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FINAL PHASE 3 RCRA FACILITY INVESTIGATION WORK PLAN FOR SANITARY SEWER SYSTEM NAS FORT WORTH TX

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INTERNATIONAL TECHNOLOGIES

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NAVAL AIR STATION
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FINAL

Phase 3 RCRA Facility Investigation Work Plan for the Sanitary Sewer System (Solid Waste Management Unit No. 66)

NAS Fort Worth JRB
Fort Worth, Texas

CONTRACT NO. F41624-94-D-8047, DELIVERY ORDER D0039

Project No. 768579
F bruary 2001

Carswell\006 CDR\h

Draft Responses to Comments
Review of Phase 3 RCRA Facility Investigation Work Plan for the Sanitary Sewer System (Solid Waste Management Unit No. 66)
NAS Fort Worth JRB, Texas
December 2000

Universe Technologies Reviewer: Jeffrey C. Blunt
Review Submitted: 12 January 2001

Item	Page	Section	Comment	Response
1	N/A	N/A	There are seven pages prior to the start of the main text (Table of Contents, List of Tables, etc) which are numbered using Roman Numerals. Please change all pages to say "Page _ of vii" rather than "Page _ of vi"	The error will be corrected.
2	N/A	N/A	Please include Tables and Figures immediately after the applicable text where practical (e.g. Tables and Figures of 3 pages or less) rather than in an appendix. Please update the List of Tables and List of Figures accordingly.	The tables and figures will be included within text as requested.
3	1	1.1	1st paragraph, 1st sentence. Please state the name of the U.S. Navy contractor mentioned here (presumably Metcalf and Eddy).	The name of the U S Navy contractor will be provided as requested.
4	1	1.1	1st paragraph, 2nd sentence. Please delete the words "mobilize and" prior to the word "collect".	The correction will be made as requested.
5	2	1.1	2nd sentence on the page. Please change "work plan" to "Work Plan" here and in all other cases where it is used in a title. Also, consider using the abbreviation QPP for Quality Program Plan here and throughout the document.	The corrections will be made as requested.

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Draft Responses to Comments
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NAS Fort Worth JRB, Texas
December 2000

Item	Page	Section	Comment	Response
6	2	1.1	2nd paragraph on the page, 1st sentence. Please indicate that there are separate work plans for the Phase 1 and Phase 2 work.	The correction will be made as requested.
7	2	1 1	2nd paragraph on the page, 2nd and 3rd sentences. If the previous QPP and HSP are to be revised/amended for this Phase 3 work, please state it here	A statement will be added to state that the HSP will not be amended and that the FSP is amended to specify locations that require additional investigation during the Phase 3 investigation.
8	2	1.1	2nd paragraph from the top of the page. Please delete the last sentence of the paragraph.	The correction will be made as requested.
9	2	1 1	3rd paragraph from the top of the page, 1st sentence The reference for the FSP is given here, but should be given when the document is first mentioned (which occurred in the previous paragraph). Please follow this format throughout the document	The reference will be added as requested.
10	3	1 2	Bullets. Please revise the first bullet to indicate that RRS 1 closure may not require any cleanup. If appropriate, please revise the 2nd bullet to indicate that RRS 2 closure may only require delineation of contamination in lieu of cleanup in some cases. Also, if "media specific" and "medium specific" concentrations are the same thing, please choose one and use it consistently throughout the Work Plan.	The following statement will be added to the first bullet "RRS 1 closure may not require cleanup if detected concentrations are below background concentrations." The following statement will be added to the 2nd bullet: "RRS 2 closure may only require delineation of contamination, in lieu of cleanup, in the event detected contaminant concentrations do not exceed MSCs (i.e., concentrations exceed background only). "Media-specific" concentrations will be used throughout the document.

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Item	Page	Section	Comment	Response
11	3	1.2	Last bullet on the page Please change the last two lines on the page to read "...contamination for determining their closure status. Based upon the results of Phase 3 sampling, the Sanitary Sewer System will be recommended for ".	The correction will be made as requested.
12	4	1.2	First sentence below bullet. Please use either "draft-final" or "draft final" consistently throughout the document. If appropriate, please add the words "under RRS 1" to the end of the sentence.	We suggest retaining the "Draft Final" designation for the Report throughout since this will allow AFCEE and Unitec comments to be included in a "Final" version which is the only one TNRCC will review anyway. Use of "Draft" will require more iterations than necessary.
13	4	1.3	2nd sentence. Please change the first part of the sentence to read "Chapters 3.0, 4.0, and Appendix B will comprise the FSP....".	The correction will be made as requested
14	5	2.0	Chapter 2.0 is largely a reprint of information published in the original Work Plan. For the Phase 2 Work Plan, this data was largely incorporated by reference Please consider using the same technique for the Phase 3 Work Plan rather than including pages of previously published background data. This applies specifically to sections 2.1, 2.2, and 2.3.1.	Since the TNRCC no longer reviews work plans, the background information presented in Section 2.0 will remain in the document for the convenience of the regulators and field crew.
15	14	2.3 2	References at the end of the first and second paragraphs. The Phase 2 WP contains the same paragraphs, but references (Jacobs, 1995a,b) rather than (Jacobs 1995a). Please reconcile this discrepancy.	The reference "(Jacobs, 1995a,b)" will be added to the work plan.

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Item	Page	Section	Comment	Response
16	15	2.3.3	1st paragraph, last sentence. Please give the RCRA permit number (HW-50289) at the end of the sentence.	The information will be added as requested.
17	16	2.3.3	First full sentence on the page. Please change "Hazardous Waste Part B permit" to "RCRA Part B permit".	The correction will be made as requested
18	16	2.3.3	1st full paragraph on the page, 1st sentence. Please change the last part of the sentence to read "...RFI report prepared for the EPA (A.T. Kearney, 1989)."	The sentence will be changed to read "...in a RCRA Facility Assessment (RFA) prepared for the EPA (A. T. Kearney, 1989)".
19	17	2.3 3	2nd and 3rd paragraphs on the page. Please prepare a better transition between the paragraphs. The second paragraph refers to 11 OWSs and the third describes 21 OWSs with no explanation of where the additional OWSs came from.	The paragraphs will be rewritten for clarity.
20	17	2.3.3	3rd paragraph on the page, 1st sentence. Please reference the RFI closure report here and in the references section.	The reference will be added as requested.
21	17	2.3.3	4th paragraph on the page, last sentence. Insert "Phase 2 and" between "the" and "Phase 3". Also, the document referenced at the end of the sentence is incorrect. The (IT, 2000) document in the reference section refers to the Sanitary Sewer System Phase 2 RFI Work Plan, not the OWS Phase 3 RFI Work Plan. Please include appropriate references here and in the References section for the OWS Phase 2 RFI and Phase 3 RFI Work Plans.	The corrections will be made as requested.

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Item	Page	Section	Comment	Response
22	17	2.3.3	5th paragraph on the page, 2nd sentence Please change the word "completed" to "conducted". Also, later in the Work Plan, the date of the Phase 2 investigation is referred to as "April/May 2000" and here it says that the work took place in "March/April 2000". Please clarify.	The corrections will be made as requested
23	18	2.3.3	Last two sentences on the page. Please rewrite these sentences. The first of these sentences seems to indicate that sampling was not done at these manholes, yet the second of the two sentences states that the samples are included in the Phase 3 investigation Please clarify.	The manholes were not sampled during P2 because of construction activities. The sentences will be reworded for clarity.
24	21	3.2	2nd bullet on page. This bullet appears to be repetitive. The information within the parenthesis seems to be presented again after the colon. Please clarify.	The bullet will be revised for clarity
25	21	3.2 1	2nd sentence. Please indicate that the sample(s) will be taken from the entire 2 foot interval directly above the water table.	The correction will be made as requested.
26	21	3 2.1	2nd paragraph, 3rd sentence. Please rewrite the first part of the sentence to read "The depth to groundwater at the site ranges from less than 5 feet below grade to greater than 20 feet below grade.. ". Also, given the previous work done at the site, is it really necessary to conduct continuous sampling? Is there sufficient water table data to allow a better estimate of where the water table will be encountered?	The sentence will be rewritten as requested. Given that monitoring well data is not available at each sampling location, specifying the 2-foot sampling depth above groundwater would be an approximation. Therefore, it is recommended that continuous sampling be performed to ensure that saturated soil samples are not collected.

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Item	Page	Section	Comment	Response
27	22	3.2.1	1st paragraph on the page. Please use a consistent format when referring to analytical methods throughout the Work Plan. For example, in this paragraph, analytical methods are given in 3 different formats (EPA SW846 Method SW____, Method ____, and Method SW____). In other places, other formats are used (e.g. EPA Method ____, EPA Method SW____). Also, please be consistent throughout the document with method numbers. In this paragraph, metals analysis is referred to as Method SW 6010, yet in other places, it is referred to as Method SW 6010B.	The following format will be used throughout the document. "EPA Method SW8260"
28	22	3.2.1	2nd paragraph, last sentence. Please reword this sentence to increase clarity.	The sentence will be reworded for clarity.
29	22	3 2.1	3rd paragraph on the page, 1st sentence. Please change "polycarbonated biphenyls" to "polychlorinated biphenyls".	The correction will be made as requested.
30	23	3.2 2	1st paragraph on the page, 2nd sentence. Please indicate the approving authority for the analytical laboratory.	The sentence will be changed to read "A local IT-approved analytical laboratory will be utilized to provide screening data for VOCs using EPA Method SW8260A".
31	23	3.2 2	1st paragraph on the page, last sentence. If contamination has reached the groundwater, will 20 DPT samples be adequate to delineate the extent of the plume?	The 20 DPT groundwater samples is an approximation. The number of DPT groundwater samples may vary based on the severity of contamination identified in soil samples collected during the investigation.

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NAS Fort Worth JRB, Texas
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Item	Page	Section	Comment	Response
32	24	3 3	2nd paragraph on the page, 1st sentence If the location of the designated storage area is known, please give it here If the location has not yet been determined, please indicate who will make the determination.	The text will be revised to state ".. .at the NAS Fort Worth designated storage area (located at the decontamination area north of the main gate entrance) until analytical data are received".
33	25	4 1	1st paragraph. Please be consistent when referring to the same document throughout the Work Plan For example, in this paragraph, the same document is variably referred to as "Draft RFI Report", and "draft Sanitary Sewer System RFI report".	The document will be revised as requested
34	25	4.1	Last sentence on the page. The sentence is a bit cumbersome and confusing. If appropriate, please reword the sentence to say "No further samples will be taken in areas of previously delineated contamination."	The sentence will be revised for clarity
35	27	4.2	First full paragraph on the page. Please give an explanation of why PET sample sleeves were used to obtain VOC samples if there was a possibility that the sleeves would contaminate the sample	At the time of the Sanitary Sewer RFI in 1997, PET was an AFCEE-approved sampling material for VOCs
36	27	4.2	Bullet 2. Please replace "considering the" with "due to suspected".	The correction will be made as requested.

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Item	Page	Section	Comment	Response
37	27	4.2.1	The discussion indicates that no silver was found in background samples by Jacobs, but was found along the sanitary sewer line by IT. The discussion attributes this to matrix interferences. Were other possibilities eliminated? For example, on many military installations, photo and x-ray labs disposed spent fixer/developer (containing silver) by letting it run into the sanitary sewer system. Please consider/discuss, if appropriate.	The discussion does not indicate that no silver was found in background samples collected by Jacobs, but rather that the background silver concentrations reported by Jacobs were determined using an analytical method (EPA Method SW7761) with a much lower detection limit than the ICP Method (EPA method SW6010) used during the Phase 1 Sanitary Sewer RFI. All of the silver concentrations detected in the Phase 1 RFI were low level concentrations slightly above the method detection limit (MDL) but below the practical quantitation limit (PQL) (i.e , f-flagged). Considering the higher MDL associated with EPA Method SW6010 than the MDL for the method (SW7761) used to determine the background concentration for silver, the silver concentrations detected in soil samples at the site are not likely above naturally occurring silver concentrations in soil and are likely associated with matrix interferences associated with EPA Method SW6010. The photographic activities at Building 1170 (SWMU 13) were considered as a possible source for the silver concentrations. However, no pattern of elevated concentrations were observed in the Phase 1 RFI samples collected downgradient from this location.
38	29	4 2 1, 4.2.2	If appropriate, support the toluene/silver technical discussions with a statement that these contaminants are not expected based on previous activities at the base.	The recommended statement is not appropriate for toluene considering that the majority of the OWS discharging to the sanitary sewer removed petroleum-type products. A statement will be added to claim that the random pattern of detected silver concentrations is not expected based on previous activities at the base.
39	29	4.3	Last sentence on the page. Insert the words "wherever possible," between "addition," and "soil".	The correction will be made as requested.

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Draft Responses to Comments
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NAS Fort Worth JRB, Texas
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40	32	4.4	"Laboratory Methods" paragraph. In the second sentence, change "Methods" to "Method". In the third sentence, delete the word "for".	The corrections will be made as requested.
41	34	5.0	Given all the additional data to be included in the report, it might be appropriate to call the report a draft rather than a draft final.	Although there has been a time lapse between the initial Draft Sanitary Sewer RFI Report in 1997 and the addition of data from the Phase 2 and Phase 3 RFI activities, it is in the best interest of the project to issue the report as "Draft Final". The report can then be revised to "Final" based on AFCEE and Unitec review because TNRCC will only review "Final" documents. There may be a post final Report in any case.
42	37	8 0	Please include all additional documents (listed in previous comments above) in this section.	The references will be revised as requested.
43	N/A	Tables	Table 3-1. Please be consistent in all table column headings (on this table and others). For example, if one column is "VOA by SW8260", the next column should be "PAHs by SW8310", not "PAHs 8310". Also, please ensure that words/phrases are not split (e g., in column 5 of this table, "SW6010B" should fit on one line).	The table will be corrected and reformatted as requested.
44	N/A	Tables	Table 3-2. On this table and those like it, please explain how you arrive at the "Total No. of Samples" Adding the numbers in any of the rows does not give the number shown in this column. Please indicate which samples are not included in this total and why they are not counted in the total.	The table will be corrected as requested.
45	N/A	Figures	On all figures, in the notes section, ensure that the text matches that in the body of the Work Plan For example, in the Work Plan, metals are sometimes listed as being analyzed by Method SW 6010B/7000, but here, the "7000" (for lead) is not included. Also, please use a consistent format as mentioned in previous	The figures will be revised for consistency.

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Item	Page	Section	Comment	Response
			comments.	
46	N/A	Figures	For figures relating to chapter 4.0 of the Work Plan, please include a note explaining the proposed soil sampling depths as was done for the figures relating to chapter 3.0 of the Work Plan.	The notes will be added to the Chapter 4.0 figures as requested.
47	N/A	Figures	Figure 4-4. Why is no confirmatory sample being taken for Selenium from 11L25S-P3 when Selenium was found in exceedance of RRS 1 at 11L25S? A VOC sample will be taken from 11D6A-P3, which is located adjacent to 11D6A, which had no RRS 1 exceedances, please explain the rationale for this sample Also, please explain why are no samples being taken in the to confirm/delineate RRS 1 exceedances of Mn, Co, and Cu?	The estimated concentration of selenium detected at 16 to 18 feet bgs at 11L25S (0.36 B mg/kg) is likely an extreme, but true background concentration (0.3 mg/kg) The absence of elevated selenium concentrations in the surrounding samples provides further evidence that the selenium detected at 11L25S was an extreme, but true background concentration. Chlorobenzene (0.0025 mg/kg) was detected above its MQL (0.0023 mg/kg) at 1106A during the 1997 RFI. A shadowbox will be added to Figure 4-4 to show this result. Manganese, cobalt, and copper are not being sampled for because these inorganic were either confirmed at concentrations below their respective background concentrations during the Phase 2 RFI (e.g , cobalt at 1107); or these inorganics were detected at concentrations indicative of extreme, but true background concentrations during the 1997 RFI (e.g., copper at 1107).
48	N/A	Figures	Figure 4-5. Consider moving MH15Q-P3 south of MH15Q in order to get the new boring closer to the original boring.	MH15Q-P3 was placed north of MH15Q-P3 because of recent construction activities near MH15Q. The location of MH15Q-P3 will be located as close to MH15Q as site conditions will allow.
49	N/A	Figures	Figure 4-7. Consider sampling for Mo at MH4-NP3 and MH4-SP3.	The molybdenum concentration detected at MH-4 (1.5 B mg/kg) is virtually identical to the background concentration (1.46 mg/kg). Considering that the molybdenum concentration was estimated (i.e., B-flagged), the concentration was likely an extreme, but true background concentration. Therefore, no

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Draft Responses to Comments
Review of Phase 3 RCRA Facility Investigation Work Plan for the Sanitary Sewer System (Solid Waste Management Unit No. 66)
NAS Fort Worth JRB, Texas
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Item	Page	Section	Comment	Response
				delineation is warranted for molybdenum at MH4-5P3 or MH4-NP3.
			Why is B1125N-P3 not being sampled for Mo and Cu?	The molybdenum (1.6 B mg/kg) and copper (13.9 mg/kg) concentrations detected at B1125N are like extreme, but true background concentrations. The background concentrations for molybdenum and copper are 1.46 mg/kg and 13.72 mg/kg, respectively.
			Why is MHB6-P3 not being sampled for Co?	Cobalt is not being sampled at MHB6-P3 because the detected cobalt concentration in the Phase 1 sample (6.3 B mg/kg) is likely an extreme, but true background concentration (6.19 mg/kg).
50	N/A	Figures	Figure 4-8. Please explain why B1125N-P3 is not being sampled for Mo and Cu.	The molybdenum (1.6 B mg/kg) and copper (13.9 mg/kg) concentrations detected at B1125N are like extreme, but true background concentrations. The background concentrations for molybdenum and copper are 1.46 mg/kg and 13.72 mg/kg, respectively.
51	N/A	Figures	Figure 4-9. Please explain why a confirmatory sample for Zn is not being taken at MH53-P3.	The zinc concentration detected at MH53 (49.7 mg/kg) is likely an extreme but true background concentration (38.8 mg/kg). The absence of zinc concentrations above background in the surrounding soil samples supports this theory
52	N/A	Figures	Figure 4-10. Why is the Monitoring Well being installed upgradient of the previously noted groundwater contamination?	As discussed in Section 4 4 of the work plan (Page 31, last paragraph), the proposed monitoring well, WITCTA057, is located upgradient of the previously noted groundwater contamination to determine whether the tert-butylbenzene concentrations in the area are associated with the fuel spill at AOC-4
53	N/A	Figures	Figure 4-11. Please indicate the direction of groundwater flow on this figure and figure 4-12.	Groundwater flow direction will be added as requested.

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TO UNITEC
FM ERD
Rec'd 2 Feb 2001
F41/R/Ct File TKS

IT Corporation
312 Directors Drive
Knoxville, TN 37923-4799
Tel 865 690.3211
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A Member of The IT Group

the IT group

February 1, 2001

TO: Christina H.

RECEIVED FEB 2 2001 AFCEE/MSP Data Library

Mr. Charles Pringle
AFCEE/ERD
3207 North Road
Brooks AFB, TX 78235-5363

Subject: **Final Phase 3 RCRA Facility Investigation Work Plan for the Sanitary Sewer System, Solid Waste Management Unit No. 66**
NAS Fort Worth JRB, Fort Worth, Texas
Contract F41624-94-D-8047, Delivery Order 039
IT Project Number 768579

Dear Mr. Pringle:

Please find the enclosed copy of the Final Work Plan/Field Sampling Plan for the subject investigation of both the Phase 3 Sanitary Sewer System and Line Break RFI. We anticipate mobilizing as soon as investigation locations are cleared by SM&P. This could be as early as February 12, 2001.

Please call me at (865) 690-3211 if you have any questions or concerns.

Sincerely,

12 Feb 2001
Start Field Work

Willard S. Carter, PMP
Sr. Project Manager

Enclosures

cc: C. Hewitt (Unitec) – 2 copies
M. Dodyk (AFCEE) – 2 copies
B. Summers (IT) – 2 copies
K. Hurley (HGL) – 1 copy
File

FINAL

PHASE 3 RCRA FACILITY INVESTIGATION WORK PLAN FOR THE SANITARY SEWER SYSTEM SOLID WASTE MANAGEMENT UNIT NO. 66

NAS FORT WORTH JRB
FORT WORTH, TEXAS

CONTRACT NO. F41624-94-D-8047, DELIVERY ORDER D0039

Project No. 768579

February 2001

Final
Phase 3 RCRA Facilty Investigation
Work Plan for the Sanitary Sewer System
Solid Waste Management Unit No. 66
NAS Fort Worth JRB, Fort Worth, Texas

Prepared for:

Air Force Center for Environmental Excellence
HSC/PKVCB
Headquarters Human Systems Center
Brooks Air Force Base, Texas 78235-5353

Prepared by:

IT Corporation
312 Directors Drive
Knoxville, Tennessee 37923

February 2001

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List of Acronyms

AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AFP	Air Force Plant
AOC	area(s) of concern
CAM	Continuous Automated Monitoring
CWA	Clean Water Act
DOD	U.S. Department of Defense
DPT	direct-push technology
DQSR	data quality summary report
EPA	U.S. Environmental Protection Agency
^{o}F	degrees Fahrenheit
FSP	field sampling plan
gal/year	gallons per year
GFAA	graphite furnace atomic absorption
HGL	Hydrogeologic
HSP	health and safety plan
ICP	inductively coupled plasma
IRP	installation restoration program
IT	IT Corporation
JP-4	jet propulsion (grade-4) fuel
JRB	Joint Reserve Base
Law	Law Environmental, Inc.
M&E	Metcalf & Eddy
MDL	method detection limit
MEK	methyl ethyl ketone
MGD	million gallons per day
mg/L	milligrams per liter
MOGAS	motor gas
MQL	method quantitation limit
MSC	media-specific concentration
msl	mean sea level

List of Acronyms *(Continued)*

NAS	Naval Air Station Joint Reserve Base
NCTCOG	North Central Texas Council of Governments
NPDES	National Pollution Discharge Elimination System
OWS	oil/water separator
PAH	polynuclear aromatic hydrocarbons
Parsons	Parsons Engineering Science
PCB	polychlorinated biphenyl
PET	preliminary equipment test
POL	petroleum, oils, and lubricants
POTW	publicly owned treatment works
PQL	practical quantitation limit
QA/QC	quality assurance/quality control
QAPP	quality assurance project plan
QPP	quality program plan
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RRP	risk reduction program
RRS	risk reduction standard
SAC	Strategic Air Command
SAP	sampling and analysis
SPLP	synthetic precipitation leaching procedure
SVOC	semivolatile organic compound
SWMU	solid waste management unit
TCA	trichloroethane
TCE	trichloroethene
TNRCC	Texas Natural Resource Conservation Commission
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
UTL	upper tolerance level
VOC	volatile organic compound
WP	work plan
WSA	weapons storage area

1.0 Introduction

IT Corporation (IT) has been contracted by the Air Force Center for Environmental Excellence (AFCEE) to perform Phase 3 of a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) to characterize soil and groundwater conditions near the Sanitary Sewer System (Solid Waste Management Unit [SWMU] 66) at the Naval Air Station (NAS) Fort Worth Joint Reserve Base (JRB) in Fort Worth, Texas. One portion of the Phase 3 investigation will focus on characterizing potential impacts to soil and groundwater as a result of line breaks (e.g., cracks, bad connections) in the sewer piping. Additionally, the Phase 3 RFI activities will include confirmation and/or delineation of contaminants detected in soil and/or groundwater at concentrations that exceeded background concentrations as defined by the Texas Natural Resource Conservation Commission (TNRCC) during Phase 1 and/or Phase 2 of the RFI activities. IT is performing this work under Contract F41624-94-D-8047, Delivery Order 39.

1.1 Project Objectives

The line break portion the Phase 3 activities is based upon data obtained from an integrity evaluation of the Sanitary Sewer System by a U.S. Navy contractor (Metcalf & Eddy). The objective of the line break investigation portion of the Phase 3 RFI is to: evaluate the results of the sanitary sewer infrastructure evaluation (Metcalf & Eddy, 1999), identify line break locations where additional soil and groundwater data is needed, mobilize and collect the required soil and groundwater samples, and compile and interpret the additional data into a RFI addendum report. The objective of the confirmation/delineation portion of the Phase 3 RFI is to: compare the results of soil and groundwater samples collected during Phase 1 and Phase 2 portions of the RFI to Risk Reduction Standard 1 (RRS 1) concentrations (i.e., background concentrations), identify sample locations where confirmation or delineation samples are required, collect the required soil and groundwater samples, and compile and interpret the additional data into a RFI addendum report. The RFI addendum report will include recommendations for site closure, additional sampling, or remediation, as needed.

After completion of the draft Sanitary Sewer System RFI report (IT, 1997a) and subsequent Phase 2 sampling, TNRCC comments indicated that additional delineation of contaminants detected above RRS 1 and/or RRS 2 would be required for completion of the RFI. Compliance with TNRCC RRSs for completion of the RFI will require additional lateral delineation of

contaminants exceeding background upper tolerance levels (UTL) for inorganic constituents, or method quantitation limits (MQL) for organic constituents. This Phase 3 Sanitary Sewer System RFI Work Plan (WP) will provide the rationale for selecting the proposed sampling locations and present the number of soil and groundwater samples proposed and the required analyses required to confirm/delineate contaminant concentrations detected above RRS 1 during Phases 1/Phase 2 of the RFI, and to characterize the impacts of the line breaks in the Sanitary Sewer System at NAS Fort Worth JRB. The WP will also discuss the methods for reporting the regulatory status of the Sanitary Sewer System in accordance with Texas Natural Resource and Conservation Commission (TNRCC) Risk Reduction Standards (RRS). The WP includes by reference the findings provided in the draft Sanitary Sewer System RFI report (IT, 1997a).

This WP appends both the Phase 1 Sanitary Sewer System RFI WP (IT, 1997b) and FSP (IT, 1997c) and the Phase 2 RFI WP (IT, 2000a). The WP will identify the locations along the Sanitary Sewer System that require investigation, specify the sample collection techniques and analytical methods, explain the rationale for the sample collection, and provide sufficient information to serve as the Phase 3 FSP. The quality program plan (QPP) to be followed during the Phase 3 RFI activities was initially presented in the Phase 1 Sanitary Sewer System RFI WP (IT, 1997b). The QPP includes a health and safety plan (HSP) and a sampling and analysis plan (SAP). The HSP is a project-specific and site-specific plan and will not be amended based upon the nature of the Phase 3 RFI activities. The SAP consists of two volumes: the field sampling plan (FSP) and the quality assurance project plan (QAPP). The FSP (IT, 1997c) is amended by this WP to specify locations that require additional investigation, and to describe the methods to be used in the collection and analysis of additional data samples that will be collected during the Phase 3 RFI activities. The QAPP documents the data quality objectives and the quality assurance/quality control (QA/QC) procedures to be used in the performance of field and laboratory work.

1.2 Regulatory Requirements

Data collected during Phase 1 and Phase 2 RFI activities were evaluated to verify suitability of closure under TNRCC RRSs. The TNRCC RRSs specified in (30 TAC 335 Subchapter S) specify a consistent risk management policy to define what cleanup actions are necessary to protect human health and the environment. The RRSs define the following three tiers of cleanup standards:

- RRS 1 requires a cleanup to nondetectable levels or background levels unaffected by waste management activities for all contaminants. This level of a cleanup is commonly referred to as "clean closure." RRS1 closure may not require cleanup if detected concentrations are below background concentrations. Deed certification on the property and post-closure care is not required under this standard.

- RRS 2 requires a cleanup to health-based levels such that any substantial threat to human health or the environment is reduced to acceptable levels. These cleanup standards are termed media-specific concentrations (MSC). Examples of MSCs for selected chemicals are tabulated in the regulations (30 TAC Section 336.568 Appendix II) and equations are prescribed for use in calculating MSCs for chemicals not listed. RRS2 closure may only require delineation of contamination, in lieu of cleanup, in the event detected contaminant concentrations do not exceed MSCs (i.e., concentrations exceed background concentrations only). Deed certification on the property is required.

- RRS 3 requires a site-specific baseline risk assessment to define alternative cleanup levels based on health effects. Deed certification and post-closure care are required under this standard.

The results for soil and groundwater samples collected for analysis of inorganic compounds are compared to the approved base-specific background UTLs as presented in the final basewide background study (Jacobs Engineering [Jacobs], 1998) to determine if a release has occurred from a particular oil/water separator (OWS). For samples analyzed for organic compounds, the results were compared to MQLs determined from a particular analytical method for a given constituent. Additionally, all analytical results are compared to available MSCs to determine whether the detected contaminants pose a threat to shallow groundwater.

- Subsequent evaluation of the draft Sanitary Sewer System RFI report (IT, 1997a) resulted in recommendations for additional evaluation of selected segments of the Sanitary Sewer System. Selected line segments were recommended for either additional evaluation or delineation of the extent of contamination for determining the closure status. Based upon the results of Phase 3 sampling, the Sanitary Sewer System will be recommended for either RRS 1 or RRS 2 closure. The TNRCC RRSs defined in 30 TAC 335 Subchapter S specify a consistent risk management policy to define the cleanup actions necessary to protect human health and the environment.

The draft final Sanitary Sewer System RFI report will present areas of sewer segment contaminant concentrations that did not exceed background UTL, permitting recommendation for closure under RRS1. Where contaminant concentrations exceeded background UTLs only and not MSCs, the Sanitary Sewer System segment or area will be recommended for RRS 2, which requires deed certification. For an area of the Sanitary Sewer System that has contaminants exceeding both UTLs and MSCs in soil and/or groundwater, the area will be recommended for RRS 2 closure.

1.3 Work Plan Organization

Chapter 2.0 describes the background and existing site information for the Sanitary Sewer System at NAS Fort Worth JRB. Chapters 3.0, 4.0, and Appendix B will comprise the FSP for the Phase 3 RFI investigation activities. Chapter 3.0 presents the rationale and proposed sampling strategy that will be used to characterize soil and groundwater impacts associated with line breaks in the Sanitary Sewer System. Chapter 4.0 presents the results of the Phase 2 investigation activities and presents the rationale and proposed sampling strategy required to confirm or delineate contaminant concentrations detected above RRS 1 and/or RRS 2 during Phases 1 and 2 of the RFI. Chapter 5.0 presents the reporting requirements for data collected during the Phase 3 investigation, and Chapter 6.0 presents the project schedule. Chapter 7.0 presents the project management approach that will be used during completion of the Phase 3 activities. Chapter 8.0 presents the references cited during completion of this WP.

Tables and figures are included in the text. Appendices provided in support of this RFI report include: Appendix A, Analytical results from the Phase 2 RFI activities, and Appendix B, Sanitary Sewer System RFI FSP procedures.

2.0 Background and Existing Site Information

2.1 Site Description

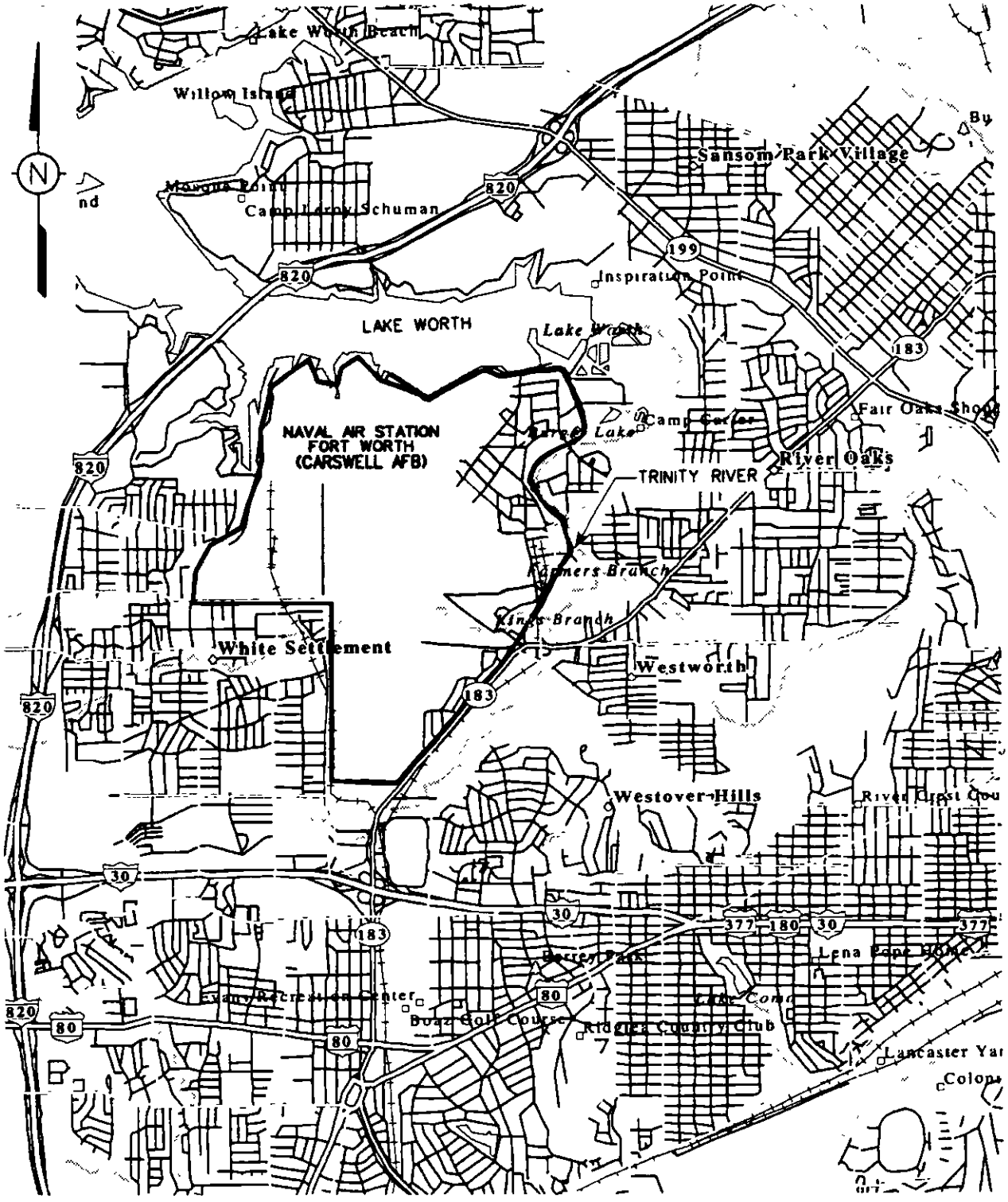
NAS Fort Worth JRB is located in Tarrant County, 8 miles west of downtown Fort Worth, Texas (see Figure 2-1). The Base is located at approximately 32 degrees north latitude and 97 degrees west longitude. The NAS Fort Worth JRB property, totaling 2,555 acres, consists of the main Base and two noncontiguous parcels. The main Base comprises 2,264 acres and is bordered by Lake Worth to the north, the West Fork of Trinity River and Westworth Village to the east, Fort Worth to the northeast and southeast, White Settlement to the west and southwest, and Air Force Plant (AFP) 4 to the west. The area surrounding NAS Fort Worth is mostly suburban, including the residential areas of the cities, with their respective populations from the 1990 census; Fort Worth (447,600), Westworth Village (2,350), Sansom Park Village (3,928), River Oaks (6,580), and White Settlement (15,472). The Sanitary Sewer System is located throughout the industrialized areas of NAS Fort Worth JRB.

2.2 Environmental Setting

2.2.1 Climate

The climate in the Fort Worth region is subhumid with mild winters and hot, humid summers. The average annual precipitation is 31.5 inches, with the majority falling between April and October. The average annual temperature is 66 degrees Fahrenheit (°F). July is the hottest month, with an average monthly temperature of 86°F, while January is the coldest month, with an average monthly temperature of 45°F. Temperature changes are rapid and often change 20 to 30 degrees in several hours. The average annual relative humidity is 63 percent.

Prevailing winds are primarily southerly from March through November and northerly from December through February; the average wind speed is 8 knots. Severe thunderstorms with wind speeds of 65 knots and hail storms are common. Climate conditions in summer make tornado formations possible, although there is more property damage each year due to hail than to tornadoes.



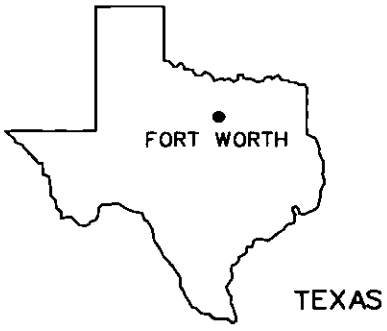


FIGURE 2-1
SITE LOCATION MAP

PHASE 3 SANITARY SEWER RFI
NAVAL AIR STATION FORT WORTH
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 12/11/00	DATE LAST REV	DRAFT CHCK BY C TUMLIN	INITIATOR W CARTER	DWG NO. \768579es 248
DRAWN BY M CRAFT	DRAWN BY	ENGR CHCK BY W CARTER	PROJ MGR W CARTER	PROJ NO 765725

08 16 32 12/11/00

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2.2.2 Sensitive Habitats

Sensitive habitats include those areas that can potentially restrict the reuse of the land, such as wetlands under the jurisdiction of the Clean Water Act (CWA), plant communities that are designated as unusual or of limited distribution, and important seasonal use areas for wildlife (e.g., migration route, breeding areas, or crucial summer/winter habitat that are of agency concern). This includes areas associated with a protected species, or those areas critical to a species of population.

The shore of Lake Worth is considered a sensitive habitat due to its importance to migratory birds, including state- and federal-listed species. The great blue heron rookeries by the Fort Worth Nature Center are sensitive nesting areas along the northern banks of Lake Worth. The birds are especially vulnerable to human intrusion during the nesting season. These rookeries are protected as sensitive wildlife areas by the Texas Department of Parks and Wildlife.

2.2.3 Wetlands

NAS Fort Worth has a total of 0.6 acres of jurisdictional wetlands designated by U.S. Army Corps of Engineers (USACE), Fort Worth, Texas. Wetlands are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Areas that are periodically wet, but do not meet all three criteria (hydrophytic vegetation, hydric soils, and wetland hydrology), may still be jurisdictional wetlands subject to Section 404 of the federal CWA if they qualify as problem wetlands.

Drainage ditches are not considered as "waters of the United States" and are not classified as "jurisdictional" for protection under Section 404 of the CWA by the Fort Worth USACE. Although water flows through Farmers Branch Creek and is found in various small ponds on the golf course, very little wetland vegetation is associated with these areas. Likewise, wetland vegetation along Lake Worth is infrequent and usually emergent when present. These areas do not support enough wetland cover to be classified as jurisdictional wetlands. Jurisdictional wetland areas on station are found in the natural drainage stream southeast of AFP 4, totaling approximately 0.5 acre, and on the west side of the off-site Weapons Storage Area (WSA), totaling approximately 0.1 acre.

2.2.4 Surface Waters

NAS Fort Worth and all of Tarrant County are located within the Trinity River watershed. Surface water resources in the vicinity of the station include the West Fork and Kings Branch of the Trinity River, Farmers Branch Creek, Lake Worth, two ponds located in the golf course area, and one small pond in the off-site WSA.

The amount of water the Trinity River receives is controlled by the watershed runoff from impervious areas during storms, by releases and overflows from the series of man-made reservoirs along the forks and tributaries by natural runoff, and by the discharge of effluent from sewage treatment plants. Lake Worth, a man-made reservoir constructed in 1914 on the West Fork of the Trinity River, is located north of NAS Fort Worth and is owned and operated by the City of Fort Worth. The West Fork of the Trinity River flows southeastward from the Lake Worth dam and spillway and flows along the eastern boundary of NAS Forth Worth. These waters are used for public water supply and recreation. The Lake Worth spillway elevation is 594 feet above mean sea level (msl) and has a maximum discharge capacity of 55,000 cubic feet per second. Lake Worth averages 6 feet in depth, with a maximum depth of 28 feet, and covers an area of 3,558 acres. It is 12 miles long and its drainage area covers approximately 2,064 square miles. The lake has a conservation storage capacity of 38,130 acre-feet (or approximately 12.4 billion gallons).

Surface water is the main source of potable water in the vicinity of NAS Fort Worth. The City of Fort Worth Water Department is the primary supplier to the areas surrounding and including the station. Water from the Farmers Branch Creek is used to irrigate the on-station golf course. White Settlement and Sansom Park obtain water from 12 and 9 groundwater wells, respectively, but when required, they purchase surface water from Fort Worth to supplement their water supplies. NAS Fort Worth purchased 0.93 million gallons per day (MGD), 0.77 MGD, and 0.76 MGD of water from Forth Worth in 1989, 1990, and 1991, respectively.

Surface drainage at NAS Fort Worth is collected by the storm drainage system and routed into the sewer system, or as outfall into Lake Worth. An underground drainage culvert conducts surface runoff generated from areas west of the NAS Fort Worth eastward to Farmers Branch Creek. After exiting the underground culvert, Farmers Branch Creek flows eastward through the

on-Base golf course before flowing into Kings Branch Creek and eventually discharging into the West Fork of the Trinity River at the southeastern part of the Base. Farmers Branch is an intermittent stream that receives most of its flow from surface water runoff discharged into the creek from storm drains, culverts, and overland flow. Several springs discharge into Farmers Branch Creek as it flows through the on-Base golf course.

The North Central Texas Council of Governments (NCTCOG) has implemented the Continuous Automated Monitoring (CAM) system. Two monitoring stations are located along the West Fork of the Trinity River, downstream from NAS Fort Worth. Current Results of analyses of water from the first CAM station downstream from the NAS Fort Worth showed that 100 percent of the samples were below the criteria value of 5.5 milligrams per liter (mg/L) for dissolved oxygen, and that measure of acidity and alkalinity (pH) values range from 6.6 to 9.8 due to the presence of substantial attached algal communities. The U.S. Environmental Protection Agency (EPA) secondary drinking water standard for pH is a range from 6.5 to 8.5; this range is a guideline, not a requirement.

Storm water runoff from the NAS Fort Worth that is not routed to the Base or city sewer system is discharged into Lake Worth. The outfall is permitted under the National Pollution Dishcarge Elimination System (NPDES) and monitoring results document compliance with permit discharge limitations.

The water quality of Lake Worth is moderately hard, and contains slightly elevated salt levels during the warm summer season. Historically, Lake Worth has experienced problems with high sediment loads. Lake Worth was included in the 1990 nonpoint source report for having known problems with sedimentation from agricultural and vacant lands. The sedimentation problems have been reduced by using Eagle Mountain Lake as a sediment trap.

The potential for contamination of surface water is present at several locations on NAS Fort Worth. Potential for migration of hazardous contaminants through the surface water is considered high, primarily due to the proximity of identified sites to the West Fork of the Trinity River, Farmers Branch Creek, and Lake Worth. In addition, shallow groundwater carrying dissolved contaminants may discharge to these surface waters.

2.2.5 Geography and Physiography

NAS Fort Worth is located within the Grand Prairie section of the Central Lowlands Physiographic Province. The area is characterized by broad terrace surfaces sloping gently eastward, interrupted by westward-facing escarpments. The topography of the Base is fairly flat, except for areas near Farmers Branch Creek and the Trinity River. Elevations average 650 feet above msl and range from 550 feet above msl in the east to 690 feet above msl in the southwest.

Soils in the area generally consist of the Aledo-Bolar-Sanger Association which is defined as gently sloping to moderately steep, very shallow to deep, loamy and clayey soils on uplands.

The land uses west of the NAS Fort Worth are predominantly residential and industrial. These include single-family residences, commercial centers, AFP 4, and an industrial complex in White Settlement.

The predominant development south of the NAS Fort Worth is the commercial area located at the Interstate 30 and State Highway 183 interchange. This area includes a discount retail center, a regional shopping mall, and a convenience center.

Various types of residential development occur southeast of the NAS Fort Worth, north of Interstate 30. South of River Oaks Boulevard and Roaring Springs Road are country club estates and upscale townhouses. Further south are middle- to upper-income, single-family housing, and multi-family units mixed with commercial office development. Single-family housing is also found on the eastern side of the NAS Fort Worth, from the Kings Branch housing tract north to Meandering Road.

Public/recreational land uses occur north of the NAS Fort Worth, surrounding Lake Worth. Public access along the southern shore of Lake Worth is currently restricted due to NAS Fort Worth JRB activities. A fish hatchery, YMCA camp, and private recreation lands occur along the West Fork of the Trinity River, northeast of the NAS Fort Worth.

2.2.6 Regional Geology

Quaternary alluvium is found at the surface through most of the NAS Fort Worth area. The alluvium consists of floodplain and fluvial terrace deposits of gravel, sand, silt, and clay that

occur as a veneer on the eroded surface of Upper Cretaceous strata. The Quaternary alluvium found throughout the area was deposited by the Trinity River in terrace deposits along the river valley banks as a result of changing sea level during the Pleistocene and Holocene (Recent) Epochs. Reworking and deposition of these deposits by the ancestral and present Trinity River has created a series of Pleistocene age "terraced" river alluvium deposits of varying elevations placed by the river at various elevations due to its corresponding level influence by sea level changes during Quaternary continental glaciation. The Pleistocene terrace deposits, consisting of gravel, sand, and silt, are found at higher topographic elevations than the Holocene age alluvial deposits located in the alluvial-filled valleys of present streams.

Previous drilling activities at the Naval Air Station indicate that the alluvial deposits vary in thickness from less than 10 feet to about 50 feet in thickness and generally thicken in an east to southeastern direction toward the Trinity River. The irregular thickness of the alluvium is due to depositional events, stream channeling, and erosion. In general, silt and clay with varying amounts of sand and gravel occur at the land surface down to depths of 5 to 10 feet. Underlying the silt and clay is a sand and gravel unit that normally increases in grain size with increasing depth. The sand deposits are fine- to coarse-grained, tan to rust in color, and composed predominantly of quartz grains. Gravel is mostly limestone and fossilized limestone shell fragments ranging in size from fine to cobbles. The gravels were deposited as channel lag deposits on the scoured upper surface of the underlying Cretaceous strata. The alluvial deposits are heterogeneous in nature, with changes in stratigraphy occurring over very short distances due to their depositional environment.

