See 3.3.3 discussion.

3.3 OU 3

3.3.1 Groundwater Model Update – Donald Hardison provided figures for Areas A and B, Area C, Area D, Area E, and Areas F and G and discussed the groundwater monitoring results from the January 2013 sampling event. Upgradient contamination was found at OU 3, which the Team previously decided should be a different site because the contamination was from a different source.

Overall, groundwater contamination exists at concentrations exceeding GCTLs throughout Areas A through G. Area G is not bounded to the east by permanent wells, but is bounded by DPT wells. Area E does not have a ROD; and Areas A, B, and G are in long-term monitoring. The cross-section figures will be updated with the January 2013 groundwater sampling results.

Mike M. presented the Mann-Kendall results. Most of the wells have been less than GCTLs for the past 3 years. Increases in trends appear to be daughter products as the TCE degrades. In general, the mass discharge is greater above the clay layer compared to below the clay layer. Mike S. suggested converting the mass discharge graphs from kg/year to g/year/ft^2 mass flux to see if there is any significant difference in the above and below clay layers per unit area. Tetra Tech is still looking at the geochemistry for MNA and will incorporate all findings into the RI Addendum.

3.3.2 Vapor Intrusion Discussion – Eric Davis – The draft, Revision 1, OU 3 Vapor Intrusion Evaluation Report was submitted to the EPA and FDEP on March 7, 2013. CH2M HILL is waiting on comments.

A meeting was held to discuss the results of the Building 103 indoor air re-sampling on March 8, 2013. Data suggests that conditions may be more favorable for vapor intrusion in the winter versus the summer. Ratio calculations suggest vapor intrusion as a potential contributing source of indoor TCE.

Action Item: Eric is to send the TCE Rapid Action Alert Fact Sheet, April 2013 to Team members.

Phase 3 of the vapor intrusion investigation will begin in the next couple of months with sampling in December 2013 or January 2014.

Action Item: A follow-up discussion between CH2M HILL and the Navy needs to be held to discuss the Building 103 vapor intrusion results and the immediate action path forward (sampling in the near term or wait for Phase 3).

Pete recommended conducting both summer and winter sampling in order to compare variability. Dave added the FDEP does not currently have any indoor air criteria; the only

Department that does is the Department of Health. Per Mike S., the EPA has new RSL guidance out, and the Navy is reviewing it.

3.3.3 Update on System Decommissioning at Building 780C – Eric Davis – CH2M HILL prepared a Work Plan to perform some minor tasks with decommissioning the remedial systems. The Work Plan was approved to remove the sequestering agent line. The work was performed on April 12, 2013, and a Technical Memorandum was prepared. The portion of the line that is underground was drained, but not removed.

The Navy issued a RFP/SOW for multiple tasks; AGVIQ is the prime, and CH2M HILL is the sub. The Work Plan for tasks at PSC 45 will include soil excavation; system decommissioning at Building 780C, the FFTF, and LNAPL structures at OU 1; Phase 3 vapor intrusion study at OU 3; continue semiannual groundwater sampling and perform soil metals MNA investigation at the Pesticide Shop; and basewide well abandonment (approximately 30 wells). It is anticipated the Work Plan will be submitted to the Navy for review the end of the week. The system decommissioning, well abandonment, and soil investigation will be the first tasks performed.

Eric would like to perform the decommissioning and well abandonment without regulatory approval if possible. Jennifer asked about the method that will be used to abandon the wells and wants to ensure the proper criteria are being met. Eric stated the information in the Work Plan for abandoning wells was taken from other well abandonment projects at NAS Jacksonville. Regarding the remediation systems, the FDEP would like the review the information before work is conducted.

Action Item: Eric is to prioritize the portions of the JM10 Work Plan (decommissioning and well abandonment) that need to be accomplished first (and possibly without regulatory approval) and send to Team members for review with email confirmation.

3.3.4 Presentation – Rachel Klinger – Rachel provided a presentation on the Overview of Enhanced In-Situ Bioremediation (EISB) Pilot and EK-BIO Testing at OU 3.

EISB System Layout – Proposed to install 8 monitoring wells and 50 temporary amendment monitoring wells (injection points). Tim commented that he would rather see permanent wells versus temporary wells; however, Mike S. pointed out the cost factor of permanent wells is too expensive. The estimated time for injections is a 2-week window.

The EISB project will consist of the following four tasks: 1) Pilot Test Work Plan Development (underway), 2) Baseline Monitoring and EVO injection, 3) Quarterly Monitoring and Reporting, and 4) Final Reporting.

The technical objectives of the EK-BIO Pilot are to demonstrate and quantify the ability to effectively distribute remediation agents across a target low K/heterogeneous area using a direct current (DC) electric field. This includes demonstrating that treatment is induced across the target treatment area, quantifying Ek system operational parameters to allow design and optimization for full-scale implementation, and developing costing information for technology evaluation and use by DoD and remediation practitioners. The technical approach will consist of the following seven tasks: 1) Treatability Testing (completed), 2) Design and Demonstration Plan (underway), 3) System Installation, 4) Baseline Characterization, 5) Operation and Performance Monitoring, 6) Model Validation, and 7) Technical Guidance on EK-BIO Design and Application.

After a 90-day period, there will be a period of no current followed by switching the X and Y directions of the current. The titanium rods are custom made from 3 to 5 feet long. It is estimated that 4-foot rods will be used. It is proposed to have 9 electrode wells, 8 amendment supply wells, 12 soil borings, and 12 monitoring wells. The exact layout will be determined by the EISB results. It is hoped that field work will start in June. Geosyntec would like to get the wells installed and the baseline performed before the Work Plan is approved.

Action Item: Rachel is to send the well construction detail including screen intervals, methods, etc. to Jennifer and Pete in order to obtain a verbal approval to install monitoring wells and conduct the baseline sampling at OU 3.

Action Item: Mike S. is to send Team members and Dave the ESTCP reports.

3.4 OU 6 – PSC 52 Hangar 1000 – Donald Hardison – The Annual Report has been submitted, and Tetra Tech is waiting on comments.

3.5 OU 7 – PSC 46 Update – DRMO – Eric Davis – The final Technical Memorandum was issued in April 2013.

3.6 OU 8 – PSC 47 – Eric Davis – See 3.3.3 discussion.

3.7 OU 9 – PSC 45 – Building 200 – Alan Pate – The RI Report redline has been submitted along with a response to comments letter. Tetra Tech is waiting on approval from the EPA, Navy, and FDEP that comments have been adequately addressed in order to submit the draft-final report.

3.7.1 Update on PSC 45 soil excavation – Eric Davis – See 3.3.3 discussion.

3.8 OU 10 – MRP Sites – Barb Becker – Barb provided figures for UXO 1 – Fort Dix Skeet Range and UXO 3 – Former Skeet Range. Remedial investigation sample locations, boundaries, and exceedances of screening levels were included on the figures. There are remnants of skeet fragments throughout the entire UXO 1 area. Barb asked if the right screening levels (FDEP SCTLs) are being used to depict nature and extent or should she use EPA number for human health. Per Dave, the EPA RSLs at 10^{-6} is less than FDEP's number; the EPA's risk range is 10^{-4} and 10^{-6}, while the FDEP only allows 10^{-6}, thus being more stringent. Dave added for eco screening for many contaminants, the FDEP does not have eco numbers. Barb stated the figures reflect EPA eco RSLs. Dave stated from the FDEP standpoint, they are fine with using SCTLs. Pete said for the presentation of nature and extent, it does not matter which numbers are used. FDEP numbers will be used except for eco.

Dave asked about the screening values for sediment and surface water (Figure 5-2). The Department has Sediment Quality Assessment Guidelines (SQAGs) for freshwater threshold effects concentrations for PAHs and metals. He asked that Barb compare and ensure the SQAG numbers are not below EPA Region IV numbers and use the most conservative numbers for screening purposes.

Action Item: Dave is to send the Sediment Quality Assessment Guidelines (SQAGs) to Barb.

UXOs 2, 4 and 6 – Todd Haverkost – The UFP-SAP Amendment has been submitted, and Resolution Consultants is waiting on EPA comments. The 90-day window closes on June 13, 2013. The amendment is mainly a personnel change from Tetra Tech to Resolution Consultants.

3.9 OU 11 – PSC Sites with LUCs and no RODs and PSC 55 – Alan Pate – Tetra Tech took samples at PSC 55, and the data have been validated. More samples are required for delineation. It appears that delineation (if found) will make the LUC boundaries larger. The Site Investigation Report will be completed with the data on hand. A separate sampling approach will be developed for delineation. The constituents consist of mostly B(a)P and arsenic. There will be more to report at the next meeting. Need update on PSC's with LUCs but no RODs.

3.10 Petroleum Sites

3.10.1 Gas Hill (PCA 4) – Eric Davis – There is nothing new to report; this site will be transitioned to Solutions.

3.10.2 Hawkins' Property – Tim Curtin – There is nothing new to report. Team members discussed the history of the site and the state-funded petroleum cleanup program.

3.10.3 PCA 25 – Boat House Area – There is nothing new to report.

3.10.4 Kemen Test Cell – There is nothing to report; this site is not funded yet.

3.10.5 Firefighter Training Facility (OU 2) – Eric Davis – See 3.3.3 discussion.

3.11 PSC 38 – Torpedo Rework Facility – Alan Pate – The soil has been delineated with the exception of the southeastern corner of the property. There are two delineation points at the southeastern corner of the property. If there are 2 delineation points why is this corner not delineated? Please clarify.The RI Report for PSC 38 will be written with recommendations for delineation in the southeastern corner. The groundwater plume has not been delineated and has gone outside of the fenced area of PSC 38. The plume needs to be defined to the north and to the east. Other recommendations in the RI Report will be to install permanent monitoring wells. The RI Report will be completed and sent to the team in June 2013.

3.12 PSC 56 – NEX Gas Station – There is nothing to report. The site was transferred to the IR Program and is currently not funded.

3.13 PSC 57 – S-3 High Power Turn-up Pad – Todd Haverkost – Resolution Consultants received comments from the FDEP and approval from EPA on the draft SAP for Site Inspection. One comment is to add the 8 RCRA metals due to the possibility of used oil. Another comment pertains to alternate well locations proposed because wells MW-02, MW-03, and MW-05 are covered and cannot be found. Well MW-03 will be reinstalled to the original location to keep an upgradient well. The SAP redline is anticipated to be resubmitted by next week.

Consensus: Team members reached consensus that monitoring wells MW-03 and MW-05 should be reinstalled at their original locations at PSC 57. If MW-02 cannot be found, TW-01 will be installed upgradient of MW-04. Well TW-03 will be installed southeast of the former pad.

3.14 Well abandonments across the Station – Eric Davis – See 3.3.3 discussion.

4.0 Miscellaneous

4.1 Proposed Construction Update – Tim Curtin – Tim gave an update of proposed and current construction projects.

- The air show was cancelled for this year.
- The runway contract has been postponed until next year. The project was delayed due to a lack of funding.
- Ditch repair will be conducted on the flightline. Two of the ditches are next to IR sites. The ditches will be cleared out and concrete added.
- Phase 2 of the wastewater reuse project has been completed; Phase 3 will start soon with another line being added from the reuse pond to the spray irrigation field at the south antenna farm.
- The BAMS projects are ongoing.
- There is a project to harden the shoreline on Mulberry Cove. Plants will still be able to grow up through the shoreline armor.
- New grounding will be added at Substation Number 3. There is some concern with the electro-kinetic project coming up.
- Wright Street is going to be repaved.

4.2 Tier II Update – Sarah Reed – The last Tier II meeting was a virtual meeting held March 19, 2013. Major discussion topics included reorganization and funding updates, Tier I Team reports and Exit Strategies, Exit Strategy revision, NSA Panama City Tier I Team presentation, review Tier II FY 2013 goals, Tier I Team recognition, FDEP combined cleanup rules, and the Remediation

Innovative Technology Seminar (RITS). The next meeting is scheduled for June 19-20, 2013, in Jacksonville with the Key West Tier I Partnering Team presenting.

The last Tier II conference call was held May 6, 2013. Items of discussion included agency travel restrictions, Petroleum SMP submittal, Exit Strategy revision, new FDEP RPM, the RITS, and June 2013 meeting logistics.

A conference call was held regarding the Exit Strategy revision. The new Exit Strategy will be in Microsoft Project documenting milestones. Arne Olsen is populating the revision with NAS Whiting Field information so that it can be reviewed by Tier I Teams. There will be another Exit Strategy call at the end of June to go over feedback from Tier I Teams. Team members proceeded to provide feedback to Sarah regarding the revised Exit Strategy.

The current Exit Strategy needs to be updated and sent to Tier II by May 31, 2013.

RPMs need to start looking at the Petroleum SMP for submittal to the FDEP.

4.3 Institutional Controls Implementation Plans Update – Tim Curtin – There is nothing new to report.

4.4 RCRA Activities – Tim Curtin – Working on their permit renewal. The frequency of monitoring will be decreased at PSC 42 to once every two years with the new permit. Building 101S will be in the permit under the NAS Jacksonville IR Partnering Team.

4.5 Exit Strategy Review – Due to Mark's absence, the Exit Strategy was not reviewed.

Action Item: Mark is to update the Exit Strategy and send to Team members, Robbie Darby, and Rich May by May 31, 2013.

4.6 BOA Contracts Update and Schedule – UFP-SAPs need to be submitted as early as possible. Field work needs to start by June.

Action Item: Jennifer is to send the FDEP Document Review Excel file to Adrienne.

4.7 CNO Award – There is nothing new to discuss until the November/December timeframe when applications are sent out.

4.8 RAB Meeting in July – Tim is working on a draft agenda for the RAB meeting. The RAB meeting will be held in the evening after the first day of the Partnering Team meeting.

Action Item: Tim is to send Team members the draft RAB Meeting Agenda by mid-June.

5.0 Meeting Closing

5.1 Review Meeting Consensus Items – Done

5.2 Review Meeting Understandings – None

5.3 Review Action Items – Done

5.4 Next Meeting Proposed Agenda Changes

5.5 Set the future meeting dates in advance

Conference Call: Tuesday, July 9, 2013, 1:00 p.m. to discuss RAB meeting.

Meeting Date	Meeting Time	Location	Meeting Chairman
7/23/13 7/24/13	1 p.m. to 5:00 p.m. 8:00 a.m. to 12:00 noon	Jacksonville RAB meeting evening of July 23, 2013	Mark Peterson
9/17/13 9/18/13	1 p.m. to 5:00 p.m. 8:00 a.m. to 12:00 noon	Jacksonville	Adrienne Wilson
11/12/13 11/13/13	1 p.m. to 5:00 p.m. 8:00 a.m. to 12:00 noon	Jacksonville	Tim Curtin

5.6 Set the next meeting location, duration, and roles

- Location – Jacksonville
- Dates – July 23-24, 2013
- Duration – two days
- Chair – Mark Peterson
- Gate/Timekeeper – Adrienne Wilson
- Scribe – Julie Johnson

5.7 Facilitator Plus/Deltas – Done

Plus
Jennifer joining Team
Accomplished a lot
Scheduling with RITS

Deltas
Dave leaving Team
Mark not at meeting
No Team dinner

Site	CONSENSUS ITEMS
C-10513	Team approved the meeting minutes from March 2013 meeting
C-20513	Team members reached consensus that monitoring wells MW-03 and MW-05 should be reinstalled at their original locations at PSC 57. If MW-02 cannot be found, TW-01 will be installed upgradient of MW-04. Well TW-03 will be installed southeast of the former pad.
Agenda Item No.	**PARKING LOT**
	A potential success story, identifying plume reduction project at OU 3 Area A, which will reduce requirements for HAZWOPER training (CNO award due in December 2012). Team due every other year and the installation done every year.

	Yellow Water Weapons Housing Area – Part of Site 15 (sweeping for MEC) Natural Resource Corridor. Public Safety. Tim said the station is looking at getting rid of that area. Tim said nobody wants the road (causing hold up). Dave said the main concern is the part of yellow water Site 15 extends out to the area between the ball field and the old fence line. Confirm that the LUCs will be acceptable for both sites. LUC = only good for a pass through (hiking, biking, horseback riding; no attractors). Tim checking on status of transfer (November 2012). Tim said it has to be approved by congress. Expecting congressional approval to transfer ownership from the Navy to the PPV contractor (housing company) the middle of April 2013. Dave concerned about the Site 15 encroaching the housing area. Tim said that part of the property will not be transferred. Dave said that multiple property owners may have to sign off on the permit. **Update 05-2013:** With Dave departing the Team, this will transition to Pete.
Remove from Parking Lot	Building 200 Wash Rack Carbon TET associated with PSC 45 determination needs to be made on how to deal with the Carbon TET issue. **Update 05-2013:** This is now a new site in the NORM database.
05/20/2013	Per Tim C., the Team will have to recommend whether keep the slabs at Hangars 113, 114, and 115.

ACTION ITEMS

Action Item No.	Responsible Party	Status	Due Date	Site	Action Item
Action Items from September 6, 2012 Meeting					
A-50912	Laura S	Working	Next Meeting	OU 3, VI discussion	Laura S. to provide the Jacksonville Partnering team with the information regarding the Colorado EPA Region 8 VI study, summa canister vs. what other type that was 20 percent the cost of summa canister.
Action Items from January 14-15, 2013 Meeting					
A-10113	Dave	Done	Next Meeting	PCA 4, Gas Hill Fuel Farm	Dave to ask which method is preferable, 8260 or 8270SIM for reporting Naphthalene. **Update 05-2013:** The 8270 series is the preferable method for semivolatiles.
A-40113	Mark P.	Done	1/16/13	OU 3/OU 4	Mark to look for recent EPA comments to the OU 3 and OU 4 LUC RDs. **Update 05-2013:** The EPA comments were found.
March 12-13, 2013					
A-20313	Mark P.	Done	Friday	OU 3 – Wright St.	Mark to get a well map of Wright Street to Tim Curtin by Friday.
May 20-21, 2013					
A-10513	Julie	Working	TBD		Julie is to provide a 1- to 2-page summary of each site to Team members.
A-20513	Julie	Done	TBD		Julie is to send the Document Status Tracker to Eric, Mark, and Todd to be updated.
A-30513	Dave	Working	By next week	MRP Sites	Dave is to send the Sediment Quality Assessment Guidelines (SQAGs) to Barb Becker.
A-40513	Rachel	Working	TBD	OU 3	Rachel is to send the well construction detail including screen intervals, methods, etc. to Jennifer and Pete in order to obtain a verbal approval to install monitoring wells and

ACTION ITEMS					
Action Item No.	**Responsible Party**	**Status**	**Due Date**	**Site**	**Action Item**
					conduct the baseline sampling at OU 3.
A-50513	Mike S.	Working	TBD		Mike S. is to send Team members and Dave the ESTCP reports.
A-60513	Eric	Working	TBD	Building 103	Eric is to send the TCE Rapid Action Alert Fact Sheet, April 2013 to Team members.
A-70513	Eric	Working	Before the next meeting	Building 103	A follow-up discussion between CH2M HILL and the Navy needs to be held to discuss the Building 103 vapor intrusion results and immediate action path forward (sampling in the near term or wait for Phase 3).
A-80513	Eric	Working	TBD	Various	Eric is to prioritize the portions of the JM10 Work Plan (decommissioning, well abandonment, and PSC 45) that need to be accomplished first (and possibly without regulatory approval) and send to Team members for review with email confirmation.
A-90513	Adrienne	Working	Done	LTM	Adrienne is to send the Solutions IES document tracker to Team members.
A-100513	Mark	Working	May 30, 2013		Mark is to update the Exit Strategy and send to Team members, Robbie Darby, and Rich May by May 31, 2013.
A-110513	Jennifer Conklin	Working	By next week		Jennifer is to send the FDEP Document Review Excel file to Adrienne.
A-120513	Tim	Working	Mid-June		Tim is to send Team members the draft RAB Meeting Agenda by mid-June.

Document Reviews Underway

FEDERAL FACILITIES DATABASE

List of document reviews within the Federal Facilities database that have no value in the "Date Out" column and no explanation indicated in the "Explanation" column.

JACKSONVILLE NAVAL AIR STATION (NAS JAX)

55 Document Reviews Underway

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Draft Remedial Investigation Report, PSC 45, Rev 1, May 2, 2013	5/6/2013			DG/JRC	w/CD
PSC 45 RI, Rev 1, Redline & Response to Comments, April 24, 2013	5/6/2013			DG/JRC	
Draft PSC 55 - Response to Comments & Site Investigation Redlined Report, April 24, 2013	4/25/2013			DPG/JC	
Site Investigation Report, PSC 55, April 24, 2013	4/25/2013			DPG/JC	w/CD
Draft Interim Remedial Action Completion Report, Munitions Removal Actions, April 18, 2013	4/19/2013			DPG	w/CD
Tech Memo-Groundwater Sampling & Analysis, OU 7, PSC 46-Former Defense Reutilization & Marketing Office (DRMO), April 4, 2013	4/15/2013			DPG	Received By E-Mail
Draft Annual Monitored Natural Attenuation Evaluation Report, OU 6-Hangar 1000 (Year 3-April 16-17, 2012 & October 16-17, 2012, March 27, 2013	4/1/2013			DPG	w/CD
Long Term Groundwater Monitoring Report - Hangar 1000, OU 6, March 27, 2013	4/1/2013			DPG	Ltrs w/CD
Draft Revision 2 Groundwater Monitoring Report, PCA 16-Hawkins 103rd Street Property, March 21, 2013	3/26/2013			DPG	w/CD
Draft UFP Sampling & Analysis Plan Amendment, MRP, RI - OU 10, UXO's 2, 4 & 6, March 18, 2013	3/18/2013			DPG	w/CD
Phase II Vapor Intrusion Investigation Report, OU 3, Revision 01, March 2013, March 8, 2013	3/11/2013			DPG	w/CD
2012 Annual Groundwater Monitoring Report, PSC 47-Pesticide Shop, February 20, 2013	2/22/2013			DPG	w/CD
2012 Annual Groundwater Monitoring Report, PCA 4-Gas Hill Fuel Farm, Rev 01, February 7, 2013	2/8/2013			DPG	w/CD
Draft UFP SAP, Groundwater Monitoring, PCA 4-Gas Hill Fuel Farm, Rev 2, January 10, 2013	1/15/2013			DPG	w/CD

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Draft Annual Groundwater Monitoring Rpt, OU 1, PSCs 26&27, Revision 2, January 9, 2013	1/11/2013			DPG	w/CD
Final FFA Site Management Plan CY2013 & Response to Comments, December 3, 2012	12/5/2012			DPG	w/CD
Draft 2002 Annual Groundwater Monitoring Report, OU 5, PSC 51, October 23, 2012	10/26/2012			DPG	w/CD
Land Use Control Remedial Design, OU 7-DRMO, Revision 1, October 19, 2012	10/24/2012			DPG	w/CD
Draft Sampling & Analysis Plan, FSP&QAPP, Annual Monitoring, OU 5, PSC 51, OU 1, PSCs 26 & 27, and OU 3 - Area A, Rev 2, October 3, 2012	10/9/2012			DPG	
Response to Comments - Draft Site Assessment Report, PCA 25, UST Site 119 Fuel Transfer Sump, September 12, 2012	9/12/2012			DPG	
Final 2013 Federal Facilities Agreement Site Management Plan Amendment, August 28, 2012	9/11/2012			DPG	
B101S Groundwater Monitoring Results, June 2012, (July 13, 2012)	7/27/2012			DPG	w/CD
Draft Final Sampling & Analysis Plan (FSP & QAPP), April 2012, Groundwater Monitoring - Petroleum Contaminated Area (PCA) 15, Fire Fighting Training Facility, (April 25, 2012)	4/27/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 3, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 4 - Casa Linda Lake, (January 30, 2012)	2/3/2012			DPG	w/CD
Draft Land Use Control Remedial Design OU 7, (January 30, 2012)	2/3/2012			DPG	w/CD
Final Land Use Control Remedial Design OU 1, (January 19, 2012)	2/1/2012			DPG	
Final Annual Monitored Natural Attenuation Evaluation Report, OU 6-Hangar 1000, (October 2011)	10/11/2011			DPG	w/CD
Final 2011 Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 01, (October 2011)	10/6/2011			DPG	w/CD
Annual Sampling Report - Long-Term Monitoring Program, OU 3, Area A, (May 31, 2011)	7/12/2011			DPG	w/CD
Work Plan MR for Soil/Sediment Remediation at OU 7, PSC 46 - Defense Reutilization & Marketing Office, Revision 01, (May 2011)	5/19/2011			DPG	