Underlying the Quaternary alluvium are the Cretaceous-aged Goodland and Walnut Formations. Both formations consist of interbedded, fossiliferous, hard limestone and calcareous shale. The rock is fractured and there is considerable jointing and flaking, which gives the limestone a fractured appearance. The Goodland Limestone is comprised of white, chalky, fossiliferous, thinly to massively bedded, resistant limestone, and gray to yellow-brown silty marl. Underlying the Goodland is the Walnut Formation. The Walnut Formation, about 20 to 30 feet thick in the vicinity of NAS Fort Worth, consists of indurated fossiliferous limestone interbedded brown sandy clay, thinly bedded fossiliferous clay, fissile shale, and iron-stained earthy limestone. These strata are generally dry, although small amounts of water are occasionally present in the shale and clay units (Radian Corporation [Radian], 1991).

The Cretaceous-age strata have a regional dip to the southeast. The surface elevation of the Cretaceous strata surface varies considerably across the area of the NAS due to erosion of the Trinity River and its ancient stream course. The Goodland and Walnut Formations have been removed by erosion of the Trinity River to the west of NAS Fort Worth and along the erosional valley of the Trinity River to the north and the east of the site. The locally irregular topography of the top of the bedrock is characteristic of an erosional surface modified by fluvial processes, which is characterized by the variable nature and thickness of the overlying sequence of Quaternary alluvial sediments.

Unconformably underlying the Goodland and Walnut Formations is the Cretaceous-aged Paluxy Formation. Regionally, the Paluxy Formation is divided into upper and lower sand members by a shale unit. The sands in the upper part of the Paluxy are reported to be fine-grained with shale interbeds. The lower sand member generally consists of two separate and distinct sand strata, but the individual sand beds do not maintain constant thickness or lithology over long distances. The lower part of the Paluxy Formation generally consists of coarse-grained sand that grades upward into fined-grained sand with variable amounts of shale and limestone. The sandstone, composed of fine- to coarse-grained white quartz, is well-sorted, poorly consolidated, and cross-bedded. Iron and pyrite nodules occur in the sandstone, and lignite is locally present. The Paluxy Formation thickness ranges from 140 to 190 feet, averaging 160 feet in Tarrant County (Radian, 1991).

The Paluxy Formation is exposed along the southern shore of Lake Worth at the northern boundary of the facility and along the erosional channel of the Trinity River. The Paluxy Formation either is aerially exposed or is in contact with overlying Quaternary alluvium where the Goodland and Walnut Formations have been removed by erosion.

2.2.7 Hydrogeology

Three hydrogeologic units exist beneath NAS Fort Worth that are relevant to subsurface conditions. From the shallowest to the deepest, they are: 1) the Quaternary alluvium aquifer, containing unconfined groundwater associated with the Pleistocene terrace and the Trinity River alluvial deposits, 2) an aquitard of predominantly dry limestone of the Goodland and Walnut Formations, and 3) an aquifer in the Paluxy Formation. All groundwater samples for this

investigation were collected from depths of 15 to 25 feet deep in the Quaternary alluvium aquifer.

The Quaternary alluvial groundwater is found under unconfined conditions at NAS Fort Worth. Isolated areas of apparent semiconfined conditions at transition zones between stratigraphic terrace units were encountered during the filed investigation. Low permeability is typical of the alluvium because of the large amounts of clay and silt. However, there are zones of greater permeability in the saturated sands and gravels of former channel deposits. Recharge to the water-bearing sediments is local, from rainfall and infiltration from stream channels and drainage ditches. The direction of groundwater flow is generally controlled either by bedrock topography or discharge zones at primary or secondary streams. Previous reports indicate that the groundwater flow in these sediments across the facility is generally toward Farmers Branch Creek or eastward toward the Trinity River located at the eastern boundary of the facility. Quaternary alluvium river channel deposits at the western boundary of NAS Fort Worth had a measured hydraulic conductivity of 2.9×10^{-1} from a 1991 pump test (Radian, 1991). This test was conducted in an area of higher permeability due to the well being located in a former river channel gravel deposit at the western end of White Settlement Road. Additional aquifer tests conducted during investigation of ST-14 indicated hydraulic conductivities for these sediments in the range of 2×10^{-5} to 2.4×10^{-2} feet per minute (Parsons Engineering Science [Parsons], 1996).

Groundwater leakage may occur to the underlying Paluxy Formation in areas where the Walnut Formation aquitard is significantly thinned by erosion or eroded away. The Walnut Formation is absent along the station where the West Fork of the Trinity River has removed the unit due to erosion. The unconfined groundwater found in the Quaternary alluvium is generally separated from the underlying Paluxy Aquifer by the low permeability limestones and calcareous shales where the Goodland and Walnut Formations are present. The aquitard is composed of moist clay and shale layers interbedded with dry limestone beds.

Vertical hydraulic conductivity of the competent Walnut Formation was measured on core samples collected during the AFP-4 remedial investigation. The calculated logarithmic mean of the hydraulic conductivity values is 7.0×10^{-10} centimeter per second. Hydrographs from paired upper zone Quaternary alluvium and Paluxy Formation monitoring wells indicate there is little

flow from the overlying alluvial aquifer to the Paluxy Formation in those areas where the Walnut Formation is not deeply eroded. In those areas where erosion has cut into the Walnut Formation, the potential exists for downward migration of recharge to the Paluxy Formation (Kuniasky et. al., 1996).

The Paluxy Aquifer is the shallowest Cretaceous-aged aquifer underlying NAS Fort Worth. In the area, water in the uppermost part of the Paluxy Formation would occur under confined conditions beneath the Goodland and Walnut Formations, except where these units have been eroded away. However, extensive groundwater pumping in the Fort Worth area, including the cities of White Settlement and Samson Park, has lowered the Paluxy Aquifer potentiometric surface below the top of the formation, resulting in unconfined conditions.

Recharge to the Paluxy Aquifer occurs where the formation crops out. The Paluxy Formation crops out west of AFP 4, and north of NAS Fort Worth in the bed of Lake Worth. Lake Worth is a major recharge area for the aquifer and creates a potentiometric high in its vicinity. Regional groundwater flow is southeastward in direction of the regional dip. Transmissivities in the Paluxy Aquifer range from 1,263 to 13,808 gallons per day per foot, and average 3,700 gallons per day per foot (Radian, 1991).

2.3 Site History and Operations

2.3.1 Ownership

The facility known as NAS Fort Worth JRB was originally a modest dirt runway built to service an aircraft manufacturing plant located where AFP 4, is now located. When it was established in 1942, the installation was referred to as the Tarrant Field Airdrome and was originally under the jurisdiction of the Gulf Coast Army Air Field Training Command. The Strategic Air Command (SAC) assumed control of the installation in 1946 and the NAS Fort Worth served as headquarters of the Eighth Air Force. At that time, the 7th Bomber Wing became the NAS Forth Worth host unit. The NAS Fort Worth was renamed Carswell Air Force Base (AFB) in 1948 in honor of Fort Worth native, Major Horace S. Carswell.

In 1951, Headquarters 19 Air Division was located at Carswell AFB, where it remained until September 1988. The Air Combat Command assumed control of the NAS Fort Worth in 1992 with the disestablishment of SAC. On October 1, 1994, the U.S. Navy assumed responsibility for the facility and the name changed from Carswell AFB to NAS Fort Worth JRB. All further references to the facility in this document will appear as "NAS Fort Worth."

The Air Force Base Conversion Agency (AFBCA) is currently the on-site responsible party for installation restoration program (IRP) sites and the RCRA Part B permit holder for SWMUs. The AFBCA operating location is tasked with: coordinating closure activities, maintaining a caretaker force, and serving as an Air Force liaison supporting NAS Fort Worth property disposal and interim leases. AFBCA will remain the on-site responsible party for areas outside the 301 Tactical Fighter Wing area until the disposal of all NAS Fort Worth properties is complete (Jacobs, 1995).

2.3.2 Operation

Before the construction of the initial airfield facilities in 1942, the area now occupied by NAS Fort Worth, was pasture land and woods. The majority of the NAS Fort Worth property was acquired in the 1940s, with most of the property acquired from the City of Fort Worth in 1941. Additional property, including most of the south Base, the hospital area, and the Off-Site Weapons Storage Area, was acquired during the 1950s. Kings Branch and south Base residential areas were acquired in 1960. Several miscellaneous additional properties totaling less than 10 acres have been acquired since 1970 (Jacobs, 1995a,b).

After 1941, the former Carswell AFB mission was a bomber training base. Carswell AFB was realigned as NAS Fort Worth in 1994. Wastes have been generated and disposed of at NAS Fort Worth since the beginning of industrial operations in 1942. The major industrial operations at NAS Fort Worth included: maintenance of jet engines, aerospace ground equipment, fuel systems, weapons systems, and hydraulic systems; maintenance of general and special purpose vehicles; aircraft corrosion control; and nondestructive inspection activities (Jacobs, 1995a,b).

Waste oils generally refer to lubricating fluids, such as crankcase oils and synthetic turbine oils. Hydraulic fluids have also been included in this category. Recoverable fuels refer to fuel drained from aircraft tanks and vehicles, such as jet petroleum grade 4 (JP-4) and motor gasoline

(MOGAS). Spent solvents and cleaners refer to liquid used for degreasing and general cleaning of aircraft, aircraft systems, electronic components, and vehicles. This category includes PD-680 and various chlorinated organic compounds, such as carbon tetrachloride, trichloroethene (TCE), and 1,1,1-trichloroethane (TCA).

Specific types of solvents used by the Air Force have changed over the years. In the 1950s, carbon tetrachloride was in common use. Its use was replaced by TCE around 1960. Since then, TCE and 1,1,1-TCA have been commonly used; however, TCE usage has decreased in favor of 1,1,1-TCA. Today, PD-680 Type II, 1,1,1-TCA, and TCE are used.

Waste paint solvents or thinners and strippers are generated by corrosion control activities. Typical thinners include isobutyl acetate, toluene, methyl ethyl ketone (MEK), isopropanol, naphtha, and xylene. Paint strippers generally contain such compounds as methylene chloride, toluene, ammonium hydroxide, and phenolics (CH2M Hill, Inc. [CH2M], 1996).

All of these operations generated waste materials, primarily oils, recoverable fuels, spent solvents, and cleaners. Most waste oils, recovered fuels, spent solvents, and cleaners were either burned at fire training areas on NAS Fort Worth, reused on NAS Fort Worth, or processed through the Defense Property Disposal Office. An undetermined amount of these materials were discharged to the Sanitary Sewer System at NAS Fort Worth (Jacobs, 1995a,b).

2.3.3 Results of Previous Site Investigations

In 1984, the IRP was initiated at NAS Fort Worth and began with a program records search conducted by CH2M. Since 1984, Air Force IRP studies have been conducted by several contractors, and have focused on the identification and characterization of waste disposal areas and SWMUs identified in the installation's RCRA Part B permit (HW-50289).

Pursuant to the Defense Base Closure and Realignment Act of 1990, NAS Fort Worth was selected for closure and associated property disposal during Round II Base Closure Commission deliberations. This announcement initiated the closure and began disposal and reuse planning activities.

The ongoing IRP is under a Defense-State Memorandum of Agreement, which is a financial reimbursement agreement between the U.S. Department of Defense (DOD) and the State of Texas. NAS Fort Worth JRB has a RCRA Part B permit issued by the TNRCC in February 1991 that establishes requirements and procedures for investigating RCRA SWMUs. Most NAS Fort Worth IRP sites are also SWMUs and are regulated under this permit.

The Sanitary Sewer System was designated as SWMU No. 66 in a RCRA Facility Assessment (RFA) report prepared for the EPA (A. T. Kearney, 1989). The RFA reported the Sanitary Sewer System collects sanitary wastewater as well as some industrial wastewater from NAS Fort Worth facilities, including the Visual Information Center Work Station Waste Accumulation Areas (SWMU No. 13). The report indicated other industrial activities that discharged waste to the Sanitary Sewer System include:

- Aerospace Ground Equipment Maintenance Shop at Building 1414 (1,800 pounds per year aircraft soap)
- Battery Shop at Building 1410 (500 gallons per year [gal/year] of neutralized electrolyte)
- Fuel Systems Shop at Building 1048 (300 gal/yr of JP-4)
- Nondestructive Investigation Laboratory at Building 1414 (500 gal/yr of film development chemicals)
- Jet Engine Test Cell at Building 1015 (350 gal/yr of JP-4, 225 gal/yr of oil and hydraulic fluid)
- Wash Rack at Building 29 (15,000 gal/yr of PD-680, 5,000 gal/yr of aircraft soap)
- Aerospace Ground Equipment Maintenance Shop at Building 1628 (100 gal/yr of PD-680)
- Wash Rack at Building 18 (9,000 gal/yr of PD-680, 3,100 gal/yr of aircraft soap).

The wastewater collected by the Sanitary Sewer System is discharged into the City of Fort Worth publicly-owned treatment works (POTW). The Sanitary Sewer System has been in operation since the Base was activated in 1942.

NAS Fort Worth currently has 19 IRP sites. A Phase I records search conducted in 1984 identified 15 sites requiring further evaluation. Subsequent IRP investigations and other Base activities have identified an additional 4 sites. Thirteen of these sites are also RCRA SWMUs. The East Area Groundwater Site is suspected of being contaminated due to the presence of the IRP sites, but is not currently considered as a unique site. This IRP site is the responsibility of the adjacent AFP 4 and is not a NAS Fort Worth IRP site. The TCE plume is managed under the Federal Facilities Agreement for AFP 4, which is an NPL site (Jacobs, 1995a).

An investigation at 11 of the 21 OWS sites at NAS Forth Worth JRB was performed to assess contamination at the OWSs and evaluate the condition and future use of the OWSs (Law Environmental, Inc. [Law], 1995). The report indicated that 2 of the OWS separators, located at Building 1015 (SWMU No. 47) and Building 1194 (SWMU No. 35), were connected to the Sanitary Sewer System. The OWS at Building 38 was connected to a french drain and discharged to an unnamed stream (area(s) of concern [AOC] No. 14). The discharge connections of the remaining 7 OWSs investigation were not reported (Law, 1995).

A NAS Fort Worth OWS RFI closure report has been prepared by IT (2000b) to document that potential releases of regulated materials into the environment from five of the 21 OWS sites meet the requirements for closure using RRS 1 under the TNRCC Risk Reduction Program (RRP). The five sites that are presented for RRS 1 closure include the OWSs at Buildings 1101, 1320, 1423, 1656, and Building 4160 OWS (IT, 2000b).

The remaining 16 OWS sites discussed in the NAS Fort Worth OWS RFI addendum report (IT, 1998) require additional sampling to confirm and/or delineate contaminant concentrations detected during previous investigations. Two of these sites (OWS 1145 [AOC 13], and OWS 1628 [SWMU 7]) are being investigated by HydroGeoLogic, Inc. (HGL) and will be included in HGL's closure report. The remaining 14 OWS sites require additional sampling that is being completed during the Phase 2 and Phase 3 RFI work for OWSs (IT, 1999, 2000c).

IT performed Phase 1 of the Sanitary Sewer System RFI in early 1997 and presented the results of the investigation in the draft report (IT, 1997a). Based upon the findings identified during Phase 1 of the RFI, a Phase 2 investigation was conducted in April/May 2000 to provide

additional soil and groundwater data to supplement the Phase 1 results. Additional discussion of the Phase 1 and Phase 2 RFI results will be presented in Chapter 4.0 of this WP.

During the Phase 2 RFI activities, construction activities prohibited the collection of soil samples at 11 manhole locations. Therefore, the soil samples will be collected from these manholes during the Phase 3 RFI activities.

3.0 Line-Break Investigation

This chapter of the WP defines the scope of work to be performed during the investigation of line breaks that were identified by M&E (1999) during the integrity evaluation of the Sanitary Sewer System (SWMU 66). The purpose of the line break investigation is to collect the necessary analytical data to characterize the potential impacts to soil and groundwater in the vicinity of each line break. Investigation activities that will be completed during the characterization of the line breaks will include the collection of soil samples (one sample from the depth immediately below the sewer invert elevation, and one sample from the depth just above the water table) and the collection of groundwater screening data using direct-push technology (DPT). The DPT groundwater samples will be collected at locations where soil analytical data suggests that groundwater may be impacted. Results of the DPT groundwater investigation will be used to select locations for the installation and sampling of groundwater monitoring wells that would be required to verify potential releases to groundwater.

3.1 Rationale

Additional information on the integrity of the Sanitary Sewer System was provided in 1999 to the Air Force from the Navy. A Navy contractor (M&E, 1999) performed a video camera survey and prepared a report of the Sanitary Sewer System integrity. The information showed 95 locations where the sewer system pipe integrity was compromised by mechanical failure such as broken pipes, missing pipes, pipe cracks, offset and misaligned joints, and/or collapsed pipes. Since the previous Sanitary Sewer System draft RFI report (IT, 1997a) indicated minimal environmental concerns with joints at the sewer system manholes, this additional proposed work is to investigate the line segments between the manholes that exhibit structural failure.

Table 3-1 lists 95 locations where mechanical failure along the sewer piping where soil samples are recommended to be collected. Figure 3-1 displays the layout of the sanitary sewer at NAS Fort Worth JRB and Figures 3-2 through 3-8 display proposed soil sampling locations that require investigation during the line break portion of the Phase 3 investigation. Defects at the 95 locations provided in the M&E (1999) report include:

- Sewer line with broken pipe (33 locations)
- Sewer line with cracks (46 locations)

Table 3-1

Subsurface Soil Boring Samples and Analytical Parameters
Phase 3 Line-Break Investigation
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

(Page 1 of 4)

Analysis[2]			VOCs by SW8260B	PAHs by SW8310	TAL Metals by SW6010B/7000	SPLP Metals by SW1312/SW6010B (Trace)[3]
Location	Sample Depths[1]	Rationale for Soil Sampling at Location	None, 4°C	None, < 4°C	None, 4°C	
			14 Days	7 Days preext. 40 days postext	180 Days	
MH75-225	5-7 ft, GW Interface	Severe cracking	X	X	X	TBD
MH77-384	6-8 ft, GW Interface	Open Longitudinal Crack	X	X	X	TBD
MH55-90	8-10 ft, GW Interface	Separated and severely offset pipe joint	X	X	X	TBD
MH11D8-211	5-7 ft, GW Interface	Severe pipe cracking	X	X	X	TBD
MH11D7-179	5-7 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11D6-112	5-7 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11D5-75	5-7 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11J-190	8-10 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11I-100	4-6 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11I-250	4-6 ft, GW Interface	Broken pipe & offset joints	X	X	X	TBD
MH11H-49	5-7 ft, GW Interface	Broken & cracked pipe	X	X	X	TBD
MH11G-72	7-9 ft, GW Interface	Broken & collapsed pipe	X	X	X	TBD
MH11DA-59	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MH11DA-240	10-12 ft, GW Interface	Severe cracking	X	X	X	TBD
MH11A-295	17-19 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB15-50	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB15-150	10-12 ft, GW Interface	Severe pipe cracking	X	X	X	TBD
MHB13-5	10-12 ft, GW Interface	Severe pipe cracking	X	X	X	TBD
MHB7D-100	6-8 ft, GW Interface	Pipe Cracks	X	X	X	TBD
MHB9A-98	10-12 ft, GW Interface	Collapsed Pipe	X	X	X	TBD
MHB9-40	6-8 ft, GW Interface	Protruding service connection	X	X	X	TBD
MH15E11-100	9-11 ft, GW Interface	Severe pipe offset & open joints	X	X	X	TBD
MH15E5-20	6-8 ft, GW Interface	Broken pipe	X	X	X	TBD
MH15E4A-169	8-10 ft, GW Interface	Broken & cracked pipe	X	X	X	TBD
MH15I-200	5-7 ft, GW Interface	Severe pipe cracking	X	X	X	TBD
MH15G2-72	5-7 ft, GW Interface	Severe pipe offset	X	X	X	TBD
MH4C-169	7-9 ft, GW Interface	Broken pipe (infiltration)	X	X	X	TBD
MH9A-183	10-12 ft, GW Interface	Infiltration	X	X	X	TBD
MH13A1-60	7-9 ft, GW Interface	Broken pipe	X	X	X	TBD
MH13E-13	7-9 ft, GW Interface	Cracked pipe joint	X	X	X	TBD
MH18A-11	5-7 ft, GW Interface	Collapsed pipe	X	X	X	TBD

Table 3-1

Subsurface Soil Boring Samples and Analytical Parameters
Phase 3 Line-Break Investigation
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Analysis[2]			VOCs by SW8260B	PAHs by SW8310	TAL Metals by SW6010B/7000	SPLP Metals by SW1312/SW6010B (Trace)[3]
Location	Sample Depths[1]	Rationale for Soil Sampling at Location	None, 4°C	None, < 4°C	None, 4°C	
			14 Days	7 Days preext. 40 days postext	180 Days	
MH18A-107	5-7 ft, GW Interface	Broken pipe	X	X	X	TBD
MH15A-131	10-12 ft, GW Interface	Infiltration	X	X	X	TBD
MH15-208	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MH13-100	10-12 ft, GW Interface	Severe pipe cracking (infiltration)	X	X	X	TBD
MH13-300	10-12 ft, GW Interface	Severe pipe cracking (infiltration)	X	X	X	TBD
MH12-100	12-14 ft, GW Interface	Pipe corrosion	X	X	X	TBD
MH11-160	6-8 ft, GW Interface	Severe pipe cracking (infiltration)	X	X	X	TBD
MH9-50	10-12 ft, GW Interface	Pipe corrosion	X	X	X	TBD
MH8-150	8-10 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH8-60	8-10 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH7-250	8-10 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH7-400	8-10 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH7-650	8-10 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH5-125	7-9 ft, GW Interface	Cracking & missing pipe	X	X	X	TBD
MH14-100	5-7 ft, GW Interface	Severe pipe offset	X	X	X	TBD
MH15G1-80	5-7 ft, GW Interface	Broken & cracked pipe	X	X	X	TBD
MH15G1-260	5-7 ft, GW Interface	Broken & cracked pipe	X	X	X	TBD
MHB8-287	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB6-176	12-14 ft, GW Interface	Separated pipe joint	X	X	X	TBD
MH70A-100	8-10 ft, GW Interface	Severe pipe crack	X	X	X	TBD
MH11J-75	8-10 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MH11A-75	17-19 ft, GW Interface	Pipe collapse	X	X	X	TBD
MHB16-100	10-12 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MHB15A-75	10-12 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MHB13-80	7-9 ft, GW Interface	Pipe collapse	X	X	X	TBD
MHB9A-80	10-12 ft, GW Interface	Pipe collapse	X	X	X	TBD
MH15E10-50	5-7 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MH15E8-75	6-8 ft, GW Interface	Pipe collapse	X	X	X	TBD
MH15E6-75	6-8 ft, GW Interface	Broken pipe	X	X	X	TBD
MH15E3-50	7-9 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MH4C-100	7-9 ft, GW Interface	Broken pipe	X	X	X	TBD
MH9C-80	10-12 ft, GW Interface	Circular pipe crack	X	X	X	TBD

Table 3-1

Subsurface Soil Boring Samples and Analytical Parameters
Phase 3 Line-Break Investigation
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

(Page 3 of 4)

Analysis[2]			VOCs by SW8260B	PAHs by SW8310	TAL Metals by SW6010B/7000	SPLP Metals by SW1312/SW6010B (Trace)[3]
Location	Sample Depths[1]	Rationale for Soil Sampling at Location	None, 4°C	None, < 4°C	None, 4°C	
			14 Days	7 Days preext. 40 days postext	180 Days	
MH9A-80	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MH18-220	5-7 ft, GW Interface	Offset joint	X	X	X	TBD
MH16-50	5-7 ft, GW Interface	Circular pipe crack	X	X	X	TBD
MH15A-40	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD
MH69-277	5-7 ft, GW Interface	Pipe cracks	X	X	X	TBD
MH71-100	7-9 ft, GW Interface	Pipe cracks	X	X	X	TBD
MH72-30	7-9 ft, GW Interface	Pipe cracks	X	X	X	TBD
MH74-225	6-8 ft, GW Interface	Pipe cracks	X	X	X	TBD
MH73-75	5-7 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH74-60	5-7 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH75-90	5-7 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH76-150	5-7 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH77-90	6-8 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH79-100	6-8 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MHB3G-75	10-12 ft, GW Interface	Multiple pipe cracks	X	X	X	TBD
MHB3F-50	10-12 ft, GW Interface	Multiple pipe cracks	X	X	X	TBD
MHB3E-75	6-8 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MHB3D-80	6-8 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MHB3C-10	6-8 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MHB6A1-150	5-7 ft, GW Interface	Severe pipe cracks	X	X	X	TBD
MH56-80	7-9 ft, GW Interface	Separated pipe joint	X	X	X	TBD
MH49-130	5-7 ft, GW Interface	Pipe cracks	X	X	X	TBD
MH11D8-50	5-7 ft, GW Interface	Broken pipe joint	X	X	X	TBD
MH11D6A-88	5-7 ft, GW Interface	Misaligned joint	X	X	X	TBD
MH11D4-50	5-7 ft, GW Interface	Broken pipe & 45 Degree Elbow	X	X	X	TBD
MHB3H-75	5-7 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB12-8	6-8 ft, GW Interface	Broken pipe	X	X	X	TBD
MH15G2A-10	6-8 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB3E-225	6-8 ft, GW Interface	Pipe Cracks	X	X	X	TBD
MH8025N-50	5-7 ft, GW Interface	Broken pipe	X	X	X	TBD
MHB3-55	6-8 ft, GW Interface	Broken pipe	X	X	X	TBD
MH9B-40	10-12 ft, GW Interface	Broken pipe	X	X	X	TBD

Table 3-1

Subsurface Soil Boring Samples and Analytical Parameters
Phase 3 Line-Break Investigation
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

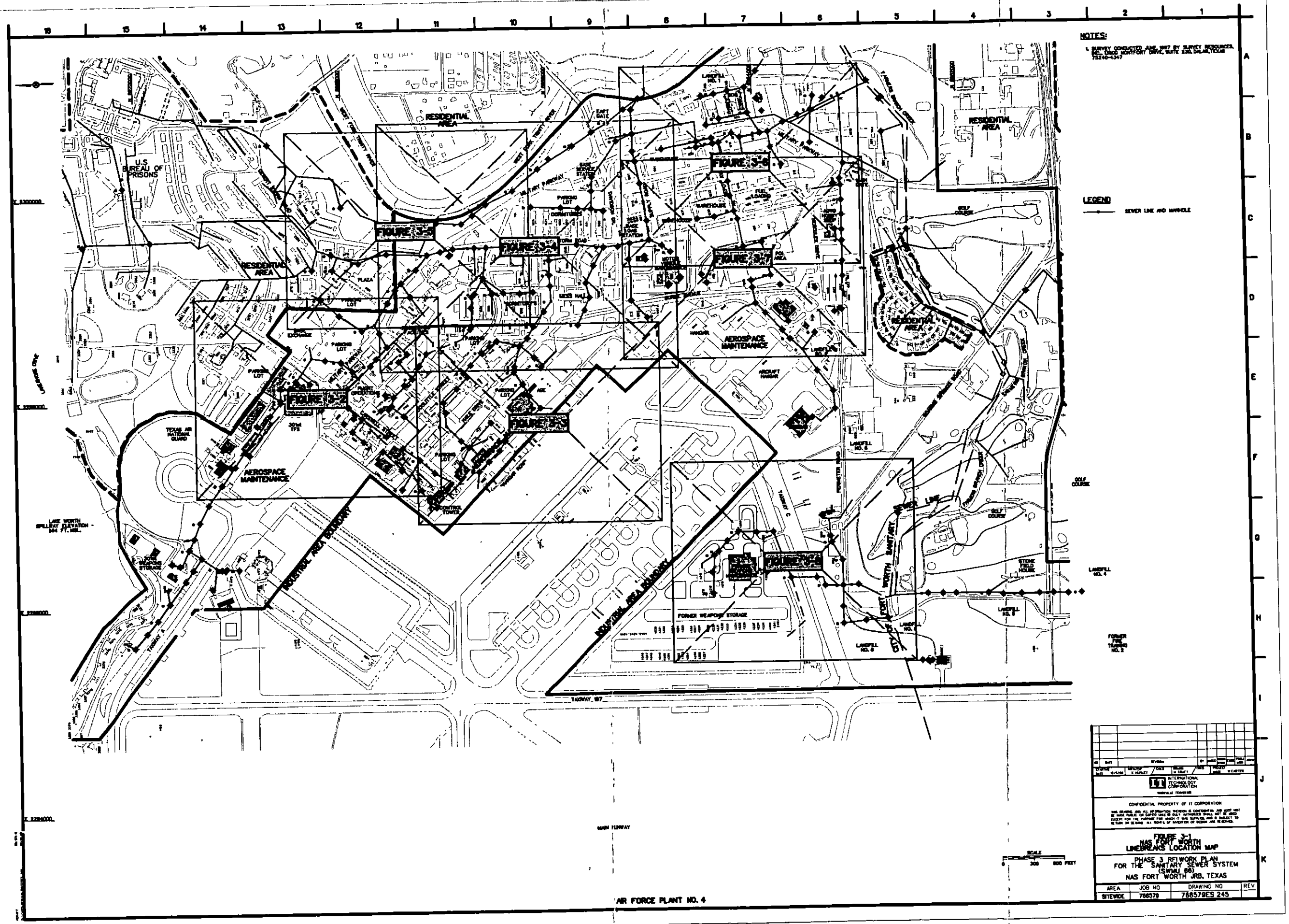
(Page 4 of 4)

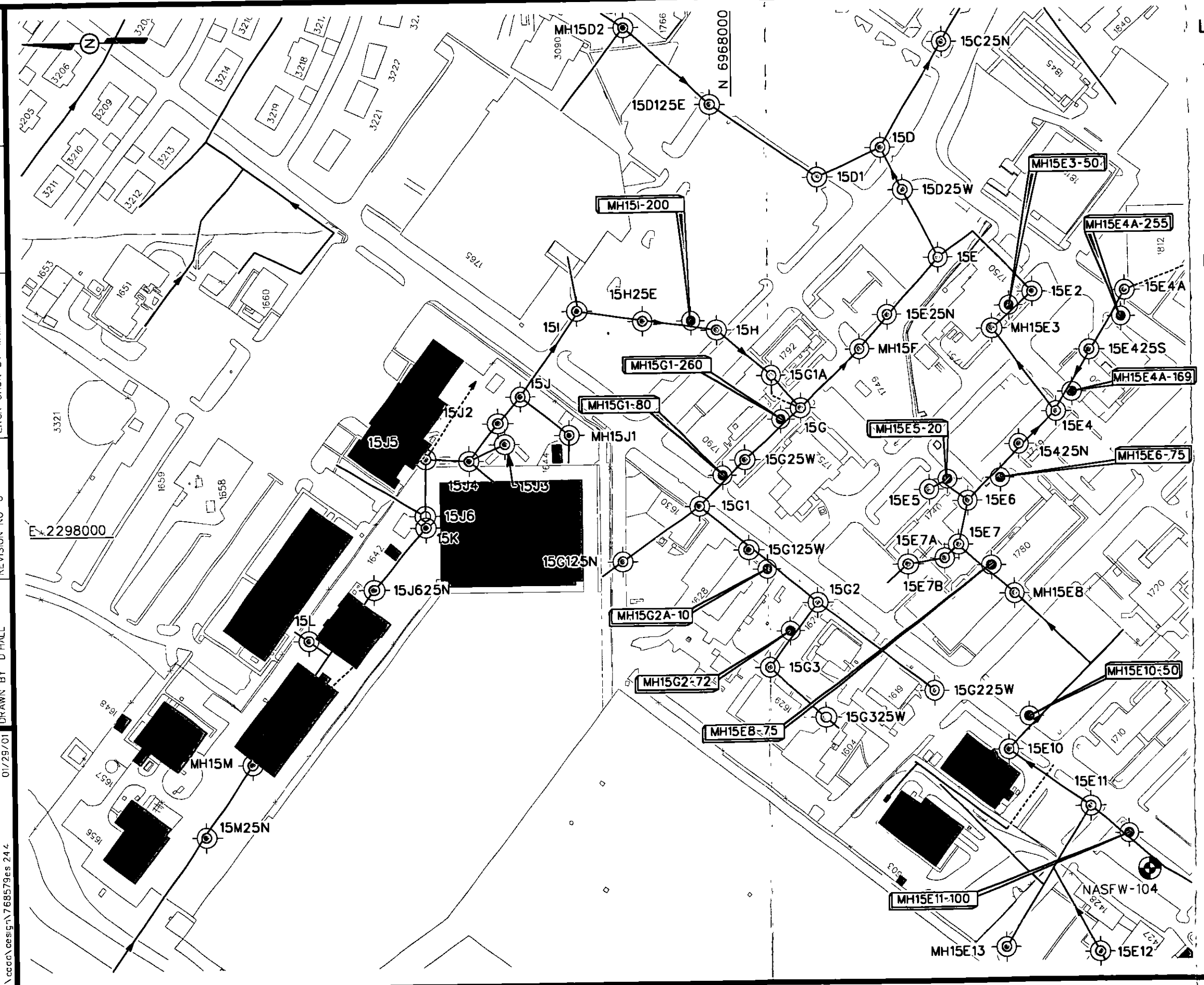
Notes

[1] Sample depths correspond to the depth directly below the sewer invert elevation and the entire 2-foot interval directly above the groundwater interface The depth of sewer invert elevation was estimated from the Metcalf and Eddy (1999) integrity evaluation report

[2] QC samples to be taken· MS/MSD - 5% of total field samples, 1 set per SDG or 1 set per 20 samples Dup - 10% of total field samples. Mat blk - 1 per water source/matrix Trip blk - 1 per VOA cooler Equip Rinse-1 per day

[3] TBD - To be determined SPLP analysis will only be performed for contaminant concentrations that exceed TNRCC MSCs


NOTES:
1. SURVEY CONDUCTED AND MAP BY SURVEY RESOURCES, INC., 13600 NORTHFORT DRIVE, SUITE 200, DALLAS, TEXAS 75240-3347
LEGEND
SEWER LINE AND MANHOLE
FIGURE 3-1
FIGURE 3-2
FIGURE 3-3
FIGURE 3-4
FIGURE 3-5
FIGURE 3-6
FIGURE 3-7
FIGURE 3-8
RESIDENTIAL AREA
U.S. BUREAU OF PRISONS
AEROSPACE MAINTENANCE
TEXAS AIR NATIONAL GUARD
LAKE WORTH SPILLWAY ELEVATION - 644 FT. MSL
INDUSTRIAL AREA BOUNDARY
FORMER WEAPONS STORAGE
GOLF COURSE
LANDFILL NO. 4
LANDFILL NO. 5
LANDFILL NO. 6
LANDFILL NO. 7
LANDFILL NO. 8
FORMER FIRE TRAINING NO. 2
NORTH SANITARY SEWER LINE
TAXIWAY "B7"
MAIN RUNWAY
AIR FORCE PLANT NO. 4
SCALE
0 300 600 FEET
INTERNATIONAL TECHNOLOGY CORPORATION
CONFIDENTIAL PROPERTY OF IT CORPORATION
FIGURE J-1
NAS FORT WORTH
LINEBREAKS LOCATION MAP
PHASE 3 RFI WORK PLAN
FOR THE SANITARY SEWER SYSTEM
(SWMU 66)
NAS FORT WORTH JRB, TEXAS
AREA
JOB NO
DRAWING NO
REV
SITEWIDE
766579
788579ES 245



LEGEND

- SEWER LINE WITH FLOW DIRECTION
- PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

SCALE

0 200 400 FEET

FIGURE 3-2

SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR V MAKI
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER
01/29/01			DWG NO \768579es 244
02 22 21			PROJ NO 768579

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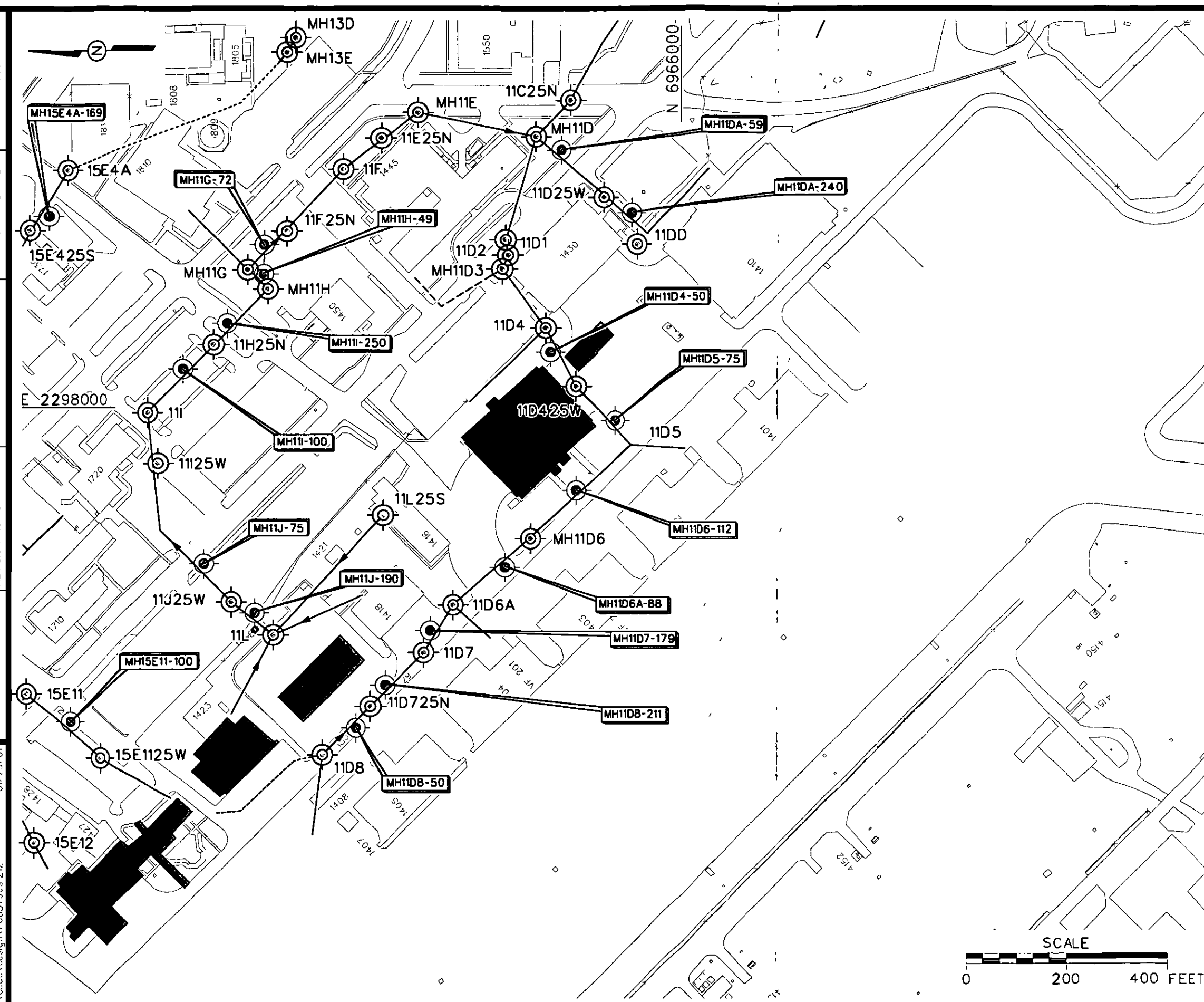
mcraft



LEGEND

- SEWER LINE WITH FLOW DIRECTION
- PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

FIGURE 3-3
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR M MAKI
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER
01/29/01			PROJ NO 768579
			DWG NO \768579es 212

02 25 50

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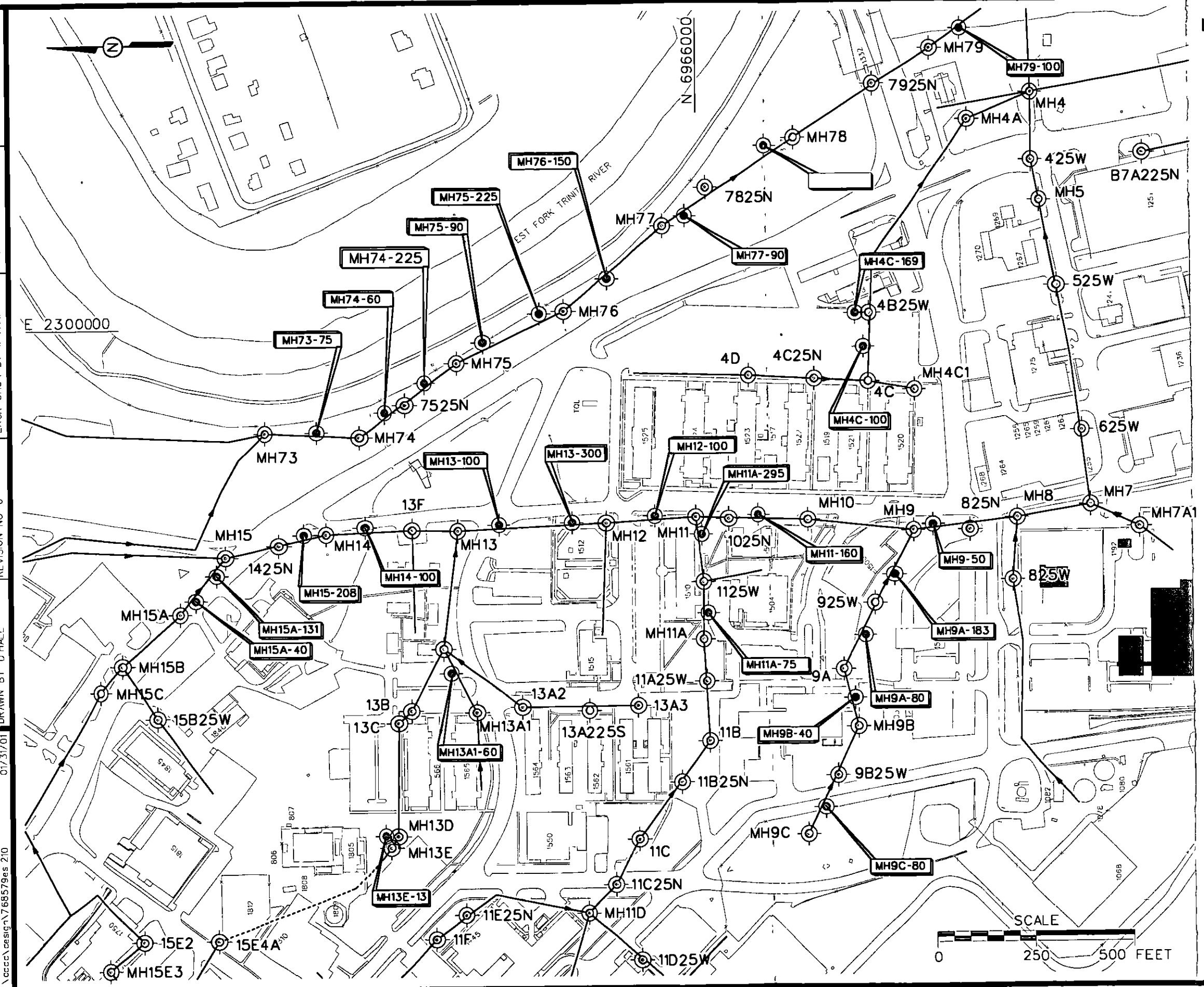
mcraft



LEGEND

SEWER LINE WITH FLOW DIRECTION

PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION

PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

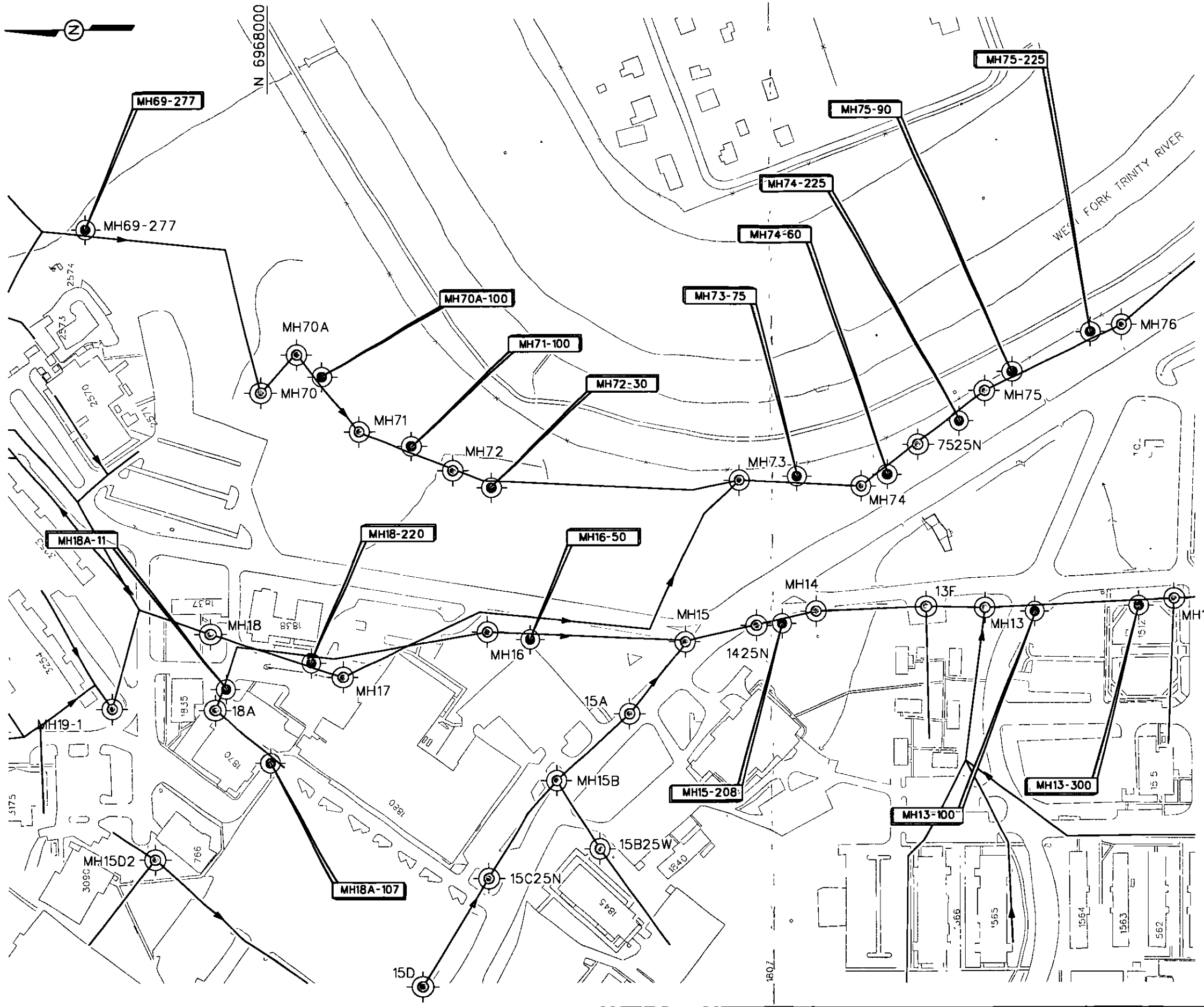
THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

FIGURE 3-4
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

01/31/01	DRAFT CHCK BY D HALL	DATE LAST REV 01/15/00	DWG NO \768579es 210
	ENGR CHCK BY V VAKI	REVISION NO 0	PROJ NO 768579
		STARTING DATE 01/15/00	INITIATOR M MAKI
		DRAWN BY D HALL	PROJ MGR W CARTER
01/31/01			
01 48 34			
c:\cccc\cesign\768579es 210			



LEGEND

SEWER LINE WITH FLOW DIRECTION

PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION

PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

SCALE

0 200 400 FEET

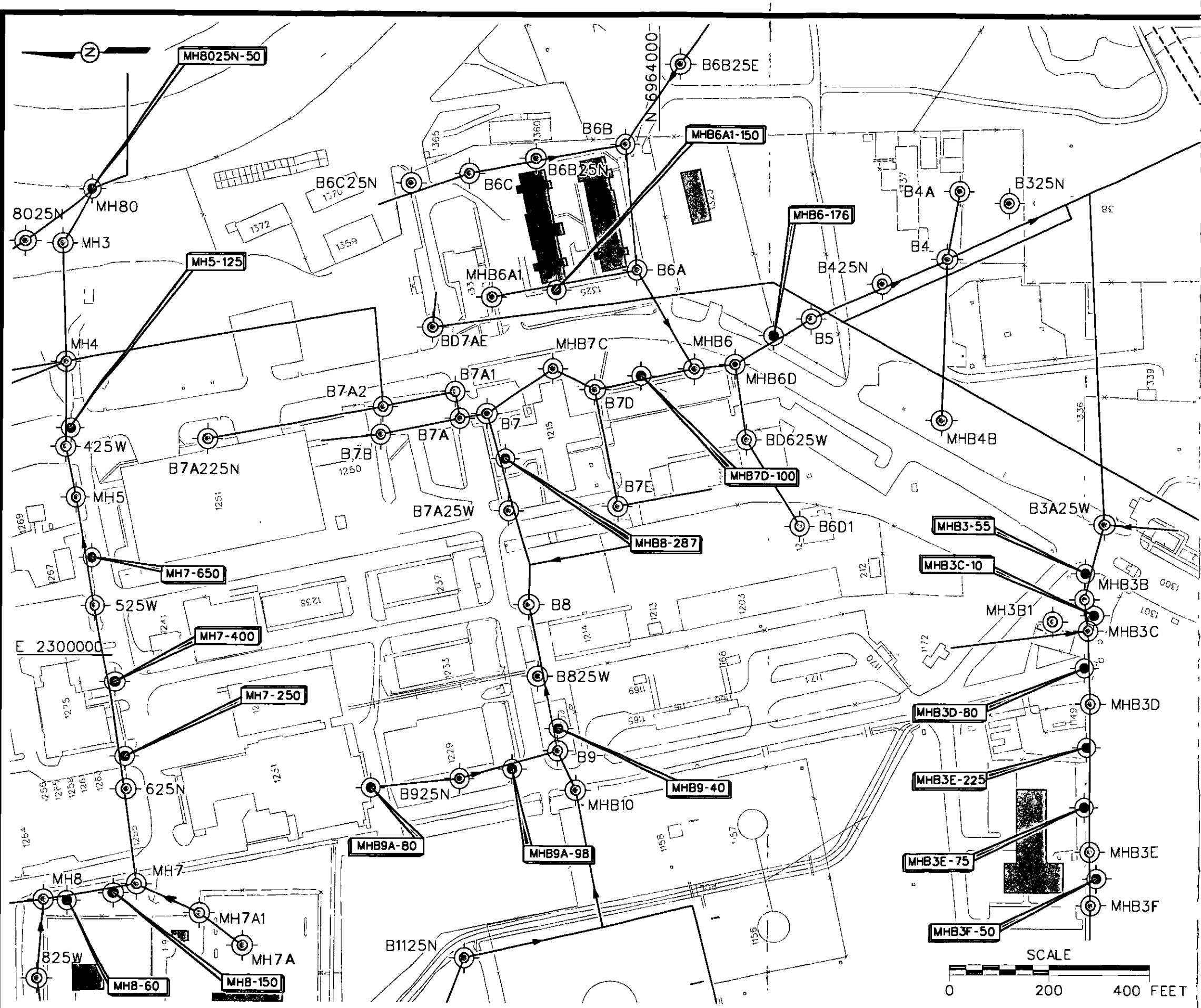
FIGURE 3-5
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR V MAKI	DWG NO V768579es 211	
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER	PROJ NO 768579	

02 53 06 01/29/01 c:\cadd\cesgn\768579es 211 marcft



LEGEND

- SEWER LINE WITH FLOW DIRECTION
- PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

FIGURE 3-6
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV	DRAFT CHCK BY D HALL	INITIATOR M MAKI
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER
01/29/01	01/29/01		PROJ NO 768579
03 14 05			DWG NO V768579es 209

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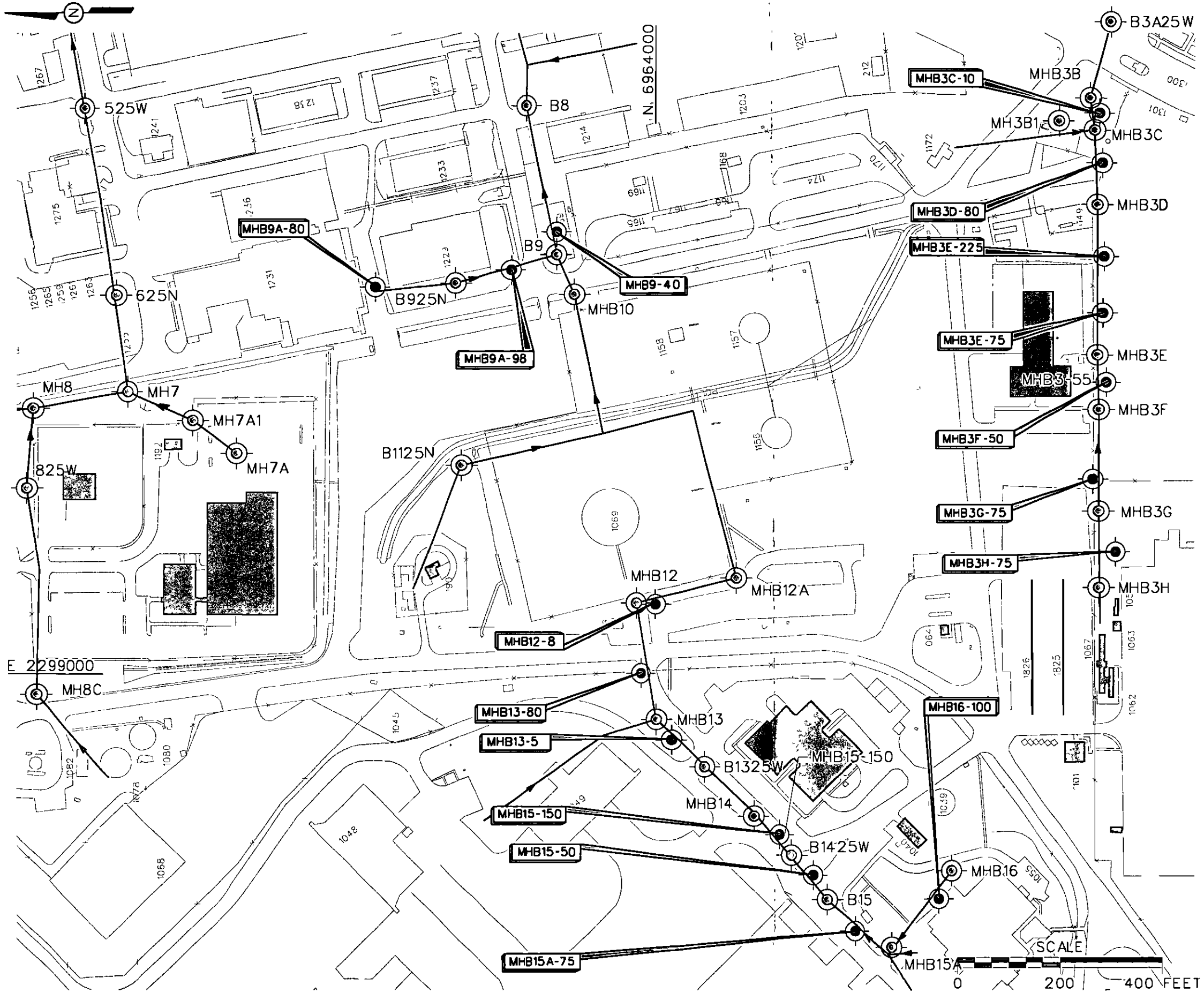

LEGEND

SEWER LINE WITH FLOW DIRECTION

PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION

PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

FIGURE 3-7
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR M MAKI
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER
01/29/01			PROJ NO 768579
03 25 03			DWG NO \768579es 208

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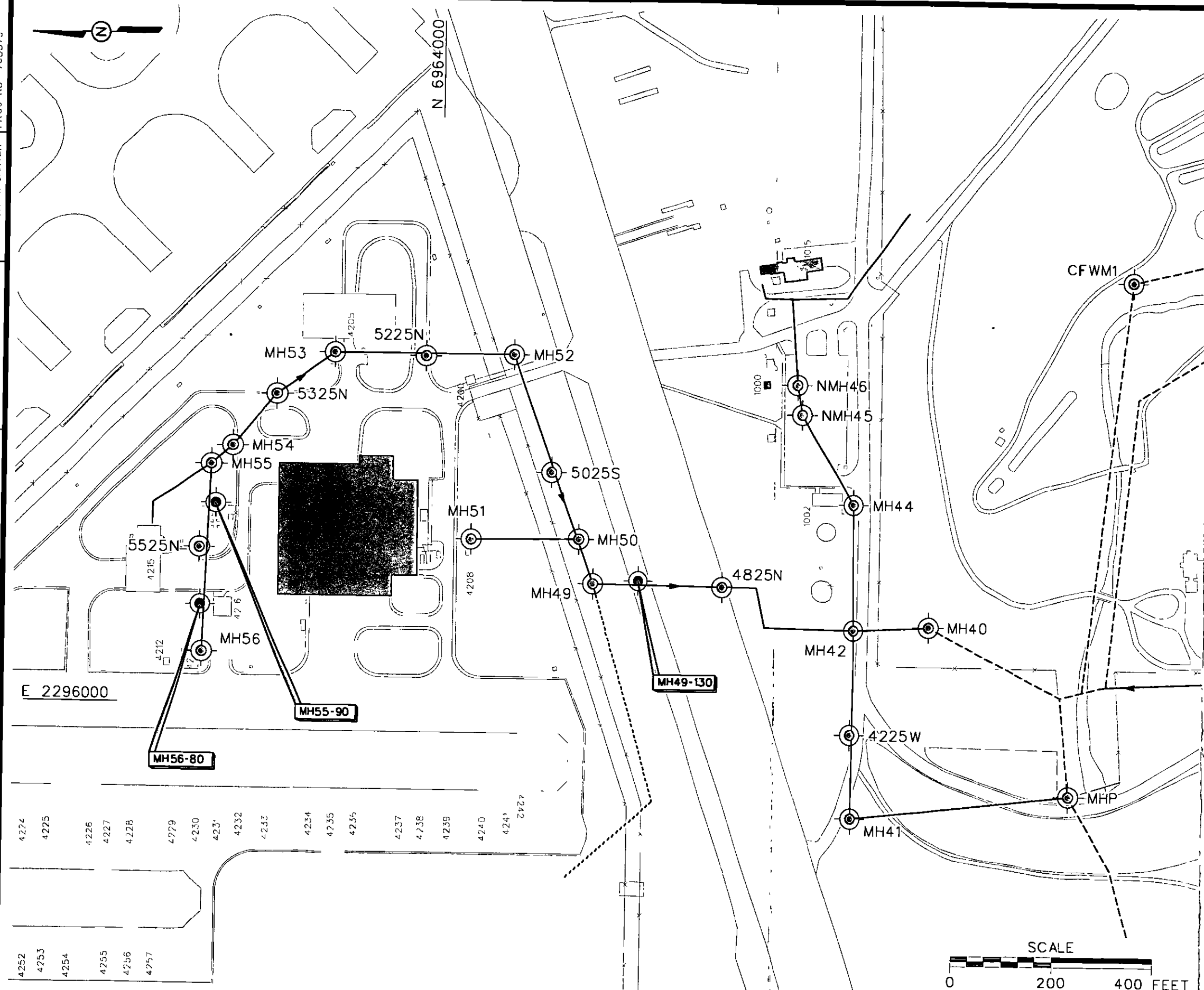

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- PHASE 1/PHASE 2 MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLING LOCATION

NOTE:

THE PROPOSED SAMPLE LOCATIONS SHALL BE PLACED 2 FEET FROM THE ADJACENT SANITARY SEWER PIPING TRENCH. AT EACH LOCATION, SOIL SAMPLES WILL BE COLLECTED FROM A DEPTH IMMEDIATELY BELOW THE SEWER INVERT AND FROM A SUBSURFACE DEPTH (2 FEET ABOVE THE TOP OF THE WATER TABLE). ALL SOIL SAMPLES WILL BE ANALYZED FOR VOCs BY METHOD SW8260, PAHs BY METHOD SW8310, AND TAL METALS BY METHOD SW6010B/SW7000.

FIGURE 3-8
SANITARY SEWER SYSTEM
LINE BREAK
PROPOSED SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR V MAKI	DWG NO \768579es 207
DRAWN BY D HALL	REVISION NO 0	ENGR CHCK BY M MAKI	PROJ MGR W CARTER	PROJ NO 768579

03 26 51 01/29/01 c:\ccc\cesign\768579es 207 mcraft

- Sewer line with collapsing pipe (seven locations)
- Sewer line with severely offset pipe joints (nine locations).

Data from *the Sanitary Sewer Evaluation Report, Phase II, Draft Report Naval Air Station- JRB, Fort Worth, Texas* (M&E, 1999) indicated other problems with the Sanitary Sewer System including infiltration, pipe corrosion, mineral deposits, and root blockage. However, sections of sewer line where water infiltration, root blockage, mineral deposits, or line corrosion were the only problems noted are not included in this WP to be investigated. These line segments appear to be not releasing sewage to the soil and groundwater surrounding the sewer line. It was determined that only the locations where mechanical failure could allow a release of sewage to the environment would be investigated. Additionally, several line breaks are located outside the NAS Fort Worth JRB property boundary and were excluded from the WP.

3.2 Sanitary Sewer System Investigation Locations

Varying methods will be used for collection at different media and allow contaminant delineation in the near-surface soil, subsurface soil, and groundwater. After soil analytical results have been received and evaluated against TNRCC RRS 1 and RRS 2 criteria, a direct-push groundwater investigation will be completed to collect screening data for VOCs. Monitoring wells will then be installed for monitoring of locations which indicated groundwater contamination that may be due to the releases from the sanitary sewer during the direct-push investigation. The line-break investigation is expected to include the following activities:

- 95 subsurface soil samples below the sewer invert elevation
- 95 subsurface soil samples collected directly above the water table
- Approximately 20 DPT mini-well volatile organic compounds (VOCs) screening samples
- Approximately ten proposed monitoring well installations
- Approximately ten monitoring well groundwater verification samples.

Figures 3-1 displays the location of the Sanitary Sewer System throughout the NAS Fort Worth JRB property. Figures 3-2 through 3-8 display the proposed soil sampling locations for the line break portion of the Phase 3 RFI. Table 3-2 approximates the number of analyses required to

investigate potential releases from the Sanitary Sewer System areas with mechanical failure which include:

- Subsurface soils (190 VOCs, 190 polynuclear aromatic hydrocarbons (PAH), 190 metals, 25 synthetic precipitation leaching procedure (SPLP) for specific metals)

  Groundwater samples:

  -20 groundwater VOC DPT-screening analyses,
  -10 groundwater analyses for VOCs, PAHs and metals (10 new monitoring wells).

These analyses do not include the number of field (10 percent field blanks and 1 daily equipment blank) and laboratory QA/QC samples (5 percent matrix spike (MS)/matrix spike duplicate).

3.2.1 Sanitary Sewer Line Break RFI Soil Investigation

Soil samples will be collected to assess potential contaminant releases from the Sanitary Sewer System to the soil. Soil samples will be collected at two subsurface depths: directly below the invert elevation of the sewer piping, and from the entire 2-foot interval directly above the water table. No soil samples will be collected within the saturated zone.

Table 3-1 includes the depths that will be sampled at each location. The depth to the sewer invert elevation was based upon the buried depths for the mechanical defects provided in the M&E (1999) integrity evaluation. The depth to groundwater at the site ranges from 5 feet below grade to greater than 20 feet below grade; therefore, continuous sampling will be required to ensure that the proper depths above the water table are sampled. In cases where the sewer invert elevation is below the top of the water table, only the soil sample collected from directly above the water table will be submitted for analysis.

Specific soil sample collection techniques are provided in the FSP (IT, 1997c) and Appendix B of this WP. Soil samples will be collected by driving the sample tubes within a split-spoon into the ground with a DPT soil probe. All sampling equipment will be decontaminated before and after each use in accordance with the FSP (Appendix B).

Table 3-2

Summary Table of Soil and Groundwater Samples - Phase 3 Line-Break Investigation
Phase 3 RFI - Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Parameter	Analytical Method	Matrix	Number of Field samples[1]	Field Duplicate 10%	Matrix Spike[2] 5%	Matrix Spike Duplicate[2] 5%	Material Blank 1 per source/ matrix	Equip. Rinsate 1 per Day	Trip Blank 1 per VOA cooler	Total No. of Samples	Combined Total No of Water/Soil Samples
Volatiles	SW8260B	Soil	190	19	10	10	1	1	0	211	
		Water	30	3	2	2	0	1	6	40	
		Combined									251
PAHs	SW8310	Soil	190	19	1	1	1	1	0	211	
		Water	10	1	1	1	0	1	0	12	
		Combined									223
TAL Metals	SW6010B Trace/	Soil	190	19	10	10	0	5	0	214	
	SW7000	Water	10	1	1	1	1	2	0	14	
		Combined									228
SPLP[3]	SW60101B Trace	Soil	30	0	0	2	0	0	0	30	
	/SW7300	Water	0	0	0	0	0	0	0	0	
		Combined									30
Field Parameters		Soil	0	0	0	0	0	0	0	0	
		Water	30	0	0	0	0	0	0	30	
		Combined									30

Notes

[1] Two soil samples shall be collected at 95 locations at depths listed in Table 3-1
The number of groundwater samples is approximated The number of DPT groundwater samples and number of monitoring well groundwater samples will be provided after the results of the soil samples have been evaluated to determine the locations of verification groundwater samples

[2] Matrix spike (MS) and matrix spiked duplicates (MSDs) are considered internal quality (QC) samples and are not included in the "Total Number of Samples" column

[3] SPLP - Synthetic Preciptate Leachate Procedure The number of SPLP analysis is approximated
Soil samples with inorganic concentrations greater than RRS 2 (i e , MSCs) will have SPLP analysis

Laboratory Methods. All soil samples will be submitted for analysis using EPA Method SW6010B/SW7000 series RCRA metals, including mercury, EPA Method 8260A for VOCs, and EPA Method SW8310 for PAHs.

Selected soil samples will be analyzed for silver by EPA Method SW7761 which was originally used by Jacobs (1998) during their background study. This method will help determine whether silver is present above background as a result of any release from the sanitary sewer. The random occurrence of silver concentrations above its background UTL in previous RFI soil samples suggests that the silver concentrations are not likely related to a release from the Sanitary Sewer System.

Analysis for other Appendix IX constituents (e.g., pesticides, polychlorinated biphenyls (PCB), herbicides, cyanide, dioxins/furans, and cyanide) were not included in the analytical suite because these compounds are not expected to occur since the primary industries on the base discharge primarily washwater from processes that use fuels and solvents. Metals analysis will be performed to ensure the method reporting limit is lower than the constituent background UTL concentration. Analytical parameters and the number of samples to be collected are shown in Tables 3-1 and 3-2.

The SPLP will be performed for inorganic constituents in soil samples that exceed the TNRCC medium-specific concentrations to determine whether the contaminant could leach into groundwater. The decision of analyzing by the SPLP procedure will be made after the analytical results are received from the laboratory. Sufficient soil volume will be collected for each soil sample in the event that the SPLP analysis is required.

3.2.2 Sanitary Sewer Line Break RFI Groundwater Investigation

The Sanitary Sewer System line break investigation will be done in a two-phased approach. Field work to collect soil samples will be done during the initial mobilization. After soil analytical results have been evaluated against TNRCC RRS 1 and RRS 2 concentrations, a Phase 3 groundwater assessment WP addendum will be prepared, identifying locations where groundwater sampling is required to characterize the potential migration of contaminants into groundwater. Groundwater will not be investigated in areas already known to have contaminant plumes (e.g., the AFP 4 TCE plume, POL yard, Base Service Station, etc.).

A DPT groundwater investigation will be performed during the second mobilization to characterize groundwater conditions at locations where the detected soil concentrations exceed medium-specific concentrations. A local, IT-approved analytical laboratory will be utilized to provide screening data for VOCs using EPA Method SW8260B. It is anticipated that approximately 20 DPT groundwater samples will be required to delineate groundwater contamination.

It is anticipated that up to ten new monitoring wells may be required to be installed to monitor groundwater contamination identified during the DPT investigation. Locations of the proposed monitoring wells will be presented to AFCEE in a technical memorandum that summarizes the results of the DPT investigation. Installation and sampling of monitoring wells will follow the procedures in Appendix B.

Laboratory Methods. Groundwater confirmation samples from permanent monitoring wells will be collected and submitted for analysis of VOCs using EPA Method SW8260B, PAHs using EPA Method SW8310 and RCRA metals, including mercury. Silver may also be analyzed using EPA Method SW7761 to confirm elevated concentrations detected using EPA Method SW6010B.

Groundwater field parameters will be measured during collection of samples from both temporary monitoring wells and permanent monitoring wells that have been installed. Parameters to be measured in the field include pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential. Groundwater low-flow sampling procedures are outlined in greater detail in Appendix B of this WP.

3.3 Investigation-Derived Waste Management

Wastes that may be generated during the RFI site investigation include: (1) purged groundwater, (2) decontamination water, (3) drill cuttings, (4) expendable protective clothing (e.g., Tyvek), and (5) general trash. Modifications to the planned waste management may be made if waste attributes change or field observations warrant a change. The general waste management approach is presented in this subsection; the detailed approach was included in the FSP (IT, 1997c).

All groundwater generated during monitoring well development and purging and decontamination water generated during decontamination process will be contained on-site (base) at the central storage location. Waste water will be stored in labeled, 55-gallon, U.S. Department of Transportation drums. The water will be tested for VOCs, total petroleum hydrocarbons (TPH), and metals. The analytical results will be reviewed to determine if the water requires treatment before disposal. If treatment is required, the waste water will be treated and tested prior to discharge to the sanitary sewer. The analytical results will be provided to NAS Fort Worth JRB environmental authorities for review and approval before discharge to the NAS Fort Worth JRB Sanitary Sewer System.

Drill cuttings from soil probe and drilling activities will be contained in drums, which will be labeled and kept at the NAS Fort Worth JRB designated storage location (located at the decontamination area north of the main gate entrance) until analytical data are received. Contaminated soils will be disposed of at an appropriate licensed landfill, most likely as industrial, nonhazardous waste.

Waste disposal activity will be coordinated with NAS Fort Worth JRB environmental authorities. Any hazardous waste disposal will be at a site selected by NAS Fort Worth JRB environmental authorities, who will sign any transportation manifest as the "generator." All waste management practices will follow the guidelines established by the TNRCC.

4.0 Phase 3 Confirmation/Delineation Sampling

After completion of the draft Sanitary Sewer System RFI report (IT, 1997a) and subsequent Phase 2 sampling, TNRCC comments indicated that additional delineation of contaminants detected would be required for completion of the RFI. Compliance with TNRCC RRSs for completion of the RFI will require additional lateral delineation of contaminants exceeding background UTLs for inorganic constituents, or MQLs for organic constituents (i.e., RRS 1 concentrations)

4.1 Summary of Phase 1/Phase 2 Results

Results of the initial Phase 1 investigation of the Sanitary Sewer System RFI were presented in the Draft Sanitary Sewer System RFI report (IT, 1997a). Table 4-1 lists the detected soil concentrations from the Phase 1 investigation that exceeded RRS 1 concentrations (i.e., background). Table 4-2 presents the detected groundwater concentrations that exceeded RRS 1 during the Phase 1 investigation. Evaluation of the Phase 1 analytical data from the draft Sanitary Sewer System RFI report indicated sample locations could be categorized as:

- Locations with contaminant concentrations exceeding TNRCC RRS 1 criteria that require further delineation
- Locations requiring sample confirmation due to detections less than one order of magnitude above RRS 1
- Locations not requiring additional delineation due to influences from comingled plumes or proven anthropogenic contaminants
- Locations not requiring additional delineation due to organic analytes not exceeding analytical method practical quantitation limit (PQL) or inorganic analytes not exceeding site-wide background UTLs.

Phase 2 RFI activities were completed April and May of 2000 and followed the Phase 2 WP (IT, 2000a). Phase 2 soil and groundwater samples were based on the locations that had constituents exceeding background UTLs or MQLs. Phase 2 sample locations were selected to provide both confirmation of sampling results and additional delineation of the lateral extent of contamination. No samples were collected in areas of previously delineated contamination.

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No.	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
Inorganics													
11C25N	MS1270	27-Feb-97	14	16	Silver	7 33	0 48	B	nv	0 128	No	51	Yes
11L25S	MS1395	16-Mar-97	0	2	Arsenic	69 44	6 2	B	nv	5 85	No	5	No
11L25S	MS1395	16-Mar-97	0	2	Silver	8 1	0 56	B	nv	0 213	No	51	Yes
11L25S	MS1396	16-Mar-97	16	18	Selenium	0 59	0 36	B	nv	0 313	No	5	Yes
15B25W	MS1307	3-Mar-97	5	7	Copper	7 19	27 3		nv	13 72	No	130	Yes
15E25N	MS1285	28-Feb-97	3	5	Arsenic	63 4	8 1	B	nv	6 58	No	5	No
15E25N	MS1285	28-Feb-97	3	5	Manganese	2 11	1030	*	nv	351 7	No	1400	Yes
15E25N	MS1285	28-Feb-97	3	5	Silver	7 4	0 4	B	nv	0 128	No	51	Yes
15G125N	MS1412	18-Mar-97	8	10	Manganese	2 12	526	N	nv	351 7	No	1400	Yes
15G125N	MS1412	18-Mar-97	8	10	Silver	7 41	0 38	B	nv	0 128	No	51	Yes
5225N	MS1222	1-Apr-97	18	20	Silver	8 66	0 56	B	nv	0 128	No	51	Yes
825N	MS1261	26-Feb-97	8	10	Silver	8 18	0 45	B	nv	0 128	No	51	Yes
925W	MS1384	15-Mar-97	4	6	Arsenic	67 8	9 4	B	B	6 58	No	5	No
925W	MS1384	15-Mar-97	4	6	Cadmium	4 52	0 73	B	B	0 59	No	0 5	No
925W	MS1384	15-Mar-97	4	6	Silver	7 91	0 47	B	B	0 128	No	51	Yes
925W	MS1385	15-Mar-97	4	6	Arsenic	67 19	13 1	B	B	6 58	No	5	No
925W	MS1385	15-Mar-97	4	6	Cadmium	4 48	0 61	B	B	0 59	No	0 5	No
925W	MS1385	15-Mar-97	4	6	Manganese	2 24	483		nv	351 7	No	1400	Yes
925W	MS1385	15-Mar-97	4	6	Silver	7 84	0 4	B	B	0 128	No	51	Yes
B1125N	MS1161	19-Mar-97	0	2	Lead	58 14	41	B	nv	30 97	No	1 5	No
B1125N	MS1161	19-Mar-97	0	2	Molybdenum	9 3	1 6	B	nv	1 46	No	51	Yes
B1125N	MS1161	19-Mar-97	0	2	Silver	8 14	0 47	B	nv	0 213	No	51	Yes
B1125N	MS1163	19-Mar-97	6	8	Copper	7 35	13 9		nv	13 72	No	130	Yes
B1125N	MS1163	19-Mar-97	6	8	Silver	8 58	0 62	B	nv	0 128	No	51	Yes
B6B25E	MS1250	25-Feb-97	6	8	Arsenic	68 49	11 8	B	nv	6 58	No	5	No
B6B25E	MS1250	25-Feb-97	6	8	Molybdenum	9 13	2 3	B	nv	1 93	No	51	Yes
MH11A	MS1264	27-Feb-97	16	18	Manganese	2 15	394	EN	J	351 7	No	1400	Yes
MH11A	MS1264	27-Feb-97	16	18	Silver	7 52	0 46	B	B	0 128	No	51	Yes
MH11B	MS1267	27-Feb-97	16	18	Arsenic	63 55	7	B	nv	6 58	No	5	No
MH11C	MS1269	27-Feb-97	14	16	Silver	8 15	0 55	B	nv	0 128	No	51	Yes
MH11D	MS1271	27-Feb-97	14	16	Barium	2 15	210		nv	128 1	No	200	No

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
MH11D	MS1271	27-Feb-97	14	16	Manganese	2 15	1070	EN	nv	351 7	No	1400	Yes
MH11D	MS1271	27-Feb-97	14	16	Silver	7 53	0 64	B	nv	0 128	No	51	Yes
MH11D2	MS1277	28-Feb-97	14	16	Barium	2 13	585	N*	nv	128 1	No	200	No
MH11D2	MS1277	28-Feb-97	14	16	Cobalt	7 47	6 6	B	nv	6 19	No	610	Yes
MH11D2	MS1277	28-Feb-97	14	16	Manganese	10 67	3350	*	nv	351 7	No	1400	No
MH11D2	MS1277	28-Feb-97	14	16	Silver	7 47	0 92	B	nv	0 128	No	51	Yes
MH11D3	MS1278	28-Feb-97	14	16	Barium	2 16	443	N*	nv	128 1	No	200	No
MH11D3	MS1278	28-Feb-97	14	16	Cobalt	7 55	7 1	B	nv	6 19	No	610	Yes
MH11D3	MS1278	28-Feb-97	14	16	Manganese	2 16	2520	*	nv	351 7	No	1400	No
MH11D3	MS1278	28-Feb-97	14	16	Silver	7 55	0 49	B	nv	0 128	No	51	Yes
MH11D4	MS1379	14-Mar-97	14	16	Silver	8 62	0 56	B	nv	0 128	No	51	Yes
MH11D5	MS1377	14-Mar-97	16	18	Silver	7 35	0 44	B	nv	0 128	No	51	Yes
MH11D7	MS1349	11-Mar-97	8	10	Arsenic	70 09	8 3	B	nv	6 58	No	5	No
MH11D7	MS1349	11-Mar-97	8	10	Cadmium	4 67	0 69	B	nv	0 59	No	0 5	No
MH11D7	MS1349	11-Mar-97	8	10	Cobalt	8 18	17 6		nv	6 19	No	610	Yes
MH11D7	MS1349	11-Mar-97	8	10	Copper	7 01	14 7		nv	13 72	No	130	Yes
MH11D7	MS1349	11-Mar-97	8	10	Lead	58 41	30	B	nv	12 66	No	1 5	No
MH11D7	MS1349	11-Mar-97	8	10	Nickel	17 52	23 1		nv	19 76	No	200	Yes
MH11D7	MS1349	11-Mar-97	8	10	Vanadium	9 35	51 9		nv	37 4	No	72	Yes
MH11DD	MS1378	14-Mar-97	16	18	Silver	7 87	0 38	B	nv	0 128	No	51	Yes
MH11E	MS1293	1-Mar-97	14	16	Cadmium	4 66	0 64	B	nv	0 59	No	0 5	No
MH11F	MS1295	1-Mar-97	0	2	Antimony	46 57	5 6	BN	nv	0 56	No	0 6	No
MH11F	MS1295	1-Mar-97	0	2	Cadmium	4 66	0 75	B	nv	0 556	No	0 5	No
MH11F	MS1295	1-Mar-97	0	2	Lead	58 21	39 1	B	nv	30 97	No	1 5	No
MH11I	MS1336	10-Mar-97	12	14	Silver	8 25	0 43	B	nv	0 128	No	51	Yes
MH11L	MS1391	15-Mar-97	0	2	Silver	8 62	0 9	B	nv	0 213	No	51	Yes
MH13E	MS1057	4-Mar-97	0	2	Arsenic	1 27	6		nv	5 85	No	5	No
MH13E	MS1057	4-Mar-97	0	2	Beryllium	0 38	1 2		nv	1 02	No	0 4	No
MH13E	MS1057	4-Mar-97	0	2	Selenium	0 64	1 3		nv	0 907	No	5	Yes
MH15	MS1132	16-Mar-97	1 99	4	Arsenic	67 11	7 8	B	nv	6 58	No	5	No
MH15	MS1132	16-Mar-97	1 99	4	Selenium	0 56	0 53	B	nv	0 313	No	5	Yes
MH15	MS1132	16-Mar-97	1 99	4	Silver	7 83	0 42	B	nv	0 128	No	51	Yes
MH15	MS1133	16-Mar-97	8	10	Lead	60 68	24	B	nv	12 66	No	1 5	No
MH15	MS1133	16-Mar-97	8	10	Silver	8 5	0 55	B	nv	0 128	No	51	Yes

667 63

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No.	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
MH15E3	MS1075	10-Mar-97	5	7	Arsenic	75 28	9 5	B	nv	6 58	No	5	No
MH15E3	MS1075	10-Mar-97	5	7	Cadmium	5 02	0 66	B	nv	0 59	No	0 5	No
MH15E3	MS1075	10-Mar-97	5	7	Lead	0 38	42 8		nv	12 66	No	1 5	No
MH15E3	MS1075	10-Mar-97	5	7	Manganese	2 51	528	*	nv	351 7	No	1400	Yes
MH15E3	MS1075	10-Mar-97	5	7	Mercury	0 13	0 06	B	nv	0 035	No	0 2	Yes
MH15E3	MS1075	10-Mar-97	5	7	Selenium	0 63	0 81		nv	0 313	No	5	Yes
MH15E3	MS1076	10-Mar-97	5	7	Arsenic	74 26	11 6	B	nv	6 58	No	5	No
MH15E3	MS1076	10-Mar-97	5	7	Cadmium	4 95	0 6	B	nv	0 59	No	0 5	No
MH15E3	MS1076	10-Mar-97	5	7	Chromium	8 66	17 7	N	nv	16 31	No	10	No
MH15E3	MS1076	10-Mar-97	5	7	Cobalt	8 66	6 8	B*	nv	6 19	No	610	Yes
MH15E3	MS1076	10-Mar-97	5	7	Manganese	2 48	466	*	nv	351 7	No	1400	Yes
MH15E3	MS1076	10-Mar-97	5	7	Mercury	0 12	0 1	B	nv	0 035	No	0 2	Yes
MH15E3	MS1076	10-Mar-97	5	7	Silver	8 66	0 61	B	nv	0 128	No	51	Yes
MH15E6	MS1081	10-Mar-97	0	2	Silver	7 58	0 65	B	nv	0 213	No	51	Yes
MH15G1	MS1091	11-Mar-97	0	2	Mercury	0 12	1 1		nv	0 14	No	0 2	No
MH15G1	MS1091	11-Mar-97	0	2	Zinc	2 4	41	E	nv	38 8	No	3100	Yes
MH15J2	MS1360	13-Mar-97	6	8	Cadmium	0 59	0 65	N	nv	0 59	No	0 5	No
MH15J2	MS1360	13-Mar-97	6	8	Mercury	0 039	0 086	J	nv	0 035	No	0 2	Yes
MH15J2	MS1360	13-Mar-97	6	8	Selenium	0 59	0 63	J	nv	0 313	No	5	Yes
MH15J4	MS1373	13-Mar-97	6	8	Selenium	0 59	0 97	J	nv	0 313	No	5	Yes
MH15J6	MS1436	25-Mar-97	1	3	Lead	0 33	15 1		nv	12 66	No	1 5	No
MH15J6	MS1436	25-Mar-97	1	3	Selenium	0 55	0 52	B	nv	0 313	No	5	Yes
MH15J6	MS1436	25-Mar-97	1	3	Silver	7 67	0 76	B	J	0 128	No	51	Yes
MH15J6	MS1437	25-Mar-97	10	12	Arsenic	63 3	6 6	B	J	6 58	No	5	No
MH15J6	MS1437	25-Mar-97	10	12	Cadmium	4 22	0 81	B	J	0 59	No	0 5	No
MH15J6	MS1437	25-Mar-97	10	12	Manganese	2 11	826		nv	351 7	No	1400	Yes
MH15K	MS1435	25-Mar-97	10	12	Silver	7 71	0 81	B	nv	0 128	No	51	Yes
MH15Q	MS1279	28-Feb-97	0	2	Arsenic	68 18	7	B	nv	5 85	No	5	No
MH15Q	MS1279	28-Feb-97	0	2	Cadmium	4 55	0 67	B	nv	0 556	No	0 5	No
MH15Q	MS1279	28-Feb-97	0	2	Lead	56 82	107		nv	30 97	No	1 5	No
MH15Q	MS1279	28-Feb-97	0	2	Silver	7 95	0 47	B	nv	0 213	No	51	Yes
MH15Q	MS1279	28-Feb-97	0	2	Zinc	2 27	129	N	nv	38 8	No	3100	Yes
MH15Q	MS1280	28-Feb-97	0	2	Arsenic	69 04	6 1	B	nv	5 85	No	5	No
MH15Q	MS1280	28-Feb-97	0	2	Silver	8 06	0 42	B	nv	0 213	No	51	Yes
MH15S	MS1488	1-Apr-97	13	14	Manganese	2 29	424		nv	351 7	No	1400	Yes
MH15S	MS1488	1-Apr-97	13	14	Silver	8 03	0 4	B	nv	0 128	No	51	Yes
MH19-1	MS1386	15-Mar-97	0	2	Silver	8	0 45	B	nv	0 213	No	51	Yes

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No.	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
MH35	MS1470	28-Mar-97	16	18	Manganese	2 19	1310	N	nv	351 7	No	1400	Yes
MH35	MS1470	28-Mar-97	16	18	Molybdenum	8 76	2 3	B	nv	1 93	No	51	Yes
MH4	MS1253	25-Feb-97	8	10	Cadmium	4 78	0 72	B	nv	0 59	No	0 5	No
MH4	MS1259	26-Feb-97	0	2	Cadmium	4 61	1 7	B	B	0 556	No	0 5	No
MH4	MS1259	26-Feb-97	0	2	Copper	6 92	37		nv	17 37	No	130	Yes
MH4	MS1259	26-Feb-97	0	2	Molybdenum	9 23	1 5	B	B	1 46	No	51	Yes
MH4	MS1259	26-Feb-97	0	2	Silver	8 07	0 44	B	B	0 213	No	51	Yes
MH46	MS1138	17-Mar-97	18	20	Cadmium	4 28	0 87	B	B	0 59	No	0 5	No
MH5	MS1257	26-Feb-97	0	2	Cadmium	4 67	0 65	B	nv	0 556	No	0 5	No
MH5	MS1257	26-Feb-97	0	2	Lead	58 41	31 3	B	nv	30 97	No	1 5	No
MH5	MS1257	26-Feb-97	0	2	Silver	8 18	0 47	B	nv	0 213	No	51	Yes
MH53	MS1204	27-Mar-97	0	2	Arsenic	76 14	8 4	B	nv	5 85	No	5	No
MH53	MS1204	27-Mar-97	0	2	Cadmium	5 08	1 2	B	nv	0 556	No	0 5	No
MH53	MS1204	27-Mar-97	0	2	Zinc	2 54	49 7		nv	38 8	No	3100	Yes
MH56	MS1200	27-Mar-97	0	2	Arsenic	69 93	15	B	nv	5 85	No	5	No
MH56	MS1200	27-Mar-97	0	2	Cadmium	4 66	0 76	B	nv	0 556	No	0 5	No
MH56	MS1201	27-Mar-97	0	2	Beryllium	0 36	1 1		nv	1 02	No	0 4	No
MH75	MS1325	5-Mar-97	5	7	Arsenic	66 24	6 9	B	nv	6 58	No	5	No
MH75	MS1325	5-Mar-97	5	7	Molybdenum	8 83	5 4	B	nv	1 93	No	51	Yes
MH9B	MS1381	14-Mar-97	11	13	Arsenic	65 5	13 3	B	nv	6 58	No	5	No
MH9B	MS1381	14-Mar-97	11	13	Molybdenum	8 73	2 8	B	nv	1 93	No	51	Yes
MHB12	MS1165	19-Mar-97	0	2	Silver	8 13	0 41	B	nv	0 213	No	51	Yes
MHB12	MS1166	19-Mar-97	0	2	Lead	58 62	80 2		nv	30 97	No	1 5	No
MHB12	MS1166	19-Mar-97	0	2	Molybdenum	9 38	3 6	B	nv	1 46	No	51	Yes
MHB12	MS1167	19-Mar-97	10	11 5	Silver	8 28	0 49	B	nv	0 128	No	51	Yes
MHB3E	MS1041	1-Mar-97	0	2	Arsenic	77 82	6 4	B	nv	5 85	No	5	No
MHB3E	MS1041	1-Mar-97	0	2	Cadmium	5 19	0 75	B	nv	0 556	No	0 5	No
MHB3E	MS1041	1-Mar-97	0	2	Lead	64 85	63 9	B	nv	30 97	No	1 5	No
MHB6	MS1425	19-Mar-97	0	2	Cadmium	4 87	0 61	B	nv	0 556	No	0 5	No
MHB6	MS1425	19-Mar-97	0	2	Silver	8 53	0 49	B	nv	0 213	No	51	Yes
MHB6	MS1426	19-Mar-97	6	8	Cobalt	8 14	6 3	B	nv	6 19	No	610	Yes
MHB6	MS1426	19-Mar-97	6	8	Lead	58 14	15 3	B	nv	12 66	No	1 5	No
MHB9	MS1021	27-Feb-97	0	2	Beryllium	0 4	1 3		nv	1 02	No	0 4	No
MHB9	MS1021	27-Feb-97	0	2	Silver	9 38	0 49	B	nv	0 213	No	51	Yes
MHB9	MS1022	27-Feb-97	2	4	Silver	8 83	0 55	B	B	0 128	No	51	Yes