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Annual Monitoring Report - Long-Term Monitoring Program Potential Source of Contamination 51, (October 2010)	5/9/2011			DPG	Received By E-Mail
January 2011 Biannual Monitoring Report OU 3, Site 11 Area B & Site 15 Area G	4/26/2011			DPG	w/CD
Munitions Response Site Prioritization Protocol Work Sheets for Munitions Response Program Sites	10/1/2010			DPG	
Site Inspection Report MRP Site Inspection at Former Machine Gun Range Complex, (September 2010)	10/1/2010			DPG	w/2 CDs
Annual Groundwater Monitoring Report - Potential Source of Contamination 47, Revision 00, (June 2010)	6/8/2010			DPG	w/CD
Monitored Natural Attenuation Plan Petroleum Contaminated Area 4--Gas Hill Fuel Farm, Revision 02	4/29/2010			DPG	w/CD
Sampling Event Report for OU 1 (November 2008)	11/25/2008			DPG	CD w/HASP, SAP, SERs for Additional Assess. @ OU 1 & 3
Final Sampling & Analysis Plan for Groundwater Assessment Upgradient of Building 106 & Area C & Soil Assessment at Building 106, OU 3	11/3/2008			DPG	w/CD
Smoke and Dye Tracer Testing and Sampling of the Eastern Storm Sewer at OU 3, Areas F & G	7/24/2008			DPG	Received by E-mail
PSC 47 Interim Remedial Action-Concrete Placement, Contract N62467-01-D-0331, CTO #0064, Revision No. 03	3/25/2008			DPG	E-Mail
2007 Annual Monitoring Report Storm Sever Sampling OU#3 Areas F & G, Rev. 0	12/4/2007			DG	report with cd
Remedial Action Work Plan Soil/Sediment Remdiation and Groundwater Sampling OU#7 PSC 46 Defense Reutilization and Marketing office, Rev.0	10/17/2007			DG	rec. by email
Final Land Use Control Remedial Design for Hangar 1000	10/15/2007			DG	report no cd
Remedial Action Work Plan Soil/Sedimanet Remdiation and Groundwater Sampling at OU#7 and Maintenance office naval air Station Jacksonville, Rev. 0	10/12/2007			DG	report with cd
Final Treatability Study Report for Petroleum Contaminated Area (PCA) 16 (hawkins 103rd. Street Property)	8/20/2007			DG	report with cd
Final Report Annual Long Term monitoring (LTM) Report, Jan. 5-6, 2007 Sampling Event for Area B (PSC 11) and Area G (PSC 15) OU#3	3/5/2007			JHC	report with cd

Document Title	Date In	Date Out	Explanation	BC/RPM	Comments
Final Land Use Control Remedial Design for OU#3 Area A	2/8/2007			JHC	report with cd
Draft Land Use Control Remdial Design OU#3 Area A, Rev. 0	12/27/2006			JHC	report no cd
Final Removal Action Completion Report Gas Hill Fuel Farm Tanks Demolition and Disposal	12/18/2006			JHC	report with cd
Remedial Investigation/Feasibility Study Sampling and Analysis Plan Addendum for Potential Source of Contamination 47	11/30/2006			JHC	report no cd
Final Land Use Control Remedial Design at OU#5 PSC 51	11/27/2006			JHC	report with cd
Final Removal Action Completion Report Gas Hill	10/16/2006			JHC	Report with cd
Closure Assessment report for underground storage tanks 880-6 and 7 at bldg. 429	7/19/2006			JHC	report no cd
SWMU Report for the kemenTest Cell	8/26/2004			JHC	no Cd

NAS Jacksonville Partnering Team Document Review Status

Date of Status: 27-May-2013

No.	Document Name	Distribution (email or hardcopy)	Date Submitted (or to be submitted)	Deadline for Comments of Draft (45 days to comment)	FFA Deadline for Comments of Draft (90 days to comment)	Navy Deadline for Redline & RTC & Draft Final (45 days)	Navy Deadline for Draft Final Submittal (60 days)	Navy Deadline for Extension Letter (10 days prior to deadline for Final or 20 days after DF submittal)	Deadline for Final letter of approval (30 days) **	Comments Received from						Solutions-IES To Do	NAVFAC To Do	Budget	Invoiced	Remaining Budget
										FDEP	EPA	NAVFAC SE RPM	NAVFAC Legal	NAVFAC SE Chemist	NAS JAX					
			Solutions IES	LTM																
1	B101S APP/HASP - **Complete**	Draft: email Final: HC+CD	23-Mar-2012 6-Jun-2012	7-May-2012	21-Jun-2012	5-Aug-2012	20-Aug-2012	30-Aug-2012	9-Sep-2012	NA	NA	NA	NA	NA	X					
2	B101S UFP SAP - **Complete**	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	23-Mar-2012 6-Jun-2012 17-Aug-2012	7-May-2012	21-Jun-2012	5-Aug-2012	20-Aug-2012	30-Aug-2012	9-Sep-2012	NA	NA	X	NA	X	X					
3	B101S Groundwater Monitoring Results, June 2012 - **Complete**	Draft: email Final: 4 HC+CDs	18-Jul-2012 19-Jul-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X					
4	B101S Groundwater Monitoring Results, December 2012 - **Complete**	Draft: email Final: 4 HC+CDs	28-Feb-2012 23-Jan-2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X					
5	FFTF APP - **Complete**	Draft: email Final: HC+CD	25-Jan-2012 18-Jan-2013	10-Mar-2012	24-Apr-2012	8-Jun-2012	23-Jun-2012	3-Jul-2012	13-Jul-2012	NA	NA	NA	NA	NA	X			$ 67,464.00	$ 49,564.78	$ 17,899.22
6	FFTF UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	25-Jan-2012 26-Apr-2012	10-Mar-2012	24-Apr-2012	8-Jun-2012	23-Jun-2012	3-Jul-2012	13-Jul-2012		NA	X	NA	X	X		Request comments from FDEP on Draft Final UFP SAP			
7	FFTF Semi-Annual Groundwater Monitoring Report (September 2012)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	14-Dec-2012 10-Jan-2013	28-Feb-2013	14-Mar-2013	28-Apr-2013	13-May-2013	23-May-2013	2-Jun-2013		NA	X	NA	NA	X		Request comments from FDEP on Draft Rev 2 Report			
8	FFTF Annual Groundwater Monitoring Report (September 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	30-Nov-2013	14-Jan-2014	28-Feb-2014	14-Apr-2014	29-Apr-2014	9-May-2014	19-May-2014		NA		NA	NA		Going to annual sampling. Next event in September 2013				
9	Gas Hill APP - **Complete**	Draft: email Final: HC+CD	1-May-2012 18-Jan-2013	15-Jun-2012	30-Jul-2012	13-Sep-2012	28-Sep-2012	8-Oct-2012	18-Oct-2012	NA	NA	NA	NA	N/A	X					
10	Gas Hill UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	1-May-2012 10-Jan-2013	15-Jun-2012	30-Jul-2012	13-Sep-2012	28-Sep-2012	8-Oct-2012	18-Oct-2012		N/A	X	NA	X	X		Request comments from FDEP on Draft Rev 2 UFP SAP			
11	Gas Hill Semi-Annual Groundwater Monitoring Report (September 2012)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	30-Nov-2012 8-Jan-2013	14-Jan-2013	28-Feb-2013	14-Apr-2013	29-Apr-2013	9-May-2013	19-May-2013		N/A	X	NA	NA	X		Request comments from FDEP Draft Rev 2 report			
12	Gas Hill Semi-Annual Groundwater Monitoring Report (March 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	15-May-2013	29-Jun-2013	13-Aug-2013	27-Sep-2013	12-Oct-2013	22-Oct-2013	1-Nov-2013		NA		NA	NA			Provide comments on Draft report			
13	PCA 25 UST Site 119 APP - **Complete**	Draft: email Final: HC+CD	16-May-2012 18-Jan-2013	30-Jun-2012	14-Aug-2012	28-Sep-2012	13-Oct-2012	23-Oct-2012	2-Nov-2012	N/A	NA	NA	NA	NA	X					
14	PCA 25 UST Site 119 UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	16-May-2012 9-Jul-2012 26-Sep-2012	30-Jun-2012	14-Aug-2012	28-Sep-2012	13-Oct-2012	23-Oct-2012	2-Nov-2012		NA	X	NA	X	X		Request approval from FDEP on Final UFP SAP			
15	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (August 2012)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	1-Nov-2012 8-Jan-2013	16-Dec-2012	30-Jan-2013	16-Mar-2013	31-Mar-2013	10-Apr-2013	20-Apr-2013		NA	X	NA	NA	X		Request comments from FDEP on Draft Rev 2 report	$ 246,593.00	$ 103,358.29	$ 143,234.71
16	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (November 2012)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	16-Jan-2013	2-Mar-2013	16-Apr-2013	31-May-2013	15-Jun-2013	25-Jun-2013	5-Jul-2013		NA		NA	NA			Provide comments on Draft report			
17	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (March 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	14-May-2013	28-Jun-2013	12-Aug-2013	26-Sep-2013	11-Oct-2013	21-Oct-2013	31-Oct-2013		NA		NA	NA			Provide comments on Draft report			
18	PCA 25 UST Site 119 Annual Groundwater Monitoring Report (June 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	31-Jul-2013	14-Sep-2013	29-Oct-2013	13-Dec-2013	28-Dec-2013	7-Jan-2014	17-Jan-2014		NA		NA	NA		Perform June 2013 sampling event				
19	Hawkins Property APP **(Complete)**	Draft: email Final: HC+CD	15-Jun-2012 29-Jan-2013	30-Jul-2012	13-Sep-2012	28-Oct-2012	12-Nov-2012	22-Nov-2012	2-Dec-2012	NA	NA	NA	NA	NA	X					
20	Hawkins Property Groundwater Monitoring Report	Draft: email Final: HC+CD	14-Mar-2013 22-Mar-2013	28-Apr-2013	2-Sep-2015	17-Oct-2015	1-Nov-2015	11-Nov-2015	21-Nov-2015			X	NA	NA			Request comments from EPA, FDEP, and Tim on Draft Rev 2 Report			
21	OU-5 PSC 51, OU-1 PSCs 26&27, OU-3 Area A APP - **Complete**	Draft: email Final: HC+CD	14-Jun-2012 29-Jan-2013	29-Jul-2012	12-Sep-2012	27-Oct-2012	11-Nov-2012	21-Nov-2012	1-Dec-2012	NA	NA	NA	NA	NA	X					
22	OU-5 PSC 51, OU-1 PSCs 26&27, OU-3 Area A UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	13-Jul-2012 5-Oct-2012	27-Aug-2012	11-Oct-2012	25-Nov-2012	10-Dec-2012	20-Dec-2012	30-Dec-2012		NA	X	NA	X	X		Request comments from FDEP on Draft Final UFP SAP			
23	OU-5 PSC 51 Annual Groundwater Monitoring Report	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	2-Oct-2012 23-Oct-2012	16-Nov-2012	31-Dec-2012	14-Feb-2013	1-Mar-2013	11-Mar-2013	21-Mar-2013		X	X	NA	NA	X		Request comments from FDEP on Draft report	$ 45,318.00	$ 44,105.43	$ 1,212.57
24	OU-1 PSCs 26&27 Annual Groundwater Monitoring Report	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	26-Oct-2012 9-Jan-2013	10-Dec-2013	24-Jan-2013	10-Mar-2013	25-Mar-2013	4-Apr-2013	14-Apr-2013			X	NA	NA	X		Request comments from EPA and FDEP on Draft Rev 2 Report			
25	OU-3 Area A Annual Groundwater Monitoring Report	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs	30-Oct-2012 8-Jan-2013	14-Dec-2012	28-Feb-2013	14-Mar-2013	29-Mar-2013	8-Apr-2013	18-Apr-2013			X	NA	NA	X		Request comments from EPA and FDEP on Draft Rev 2 Report			
26	Polishing Pond APP - **Complete**	Draft: email Final: HC+CD	9-Nov-2012 9-Jan-2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X					
27	Polishing Pond UFP SAP - **Complete**	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	9-Nov-2012 11-Dec-2012 11-Jan-2013	NA	NA	NA	NA	NA	NA	X	NA	X	NA	X	X			$ 21,235.00	$ 21,235.00	$ -
28	Polishing Pond January 2013 Letter Report	Draft: email Final: 4 HC+CDs	11-Feb-2013 12-Feb-2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	Send final document to Tt for NIRIS once approval from FDEP received. Upload NEDD to NIRIS.				

29	PSC 46, PSC 47, PSC 48, PSC 52, OU-3 Areas B&G APP/SAHP	Draft: email Final: HC+CD	3-May-2013	17-Jun-2013						NA			NA	NA		Final to NAVFAC 5/31.				
30	OU-7 PSC 46 UFP SAP (on hold)	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	TBD										NA	NA			Request for additional MW info.			
31	OU-8 PSC 47 UFP SAP (on hold till 2014)	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	TBD										NA	NA			On Hold	$ 170,415.00	$ 17,253.75	$ 153,161.25
32	OU-3 PSC 48 UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	30-Apr-2013	14-Jun-2013								X	NA	X		Draft R2 to NAVFAC 5/31.				
33	OU-3 Areas B&G UFP SAP	Draft: email Draft Rev 2: HC+CD Final: 4 HC+CDs	2-May-2013	16-Jun-2013								X	NA	X		Draft R2 to NAVFAC 5/31.				
34	B101S Groundwater Monitoring Results (June 2013)	Draft: email Final: 4 HC+CDs		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Perform June 2013 sampling event		$ 18,642.00	$ -	$ -
35	B101S Groundwater Monitoring Results (December 2013)	Draft: email Final: 4 HC+CDs		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		Perform December 2013 sampling event				
36	OU-5 PSC 51 Annual Groundwater Monitoring Report (June 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs											NA	NA		Perform June 2013 sampling event				
37	OU-1 PSCs 26&27 Annual Groundwater Monitoring Report (June 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs											NA	NA		Perform June 2013 sampling event		$ 27,007.00	$ -	$ -
38	OU-3 Area A Annual Groundwater Monitoring Report (June 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs											NA	NA		Perform June 2013 sampling event				
39	Gas Hill Semi-Annual Groundwater Monitoring Report (September 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									N/A		NA	NA		Perform September 2013 sampling event				
40	Gas Hill Semi-Annual Groundwater Monitoring Report (March 2014)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform March 2014 sampling event				
41	FFTF Annual Groundwater Monitoring Report (September 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform September 2013 sampling event				
42	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (August 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform August 2013 sampling event		$ 128,925.00	$ -	$ -
43	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (November 2013)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform November 2013 sampling event				
44	PCA 25 UST Site 119 Quarterly Groundwater Monitoring Report (March 2014)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform March 2014 sampling event				
45	PCA 25 UST Site 119 Annual Groundwater Monitoring Report (June 2014)	Draft: email Draft Rev 2: 2HCs + CDs Final: 4 HC+CDs									NA		NA	NA		Perform June 2014 sampling event				

X = Comments have been received from this reviewer
Blank = No comments have been received from this reviewer
Shaded - Documents to be submitted in the next 30 days.
NA = no review required by this reviewer.

** The regulators will issue a letter approving the draft-final as final if no dispute resolution.

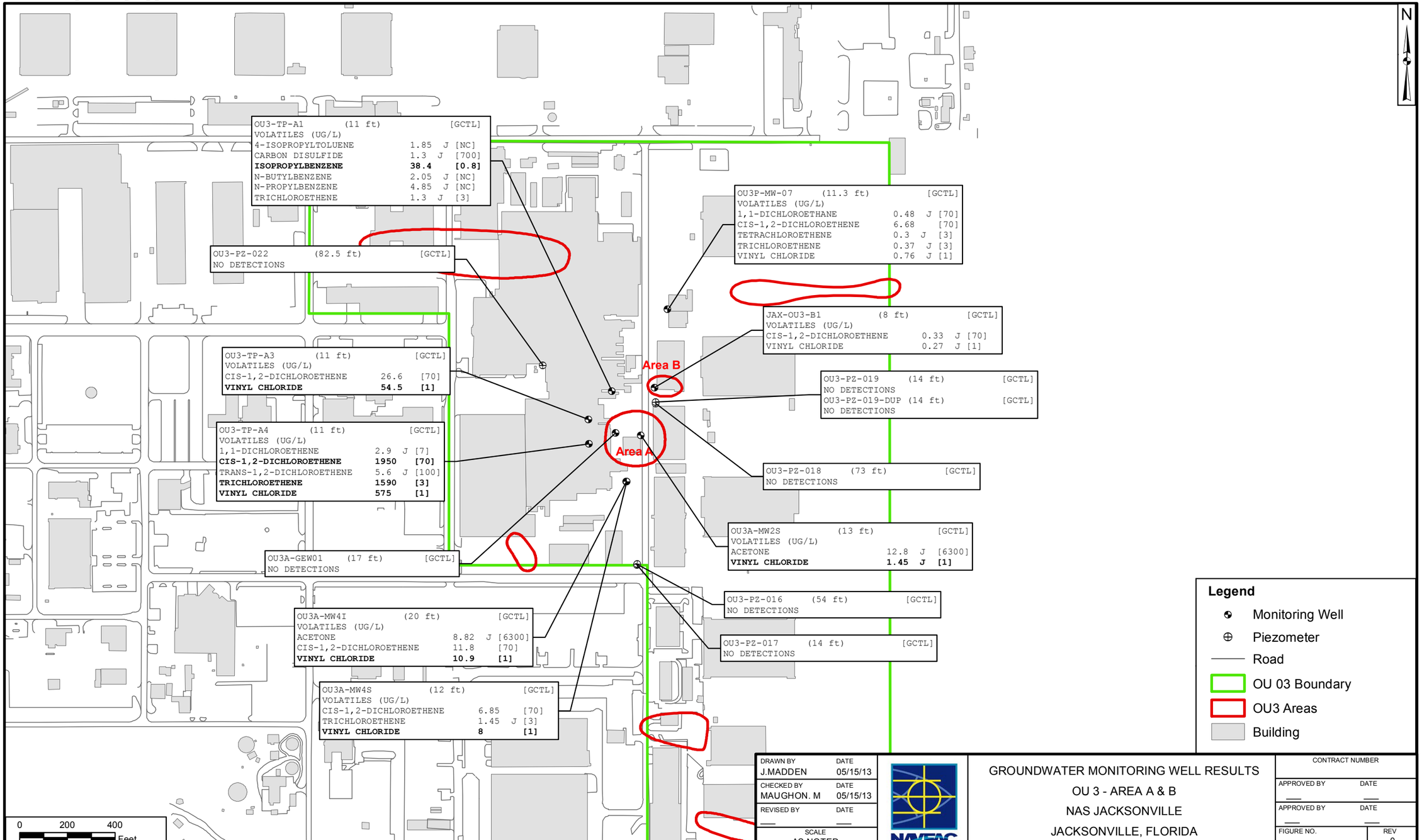
OU-7 PSC 46,	P/HASP (all sit	Draft
OU-8 PSC 47,	P SAP (46 on hold)	
OU-3 PSC 48,	P SAP (47 on hold)	
OU-6 PSC 52,	FP SAP (PSC 4	Draft
U-3 Areas B&G	P SAP (Areas B	Draft

MONTHLY PROJECT REPORT
NAVFAC ETS CONTRACT NO: N69450-11-D-0100
NAS JACKSONVILLE
NAS JACKSONVILLE CONTACT: TIM CURTIN
April 8, 2013

Site	Task/Document	Version	Date Submitted to Team	Tim Curtin Comments Received
B101S	APP/HASP	Draft	3/23/12	5/22/12
	UFP SAP	Draft	3/23/12	3/30/12
FFTF	APP/HASP	Draft	1/25/12	4/12/12
	UFP SAP	Draft	1/25/12	3/19/12
	Semi-Annual GW Mon Rpt (Sep 2012)	Draft Rev 2	1/10/2013	3/12/13
	Annual GW Mon Rpt (Sep 2013)			
Gas Hill	APP/HASP	Draft	5/1/12	10/11/12
	UFP SAP	Draft	5/1/12	10/19/12
	Semi-Annual GW Mon Rpt (Sep 2012)	Draft Rev 2	1/8/13	3/20/13
	Semi-Annual GW Mon Rpt (Mar 2013)			
PCA 25	APP/HASP	Draft	5/16/12	10/12/2012 & 10/23/12
	UFP SAP	Draft	5/16/12	5/23/12
	Quarterly GW Mon Rpt (Aug 2012)	Draft Rev 2	1/8/13	3/15/13
	Quarterly GW Mon Rpt (Nov 2012)			
	Quarterly GW Mon Rpt (Feb 2012)			
	Annual GW Mon Rpt (May 2012)			
Hawkins Property	APP/HASP	Draft	6/15/12	10/23/12
	UFP SAP			
	Groundwater Monitoring Report	Draft Rev 2	3/22/13	
OU-5 PSC 51, OU-1 PSCs 26&27, OU-3 Area A	APP/HASP	Draft	6/14/12	10/12/12
	UFP SAP	Draft	7/13/12	10/2/2012 & 10/22/12
	OU-5 PSC 51 Annual GW Mon Rpt	Draft	10/23/12	2/15/13
	OU-1 PSCs 26&27 Annual GW Mon Rpt	Draft Rev 2	1/9/13	3/6/2013, 3/18/13
	OU-3 Area A Annual GW Mon Rpt	Draft Rev 2	1/8/13	3/18/13
Polishing Pond	APP/HASP	Draft	11/9/12	11/9/12
	UFP SAP	Draft	11/9/12	NA
OU-7 PSC 46, OU-8 PSC 47, OU-3 PSC 48, OU-6 PSC 52, OU-3 Areas	APP/HASP (all sites)	Draft	5/3/13	
	UFP SAP (46 on hold)	NA		
	UFP SAP (47 on hold)	NA		
	UFP SAP (PSC 48)	Draft	4/30/13	
	UFP SAP (Areas B&G)	Draft	5/2/13	

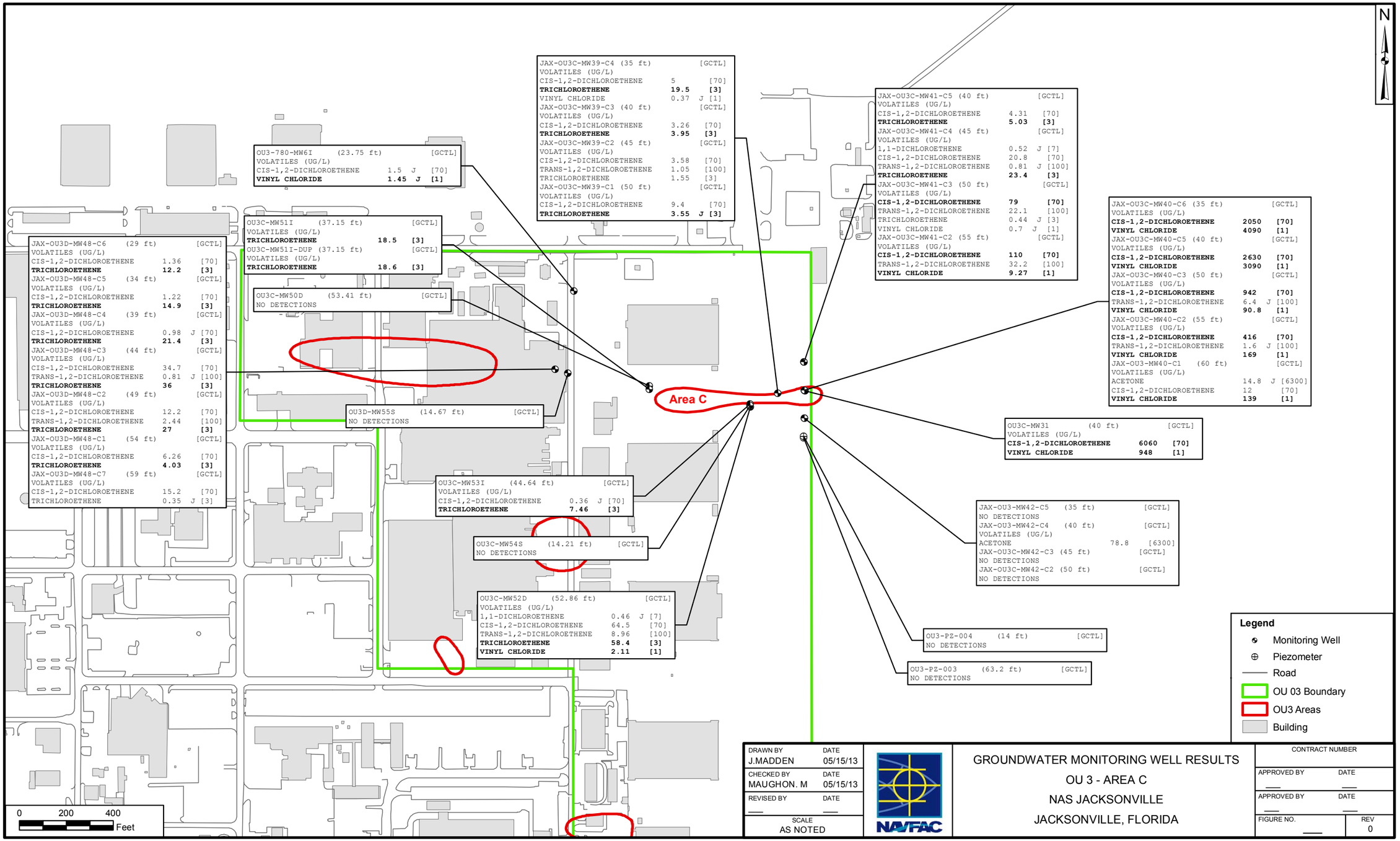
Note:
Review required

M:\GIS\JACKSONVILLE_NAS\MXD\OU3_AREA_C_TAGS.MXD 01/09/13 JM



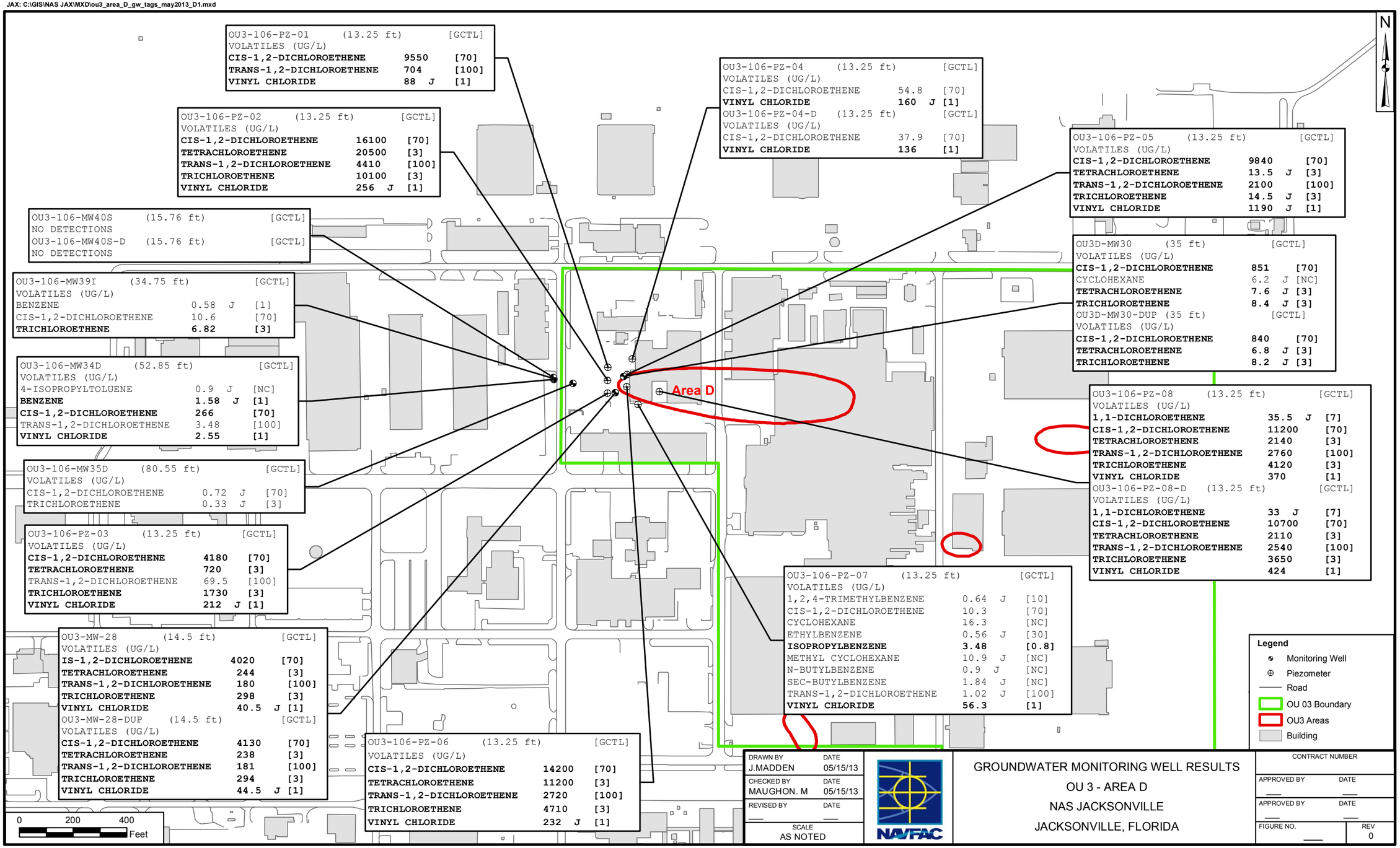
DRAWN BY J.MADDEN	DATE 05/15/13	GROUNDWATER MONITORING WELL RESULTS OU 3 - AREA A & B NAS JACKSONVILLE JACKSONVILLE, FLORIDA	CONTRACT NUMBER
CHECKED BY MAUGHON. M	DATE 05/15/13		APPROVED BY ___ DATE ___
REVISED BY ___	DATE ___		APPROVED BY ___ DATE ___
SCALE AS NOTED			FIGURE NO. ___ REV 0

Path: C:\GIS\NAS JAX\MXD\ou3_area_C_gw_tags_may2013.mxd



DRAWN BY J.MADDEN	DATE 05/15/13	GROUNDWATER MONITORING WELL RESULTS OU 3 - AREA C NAS JACKSONVILLE JACKSONVILLE, FLORIDA	CONTRACT NUMBER
CHECKED BY MAUGHON. M	DATE 05/15/13		APPROVED BY ___ DATE ___
REVISED BY ___	DATE ___		APPROVED BY ___ DATE ___
SCALE AS NOTED			FIGURE NO. ___ REV 0

JAX: C:\GIS\NAS JAX\MXD\ou3_area_D_gw_tags_may2013_D1.mxd



OU3-106-PZ-01 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**9550**	**[70]**
TRANS-1,2-DICHLOROETHENE	**704**	**[100]**
VINYL CHLORIDE	**88 J**	**[1]**

OU3-106-PZ-02 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**16100**	**[70]**
TETRACHLOROETHENE	**20500**	**[3]**
TRANS-1,2-DICHLOROETHENE	**4410**	**[100]**
TRICHLOROETHENE	**10100**	**[3]**
VINYL CHLORIDE	**256 J**	**[1]**

OU3-106-MW40S (15.76 ft) [GCTL]
NO DETECTIONS
OU3-106-MW40S-D (15.76 ft) [GCTL]
NO DETECTIONS

OU3-106-MW39I (34.75 ft) [GCTL]
VOLATILES (UG/L)

BENZENE	0.58 J	[1]
CIS-1,2-DICHLOROETHENE	10.6	[70]
TRICHLOROETHENE	**6.82**	**[3]**

OU3-106-MW34D (52.85 ft) [GCTL]
VOLATILES (UG/L)

4-ISOPROPYLTOLUENE	0.9 J	[NC]
BENZENE	**1.58 J**	**[1]**
CIS-1,2-DICHLOROETHENE	**266**	**[70]**
TRANS-1,2-DICHLOROETHENE	3.48	[100]
VINYL CHLORIDE	**2.55**	**[1]**

OU3-106-MW35D (80.55 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	0.72 J	[70]
TRICHLOROETHENE	0.33 J	[3]

OU3-106-PZ-03 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**4180**	**[70]**
TETRACHLOROETHENE	**720**	**[3]**
TRANS-1,2-DICHLOROETHENE	69.5	[100]
TRICHLOROETHENE	**1730**	**[3]**
VINYL CHLORIDE	**212 J**	**[1]**

OU3-MW-28 (14.5 ft) [GCTL]
VOLATILES (UG/L)

IS-1,2-DICHLOROETHENE	**4020**	**[70]**
TETRACHLOROETHENE	**244**	**[3]**
TRANS-1,2-DICHLOROETHENE	**180**	**[100]**
TRICHLOROETHENE	**298**	**[3]**
VINYL CHLORIDE	**40.5 J**	**[1]**

OU3-MW-28-DUP (14.5 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**4130**	**[70]**
TETRACHLOROETHENE	**238**	**[3]**
TRANS-1,2-DICHLOROETHENE	**181**	**[100]**
TRICHLOROETHENE	**294**	**[3]**
VINYL CHLORIDE	**44.5 J**	**[1]**

OU3-106-PZ-06 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**14200**	**[70]**
TETRACHLOROETHENE	**11200**	**[3]**
TRANS-1,2-DICHLOROETHENE	**2720**	**[100]**
TRICHLOROETHENE	**4710**	**[3]**
VINYL CHLORIDE	**232 J**	**[1]**

OU3-106-PZ-04 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	54.8	[70]
VINYL CHLORIDE	**160 J**	**[1]**

OU3-106-PZ-04-D (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	37.9	[70]
VINYL CHLORIDE	**136**	**[1]**

OU3-106-PZ-05 (13.25 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**9840**	**[70]**
TETRACHLOROETHENE	**13.5 J**	**[3]**
TRANS-1,2-DICHLOROETHENE	**2100**	**[100]**
TRICHLOROETHENE	**14.5 J**	**[3]**
VINYL CHLORIDE	**1190 J**	**[1]**

OU3D-MW30 (35 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**851**	**[70]**
CYCLOHEXANE	6.2 J	[NC]
TETRACHLOROETHENE	**7.6 J**	**[3]**
TRICHLOROETHENE	**8.4 J**	**[3]**

OU3D-MW30-DUP (35 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**840**	**[70]**
TETRACHLOROETHENE	**6.8 J**	**[3]**
TRICHLOROETHENE	**8.2 J**	**[3]**

OU3-106-PZ-08 (13.25 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	**35.5 J**	**[7]**
CIS-1,2-DICHLOROETHENE	**11200**	**[70]**
TETRACHLOROETHENE	**2140**	**[3]**
TRANS-1,2-DICHLOROETHENE	**2760**	**[100]**
TRICHLOROETHENE	**4120**	**[3]**
VINYL CHLORIDE	**370**	**[1]**

OU3-106-PZ-08-D (13.25 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	**33 J**	**[7]**
CIS-1,2-DICHLOROETHENE	**10700**	**[70]**
TETRACHLOROETHENE	**2110**	**[3]**
TRANS-1,2-DICHLOROETHENE	**2540**	**[100]**
TRICHLOROETHENE	**3650**	**[3]**
VINYL CHLORIDE	**424**	**[1]**

OU3-106-PZ-07 (13.25 ft) [GCTL]
VOLATILES (UG/L)

1,2,4-TRIMETHYLBENZENE	0.64 J	[10]
CIS-1,2-DICHLOROETHENE	10.3	[70]
CYCLOHEXANE	16.3	[NC]
ETHYLBENZENE	0.56 J	[30]
ISOPROPYLBENZENE	**3.48**	**[0.8]**
METHYL CYCLOHEXANE	10.9 J	[NC]
N-BUTYLBENZENE	0.9 J	[NC]
SEC-BUTYLBENZENE	1.84 J	[NC]
TRANS-1,2-DICHLOROETHENE	1.02 J	[100]
VINYL CHLORIDE	**56.3**	**[1]**

DRAWN BY J.MADDEN	DATE 05/15/13	GROUNDWATER MONITORING WELL RESULTS OU 3 - AREA D NAS JACKSONVILLE JACKSONVILLE, FLORIDA
CHECKED BY MAUGHON. M	DATE 05/15/13	CONTRACT NUMBER
REVISED BY —	DATE —	APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC	APPROVED BY — DATE —
		FIGURE NO. — REV 0

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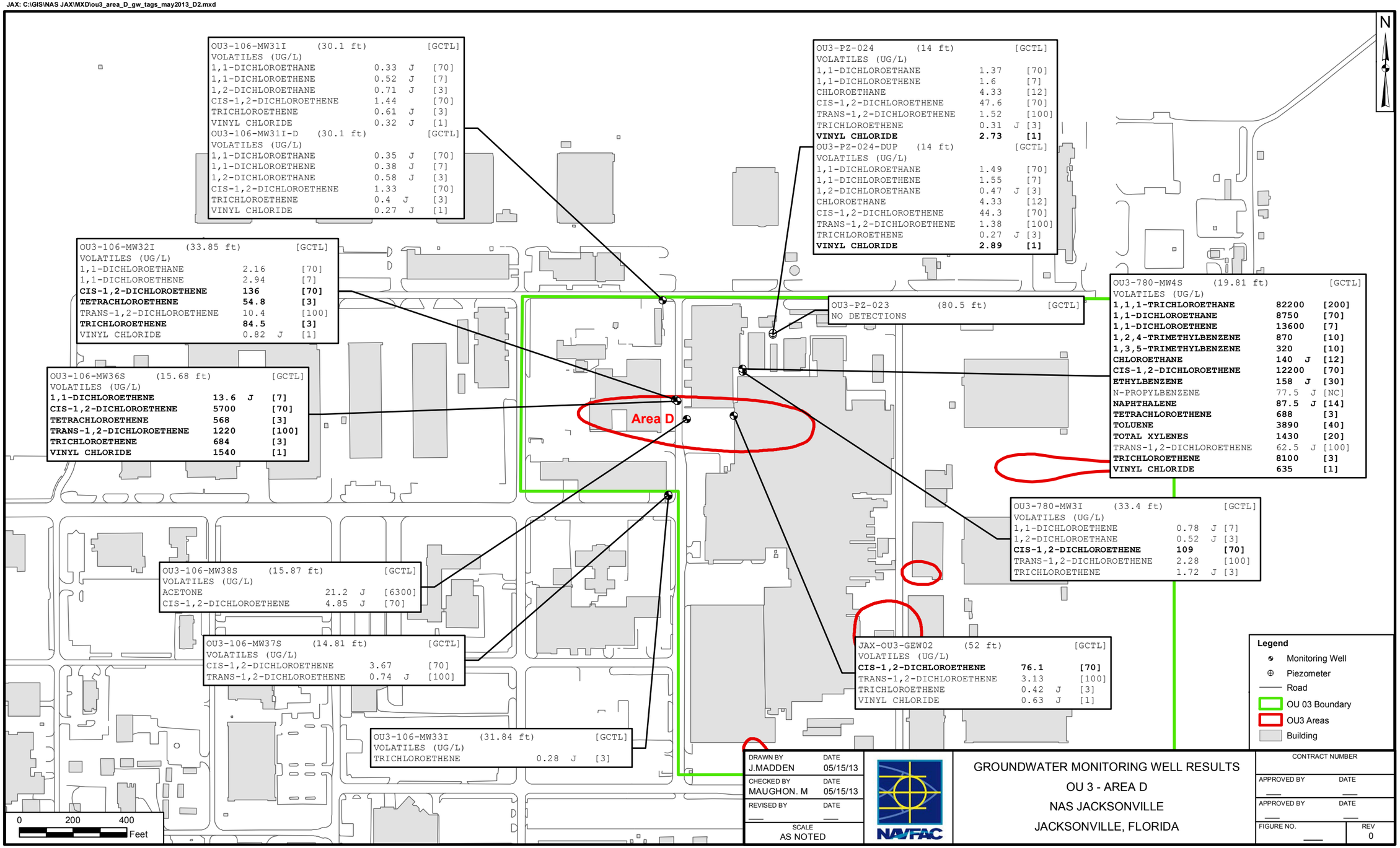

OU3-106-MW31I (30.1 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.33	J	[70]
1,1-DICHLOROETHENE	0.52	J	[7]
1,2-DICHLOROETHANE	0.71	J	[3]
CIS-1,2-DICHLOROETHENE	1.44		[70]
TRICHLOROETHENE	0.61	J	[3]
VINYL CHLORIDE	0.32	J	[1]

OU3-106-MW31I-D (30.1 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.35	J	[70]
1,1-DICHLOROETHENE	0.38	J	[7]
1,2-DICHLOROETHANE	0.58	J	[3]
CIS-1,2-DICHLOROETHENE	1.33		[70]
TRICHLOROETHENE	0.4	J	[3]
VINYL CHLORIDE	0.27	J	[1]

OU3-106-MW32I (33.85 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	2.16		[70]
1,1-DICHLOROETHENE	2.94		[7]
CIS-1,2-DICHLOROETHENE	**136**		**[70]**
TETRACHLOROETHENE	**54.8**		**[3]**
TRANS-1,2-DICHLOROETHENE	10.4		[100]
TRICHLOROETHENE	**84.5**		**[3]**
VINYL CHLORIDE	0.82	J	[1]

OU3-106-MW36S (15.68 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	**13.6**	**J**	**[7]**
CIS-1,2-DICHLOROETHENE	**5700**		**[70]**
TETRACHLOROETHENE	**568**		**[3]**
TRANS-1,2-DICHLOROETHENE	**1220**		**[100]**
TRICHLOROETHENE	**684**		**[3]**
VINYL CHLORIDE	**1540**		**[1]**

OU3-106-MW38S (15.87 ft) [GCTL]
VOLATILES (UG/L)

ACETONE	21.2	J	[6300]
CIS-1,2-DICHLOROETHENE	4.85	J	[70]

OU3-106-MW37S (14.81 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	3.67		[70]
TRANS-1,2-DICHLOROETHENE	0.74	J	[100]

OU3-106-MW33I (31.84 ft) [GCTL]
VOLATILES (UG/L)

TRICHLOROETHENE	0.28	J	[3]

OU3-PZ-024 (14 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	1.37		[70]
1,1-DICHLOROETHENE	1.6		[7]
CHLOROETHANE	4.33		[12]
CIS-1,2-DICHLOROETHENE	47.6		[70]
TRANS-1,2-DICHLOROETHENE	1.52		[100]
TRICHLOROETHENE	0.31	J	[3]
VINYL CHLORIDE	**2.73**		**[1]**

OU3-PZ-024-DUP (14 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	1.49		[70]
1,1-DICHLOROETHENE	1.55		[7]
1,2-DICHLOROETHANE	0.47	J	[3]
CHLOROETHANE	4.33		[12]
CIS-1,2-DICHLOROETHENE	44.3		[70]
TRANS-1,2-DICHLOROETHENE	1.38		[100]
TRICHLOROETHENE	0.27	J	[3]
VINYL CHLORIDE	**2.89**		**[1]**

OU3-PZ-023 (80.5 ft) [GCTL]
NO DETECTIONS

OU3-780-MW4S (19.81 ft) [GCTL]
VOLATILES (UG/L)

1,1,1-TRICHLOROETHANE	**82200**		**[200]**
1,1-DICHLOROETHANE	**8750**		**[70]**
1,1-DICHLOROETHENE	**13600**		**[7]**
1,2,4-TRIMETHYLBENZENE	**870**		**[10]**
1,3,5-TRIMETHYLBENZENE	**320**		**[10]**
CHLOROETHANE	**140**	**J**	**[12]**
CIS-1,2-DICHLOROETHENE	**12200**		**[70]**
ETHYLBENZENE	**158**	**J**	**[30]**
N-PROPYLBENZENE	77.5	J	[NC]
NAPHTHALENE	**87.5**	**J**	**[14]**
TETRACHLOROETHENE	**688**		**[3]**
TOLUENE	**3890**		**[40]**
TOTAL XYLENES	**1430**		**[20]**
TRANS-1,2-DICHLOROETHENE	62.5	J	[100]
TRICHLOROETHENE	**8100**		**[3]**
VINYL CHLORIDE	**635**		**[1]**

OU3-780-MW3I (33.4 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.78	J	[7]
1,2-DICHLOROETHANE	0.52	J	[3]
CIS-1,2-DICHLOROETHENE	**109**		**[70]**
TRANS-1,2-DICHLOROETHENE	2.28		[100]
TRICHLOROETHENE	1.72	J	[3]

JAX-OU3-GEW02 (52 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**76.1**		**[70]**
TRANS-1,2-DICHLOROETHENE	3.13		[100]
TRICHLOROETHENE	0.42	J	[3]
VINYL CHLORIDE	0.63	J	[1]

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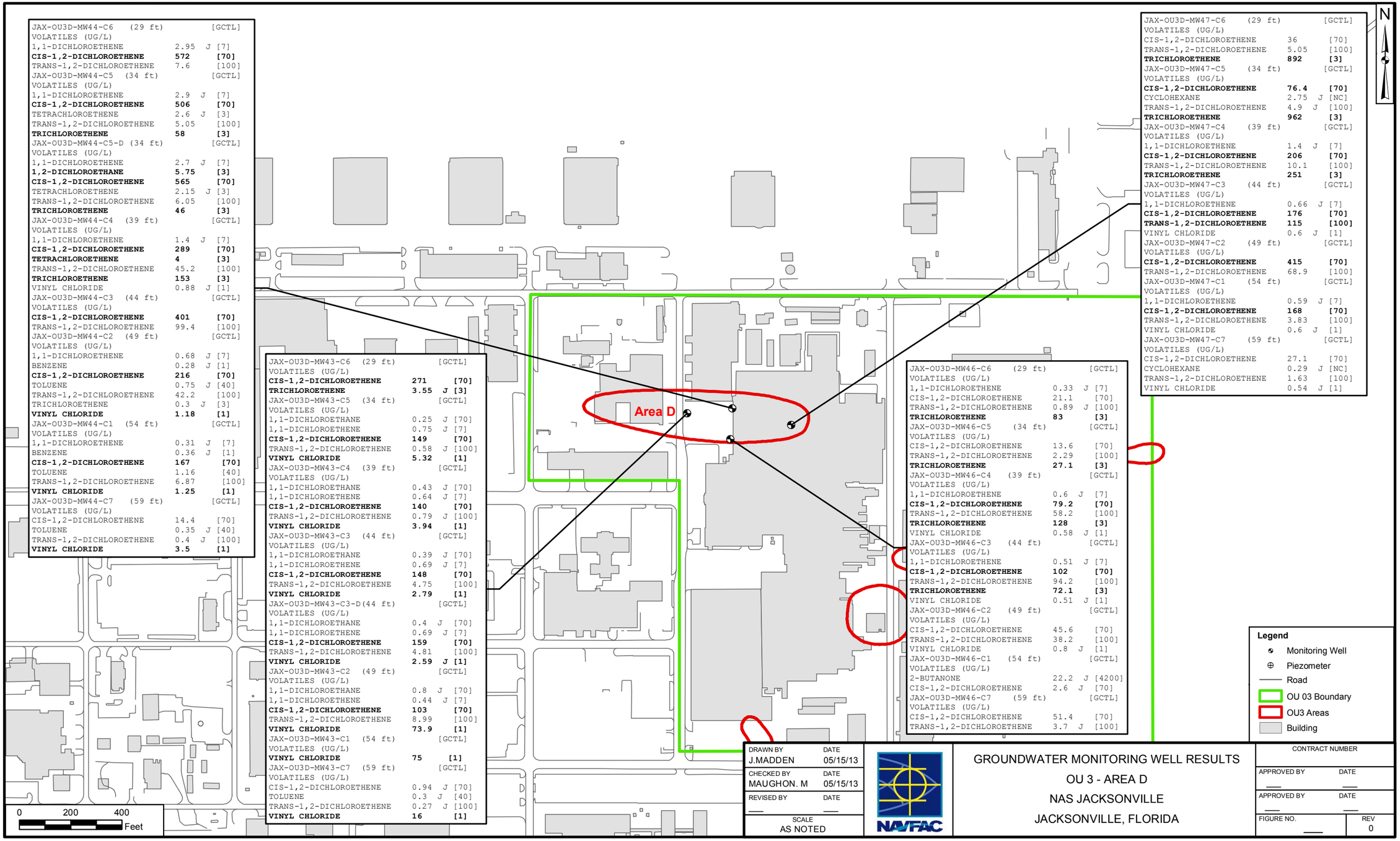