Table 4-1

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Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)		Does Result Support Closure Under RRS2?
Organics														
MH15J2	MS1360	13-Mar-97	6	8	Diesel	4 8	37	qrN	nv	4 7	No	6130	*	Yes
MH15J2	MS1360	13-Mar-97	6	8	Gasoline	1 2	2 4	qB	nv	1 2	No	613	*	Yes
MH11F	MS1295	1-Mar-97	0	2	Gamma-chlordane	0 017	0 019		nv	0 016	No	0 2	b	Yes
MH11F	MS1295	1-Mar-97	0	2	Heptachlor	0 0023	0 0052		nv	0 0021	No	0 04		Yes
MH15E6	MS1081	10-Mar-97	0	2	4,4'-DDE	0 0065	0 02		nv	0 0031	No	0 084		Yes
MH15E6	MS1081	10-Mar-97	0	2	4,4'-DDT	0 017	0 019		nv	0 0083	No	0 084		Yes
MH15E6	MS1081	10-Mar-97	0	2	Endrin	0 0087	0 011		nv	0 0042	No	0 2		Yes
MH15E6	MS1081	10-Mar-97	0	2	Heptachlor	0 0043	0 0022	J	J	0 0021	No	0 04		Yes
MH15J6	MS1436	25-Mar-97	1	3	Alpha-chlordane	4 1	2 4	J	J	0 016	No	0 2	b	No
MH15J6	MS1436	25-Mar-97	1	3	Gamma-chlordane	4 1	4 5		nv	0 016	No	0 2	b	No
MH19-1	MS1387	15-Mar-97	0	2	4,4'-DDE	0 0034	0 026		nv	0 0031	No	0 084		Yes
MH19-1	MS1387	15-Mar-97	0	2	4,4'-DDT	0 0092	0 019		nv	0 0083	No	0 084		Yes
MH4	MS1253	25-Feb-97	8	10	4,4'-DDE	0 0036	0 0086		nv	0 0031	No	0 084		Yes
MH4	MS1259	26-Feb-97	0	2	4,4'-DDE	0 0035	0 0065		nv	0 0031	No	0 084		Yes
MH5	MS1257	26-Feb-97	0	2	4,4'-DDE	0 007	0 0048	J	J	0 0031	No	0 084		Yes
MH5	MS1257	26-Feb-97	0	2	Gamma-chlordane	0 035	0 016	J	J	0 016	No	0 2	b	Yes
11H25N	MS1334	10-Mar-97	0	2	Methylene chloride	0 0022	0 01	B	nv	0 0021	No	0 5		Yes
11H25N	MS1334	10-Mar-97	0	2	Toluene	0 0054	0 0062		nv	0 0052	No	100		Yes
11H25N	MS1335	10-Mar-97	12	14	Chlorobenzene	0 0023	0 0036		nv	0 0021	No	10		Yes
11H25N	MS1335	10-Mar-97	12	14	Methylene chloride	0 0023	0 011	B	nv	0 0021	No	0 5		Yes
11H25N	MS1335	10-Mar-97	12	14	Toluene	0 0058	0 0085		nv	0 0052	No	100		Yes
11L25S	MS1395	16-Mar-97	0	2	Methylene chloride	0 0023	0 014		nv	0 0021	No	0 5		Yes
11L25S	MS1396	16-Mar-97	16	18	Methylene chloride	0 0024	0 0029		nv	0 0021	No	0 5		Yes
15B25W	MS1306	3-Mar-97	0	2	Methylene chloride	0 0022	0 0055	B	nv	0 0021	No	0 5		Yes
15B25W	MS1307	3-Mar-97	5	7	Methylene chloride	0 0024	0 0054	B	nv	0 0021	No	0 5		Yes
15B25W	MS1307	3-Mar-97	5	7	Toluene	0 006	0 011		nv	0 0052	No	100		Yes
15E25N	MS1285	28-Feb-97	3	5	Toluene	0 0053	0 016		nv	0 0052	No	100		Yes
15E425N	MS1077	10-Mar-97	6	8	1,3,5-trimethylbenzene	0 0034	0 0038		nv	0	No	511	*	Yes
15E425N	MS1077	10-Mar-97	6	8	Methylene chloride	0 0022	0 0093	B	nv	0 0021	No	0 5		Yes
15E425N	MS1077	10-Mar-97	6	8	Toluene	0 0056	0 0097		nv	0 0052	No	100		Yes
15G125N	MS1412	18-Mar-97	8	10	Methylene chloride	0 0021	0 0079	B	nv	0 0021	No	0 5		Yes
5225N	MS1222	1-Apr-97	18	20	Methylene chloride	0 0025	0 0041	B	nv	0 0021	No	0 5		Yes
5225N	MS1222	1-Apr-97	18	20	Toluene	0 0062	0 043		nv	0 0052	No	100		Yes

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
5525N	MS1199	27-Mar-97	15	17	Methylene chloride	0 0023	0 0024	B	nv	0 0021	No	0 5	Yes
5525N	MS1199	27-Mar-97	15	17	Toluene	0 0058	0 012		nv	0 0052	No	100	Yes
925W	MS1384	15-Mar-97	4	6	Methylene chloride	0 0023	0 0061		nv	0 0021	No	0 5	Yes
925W	MS1384	15-Mar-97	4	6	Toluene	0 0056	0 017		nv	0 0052	No	100	Yes
925W	MS1385	15-Mar-97	4	6	Methylene chloride	0 0022	0 0061		nv	0 0021	No	0 5	Yes
925W	MS1385	15-Mar-97	4	6	Toluene	0 0056	0 022		nv	0 0052	No	100	Yes
B1125N	MS1161	19-Mar-97	0	2	Methylene chloride	0 0023	0 003	B	nv	0 0021	No	0 5	Yes
B1125N	MS1161	19-Mar-97	0	2	Toluene	0 0058	0 034		nv	0 0052	No	100	Yes
B1125N	MS1162	19-Mar-97	0	2	Methylene chloride	0 0024	0 0028	B	nv	0 0021	No	0 5	Yes
B1125N	MS1162	19-Mar-97	0	2	Toluene	0 006	0 043		nv	0 0052	No	100	Yes
B1125N	MS1163	19-Mar-97	6	8	Methylene chloride	0 0025	0 0026	B	nv	0 0021	No	0 5	Yes
B1125N	MS1163	19-Mar-97	6	8	Toluene	0 0061	0 012		nv	0 0052	No	100	Yes
B15A25W	MS1106	13-Mar-97	0 5	2 5	Methylene chloride	0 0024	0 0066	B	nv	0 0021	No	0 5	Yes
B15A25W	MS1106	13-Mar-97	0 5	2 5	Toluene	0 0061	0 0077		nv	0 0052	No	100	Yes
B15A25W	MS1107	13-Mar-97	12	14	1,4-dichlorobenzene	0 0025	0 0033		nv	0 0021	No	7 5	Yes
B15A25W	MS1107	13-Mar-97	12	14	Methylene chloride	0 0025	0 0073	B	nv	0 0021	No	0 5	Yes
B15A25W	MS1107	13-Mar-97	12	14	Toluene	0 0062	0 019		nv	0 0052	No	100	Yes
MH11B	MS1267	27-Feb-97	16	18	Naphthalene	0 0021	0 018		nv	0 0021	No	200	Yes
MH11B	MS1267	27-Feb-97	16	18	Sec-butylbenzene	0 0074	0 0066	J	nv		No	102	Yes
MH11B	MS1267	27-Feb-97	16	18	Tert-butylbenzene	0 0074	0 008		nv	0 0073	No	102	Yes
MH11D3	MS1278	28-Feb-97	14	16	Toluene	0 0054	0 0094		nv	0 0052	No	100	Yes
MH11D4	MS1379	14-Mar-97	14	16	Methylene chloride	0 0025	0 014		nv	0 0021	No	0 5	Yes
MH11D4	MS1379	14-Mar-97	14	16	Toluene	0 0062	0 038		nv	0 0052	No	100	Yes
MH11D5	MS1377	14-Mar-97	16	18	Methylene chloride	0 0021	0 012		nv	0 0021	No	0 5	Yes
MH11D5	MS1377	14-Mar-97	16	18	Toluene	0 0053	0 01		nv	0 0052	No	100	Yes
MH11D6A	MS1350	11-Mar-97	8	10	Chlorobenzene	0 0023	0 0025		nv	0 0021	No	10	Yes
MH11D6A	MS1350	11-Mar-97	8	10	Toluene	0 0058	0 021		nv	0 0052	No	100	Yes
MH11D7	MS1349	11-Mar-97	8	10	Toluene	0 0058	0 0078		nv	0 0052	No	100	Yes
MH11DD	MS1378	14-Mar-97	16	18	Methylene chloride	0 0022	0 013		J-	0 0021	No	0 5	Yes
MH11DD	MS1378	14-Mar-97	16	18	Toluene	0 0056	0 064		J-	0 0052	No	100	Yes
MH11E	MS1293	1-Mar-97	14	16	Methylene chloride	0 0023	0 009	B	nv	0 0021	No	0 5	Yes
MH11E	MS1293	1-Mar-97	14	16	Naphthalene	0 0023	0 0028		nv	0 0021	No	200	Yes
MH11E	MS1293	1-Mar-97	14	16	Toluene	0 0058	0 013		nv	0 0052	No	100	Yes
MH11F	MS1295	1-Mar-97	0	2	Methylene chloride	0 0023	0 015	B	nv	0 0021	No	0 5	Yes

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Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)		Does Result Support Closure Under RRS2?
MH11F	MS1295	1-Mar-97	0	2	Toluene	0 0058	0 0072		nv	0 0052	No	100		Yes
MH11F	MS1296	1-Mar-97	14	16	Methylene chloride	0 0021	0 0069	B	nv	0 0021	No	0 5		Yes
MH11I	MS1336	10-Mar-97	12	14	Methylene chloride	0 0024	0 01	B	nv	0 0021	No	0 5		Yes
MH11I	MS1336	10-Mar-97	12	14	Toluene	0 0059	0 0062		nv	0 0052	No	100		Yes
MH11L	MS1391	15-Mar-97	0	2	Methylene chloride	0 0025	0 0064		nv	0 0021	No	0 5		Yes
MH11L	MS1391	15-Mar-97	0	2	P-isopropyltoluene	0 0074	0 0063	J	nv	0 0062	No	20400	*	Yes
MH11L	MS1391	15-Mar-97	0	2	Toluene	0 0062	0 029		nv	0 0052	No	100		Yes
MH11L	MS1392	15-Mar-97	17	19	Methylene chloride	0 0022	0 0047		nv	0 0021	No	0 5		Yes
MH11L	MS1392	15-Mar-97	17	19	Toluene	0 0055	0 01		nv	0 0052	No	100		Yes
MH13E	MS1054	3-Mar-97	12	14	Methylene chloride	0 0023	0 014		nv	0 0021	No	0 5		Yes
MH13E	MS1057	4-Mar-97	0	2	1,2,3-trichlorobenzene	0 0025	0 0091		nv	0 0021	No	7	a	Yes
MH13E	MS1057	4-Mar-97	0	2	1,2,4-trichlorobenzene	0 0025	0 0085		nv	0 0021	No	7		Yes
MH13E	MS1057	4-Mar-97	0	2	Hexachlorobutadiene	0 0064	0 015		nv	0 0052	No	2		Yes
MH13E	MS1057	4-Mar-97	0	2	Naphthalene	0 0025	0 0055		nv	0 0021	No	200		Yes
MH15	MS1132	16-Mar-97	1 99	4	Methylene chloride	0 0022	0 01		nv	0 0021	No	0 5		Yes
MH15	MS1132	16-Mar-97	1 99	4	Toluene	0 0056	0 0062		nv	0 0052	No	100		Yes
MH15	MS1133	16-Mar-97	8	10	Methylene chloride	0 0024	0 011		nv	0 0021	No	0 5		Yes
MH15	MS1133	16-Mar-97	8	10	Toluene	0 0061	0 009		nv	0 0052	No	100		Yes
MH15E12	MS1469	28-Mar-97	0	2	Chlorobenzene	0 0025	0 0035		nv	0 0021	No	10		Yes
MH15E12	MS1469	28-Mar-97	0	2	Toluene	0 0063	0 062		nv	0 0052	No	100		Yes
MH15E12	MS1471	28-Mar-97	18 5	20	Methylene chloride	0 0024	0 0028	B	nv	0 0021	No	0 5		Yes
MH15E12	MS1471	28-Mar-97	18 5	20	Toluene	0 0061	0 0061		nv	0 0052	No	100		Yes
MH15E3	MS1075	10-Mar-97	5	7	Methylene chloride	0 0025	0 0096	B	nv	0 0021	No	0 5		Yes
MH15E3	MS1075	10-Mar-97	5	7	Toluene	0 0063	0 0067		nv	0 0052	No	100		Yes
MH15E3	MS1076	10-Mar-97	5	7	1,2,4-trichlorobenzene	0 0025	0 0043		nv	0 0021	No	7		Yes
MH15E3	MS1076	10-Mar-97	5	7	Methylene chloride	0 0025	0 0095	B	nv	0 0021	No	0 5		Yes
MH15E3	MS1076	10-Mar-97	5	7	Toluene	0 0062	0 012		nv	0 0052	No	100		Yes
MH15E6	MS1081	10-Mar-97	0	2	Toluene	0 0054	0 0071		nv	0 0052	No	100		Yes
MH15E6	MS1082	10-Mar-97	5	7	Methylene chloride	0 0023	0 0025	B	nv	0 0021	No	0 5		Yes
MH15G1	MS1091	11-Mar-97	0	2	1,3,5-trimethylbenzene	0 0036	0 0041		nv	0 0031	No	511	*	Yes
MH15G1	MS1091	11-Mar-97	0	2	Toluene	0 006	0 033		nv	0 0052	No	100		Yes
MH15J2	MS1362	13-Mar-97	10	12	Methylene chloride	0 0021	0 0084	B	nv	0 0021	No	0 5		Yes
MH15J4	MS1372	13-Mar-97	0	2	Chlorobenzene	0 0023	0 0061		nv	0 0021	No	10		Yes
MH15J4	MS1372	13-Mar-97	0	2	Methylene chloride	0 0023	0 0064	B	J-	0 0021	No	0 5		Yes
MH15J4	MS1372	13-Mar-97	0	2	Tetrachloroethene	0 0081	0 014		nv	0 0059	No	0 5		Yes
MH15J4	MS1372	13-Mar-97	0	2	Toluene	0 0058	0 021		nv	0 0052	No	100		Yes
MH15J4	MS1372	13-Mar-97	0	2	Trichloroethene	0 012	0 0094	J	J	0 0059	No	0 5		Yes

Table 4-1

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Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
MH15J4	MS1374	13-Mar-97	10	12	Methylene chloride	0 0022	0 0059	B	nv	0 0021	No	0 5	Yes
MH15J4	MS1374	13-Mar-97	10	12	Toluene	0 0055	0 011		nv	0 0052	No	100	Yes
MH15J6	MS1437	25-Mar-97	10	12	Methylene chloride	0 0021	0 0035		nv	0 0021	No	0 5	Yes
MH15K	MS1435	25-Mar-97	10	12	Toluene	0 0055	0 01		nv	0 0052	No	100	Yes
MH15M	MS1445	26-Mar-97	1	3	Chlorobenzene	0 0023	0 0028		nv	0 0021	No	10	Yes
MH15M	MS1445	26-Mar-97	1	3	Methylene chloride	0 0023	0 0088		nv	0 0021	No	0 5	Yes
MH15M	MS1445	26-Mar-97	1	3	Toluene	0 0058	0 015		nv	0 0052	No	100	Yes
MH15M	MS1446	26-Mar-97	11	13	Methylene chloride	0 0022	0 0074		nv	0 0021	No	0 5	Yes
MH15M	MS1446	26-Mar-97	11	13	Toluene	0 0055	0 011		nv	0 0052	No	100	Yes
MH15Q	MS1279	28-Feb-97	0	2	Methylene chloride	0 0023	0 0089		nv	0 0021	No	0 5	Yes
MH15Q	MS1279	28-Feb-97	0	2	Toluene	0 0057	0 028		nv	0 0052	No	100	Yes
MH15Q	MS1280	28-Feb-97	0	2	Toluene	0 0058	0 021		nv	0 0052	No	100	Yes
MH15Q	MS1281	28-Feb-97	12	14	Methylene chloride	0 0022	0 0024		nv	0 0021	No	0 5	Yes
MH15Q	MS1281	28-Feb-97	12	14	Toluene	0 0055	0 0074		nv	0 0052	No	100	Yes
MH15S	MS1487	1-Apr-97	1	2	Methylene chloride	0 0023	0 0037	B	nv	0 0021	No	0 5	Yes
MH15S	MS1487	1-Apr-97	1	2	Toluene	0 0057	0 051		nv	0 0052	No	100	Yes
MH15S	MS1488	1-Apr-97	13	14	Methylene chloride	0 0023	0 0036	B	nv	0 0021	No	0 5	Yes
MH15S	MS1488	1-Apr-97	13	14	Toluene	0 0057	0 025		nv	0 0052	No	100	Yes
MH19-1	MS1386	15-Mar-97	0	2	Methylene chloride	0 0023	0 007		nv	0 0021	No	0 5	Yes
MH19-1	MS1386	15-Mar-97	0	2	Toluene	0 0057	0 014		nv	0 0052	No	100	Yes
MH19-1	MS1387	15-Mar-97	0	2	Methylene chloride	0 0023	0 0042		nv	0 0021	No	0 5	Yes
MH19-1	MS1387	15-Mar-97	0	2	Toluene	0 0057	0 039		nv	0 0052	No	100	Yes
MH19-1	MS1388	15-Mar-97	12	14	Methylene chloride	0 0021	0 0039		nv	0 0021	No	0 5	Yes
MH19-1	MS1388	15-Mar-97	12	14	Toluene	0 0053	0 0057		nv	0 0052	No	100	Yes
MH35	MS1467	28-Mar-97	0	2	Methylene chloride	0 0023	0 0025	B	nv	0 0021	No	0 5	Yes
MH35	MS1467	28-Mar-97	0	2	Toluene	0 0057	0 0065		nv	0 0052	No	100	Yes
MH35	MS1470	28-Mar-97	16	18	Methylene chloride	0 0022	0 0025	B	nv	0 0021	No	0 5	Yes
MH35	MS1470	28-Mar-97	16	18	Toluene	0 0055	0 0076		nv	0 0052	No	100	Yes
MH4	MS1253	25-Feb-97	8	10	Toluene	0 006	0 019		nv	0 0052	No	100	Yes
MH4	MS1259	26-Feb-97	0	2	Toluene	0 0058	0 012		nv	0 0052	No	100	Yes
MH46	MS1138	17-Mar-97	18	20	Methylene chloride	0 0021	0 0037	B	nv	0 0021	No	0 5	Yes
MH46	MS1138	17-Mar-97	18	20	Naphthalene	0 0021	0 0027		nv	0 0021	No	200	Yes
MH46	MS1138	17-Mar-97	18	20	Toluene	0 0054	0 023		nv	0 0052	No	100	Yes
MH5	MS1257	26-Feb-97	0	2	Toluene	0 0058	0 033		nv	0 0052	No	100	Yes
MH5	MS1258	26-Feb-97	6	8	Toluene	0 0059	0 0068		nv	0 0052	No	100	Yes
MH53	MS1203	27-Mar-97	0	2	Toluene	0 0053	0 013		nv	0 0052	No	100	Yes

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

Location	Sample No.	Sample Date	Start Depth	End Depth	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/kg)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result Support Closure Under RRS2?
MH53	MS1204	27-Mar-97	0	2	Ethylbenzene	0 0038	0 0041		nv	0 0031	No	70	Yes
MH53	MS1204	27-Mar-97	0	2	M,p-xylenes	0 0089	0 014		nv	0 0073	No	1000	Yes
MH53	MS1204	27-Mar-97	0	2	Toluene	0 0063	0 14		nv	0 0052	No	100	Yes
MH53	MS1205	27-Mar-97	18	20	Toluene	0 0062	0 025		nv	0 0052	No	100	Yes
MH56	MS1200	27-Mar-97	0	2	Toluene	0 0058	0 071		nv	0 0052	No	100	Yes
MH56	MS1201	27-Mar-97	0	2	Toluene	0 0061	0 05		nv	0 0052	No	100	Yes
MH75	MS1324	5-Mar-97	5	7	Chlorobenzene	0 0022	0 0023		nv	0 0021	No	10	Yes
MH9B	MS1381	14-Mar-97	11	13	Methylene chloride	0 0022	0 012		nv	0 0021	No	0 5	Yes
MH9B	MS1381	14-Mar-97	11	13	Toluene	0 0055	0 013		nv	0 0052	No	100	Yes
MHB12	MS1165	19-Mar-97	0	2	Toluene	0 0058	0 0058		nv	0 0052	No	100	Yes
MHB12	MS1166	19-Mar-97	0	2	Toluene	0 0059	0 06		nv	0 0052	No	100	Yes
MHB12	MS1167	19-Mar-97	10	11 5	Methylene chloride	0 0024	0 0022	J,B	nv	0 0021	No	0 5	Yes
MHB12	MS1167	19-Mar-97	10	11 5	Toluene	0 0059	0 013		nv	0 0052	No	100	Yes
MHB3E	MS1041	1-Mar-97	0	2	Methylene chloride	0 0026	0 0077	B	nv	0 0021	No	0 5	Yes
MHB3E	MS1041	1-Mar-97	0	2	Toluene	0 0065	0 023		nv	0 0052	No	100	Yes
MHB3E	MS1042	1-Mar-97	10	12	Methylene chloride	0 0025	0 0071	B	nv	0 0021	No	0 5	Yes
MHB3E	MS1042	1-Mar-97	10	12	Toluene	0 0064	0 015		nv	0 0052	No	100	Yes
MHB6	MS1425	19-Mar-97	0	2	Toluene	0 0061	0 02		nv	0 0052	No	100	Yes
MHB6	MS1426	19-Mar-97	6	8	Toluene	0 0058	0 019		nv	0 0052	No	100	Yes
11C25N	MS1270	27-Feb-97	14	16	Di-n-butyl phthalate	1 5	5 8		nv	0 73	No	1000	Yes
11L25S	MS1395	16-Mar-97	0	2	Pyrene	0 81	0 23	J	J		No	310	Yes
MH11D3	MS1278	28-Feb-97	14	16	Di-n-butyl phthalate	0 76	1 8		nv	0 73	No	1000	Yes
MH15E3	MS1076	10-Mar-97	5	7	Pyrene	0 87	0 58	J	J		No	310	Yes
MH15E6	MS1081	10-Mar-97	0	2	Pyrene	0 76	0 65	J	J		No	310	Yes
MH15G1	MS1091	11-Mar-97	0	2	Benzo(a)anthracene	0 84	2 3		nv	0 73	No	0 039	No
MH15G1	MS1091	11-Mar-97	0	2	Benzo(a)pyrene	0 84	1 5		nv	0 73	No	0 02	No
MH15G1	MS1091	11-Mar-97	0	2	Benzo(b)fluoranthene	0 84	2 6		nv	0 73	No	0 039	No
MH15G1	MS1091	11-Mar-97	0	2	Benzo(ghi)perylene	0 84	0 9		nv	0 73	No	310	Yes
MH15G1	MS1091	11-Mar-97	0	2	Benzo(k)fluoranthene	0 84	2 6		nv	0 73	No	0 39	No
MH15G1	MS1091	11-Mar-97	0	2	Chrysene	0 84	1 9		nv	0 73	No	3 9	Yes
MH15G1	MS1091	11-Mar-97	0	2	Fluoranthene	0 84	3 7		nv	0 73	No	410	Yes
MH15G1	MS1091	11-Mar-97	0	2	Indeno(1,2,3-cd)pyrene	0 84	0 82	J	J	0 73	No	0 039	No
MH15G1	MS1091	11-Mar-97	0	2	Phenanthrene	0 84	2 3		nv	0 73	No	310	Yes
MH15G1	MS1091	11-Mar-97	0	2	Pyrene	0 84	4 7		J		No	310	Yes
MH15Q	MS1279	28-Feb-97	0	2	Pyrene	1 6	0 19	J	nv		No	310	Yes

Table 4-1

Summary of Phase 1 Detected Soil Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth, Texas

* Calculated value
[a] 1,2,4-trichlorobenzene used as surrogate
[b] Chlordane used as surrogate
[c] Polychlorinated biphenyls used as surrogate

MSC = Media-Specific Concentration
NA = not applicable
PQL = Practical Quantitation Limit
RRS1 = Risk Reduction Standard 1
RRS2 = Risk Reduction Standard 2
TNRCC = Texas Natural Resources Conservation Commission
UTL = Upper Tolerance Limit

Footnotes:

[1] UTLs for inorganics derived from Final Draft Basewide Background Study, Jacobs Engineering, 1998 MQLs for organics were derived by taking the most conservative reporting limit for a given analyte
[2] TNRCC, 1999, "Updated Examples of Standard No 2, Appendix II Media-Specific Concentrations (MSCs) - Industrial Setting", July 14

Laboratory Qualifier Definitions:

" " = The analyte was positively identified
"J" = For inorganics, the associated value is an estimated quantity For organics, the analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample
"J-" = For inorganics, the associated value is an estimated quantity The value may be lower than the true value
"J-" = For organics, the analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample The value may be lower than the true value
"J+" = For inorganics, the associated value is an estimated quantity The value may be higher than the true value
"J+" = For organics, the analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample The value may be higher than the true value
"nv" = not validated

Table 4-2

Summary of Phase 1 Detected Groundwater Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample No.	Sample Date	Parameter	Reporting Limit (mg/L)	Result (mg/L)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/L)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/L)	Does Result Support Closure Under RRS2?
GMI-22-05M	MS1539	11-Apr-97	Antimony	0 4	0 0245	B	nv	0 002	No	0 006	No
GMI-22-05M	MS1539	11-Apr-97	Manganese	0 02	0 404		nv	0 175	No	14	Yes
GMI-22-05M	MS1539	11-Apr-97	Mercury	0 001	0 00011	B	nv	0 0001	No	0 002	Yes
GMI-22-05M	MS1539	11-Apr-97	Methylene chloride	0 0003	0 0004	B	nv	0 0003	No	0 005	Yes
IDW	MS1594	2-May-97	Antimony	0 4	0 0178	B		0 002	No	0 006	No
IDW	MS1594	2-May-97	Chloroform	0 0003	0 00041			0 0003	No	0 1	Yes
IDW	MS1594	2-May-97	Cis-1,2-dichloroethene	0 0012	0 0089			0 0012	No	0 07	Yes
IDW	MS1594	2-May-97	Manganese	0 02	0 506			0 175	No	14	Yes
IDW	MS1594	2-May-97	Methylene chloride	0 0003	0 00047	B		0 0003	No	0 005	Yes
IDW	MS1594	2-May-97	Naphthalene	0 0004	0 0025			0 0004	No	2	Yes
IDW	MS1594	2-May-97	Trichloroethene	0 001	0 022			0 001	No	0 005	No
MW-5	MS1534	10-Apr-97	Beryllium	0 003	0 00048	B		0 0003	No	0 004	Yes
MW-5	MS1534	10-Apr-97	Methylene chloride	0 0003	0 0009	B		0 0003	No	0 005	Yes
ST14MW24	MS1529	9-Apr-97	Antimony	0 4	0 019	B	nv	0 002	No	0 006	No
ST14MW24	MS1529	9-Apr-97	Methylene chloride	0 0003	0 0018	B	nv	0 0003	No	0 005	Yes
ST14MW27	MS1533	10-Apr-97	Beryllium	0 003	0 00048	B		0 0003	No	0 004	Yes
ST14MW27	MS1533	10-Apr-97	Chromium	0 07	0 0307	B		0 006	No	0 1	Yes
ST14MW27	MS1533	10-Apr-97	Manganese	0 02	1 44			0 175	No	14	Yes
ST14MW27	MS1533	10-Apr-97	Methylene chloride	0 0003	0 0013	B		0 0003	No	0 005	Yes
ST14MW27	MS1533	10-Apr-97	Nickel	0 15	0 0284	B		0 0204	No	2	Yes
ST14MW27	MS1533	10-Apr-97	Tert-butylbenzene	0 0014	0 0096			0 0014	No	1 02	Yes
ST14-W05	MS1532	10-Apr-97	Antimony	0 4	0 0237	B	nv	0 002	No	0 006	No
ST14-W05	MS1532	10-Apr-97	Beryllium	0 003	0 00049	B	nv	0 0003	No	0 004	Yes
ST14-W05	MS1532	10-Apr-97	Manganese	0 02	1 15		nv	0 175	No	14	Yes
ST14-W05	MS1532	10-Apr-97	Methylene chloride	0 0003	0 0017	B	nv	0 0003	No	0 005	Yes
WITCTA007	MS1541	22-Apr-97	Cis-1,2-dichloroethene	0 0024	0 057			0 0012	No	0 07	Yes
WITCTA007	MS1541	22-Apr-97	Manganese	0 02	0 346			0 175	No	14	Yes
WITCTA007	MS1541	22-Apr-97	Methylene chloride	0 0006	0 0011	B		0 0003	No	0 005	Yes
WITCTA007	MS1541	22-Apr-97	Trichloroethene	0 002	0 054			0 001	No	0 005	No

Table 4-2

Summary of Phase 1 Detected Groundwater Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample No.	Sample Date	Parameter	Reporting Limit (mg/L)	Result (mg/L)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/L)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/L)	Does Result Support Closure Under RRS2?
WITCTA009	MS1546	23-Apr-97	Cis-1,2-dichloroethene	0 06	0 033	J	J	0 0012	No	0 07	Yes
WITCTA009	MS1546	23-Apr-97	Manganese	0 02	0 675		nv	0 175	No	14	Yes
WITCTA009	MS1546	23-Apr-97	Methylene chloride	0 015	0 039	B	nv	0 0003	No	0 005	No
WITCTA009	MS1546	23-Apr-97	Silver	0 07	0 0041	B	nv	0 0002	No	0 51	Yes
WITCTA009	MS1546	23-Apr-97	Trichloroethene	0 05	0 65		nv	0 001	No	0 005	No
WITCTA010	MS1543	22-Apr-97	Cis-1,2-dichloroethene	0 0012	0 0018			0 0012	No	0 07	Yes
WITCTA010	MS1543	22-Apr-97	Manganese	0 02	0 954			0 175	No	14	Yes
WITCTA010	MS1543	22-Apr-97	Methylene chloride	0 0003	0 00044	B		0 0003	No	0 005	Yes
WITCTA011	MS1576	30-Apr-97	Arsenic	0 6	0 0244	B	B	0 0049	No	0 05	Yes
WITCTA011	MS1576	30-Apr-97	Chloroform	0 015	0 015	J	J	0 0003	No	0 1	Yes
WITCTA011	MS1576	30-Apr-97	Cis-1,2-dichloroethene	0 06	0 058	J	J	0 0012	No	0 07	Yes
WITCTA011	MS1576	30-Apr-97	Manganese	0 02	0 63			0 175	No	14	Yes
WITCTA011	MS1576	30-Apr-97	Trichloroethene	0 05	0 55			0 001	No	0 005	No
WITCTA012	MS1556	28-Apr-97	Arsenic	0 01	0 0104			0 0049	No	0 05	Yes
WITCTA012	MS1557	28-Apr-97	Arsenic	0 01	0 0104			0 0049	No	0 05	Yes
WITCTA012	MS1556	28-Apr-97	Cis-1,2-dichloroethene	0 006	0 092			0 0012	No	0 07	No
WITCTA012	MS1557	28-Apr-97	Cis-1,2-dichloroethene	0 006	0 094			0 0012	No	0 07	No
WITCTA012	MS1556	28-Apr-97	Manganese	0 02	0 587			0 175	No	14	Yes
WITCTA012	MS1557	28-Apr-97	Manganese	0 02	0 578			0 175	No	14	Yes
WITCTA012	MS1556	28-Apr-97	Methylene chloride	0 0015	0 0016	B		0 0003	No	0 005	Yes
WITCTA012	MS1557	28-Apr-97	Methylene chloride	0 0015	0 0018	B		0 0003	No	0 005	Yes
WITCTA012	MS1556	28-Apr-97	Trichloroethene	0 005	0 0068			0 001	No	0 005	No
WITCTA012	MS1557	28-Apr-97	Trichloroethene	0 005	0 0062			0 001	No	0 005	No
WITCTA013	MS1560	28-Apr-97	Cis-1,2-dichloroethene	0 03	0 05			0 0012	No	0 07	Yes
WITCTA013	MS1560	28-Apr-97	Methylene chloride	0 0075	0 017	B		0 0003	No	0 005	No
WITCTA013	MS1560	28-Apr-97	Trichloroethene	0 025	0 33			0 001	No	0 005	No
WITCTA015	MS1548	23-Apr-97	Chloroform	0 003	0 0048		nv	0 0003	No	0 1	Yes
WITCTA015	MS1548	23-Apr-97	Cis-1,2-dichloroethene	0 012	0 24		nv	0 0012	No	0 07	No
WITCTA015	MS1548	23-Apr-97	Methylene chloride	0 003	0 0074	B	nv	0 0003	No	0 005	No
WITCTA015	MS1548	23-Apr-97	Tetrachloroethene	0 014	0 011	J	nv	0 0014	No	0 005	No

Table 4-2

Summary of Phase 1 Detected Groundwater Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample No.	Sample Date	Parameter	Reporting Limit (mg/L)	Result (mg/L)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/L)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/L)		Does Result Support Closure Under RRS2?
WITCTA017	MS1547	23-Apr-97	Methylene chloride	0 0003	0 00085	B		0 0003	No	0 005		Yes
WITCTA017	MS1547	23-Apr-97	Silver	0 07	0 0048	B		0 0002	No	0 51		Yes
WITCTA019	MS1568	29-Apr-97	Beryllium	0 003	0 00051	B		0 0003	No	0 004		Yes
WITCTA019	MS1568	29-Apr-97	Carbon dioxide	2	72 5			2	No	NA		Yes
WITCTA019	MS1568	29-Apr-97	Cis-1,2-dichloroethene	0 0012	0 0015			0 0012	No	0 07		Yes
WITCTA019	MS1568	29-Apr-97	Manganese	0 02	0 315			0 175	No	14		Yes
WITCTA019	MS1568	29-Apr-97	Methane	0 001	0 014			0 001	No	NA		Yes
WITCTA019	MS1568	29-Apr-97	Methylene chloride	0 0003	0 0005	B		0 0003	No	0 005		Yes
WITCTA019	MS1568	29-Apr-97	Nitrate	0 1	4 7			0 1	No	10		Yes
WITCTA019	MS1568	29-Apr-97	Sulfate	0 2	33			0 2	No	NA		Yes
WITCTA020	MS1569	29-Apr-97	Beryllium	0 003	0 00051	B		0 0003	No	0 004		Yes
WITCTA020	MS1569	29-Apr-97	Methylene chloride	0 0003	0 00058	B		0 0003	No	0 005		Yes
WITCTA020	MS1569	29-Apr-97	Trichloroethene	0 001	0 0078			0 001	No	0 005		No
WITCTA024	MS1593	2-May-97	1,2,4-trimethylbenzene	0 0026	0 064		nv	0 0026	No	0	*	No
WITCTA024	MS1593	2-May-97	1,3,5-trimethylbenzene	0 001	0 0035		nv	0 001	No	5 11	*	Yes
WITCTA024	MS1593	2-May-97	Isopropylbenzene	0 001	0 0013		nv	0 0005	No	10		Yes
WITCTA024	MS1593	2-May-97	Methylene chloride	0 0006	0 0033		nv	0 0003	No	0 005		Yes
WITCTA024	MS1593	2-May-97	Naphthalene	0 0008	0 0041		nv	0 0004	No	2		Yes
WITCTA024	MS1593	2-May-97	N-propylbenzene	0 0008	0 0037		nv	0 0008	No	1 02	*	Yes
WITCTA024	MS1593	2-May-97	P-isopropyltoluene	0 0024	0 0034		nv	0 0012	No	204	*	Yes
WITCTA024	MS1593	2-May-97	Sec-butylbenzene	0 0026	0 0031		nv	0 0013	No	1 02	*	Yes
WITCTA024	MS1593	2-May-97	Tert-butylbenzene	0 0028	0 0024	J	nv	0 0014	No	1 02	*	Yes
WITCTA025	MS1553	24-Apr-97	Cis-1,2-dichloroethene	0 006	0 071		nv	0 0012	No	0 07		No
WITCTA025	MS1553	24-Apr-97	Methylene chloride	0 0015	0 0049	B	nv	0 0003	No	0 005		Yes
WITCTA025	MS1553	24-Apr-97	Silver	0 07	0 0037	B	nv	0 0002	No	0 51		Yes
WITCTA025	MS1553	24-Apr-97	Tetrachloroethene	0 007	0 014		nv	0 0014	No	0 005		No
WITCTA026	MS1596	2-May-97	Methylene chloride	0 0003	0 00045	B		0 0003	No	0 005		Yes
WITCTA028	MS1552	24-Apr-97	Manganese	0 02	0 562			0 175	No	14		Yes
WITCTA028	MS1552	24-Apr-97	Methylene chloride	0 0003	0 00091	B		0 0003	No	0 005		Yes

Table 4-2

Summary of Phase 1 Detected Groundwater Concentrations Exceeding Background
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample No.	Sample Date	Parameter	Reporting Limit (mg/L)	Result (mg/L)	Laboratory Qualifier	Validation Qualifier	Background UTL or MQL[1] (mg/L)	Does Result Support Closure Under RRS1?	TNRCC MSC[2] (mg/L)		Does Result Support Closure Under RRS2?
WITCTA031	MS1586	1-May-97	Arsenic	0 6	0 0517	B		0 0049	No	0 05		No
WITCTA031	MS1586	1-May-97	Barium	0 02	1 49			0 587	No	2		Yes
WITCTA031	MS1586	1-May-97	Carbon dioxide	2	62 5			2	No	NA		Yes
WITCTA031	MS1586	1-May-97	Ethane	0 001	0 006			0 001	No	NA		Yes
WITCTA031	MS1586	1-May-97	Manganese	0 02	1.72			0 175	No	14		Yes
WITCTA031	MS1586	1-May-97	Methane	0 002	0 015			0 001	No	NA		Yes
WITCTA031	MS1586	1-May-97	Sulfate	0 2	6 8			0 2	No	NA		Yes
WITCTA031	MS1586	1-May-97	Vinyl chloride	0 0011	0 0022			0 0011	No	0 002		No
WITCTA033	MS1577	30-Apr-97	Carbon dioxide	2	50			2	No	NA		Yes
WITCTA033	MS1577	30-Apr-97	Ferrous iron	0 042	0 835			0 042	No	NA		Yes
WITCTA033	MS1577	30-Apr-97	Methane	0 001	0 009			0 001	No	NA		Yes
WITCTA033	MS1577	30-Apr-97	Methylene chloride	0 0003	0 00073	B		0 0003	No	0 005		Yes
WITCTA033	MS1577	30-Apr-97	Nitrate	0 1	1 2			0 1	No	10		Yes
WITCTA033	MS1577	30-Apr-97	P-isopropyltoluene	0 0012	0 01			0 0012	No	204	*	Yes
WITCTA033	MS1577	30-Apr-97	Sulfate	0 2	23			0 2	No	NA		Yes
WITCTA036	MS1597	2-May-97	1,2,4-trimethylbenzene	160	750			0 0026	No	0	*	No
WITCTA036	MS1597	2-May-97	1,3,5-trimethylbenzene	63	190			0 001	No	5 11	*	No
WITCTA036	MS1597	2-May-97	Diesel	100	11000			100	No	61 3	*	No
WITCTA036	MS1597	2-May-97	Ethylbenzene	75	120			75	No	0 7		No
WITCTA036	MS1597	2-May-97	Gasoline	100	8600			0 1	No	6 13	*	No
WITCTA036	MS1597	2-May-97	M,p-xylenes	160	410			160	No	10		No
WITCTA036	MS1597	2-May-97	Naphthalene	50	320			0 0004	No	2		No
WITCTA036	MS1597	2-May-97	N-propylbenzene	50	94			0 0008	No	1 02	*	No
WITCTA036	MS1597	2-May-97	O-xylene	140	230			140	No	10		No
WITCTA036	MS1597	2-May-97	Toluene	140	180			0 0011	No	1		No
WITCTA037	MS1566	29-Apr-97	Beryllium	0 003	0 00036	B		0 0003	No	0 004		Yes
WITCTA037	MS1566	29-Apr-97	Carbon dioxide	2	52 5			2	No	NA		Yes
WITCTA037	MS1566	29-Apr-97	Cis-1,2-dichloroethene	0 006	0 0084			0 0012	No	0 07		Yes
WITCTA037	MS1566	29-Apr-97	Ferrous iron	0 042	0 06			0 042	No	NA		Yes
WITCTA037	MS1566	29-Apr-97	Methylene chloride	0 0015	0 0019	B		0 0003	No	0 005		Yes
WITCTA037	MS1566	29-Apr-97	Nitrate	0 1	1 7			0 1	No	10		Yes
WITCTA037	MS1566	29-Apr-97	Sulfate	0 2	18			0 2	No	NA		Yes
WITCTA037	MS1566	29-Apr-97	Trichloroethene	0 005	0 058			0 001	No	0 005		No

Table 4-2

Summary of Phase 1 Detected Groundwater Concentrations Exceeding RRS 1
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

* Calculated value

MSC = Media-Specific Concentration
NA = not applicable
PQL = Practical Quantitation Limit
RRS1 = Risk Reduction Standard 1
RRS2 = Risk Reduction Standard 2
TNRCC = Texas Natural Resources Conservation Commission
UTL = Upper Tolerance Limit

Footnotes:
[1] UTLs for inorganics derived from Final Draft Basewide Background Study, Jacobs Engineering, 1998 MQLs for organics were derived by taking the most conservative reporting limit for a given analyte
[2] TNRCC, 1999, "Updated Examples of Standard No 2, Appendix II Media-Specific Concentrations (MSCs) - Industrial Setting", July 14

Validated Qualifiers:
"B" = For organics, the analyte was found in an associated blank, as well as in the sample
"J" = For inorganics, the associated value is an estimated quantity.
"J+" = The associated value is an estimated quantity The value may be higher than the true value
"nv" = not validated

The following shows the rationale in eliminating certain sample locations from the Sanitary Sewer RFI for further investigation:

- Organic analytes not exceeding laboratory method PQLs.
- Inorganic analytes not exceeding background UTLs.
- Groundwater samples from locations from known spill sites and the areas influenced by the AFP 4 TCE groundwater plume.
- Sample locations with contaminants suspected of anthropogenic source (PAHs from asphalt), removal of sample detections suspected to be caused by laboratory contamination, and removal of single detections of uncommon constituents that do not have an identified local industrial source.

A complete summary of the Phase 2 RFI analytical results is provided in the data quality summary report (DQSR) provided in Appendix A. Table 4-3 presents the detected soil concentrations that exceeded RRS 1 values (i.e., background) during the Phase 2 investigation. Table 4-4 presents the detected concentrations from the Phase 2 groundwater samples compared to RRS 1 (i.e., background concentrations) and RRS 2 (MSCs) values.

4.2 Rationale for Phase 3 Confirmation/Delineation Sampling

Further evaluation of the soil analytical data collected during both Phase 1 and Phase 2 indicate that additional sampling is necessary to delineate contaminant concentrations to RRS 1. Figures 4-1 through 4-12 identify the sampling locations that require additional confirmation or delineation and summarize required analyses. The Phase 3 sampling locations were chosen based on the following rationale:

- Phase 1 sampling locations where soil and/or groundwater concentrations that exceeded RRS 1/RRS 2 were not confirmed during Phase 2 field activities. These locations include several proposed Phase 2 sampling locations where construction activities prohibited sampling during the April/May 2000 Phase 2 sampling event.
- Phase 2 sampling locations where the detected concentrations confirmed that contaminant(s) are present above RRS 1 concentrations. Additional sampling is required at these locations to delineate contaminant concentrations to RRS 1.