JAX-OU3D-MW44-C6 (29 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	2.95	J	[7]
CIS-1,2-DICHLOROETHENE	**572**		**[70]**
TRANS-1,2-DICHLOROETHENE	7.6		[100]

JAX-OU3D-MW44-C5 (34 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	2.9	J	[7]
CIS-1,2-DICHLOROETHENE	**506**		**[70]**
TETRACHLOROETHENE	2.6	J	[3]
TRANS-1,2-DICHLOROETHENE	5.05		[100]
TRICHLOROETHENE	**58**		**[3]**

JAX-OU3D-MW44-C5-D (34 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	2.7	J	[7]
1,2-DICHLOROETHANE	**5.75**		**[3]**
CIS-1,2-DICHLOROETHENE	**565**		**[70]**
TETRACHLOROETHENE	2.15	J	[3]
TRANS-1,2-DICHLOROETHENE	6.05		[100]
TRICHLOROETHENE	**46**		**[3]**

JAX-OU3D-MW44-C4 (39 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	1.4	J	[7]
CIS-1,2-DICHLOROETHENE	**289**		**[70]**
TETRACHLOROETHENE	**4**		**[3]**
TRANS-1,2-DICHLOROETHENE	45.2		[100]
TRICHLOROETHENE	**153**		**[3]**
VINYL CHLORIDE	0.88	J	[1]

JAX-OU3D-MW44-C3 (44 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**401**		**[70]**
TRANS-1,2-DICHLOROETHENE	99.4		[100]

JAX-OU3D-MW44-C2 (49 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.68	J	[7]
BENZENE	0.28	J	[1]
CIS-1,2-DICHLOROETHENE	**216**		**[70]**
TOLUENE	0.75	J	[40]
TRANS-1,2-DICHLOROETHENE	42.2		[100]
TRICHLOROETHENE	0.3	J	[3]
VINYL CHLORIDE	**1.18**		**[1]**

JAX-OU3D-MW44-C1 (54 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.31	J	[7]
BENZENE	0.36	J	[1]
CIS-1,2-DICHLOROETHENE	**167**		**[70]**
TOLUENE	1.16		[40]
TRANS-1,2-DICHLOROETHENE	6.87		[100]
VINYL CHLORIDE	**1.25**		**[1]**

JAX-OU3D-MW44-C7 (59 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	14.4		[70]
TOLUENE	0.35	J	[40]
TRANS-1,2-DICHLOROETHENE	0.4	J	[100]
VINYL CHLORIDE	**3.5**		**[1]**

JAX-OU3D-MW43-C6 (29 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**271**		**[70]**
TRICHLOROETHENE	**3.55**	**J**	**[3]**

JAX-OU3D-MW43-C5 (34 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.25	J	[70]
1,1-DICHLOROETHENE	0.75	J	[7]
CIS-1,2-DICHLOROETHENE	**149**		**[70]**
TRANS-1,2-DICHLOROETHENE	0.58	J	[100]
VINYL CHLORIDE	**5.32**		**[1]**

JAX-OU3D-MW43-C4 (39 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.43	J	[70]
1,1-DICHLOROETHENE	0.64	J	[7]
CIS-1,2-DICHLOROETHENE	**140**		**[70]**
TRANS-1,2-DICHLOROETHENE	0.79	J	[100]
VINYL CHLORIDE	**3.94**		**[1]**

JAX-OU3D-MW43-C3 (44 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.39	J	[70]
1,1-DICHLOROETHENE	0.69	J	[7]
CIS-1,2-DICHLOROETHENE	**148**		**[70]**
TRANS-1,2-DICHLOROETHENE	4.75		[100]
VINYL CHLORIDE	**2.79**		**[1]**

JAX-OU3D-MW43-C3-D(44 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.4	J	[70]
1,1-DICHLOROETHENE	0.69	J	[7]
CIS-1,2-DICHLOROETHENE	**159**		**[70]**
TRANS-1,2-DICHLOROETHENE	4.81		[100]
VINYL CHLORIDE	**2.59**	**J**	**[1]**

JAX-OU3D-MW43-C2 (49 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHANE	0.8	J	[70]
1,1-DICHLOROETHENE	0.44	J	[7]
CIS-1,2-DICHLOROETHENE	**103**		**[70]**
TRANS-1,2-DICHLOROETHENE	8.99		[100]
VINYL CHLORIDE	**73.9**		**[1]**

JAX-OU3D-MW43-C1 (54 ft) [GCTL]
VOLATILES (UG/L)

VINYL CHLORIDE	**75**		**[1]**

JAX-OU3D-MW43-C7 (59 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	0.94	J	[70]
TOLUENE	0.3	J	[40]
TRANS-1,2-DICHLOROETHENE	0.27	J	[100]
VINYL CHLORIDE	**16**		**[1]**

JAX-OU3D-MW46-C6 (29 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.33	J	[7]
CIS-1,2-DICHLOROETHENE	21.1		[70]
TRANS-1,2-DICHLOROETHENE	0.89	J	[100]
TRICHLOROETHENE	**83**		**[3]**

JAX-OU3D-MW46-C5 (34 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	13.6		[70]
TRANS-1,2-DICHLOROETHENE	2.29		[100]
TRICHLOROETHENE	**27.1**		**[3]**

JAX-OU3D-MW46-C4 (39 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.6	J	[7]
CIS-1,2-DICHLOROETHENE	**79.2**		**[70]**
TRANS-1,2-DICHLOROETHENE	58.2		[100]
TRICHLOROETHENE	**128**		**[3]**
VINYL CHLORIDE	0.58	J	[1]

JAX-OU3D-MW46-C3 (44 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.51	J	[7]
CIS-1,2-DICHLOROETHENE	**102**		**[70]**
TRANS-1,2-DICHLOROETHENE	94.2		[100]
TRICHLOROETHENE	**72.1**		**[3]**
VINYL CHLORIDE	0.51	J	[1]

JAX-OU3D-MW46-C2 (49 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	45.6		[70]
TRANS-1,2-DICHLOROETHENE	38.2		[100]
VINYL CHLORIDE	0.8	J	[1]

JAX-OU3D-MW46-C1 (54 ft) [GCTL]
VOLATILES (UG/L)

2-BUTANONE	22.2	J	[4200]
CIS-1,2-DICHLOROETHENE	2.6	J	[70]

JAX-OU3D-MW46-C7 (59 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	51.4		[70]
TRANS-1,2-DICHLOROETHENE	3.7	J	[100]

JAX-OU3D-MW47-C6 (29 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	36		[70]
TRANS-1,2-DICHLOROETHENE	5.05		[100]
TRICHLOROETHENE	**892**		**[3]**

JAX-OU3D-MW47-C5 (34 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**76.4**		**[70]**
CYCLOHEXANE	2.75	J	[NC]
TRANS-1,2-DICHLOROETHENE	4.9	J	[100]
TRICHLOROETHENE	**962**		**[3]**

JAX-OU3D-MW47-C4 (39 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	1.4	J	[7]
CIS-1,2-DICHLOROETHENE	**206**		**[70]**
TRANS-1,2-DICHLOROETHENE	10.1		[100]
TRICHLOROETHENE	**251**		**[3]**

JAX-OU3D-MW47-C3 (44 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.66	J	[7]
CIS-1,2-DICHLOROETHENE	**176**		**[70]**
TRANS-1,2-DICHLOROETHENE	**115**		**[100]**
VINYL CHLORIDE	0.6	J	[1]

JAX-OU3D-MW47-C2 (49 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	**415**		**[70]**
TRANS-1,2-DICHLOROETHENE	68.9		[100]

JAX-OU3D-MW47-C1 (54 ft) [GCTL]
VOLATILES (UG/L)

1,1-DICHLOROETHENE	0.59	J	[7]
CIS-1,2-DICHLOROETHENE	**168**		**[70]**
TRANS-1,2-DICHLOROETHENE	3.83		[100]
VINYL CHLORIDE	0.6	J	[1]

JAX-OU3D-MW47-C7 (59 ft) [GCTL]
VOLATILES (UG/L)

CIS-1,2-DICHLOROETHENE	27.1		[70]
CYCLOHEXANE	0.29	J	[NC]
TRANS-1,2-DICHLOROETHENE	1.63		[100]
VINYL CHLORIDE	0.54	J	[1]

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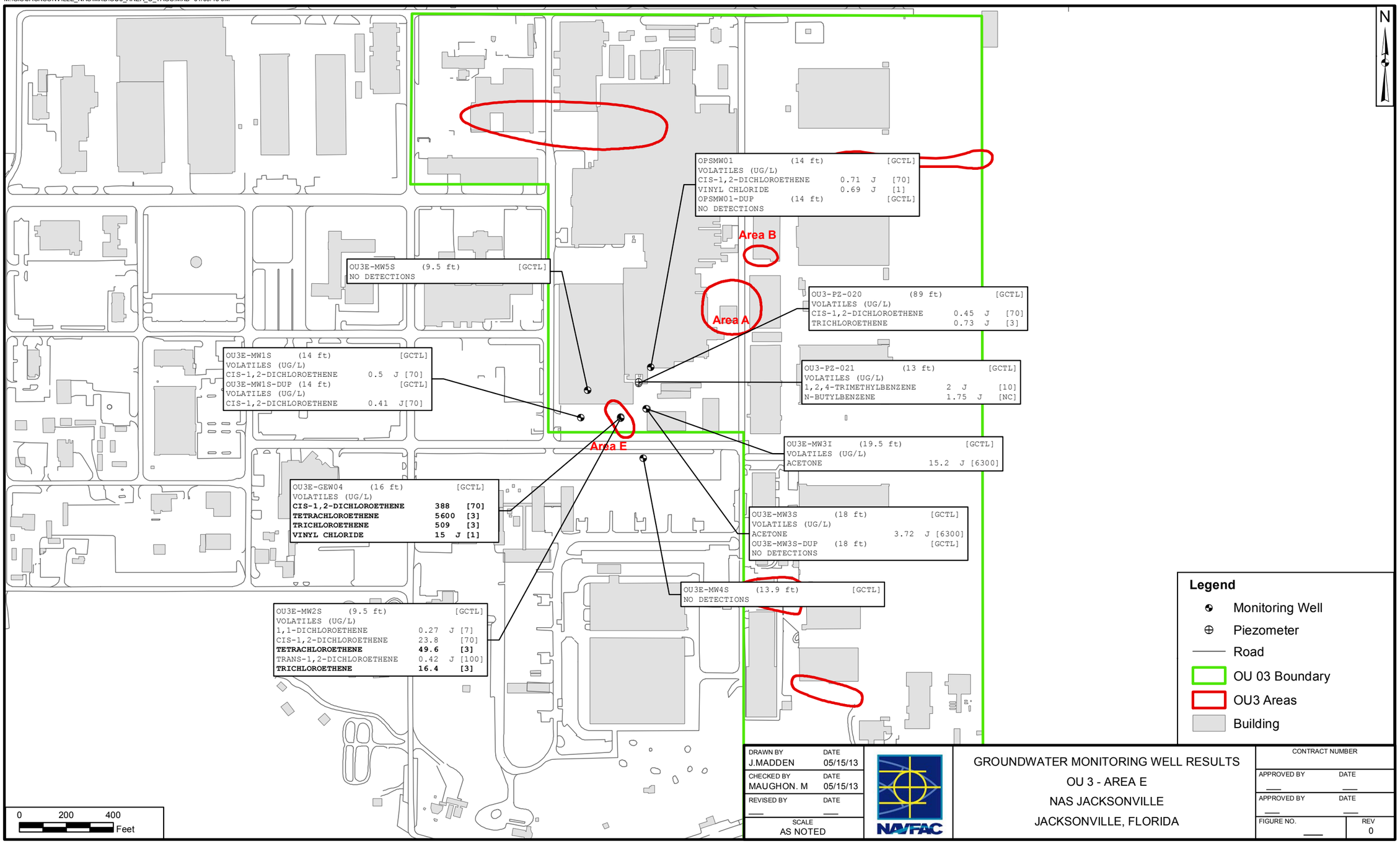

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SCALE	
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GROUNDWATER MONITORING WELL RESULTS
OU 3 - AREA E
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	
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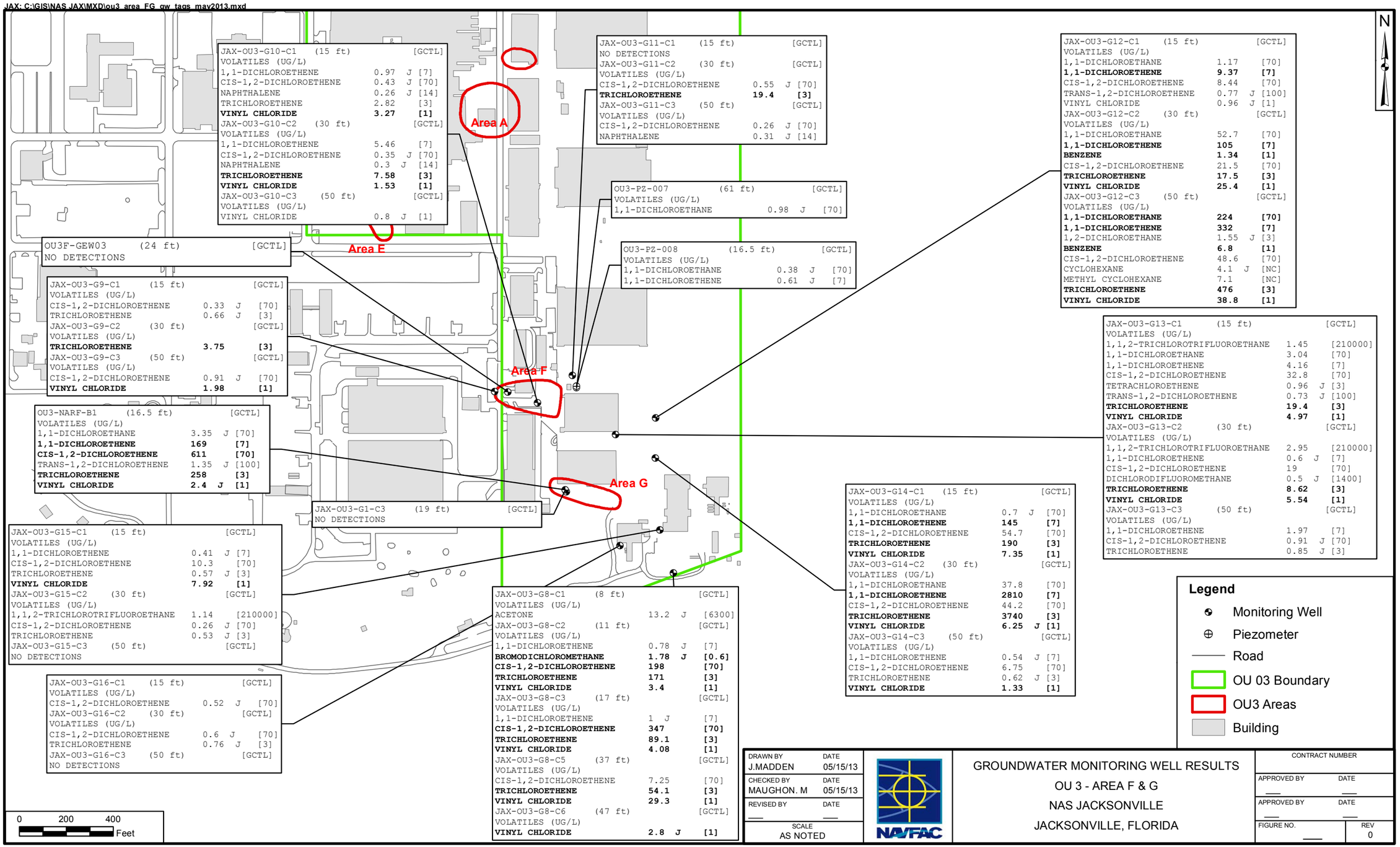

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MAUGHON. M	05/15/13
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—	—
SCALE	
AS NOTED	

NAVFAC

GROUNDWATER MONITORING WELL RESULTS
OU 3 - AREA F & G
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	
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Location	PCE	TCE	cDCE	tDCE	VC	1,1,1-TCA
OU3A-GEW01	No Trend	Stable	Stable	No Trend	No Trend	Stable
OU3A-MW1S	Stable	Significant Downward Trend	Significant Downward Trend	No Trend	Significant Downward Trend	Stable
OU3A-MW2S	No Trend	No Trend	No Trend	Stable	No Trend	Stable
OU3A-MW3I	Stable	No Trend	Stable	Stable	Stable	Stable
OU3A-MW3S	Stable	Significant Downward Trend	No Trend	Stable	No Trend	Stable
OU3A-MW4I	No Trend	No Trend	Significant Downward Trend	No Trend	No Trend	Stable
OU3A-MW4S	No Trend	No Trend	No Trend	No Trend	Significant Downward Trend	No Trend
OU3A-MW5I	Stable	No Trend	Significant Downward Trend	Significant Downward Trend	Significant Downward Trend	Stable
OU3A-MW5S	Stable	No Trend	Stable	Stable	No Trend	Stable
OU3A-MW6S	Stable	No Trend	Stable	Stable	No Trend	Stable
OU3A-MW7	Stable	Significant Downward Trend	No Trend	No Trend	Significant Downward Trend	Stable
OU3-PZ-016	Stable	Stable	Stable	Stable	Stable	Stable
OU3-PZ-017	--	--	--	--	--	--
JAX-OU3-B1-C1	--	--	--	--	--	--
JAX-OU3-B1-C3	No Trend	Significant Downward Trend	Stable	Stable	Significant Upward Trend	Stable
JAX-OU3-B1-C4	--	--	--	--	--	--
JAX-OU3-B1-C5	--	--	--	--	--	--
JAX-OU3-B1-C6	--	--	--	--	--	--
JAX-OU3-B1-C7	--	--	--	--	--	--
JAX-OU3-B2	Stable	Stable	Stable	Stable	Stable	Stable
JAX-OU3-B3	Stable	Stable	Stable	Stable	Stable	Stable
OU3-PZ-018	Stable	Stable	Stable	Stable	Stable	Stable
OU3-PZ-019	--	--	--	--	--	--
OU3C-MW31	No Trend	Significant Downward Trend	Significant Upward Trend	Stable	Significant Upward Trend	Stable
OU3C-MW50D	--	--	--	--	--	--
OU3C-MW51I	--	--	--	--	--	--
OU3C-MW52D	--	--	--	--	--	--
OU3C-MW53I	--	--	--	--	--	--
OU3C-MW54S	--	--	--	--	--	--
OU3-PZ-003	Stable	Stable	Stable	Stable	Stable	Stable

OU3-PZ-004	--	--	--	--	--	--
OU3C-MW39-C1	No Trend	No Trend	Stable	No Trend	Stable	Stable
OU3C-MW39-C2	No Trend	Significant Downward Trend	Stable	No Trend	Stable	Stable
OU3C-MW39-C3	--	--	--	--	--	--
OU3C-MW39-C4	--	--	--	--	--	--
OU3C-MW40-C1	--	--	--	--	--	--
OU3C-MW40-C2	No Trend	No Trend	Significant Downward Trend	No Trend	No Trend	Stable
OU3C-MW40-C3	No Trend	No Trend	Stable	No Trend	Significant Downward Trend	Stable
OU3C-MW40-C4	--	--	--	--	--	--
OU3C-MW40-C5	No Trend	No Trend	Stable	Stable	Stable	Stable
OU3C-MW40-C6	--	--	--	--	--	--
OU3C-MW41-C1	--	--	--	--	--	--
OU3C-MW41-C2	No Trend	Stable	Significant Upward Trend	Significant Upward Trend	No Trend	Stable
OU3C-MW41-C3	No Trend	No Trend	Significant Upward Trend	No Trend	No Trend	Stable
OU3C-MW41-C4	--	--	--	--	--	--
OU3C-MW41-C5	--	--	--	--	--	--
OU3C-MW41-C6	No Trend	No Trend	Significant Downward Trend	No Trend	Stable	Stable
OU3C-MW42-C1	--	--	--	--	--	--
OU3C-MW42-C2	Stable	Stable	Stable	Stable	Stable	Stable
OU3C-MW42-C3	--	--	--	--	--	--
OU3C-MW42-C4	--	--	--	--	--	--
OU3C-MW42-C5	--	--	--	--	--	--
OU3D-GEW02	--	--	--	--	--	--
OU3D-MW30	Significant Downward Trend	Stable	Stable	Stable	Stable	Stable
OU3D-MW55S	--	--	--	--	--	--
OU3P-MW-07	--	--	--	--	--	--
OU3-PZ-022	Stable	Stable	Stable	Stable	--	Stable
OU3D-MW43-C1	--	--	--	--	--	--
OU3D-MW43-C2	--	--	--	--	--	--
OU3D-MW43-C3	--	--	--	--	--	--
OU3D-MW43-C4	--	--	--	--	--	--
OU3D-MW43-C5	--	--	--	--	--	--
OU3D-MW43-C6	--	--	--	--	--	--
OU3D-MW43-C7	--	--	--	--	--	--

OU3D-MW44-C1	--	--	--	--	--	--
OU3D-MW44-C2	--	--	--	--	--	--
OU3D-MW44-C3	--	--	--	--	--	--
OU3D-MW44-C4	--	--	--	--	--	--
OU3D-MW44-C5	--	--	--	--	--	--
OU3D-MW44-C6	--	--	--	--	--	--
OU3D-MW44-C7	--	--	--	--	--	--
OU3D-MW46-C1	--	--	--	--	--	--
OU3D-MW46-C2	--	--	--	--	--	--
OU3D-MW46-C3	--	--	--	--	--	--
OU3D-MW46-C4	--	--	--	--	--	--
OU3D-MW46-C5	--	--	--	--	--	--
OU3D-MW46-C6	--	--	--	--	--	--
OU3D-MW46-C7	--	--	--	--	--	--
OU3D-MW47-C1	--	--	--	--	--	--
OU3D-MW47-C2	--	--	--	--	--	--
OU3D-MW47-C3	--	--	--	--	--	--
OU3D-MW47-C4	--	--	--	--	--	--
OU3D-MW47-C5	--	--	--	--	--	--
OU3D-MW47-C6	--	--	--	--	--	--
OU3D-MW47-C7	--	--	--	--	--	--
OU3D-MW48-C1	--	--	--	--	--	--
OU3D-MW48-C2	--	--	--	--	--	--
OU3D-MW48-C3	--	--	--	--	--	--
OU3D-MW48-C4	--	--	--	--	--	--
OU3D-MW48-C5	--	--	--	--	--	--
OU3D-MW48-C6	--	--	--	--	--	--
OU3D-MW48-C7	--	--	--	--	--	--
OU3E-GEW04	Stable	Stable	Stable	Stable	No Trend	Stable
OU3E-MW1S	No Trend	Stable	Stable	Stable	Stable	Stable
OU3E-MW2S	No Trend	No Trend	No Trend	No Trend	No Trend	Stable
OU3E-MW3I	Stable	No Trend	No Trend	Stable	Stable	Stable
OU3E-MW3S	No Trend	No Trend	Stable	Stable	No Trend	Stable
OU3E-MW4S	Stable	Stable	Stable	Stable	Stable	Stable
OU3E-MW5S	Stable	Stable	No Trend	Stable	No Trend	Stable
OPSMW01	--	--	--	--	--	--
OU3-PZ-020	Stable	Stable	Stable	Stable	Stable	Stable
OU3-PZ-021	Stable	Stable	Stable	Stable	No Trend	Stable
OU3F-GEW03	Stable	No Trend	Stable	Stable	Stable	Stable
OU3-PZ-007	Stable	Stable	Stable	Stable	Stable	Stable
OU3-PZ-008	Stable	Stable	Stable	Stable	Stable	Stable
JAX-OU3-G10-C1	--	--	--	--	--	--
JAX-OU3-G10-C2	--	--	--	--	--	--
JAX-OU3-G10-C3	--	--	--	--	--	--
JAX-OU3-G11-C1	--	--	--	--	--	--
JAX-OU3-G11-C2	--	--	--	--	--	--
JAX-OU3-G11-C3	--	--	--	--	--	--

JAX-OU3-G12-C1	--	--	--	--	--	--
JAX-OU3-G12-C2	--	--	--	--	--	--
JAX-OU3-G12-C3	--	--	--	--	--	--
JAX-OU3-G13-C1	--	--	--	--	--	--
JAX-OU3-G13-C2	--	--	--	--	--	--
JAX-OU3-G13-C3	--	--	--	--	--	--
JAX-OU3-G14-C1	--	--	--	--	--	--
JAX-OU3-G14-C2	--	--	--	--	--	--
JAX-OU3-G14-C3	--	--	--	--	--	--
JAX-OU3-G15-C1	--	--	--	--	--	--
JAX-OU3-G15-C2	--	--	--	--	--	--
JAX-OU3-G15-C3	--	--	--	--	--	--
JAX-OU3-G16-C1	--	--	--	--	--	--
JAX-OU3-G16-C2	--	--	--	--	--	--
JAX-OU3-G16-C3	--	--	--	--	--	--
JAX-OU3-G1-C1	--	--	--	--	--	--
JAX-OU3-G1-C2	--	--	--	--	--	--
JAX-OU3-G1-C3	No Trend	Significant Downward Trend	Stable	No Trend	No Trend	Significant Downward Trend
JAX-OU3-G1-C4	--	--	--	--	--	--
JAX-OU3-G1-C5	--	--	--	--	--	--
JAX-OU3-G1-C6	--	--	--	--	--	--
JAX-OU3-G1-C7	--	--	--	--	--	--
JAX-OU3-G2-C1	--	--	--	--	--	--
JAX-OU3-G2-C2	--	--	--	--	--	--
JAX-OU3-G2-C3	--	--	--	--	--	--
JAX-OU3-G2-C4	--	--	--	--	--	--
JAX-OU3-G2-C5	Stable	No Trend	Significant Upward Trend	Stable	Stable	Stable
JAX-OU3-G2-C6	--	--	--	--	--	--
JAX-OU3-G2-C7	--	--	--	--	--	--
JAX-OU3-G3-C1	--	--	--	--	--	--
JAX-OU3-G3-C2	--	--	--	--	--	--
JAX-OU3-G3-C3	No Trend	Significant Downward Trend	Significant Downward Trend	No Trend	No Trend	Stable
JAX-OU3-G3-C4	--	--	--	--	--	--
JAX-OU3-G3-C5	--	--	--	--	--	--
JAX-OU3-G3-C6	--	--	--	--	--	--
JAX-OU3-G3-C7	--	--	--	--	--	--
JAX-OU3-G4-C1	--	--	--	--	--	--
JAX-OU3-G4-C2	--	--	--	--	--	--
JAX-OU3-G4-C3	--	--	--	--	--	--
JAX-OU3-G4-C4	No Trend	Stable	Stable	No Trend	Stable	Stable
JAX-OU3-G4-C5	--	--	--	--	--	--

JAX-OU3-G4-C6	--	--	--	--	--	--
JAX-OU3-G4-C7	--	--	--	--	--	--
JAX-OU3-G5-C1	--	--	--	--	--	--
JAX-OU3-G5-C2	--	--	--	--	--	--
JAX-OU3-G5-C3	Stable	No Trend	No Trend	Stable	Stable	Stable
JAX-OU3-G5-C4	--	--	--	--	--	--
JAX-OU3-G5-C5	--	--	--	--	--	--
JAX-OU3-G5-C6	--	--	--	--	--	--
JAX-OU3-G5-C7	--	--	--	--	--	--
JAX-OU3-G6-C1	--	--	--	--	--	--
JAX-OU3-G6-C2	--	--	--	--	--	--
JAX-OU3-G6-C3	Stable	Stable	Stable	Stable	Stable	Stable
JAX-OU3-G6-C4	--	--	--	--	--	--
JAX-OU3-G6-C5	--	--	--	--	--	--
JAX-OU3-G6-C6	--	--	--	--	--	--
JAX-OU3-G6-C7	--	--	--	--	--	--
JAX-OU3-G7-C1	--	--	--	--	--	--
JAX-OU3-G7-C2	--	--	--	--	--	--
JAX-OU3-G7-C3	Stable	Significant Downward Trend	No Trend	Stable	No Trend	Stable
JAX-OU3-G7-C4	--	--	--	--	--	--
JAX-OU3-G7-C5	--	--	--	--	--	--
JAX-OU3-G7-C6	--	--	--	--	--	--
JAX-OU3-G7-C7	--	--	--	--	--	--
JAX-OU3-G8-C1	Stable	Stable	Stable	Stable	No Trend	Stable
JAX-OU3-G8-C2	Stable	Stable	Significant Upward Trend	No Trend	Stable	Stable
JAX-OU3-G8-C3	Stable	Stable	No Trend	No Trend	No Trend	Stable
JAX-OU3-G8-C4	No Trend	Significant Upward Trend	No Trend	No Trend	No Trend	Stable
JAX-OU3-G8-C5	Stable	No Trend	No Trend	Stable	No Trend	Stable
JAX-OU3-G8-C6	Stable	No Trend	No Trend	Stable	No Trend	Stable
JAX-OU3-G8-C7	--	--	--	--	--	--
JAX-OU3-G9-C1	--	--	--	--	--	--
JAX-OU3-G9-C2	--	--	--	--	--	--
JAX-OU3-G9-C3	--	--	--	--	--	--
OU3-NARF-B1	--	--	--	--	--	--
MW-780-MW3I	--	--	--	--	--	--
MW-780-MW4S	--	--	--	--	--	--
MW-780-MW5S	--	--	--	--	--	--
MW-780-MW6I	--	--	--	--	--	--
OU3-106-MW31I	--	--	--	--	--	--

OU3-106-MW32I	--	--	--	--	--	--
OU3-106-MW33I	--	--	--	--	--	--
OU3-106-MW34D	--	--	--	--	--	--
OU3-106-MW35D	--	--	--	--	--	--
OU3-106-MW36S	--	--	--	--	--	--
OU3-106-MW37S	--	--	--	--	--	--
OU3-106-MW38S	--	--	--	--	--	--
OU3-106-MW39I	--	--	--	--	--	--
OU3-106-MW40S	--	--	--	--	--	--
OU3-106-PZ-01	Significant Downward Trend	Significant Downward Trend	Significant Downward Trend	Significant Downward Trend	Significant Downward Trend	Stable
OU3-106-PZ-02	Stable	Stable	Stable	Significant Downward Trend	Significant Downward Trend	Stable
OU3-106-PZ-03	Significant Downward Trend	Significant Downward Trend	Stable	No Trend	No Trend	Stable
OU3-106-PZ-04	Significant Downward Trend	Significant Downward Trend	No Trend	No Trend	Significant Upward Trend	Stable
OU3-106-PZ-05	Significant Downward Trend	Significant Downward Trend	Significant Upward Trend	Stable	Significant Upward Trend	Stable
OU3-106-PZ-06	Significant Downward Trend	Significant Downward Trend	Significant Upward Trend	Stable	Stable	Stable
OU3-106-PZ-07	Significant Upward Trend	Significant Upward Trend	Stable	Significant Downward Trend	Significant Downward Trend	Stable
OU3-106-PZ-08	Significant Downward Trend	Significant Downward Trend	Significant Upward Trend	Significant Upward Trend	Significant Upward Trend	Stable
OU3-MW-28	Significant Downward Trend	Stable	Significant Upward Trend	Significant Upward Trend	Significant Upward Trend	Stable
OU3-PZ-023	Stable	Stable	Stable	Stable	--	Stable
OU3-PZ-024	--	--	--	--	--	--
MW-780-1	Stable	No Trend	Significant Upward Trend	Significant Upward Trend	Significant Upward Trend	No Trend
MW-780-2	Stable	No Trend	Significant Upward Trend	No Trend	Significant Upward Trend	Stable
OU3-MW101S-01	--	--	--	--	--	--

Notes:

-- Indicates that there were an insufficient number of samples to run the test.

Color Coding:

	No Exceedance or Not Sampled Since 2010
	Statistically Significant Upward Trend
	Stable ("Flat") Trend
	Statistically Significant Downward Trend
	No Data
	No Trend

1,1-DCE	1,1-DCA	CA
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Stable	Stable	Stable
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Significant Downward Trend	Significant Downward Trend	Stable
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No Trend	Stable	Stable
No Trend	Significant Upward Trend	Stable
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Significant Downward Trend	Stable	Stable
No Trend	Stable	Stable
Significant Downward Trend	Stable	Stable
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No Trend	Stable	Stable
No Trend	Stable	Stable
No Trend	Stable	Stable
No Trend	Stable	Stable
Stable	Stable	--
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Significant Downward Trend	Significant Downward Trend	Significant Downward Trend
Significant Downward Trend	Significant Downward Trend	Significant Downward Trend
--	--	--

Figure 5-x
Estimated Vinyl Chloride Mass Discharge Values Above and Below Clay Layer through Cross Section G-G' (kg/year)

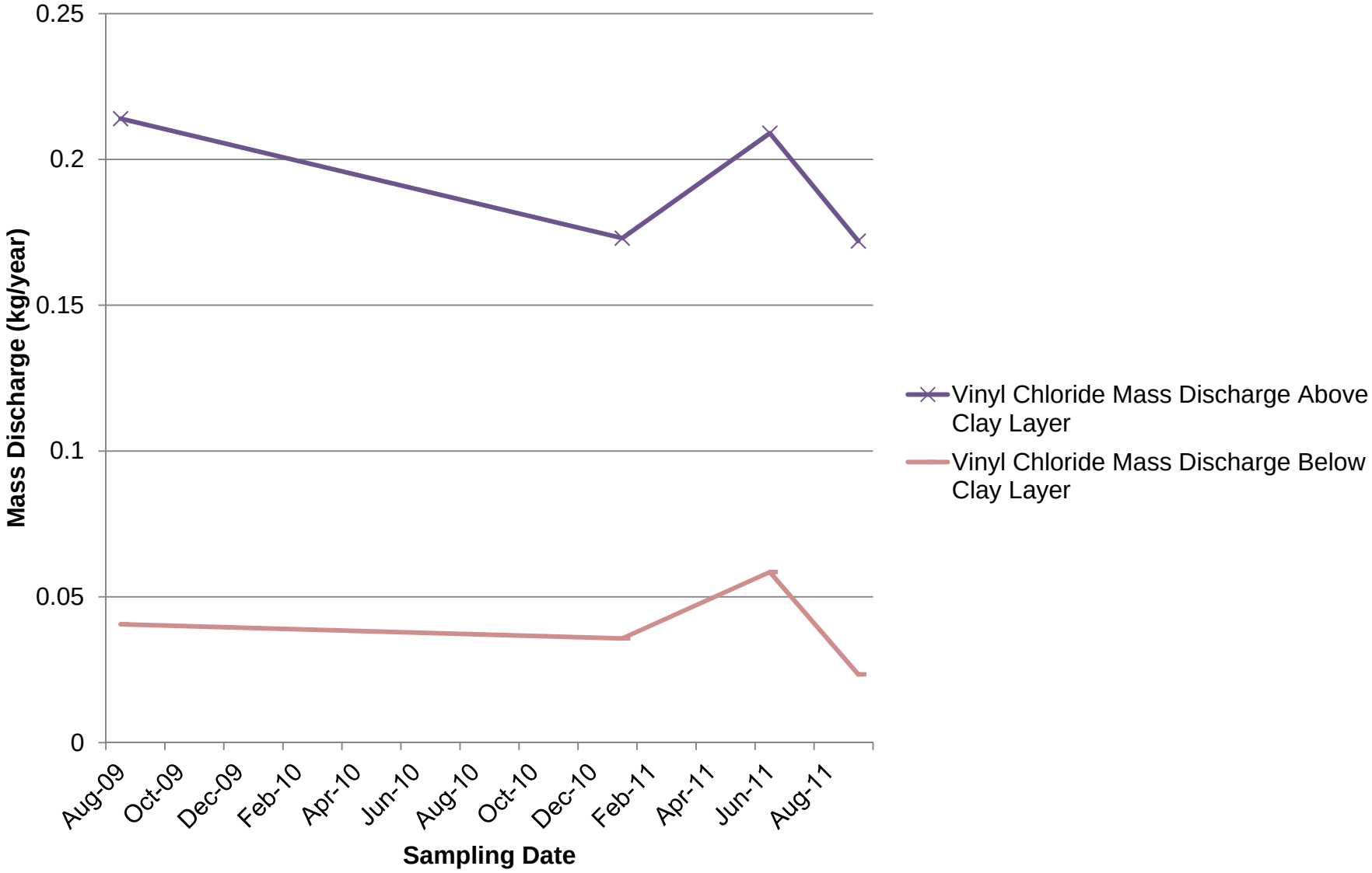


Figure 5-x
Estimated cis-1,2-Dichloroethene Mass Discharge Values Above and Below Clay Layer through Cross Section G-G' (kg/year)

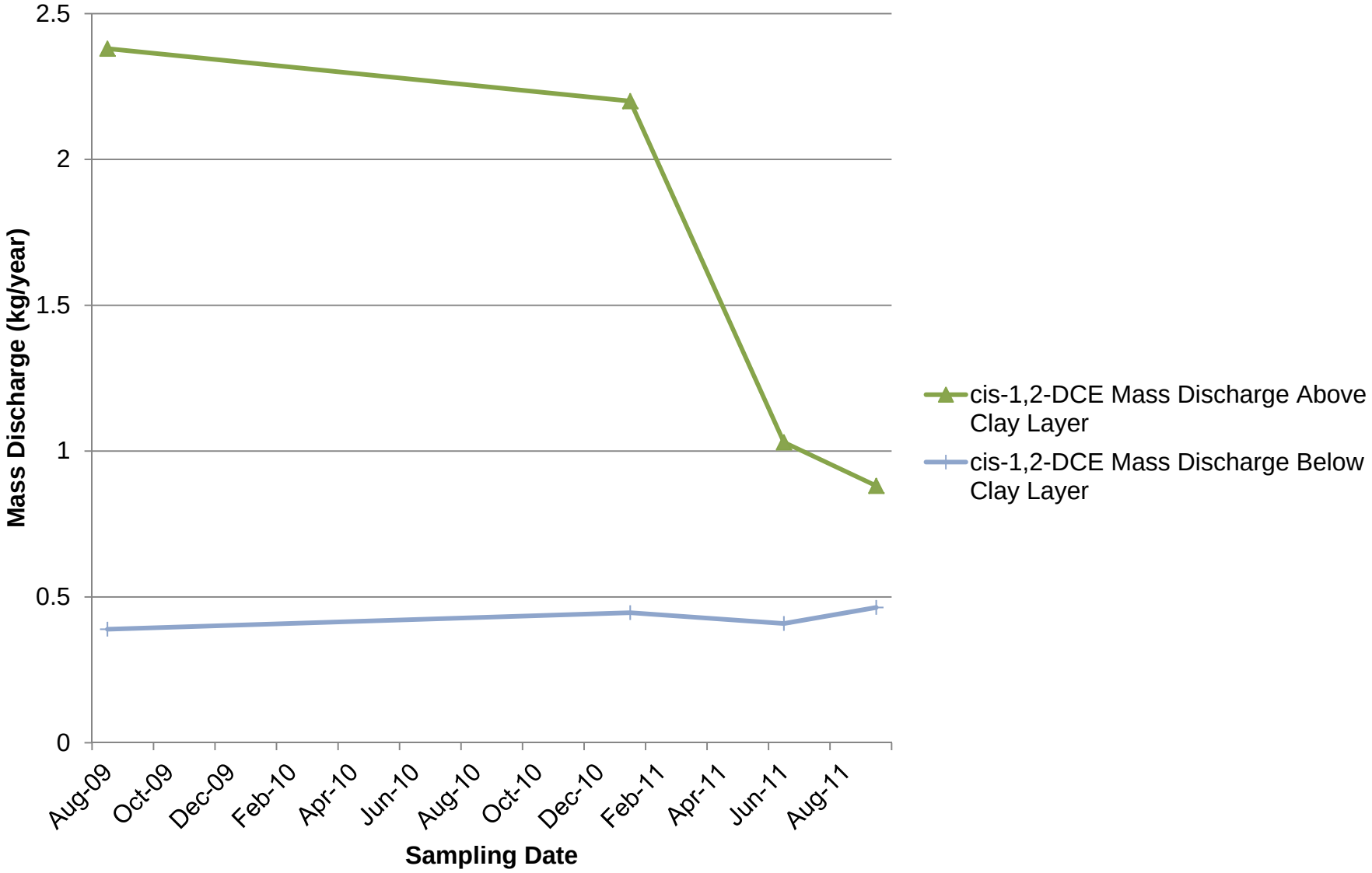


Figure 5-x
Estimated Trichloroethene Mass Discharge Values Above and Below Clay Layer through Cross Section G-G' (kg/year)

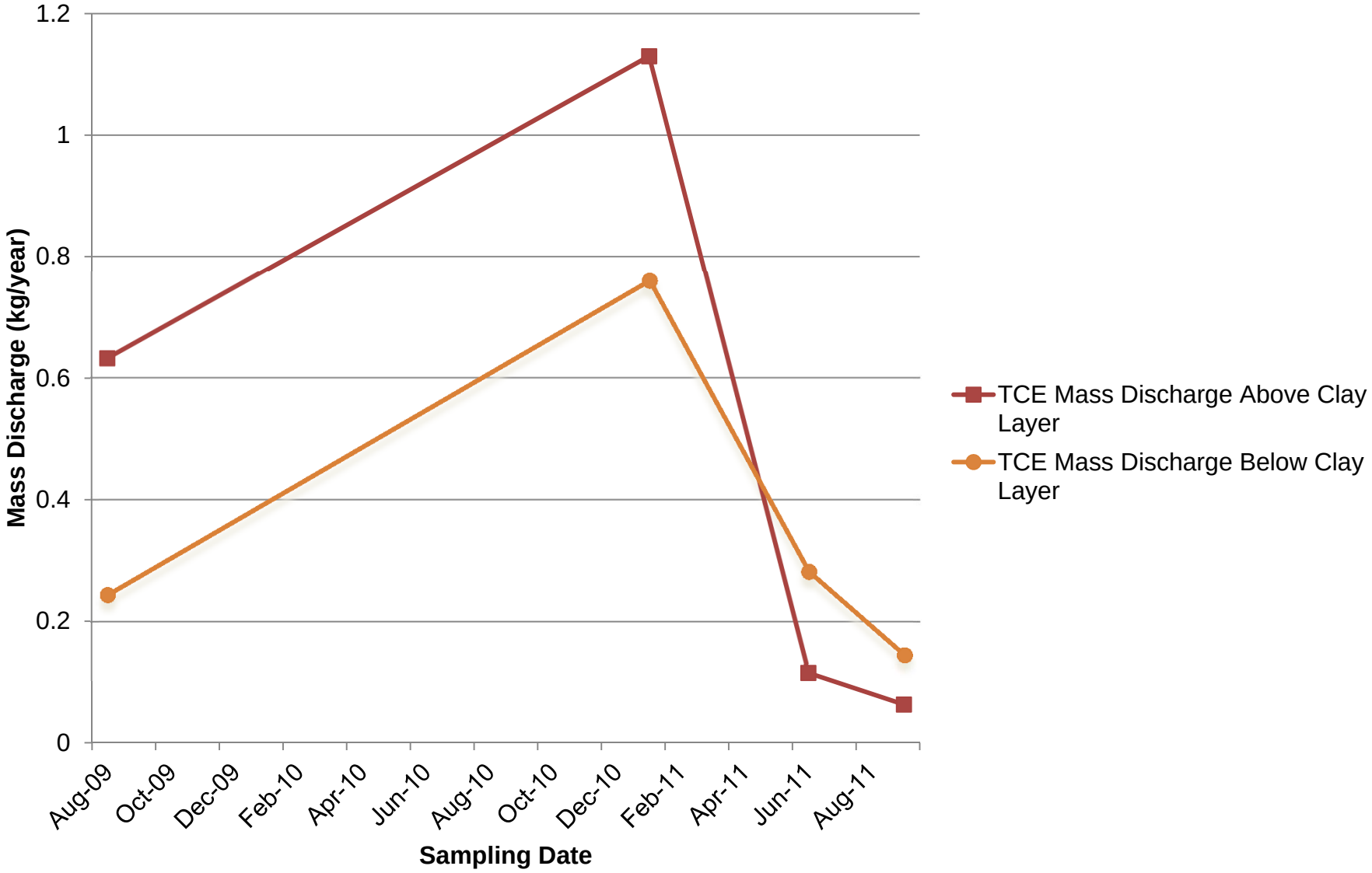
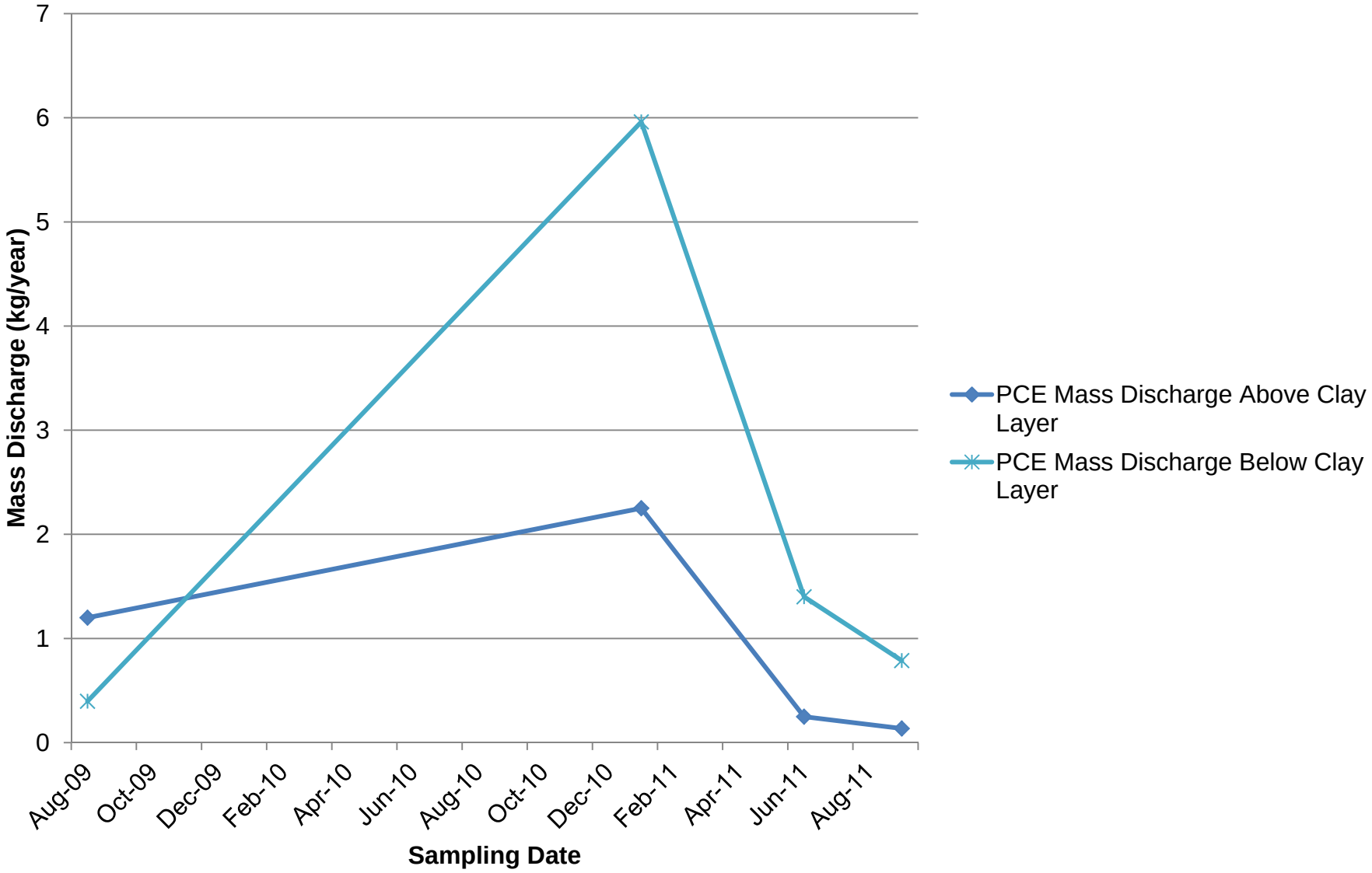