The following contaminants were eliminated for the reasons specified:

Table 4-3

Summary of Phase 2 Detected Soil Concentrations Compared to Background and TNRCC Media Specific Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Start Depth (FT)	End Depth (FT)	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Background UTL or MQL[1] (mg/kg)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result support closure under RRS2?
11C25N	10-Apr-00	BT0033	15	17	Silver	1 1	0 97	0 128	F	J	No	51	Yes
11C25N	10-Apr-00	BT0034	15	17	Silver	1	0 35	0 128	F	nv	No	51	Yes
11H25N	10-Apr-00	BT0037	17	18	2-butanone	0 13	0 00284	0 13	F	J	Yes	6100	NA
11H25N	10-Apr-00	BT0037	17	18	Acetone	0 27	0 01	0 26	R	J	Yes	1000	NA
11H25N	10-Apr-00	BT0038	17	18	Acetone	0 28	0 00959	0 26	F	nv	Yes	1000	NA
11H25N	10-Apr-00	BT0037	17	18	Cis-1,2-dichloroethene	0 0065	0 00057	0 0063	F	J	Yes	7	NA
11H25N	10-Apr-00	BT0037	17	18	Ethylbenzene	0 0032	0 000441	0 0032	F	J	Yes	70	NA
11H25N	10-Apr-00	BT0038	17	18	M,p-xylenes	0 0057	0 00075	0 0053	F	nv	Yes	1000	NA
11H25N	10-Apr-00	BT0037	17	18	Methylene chloride	0 0022	0 00968	0 0021		J	No	0 5	Yes
11H25N	10-Apr-00	BT0038	17	18	Methylene chloride	0 0023	0 00114	0 0021	F	nv	Yes	0 5	NA
11H25N	10-Apr-00	BT0037	17	18	Toluene	0 0054	0 000548	0 0053	F	J	Yes	100	NA
11H25N	10-Apr-00	BT0037	17	18	Trichloroethene	0 011	0 00265	0 011	F	J	Yes	0 5	NA
11H25N	10-Apr-00	BT0038	17	18	Trichloroethene	0 011	0 000955	0 011	F	nv	Yes	0 5	NA
15E25N	11-Apr-00	BT0050	8	10	Manganese	2 1	343	351 7		nv	Yes	1400	NA
15E25N	11-Apr-00	BT0050	8	10	Silver	1 1	0 251	0 128	F	nv	No	51	Yes
5225N	27-Apr-00	BT0040	21	22	Silver	1 2	0 991	0 128	F	nv	No	51	Yes
925W	12-Apr-00	BT0060	6	8	Arsenic	1 1	2 86	6 58		J	Yes	5	NA
925W	12-Apr-00	BT0061	6	8	Arsenic	1 2	6 38	6 58		nv	Yes	5	NA
925W	12-Apr-00	BT0060	6	8	Silver	1 1	0 448	0 128	F	J	No	51	Yes
925W	12-Apr-00	BT0061	6	8	Silver	1 2	0 455	0 128	F	nv	No	51	Yes
B1125N	14-Apr-00	BT0012	0	2	Silver	1 2	0 564	0 213	F	nv	No	51	Yes
B15A25W	14-Apr-00	BT0028	8	10	1,4-dichlorobenzene	0 0024	0 0217	0 0021		nv	No	7 5	Yes
MH11A	14-Apr-00	BT0044	13	15	Silver	1 1	0 513	0 128	F	nv	No	51	Yes
MH11B	14-Apr-00	BT0032	13	13 5	Tert-butylbenzene	0 041	0 622	0 0074	J	nv	No	102	Yes
MH11C	10-Apr-00	BT0045	16	18	Silver	1 1	0 329	0 128	F	nv	No	51	Yes
MH11D	10-Apr-00	BT0046	14	17	Manganese	2 2	325	351 7		nv	Yes	1400	NA
MH11D	10-Apr-00	BT0046	14	17	Silver	1 1	0 742	0 128	F	nv	No	51	Yes
MH11D2	10-Apr-00	BT0047	17	19	Barium	1 1	12 7	128 1		nv	Yes	200	NA

Table 4-3

Summary of Phase 2 Detected Soil Concentrations Compared to Background and TNRCC Media Specific Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Start Depth (FT)	End Depth (FT)	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Background UTL or MQL[1] (mg/kg)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/kg)		Does Result support closure under RRS2?
MH11D2	10-Apr-00	BT0047	17	19	Manganese	2 2	356	351 7		nv	No	1400		Yes
MH11D2	10-Apr-00	BT0047	17	19	Silver	1 1	0 35	0 128	F	nv	No	51		Yes
MH11D3	10-Apr-00	BT0048	18	20	Barium	1 1	21 2	128 1		nv	Yes	200		NA
MH11D3	10-Apr-00	BT0048	18	20	Manganese	2 2	296	351 7		nv	Yes	1400		NA
MH11D3	10-Apr-00	BT0048	18	20	Silver	1 1	0 254	0 128	F	nv	No	51		Yes
MH11D4	11-Apr-00	BT0058	15 5	17 5	Silver	1	0 389	0 128	F	nv	No	51		Yes
MH11D7	11-Apr-00	BT0053	17 5	19 5	Cobalt	11	1 76	6 19	F	nv	Yes	610		NA
MH11D7	11-Apr-00	BT0053	17 5	19 5	Lead	1 1	3 18	12 66		nv	Yes	1 5		NA
MH11DD	11-Apr-00	BT0057	15	17	Silver	1 1	0 889	0 128	F	nv	No	51		Yes
MH11F	10-Apr-00	BT0020	0	2	Antimony	1 2	0 677	0 56	F	nv	No	0 6		No
MH11I	10-Apr-00	BT0052	16	18	Silver	1 2	0 588	0 128	F	nv	No	51		Yes
MH11L	11-Apr-00	BT0023	1	3	Silver	1 2	1 27	0 128		nv	No	51		Yes
MH13E	10-Apr-00	BT0003	0	2	M,p-xylenes	0 006	0 000952	0 0053	F	nv	Yes	1000		NA
MH15E12	12-Apr-00	BT0010	0	2	Acetone	0 29	0 00316	0 26	J	nv	Yes	1000		NA
MH15E6	11-Apr-00	BT0004	0	2	4,4'-DDE	0 0034	0 00879	0 0034		nv	No	0 084	a	Yes
MH15E6	11-Apr-00	BT0004	0	2	4,4'-DDT	0 0034	0 0069	0 0034		nv	No	0 084	a	Yes
MH15E6	11-Apr-00	BT0004	0	2	Silver	1	0 452	0 213	F	nv	No	51		Yes
MH15G1	11-Apr-00	BT0005	0	2	Mercury	0 12	0 005	0 14	F	J	Yes	0 2		NA
MH15G1	11-Apr-00	BT0005	0	2	Methylene chloride	0 0024	0 00113	0 0021	F	J	Yes	0 5		NA
MH15G1	11-Apr-00	BT0006	0	2	Methylene chloride	0 0024	0 00113	0 0021	F	nv	Yes	0 5		NA
MH15J4	12-Apr-00	BT0008	0	2	Acetone	0 27	0 00712	0 26	F	nv	Yes	1000		NA
MH15J4	12-Apr-00	BT0008	0	2	Tetrachloroethene	0 0074	0 0151	0 0074		nv	No	0 5		Yes
MH15J4	12-Apr-00	BT0008	0	2	Trichloroethene	0 011	0 00398	0 011	F	nv	Yes	0 5		NA
MH15J6	12-Apr-00	BT0026	0	2	Silver	1 1	0 966	0 213	F	nv	No	51		Yes
MH15J6	12-Apr-00	BT0064	12	14	Manganese	2 1	618	351 7		nv	No	1400		Yes

Table 4-3

Summary of Phase 2 Detected Soil Concentrations Compared to Background and TNRCC Media Specific Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Start Depth (FT)	End Depth (FT)	Parameter	Reporting Limit (mg/kg)	Result (mg/kg)	Background UTL or MQL[1] (mg/kg)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/kg)	Does Result support closure under RRS2?
MH15K	12-Apr-00	BT0063	12	14	Silver	1 1	0 532	0 128	F	nv	No	51	Yes
MH15S	27-Apr-00	BT0066	10	12	Silver	1 2	0 798	0 128	F	nv	No	51	Yes
MH19-1	26-Apr-00	BT0021	0	2	Silver	1 1	0 923	0 213	F	J	No	51	Yes
MH35	10-May-00	BT0065	13	15	Manganese	2 2	441	351 7		nv	No	1400	Yes
MH4	27-Apr-00	BT0018	0	2	Cadmium	0 11	1 63	0 556	M	J	No	0 5	No
MH4	27-Apr-00	BT0018	0	2	Copper	2 2	54 3	17 37	M	J	No	130	Yes
MH4	27-Apr-00	BT0018	0	2	Silver	1 1	0 91	0 213	F	J	No	51	Yes
MH53	27-Apr-00	BT0016	0	2	Cadmium	0 11	0 2	0 556		nv	Yes	0 5	NA
MH56	27-Apr-00	BT0014	0	2	Arsenic	1 2	5 81	5 85			Yes	5	NA
MH56	27-Apr-00	BT0015	0	2	Arsenic	1 2	6 54	5 85		nv	No	5	No
MH75	14-Apr-00	BT0036	3 5	5	Molybdenum	3 2	2 47	1 93	F	J	No	51	Yes
MH9B	12-Apr-00	BT0059	10	12	Arsenic	1 1	7 15	6 58		nv	No	5	No
MHB12	14-Apr-00	BT0013	0	2	Lead	1 2	9 68	30 97		nv	Yes	1 5	NA
MHB3E	14-Apr-00	BT0002	0	2	Lead	1 2	37 1	30 97		nv	No	1 5	No
MHB6	27-Apr-00	BT0025	0	2	Silver	1 1	0 664	0 213	F	nv	No	51	Yes
MHB9	14-Apr-00	BT0001	0	2	Silver	1 2	0 998	0 213	F	nv	No	51	Yes

Table 4-3

Summary of Phase 2 Detected Soil Concentrations Compared to Background and TNRCC Media Specific Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

* Calculated value
[a] Polychlorinated biphenyls used as a surrogate

FT - feet
MSC - Media-Specific Concentrations
PQL - Practical Quantitation Limit
RRS1 - Risk Reduction Standard 1
RRS2 - Risk Reduction Standard 2
TNRCC - Texas Natural Resource Conservation Commission
UTL - Upper Tolerance Limit

Footnotes
[1] UTLs for inorganics derived from Final Draft Basewide Background Study, Jacobs Engineering, 1998 MQLs for organics were derived by taking the most conservative reporting limit for a given analyte
[2] TNRCC, 1999, "Updated Examples of Standard No 2, Appendix II Media-Specific Concentrations (MSCs) - Industrial Setting", July 14

Validated Qualifier Definitions.
"J" = For inorganics, the associated value is an estimated quantity For organics, the analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample
"nv" = not validated

Table 4-4

Summary of Phase 2 Detected Groundwater Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Parameter	Result (mg/L)	Reporting Limit (mg/L)	Background UTL or MQL[1] (mg/L)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/L)		Does Result support closure under RRS2?
SS-HP01	25-Apr-00	BT3001	Acetone	0 00383	0 05	0 05	F	nv	Yes	10		NA
SS-HP01	25-Apr-00	BT3001	Cis-1,2-dichloroethene	0 00056	0 0012	0 0012	F	nv	Yes	0 07		NA
SS-HP01	25-Apr-00	BT3001	Toluene	0 00063	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP02	26-Apr-00	BT3002	Acetone	0 00282	0 05	0 05	F	nv	Yes	10		NA
SS-HP02	26-Apr-00	BT3002	Methyl tert-butyl ether	0 00048	0 025	0 025	F	nv	Yes	1	*	NA
SS-HP02	26-Apr-00	BT3002	Tert-butylbenzene	0 0007	0 0014	0 0014	F	nv	Yes	1 46	*	NA
SS-HP02	26-Apr-00	BT3002	Toluene	0 00027	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP03	25-Apr-00	BT3003	1,2,4-trimethylbenzene	0 00033	0 0013	0 0013	F	nv	Yes	5 11	*	NA
SS-HP03	25-Apr-00	BT3003	Acetone	0 00289	0 05	0 05	F	nv	Yes	10		NA
SS-HP03	25-Apr-00	BT3003	Tert-butylbenzene	0 0004	0 0014	0 0014	F	nv	Yes	1 46	*	NA
SS-HP03	25-Apr-00	BT3003	Toluene	0 00059	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP03	25-Apr-00	BT3003	Vinyl chloride	0 00248	0 0011	0 0011		nv	No	0 002		No
SS-HP04	26-Apr-00	BT3004	Cis-1,2-dichloroethene	0 00064	0 0012	0 0012	J	nv	Yes	0 07		NA
SS-HP04	26-Apr-00	BT3004	Toluene	0 00032	0 0011	0 0011	J	nv	Yes	1		NA
SS-HP05	25-Apr-00	BT3005	Acetone	0 00547	0 05	0 05	F	nv	Yes	10		NA
SS-HP05	25-Apr-00	BT3005	Benzene	0 00021	0 0005	0 0005	F	nv	Yes	0 005		NA
SS-HP05	25-Apr-00	BT3005	Cis-1,2-dichloroethene	0 0528	0 0012	0 0012		nv	No	0 07		Yes
SS-HP05	25-Apr-00	BT3005	Tetrachloroethene	0 00029	0 0014	0 0014	F	nv	Yes	0 005		NA
SS-HP05	25-Apr-00	BT3005	Toluene	0 00067	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP05	25-Apr-00	BT3005	Trans-1,2-dichloroethene	0 0228	0 0006	0 0006		nv	No	0 1		Yes
SS-HP05	25-Apr-00	BT3005	Trichloroethene	0 0242	0 001	0 001		nv	No	0 005		No
SS-HP06	25-Apr-00	BT3006	Cis-1,2-dichloroethene	0 0111	0 0012	0 0012		nv	No	0 07		Yes
SS-HP06	25-Apr-00	BT3006	Tetrachloroethene	0 00101	0 0014	0 0014	F	nv	Yes	0 005		NA
SS-HP06	25-Apr-00	BT3006	Toluene	0 0005	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP06	25-Apr-00	BT3006	Trans-1,2-dichloroethene	0 00284	0 0006	0 0006		nv	No	0 1		Yes
SS-HP06	25-Apr-00	BT3006	Trichloroethene	0 0086	0 001	0 001		nv	No	0 005		No

Table 4-4

Summary of Phase 2 Detected Groundwater Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Parameter	Result (mg/L)	Reporting Limit (mg/L)	Background UTL or MQL[1] (mg/L)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/L)		Does Result support closure under RRS2?
SS-HP07	25-Apr-00	BT3007	Acetone	0 00541	0 05	0 05	F	nv	Yes	10		NA
SS-HP07	25-Apr-00	BT3007	Toluene	0 00028	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP08	26-Apr-00	BT3008	Acetone	0 00307	0 05	0 05	F	nv	Yes	10		NA
SS-HP08	26-Apr-00	BT3008	Cis-1,2-dichloroethene	0 0771	0 0012	0 0012		nv	No	0 07		No
SS-HP08	26-Apr-00	BT3008	Tetrachloroethene	0 00204	0 0014	0 0014		nv	No	0 005		Yes
SS-HP08	26-Apr-00	BT3008	Toluene	0 00025	0 0011	0 0011	F	nv	Yes	1		NA
SS-HP08	26-Apr-00	BT3008	Trans-1,2-dichloroethene	0 0425	0 0006	0 0006		nv	No	0 1		Yes
SS-HP08	26-Apr-00	BT3008	Trichloroethene	0 0765	0 001	0 001		nv	No	0 005		No
ST14MW24	4-May-00	BT3012	Vinyl chloride	0 00084	0 0011	0 0011	J	J	Yes	0 002		NA
ST14MW24	4-May-00	BT3013	Vinyl chloride	0 00084	0 0011	0 0011	F	nv	Yes	0 002		NA
WITCTA006	4-May-00	BT3016	Arsenic	0 0054	0 002	0 0014		nv	No	0 05		Yes
WITCTA009	4-May-00	BT3017	Silver	0.00189	0 01	0 0002	F	nv	No	0 51		Yes
WITCTA015	4-May-00	BT3019	Bis(2-ethylhexyl)phthalate	0 00343	0 011	0 011	F	nv	Yes	0 006		NA
WITCTA022	1-May-00	BG3002	Beryllium	0 00019	0 003	0 0003	F	nv	Yes	0 004		NA
WITCTA022	3-May-00	BT3021	Vinyl chloride	0 00072	0 0011	0 0011	J	J	Yes	0 002		NA
WITCTA024	2-May-00	BT3022	Sec-butylbenzene	0 00033	0 0013	0 0013	F	nv	Yes	1 46	*	NA
WITCTA024	2-May-00	BT3022	Tert-butylbenzene	0 00213	0 0014	0 0014		nv	No	1 46	*	Yes
WITCTA024	2-May-00	BT3022	Vinyl chloride	0 0055	0 0011	0 0011		nv	No	0 002		No
WITCTA025	2-May-00	BT3023	Cis-1,2-dichloroethene	0 0709	0 0012	0 0012		nv	No	0 07		No
WITCTA025	2-May-00	BT3023	Tetrachloroethene	0 00241	0 0014	0 0014		nv	No	0 005		Yes
WITCTA025	2-May-00	BT3023	Trans-1,2-dichloroethene	0 0426	0 0006	0 0006		nv	No	0 1		Yes
WITCTA025	2-May-00	BT3023	Trichloroethene	0 0719	0 001	0 001		nv	No	0 005		No
WITCTA049	15-May-00	BT3024	Cis-1,2-dichloroethene	0 00208	0 0012	0 0012		nv	No	0 07		Yes

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Table 4-4

Summary of Phase 2 Detected Groundwater Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Parameter	Result (mg/L)	Reporting Limit (mg/L)	Background UTL or MQL[1] (mg/L)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/L)		Does Result support closure under RRS2?
WITCTA049	15-May-00	BT3024	Trichloroethene	0 00057	0 001	0 001	F	nv	Yes	0 005		NA
WITCTA049	15-May-00	BT3024	Vinyl chloride	0 00052	0 0011	0 0011	F	nv	Yes	0 002		NA
WITCTA050	15-May-00	BT3026	1,2,3-trichlorobenzene	0 00076	0 001	0 001	F	nv	Yes	0 07	a	NA
WITCTA050	15-May-00	BT3026	1,2,4-trichlorobenzene	0 00053	0 002	0 002	F	nv	Yes	0 07		NA
WITCTA050	15-May-00	BT3025	Cis-1,2-dichloroethene	0 00017	0 0012	0 0012	F	J	Yes	0 07		NA
WITCTA050	15-May-00	BT3026	Cis-1,2-dichloroethene	0 00021	0 0012	0 0012	F	nv	Yes	0 07		NA
WITCTA050	15-May-00	BT3026	Hexachlorobutadiene	0 00064	0 0011	0 0011	F	nv	Yes	0 02		NA
WITCTA050	15-May-00	BT3026	Methyl tert-butyl ether	0 00084	0 025	0 025	F	nv	Yes	1		NA
WITCTA050	15-May-00	BT3026	Naphthalene	0 00077	0 001	0 001	F	nv	Yes	2		NA
WITCTA050	15-May-00	BT3026	N-butylbenzene	0 00063	0 0011	0 0011	F	nv	Yes	1 02	*	NA
WITCTA050	15-May-00	BT3026	Sec-butylbenzene	0 00039	0 0013	0 0013	F	nv	Yes	1 46	*	NA
WITCTA050	15-May-00	BT3025	Tert-butylbenzene	0 00231	0 0014	0 0014	F	J	No	1 46	*	Yes
WITCTA050	15-May-00	BT3026	Tert-butylbenzene	0 00223	0 0014	0 0014		nv	No	1 46	*	Yes
WITCTA050	15-May-00	BT3025	Vinyl chloride	0 00081	0 0011	0 0011	F	J	Yes	0 002		NA
WITCTA050	15-May-00	BT3026	Vinyl chloride	0 00085	0 0011	0 0011	F	nv	Yes	0 002		NA
WITCTA051	15-May-00	BT3027	Cis-1,2-dichloroethene	0 00018	0 0012	0 0012	F	nv	Yes	0 07		NA
WITCTA051	15-May-00	BT3027	N-butylbenzene	0 00037	0 0011	0 0011	F	nv	Yes	1 02	*	NA
WITCTA051	15-May-00	BT3027	Tert-butylbenzene	0 002	0 0014	0 0014		nv	No	1 46	*	Yes
WITCTA051	15-May-00	BT3027	Vinyl chloride	0.00243	0 0011	0 0011		nv	No	0 002		No
WITCTA052	15-May-00	BT3028	Cis-1,2-dichloroethene	0 0011	0 0012	0 0012	F	nv	Yes	0 07		NA
WITCTA052	15-May-00	BT3028	Trichloroethene	0 00031	0 001	0 001	F	nv	Yes	0 005		NA
WITCTA053	15-May-00	BT3029	Cis-1,2-dichloroethene	0.0761	0 0012	0 0012		nv	No	0 07		No
WITCTA053	15-May-00	BT3029	Tetrachloroethene	0 0016	0 0014	0 0014		nv	No	0 005		Yes
WITCTA053	15-May-00	BT3029	Trans-1,2-dichloroethene	0 0468	0 0006	0 0006		nv	No	0 1		Yes
WITCTA053	15-May-00	BT3029	Trichloroethene	0 0635	0 001	0 001		nv	No	0 005		No
WITCTA054	16-May-00	BT3030	Cis-1,2-dichloroethene	0 0119	0 0012	0 0012		nv	No	0 07		Yes
WITCTA054	16-May-00	BT3030	Tetrachloroethene	0 00193	0 0014	0 0014		nv	No	0 005		Yes

Table 4-4

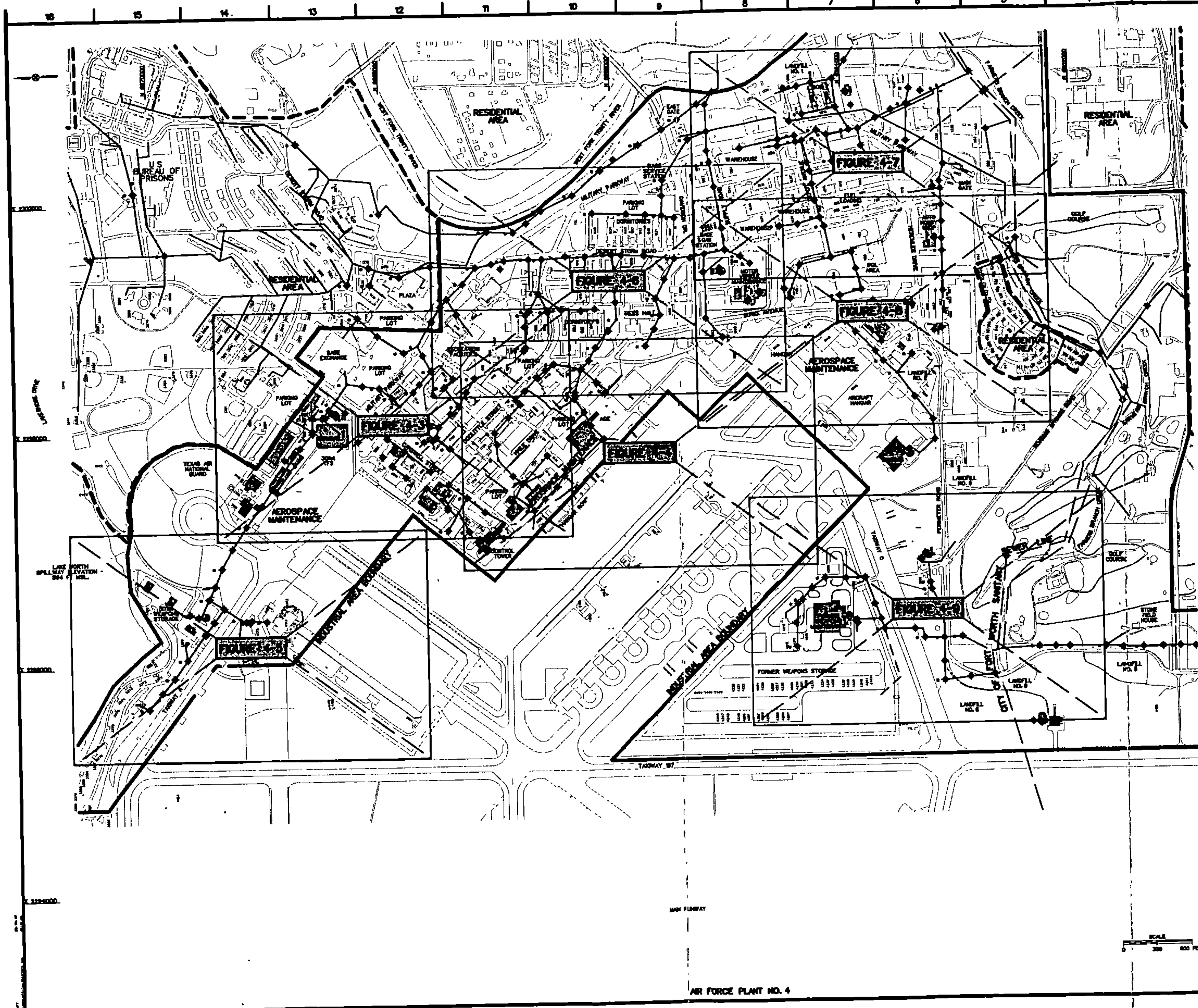
Summary of Phase 2 Detected Groundwater Concentrations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Location	Sample Date	Sample No.	Parameter	Result (mg/L)	Reporting Limit (mg/L)	Background UTL or MQL[1] (mg/L)	Laboratory Qualifier	Validation Qualifier	Does Result support closure under RRS1?	TNRCC MSC[2] (mg/L)	Does Result support closure under RRS2?
WITCTA054	16-May-00	BT3030	Trans-1,2-dichloroethene	0 00375	0 0006	0 0006		nv	No	0 1	Yes
WITCTA054	16-May-00	BT3030	Trichloroethene	0 0109	0 001	0 001		nv	No	0 005	No
WITCTA055	16-May-00	BT3031	Tetrachloroethene	0 00028	0 0014	0 0014	F	nv	Yes	0 005	NA

* Calculated value
[a] 1,2,4-Trichlorobenzene used as surrogate

MSC = Medium Specific Concentration
NA = not applicable
PQL = Practical Quantitation Limit
RRS1 = Risk Reduction Standard 1
RRS2 = Risk Reduction Standard 2
TNRCC = Texas Natural Resources Conservation Commission
UTL = Upper Tolerance Limit

Footnotes:
[1] UTLs for inorganics derived from Final Draft Basewide Background Study, Jacobs Engineering, 1998 MQLs for organics were derived by taking the most conservative reporting limit for a given analyte
[2] TNRCC, 1999, "Updated Examples of Standard No 2, Appendix II Media-Specific Concentrations (MSCs) - Industrial Setting", July 14
Validated Qualifier Definitions:
"J" = For organics, the analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample
"nv" = not validated



NOTES:

1. SURVEY CONDUCTED JUNE, 1997 BY SURVEY RESOURCES, INC. 13800 MONTFORT DRIVE, SUITE 230, DALLAS, TEXAS 75240-4347

LEGEND

- SEWER LINE AND MANHOLE
- OWS SITE LOCATION

SCALE 0 300 600 FEET

IT INTERNATIONAL TECHNOLOGY CORPORATION

CONFIDENTIAL PROPERTY OF IT CORPORATION

FIGURE 4-1
NAS FORT WORTH
SANITARY SEWER SITE MAP

PHASE 3 SANITARY SEWER RCRA FACILITY INVESTIGATION ADDENDUM WORK PLAN
NAVAL AIR STATION FORT WORTH
FORT WORTH, TEXAS

AREA	JOB NO	DRAWING NO	REV
SITEWIDE	768579	768579ES.246	

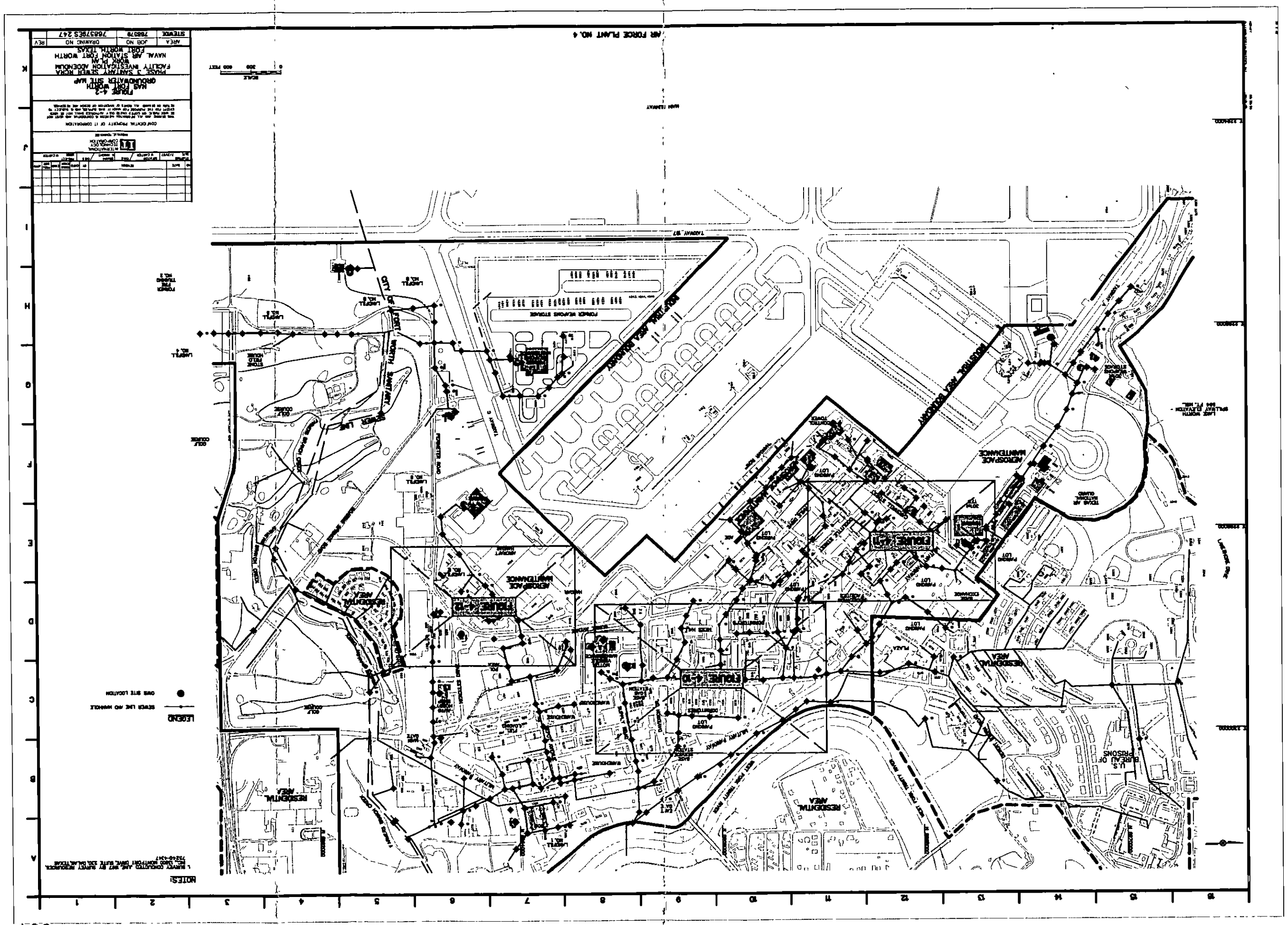


FIGURE 4-3
NAS FORT WORTH
GROUNDWATER SITE MAP

PHASE 3 SANITARY SEWER ROMA
FACILITY INVESTIGATION ADDENDUM
BOND T.W.
NAVAL AIR STATION FORT WORTH
FORT WORTH TEXAS

AREA	JOB NO	DRAWING NO	REV
SITEWDE	7685	7685795S 247	

INTERNATIONAL TECHNOLOGY CORPORATION

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NO.	DATE	REVISION	BY	CHKD	APPD	MGR	PROJ ENGR

Locotion	Sample Intervals (ft bgs)	Purpose	As	Cd	Cr	Co	Pb	Mn	Hg	Se	VOCs	Pesticides
15E25N-P3	0-2, 5-7, 10-12	Confirm	X					X				
15E6-P3	0-2, 5-7	Delineate										X
15J4-NP3	0-2, 5-7	Delineate									X	
15J4-SP3	0-2, 5-7	Delineate									X	
15J6-P3	0-2, 5-7, 10-12	Confirm	X	X			X	X		X		X
MH15E3-P3	0-2, 5-7, 10-12	Confirm	X	X	X	X	X	X	X	X	X	

Sample	Analyte	Result @ 5-7'	RRS-1	MSC
MS1075	Arsenic (PI)	9.5 B	6.58	5
	Cadmium (PI)	0.66 B	0.59	0.5
	Lead (PI)	42.8	12.66	1.5
	Manganese (PI)	528	351.7	1400
	Mercury (PI)	0.06 B	0.035	0.2
	Selenium (PI)	0.81	0.313	5
MS1076	Arsenic (PI)	11.6 B	6.58	5
	Cadmium (PI)	0.6 B	0.59	0.5
	Chromium (PI)	17.7 N	16.31	10
	Cobalt (PI)	6.8 B	6.19	610
	Manganese (PI)	466	351.7	1400
	Mercury (PI)	0.1 B	0.035	0.2
	Silver (PI)	0.61	0.128	51

BT0054 Selenium and Mercury < RRS-1 at 12-14 feet bgs.

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
BT0008	Tetrachloroethene	0.0151	0.0074	0.5

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1285	Arsenic (PI)	8.1 (3-5')	6.58	5
	Manganese (PI)	1030* (3-5')	351.7	1400
BT0050	Silver	0.251 F (8-10')	0.128	51

Sample	Analyte	Result @ 12'-14'	RRS-1	MSC
BT0063	Silver	0.532 F	0.128	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0026	Silver	0.966 F (0-2')	0.213	51
BT0064	Manganese	618 (12-14')	351.7	1400
MS1436	Alpha-chlordane (PI)	2.4 J (1-3')	0.016	0.2*
	Gamma-chlordane (PI)	4.5 (1-3')	0.016	0.2*
	Lead (PI)	15.1 (1-3')	12.66	1.5
	Selenium (PI)	0.52 B (1-3')	0.313	5
MS1437	Arsenic (PI)	6.6 J (10-12')	6.58	5
	Cadmium (PI)	0.81 J (10-12')	0.59	0.5

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
BT0004	4,4-DDE	0.00879	0.0034	0.084
	4,4'-DDT	0.0069	0.0034	0.084
	Silver	0.452 F	0.213	51

BT0062 Silver < RRS-1 at 8-10 feet bgs.

BT0005 Mercury and VOC's < RRS-1 at 0-2 feet bgs.

BT0010 VOCs < RRS-1 at 0-2 feet bgs.

BT0027 Trimethylbenzene < RRS-1 at 9-11 feet bgs.

E 2298000

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES
- CALCULATED VALUE

NOTE:
PLEASE REFER TO TABLE 4-5 FOR PROPOSED SAMPLE DEPTHS AND REQUIRED SAMPLE ANALYSES.

SCALE
0 200 400 FEET

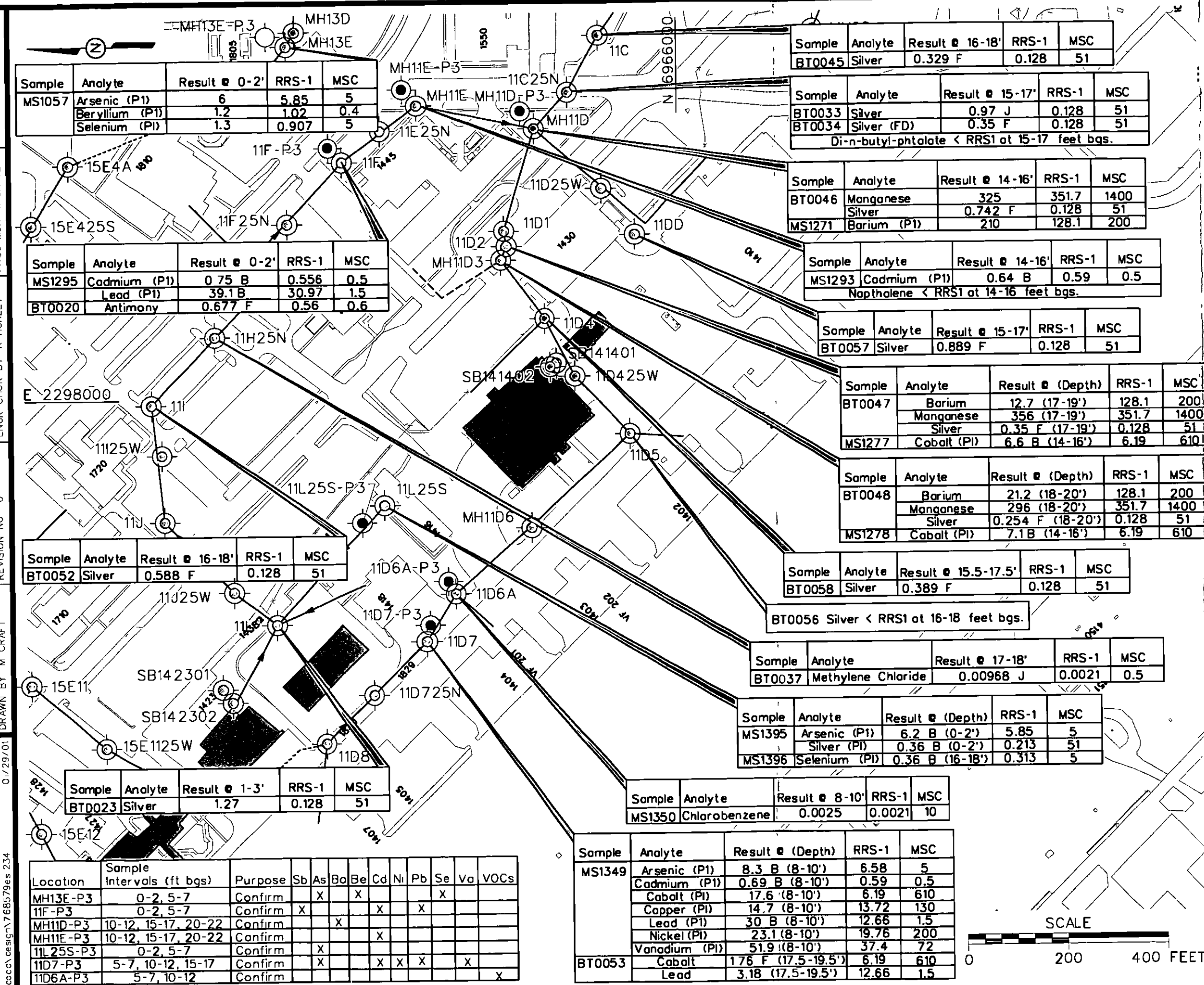
FIGURE 4-3
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/29/01	DWG NO \768579es 233	INITIATOR V MAKI
DRAWN BY D HALL	REVISION NO 0	PROJ NO 768579	PROJ MGR W CARTER
DRAFT CHCK BY D HALL	ENGR CHCK BY M MAKI		
04 09 23 01/29/01			

c:\cccc\cesign\768579es 233 mcraft



Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1057	Arsenic (P1)	6	5.85	5
	Beryllium (P1)	1.2	1.02	0.4
	Selenium (P1)	1.3	0.907	5

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1295	Cadmium (P1)	0 75 B	0.556	0.5
	Lead (P1)	39.1 B	30.97	1.5
BT0020	Antimony	0.677 F	0.56	0.6

Sample	Analyte	Result @ 16-18'	RRS-1	MSC
BT0052	Silver	0.588 F	0.128	51

Sample	Analyte	Result @ 1-3'	RRS-1	MSC
BT0023	Silver	1.27	0.128	51

Sample	Analyte	Result @ 16-18'	RRS-1	MSC
BT0045	Silver	0.329 F	0.128	51

Sample	Analyte	Result @ 15-17'	RRS-1	MSC
BT0033	Silver	0.97 J	0.128	51
BT0034	Silver (FD)	0.35 F	0.128	51
Di-n-butyl-phtalate < RRS1 at 15-17 feet bgs.				

Sample	Analyte	Result @ 14-16'	RRS-1	MSC
BT0046	Manganese	325	351.7	1400
	Silver	0.742 F	0.128	51
MS1271	Barium (P1)	210	128.1	200

Sample	Analyte	Result @ 14-16'	RRS-1	MSC
MS1293	Cadmium (P1)	0.64 B	0.59	0.5
Napthalene < RRS1 at 14-16 feet bgs.				

Sample	Analyte	Result @ 15-17'	RRS-1	MSC
BT0057	Silver	0.889 F	0.128	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0047	Barium	12.7 (17-19')	128.1	200
	Manganese	356 (17-19')	351.7	1400
	Silver	0.35 F (17-19')	0.128	51
MS1277	Cobalt (P1)	6.6 B (14-16')	6.19	610

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0048	Barium	21.2 (18-20')	128.1	200
	Manganese	296 (18-20')	351.7	1400
	Silver	0.254 F (18-20')	0.128	51
MS1278	Cobalt (P1)	7.1 B (14-16')	6.19	610

Sample	Analyte	Result @ 15.5-17.5'	RRS-1	MSC
BT0058	Silver	0.389 F	0.128	51

BT0056 Silver < RRS1 at 16-18 feet bgs.

Sample	Analyte	Result @ 17-18'	RRS-1	MSC
BT0037	Methylene Chloride	0.00968 J	0.0021	0.5

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1395	Arsenic (P1)	6.2 B (0-2')	5.85	5
	Silver (P1)	0.36 B (0-2')	0.213	51
MS1396	Selenium (P1)	0.36 B (16-18')	0.313	5

Sample	Analyte	Result @ 8-10'	RRS-1	MSC
MS1350	Chlorobenzene	0.0025	0.0021	10

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1349	Arsenic (P1)	8.3 B (8-10')	6.58	5
	Cadmium (P1)	0.69 B (8-10')	0.59	0.5
	Cobalt (P1)	17.6 (8-10')	6.19	610
	Copper (P1)	14.7 (8-10')	13.72	130
	Lead (P1)	30 B (8-10')	12.66	1.5
	Nickel (P1)	23.1 (8-10')	19.76	200
	Vanadium (P1)	51.9 (8-10')	37.4	72
BT0053	Cobalt	1.76 F (17.5-19.5')	6.19	610
	Lead	3.18 (17.5-19.5')	12.66	1.5

Location	Sample Intervals (ft bgs)	Purpose	Sb	As	Ba	Be	Cd	Ni	Pb	Se	Va	VOCs
MH13E-P3	0-2, 5-7	Confirm		X		X				X		
11F-P3	0-2, 5-7	Confirm	X				X		X			
MH11D-P3	10-12, 15-17, 20-22	Confirm			X							
MH11E-P3	10-12, 15-17, 20-22	Confirm					X					
11L25S-P3	0-2, 5-7	Confirm		X								
11D7-P3	5-7, 10-12, 15-17	Confirm		X			X	X	X		X	
11D6A-P3	5-7, 10-12	Confirm										X

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES

NOTE:
PLEASE REFER TO TABLE 4-5 FOR PROPOSED SAMPLE DEPTHS AND REQUIRED SAMPLE ANALYSES.

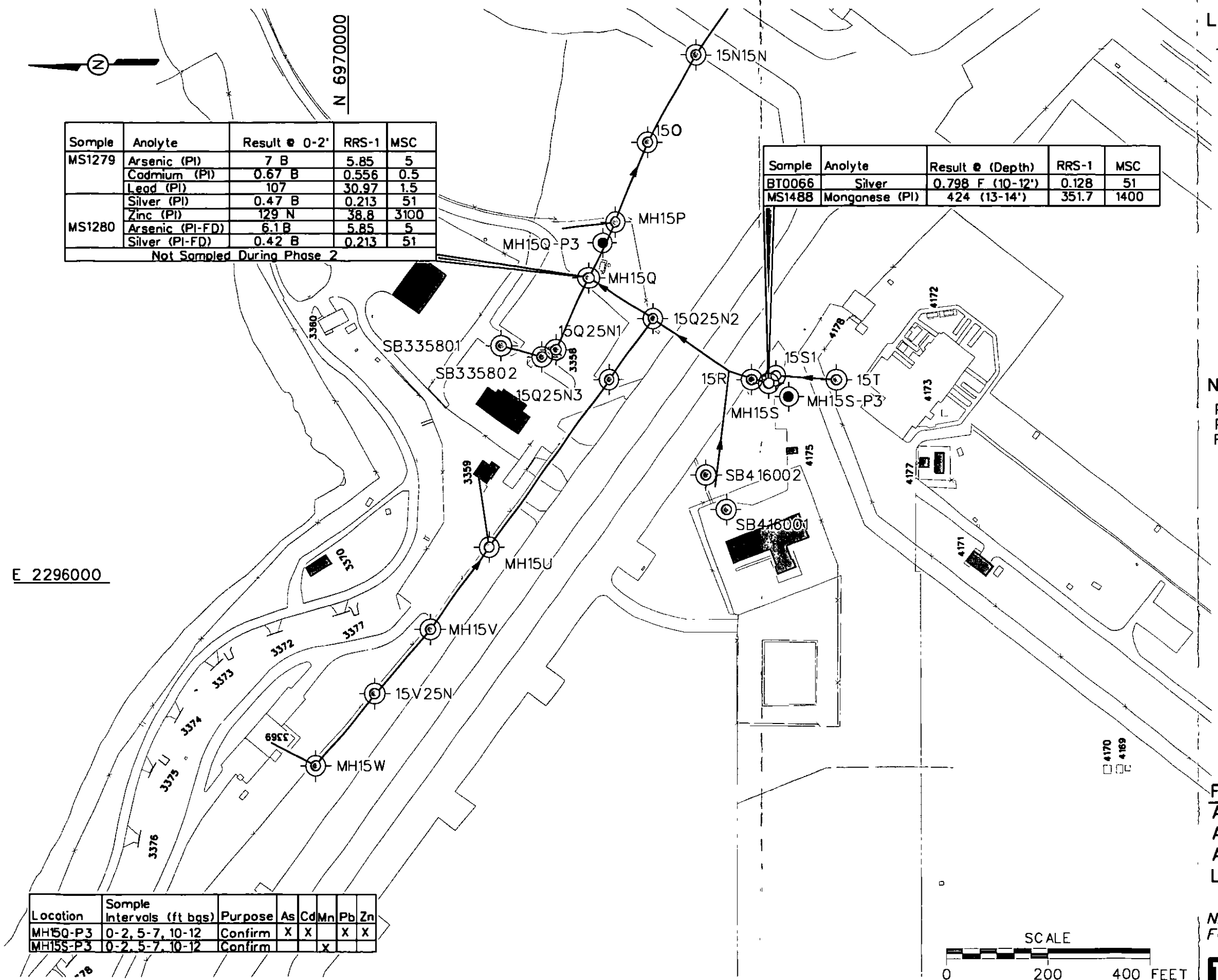
SCALE
0 200 400 FEET

FIGURE 4-4
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

DWG NO 768579es234 | PROJ NO 768579 | INITIATOR K HURLEY | PROJ MGR W CARTER | DRAFT CHCK BY D HALL | ENGR CHCK BY K HURLEY | DATE LAST REV 01/29/01 | REVISION NO 0 | STARTING DATE 11/13/00 | DRAWN BY M CRAFT | 04 08 18 | 01/29/01 | c:\acad\design\768579es234 | mcraft



Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1279	Arsenic (Pl)	7 B	5.85	5
	Cadmium (Pl)	0.67 B	0.556	0.5
	Lead (Pl)	107	30.97	1.5
MS1280	Silver (Pl)	0.47 B	0.213	51
	Zinc (Pl)	129 N	38.8	3100
	Arsenic (Pl-FD)	6.1 B	5.85	5
	Silver (Pl-FD)	0.42 B	0.213	51
Not Sampled During Phase 2				

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0066	Silver	0.798 F (10-12')	0.128	51
MS1488	Manganese (Pl)	424 (13-14')	351.7	1400

Location	Sample Intervals (ft bgs)	Purpose	As	Cd	Mn	Pb	Zn
MH15Q-P3	0-2, 5-7, 10-12	Confirm	X	X		X	X
MH15S-P3	0-2, 5-7, 10-12	Confirm			X		

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES

NOTE:

PLEASE REFER TO TABLE 4-5 FOR PROPOSED SAMPLE DEPTHS AND REQUIRED SAMPLE ANALYSES.

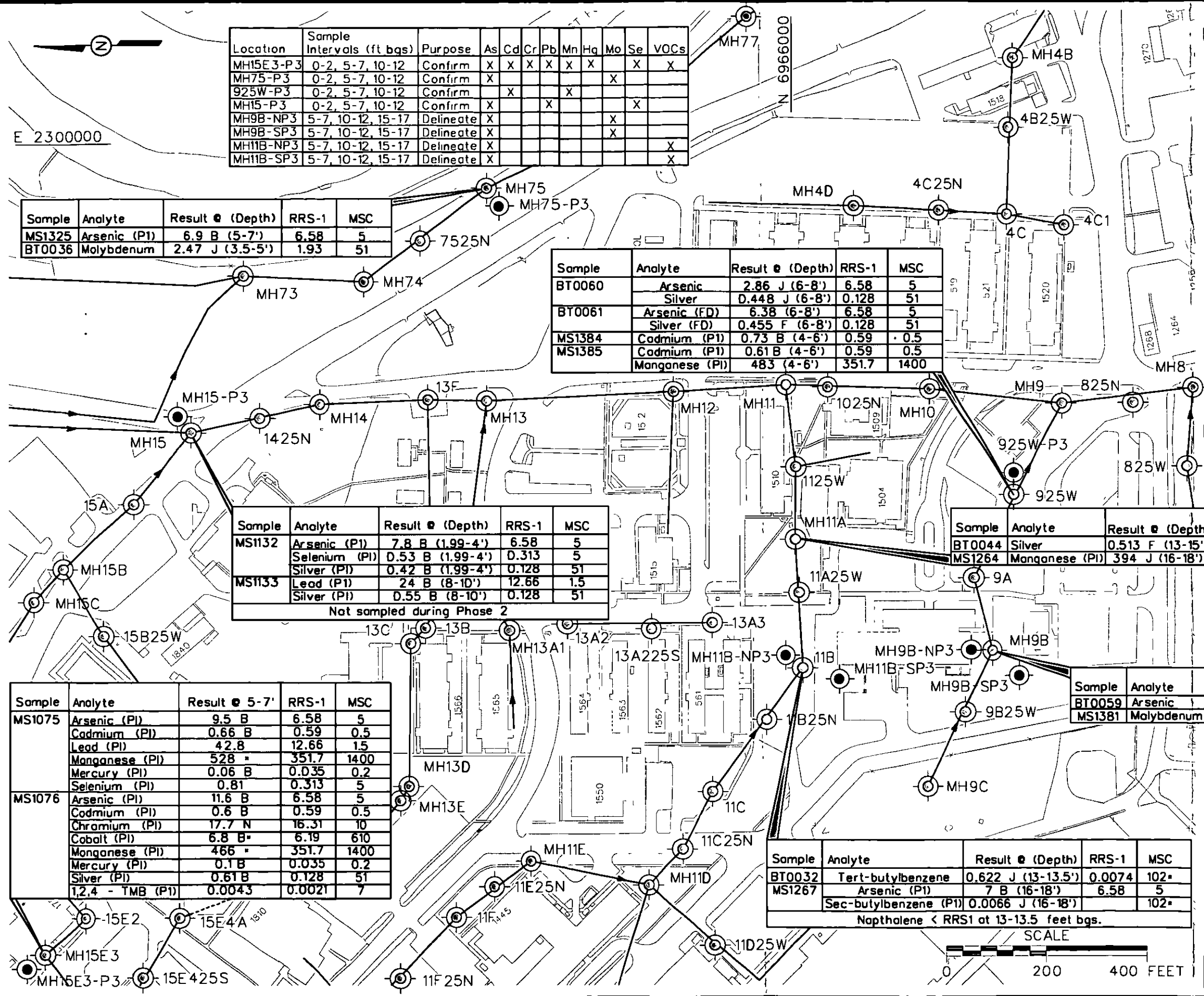
SCALE 0 200 400 FEET

FIGURE 4-5
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

DWG NO 768579es 236 | PROJ NO 768579
INITIATOR K HURLEY | PROJ MGR W CARTER
DRAFT CHCK BY D HALL | ENGR CHCK BY K HURLEY
DATE LAST REV 01/29/01 | REVISION NO 0
STARTING DATE 11/14/00 | DRAWN BY M CRAFT
04 27 13 01/29/01 c:\cadd\design\768579es 236 mcraft



Location	Sample Intervals (ft bgs)	Purpose	As	Cd	Cr	Pb	Mn	Hg	Mo	Se	VOCs
MH15E3-P3	0-2, 5-7, 10-12	Confirm	X	X	X	X	X	X		X	X
MH75-P3	0-2, 5-7, 10-12	Confirm	X						X		
925W-P3	0-2, 5-7, 10-12	Confirm		X			X				
MH15-P3	0-2, 5-7, 10-12	Confirm	X			X				X	
MH9B-NP3	5-7, 10-12, 15-17	Delineate	X						X		
MH9B-SP3	5-7, 10-12, 15-17	Delineate	X						X		
MH11B-NP3	5-7, 10-12, 15-17	Delineate	X								X
MH11B-SP3	5-7, 10-12, 15-17	Delineate	X								X

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1325	Arsenic (P1)	6.9 B (5-7')	6.58	5
BT0036	Molybdenum	2.47 J (3.5-5')	1.93	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0060	Arsenic	2.86 J (6-8')	6.58	5
	Silver	0.448 J (6-8')	0.128	51
BT0061	Arsenic (FD)	6.38 (6-8')	6.58	5
	Silver (FD)	0.455 F (6-8')	0.128	51
MS1384	Cadmium (P1)	0.73 B (4-6')	0.59	0.5
MS1385	Cadmium (P1)	0.61 B (4-6')	0.59	0.5
	Manganese (P1)	483 (4-6')	351.7	1400

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1132	Arsenic (P1)	7.8 B (1.99-4')	6.58	5
	Selenium (P1)	0.53 B (1.99-4')	0.313	5
	Silver (P1)	0.42 B (1.99-4')	0.128	51
MS1133	Lead (P1)	24 B (8-10')	12.66	1.5
	Silver (P1)	0.55 B (8-10')	0.128	51
Not sampled during Phase 2				

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0044	Silver	0.513 F (13-15')	0.128	51
MS1264	Manganese (P1)	394 J (16-18')	351.7	1400

Sample	Analyte	Result @ 5-7'	RRS-1	MSC
MS1075	Arsenic (P1)	9.5 B	6.58	5
	Cadmium (P1)	0.66 B	0.59	0.5
	Lead (P1)	42.8	12.66	1.5
	Manganese (P1)	528 *	351.7	1400
	Mercury (P1)	0.06 B	0.035	0.2
	Selenium (P1)	0.81	0.313	5
MS1076	Arsenic (P1)	11.6 B	6.58	5
	Cadmium (P1)	0.6 B	0.59	0.5
	Chromium (P1)	17.7 N	16.31	10
	Cobalt (P1)	6.8 B*	6.19	610
	Manganese (P1)	466 *	351.7	1400
	Mercury (P1)	0.1 B	0.035	0.2
	Silver (P1)	0.61 B	0.128	51
	1,2,4 - TMB (P1)	0.0043	0.0021	7

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0059	Arsenic	7.15 (10-12')	6.58	5
MS1381	Molybdenum (P1)	2.8 B (11-13')	1.93	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0032	Tert-butylbenzene	0.622 J (13-13.5')	0.0074	102*
MS1267	Arsenic (P1)	7 B (16-18')	6.58	5
	Sec-butylbenzene (P1)	0.0066 J (16-18')		102*
Napthalene < RRS1 at 13-13.5 feet bgs.				

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES
- * CALCULATED VALUE

NOTE:
PLEASE REFER TO TABLE 4-5 FOR THE PROPOSED SAMPLE DEPTHS AND REQUIRED ANALYSES.

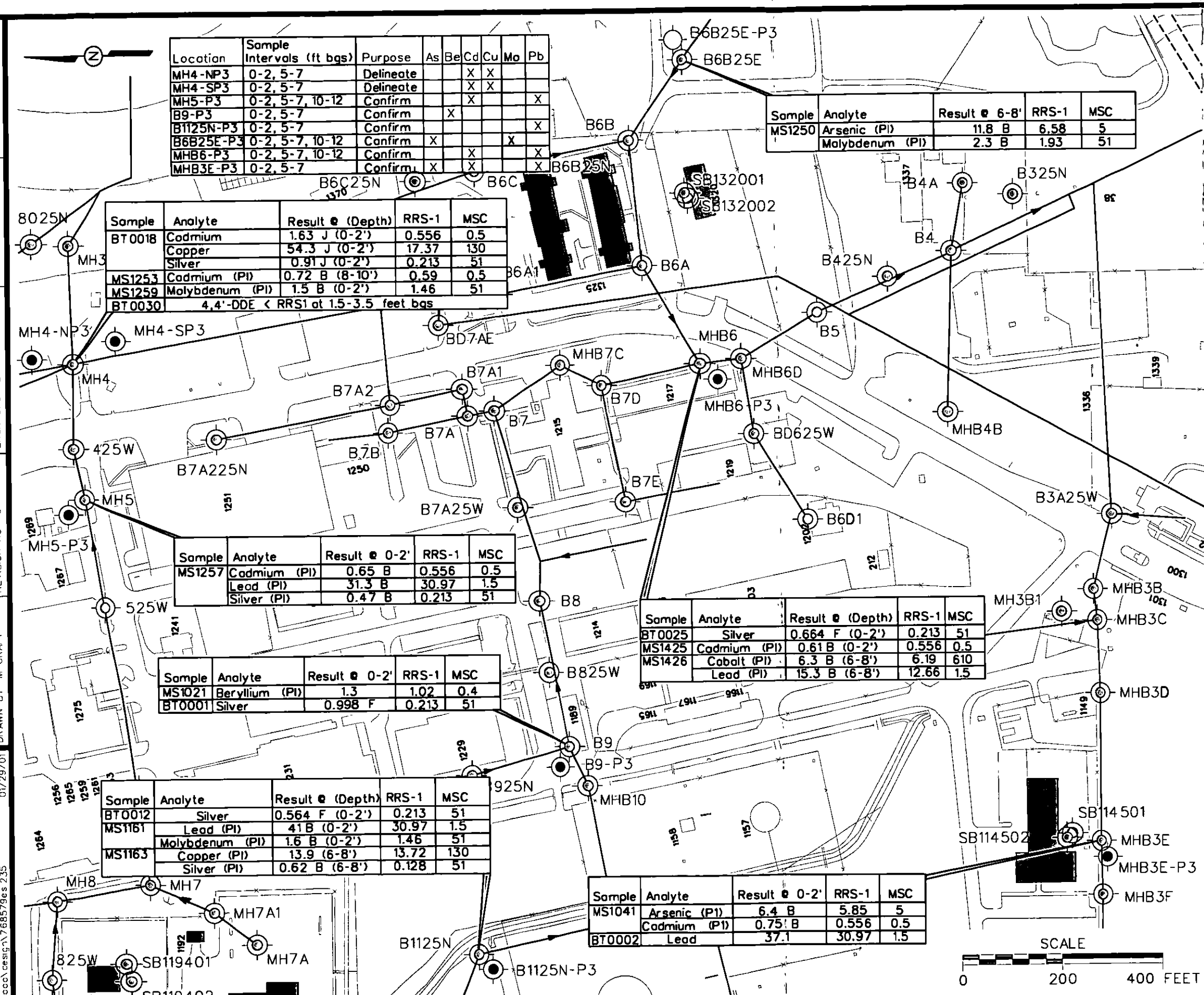
SCALE
0 200 400 FEET

FIGURE 4-6
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

DWG NO 768579es 24 | PROJ NO 768579 | INITIATOR K HURLEY | PROJ MGR W CARTER | DRAFT CHCK BY D HALL | ENGR CHCK BY M MAKI | DATE LAST REV 01/29/01 | REVISION NO 0 | STARTING DATE 11/16/00 | DRAWN BY M CRAFT | 04 29 48 01/29/01 | c:\cadd\design\768579es 241 | mcraft



Location	Sample Intervals (ft bgs)	Purpose	As	Be	Cd	Cu	Mo	Pb
MH4-NP3	0-2, 5-7	Delineate			X	X		
MH4-SP3	0-2, 5-7	Delineate			X	X		
MH5-P3	0-2, 5-7, 10-12	Confirm			X			X
B9-P3	0-2, 5-7	Confirm		X				
B1125N-P3	0-2, 5-7	Confirm						X
B6B25E-P3	0-2, 5-7, 10-12	Confirm	X				X	
MHB6-P3	0-2, 5-7, 10-12	Confirm			X			X
MHB3E-P3	0-2, 5-7	Confirm	X		X			X

Sample	Analyte	Result @ 6-8'	RRS-1	MSC
MS1250	Arsenic (PI)	11.8 B	6.58	5
	Molybdenum (PI)	2.3 B	1.93	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0018	Cadmium	1.63 J (0-2')	0.556	0.5
	Copper	54.3 J (0-2')	17.37	130
	Silver	0.91 J (0-2')	0.213	51
MS1253	Cadmium (PI)	0.72 B (8-10')	0.59	0.5
MS1259	Molybdenum (PI)	1.5 B (0-2')	1.46	51
BT0030	4,4'-DDE < RRS1 at 1.5-3.5 feet bgs			

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1257	Cadmium (PI)	0.65 B	0.556	0.5
	Lead (PI)	31.3 B	30.97	1.5
	Silver (PI)	0.47 B	0.213	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0025	Silver	0.664 F (0-2')	0.213	51
MS1425	Cadmium (PI)	0.61 B (0-2')	0.556	0.5
MS1426	Cobalt (PI)	6.3 B (6-8')	6.19	610
	Lead (PI)	15.3 B (6-8')	12.66	1.5

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1021	Beryllium (PI)	1.3	1.02	0.4
BT0001	Silver	0.998 F	0.213	51

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0012	Silver	0.564 F (0-2')	0.213	51
MS1161	Lead (PI)	41 B (0-2')	30.97	1.5
	Molybdenum (PI)	1.6 B (0-2')	1.46	51
MS1163	Copper (PI)	13.9 (6-8')	13.72	130
	Silver (PI)	0.62 B (6-8')	0.128	51

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1041	Arsenic (PI)	6.4 B	5.85	5
	Cadmium (PI)	0.75 B	0.556	0.5
BT0002	Lead	37.1	30.97	1.5

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES

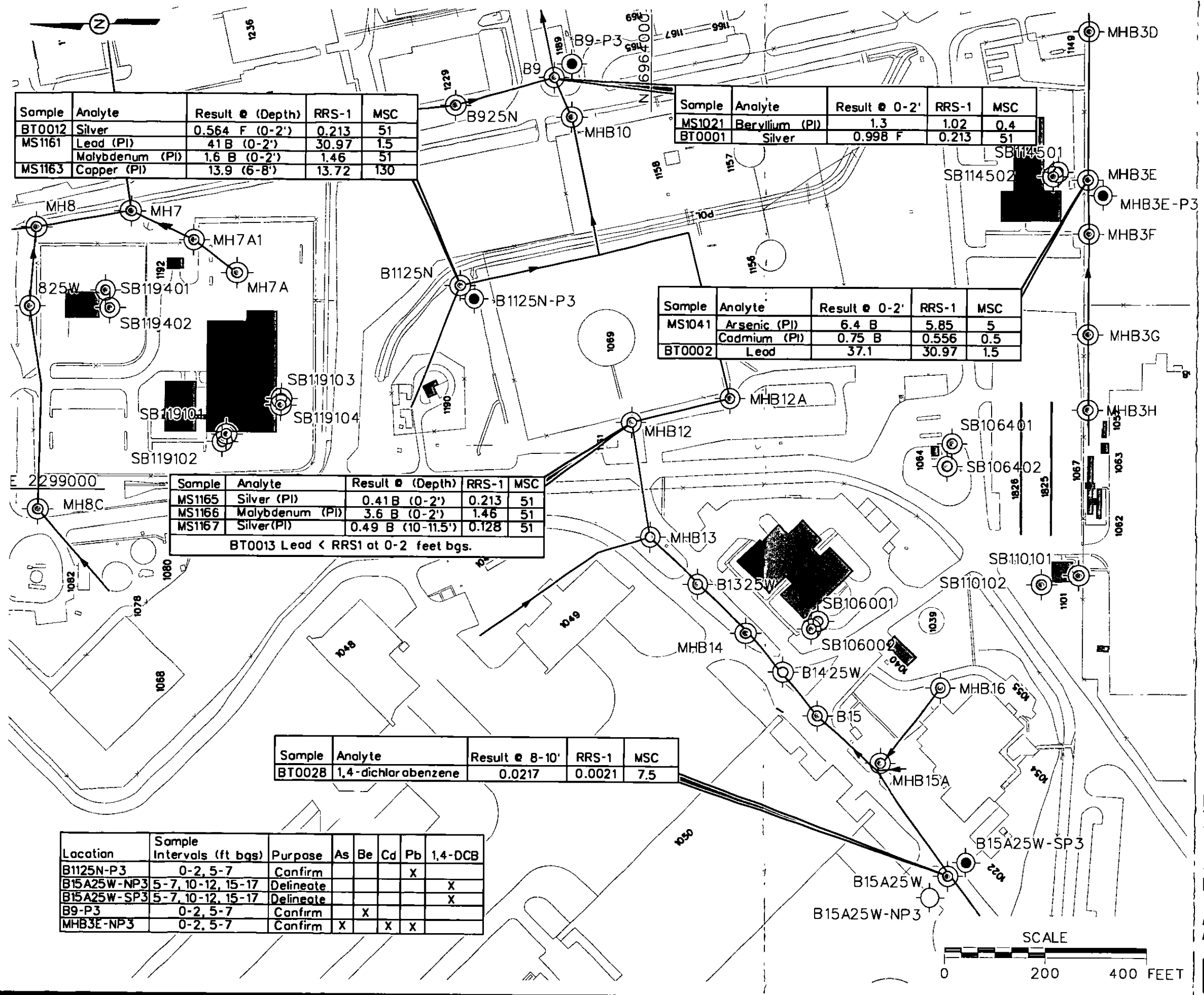
NOTE:
PLEASE REFER TO TABLE 4-5 FOR THE PROPOSED SAMPLE DEPTHS AND THE REQUIRED ANALYSES.

FIGURE 4-7
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 11/14/00	DATE LAST REV 01/29/01	DRAFT CHCK BY D HALL	INITIATOR K HURLEY
DRAWN BY M CRAFT	REVISION NO 0	ENGR CHCK BY K HURLEY	PROJ MGR W CARTER
01/29/01			PROJ NO 768579
04 38 27			DWG NO \768579es 235
mcraft	c:\cadd\design\768579es 235		



Sample	Analyte	Result @ (Depth)	RRS-1	MSC
BT0012	Silver	0.564 F (0-2')	0.213	51
MS1161	Lead (PI)	41 B (0-2')	30.97	1.5
	Molybdenum (PI)	1.6 B (0-2')	1.46	51
MS1163	Copper (PI)	13.9 (6-8')	13.72	130

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1021	Beryllium (PI)	1.3	1.02	0.4
BT0001	Silver	0.998 F	0.213	51

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1041	Arsenic (PI)	6.4 B	5.85	5
	Cadmium (PI)	0.75 B	0.556	0.5
BT0002	Lead	37.1	30.97	1.5

Sample	Analyte	Result @ (Depth)	RRS-1	MSC
MS1165	Silver (PI)	0.41 B (0-2')	0.213	51
MS1166	Molybdenum (PI)	3.6 B (0-2')	1.46	51
MS1167	Silver (PI)	0.49 B (10-11.5')	0.128	51
BT0013 Lead < RRS1 at 0-2 feet bgs.				

Sample	Analyte	Result @ 8-10'	RRS-1	MSC
BT0028	1,4-dichlorobenzene	0.0217	0.0021	7.5

Location	Sample Intervals (ft bgs)	Purpose	As	Be	Cd	Pb	1,4-DCB
B1125N-P3	0-2, 5-7	Confirm				X	
B15A25W-NP3	5-7, 10-12, 15-17	Delineate					X
B15A25W-SP3	5-7, 10-12, 15-17	Delineate					X
B9-P3	0-2, 5-7	Confirm		X			
MHB3E-NP3	0-2, 5-7	Confirm	X		X	X	

LEGEND

- SEWER LINE WITH FLOW DIRECTION
- MANHOLE SAMPLING LOCATION
- PROPOSED PHASE 3 SAMPLE LOCATION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES

NOTE:

PLEASE REFER TO TABLE 4-5 FOR THE PROPOSED SAMPLE DEPTHS AND REQUIRED ANALYSES.

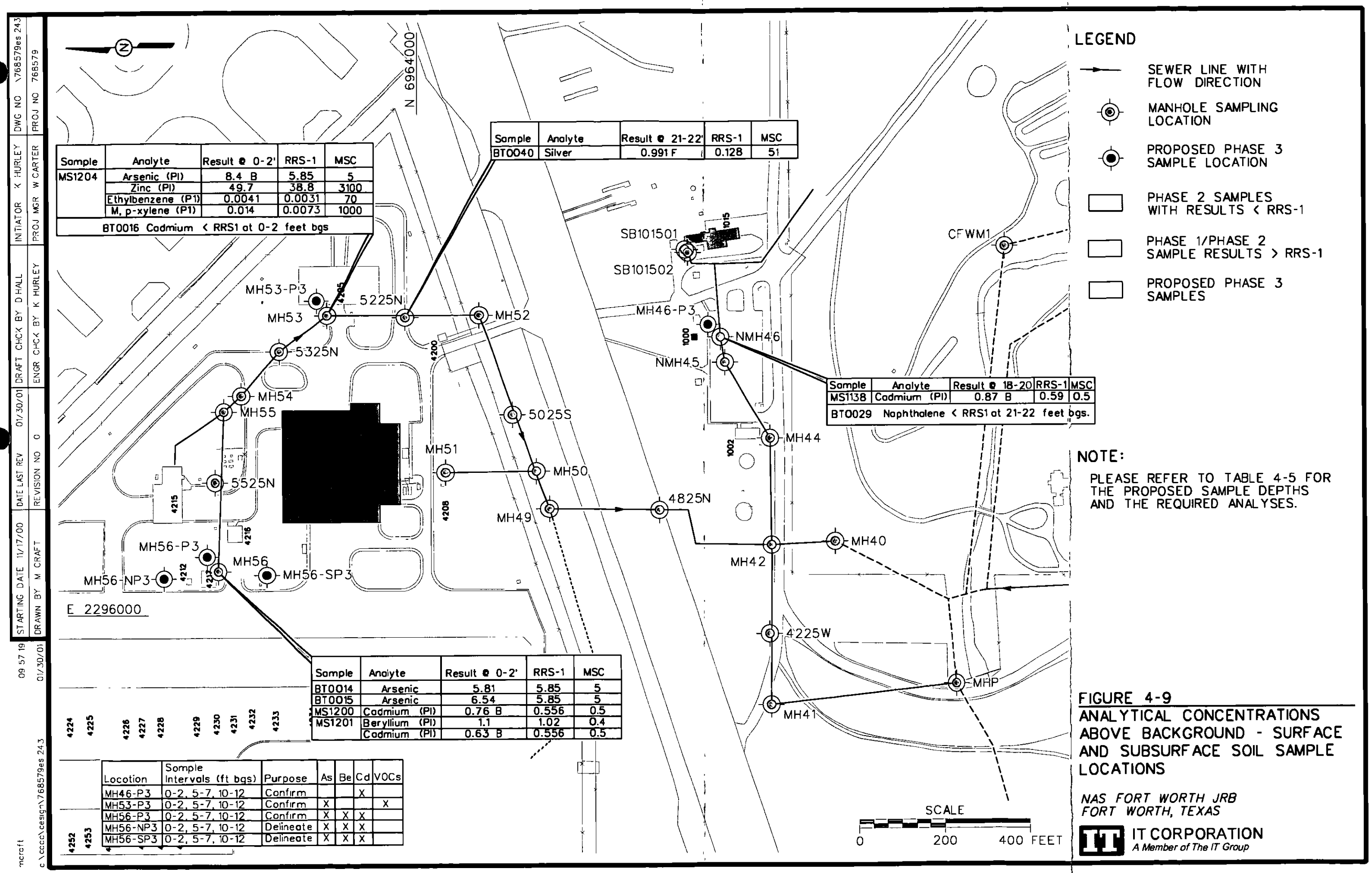
FIGURE 4-8
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 01/15/00	DATE LAST REV 01/30/01	DRAFT CHCK BY D HALL	INITIATOR K HURLEY
DRAWN BY M CRAFT	REVISION NO 0	ENGR CHCK BY K HURLEY	PROJ MGR W CARTER
01/30/01			DWG NO \768579es 242
			PROJ NO 768579

08 41 10 c:\cccc\design\768579es 242 mcraft



Sample	Analyte	Result @ 0-2'	RRS-1	MSC
MS1204	Arsenic (PI)	8.4 B	5.85	5
	Zinc (PI)	49.7	38.8	3100
	Ethylbenzene (P1)	0.0041	0.0031	70
	M, p-xylene (P1)	0.014	0.0073	1000
BT0016 Cadmium < RRS1 at 0-2 feet bgs				

Sample	Analyte	Result @ 21-22'	RRS-1	MSC
BT0040	Silver	0.991 F	0.128	51

Sample	Analyte	Result @ 18-20	RRS-1	MSC
MS1138	Cadmium (PI)	0.87 B	0.59	0.5
BT0029 Naphthalene < RRS1 at 21-22 feet bgs.				

Sample	Analyte	Result @ 0-2'	RRS-1	MSC
BT0014	Arsenic	5.81	5.85	5
BT0015	Arsenic	6.54	5.85	5
MS1200	Cadmium (PI)	0.76 B	0.556	0.5
MS1201	Beryllium (PI)	1.1	1.02	0.4
	Cadmium (PI)	0.63 B	0.556	0.5

Location	Sample Intervals (ft bgs)	Purpose	As	Be	Cd	VOCs
MH46-P3	0-2, 5-7, 10-12	Confirm			X	
MH53-P3	0-2, 5-7, 10-12	Confirm	X			X
MH56-P3	0-2, 5-7, 10-12	Confirm	X	X	X	
MH56-NP3	0-2, 5-7, 10-12	Delineate	X	X	X	
MH56-SP3	0-2, 5-7, 10-12	Delineate	X	X	X	

NOTE:

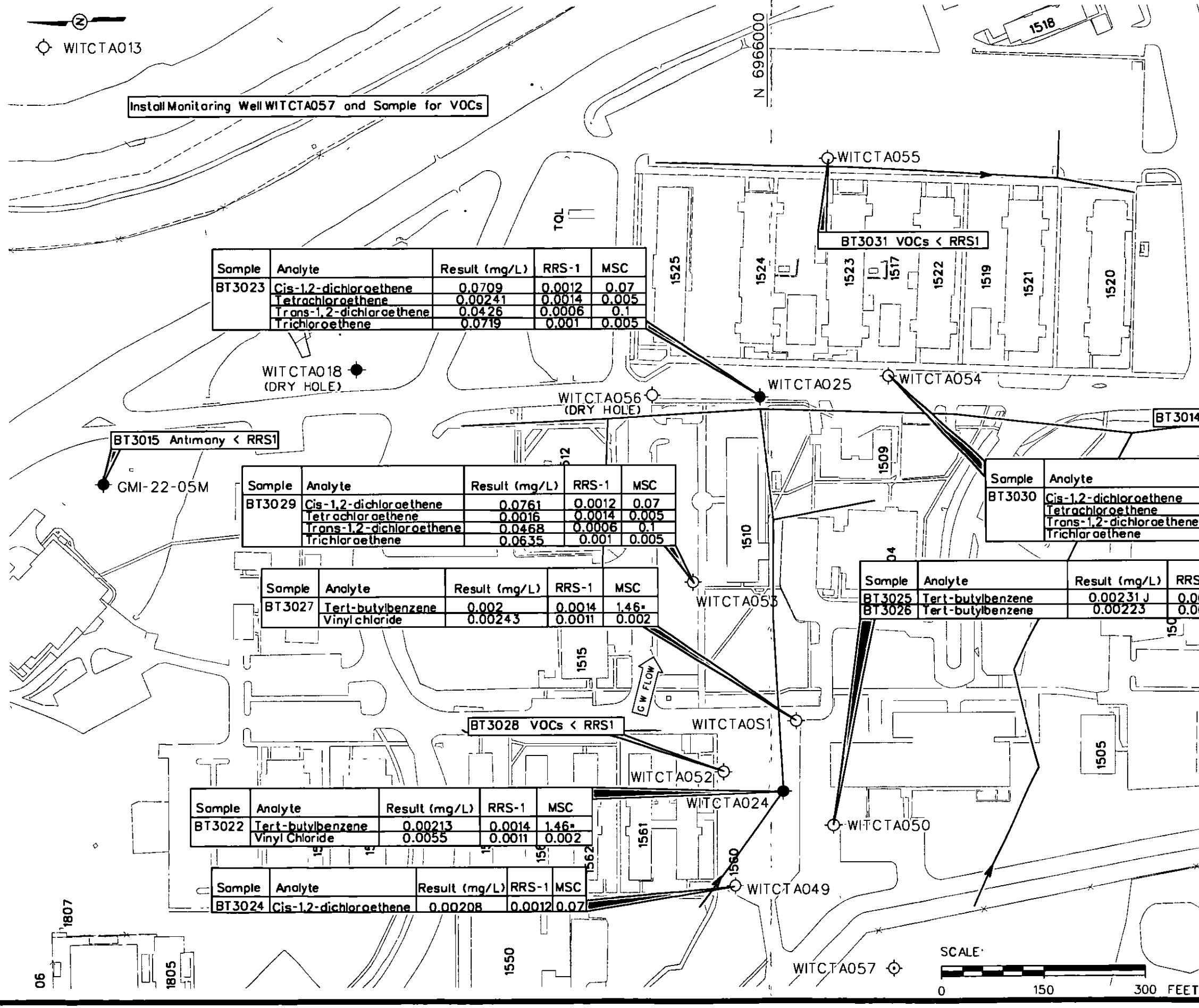
PLEASE REFER TO TABLE 4-5 FOR THE PROPOSED SAMPLE DEPTHS AND THE REQUIRED ANALYSES.

FIGURE 4-9
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND - SURFACE AND SUBSURFACE SOIL SAMPLE LOCATIONS

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

DWG NO \768579es 243	PROJ NO 768579		
INITIATOR K HURLEY	PROJ MGR W CARTER		
DRAFT CHCK BY D HALL	ENGR CHCK BY K HURLEY		
01/30/01 DATE LAST REV	REVISION NO 0		
STARTING DATE 11/17/00	DRAWN BY M CRAFT		
09 57 19 01/30/01	c:\cccc\cesign\768579es 243		



Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3023	Cis-1,2-dichloroethene	0.0709	0.0012	0.07
	Tetrachloroethene	0.00241	0.0014	0.005
	Trans-1,2-dichloroethene	0.0426	0.0006	0.1
	Trichloroethene	0.0719	0.001	0.005

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3029	Cis-1,2-dichloroethene	0.0761	0.0012	0.07
	Tetrachloroethene	0.0016	0.0014	0.005
	Trans-1,2-dichloroethene	0.0468	0.0006	0.1
	Trichloroethene	0.0635	0.001	0.005

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3030	Cis-1,2-dichloroethene	0.0119	0.0012	0.07
	Tetrachloroethene	0.00193	0.0014	0.005
	Trans-1,2-dichloroethene	0.00375	0.0006	0.1
	Trichloroethene	0.0109	0.001	0.005

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3027	Tert-butylbenzene	0.002	0.0014	1.46*
	Vinyl chloride	0.00243	0.0011	0.002

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3025	Tert-butylbenzene	0.00231 J	0.0014	1.46*
BT3026	Tert-butylbenzene	0.00223	0.0014	1.46*

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3022	Tert-butylbenzene	0.00213	0.0014	1.46*
	Vinyl Chloride	0.0055	0.0011	0.002

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3024	Cis-1,2-dichloroethene	0.00208	0.0012	0.07

LEGEND

- WITCTA019 — PHASE 1 MONITORING WELL
- WITCTA055 — PHASE 2 MONITORING WELL
- WITCTA057 — PROPOSED PHASE 3 MONITORING WELL
- SANITARY SEWER LINE
- GW FLOW — GROUNDWATER FLOW DIRECTION
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 2 SAMPLE WITH RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES

NOTES:

1. PLEASE SEE TABLE 4-6 FOR THE REQUIRED GROUNDWATER ANALYSES.
2. * CALCULATED VALUE

FIGURE 4-10

GROUNDWATER ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

DWG NO	768579es 237	STARTING DATE	11/14/00
PROJ NO	768579	DRAWN BY	M CRAFT
INITIATOR	K HURLEY	DATE LAST REV	01/30/01
PROJ MGR	W CARTER	REVISION NO	0
DRAFT CHCK BY	D HALL	01/30/01	
ENGR CHCK BY	K HURLEY	11 20 11	

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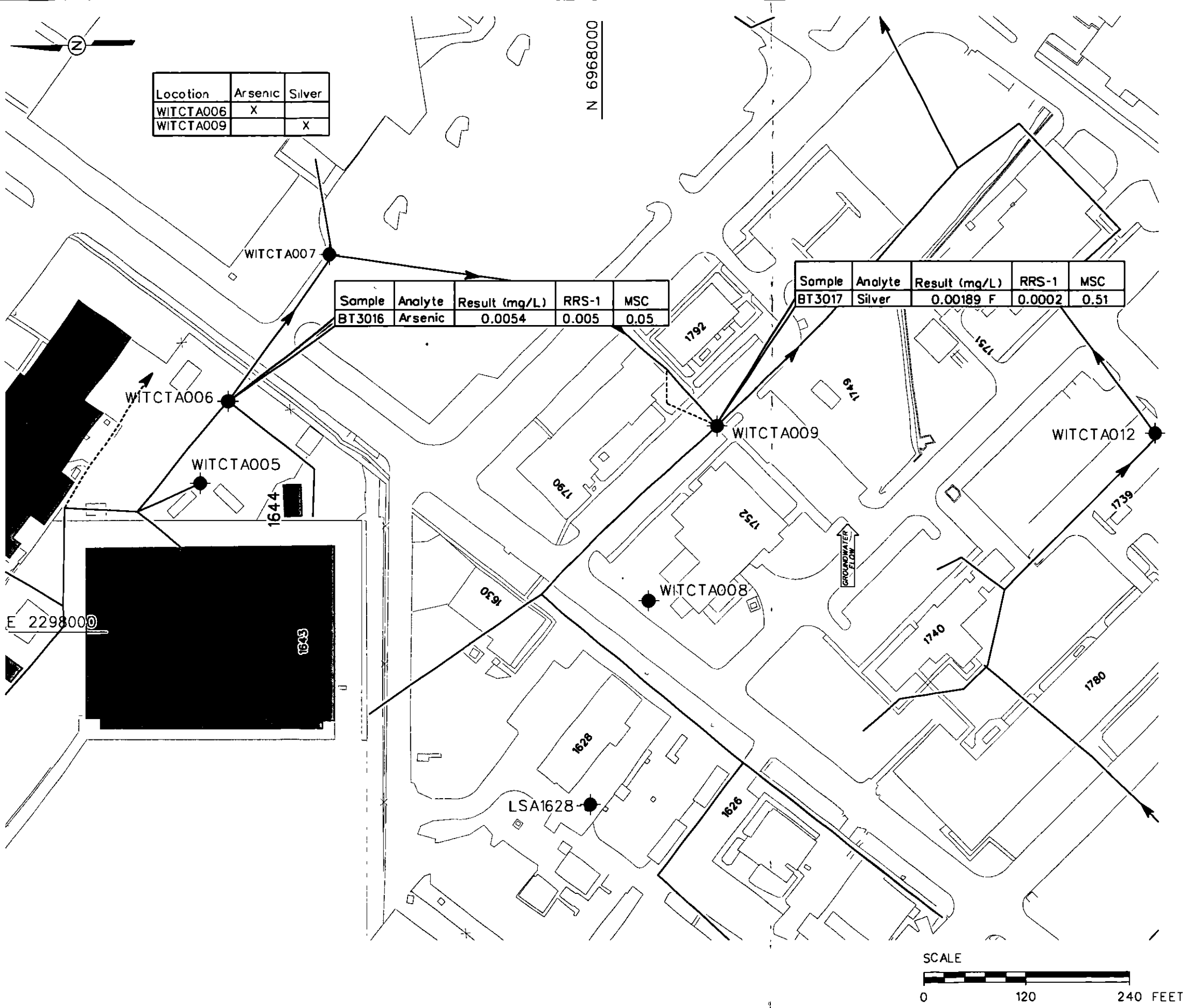
mcraft



Locotion	Arsenic	Silver
WITCTA006	X	
WITCTA009		X

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3016	Arsenic	0.0054	0.005	0.05

Sample	Analyte	Result (mg/L)	RRS-1	MSC
BT3017	Silver	0.00189 F	0.0002	0.51

LEGEND

- MONITORING WELL
- SANITARY SEWER LINE
- PHASE 2 SAMPLES WITH RESULTS < RRS-1
- PHASE 1/PHASE 2 SAMPLE RESULTS > RRS-1
- PROPOSED PHASE 3 SAMPLES
- GROUNDWATER FLOW DIRECTION

NOTE:

PLEASE SEE TABLE 4-6 FOR THE REQUIRED GROUNDWATER ANALYTICAL METHODS.

FIGURE 4-11
ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND

NAS FORT WORTH JRB
FORT WORTH, TEXAS

IT CORPORATION
A Member of The IT Group

STARTING DATE 12/27/99	DATE LAST REV 01/30/01	DRAFT CHCK BY D HALL	DWG NO \768579es 238
DRAWN BY D HALL	DRAWN BY mcraft	ENGR CHCK BY W WAKI	PROJ NO 768579
		PROJ MGR W CARTER	INITIATOR M MAKI

02 12 37 01/30/01 c:\cad\design\768579es 238 mcraft

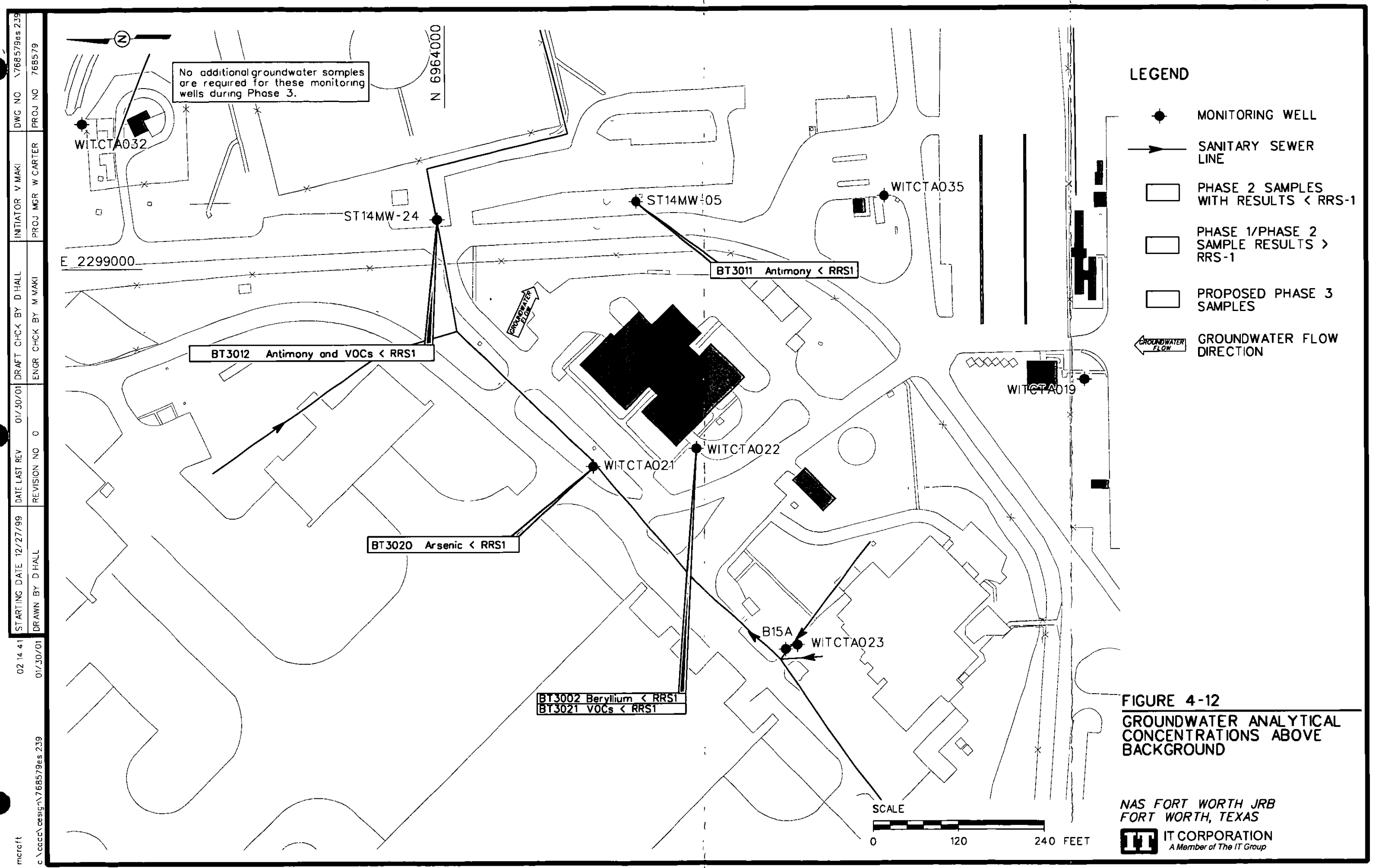


FIGURE 4-12
GROUNDWATER ANALYTICAL CONCENTRATIONS ABOVE BACKGROUND

1) Toluene concentrations detected during Phase 1 were removed from further consideration because the low concentrations that were detected were likely the result of cross-contamination from the DPT sample liner, which was made of polyethylene terephthalate (PET). At the time of the Phase 1 Sanitary Sewer System RFI in 1997, PET was an AFCEE-approved sampling material for VOCs.

2) Silver was removed from further delineation/confirmation due to supected matrix interferences associated with the ICP method (EPA Method SW6010B). Background concentrations will be verified in the line-break portion of the Phase 3 activities.

The following sections provide the rationale for removing toluene and silver from the soil sampling strategy and discusses why no groundwater samples will be collected from areas within the TCE groundwater plume emanating from AFP 4.

4.2.1 Discussion of Silver Concentrations in Soil

Although silver concentrations detected in both Phase 1 and Phase 2 of the RFI exceeded the Jacobs background concentration, no additional delineation of silver concentrations in soil will be performed during Phase 3. Silver data reported from the 1997 Phase 1 investigation and the 2000 Phase 2 investigation were generated using inductively coupled plasma (ICP) emission spectroscopy (EPA Method SW6010B). Silver results reported in both investigations ranged from non-detections to low-level, estimated (i.e., B-flagged) detections below the PQL but slightly above the method detection limit (MDL). All reported silver detections were above the background UTL for silver determined by graphite furnace atomic absorption (GFAA) spectroscopy (EPA Method SW7761) during the Jacobs basewide background study (1998), but there is reason to believe that the low-level silver detections using EPA Method SW6010B were due to matrix interferences rather than to the presence of silver at the sites above background UTLs. These matrix interferences may not have manifested themselves in the Jacobs background study data because certain site-specific matrix effects can affect ICP results without affecting GFAA results due to differences in the analytical principles underlying each method. These differences and their potential effects are outlined below.

Analysis of metals by ICP involves the interpretation of multiple spectral lines for a suite of analytes. ICP analysis involves the ionization of all metals in a sample aliquot by a plasma torch.

These ionized metal atoms emit spectra characteristic of each element. All elemental spectra are detected simultaneously, with overlapping spectral lines resolved using corrective algorithms. In analysis by GFAA, the metals in a sample aliquot are atomized without ionization. Analysis is performed by passing through the atomized sample a light beam of the specific wavelength that will excite only those atoms of the element to be analyzed. As a single spectral line is examined for a single element, the method is less subject to interference from other metals due to spectral overlap.

Generally, matrix effects can have a large impact on the analytical results when metals concentrations that are not significantly above the MDL are reported in soil. For metals, MDLs are determined using analyte-free water, with standards that undergo the complete sample preparation process. The resulting analyte-specific MDLs represent the concentration of analyte where there is 99 percent confidence that the compound is actually present in the sample, and not a false positive due to noise in the baseline signal. Soil MDLs are calculated based on water MDLs due to the difficulty in obtaining analyte-free solid matrices that realistically simulate environmental soils. These calculated values do not take into account the potential complexity of actual environmental soil samples and the potential effect of this complexity on the instrument baseline. Consequently, although the Phase 1 analytical results may have reported silver concentrations that would be above the 99 percent confidence level in an interference-free matrix, the reported concentration in an environmental soil sample may in fact be below that confidence level if matrix interferences have elevated the level of noise in the baseline in the spectral response region for silver. Note that although MS analyses are routinely performed on environmental samples, the spiking levels are very large compared to the analyte MDLs. MS analysis is designed to determine if the matrix has an effect on analytical accuracy at significant analyte concentrations (usually near the PQL), and any minor effects that have an impact near the MDL are lost due to the small size of these effects relative to the size of the MS signal.

Based upon the information presented above and the fact that silver was not detected at concentrations above background UTLs in the Phase 1 groundwater samples, the silver concentrations detected in the Phase 1 and Phase 2 soil samples may not be an indication of a release of contaminants from the Sanitary Sewer System. A portion of the soil samples collected during the line break portion of the Phase 3 RFI may be analyzed for silver using EPA Method SW7761, the same method used in the Jacobs (1998) background study to confirm silver

concentrations detected using EPA Method SW6010B. The silver results from the 95 line break sample locations (190 samples) will be sufficient to determine whether the silver concentrations detected during Phases 1 and 2 were matrix interferences or whether there has been a release of silver from the Sanitary Sewer System (SWMU 66).

The photographic activities used at Building 1170 (SWMU 13) were considered as a possible source of the silver concentrations detected in the RFI soil samples. However, no pattern of elevated concentrations was observed in the Phase 1 RFI soil samples collected downgradient from this location. The random pattern of silver concentrations detected in the RFI soil samples is not expected considering the previous activities at the base.

4.2.2 Discussion of Toluene Detections in Soil

Although toluene was detected above RRS 1 at several of the Phase 1 soil sampling locations, toluene will not be sampled for in the Phase 3 investigation. Toluene was detected at a high frequency during the Phase 1 RFI soil samples, but at generally low concentrations, which indicates that there appeared to have been a systematic introduction of trace levels of toluene during the decontamination process. The best explanation was that the toluene concentrations detected above MQLs were likely the result of the DPT sample liners used during the Phase 1 investigation. The sample liners were made of PET. As discussed in the draft Sanitary Sewer RFI report (IT, 1997a) toluene was detected in 15 of 27 equipment rinsate samples, which were generated by collecting the final deionized water rinse from the equipment decontamination process. The presence of toluene in a high number of the equipment rinsates indicates that the DPT sample liners were the likely source of the detected toluene concentrations in the 1997 Phase 1 soil samples.

4.2.3 Discussion of the Air Force Plant 4 TCE Groundwater Plume

Several groundwater monitoring wells sampled during Phase 1 of the RFI contained elevated concentrations of chlorinated solvents in groundwater. However, many of these monitoring wells are located within the TCE plume that originated at AFP 4. The extent of the AFP 4 TCE plume is managed under a Federal Facilities Agreement and the detections of chlorinated solvents from monitoring wells located within this plume are not considered indicative of a release from the Sanitary Sewer System.