Figure 5-x
Estimated Tetrachloroethene Mass Discharge Values Above and Below Clay Layer through Cross Section G-G' (kg/year)



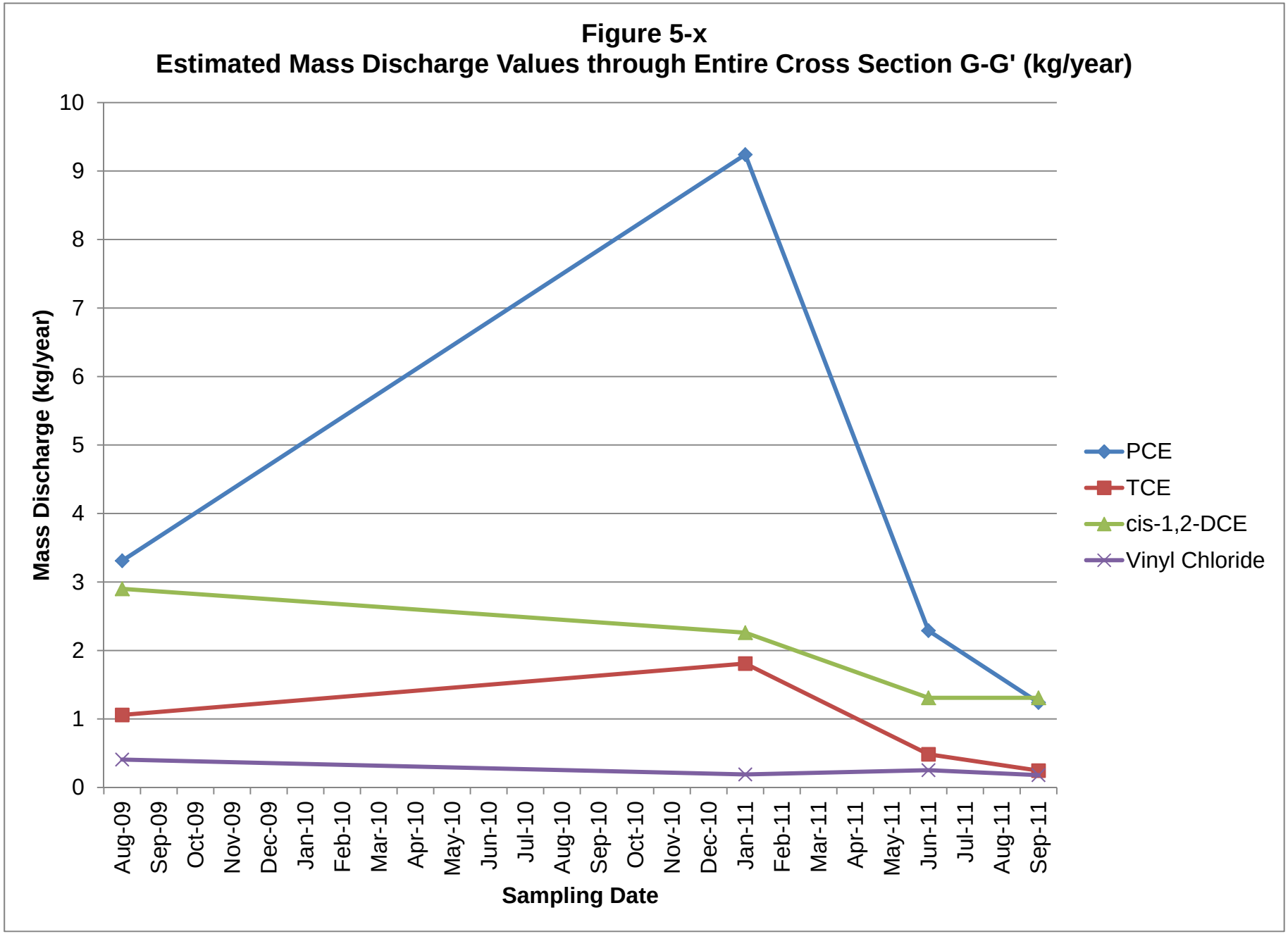


Figure 5-x
Estimated Mass Discharge Values through Entire Cross Section G-G' (kg/year)
Mass Discharge (kg/year)
10
9
8
7
6
5
4
3
2
1
0
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Oct-10
Nov-10
Dec-10
Jan-11
Feb-11
Mar-11
Apr-11
May-11
Jun-11
Jul-11
Aug-11
Sep-11
Sampling Date
PCE
TCE
cis-1,2-DCE
Vinyl Chloride

Table 5-x Estimated Mass Discharge Values (kg/year)

	Sampling Event	Event 1	Event 2	Event 3	Event 4
	Sampling Date	**Aug-09**	**Jan-11**	**Jun-11**	**Sep-11**
Entire G-G'	PCE	3.31E+00	9.24E+00	2.29E+00	1.24E+00
	TCE	1.06E+00	1.81E+00	4.85E-01	2.47E-01
	cis-1,2-DCE	2.90E+00	2.26E+00	1.31E+00	1.31E+00
	Vinyl Chloride	4.08E-01	1.91E-01	2.53E-01	1.81E-01
Above Clay Layer	PCE	1.20E+00	2.25E+00	2.49E-01	1.35E-01
	TCE	6.32E-01	1.13E+00	1.15E-01	6.29E-02
	cis-1,2-DCE	2.38E+00	2.20E+00	1.03E+00	8.81E-01
	Vinyl Chloride	2.14E-01	1.73E-01	2.09E-01	1.72E-01
Below Clay Layer	PCE	3.97E-01	5.96E+00	1.40E+00	7.88E-01
	TCE	2.44E-01	7.60E-01	2.82E-01	1.45E-01
	cis-1,2-DCE	3.89E-01	4.46E-01	4.09E-01	4.64E-01
	Vinyl Chloride	4.06E-02	3.57E-02	5.85E-02	2.34E-02

# of interpolated values

	K	TCE
Event 1	41	26
Event 2	34	18
Event 3		
Event 4		

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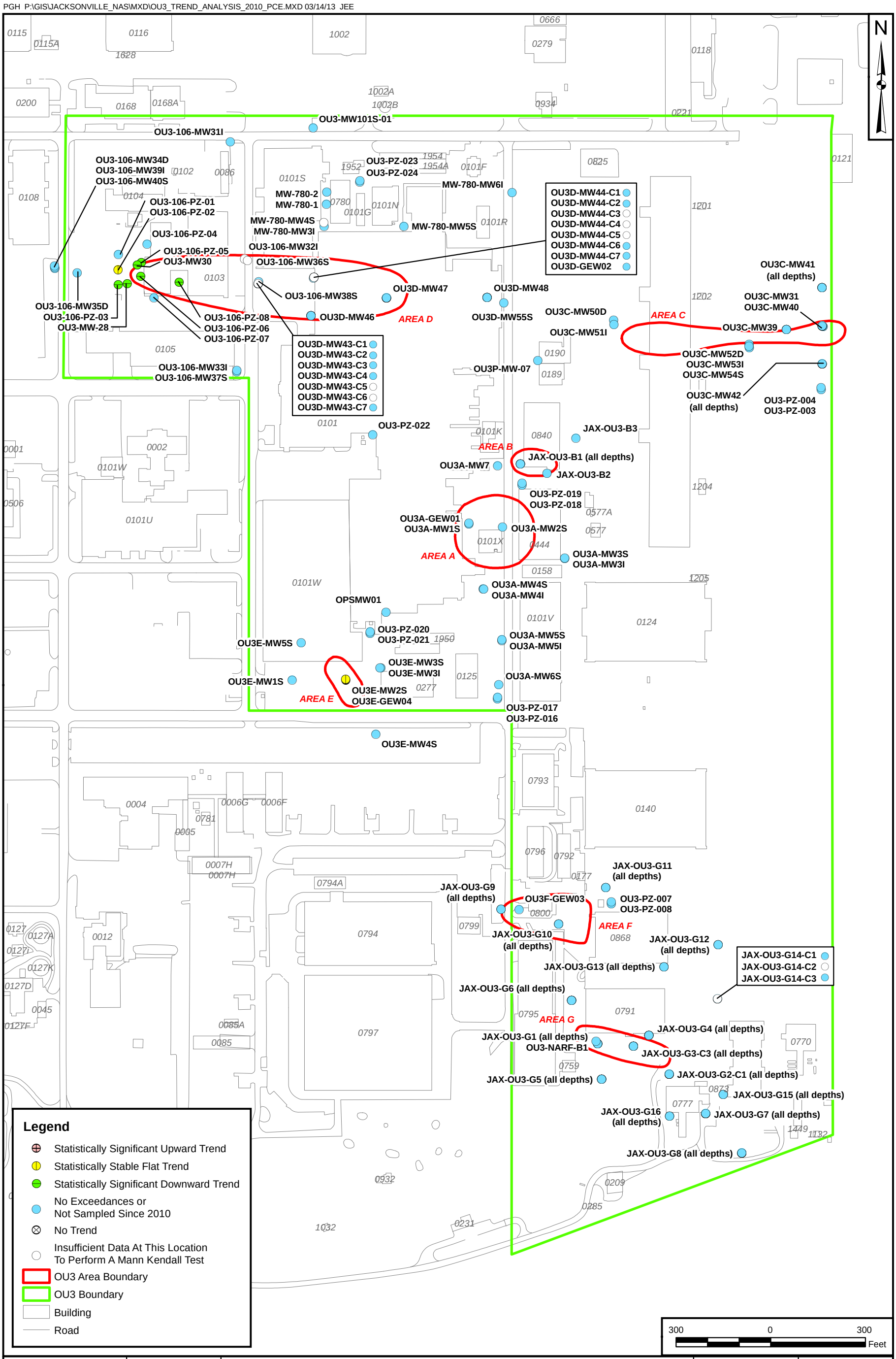

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CHECKED BY	DATE
B. LI	03/14/13
REVISED BY	DATE
SCALE	
AS NOTED	

TREND ANALYSIS RESULTS FOR TETRACHLOROETHENE
OU 3
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 5 - 1	REV 0

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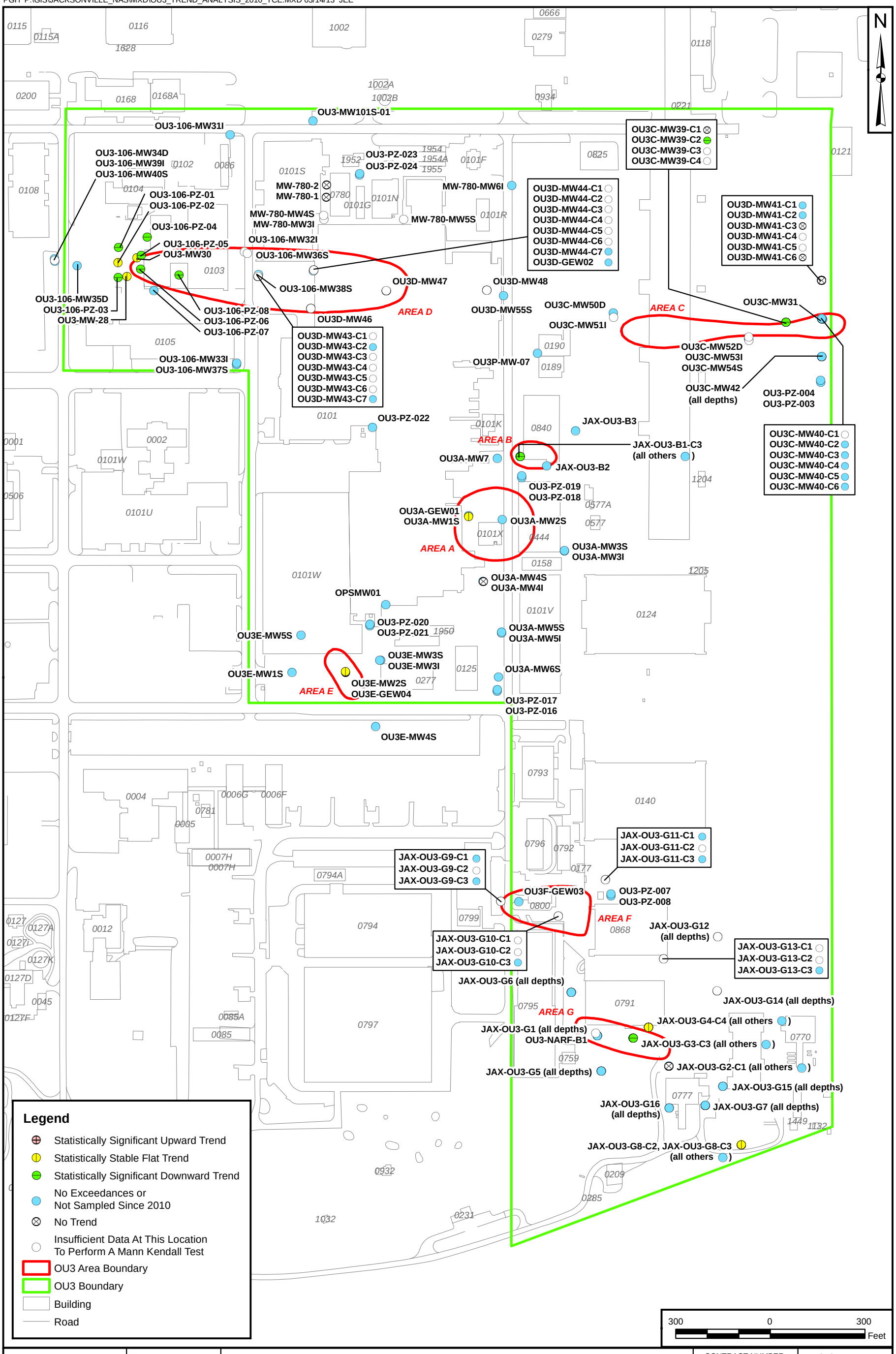

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SCALE	
AS NOTED	

NAVFAC

TREND ANALYSIS RESULTS FOR TRICHLOROETHENE
OU 3
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 5 - 2	REV 0

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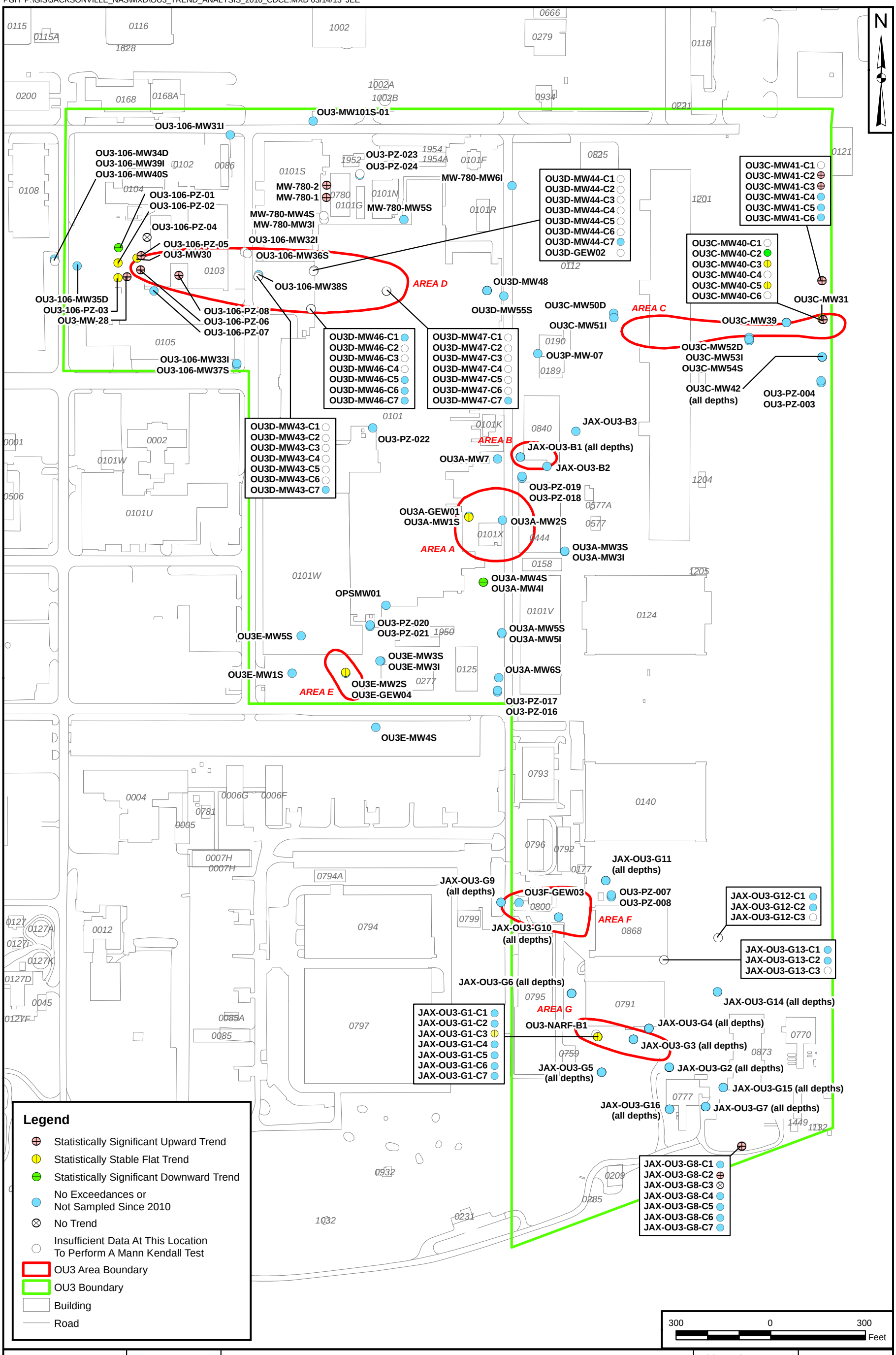

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CHECKED BY	DATE
B. LI	03/14/13
REVISED BY	DATE
SCALE	
AS NOTED	

NAVFAC

TREND ANALYSIS RESULTS FOR CIS-1,2-DICHLOROETHENE
OU 3
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 5 - 3	REV 0

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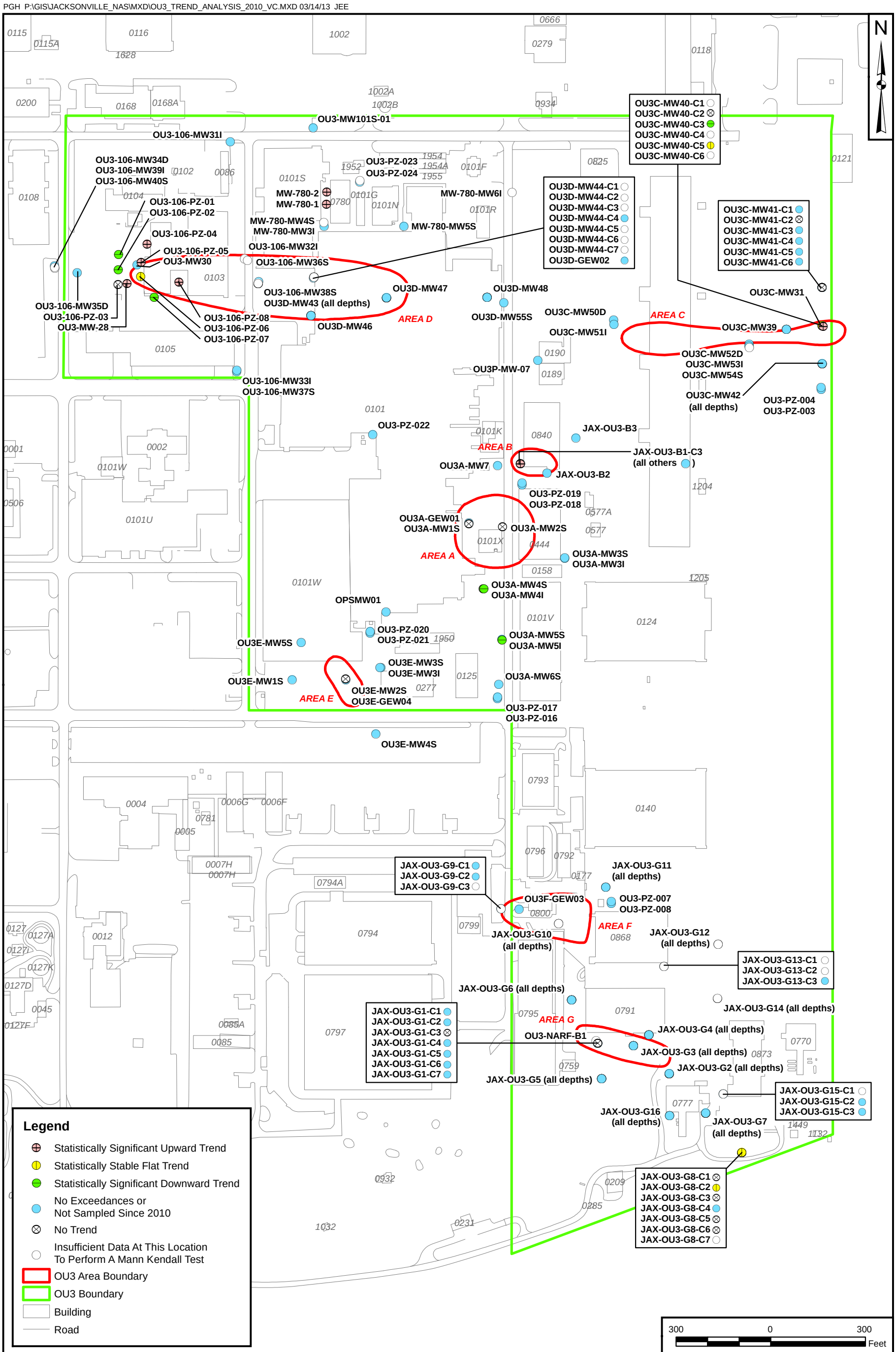

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REVISED BY	DATE
SCALE	
AS NOTED	

NAVFAC

TREND ANALYSIS RESULTS FOR VINYL CHLORIDE
OU 3
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 5 - 5	REV 0

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Overview of EISB and EK-BIO™ Pilot Testing at OU3 NAS-Jax

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Conceptual Site Model and Pilot Test Layout

EISB
EK

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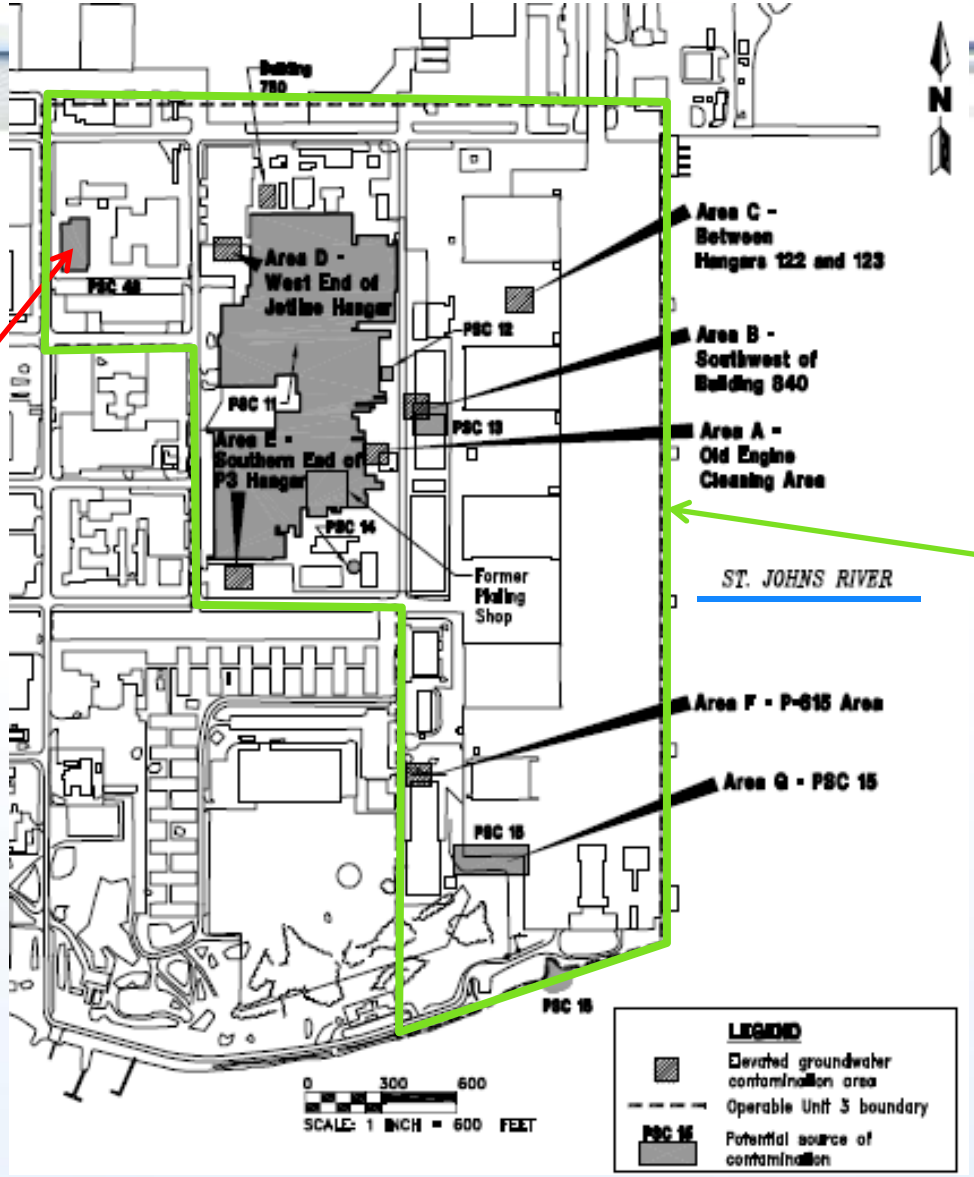
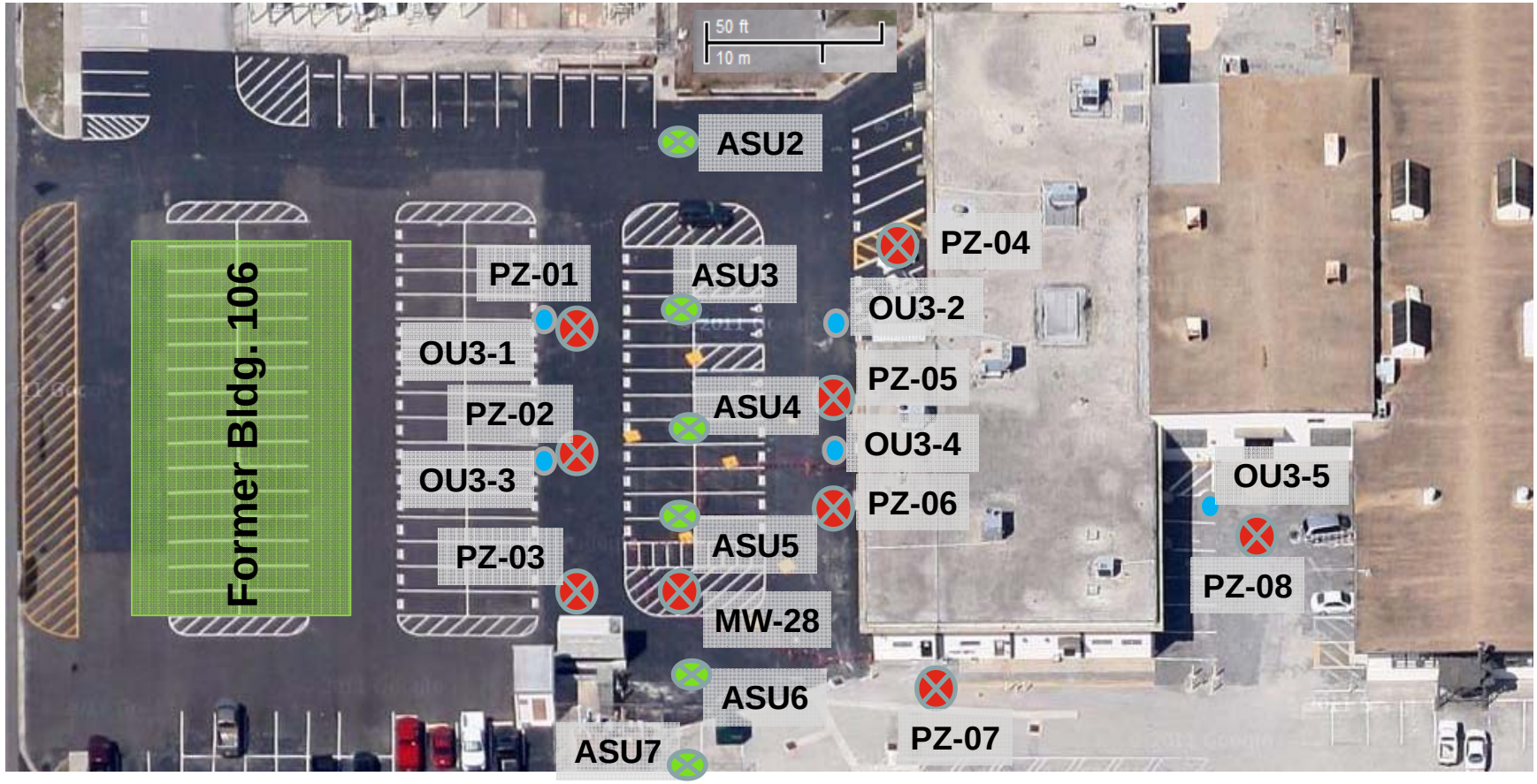
Former Bldg. 106 (Operated as Dry Cleaner 1962-1990)



OU3

ROD, September 2000



Piezometer or Monitoring Well Location

Vertical Profiling Location

Site Layout

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Figure 1

Guelph

May 2013

internal info: path, date revised, author

Piezometer or Monitoring Well Location

Direct Push Sampling Location

Inferred Extent of PCE Groundwater Impacts

*October 2012 groundwater sampling results are presented in micrograms per liter (ug/L) for PCE.

PCE Groundwater Impacts

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Guelph | May 2013

Figure 2

internal info: path, date revised, author

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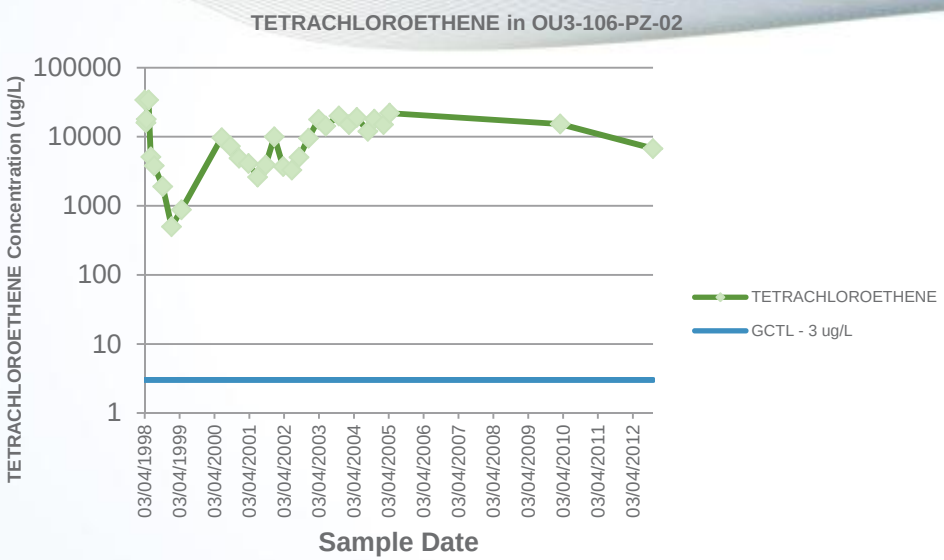
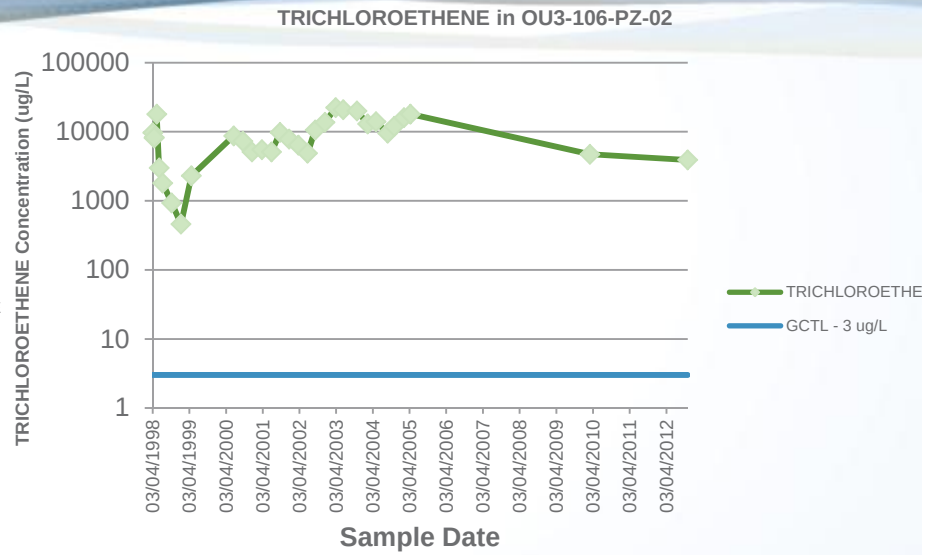
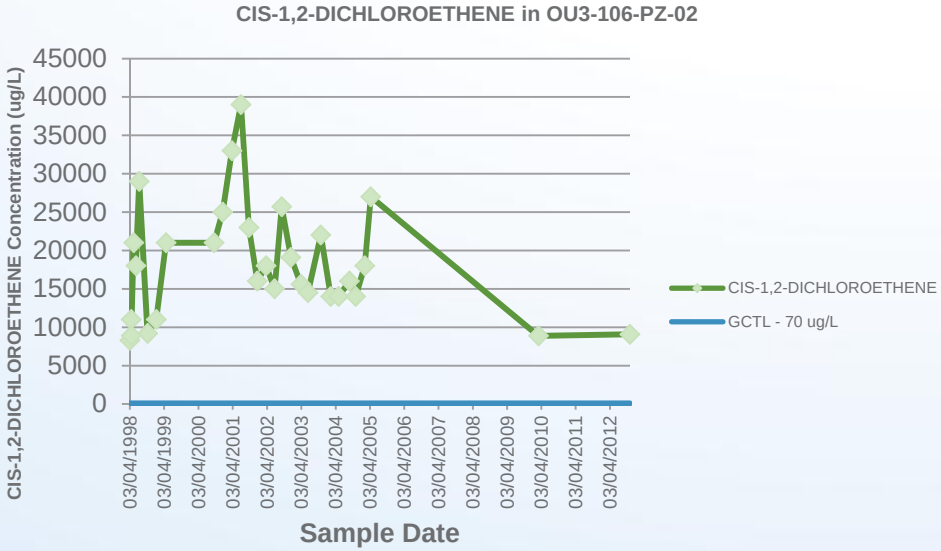
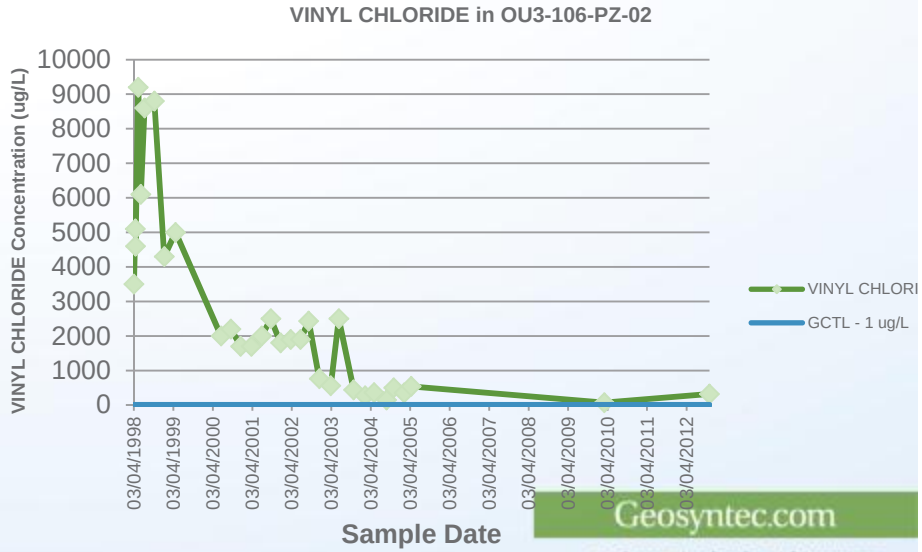
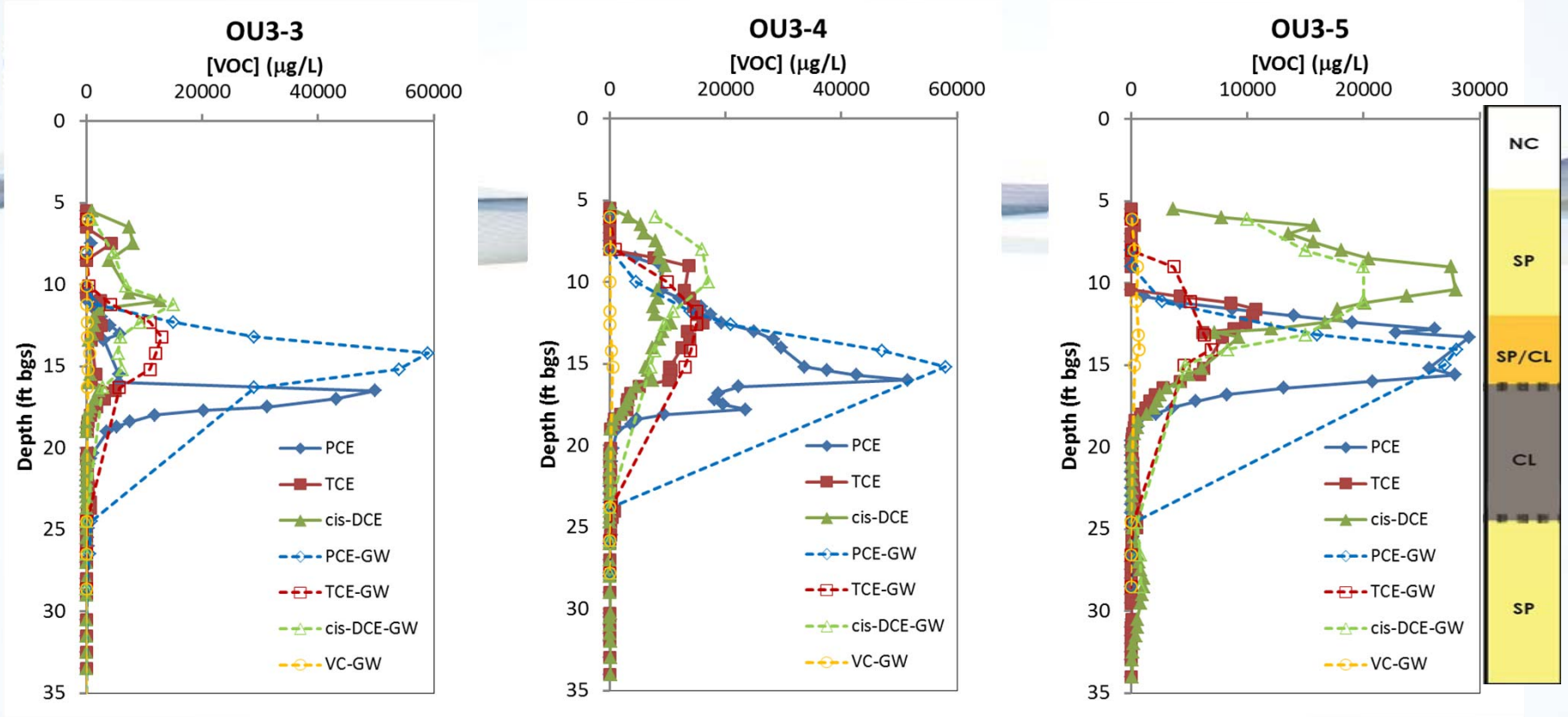
PZ-02











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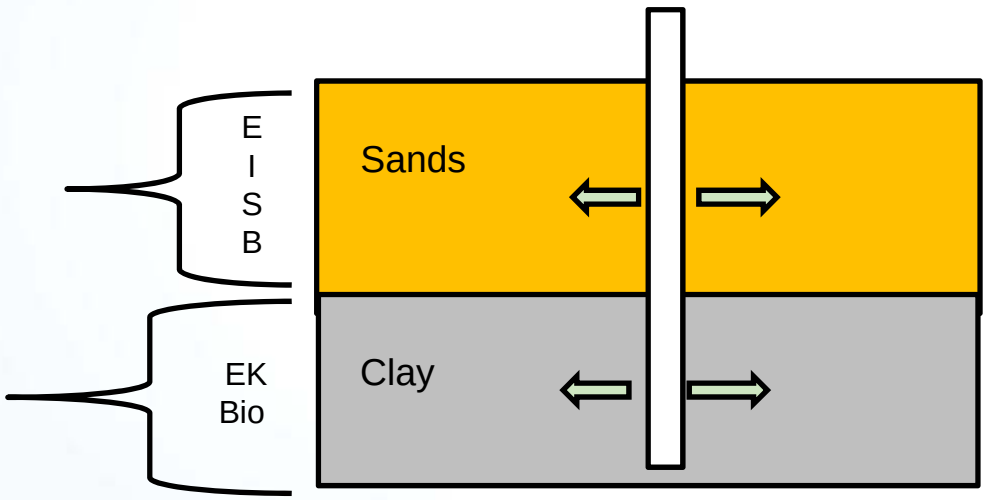
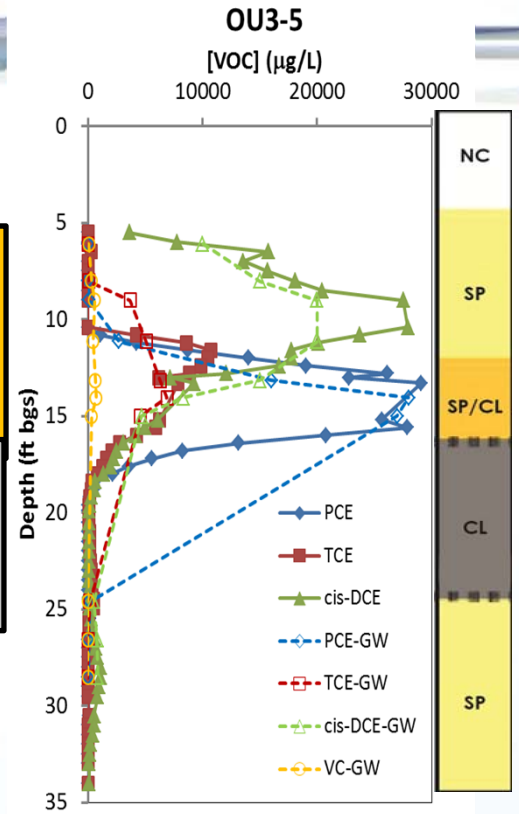
Integrated Treatment of Sands and Clays





- Combined approach to treat surficial permeable sands and deeper clay unit
- Electron donor injection into shallow contaminated zone coupled with electron donor and electromigration in clay layer

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Enhanced In-Situ Bioremediation Pilot

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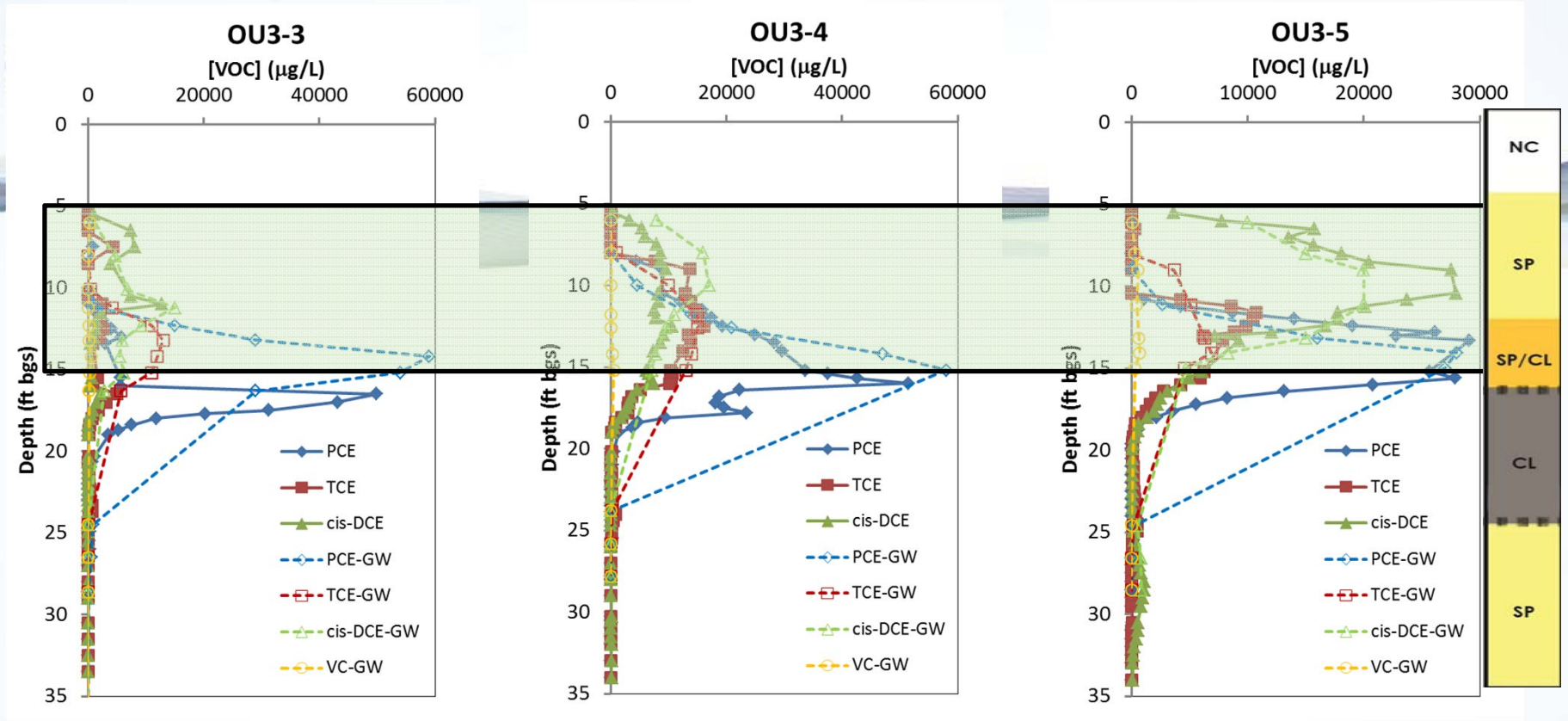
EISB – Proposed Pilot Test Areas



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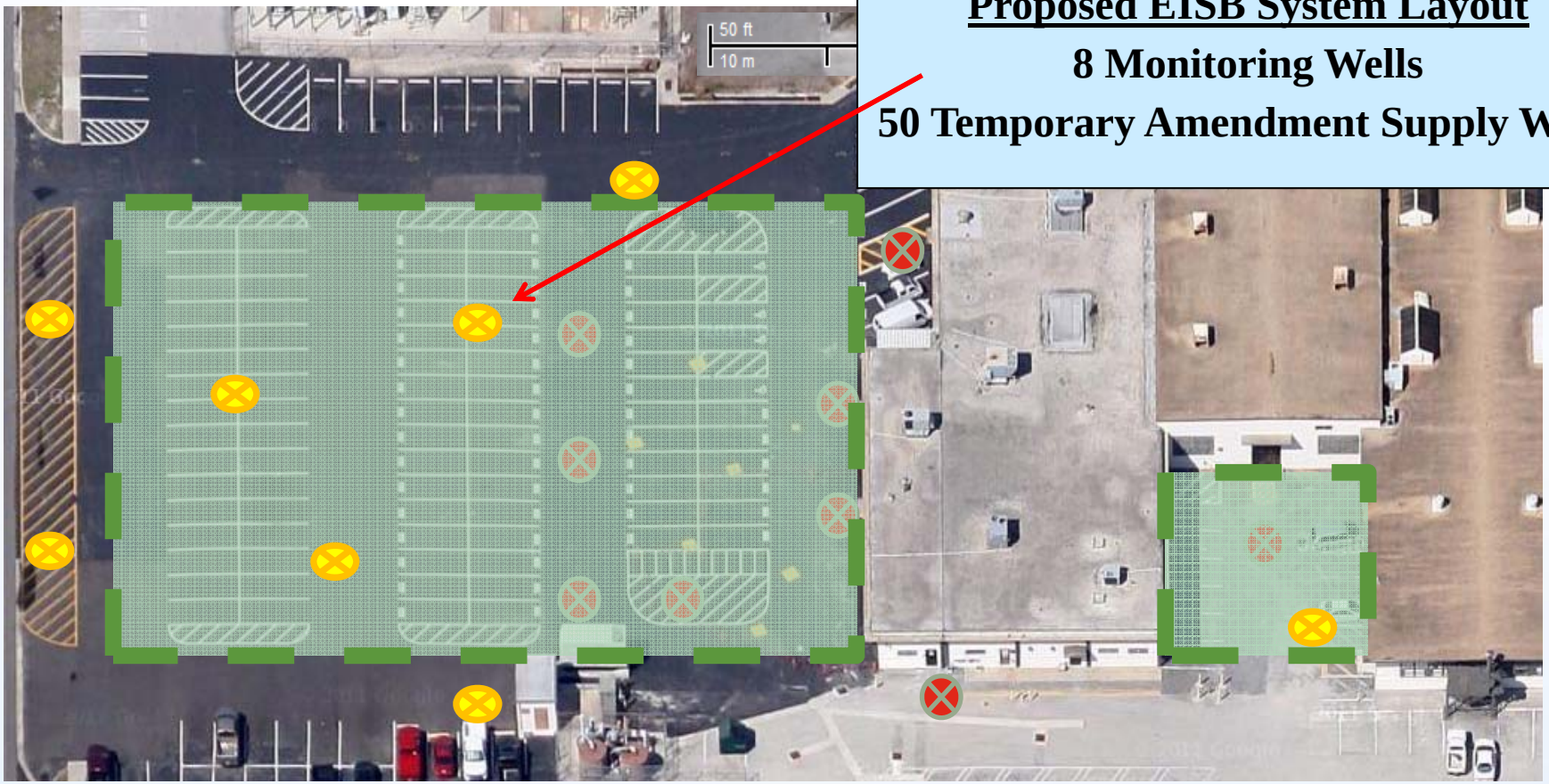
EISB – Proposed Monitoring Well Locations

Proposed EISB System Layout

8 Monitoring Wells

50 Temporary Amendment Supply Wells



Proposed Monitoring Well Location

Piezometer or Monitoring Well Location

Technical Objectives/Approach

Demonstrate potential for EISB in the shallow sands

Project consists of four tasks:

- Task 1 - Pilot Test Work Plan Development (underway)
- Task 2 - Baseline Monitoring and EVO Injection
- Task 3 - Quarterly Monitoring and Reporting
- Task 4 - Final Reporting

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EK-BIO™ Pilot

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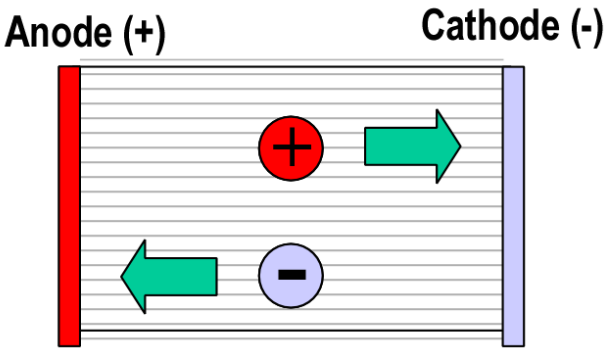
EK – How Does it Work?