4.3 Confirmation/Delineation Soil Investigation

Figures 4-3 through 4-9 identify the soil sampling locations that will be sampled during the confirmation/delineation portion of the Phase 3 investigation. The proposed analytical parameters for each sample location are also shown in Figures 4-3 to 4-9. Soil samples will confirm or delineate former sample concentrations that exceeded RRS 1 (i.e., background for inorganics and MQLs for organics). At each sample location, soil samples will collected at the sample interval which showed elevated concentrations. In addition, wherever possible, soil samples will be collected at intervals 5 feet above and 5 feet below the sample depth, which exceeded RRS 1 during previous investigations.

Table 4-5 presents the proposed Phase 3 confirmation/delineation soil sample locations and the analyses required for each sample. A total of 92 soil samples will be collected from 35 sample locations. Specific soil sample collection techniques are provided in the FSP (IT, 1997c) and Appendix B. Soil samples will be collected using DPT. The sample tubes will be driven into the ground with a DPT soil probe. All sampling equipment will be decontaminated before its use.

Laboratory Methods. The soil samples collected for confirmation/delineation will be submitted for the analyses designated in Table 4-5. Analysis for inorganic constituents shall be performed using EPA SW846 Method SW6010B RCRA metals. Analysis for VOCs will be performed using EPA Method SW8260B. Selected semivolatile organic compounds (SVOC) will be analyzed for using EPA Method SW8270C and PAHs by EPA Method SW8310. A number of soil samples will require analysis of selected pesticides using EPA Method SW8080. Metals analysis will be performed to ensure the method reporting limit is lower than the constituent background UTL concentration.

The SPLP will be performed for inorganic constituents in soil samples that exceed the TNRCC medium-specific concentrations to determine whether the contaminant is likely to leach into groundwater. Decisions for the applicability of the SPLP procedure will be evaluated after the analytical results are received from the laboratory. Sufficient soil volume will be collected for each soil sample in the event that the SPLP analysis is required.

Ta

Phase 3 Confirm/Delineate Soil Sample Locations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

(Page 1 of 2)

Analysis				VOC by SW8260B	SVOC by SW8270C	TAL Metals by SW6010B/SW7000	Pest/PCB by SW8080	SPLP Metals by SW1312/SW6010B (Trace)	As	Cd	Pb	Ba	Be	Mn	Cu	Cr	Co	Se	Hg	Mo	Sb	Va	Ni	Zn	SPLP	Organics[2] Sample
Location	Sample Depths (feet bgs)	No of field samples to be taken at each location excluding QC samples Please *see Note 1*	Rationale Confirm/ Delineate	None, 4°C 14 days	None, 4°C 7 days preext./40 days postext.	None, 4°C 180 days	None, 4°C 14 days preext./40 days postext.	None, 4°C																			
11D7-P3	5-7, 10-12, 15-17	3	Confirm As, Cd, and Pb from Phase 1			X			3	3	3											3	3			
11F-P3	0-2, 5-7	2	Confirm Cd, Pb and Sb			X				2	2										2					
11L25S-P3	0-2, 5-7	2	Confirm As from Phase 1 at 0-2 ft			X			2																	
15E6-P3	0-2, 5-7	2	Delineate pesticides found in Phase 2				X																			2
15E25N-P3	0-2, 5-7,10-12	3	Confirm As and Mn Detections from Phase 1 at 3-5 ft			X			3					3												
15J4-NP3	0-2, 5-7	2	Delineate PCE found at 0-2 ft in Phase 2	X																						2
15J4-SP3	0-2, 5-7	2	Delineate PCE found at 0-2 ft in Phase 2	X																						2
15J6-P3	0-2, 5-7,10-12	3	Confirm metals from Phase 1 and Phase 2			X	X		3	3	3			3				3								3
925W-P3	0-2, 5-7,10-12	3	Confirm Cd and Mn from Phase 1			X				3				3												
B1125N P3	0-2, 5-7	2	Confirm Pb from Phase 1 at 0-2 ft			X					2															
B15A25W-NP3	5-7, 10-12,15-17	3	Delineate 1,4-DCB from P1 at 8-10 ft	X																						3
B15A25W-SP3	5-7, 10-12,15-17	3	Delineate 1,4-DCB from P1 at 8-10 ft	X																						3
B6B25E-P3	0-2, 5-7,10-12	3	Confirm As and Mo from P1 at 6-8 ft			X			3											3						
B9-P3	0-2, 5-7	2	Confirm Be at 0-2 ft from Phase 1			X							2													
MH11B-NP3	5-7, 10-12,15-17	3	Delineate Tert-butylbenzene and As	X		X			3																	3
MH11B SP3	5-7, 10-12,15-17	3	Delineate Tert-butylbenzene and As	X		X			3																	3
11D6A	5-7, 10-12	2	Confirm Chlorobenzene	X																						2
MH11D-P3	10-12, 15-17,20-22	3	Confirm Ba from Phase 1			X						3														
MH11E-P3	10-12, 15-17,20-22	3	Confirm Cd from Phase 1			X				3																
MH13E-P3	0-2, 5-7	2	Confirm As, Be, and Se from P1 at 0-2 ft			X			2	2								2								
MH15E3-P3	0-2, 5-7,10-12	3	Confirm metals, VOCs at 5-7 ft from Phase 1	X		X			3	3	3			3		3	3	3	3							3
MH15-P3	0-2, 5-7,10-12	3	Confirm As, Pb and Se from Phase 1			X			3		3							3								
MH15Q-P3	0-2, 5-7,10-12	3	Confirm P1 As, Cd, Pb, and Zn at 0-2 ft			X			3	3	3													3		

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Ta[illegible]

Phase 3 Confirm/Delineate Soil Sample Locations
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Analysis				VOC by SW8260B	SVOC by SW8270C	TAL Metals by SW6010B/SW7000	Pest/PCB by SW8080	SPLP Metals by SW1312/SW6010B (Trace)	As	Cd	Pb	Ba	Be	Mn	Cu	Cr	Co	Se	Hg	Mo	Sb	Va	Ni	Zn	SPLP	Organics[2] Sample
Location	Sample Depths (feet bgs)	No of field samples to be taken at each location excluding QC samples Please see Note 1	Rationale Confirm/ Delineate	None, 4°C 14 days	None, 4°C 7 days preext /40 days postext	None, 4°C 180 days	None, 4°C 14 days preext /40 days postext	None, 4°C																			
MH15S-P3	5-7, 10-12,15-17	3	Confirm Phase 1 Mn at 13-14 ft			X								3					3								
MH4-NP3	0-2, 5-7	2	Delineate Cd and Cu from Phase 1 at 0-2 ft			X				2					2												
MH4-SP3	0-2, 5-7	2	Delineate Cd and Cu from Phase 1 at 0-2 ft			X				2					2												
MH46-P3	10-12, 15-17,20-22	3	Confirm Cd at 18-20 ft from Phase 1			X				3																	
MH53-P3	0-2, 5-7,10-12	3	Confirm Phase 1 As at 0-2 ft	X		X			3																		3
MH56-P3	0-2, 5-7,10-12	3	Confirm Phase 1 As, Be, and Cd at 0-2 ft			X			3	3			3														
MH5-P3	0-2, 5-7	2	Confirm Cd and Pb at 0-2 ft			X				2	2																
MH75-P3	0-2, 5-7,10-12	3	Confirm As and Mo detections from P1 and P2			X			3											3							
MH9B-NP3	5-7, 10-12,15-17	3	Delineate As and Mo from P1/P2 at 10-13 ft			X			3											3							
MH9B-SP3	5-7, 10-12,15-17	3	Delineate As and Mo from P1/P2 at 10-13 ft			X			3											3							
MHB3E-P3	0-2, 5-7	2	Confirm Phase 1 As, Cd and Pb at 0-2 ft			X			2	2	2																
MHB6 P3	0-2, 5-7,10-12	3	Confirm Phase 1 Cd and Pb at 6-8 ft			X				3	3																

Note 1 - QC samples to be taken
MS/MSD - 5% of total field samples, 1 set per SDG or 1 set per 20 samples Dup - 10% of total field samples. Mat blk - 1 per water source/matrix, Trip blk - 1 per VOA cooler, Equip Rinse - 1 per day

[2] Organic samples at these locations
15E6-P3 - Pesticides (4,4'-DDE and 4,4'-DDT)
15E3-P3 - VOCs (1,2,4-trichlorobenzene)
15J4-NP3 - VOCs (tetrachloroethene)
15J4-SP3 - VOCs (tetrachloroethene)
MH53-P3 - VOCs (ethylbenzene and M,p-xylenes)
15J6-P3 Pesticides (alpha-chlordane and gamma-chlordane)
B15A25W-SP3 - VOCs (1,4-dichlorobenzene)
B15A25W-NP3 - VOCs (1,4-dichlorobenzene)
11D6A- VOCs (Chlorobenzene)
MH11B-NP3 - VOCs (tert-butylbenzene)
MH11B-SP3 - VOCs (tert-butylbenzene)

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4.4 Phase 3 RFI Groundwater Investigation

Nineteen monitoring wells were sampled during the Phase 2 investigation. Samples were collected from twelve existing monitoring wells and from seven newly installed monitoring wells installed during Phase 2. The analytical results from the Phase 2 sampling event are summarized in Table 4-4 and are provided in Appendix A. Analytical concentrations detected above RRS 1 during Phase 2 are shown in Figures 4-10 through 4-12.

Table 4-6 presents the proposed Phase 3 groundwater sampling locations and their corresponding analytical requirements. Seven monitoring wells sampled during Phase 2 indicated contaminant concentrations were below RRS 1 in the confirmation groundwater sample. Therefore, no additional sampling is recommended at the following wells GMI-22-05, BGSMW-01, ST14MW-24, ST14MW-05, WITCTA021, and WITCTA022.

As shown in Figure 4-10, the arsenic concentration at WITCTA006 (0.0054 mg/L) slightly exceeds the background concentration (0.005 mg/L). Likewise, the silver concentration at WITCTA009 (0.00189 F mg/L) slightly exceeds background. However, these detected concentrations do not warrant further delineation because the detected concentrations are significantly below the respective MSCs for arsenic and silver. The arsenic concentration detected at WITATA006 is an extreme, but true background concentration. The detected silver concentration at WITCTA009 is likely associated with a matrix interference associated with EPA Method SW6010B. WITCTA006 will be resampled to further confirm the detected arsenic concentrations, and WITCTA009 will be resampled for analysis of silver using EPA Method SW7761.

Four monitoring wells (WITCTA049, -050, -051, and –052) were installed during the Phase 2 investigation to delineate the extent of VOCs detected during Phase 1 at WITCTA024. Three monitoring wells (WITCTA053, -054, and –055) were installed during Phase 2 to delineate the VOCs detected at monitoring well WITCTA025 during Phase 1. A fourth proposed monitoring well, WITCTA056, was a dry hole. Therefore, monitoring well WCHMHTA013 was sampled for VOCs to delineate the concentrations north of WITCTA025.

Figure 4-10 displays the VOC concentrations that exceed the MQL (i.e., background) in the wells around monitoring well WITCTA024. Tert-butytlbenzene, a breakdown product of fuels,

Table 4-6

Phase 3 Analytical Groundwater Samples
Sanitary Sewer System (SWMU 66)
NAS Fort Worth JRB, Texas

Analysis				VOCs by SW8260B	TAL Metals by SW6010B/7000 (Dissolved)	Rationale/DQO	Field Parameters (See Table 4-7)
Sample Location	Map Location	No. of field samples to be taken at each location excluding QC samples. Please see Note 1	Preservative/ Bottle:	HCL, < 4°C 3 * 40 ml glass vials	HNO_3, < 4°C 500 ml glass		
			Holding Time	14 Days	180 Days		
WITCTA057	New Well, Figure 4-10	1		X		Delineate - VOCs Only	X
WITCTA009	BLDG1792	1			X - Ag	Confirm/Resample -Ag only	X
WITCTA006	BLDG1430	1			X - As	Confirm/Resample -As only	X

Note 1 - QC samples to be taken
MS/MSD - 5% of total field samples, 1 set per SDG or 1 set per 20 samples Dup - 10% of total field samples Mat Blk - 1 per water source/matrix, Trip blk-1 VOA cool
Equip rinse - 1 per day

was detected in monitoring wells WITCTA024, WITCTA050, and WITCTA051 with a maximum concentration of 0.00231 J mg/L. The reporting limit for tert-butylbenzene for the Phase 3 data set was 0.0014 mg/L. The detections of tert-butylbenzene at very low concentrations do not indicate that the sanitary sewer has released the constitituent. The detected concentrations may be associated with the fuel spill at Spot 35 at AOC-4, which is upgradient from monitoring well WITCTA024. To determine whether tert-butylbenzene is associated with the fuel spill at AOC-4, proposed monitoring well WITCTA057 will be installed upgradient of WITCTA024 and sampled for VOCs.

Monitoring well WITCTA025 and its four delineation wells (WITCTA053, -054, -055 and WCHMHTA013) are also shown in Figure 4-10. The detected concentration of perchloroethene was below its MQL, therefore, the TCE plume is delineated to the east of WITCTA024. The absence of TCE and its breakdown products in WCHMHTA013 delineates the TCE plume to the north of WITACTA025. The detections of TCE and its breakdown products in monitoring wells WITCTA025, -053 and –054 indicate that these wells are at the leading edge of the TCE plume from AFP 4.

The presence of cis-1,2-DCE at WITCTA049 and vinyl chloride at wells WITCTA024 and WITCTA051 suggests that advanced biodegredation of the TCE plume is occurring in the areas impacted by the fuel spill at Spot-35 at AOC-4. The AFP 4 TCE plume is absent along a trend extending downgradient and east-southeast from the fuel Spot-35 spill near AOC-4. The boundary between the AFP 4 TCE plume's northern lobe and the fuel products plume from upgradient release sites is defined by these monitoring wells in this area. Monitoring well, MW-39, located approximately 800 feet upgradient from WITCTA024 contained benzene at a concentration of 12 micrograms per liter (HGL, 1999).

Because the TCE plume and Spot-35 plume are co-mingled along a boundary shown by wells WITCTA024, WITCTA049, and WITCTA051, the presence of fuels allows microbes to degrade the TCE into its breakdown products. No additional groundwater sampling is necessary in this area other than installing WITCTA057 to confirm that the tert-butylbenzene found in the wells surrounding WITCTA024 are not a result of a release of fuels from the Sanitary Sewer System. The installation and sampling of the proposed monitoring well will follow the procedures in Appendix B.

Laboratory Methods. Table 4-6 presents the proposed groundwater samples that will be collected during the confirmation/delineation portion of the Phase 3 RFI. Groundwater samples from permanent monitoring wells will be collected and submitted for analysis for VOCs using EPA SW846 Method SW8260B, and selected inorganics by EPA Method SW6010B/SW7000 RCRA metals, including mercury. Silver will be analyzed for using EPA Method SW7761.

Groundwater field parameters will be measured during collection of samples from both temporary monitoring wells and permanent monitoring wells that have been installed. Parameters to be measured in the field include pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential. Groundwater sampling procedures are outlined in greater detail in Appendix B. Table 4-7 presents the required groundwater field sampling tests and their corresponding analytical methods.

Table 4-8 presents a summary of soil and groundwater samples that will be collected in the confirmation/delineation portion of the Phase 3 RFI investigation.

4.5 Investigation-Derived Waste Management

The investigation-derived waste handling procedures are described in Section 3.3.4.

Table 4-7

Field Sampling Test and Method Table
Sanitary Sewer System Phase 3 RFI Work Plan
NAS Fort Worth JRB, Texas

Field Analysis	Method
	Water
Dissolved Oxygen	E360 1
Redox Potential	Martin Marietta Energy Systems, Inc Environmental Surveillance Procedures, ESP-307-5
pH	SW9040
Total Volatiles	PID Organic Vapor Monitor
Conductivity	SW9050
Temperature	E170 1
Turbidity	E180 1

Table 4-8

Summary Table of Confirmation/Delineation Soil Boring and Groundwater Samples
Phase 3 Sanitary Sewer System RFI
NAS Fort Worth JRB, Texas

Parameter	Analytical Method	Matrix	Number of Field samples	Field Duplicate 10%	Matrix Spike[1] 5%	Matrix Spike Duplicate[1] 5%	Material Blank 1 per source/ matrix	Equip. Rinsate 1 per Day	Trip Blank 1 per VOA cooler	Total No. of Samples
Volatiles[2]	SW8260B	Soil	24	3	1	1	1	2	2	32
		GW	1	1	1	1	1	1	1	5
Semivolatiles	SW8270C	Soil	0	0	0	0	0	0	0	0
Pesticides[2]	SW8081A	Soil	5	1	0	0	1	1	0	8
PCBs	SW8082	Soil	0	0	0	0	0	0	0	0
TAL Metals[2]	SW6010B Trace/ 7000	Soil	78	8	4	4	1	9	0	96
		GW	2	1	1	1	1	1	0	5
SPLP[3]	SW6010B Trace	Soil	8	8	0	0	0	4	0	20
Field Parameters		GW	3	0	0	0	0	0	0	3

Note Water samples are to be determined based on initial Phase 3 analysis

[1] Matrix spike (MS) and matrix spike duplicates (MSD) are considered internal quality control (QC) samples and are not included in the "Total Number of Sampler " column
[2] Full List of VOCs, pesticides and/or metals are not required See Table 4-5 for specific inorganics required at each location
[3] SPLPs assumed at 10% of metals samples

5.0 Reporting

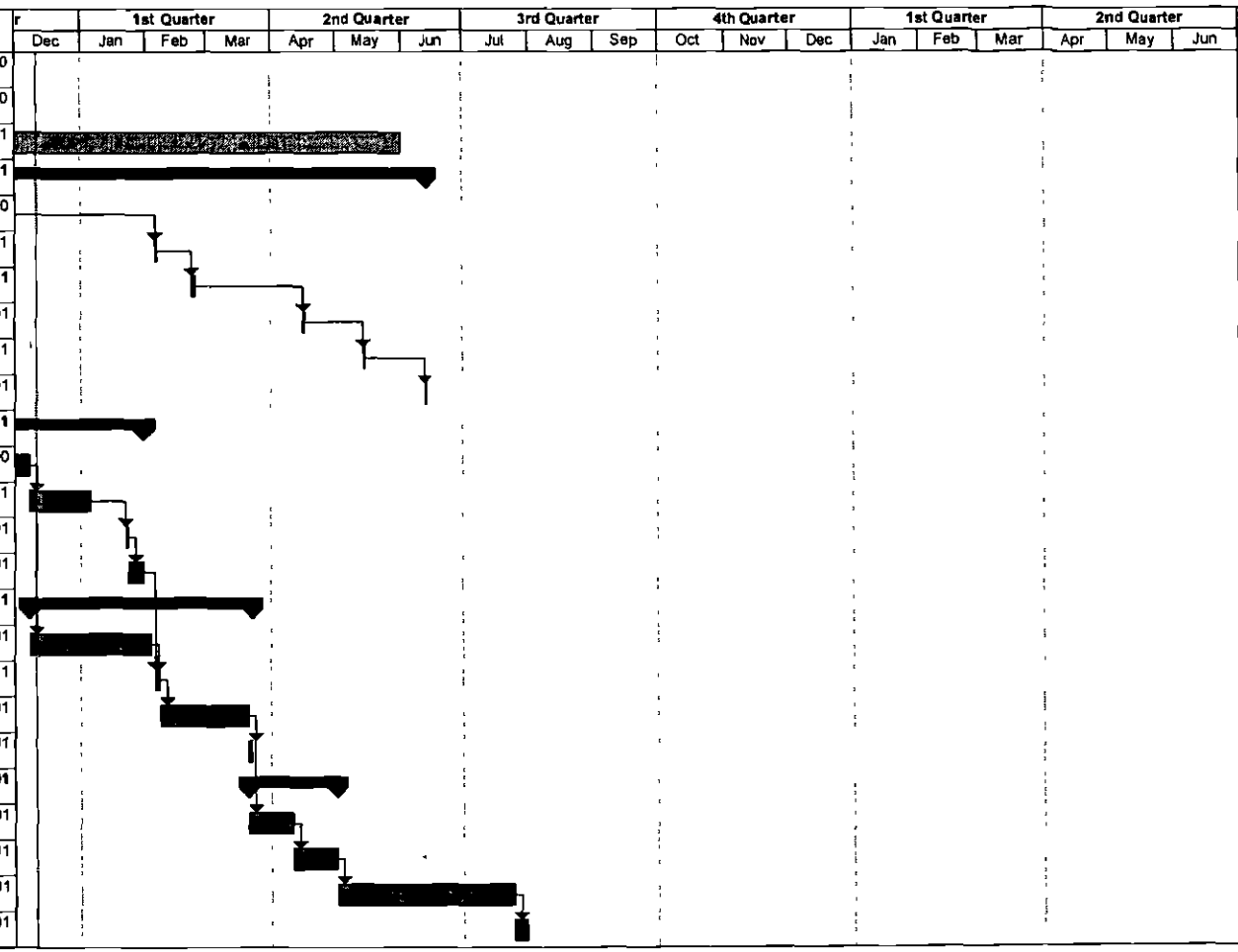
After the available data have been evaluated, including field characterization data from the Sanitary Sewer System RFI, a report will be prepared that compiles and evaluates the information. The primary objective of the draft final Sanitary Sewer System RFI report will be to compile all existing data, evaluate the data by current TNRCC regulations, and present conclusions as to the need for remedial or other actions.

6.0 Schedule

The project schedule is shown on Figure 6-1.

Figure 6-1
Project Schedule - Sanitary Sewer System Phase 3 RFI
Revised for POP Extension
NAS Ft Worth, TX

ID	Task Name	Duration	Start	Finish
1	*Propopsal*	*23 days*	*Fri 6/30/00*	*Tue 8/1/00*
2	**Notice to proceed**	0 days	Tue 8/22/00	Tue 8/22/00
3	**Project Administration**	205 days	Fri 8/18/00	Thu 5/31/01
4	**Meetings**	**160 days**	**Thu 11/2/00**	**Wed 6/13/01**
5	BCT 1	1 day	Thu 11/2/00	Thu 11/2/00
6	BCT 2	1 day	Mon 2/5/01	Mon 2/5/01
7	BCT 3	2 days	Thu 2/22/01	Fri 2/23/01
8	BCT 4	1 day	Mon 4/16/01	Mon 4/16/01
9	BCT 5	1 day	Tue 5/15/01	Tue 5/15/01
10	BCT 6	1 day	Wed 6/13/01	Wed 6/13/01
11	**Plans**	**84 days**	**Thu 10/5/00**	**Tue 1/30/01**
12	Work Plan addendum	46 days	Thu 10/5/00	Thu 12/7/00
13	AF review work plans	21 days	Fri 12/8/00	Fri 1/5/01
14	Review with TNRCC	1 day	Tue 1/23/01	Tue 1/23/01
15	Revise Work Plan	5 days	Wed 1/24/01	Tue 1/30/01
16	**Environmental sampling**	**75 days**	**Fri 12/8/00**	**Thu 3/22/01**
17	Clearance	41 days	Fri 12/8/00	Fri 2/2/01
18	Mobilization	2 days	Mon 2/5/01	Tue 2/6/01
19	Sampling	30 days	Wed 2/7/01	Tue 3/20/01
20	Demob	2 days	Wed 3/21/01	Thu 3/22/01
21	**Data management**	**30 days**	**Wed 3/21/01**	**Tue 5/1/01**
22	Analyses	15 days	Wed 3/21/01	Tue 4/10/01
23	Data validation	15 days	Wed 4/11/01	Tue 5/1/01
24	**Technical Reports**	60 days	Wed 5/2/01	Tue 7/24/01
25	Close out	4 days	Wed 7/25/01	Mon 7/30/01



Project: OWS - Carswell AFB
Date: Mon 12/11/00

Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | External Tasks | Project Summary | Split | Rolled Up Split

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7.0 Project Management

The objectives of this Phase 3 Sanitary Sewer System RFI investigation are to:

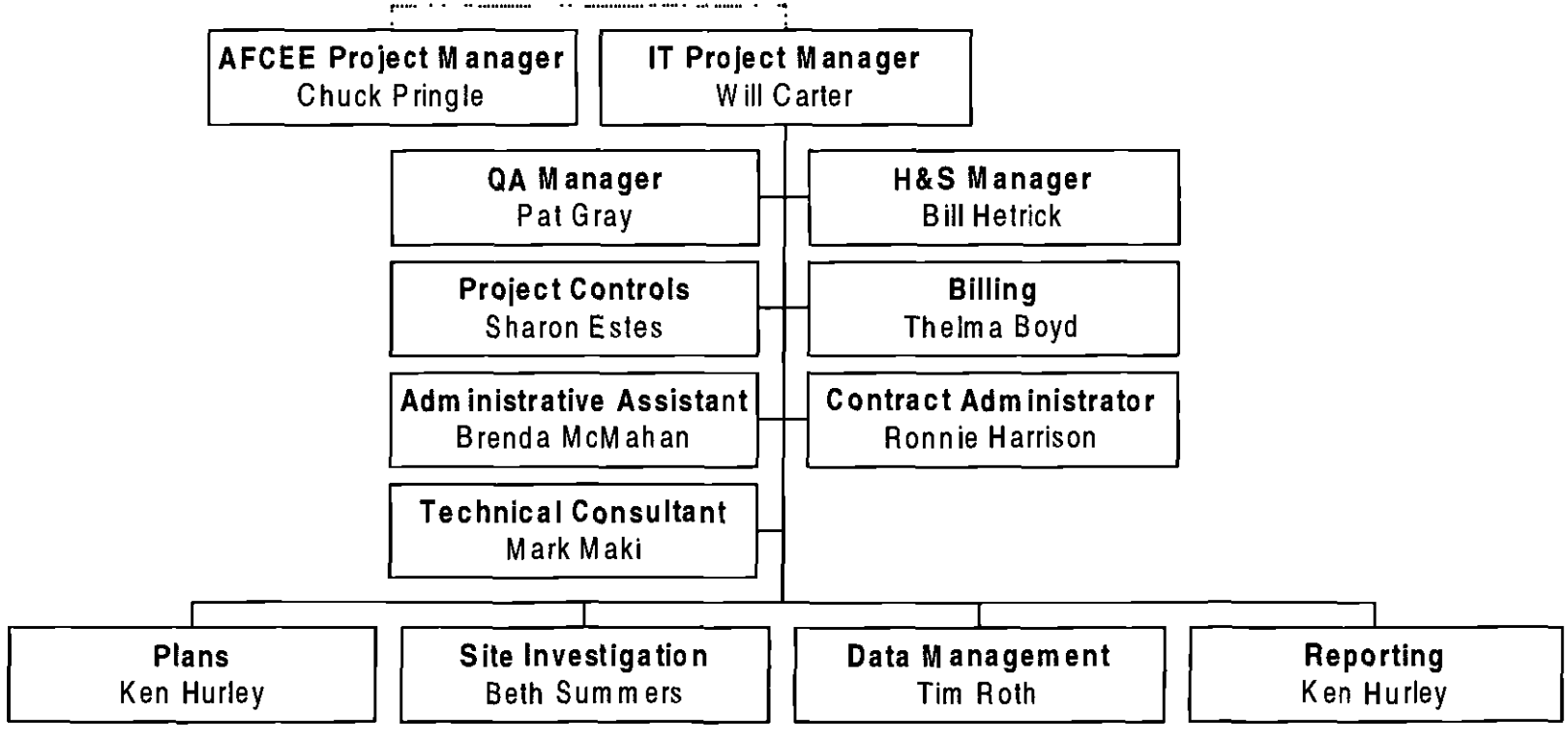
- Complete the Sanitary Sewer System Phase 3 RFI tasks in accordance with this WP, the Sanitary Sewer System RFI health and safety plan, and the Sanitary Sewer System QAPP as scheduled and within the allotted budget.
- Communicate with project participants (AFBCA, AFCEE, TNRCC, EPA) the technical compliance, scheduled and actual program progress, and budgetary status of the project as appropriate.
- Complete and issue a Sanitary Sewer System draft-final RFI report.
- Submit to regulatory agencies recommendations for suggested remedial actions at the Sanitary Sewer System.

This task includes coordinating among other RFI project participants, as well as tracking schedules and budgets and preparing monthly status reports to AFCEE. Preparation of project information, forecasting, and updating of schedules and budgets will also be done under this task.

A more detailed description of project organization and responsibility is provided in Section 3.0 of the QAPP (IT, 1999b). The project organization is shown on Figure 7-1.

Figure 7-1

Project Organization Chart
Sanitary Sewer RFI Phase 3 and Line Break Investigation
NAS Fort Worth JRB, Texas
Project 768579



8.0 References

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TAB

APPENDIX A

APPENDIX A

SUMMARY OF PHASE 2 RFI ACTIVITIES AND RESULTS

Naval Air Station (NAS) Fort Worth Joint Reserve Base
Carswell Field Phase 2 RCRA Facility Investigation Sanitary Sewer System
Data Quality Summary Report
Project No 768579 Delivery Order 0039

October 2000

1.0 Overview

Twenty-seven (27) groundwater and forty-seven (47) soil samples were collected in support of the Naval Air Station (NAS) Fort Worth Joint Reserve Base Carswell Field Phase 2 RCRA Facility Investigation Sanitary Sewer System. Samples were submitted to Kemron Environmental Services (KEMM) and analyzed for various metals by SW6010B/SW7000 Series methodology, various pesticide compounds by SW8081A, volatile compounds by SW8260B, and various semi-volatile compounds by SW8270C. QC samples consisted of the following types and quantities: eleven (11) field duplicates (FD), three (3) matrix spike/matrix spike duplicate (MS/MSD), twelve (12) trip blanks (TB) and eighteen (18) equipment rinsates (ER). An analytical summary table cross-referencing sample location, sample number, sample date and contaminants of concern is presented in Attachment A.

Ten (10) percent of samples were validated and reviewed in accordance with the "Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses" (EPA, 1999) and *"US EPA Contract Laboratory Program National Functional Guidelines for Evaluating Inorganic Data Review (EPA, February 1994)"* Data qualifiers assigned to results were based on guidance outlined in the referenced documents and the *"Naval Air Station (NAS) Fort Worth Joint Reserve Base Carswell Field Basewide Quality Assurance Project Plan (IT, February 2000)"*. Table 1.0-1 and Table 1.0-2 defines validation data and laboratory data qualifiers assigned to analytical results, respectively.

Table 1.0-1 Validation Data Qualifier Definitions

Validation Qualifier	Validation Data Qualifier Definition
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity
R	The data are unusable. (Note: Analyte may or may not be present.)
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
nv	Data not validated

Table 1.0-2 **Laboratory Data Qualifier Definitions**

Data Qualifier	Laboratory Data Qualifier Definition
J	The analyte was positively identified, the quantitation is estimation.
U	The material was analyzed for, but was not detected. The associated numerical value is at or below the method detection limit (MDL).
F	The analyte was positively identified but the associated numerical value is below the reporting limit (RL).
R	The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
B	The analyte was found in an associated blank, as well as in the sample.
M	A matrix effect was present
S	To be applied to all field screening data.
T	Tentatively identified compound (using Gas Chromatography/Mass Spectroscopy (GC/MS))

Data Validation Summary Report is presented in Attachment B.

2.0 Summary

Data were evaluated to verify compliance with precision, accuracy and completeness. To verify that project Data Quality Objectives (DQOs) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8081A, SW8260B & SW8270C method criteria. Laboratory non-conformances and discrepancies in the data were also examined to determine their impact on the data. The results of this review are presented in the following sections.

2.1 Sample Receipt and Analytical Holding Times

All sample results generated by the laboratory during this investigation have been reviewed with respect to condition of sample receipt from the laboratory, chain of custody and analysis holding times. All coolers were received by Kemron Environmental Services, Inc. in good condition under proper chain of custody with the following exceptions:

* Equipment rinsate (BT8005) pesticide fraction not collected and shipped with associated samples.
* Equipment rinsate (BT8006) volatile fraction not collected and shipped with associated samples.
* Trip blank (BT8010) not shipped with associated samples.

All extraction and analytical holding times were met.

2.2 Rejected Data

Tables 2.2-1 & Table 2.2-2 lists all rejected analytical data for groundwater and soil samples respectively. Sample re-collection at this time is not warranted due to the following:

* All rejected groundwater results are reported as non-detect.
* All rejected soil results are reported as non-detect with the following exceptions: Rejected acetone results for soil samples: BT0003, BT0005 & BT0006 (Field Duplicate) are reported above the laboratory's method detection limit but below the reporting limit. Acetone is considered a common laboratory contaminant.
* Rejected 1,1-Dichloropropene result reported above the laboratory's reporting limit is associated with field QC soil sample: BT0038 (Field Duplicate).

Table 2.2-1 Rejected Groundwater Analytical Results

Sample Delivery Group	Sample Number	Contaminant	Reason
L0004510	BT3001 [A], BT3003 [A], BT3005 [A], BT3006 [A] & BT3007 [A]	1,2-Dibromo-3-chloropropane	Failing Continuing Calibration Verification (CCV) – High bias
L0004547	BT3002 [A], BT3004 [A] & BT3008 [A]	1,1-Dichloropropene	Failing Second-Source Calibration Verification (ICV) – High bias
L0005152	BT3012 [B] & BT3013 (FD)	Dichlorodifluoromethane	Failing Laboratory Control Sample (LCS) recovery – Low bias
L0005106	BT3021 [B]	Dichlorodifluoromethane	Failing Laboratory Control Sample (LCS) recovery – Low bias
L0005370	BT3024, BT3025[C], BT3026, BT3027, BT3028 & BT3029	1,1-Dichloropropene	Failing Second-Source Calibration Verification (ICV) – High bias
L0005386	BT3030 & BT3031	1,1-Dichloropropene	Failing Second-Source Calibration Verification (ICV) – High bias
L0005254	BT3033	Dichlorodifluoromethane	Failing Laboratory Control Sample (LCS) recovery – Low bias

[A] Hydropunch screening samples.
[B] Dichlorodifluoromethane results "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*
[C] 1,1-Dichloropropene results "U" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*

Table 2.2-2 Rejected Soil Analytical Results

Sample Delivery Group	Sample Number	Contaminant	Reason
L0004241	BT0003, BT0005[A], BT0006 (FD), BT0037 [A] & BT0038 (FD)	1,1-Dichloropropene	Failing Second-Source Calibration Verification (ICV) – High bias
L0004241	BT0003, BT0005 [B], BT0006 (FD) & BT0037 [C]	Acetone & Trichlorofluoromethane	Failing Continuing Calibration Verification (CCV) – High bias (Acetone – Low bias)
L0004241	BT0038 (FD)	Trichlorofluoromethane	Failing Continuing Calibration Verification (CCV) – High bias
L0004254	BT0008 & BT0010	Methylene chloride	Failing Second-Source Calibration Verification (ICV) – High bias
L0004254	BT0008 & BT0010	Bromomethane	Failing Continuing Calibration Verification (CCV) – Low bias
L0004318	BT0036	Methylene chloride	Failing Second-Source Calibration Verification (ICV) – High bias
L0004318	BT0036 [D]	Bromomethane	Failing Continuing Calibration Verification (CCV) – Low bias

[A] 1,1-Dichloropropene "U" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*
[B] Acetone, Trichlorofluoromethane and Bromomethane results "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*
[C] Acetone results "J" qualified, Trichlorofluoromethane and Bromomethane results "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*
[D] Bromomethane results "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*

2.3 **Blank Results**

A description of the type of blank samples which were collected, processed and evaluated for background and/or process contamination during this sampling are as follows:

* Trip blank (TB) consists of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are taken and are analyzed only for VOC analytes. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

* Equipment rinsates (ER) is a sample of ASTM Type II reagent grade water poured into or over or pumped through the sampling device, collected in a sample container, and transported to the laboratory for analysis. Equipment rinsates are used to assess the effectiveness of equipment decontamination procedures. Equipment rinsates were collected on a daily basis during Phase 2 of this investigation.

* Method blanks are used to assess and document contamination resulting from the analytical process. A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank shall be carried through the complete sample preparation and analytical procedure.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in either method blanks and/or equipment rinsates. Results affected by trip blank, equipment rinsate and/or method blank contamination are summarized in Table 2.3-1.

Table 2.3-1 Summary of Trip Blank/Equipment Rinsate/Method Blank Contamination

Sample Delivery Group	Sample Number	Contaminant	Action
L0004241	BT8001 (ER)	Silver (0.00504 mg/L)	Silver results above the MDL for samples BT0033, BT0034 & BT0047 should be considered estimated.
L0004241	BT8002 (ER)	Manganese (0.00768 mg/L) Silver (0.00321 mg/L)	Manganese and Silver results above the MDL for samples BT0045, BT0046, BT0048 & BT0052 should be considered estimated.
L0004241	BT8003 (TB)	Acetone (2.68 ug/L) Methylene chloride (0.990 ug/L) Trichlorofluoromethane (0.580 ug/L)	Acetone, methylene chloride and trichlorofluoromethane results above the MDL for sample BT8002 should be considered estimated.
L0004241	BT8004 (TB)	Acetone (3.15 ug/L) Methylene chloride (1.53 ug/L)	Acetone and methylene chloride results above the MDL for sample BT8005 should be considered estimated
L0004241	BT8005 (ER)	Silver (0.00734 mg/L) Manganese (0.00292 mg/L)	Manganese and Silver results above the MDL for samples BT0004, BT0050 & BT0062 should be considered estimated.
L0004241	BT8006 (ER)	Silver (0 00413 mg/L)	Silver results above the MDL for samples BT0023, BT0056, BT0057 & BT0058 should be considered estimated
L0004241	WG75566-BLK	Antimony (0.506 mg/Kg)	Antimony results above the MDL for sample BT0020 should be considered estimated.

Sample Delivery Group	Sample Number	Contaminant	Action
L0004241	WG75436-BLK	1,2,4-Trimethylbenzene (0.3ug/Kg) 1,4-Dichlorobenzene (0.3ug/Kg) 1,2,4-Trichlorobenzene (0.5ug/Kg) Naphthalene (1.44 ug/Kg) 1,2,3-Trichlorobenzene (0.6ug/Kg)	1,2,4-Trimethylbenzene, 1,4-Dichlorobenzene, 1,2,4-Trichlorobenzene, Naphthalene & 1,2,3-Trichlorobenzene results above the MDL for samples BT0003, BT0005, BT0006, BT0027, BT0035, BT0037 & BT0038 should be considered estimated.
L0004254	BT8007 (ER)	Silver (0.00276 mg/L)	Silver results above the MDL for sample BT0063 should be considered estimated.
L0004254	BT8008 (ER)	Manganese (0.00764 mg/L) Silver (0.00506 mg/L)	Manganese and Silver results above the MDL for samples BT0026, BT0060, BT0061 & BT0064 should be considered estimated.
L0004254	BT8009 (TB)	Acetone (1.62 ug/L) Methylene chloride (0 510 ug/L)	Acetone and methylene chloride results above the MDL for sample BT8007 should be considered estimated.
L0004254	WG75689-BLK	Bromomethane (1.0 ug/Kg) 4-chlorotoluene (0.3ug/Kg) 1,2,4-Trimethylbenzene (0.3 ug/kg) 1,3-Dichlorobenzene (0.3 ug/Kg) 1,4-Dichlorobenzene (0.4 ug/Kg) 1,2-Dichlorobenzene (0.3 ug/Kg) 1,2,4-Trichlorobenzene (0.7 ug/Kg) Naphthalene (1.71 ug/Kg)	Bromomethane, 4-chlorotoluene, 1,2,4-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene & Naphthalene results above the MDL for samples BT0008 & BT0010 should be considered estimated.
L0004318	BT8011 (ER)	Acetone (2.29 ug/L) Toluene (0.240 ug/L)	Acetone & Toluene results above the MDL for sample BT0036 should be considered estimated.
L0004318	BT8012 (ER)	Acetone (3.02 ug/L)	Acetone results above the MDL for sample BT0028 should be considered estimated.
L0004318	WG76589-BLK	Bromomethane (1.0 ug/Kg) 4-chlorotoluene (0.3ug/Kg) 1,2,4-Trimethylbenzene (0.3 ug/kg) 1,3-Dichlorobenzene (0 3 ug/Kg) 1,4-Dichlorobenzene (0.4 ug/Kg) 1,2-Dichlorobenzene (0.3 ug/Kg) 1,2,4-Trichlorobenzene (0.7 ug/Kg) Naphthalene (1.71 ug/Kg)	Bromomethane, 4-chlorotoluene, 1,2,4-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene & Naphthalene results above the MDL for samples BT0028, BT0032 & BT0036 should be considered estimated.
L0004510	BT8013 (TB)	Acetone (3.37 ug/L) Methylene chloride (0.800 ug/L) Trichlorofluoromethane (0.790 ug/L)	Acetone, methylene chloride & Trichlorofluoromethane results above the MDL for samples BT3001, BT3003, BT3005, BT3006, BT3007 & BT8014 should be considered estimated.
L0004547	BT8015 (TB)	Acetone (2 91 ug/L) Methylene chloride (0.910 ug/L) Trichlorofluoromethane (0.910 ug/L)	Acetone, methylene chloride & Trichlorofluoromethane results above the MDL for samples BT3002, BT3004, BT3008 & BT8016 should be considered estimated.
L0004254	WG75316-BLK	Silver (SPLP) (0 0074 mg/L)	Silver results above the MDL for samples BT0026, BT0060 & BT0061 should be considered estimated.

Sample Delivery Group	Sample Number	Contaminant	Action
L0004575	WG76632-BLK	Cadmium (SPLP) (0.0003 mg/L) Copper (SPLP) (0.0018 mg/L) Silver (SPLP) (0.0019mg/L)	Cadmium, Copper & Silver results above the MDL for samples BT0018 & Silver results above the MDL for BT0040 should be considered estimated.
L0004575	WG76519-BLK	Naphthalene (1 03 ug/Kg)	Naphthalene results above the MDL for sample BT0029 should be considered estimated.
L0005068	BT8019 (TB)	Acetone (2.09ug/L) Methylene chloride (0.820 ug/L)	Acetone & methylene chloride results above the MDL for samples BT3022 & BT8023 should be considered estimated.
L0005106	BT8021 (TB)	Acetone (23.8 ug/L) Methylene chloride (4.10 ug/L)	Acetone & methylene chloride results above the MDL for samples BT3021& BT8022 should be considered estimated.
L0005152	BT8023 (TB)	Acetone (24.0 ug/L) 2-Butanone (4.01 ug/L)	Acetone & 2-butanone results above the MDL for samples BT3012, BT3013 & BT8024 should be considered estimated.
L0005152	BT8024 (ER)	Toluene (4 04 ug/L)	Toluene results above the MDL for samples BT3012 & BT3013 should be considered estimated.
L0005152	WG76611-BLK	Silver (0 0012 mg/L)	Silver results above the MDL for samples BT3017 & BT8024 should be considered estimated.
L0005306	WG77288-BLK	Manganese (0.0013 mg/L)	Manganese results above the MDL for sample BT8027 should be considered estimated.
L0005254	BT8025 (TB)	Acetone (23.8 ug/L) 2-Butanone (3.94 ug/L)	Acetone & 2-butanone results above the MDL for sample BT3033 & BT8026 should be considered estimated.
L0005254	BT8026 (ER)	Chloromethane (0.680 ug/L)	Chloromethane results above the MDL for sample BT3033 should be considered estimated
L0005370	BT8028 (TB)	Methylene chloride (1 03 ug/L)	Methylene chloride results above the MDL for samples BT3024, BT3025, BT3026, BT3027, BT3028, BT3029 & BT8029 should be considered estimated.
L0005370	BT8029 (ER)	Acetone (9 98 ug/L) 2-Butanone (2.98 ug/L)	Acetone & 2-Butanone results above the MDL for samples BT3024, BT3025, BT3026, BT3027, BT3028 & BT3029 should be considered estimated.
L0005370	WG77680-BLK	1,2,4-Trichlorobenzene (0.54 ug/L) Naphthalene (0.60 ug/L) 1,2,3-Trichlorobenzene (0 77ug/L) Trichloroethene (0.28 ug/L) Hexachlorobutadiene (0.80 ug/L)	1,2,4-Trichlorobenzene, naphthalene, 1,2,3-Trichlorobenzene, Trichloroethene & Hexachlorobutadiene results above the MDL for samples BT3024, BT3025, BT3026, BT3027, BT3028, BT8028 & BT3029 should be considered estimated
L0005386	BT8030 (TB)	Methylene chloride (0.880 ug/L)	Methylene chloride results above the MDL for samples BT3030, BT3031 & BT8031should be considered estimated.

Sample Delivery Group	Sample Number	Contaminant	Action
L0005386	BT8031 (ER)	Acetone (10.7 ug/L) 2-Butanone (3.01 ug/L)	Acetone & 2-Butanone results above the MDL for samples BT3030 & BT3031 should be considered estimated
L0005386	WG77680-BLK	1,2,4-Trichlorobenzene (0.54 ug/L) Naphthalene (0.60 ug/L) 1,2,3-Trichlorobenzene (0.77ug/L) Trichloroethene (0.28 ug/L) Hexachlorobutadiene (0.80 ug/L)	1,2,4-Trichlorobenzene, naphthalene, 1,2,3-Trichlorobenzene, Trichloroethene & Hexachlorobutadiene results above the MDL for samples BT3030, BT3031, BT8030 & BT8031 should be considered estimated.

2.4 **Analytical Accuracy Assessment**

MS/MSD & Laboratory Control Sample (LCS) were used to measure analytical accuracy as described in SW846 SW6010B/SW7000 Series methodology. Results indicate that an acceptable level of analytical accuracy was achieved. MS/MSD and LCS spike failure summaries are listed in Tables 2.4-1 and 2.4-2 respectively.