Electro-migration

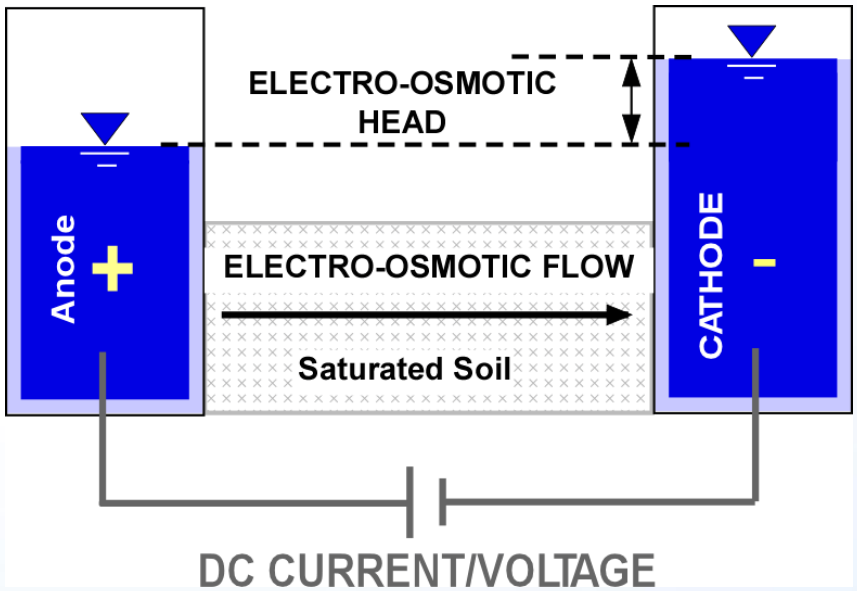
Ions transport in soil pore fluid to electrode opposite in polarity



Anions: negatively charged ions
Cations: positively charged ions

Anode: Positively charged electrode
Cathode: Negatively charged electrode

Electro-osmosis



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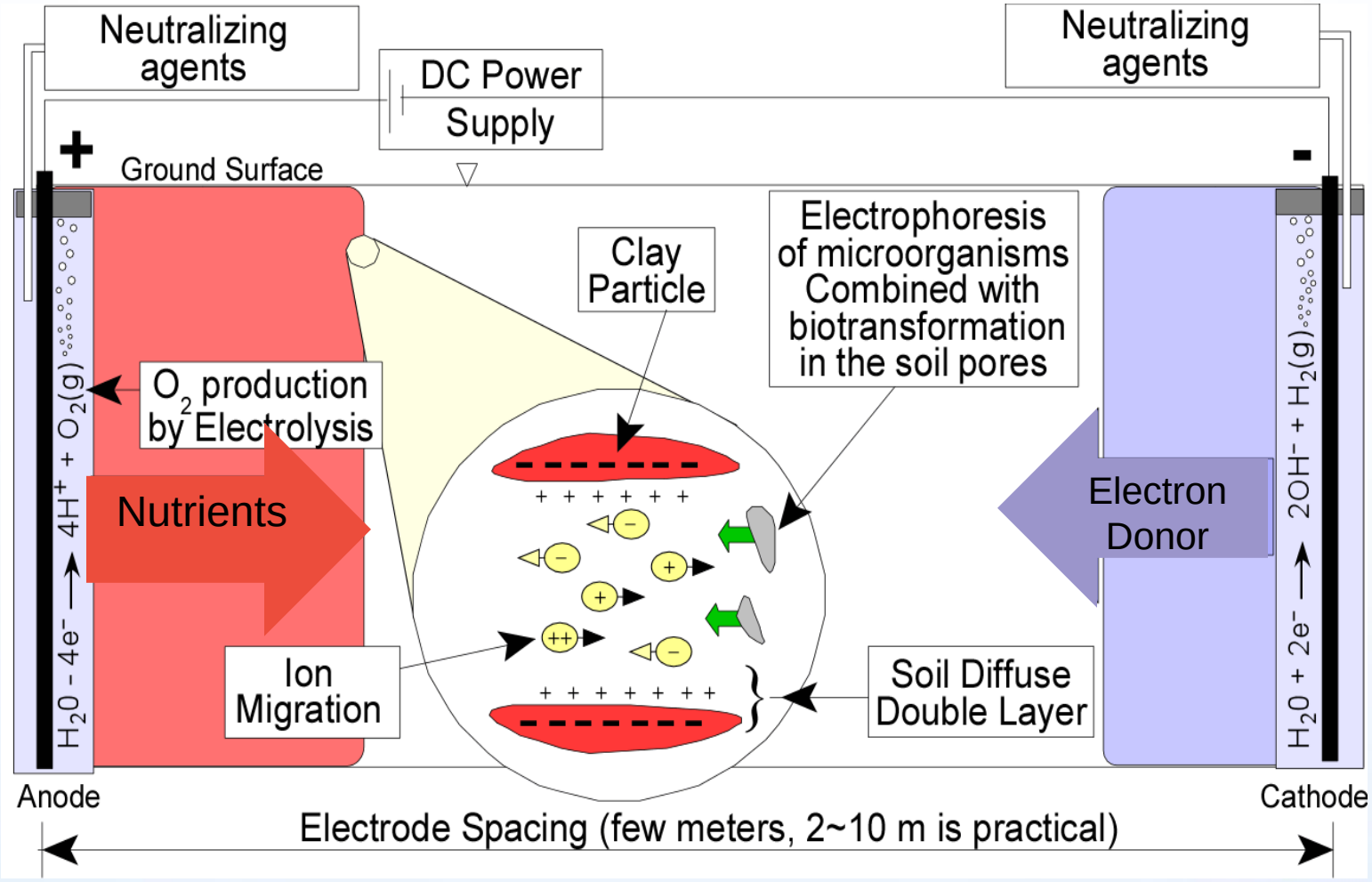
How EK-BIO™ Works



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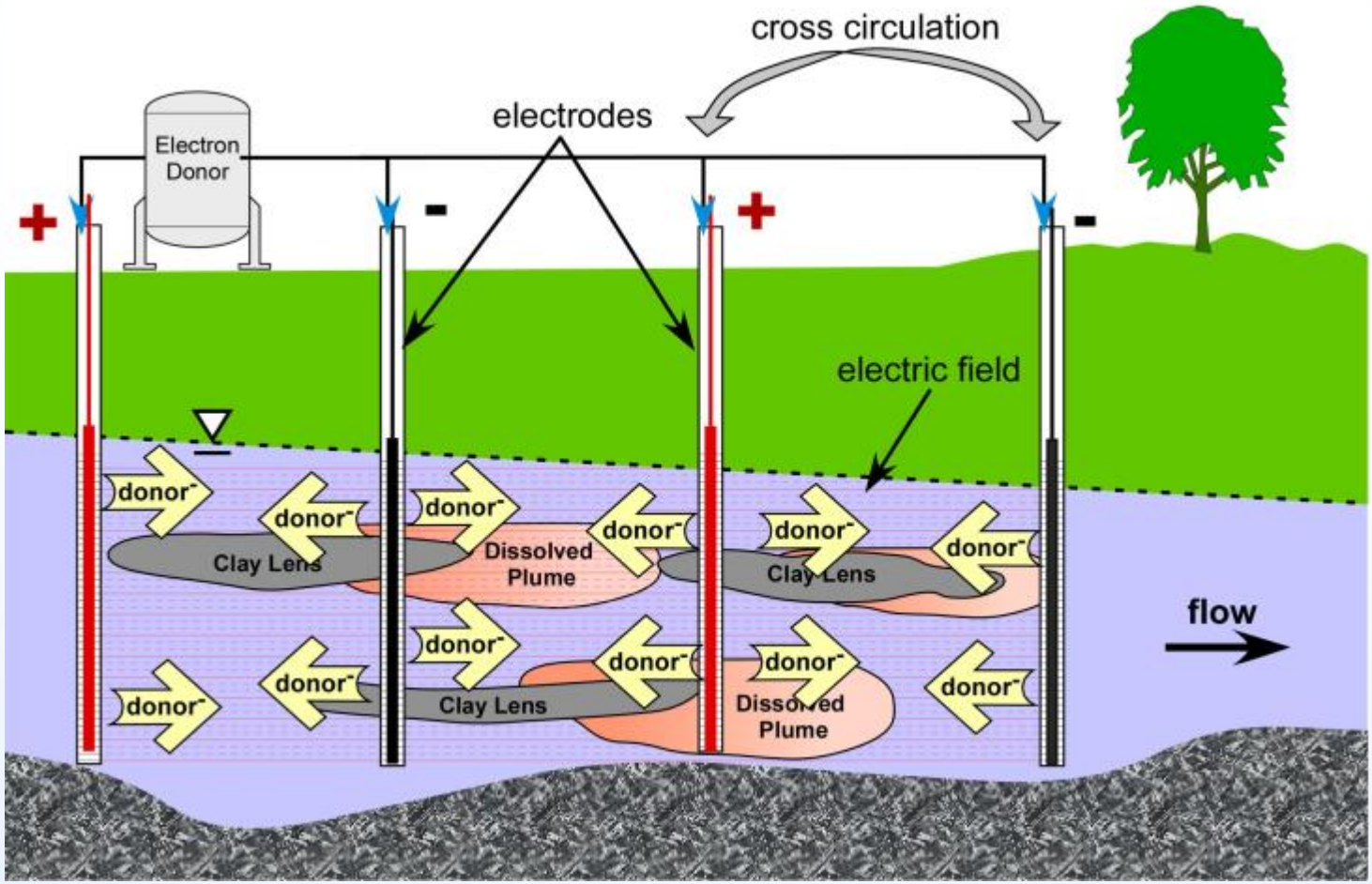
EK-BIO™ Field Application Concept



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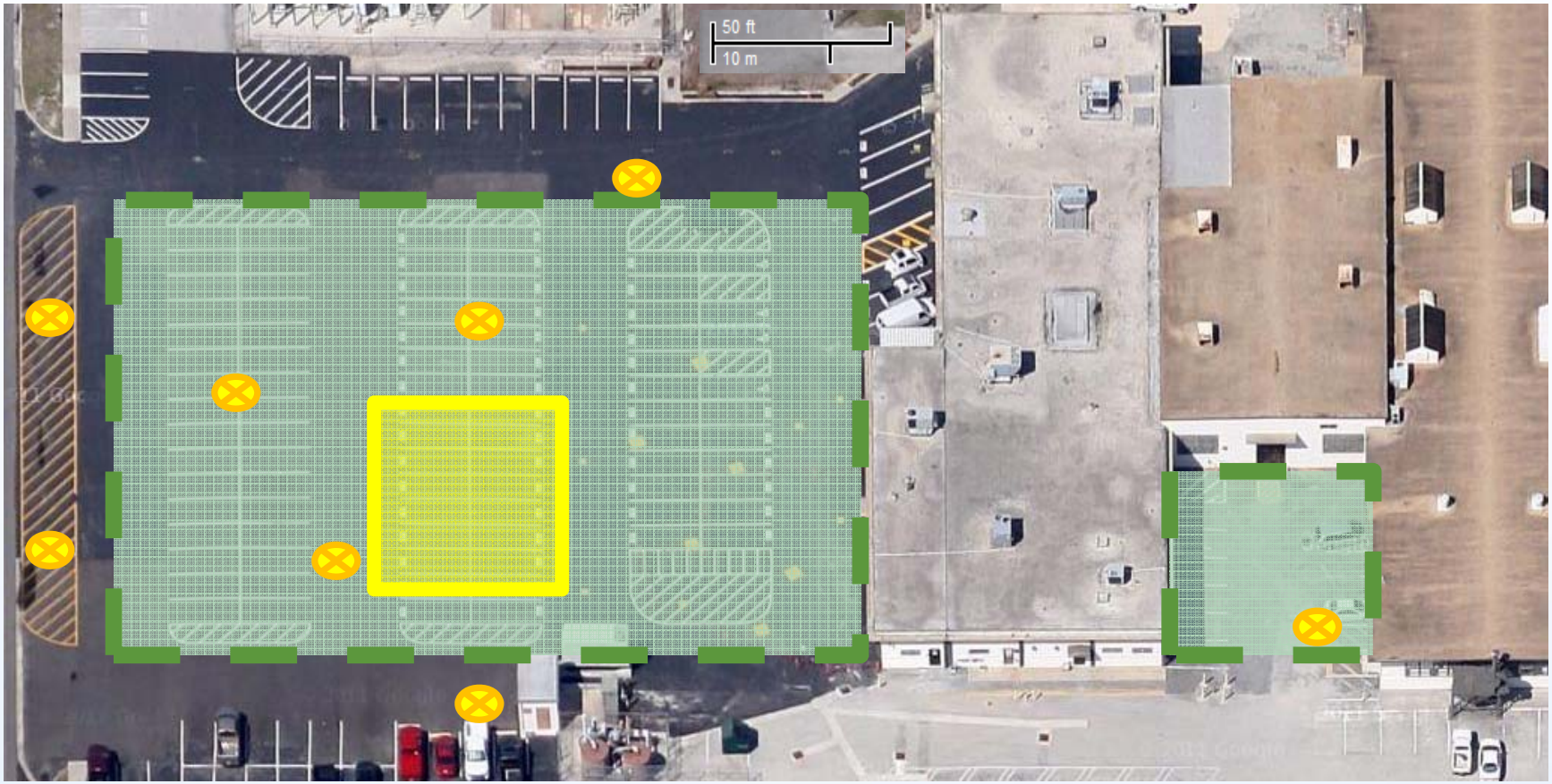
EK-BIO™ – Proposed Pilot Test Area



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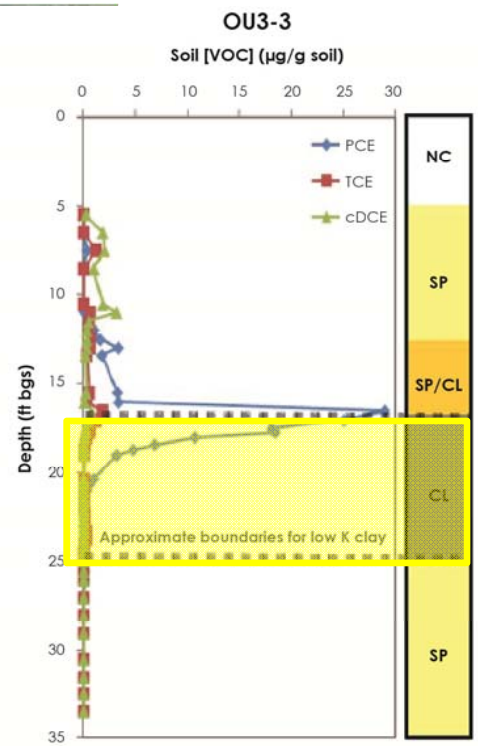
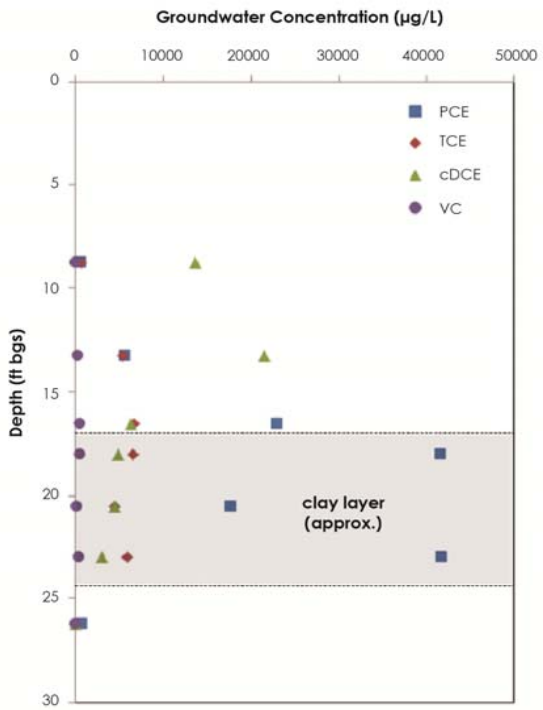
EK-BIO™ – Target Region

Soil CVOC

Pore-Water CVOC





ESTCP ER-201032

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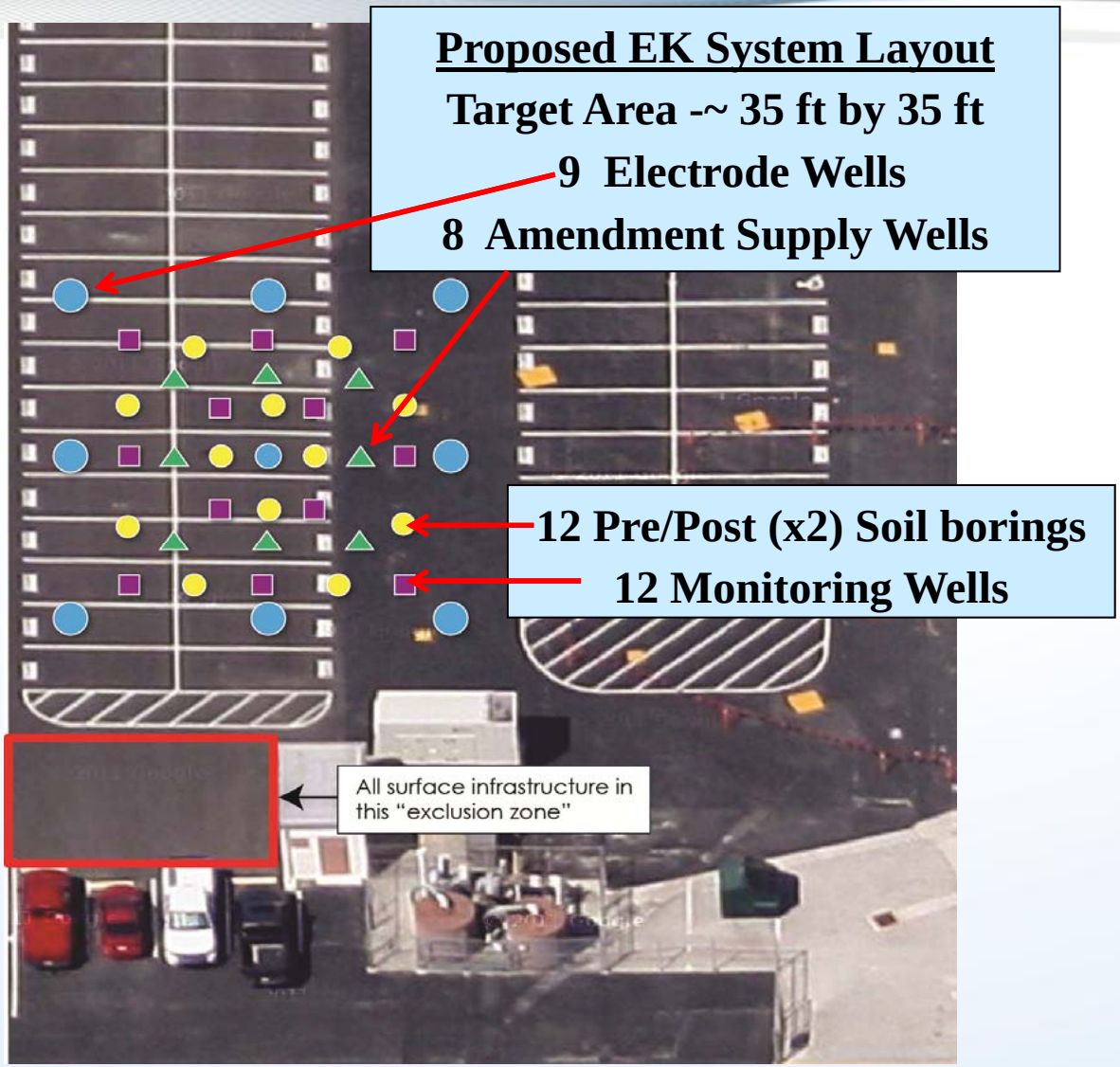
EK – Proposed Well Layout



Proposed EK System Layout

Target Area -~ 35 ft by 35 ft

9 Electrode Wells

8 Amendment Supply Wells

12 Pre/Post (x2) Soil borings

12 Monitoring Wells

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Technical Objectives

Demonstrate and quantify the ability to effectively distribute remediation agents across a target low K / heterogeneous area using a direct current (DC) electric field

1) Demonstrate that treatment is induced across the target treatment area
2) Quantify EK system operational parameters to allow design and optimization for full-scale implementation
3) Develop costing information for technology evaluation and use by DoD and remediation practitioners

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Technical Approach

Project consists of seven tasks:

- Task 1 - Treatability Testing (completed)
- Task 2 - Design & Demonstration Plan (underway)
- Task 3 - System Installation
- Task 4 - Baseline Characterization
- Task 5 - Operation & Performance Monitoring
- Task 6 - Model Validation
- Task 7 - Technical Guidance on EK-BIO™ Design & Application

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Questions