Table 2.4-1 Summary of MS/MSD Spike Recovery Failures

Sample Delivery Group	Sample Number	Contaminant	Action
L0004241	BT0003MS/MSD	1-Chlorohexane (Low bias) sec-Butylbenzene (Low bias) p-isopropyl toluene (Low bias) n-Butylbenzene (Low bias) 1,2,4-Trichlorobenzene (Low bias) Hexachlorobutadiene (Low bias) Naphthalene (Low bias) 1,2,3-Trichlorobenzene (Low bias)	1-Chlorohexane, sec-Butylbenzene, p-isopropyl toluene, n-Butylbenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Naphthalene & 1,2,3-Trichlorobenzene results above the MDL for sample BT0003 should be considered estimated [A]
L0004318	BT0036MS/MSD	p-Isopropyl toluene (Low bias) 1,4-Dichlorobenzene (Low bias) n-Butlybenzene (Low bias) 1,2,4-Trichlorobenzene (Low bias) Hexachlorobutadiene (Low bias) Naphthalene (Low bias) 1,2,3-Trichlorobenzene (Low bias)	p-Isopropyl toluene, 1,4-Dichlorobenzene, n-Butlybenzene, 1,2,4-Trichlorobenzene Hexachlorobutadiene, Naphthalene & 1,2,3-Trichlorobenzene results above the MDL for sample BT0003 should be considered estimated [B].
L0004575	BT0018MS/MSD	Cadmium (High bias) Copper (High bias)	Cadmium and Copper results above the MDL for sample BT0018 should be considered estimated [C].
L0005106	BT3021MS/MSD	Dichlorodifluoromethane (Low bias) Chloromethane (Low bias) 1,1-Dichloroethene (Low bias)	Dichlorodifluoromethane, chloromethane and 1,1-Dichloroethene results above the MDL for sample BT0021 should be considered estimated [D]
L0005152	BT3012MS/MSD	Dichlorodifluoromethane (Low bias) Chloromethane (Low bias) 1,1-Dichloroethene (Low bias)	Dichlorodifluoromethane, chloromethane and 1,1-Dichloroethene results above the MDL for sample BT3012 should be considered estimated [D].
L0005370	BT3025MS/MSD	Dichlorodifluoromethane (Low bias)	Dichlorodifluoromethane results above the MDL for sample BT3025 should be considered estimated [E].

[A] 1-Chlorohexane, sec-Butylbenzene, p-isopropyl toluene, n-Butylbenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Naphthalene & 1,2,3-Trichlorobenzene results were "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*

[B] p-Isopropyl toluene, 1,4-Dichlorobenzene, n-Butlybenzene, 1,2,4-Trichlorobenzene Hexachlorobutadiene, Naphthalene & 1,2,3-Trichlorobenzene results were "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*.

[C] Cadmium and copper results were "J" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*.

[D] Dichlorodifluoromethane, chloromethane and 1,1-Dichloroethene results were "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*.

[E] Dichlorodifluoromethane results were "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*.

Table 2.4-2 Summary of LCS Spike Recovery Failures

Sample Delivery Group	Sample Number	Contaminant	Action
L0004241	WG75436-LCS	1,1,1,2-Tetrachloroethane (High bias)	1,1,1,2-Tetrachloroethane results above the MDL for samples BT0003, BT0005, BT0006, BT0037 & BT0038 should be considered estimated.
L0004254 L0004318	WG75689-LCS	1,1,1,2-Tetrachloroethane (High bias)	1,1,1,2-Tetrachloroethane results above the MDL for samples BT0008, BT0010 & BT0036 should be considered estimated.
L0004510	WG76015-LCS	cis-1,3-Dichloropropane (High bias)	Cis-1,3-Dichloropropane results above the MDL for samples BT3001, BT3003, BT3005, BT3006 & BT3007 should be considered estimated.
L0004547	WG76456-LCS	1,1-Dichloropropene (High bias)	1,1-Dichloropropene results above the MDL for samples BT0002, BT3004 & BT3008 should be considered estimated.
L0005106 L0005152 L0005254	WG76758-LCS	Dichlorodifluoromethane (Low bias)	Dichlorodifluoromethane results above the MDL for samples BT3012 [A], BT3013, BT3021[A] & BT3033 should be considered estimated.
L0005370 L0005386	WG77680-LCS	1,1-Dichloropropene (High bias) 1,3,5-Trimethylbenzene (High bias)	1,1-Dichloropropene & 1,3,5-Trimethylbenzene results above the MDL for samples BT3024, BT3025, BT3026, BT3027, BT3028, BT3029, BT3030 & BT3031 should be considered estimated.

[A] Dichlorodifluoromethane results "UJ" qualified. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*

2.5 Analytical Precision

Field duplicate samples and duplicate spike analysis (such as MS/MSD) were used to measure precision as described by the SW846 SW6010B/SW7000 Series methodology. Analytical precision is calculated based on the following formula:

$$RPD = \left| \frac{(A-B)}{(A+B)/2} \right| 100$$

where:

RPD = Relative Percent Difference
A = original result
B = duplicate result

A high RPD between an original sample and its field duplicate may be attributable to the difference in sample matrix or distribution of the contaminant within the sample, rather than the precision of the collection process. Also, when "estimated" results are reported, there is a potential for increased variability between the primary and duplicate sample results. This occurs because, at low concentrations, the relative difference in results is magnified by the RPD calculation even though the results are comparable in absolute terms. There is also increased uncertainty in the results as the lower limit of detection is approached due to decreasing analytical accuracy. The RPD calculation cannot be performed in cases where non-detected results are reported with corresponding samples that contain detectable concentrations.

Results indicate that an acceptable analytical precision was achieved. In cases where compounds exceeded acceptance criteria ($RPD_{Aqueous} > 20$, $RPD_{Soil} > 50$), results were qualified. Table 2.5-1 lists samples qualified due to high RPDs when compared to its corresponding field duplicate.

Table 2.5-1 Summary of Field Duplicate & MS/MSD RPD Failures

Sample Delivery Group	*Sample Number*	*Contaminant*	Assigned Validation Qualifier
L0004241	BT0037	Methylene chloride Trichloroethene	J J
L0004254	BT0060	Silver (Total)	J
L0004575	BT0018	Cadmium Copper	Cadmium and Copper results above the MDL should be considered estimated [A].

[A] Cadmium and Copper results "J" qualified due to poor MS/MSD spike recoveries. See Attachment B – *"Sanitary Sewer System Data Validation Summary Report"*

2.6 Data Completeness

Completeness is calculated for the aggregation of data for each analyte measured during the Naval Air Station (NAS) Fort Worth Joint Reserve Base Carswell Field Phase 2 RCRA Facility Sanitary Sewer System. Formula for calculating completeness is listed below:

% completeness = (number of valid (i.e., non-"R" flagged) results/number of possible results)x100

The requirement for completeness is 95% for aqueous samples and 90% for soil samples (Total possible results for soil matrix includes both total and SPLP analytical results).

% Completeness $_{(Aqueous)}$ = (1378 / 1398)x100 = 98.6%
% Completeness $_{(Soil)}$ = (588 / 608)x100 = 96.7%

2.7 Data Useability

Data Quality Objectives (DQOs) provide an internal guide for control and review to verify that data are scientifically sound, defensible, and of known and acceptable quality. Factors such as precision, accuracy, representativeness and completeness were evaluated to determine if the project's DQOs were met. A review of the data revealed that most QA/QC indicators were within acceptable control limits.

The overall results of the analyses suggest that representative samples were collected and analyzed, and the results are indicative of the media analyzed. The data are considered representative of site conditions and are usable for their intended purpose.

3.0 **Attachments**

Appendix A - Analytical Summary Table

Appendix B - Data Validation Summary Report

Appendix C - Laboratory Reported Results

Appendix A - Analytical Summary Table

Carswell AFB
Delivery Order 0039
Sanitary Sewer System RFI
NAS Fort Worth
Project Number 768579

Sanitary Sewer Surface Soil Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
MHB9	MHB9-SS-BT0001-REG	BT0001	14-Apr-00	Silver by SW6010B & SPLP Silver by SW1312/SW6010B
MHB3E	MHB3E-SS-BT0002-REG	BT0002	14-Apr-00	Lead by SW6010B
MH13E	MH13E-SS-BT0003-REG	BT0003	10-Apr-00	VOCs by SW8260
MH15E6	MH15E6-SS-BT0004-REG	BT0004	11-Apr-00	Endrin, DDE and DDT by SW8081A, Silver by SW6010B & SPLP Silver by SW1312/SW6010B.
MH15G1	MH15G1-SS-BT0005-REG	BT0005	11-Apr-00	VOCs by SW8260, Mercury by SW7471A; SPLP Mercury by SW1312/SW7470A.
	MH15G1-SS-BT0006-FD	BT0006	11-Apr-00	VOCs by SW8260, Mercury by SW7471A; SPLP Mercury by SW1312/SW7470A.
MH15J4	MH15J4-SS-BT0008-REG	BT0008	12-Apr-00	VOCs by SW8260
MH15E12	MH15E12-SS-BT0010-REG	BT0010	12-Apr-00	VOCs by SW8260
B1125N	B1125N-SS-BT0011-REG	BT0011	14-Apr-00	Silver by SW6010B & SPLP Silver by SW1312/SW6010B
	B1125N-SS-BT0012-FD	BT0012	14-Apr-00	Silver by SW6010B & SPLP Silver by SW1312/SW6010B.
MHB12	MHB12-SS-BT0013-REG	BT0013	14-Apr-00	Lead by SW6010B.
MH56	MH56-SS-BT0014-REG	BT0014	27-Apr-00	Arsenic by SW6010B, SPLP Arsenic by SW1312/SW7060A
	MH56-SS-BT0015-FD	BT0015	27-Apr-00	Arsenic by SW6010B, SPLP Arsenic by SW1312/SW7060A.
MH53	MH53-SS-BT0016-REG	BT0016	27-Apr-00	Cadmium by SW6010B
MH4	MH4-SS-BT0018-REG	BT0018	27-Apr-00	Cadmium, Silver and Copper by SW6010B; SPLP Cadmium, Silver and Copper by SW1312/SW6010B.
	MH4-SS-BT0018MS-MS	BT0018MS	27-Apr-00	Cadmium, Silver and Copper by SW6010B, SPLP Cadmium, Silver and Copper by SW1312/SW6010B.
	MH4-SS-BT0018MSD-MSD	BT0018MSD	27-Apr-00	Cadmium, Silver and Copper by SW6010B; SPLP Cadmium, Silver and Copper by SW1312/SW6010B.
MH11F	MH11F-SS-BT0020-REG	BT0020	10-Apr-00	Antimony by SW6010B.
MH19-1 *	MH19-1-SS-BT0021-REG	BT0021	26-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B
	MH19-1-SS-BT0022-FD	BT0022	26-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B
MH11L	MH11L-SS-BT0023-REG	BT0023	11-Apr-00	Silver by SW6010B
MHB6	MHB6-SS-BT0025-REG	BT0025	27-Apr-00	Silver by SW6010B.
MH15J6	MH15J6-SS-BT0026-REG	BT0026	12-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B

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Carsw[illegible]FB
Delivery Order 0039
Sanitary Sewer System RFI
NAS Fort Worth
Project Number 768579

Sanitary Sewer Sub-surface Soil Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
15E425N	15E425N-SO-BT0027-REG	BT0027	11-Apr-00	1,2,4- & 1,3,5-Trimethylbenzenes by SW8260
B15A25W	B15A25W-SO-BT0028-REG	BT0028	14-Apr-00	1,2-,1,3- & 1,4-Dichlorobenzenes by SW8260
MH46	MH46-SO-BT0029-REG	BT0029	27-Apr-00	Naphthalene by SW8260
MH4	MH4-SO-BT0030-REG	BT0030	27-Apr-00	DDE by SW8081A.
	MH4-SO-BT0031-FD	BT0031	27-Apr-00	DDE by SW8081A.
MH11B	MH11B-SO-BT0032-REG	BT0032	14-Apr-00	Tert-butylbenzene & Naphthalene by SW8260
11C25N	11C25N-SO-BT0033-REG	BT0033	10-Apr-00	Di-n-butylphthalate by SW8270C, Silver by SW6010B & SPLP Silver by SW1312/SW6010B
	11C25N-SO-BT0034-FD	BT0034	10-Apr-00	Di-n-butylphthalate by SW8270C, Silver by SW6010B & SPLP Silver by SW1312/SW6010B
MH11E	MH11E-SO-BT0035-REG	BT0035	10-Apr-00	Naphthalene by SW8260
MH75	MH75-SO-BT0036-REG	BT0036	14-Apr-00	VOCs by SW8260; Molybdenum by SW6010B & SPLP Molybdenum by SW1312/SW6010B
	MH75-SO-BT0036MS-MS	BT0036MS	14-Apr-00	VOCs by SW8260; Molybdenum by SW6010B & SPLP Molybdenum by SW1312/SW6010B
	MH75-SO-BT0036MSD-MSD	BT0036MSD	14-Apr-00	VOCs by SW8260; Molybdenum by SW6010B & SPLP Molybdenum by SW1312/SW6010B
11H25N	11H25N-SO-BT0037-REG	BT0037	10-Apr-00	VOCs by SW8260
	11H25N-SO-BT0038-FD	BT0038	10-Apr-00	VOCs by SW8260
5225N	5225N-SO-BT0040-REG	BT0040	27-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B
MH11A	MH11A-SO-BT0044-REG	BT0044	14-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B
MH11C	MH11C-SO-BT0045-REG	BT0045	10-Apr-00	Silver by SW6010B, SPLP Silver by SW1312/SW6010B
MH11D	MH11D-SO-BT0046-REG	BT0046	10-Apr-00	Manganese and Silver by SW6010B & SPLP Manganese and Silver by SW13121/SW6010B
MH11D2	MH11D2-SO-BT0047-REG	BT0047	10-Apr-00	Barium, Manganese and Silver by SW6010B, SPLP Barium, Manganese and Silver by SW1312/SW6010B
MH11D3	MH11D3-SO-BT0048-REG	BT0048	10-Apr-00	Barium, Manganese and Silver by SW6010B.
15E25N	15E25N-SO-BT0050-REG	BT0050	11-Apr-00	Manganese and Silver by SW6010B
MH11I	MH11I-SO-BT0052-REG	BT0052	10-Apr-00	Silver by SW6010B
MH11D7	MH11D7-SO-BT0053-REG	BT0053	11-Apr-00	Lead and Cobalt by SW6010B, SPLP Lead and Cobalt by SW1312/SW6010B
MH15J2	MH15J2-SO-BT0054-REG	BT0054	12-Apr-00	Selenium and Mercury by SW6010B/SW7471A, SPLP Selenium and Mercury by SW1312/SW6010B & SW7471A.
MH15J4	MH15J4-SO-BT0055-REG	BT0055	12-Apr-00	Selenium by SW6010B
MH11D5	MH11D5-SO-BT0056-REG	BT0056	11-Apr-00	Silver by SW6010B
MH11DD	MH11DD-SO-BT0057-REG	BT0057	11-Apr-00	Silver by SW6010B
MH11D4	MH11D4-SO-BT0058-REG	BT0058	11-Apr-00	Silver by SW6010B
MH9B	MH9B-SO-BT0059-REG	BT0059	12-Apr-00	Arsenic by SW6010B
925W	925W-SO-BT0060-REG	BT0060	12-Apr-00	Arsenic and Silver by SW6010B, SPLP Arsenic and Silver by SW1312/SW6010B
	925W-SO-BT0061-FD	BT0061	12-Apr-00	Arsenic and Silver by SW6010B, SPLP Arsenic and Silver by SW1312/SW6010B
(MH) 15G125N	15G125N-SO-BT0062-REG	BT0062	11-Apr-00	Silver by SW6010B.
MH15K	MH15K-SO-BT0063-REG	BT0063	12-Apr-00	Silver by SW6010B
MH15J6	MH15J6-SO-BT0064-REG	BT0064	12-Apr-00	Manganese by SW6010B
MH35 *	MH35-SO-BT0065-REG	BT0065	10-May-00	Manganese by SW6010B
MH15S	MH15S-SO-BT0066-REG	BT0066	27-Apr-00	Silver by SW6010B

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Carswell AFB
Delivery Order 0039
Sanitary Sewer System RFI
NAS Fort Worth
Project Number 768579

Sanitary Sewer Hydropunch Sampling (Screening)

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
SS-HP01	SS-HP01-GW-BT3001-REG	BT3001	25-Apr-00	VOCs by SW8260B
SS-HP02	SS-HP02-GW-BT3002-REG	BT3002	26-Apr-00	VOCs by SW8260B
SS-HP03	SS-HP03-GW-BT3003-REG	BT3003	25-Apr-00	VOCs by SW8260B
SS-HP04	SS-HP04-GW-BT3004-REG	BT3004	26-Apr-00	VOCs by SW8260B
SS-HP05	SS-HP05-GW-BT3005-REG	BT3005	25-Apr-00	VOCs by SW8260B
SS-HP06	SS-HP06-GW-BT3006-REG	BT3006	25-Apr-00	VOCs by SW8260B
SS-HP07	SS-HP07-GW-BT3007-REG	BT3007	25-Apr-00	VOCs by SW8260B
SS-HP08	SS-HP08-GW-BT3008-REG	BT3008	26-Apr-00	VOCs by SW8260B

Sanitary Sewer Groundwater Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
ST14-W05	ST14-W05-GW-BT3011-REG	BT3011	3-May-00	Antimony by SW6010B
ST14MW24	ST14MW24-GW-BT3012-REG	BT3012	4-May-00	VOCs by SW8260B & Antimony by SW7041
	ST14MW24-GW-BT3013-FD	BT3013	4-May-00	VOCs by SW8260B & Antimony by SW7041
BGSMW01	BGSMW01-GW-BT3014-REG	BT3014	2-May-00	Mercury by SW7470A.
GMI-22-05M	GMI-22-05M-GW-BT3015-REG	BT3015	2-May-00	Antimony by SW6010B
WITCTA006	WITCTA006-GW-BT3016-REG	BT3016	4-May-00	Arsenic by SW6010B
WITCTA009	WITCTA009-GW-BT3017-REG	BT3017	4-May-00	Silver by SW6010B
WITCTA015 *	WITCTA015-GW-BT3018-REG	BT3018	4-May-00	Bis-(2-ethylhexyl) phthalate by SW8270C
	WITCTA015-GW-BT3019-FD	BT3019	4-May-00	Bis-(2-ethylhexyl) phthalate by SW8270C
WITCTA021	WITCTA021-GW-BT3020-REG	BT3020	3-May-00	Arsenic by SW6010B
WITCTA022	WITCTA022-GW-BT3021-REG	BT3021	3-May-00	VOCs by SW8260B
	WITCTA022-GW-BT3021MS-MS	BT3021MS	3-May-00	VOCs by SW8260B
	WITCTA022-GW-BT3021MSD-MSD	BT3021MSD	3-May-00	VOCs by SW8260B
WITCTA024	WITCTA024-GW-BT3022-REG	BT3022	2-May-00	VOCs by SW8260B
WITCTA025	WITCTA025-GW-BT3023-REG	BT3023	2-May-00	VOCs by SW8260B
WITCTA049 '	WITCTA049-GW-BT3024-REG	BT3024	15-May-00	VOCs by SW8260B
WITCTA050 '	WITCTA050-GW-BT3025-REG	BT3025	15-May-00	VOCs by SW8260B
	WITCTA050-GW-BT3026-FD	BT3026	15-May-00	VOCs by SW8260B
WITCTA051 '	WITCTA051-GW-BT3027-REG	BT3027	15-May-00	VOCs by SW8260B
WITCTA052 '	WITCTA052-GW-BT3028-REG	BT3028	15-May-00	VOCs by SW8260B
WITCTA053 '	WITCTA053-GW-BT3029-REG	BT3029	15-May-00	VOCs by SW8260B
WITCTA054 '	WITCTA054-GW-BT3030-REG	BT3030	16-May-00	VOCs by SW8260B
WITCTA055 '	WITCTA055-GW-BT3031-REG	BT3031	16-May-00	VOCs by SW8260B
WCHMHTA013	WCHMHTA013-GW-BT3033-REG	BT3033	9-May-00	VOCs by SW8260B

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Carswe[illegible]B
Delivery Order 0039
Sanitary Sewer System RFI
NAS Fort Worth
Project Number 768579

Field QC					
Sample Location	**Sample Name**	**Sample Number**	**Date Sampled**	**Analytical Suite**	**QC Associations**
SS-FLDQC	SS-FLDQC-BW-BT8001-ER	BT8001	10-Apr-00	Antimony by SW7040 & Silver by SW6010B	BT0037, BT0038, BT0045, BT0046, BT0048 & BT0052
SS-FLDQC	SS-FLDQC-BW-BT8002-ER	BT8002	10-Apr-00	Volatiles by SW8260B & Silver, Manganese and Barium by SW6010B	BT0003, BT0020, BT0033, BT0034, BT0035 & BT0047
SS-FLDQC	SS-FLDQC-BW-BT8003-TB	BT8003	10-Apr-00	Volatiles by SW8260B	BT8002
SS-FLDQC	SS-FLDQC-BW-BT8004-TB	BT8004	11-Apr-00	Volatiles by SW8260B	BT8005
SS-FLDQC	SS-FLDQC-BW-BT8005-ER	BT8005	11-Apr-00	Volatiles by SW8260B & Silver, Mercury and Manganese by SW6010B/7470A.	BT0004, BT0005, BT0006, BT0027, BT0050 & BT0062
SS-FLDQC	SS-FLDQC-BW-BT8006-ER	BT8006	11-Apr-00	Silver by SW6010B	BT0023, BT0053, BT0056, BT0057 & BT0058
SS-FLDQC	SS-FLDQC-BW-BT8007-ER	BT8007	12-Apr-00	Volatiles by SW8260B, SilverSW6010B & Selenium by SW7740	BT0008, BT0010, BT0055 & BT0063
SS-FLDQC	SS-FLDQC-BW-BT8008-ER	BT8008	12-Apr-00	Silver, Mercury, Selenium, Arsenic and Manganese by SW6010B/SW7471A.	BT0026, BT0054, BT0059, BT0060, BT0061 & BT0064
SS-FLDQC	SS-FLDQC-BW-BT8009-TB	BT8009	12-Apr-00	Volatiles by SW8260B	BT8007
SS-FLDQC	SS-FLDQC-BW-BT8011-ER	BT8011	14-Apr-00	Volatiles by SW8260B & Molybdenum by SW6010B	BT0032, BT0036, BT0036MS, BT0036MSD & BT0044
SS-FLDQC	SS-FLDQC-BW-BT8012-ER	BT8012	14-Apr-00	Volatiles by SW8260B, Di-n-butylphthalate by SW8270C, Endrin, DDE and DDT by SW8081A & Silver and Lead by SW6010B	BT0001, BT0002, BT0011, BT0012, BT0013 & BT0028
SS-FLDQC	SS-FLDQC-BW-BT8013-TB	BT8013	25-Apr-00	Volatiles by SW8260B	BT3001, BT3003, BT3005, BT3006, BT3007 & BT8014
SS-FLDQC	SS-FLDQC-BW-BT8014-ER	BT8014	25-Apr-00	Volatiles by SW8260B	BT3001, BT3003, BT3005, BT3006 & BT3007
SS-FLDQC	SS-FLDQC-BW-BT8015-TB	BT8015	26-Apr-00	Volatiles by SW8260B	BT3002, BT3004, BT3008 & BT8016
SS-FLDQC	SS-FLDQC-BW-BT8016-ER	BT8016	26-Apr-00	Volatiles by SW8260B & Silver by SW6010B	BT0021, BT0022, BT3002, BT3004 & BT3008.
SS-FLDQC	SS-FLDQC-BW-BT8017-TB	BT8017	27-Apr-00	Naphthalene only by SW8260B	BT8018
SS-FLDQC	SS-FLDQC-BW-BT8018-ER	BT8018	27-Apr-00	Naphthalene only by SW8260B, DDE by SW8081A & Arsenic by SW7060A, Cadmium, Silver and Copper by SW6010B	BT0014, BT0015, BT0016, BT0018, BT0018MS, BT0018MSD, BT0025, BT0029, BT0030, BT0031, BT0040 & BT0056.
SS-FLDQC	SS-FLDQC-BW-BT8019-TB	BT8019	2-May-00	Volatiles by SW8260B	BT3022, BT3023 & BT8020
SS-FLDQC	SS-FLDQC-BW-BT8020-ER	BT8020	2-May-00	Volatiles by SW8260B, Antimony by SW7041 & Mercury by SW7470A.	BT3014, BT3015, BT3022 & BT3023
SS-FLDQC	SS-FLDQC-BW-BT8021-TB	BT8021	3-May-00	Volatiles by SW8260B	BT3021, BT3021MS, BT3021MSD & BT8022
SS-FLDQC	SS-FLDQC-BW-BT8022-ER	BT8022	3-May-00	Volatiles by SW8260B, Antimony by SW7041 & Arsenic by SW7060A.	BT3011, BT3020, BT3021, BT3021MS & BT3021MSD
SS-FLDQC	SS-FLDQC-BW-BT8023-TB	BT8023	4-May-00	Volatiles by SW8260B	BT3012, BT3013 & BT8024
SS-FLDQC	SS-FLDQC-BW-BT8024-ER	BT8024	4-May-00	Volatiles by SW8260B, Bis (2-ethylhexyl) phthalate by SW8270C, Arsenic by SW7060A, Antimony by SW7040	BT3012, BT3013, BT3016, BT3017, BT3018 & BT3019
SS-FLDQC	SS-FLDQC-BW-BT8025-TB	BT8025	9-May-00	Volatiles by SW8260B	BT3033 & BT8026
SS-FLDQC	SS-FLDQC-BW-BT8026-ER	BT8026	9-May-00	Volatiles by SW8260B	BT3033
SS-FLDQC	SS-FLDQC-BW-BT8027-ER	BT8027	10-May-00	Manganese by SW6010B.	BT0065
SS-FLDQC	SS-FLDQC-BW-BT8028-TB	BT8028	15-May-00	Volatiles by SW8260B	BT3024, BT3025, BT3026, BT3027, BT3028, BT3029 & BT8029
SS-FLDQC	SS-FLDQC-BW-BT8029-ER	BT8029	15-May-00	Volatiles by SW8260B	BT3024, BT3025, BT3026, BT3027, BT3028 & BT3029
SS-FLDQC	SS-FLDQC-BW-BT8030-TB	BT8030	18-May-00	Volatiles by SW8260B	BT3030, BT3031 & BT8031
SS-FLDQC	SS-FLDQC-BW-BT8031-ER	BT8031	18-May-00	Volatiles by SW8260B	BT3030 & BT3031

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Appendix B - Data Validation Summary Report

DATA VALIDATION SUMMARY REPORT

PROJECT:	NAS Fort Worth Joint Reserve Base Delivery Order 39 Sanitary Sewer System
LABORATORY:	Kemron Environmental Services
WORK ORDERS:	L0004241, L0004254, L0004318, L0004548, L0004575, L005106, L0005152, L0005370
MATRIX:	Water and Soil
VALIDATION LEVEL:	III
ANALYSES, METHODS:	Volatiles (SW8260B), Semivolatiles (SW8270C), Pesticides (SW8081A), Metals –Total/SPLP (SW846 6010B/7060A/7470A)

1.0 INTRODUCTION

Water and soil samples were submitted to Kemron Environmental Services, Inc. for analyses. Samples selected for validation are listed in Table 1-1.

Samples were validated and reviewed in accordance with the "Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses" (EPA, 1999) and the "US EPA Contract Laboratory Program National Functional Guidelines for Evaluating Inorganic Data Review" (EPA, February 1994), and the associated methods.

Table 1-1. Sample Information

Work Order Number	Sample Number	Lab ID	Sample Date	Volatiles 8260B	Semivolatiles 8270C	Pesticides 8081A	Metals (Total/SPLP) 6010B/7060A/7470A	Associated Field QC
L0004241	BT0005	-03/04	04/11/00	X			X	BT8005 (ER)
	BT0033	-21/22	04/10/00		X		X	BT8002 (ER)
	BT0037	-26	04/10/00	X				BT8001 (ER) / BT8003 (TB)
L0004254	BT0060	-09/10	04/12/00				X	BT8008 (ER)
L0004318	BT0011	-04/05	04/14/00				X	BT8012 (ER)
	BT0036	-11/12	04/14/00	X			X	BT8010 (TB) / BT8011 (ER)
L0004548	BT0021	-01/02	04/26/00				X	BT8015 (TB) / BT8016 (ER)
L0004575	BT0014	-01/02	04/27/00				X	BT8018 (ER)
	BT0018	-06/07	04/27/00				X	BT8018 (ER)
	BT0030	-14	04/27/00			X		BT8018 (ER)
L0005106	BT3021	-03	05/3/00	X				BT8021 (TB) / BT8022 (ER)
L0005152	BT3012	-01	05/04/00	X			X	BT8023 (TB) / BT8024 (ER)
	BT3018	-05	05/04/00		X			BT8024 (ER)
L0005370	BT3025	-02	05/15/00	X				BT8028 (TB) / BT8029 (ER)

2.0 *VOLATILE ORGANIC COMPOUNDS by 8260B*

2.1 Sampling Documentation

"All" (L0004241, L0004318, L0005106, L0005152, L0005370) Work Orders: Chain-of-custody (COC) records indicate that the sample(s) were received in good condition and properly preserved. No qualifiers were assigned.

2.2 Holding Times

"All" Work Orders: Samples were analyzed within holding times. No qualifiers were assigned.

2.3 Instrument Tune

"All" Work Orders: Bromofluorobenzene (BFB) tunes were performed. Instrument tunes met the ion abundance criteria specified in the QAPP and the method. No qualifiers were assigned.

2.4 Calibrations

2.4.1 Initial Calibration

"All" Work Orders: Initial calibration was performed. All QC criteria were met. No qualifiers were assigned.

2.4.2 Continuing Calibration

Work Order L0004241: CCAL 20%D criteria were exceeded for acetone and trichlorofluoromethane. Results for these compounds were estimated (J/UJ).

Work Order L0004318: CCAL 20%D criteria were exceeded for bromomethane. Results for this compound were estimated (J/UJ).

Work Order L0005370: CCAL 20%D criteria were exceeded for acetone and 2-butanone. Results for these compounds were estimated (J/UJ).

2.5 Blanks

2.5.1 Method/Preparation Blanks

Work Order L0004318: 1,4-dichlorobenzene and naphthalene results for sample BT0036 were changed to non-detect status due to method blank contamination. Results were actually UJ qualified to reflect matrix problems (See section 2.8).

2.5.2 Trip Blanks

"All" Work Orders: No qualifiers were assigned.

2.5.3 Equipment and Field Blanks

Work Order L0004241: Acetone results for BT0005 were changed to non-detect status due to equipment rinsate (BT8005) contamination. Results actually UJ qualified to reflect calibration problems (See section 2.4.2).

Work Order L0004318: Acetone results for BT0036 were changed to non-detect status due to ER (BT8011) contamination.

2.6 System Monitoring Compounds (surrogates)

"All" Work Orders: Surrogate recoveries for all samples were within the control limits. No qualifiers were assigned.

2.7 Internal Standards

"All" Work Orders: The associated target compounds' internal standard areas and retention times for all samples were within the control limits. No qualifiers were assigned.

2.8 Matrix Spike (MS) /Matrix Spike Duplicate (MSD)

Work Order L0004241: MS/MSD recoveries were below QC limits for n-butylbenzene, sec-butylbenzene, 1-chlorohexane, hexachlorobutadiene, p-isopropyltoluene, naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene. Results for these compounds were estimated (qualified UJ) for sample BT0003.

Work Order L0004318: MS/MSD recoveries were below QC limits for n-butylbenzene, 1,4-dichlorobenzene, hexachlorobutadiene, p-isopropyltoluene, naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene. Results for these compounds were estimated (qualified UJ) for sample BT0036.

Work Order L0005106: MS/MSD recoveries were below QC limits for chloromethane, dichlorodifluoromethane, and 1,1-dichloroethene. Results for these compounds were estimated (qualified UJ) for sample BT3021.

Work Order L0005152: MS/MSD recoveries were below QC limits for chloromethane, dichlorodifluoromethane, and 1,1-dichloroethene. Results for these compounds were estimated (qualified UJ) for sample BT3012.

Work Order L0005370: MS/MSD recoveries were below QC limits for dichlorodifluoromethane. Results for this compound were estimated (qualified UJ) for sample BT3025.

2.9 Laboratory Control Sample (LCS)

Work Order L0005106: LCS recoveries were below QC limits for dichlorodifluoromethane. Results for this compound were estimated (qualified UJ) for sample BT3021.

Work Order L0005152: LCS recoveries were below QC limits for dichlorodifluoromethane. Results for this compound were estimated (qualified UJ) for sample BT3012.

2.10 Field Duplicates

Work Order L0004241: Samples BT0037 (original) and BT0038(FD) were evaluated. Methylene chloride and trichloroethene results were estimated (J) due to exceeded RPD (50%) QC criteria.

2.11 Compound Quantitation and Project Reporting Limits

Based on a Level III validation, samples were identified and generally quantified appropriately.

2.12 Overall Assessment of the Data

Data for validated samples are acceptable as qualified.

3.0 *SEMIVOLATILE ORGANIC COMPOUNDS by 8270C*

3.1 Sampling Documentation

"All" (L0004241, L0005152) Work Orders: Chain-of-custody (COC) records indicate that the sample(s) were received in good condition and properly preserved. No qualifiers were assigned.

3.2 Holding Times

"All" Work Orders: Samples were analyzed within the holding period for soil samples. No qualifiers were assigned.

3.3 Instrument Tune

"All" Work Orders: Decafluorotriphenylphosphine (DFTPP) tunes were performed. Instrument tunes met the ion abundance criteria specified in the QAPP and the method. No qualifiers were assigned.

3.4 Calibrations

3.4.1 Initial Calibration

"All" Work Orders: Initial calibration was performed. All QC criteria were met. No qualifiers were assigned.

3.4.2 Continuing Calibration

"All" Work Orders: Continuing calibration was performed. All QC criteria were met. No qualifiers were assigned.

3.5 Blanks

3.5.1 Method/Preparation Blanks

"All" Work Orders: All method blanks associated with samples had no contaminants detected. No qualifiers were assigned.

3.5.2 Equipment and Field Blanks

"All' Work Orders: All associated equipment rinsates (BT8002 & BT8024) associated with samples BT0033 and BT3018 had no contaminants detected. No qualifiers were assigned.

3.6 System Monitoring Compounds (surrogates)

"All" Work Orders: Surrogate recoveries for all samples were within the control limits. No qualifiers were assigned.

3.7 Internal Standards

"All" Work Orders: The associated target compounds' internal standard areas and retention times for all samples were within the control limits. No qualifiers were assigned.

3.8 Matrix Spike (MS) /Matrix Spike Duplicate (MSD)

"All" Work Orders : MS/MSD recoveries were within QC limits. No qualifiers were assigned.

3.9 Laboratory Control Sample (LCS)

"All" Work Orders: LCS analysis exhibited acceptable results. No qualifiers were assigned.

3.10 Field Duplicates

"All" Work Orders: No qualifiers were assigned.

3.11 Compound Quantitation and Project Reporting Limits

Based on a Level III validation, samples were identified and generally quantified appropriately.

3.12 Overall Assessment of the Data

Data for validated samples are acceptable as reported.

4.0 PESTICIDES by 8081A

4.1 Sampling Documentation

Work Order L0004575: Chain-of-custody (COC) records indicate that the sample(s) were received in good condition and properly preserved. No qualifiers were assigned.

4.2 Holding Times

Work Order L0004575: Samples were analyzed within the holding time. No qualifiers were assigned.

4.3 Calibrations

4.3.1 Initial Calibration

Work Order L0004575: The initial calibrations associated with the sample were performed in accordance with the method and the QAPP requirements. No qualifiers were assigned

4.3.2 Continuing Calibration

Work Order L0004575: The continuing calibrations associated with the samples were performed in accordance with the method and the QAPP requirements. No qualifiers were assigned.

4.4 Blanks

4.4.1 Method/Preparation Blanks

Work Order L0004575: All method blanks had no compounds detected. No qualifiers were assigned.

4.4.2 Equipment and Field Blanks

Work Order L0004575: Equipment rinsate (BT8018) had no compounds detected. No qualifiers were assigned.

4.5 System Monitoring Compounds (surrogates)

Work Order L0004575: Surrogate spike recoveries (%R) were within the QC limits. No qualifiers were assigned.

4.6 Matrix Spike (MS) /Matrix Spike Duplicate (MSD)

Work Order L0004575: No qualifiers were assigned.

4.7 Laboratory Control Sample (LCS)

Work Order L0004575: LCS analysis exhibited acceptable results. No qualifiers were assigned.

4.8 Field Duplicates

Work Order L0004575: No qualifiers were assigned.

4.9 Compound Quantitation

Based on a Level III validation, samples were identified and generally quantified appropriately.

4.10 Overall Assessment of the Data

Data for validated samples are acceptable as reported.

5.0 INORGANIC METALS ANALYSIS by 6010B/7060A

5.1 Sampling Documentation

"All" (L0004241, L0004254, L0004318, L0004548, L0004575, L0005152) Work Orders: Chain-of-custody (COC) records indicate that the sample(s) were received in good condition and properly preserved. No qualifiers were assigned.

5.2 Holding Times

"All" Work Orders: Validated samples were analyzed within the holding time requirements. No qualifiers were assigned.

5.3 Calibrations

5.3.1 Initial Calibration Verification

"All" Work Orders: The initial calibration verifications for all instruments were performed immediately following the standardization and met the requirements. No qualifiers were assigned.

5.3.2 Continuing Calibration Verification

"All" Work Orders: The continuing calibration verifications were within the control limits. No qualifiers were assigned.

5.4 Blanks

5.4.1 Method/Preparation Blanks

Work Order L0004254 (SPLP): SPLP method blank detected silver. Silver results for BT0060 were changed to non-detect status.

Work Order L0004575 (SPLP): SPLP method blank detected silver, cadmium, and copper. Results for these compounds were changed to non-detect status and U-qualified.

5.4.2 Equipment and Field Blanks

Work Order L0004318 (Total): The associated equipment rinsates (BT8011 & BT8013) detected silver. Silver results were changed to non-detect status (actually UJ qualified to reflect serial dilution problems).

5.4.3 Calibration Blanks

Work Order L0004318 (Total): The associated calibration blank detected silver. Silver results were changed to the non-detect status (actually UJ qualified to reflect serial dilution problems).

5.5 Matrix Spike (MS) /Matrix Spike Duplicate (MSD)

Work Order L0004575 (Total): MS/MSD percent recoveries were high for cadmium and copper. Results for these compounds were estimated (qualified J) for sample BT0018.

5.6 Laboratory Control Sample (LCS)

"All" Work Orders: LCS analysis exhibited acceptable results. No qualifiers were assigned.

5.7 Interference Check Samples

"All" Work Orders: Interference check samples analyzed were within the control limits. No qualifiers were assigned.

5.8 Field Duplicates

Work Order L0004254 (Total): BT0060 (original) and BTG0061 (FD) were evaluated and silver had high RPD. Silver results were estimated for sample BT0060.

5.9 Serial Dilution

Work Order L0004254 (Total): Silver results were estimated due to serial dilution %D > 10% for sample BT0060.

Work Order L0004318 (Total): Silver results were estimated (actually UJ qualified due to blank contamination) due to serial dilution %D > 10% for sample BT0011.

5.10 Compound Quantitation and Project Reporting Limits

Based on a Level III validation, samples were identified and generally quantified appropriately. The reporting limits listed on the Form I's were the reporting limits (RLs) specified in the QAPP.

5.11 Overall Assessment of the Data

Data for validated samples are acceptable as qualified.

Appendix C - Laboratory Reported Results

Carsw[illegible] LFB
Sanitary Sewer System Phase 2 [illegible]stigation Soil Data Summary
Project No 768579 [illegible]ery Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MHB9	BT0001	REG	14-Apr-00	0	2	Silver	7440-22-4	0 998	1 2	0 25	mg/kg	F	nv	SILVER	SS	N	Y
768579-SSS	MHB9	BT0001	REG	14-Apr-00	0	2	Silver	7440-22-4	0 956	10	0 45	ug/L	F	nv	SPLP-SILVER	SS	N	Y
768579-SSS	MHB3E	BT0002	REG	14-Apr-00	0	2	Lead	7439-92-1	37 1	1 2	0 32	mg/kg		nv	LEAD	SS	N	Y
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1,1,2-tetrachloroethane	630-20-6	0 0036	0 0036	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1,1-trichloroethane	71-55-6	0.0048	0 0048	0 00052	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1,2,2-tetrachloroethane	79-34-5	0 0024	0 0024	0.00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1,2-trichloroethane	79-00-5	0 006	0 006	0 00064	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1-dichloroethane	75-34-3	0.0024	0.0024	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1-dichloroethene	75-35-4	0 0071	0 0071	0.00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,1-dichloropropene	563-58-6	0 006	0 006	0 00048	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2,3-trichlorobenzene	87-61-6	0 0024	0 0024	0 00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2,3-trichloropropane	96-18-4	0 024	0 024	0 00096	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2,4-trichlorobenzene	120-82-1	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2,4-trimethylbenzene	95-63-6	0 0083	0 0083	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2-dibromo-3-chloropropane	96-12-8	0 012	0.012	0 0009	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2-dibromoethane	106-93-4	0 0036	0 0036	0 00045	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2-dichlorobenzene	95-50-1	0 0024	0 0024	0.00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2-dichloroethane	107-06-2	0 0036	0 0036	0 0003	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,2-dichloropropane	78-87-5	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,3,5-trimethylbenzene	108-67-8	0 0036	0 0036	0 00036	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,3-dichlorobenzene	541-73-1	0 0071	0 0071	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,3-dichloropropane	142-28-9	0 0024	0 0024	0 00042	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1,4-dichlorobenzene	106-46-7	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	1-chlorohexane	544-10-5	0 0036	0.0036	0.00049	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	2,2-dichloropropane	594-20-7	0 024	0 024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	2-butanone	78-93-3	0 14	0.14	0 002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	2-chlorotoluene	95-49-8	0 0024	0 0024	0 00049	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	4-chlorotoluene	106-43-4	0.0036	0.0036	0 00045	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Acetone	67-64-1	0 00476	0 3	0 003	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Benzene	71-43-2	0 0024	0 0024	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Bromobenzene	108-86-1	0 0024	0 0024	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Bromochloromethane	74-97-5	0 0024	0 0024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Bromodichloromethane	75-27-4	0 0048	0 0048	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Bromoform	75-25-2	0 0071	0 0071	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Bromomethane	74-83-9	0 006	0 006	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Carbon tetrachloride	56-23-5	0 012	0 012	0 00054	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Chlorobenzene	108-90-7	0.0024	0 0024	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Chloroethane	75-00-3	0.006	0 006	0 00076	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Chloroform	67-66-3	0 0024	0 0024	0 00045	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Chloromethane	74-87-3	0 0083	0 0083	0 00074	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Cis-1,2-dichloroethene	156-59-2	0.0071	0 0071	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Cis-1,3-dichloropropene	10061-01-5	0 006	0 006	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Dibromochloromethane	124-48-1	0.0036	0 0036	0.00055	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Dibromomethane	74-95-3	0 012	0 012	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Dichlorodifluoromethane	75-71-8	0.006	0 006	0 0009	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Ethylbenzene	100-41-4	0.0036	0 0036	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Hexachlorobutadiene	87-68-3	0.006	0 006	0 00047	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Isopropylbenzene	98-82-8	0 0095	0 0095	0 00036	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	M,p-xylenes	136777-61-2	0 000952	0 006	0.00055	mg/kg	F	nv	SW8260	SS	N	Y
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Methyl tert-butyl ether	1634-04-4	0 14	0.14	0 0002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Methylene chloride	75-09-2	0 0024	0 0024	0 00073	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	N-butylbenzene	104-51-8	0 006	0 006	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	N-propylbenzene	103-65-1	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Naphthalene	91-20-3	0 0024	0 0024	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	O-xylene	95-47-6	0.006	0.006	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	P-isopropyltoluene	99-87-6	0 0071	0.0071	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Sec-butylbenzene	135-98-8	0 0083	0 0083	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Styrene	100-42-5	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Tert-butylbenzene	98-06-6	0 0083	0 0083	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Tetrachloroethene	127-18-4	0 0083	0 0083	0 00031	mg/kg	U	nv	SW8260	SS	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 S[illegible]stigation Soil Data Summary
Project No 768579[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Toluene	108-88-3	0 006	0 006	0 00043	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Trans-1,2-dichloroethene	156-60-5	0 0036	0 0036	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Trans-1,3-dichloropropene	10061-02-6	0 006	0 006	0 00041	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Trichloroethene	79-01-6	0 012	0 012	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Trichlorofluoromethane	75-69-4	0 0048	0 0048	0 0011	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH13E	BT0003	REG	10-Apr-00	0	2	Vinyl chloride	75-01-4	0.011	0 011	0 0013	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E6	BT0004	REG	11-Apr-00	0	2	4,4'-dde	72-55-9	0 00879	0 0034	0 00015	mg/kg		nv	ENDDEDDT	SS	N	Y
768579-SSS	MH15E6	BT0004	REG	11-Apr-00	0	2	4,4'-ddt	50-29-3	0 0069	0 0034	0 00019	mg/kg		nv	ENDDEDDT	SS	N	Y
768579-SSS	MH15E6	BT0004	REG	11-Apr-00	0	2	Endrin	72-20-8	0 0034	0 0034	0 00016	mg/kg	U	nv	ENDDEDDT	SS	N	N
768579-SSS	MH15E6	BT0004	REG	11-Apr-00	0	2	Silver	7440-22-4	0.452	1	0 21	mg/kg	F	nv	SILVER	SS	N	Y
768579-SSS	MH15E6	BT0004	REG	11-Apr-00	0	2	Silver	7440-22-4	1 32	10	0 45	ug/L	F	nv	SPLP-SILVER	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Mercury	7439-97-6	0 005	0 12	0 0023	mg/kg	F	J	MERCURY	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Mercury	7439-97-6	0 17	0 5	0 02	ug/L	F	J	SPLP-MERCURY	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1,1,2-tetrachloroethane	630-20-6	0 0036	0 0036	0 00035	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1,1-trichloroethane	71-55-6	0 0048	0 0048	0.00052	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1,2,2-tetrachloroethane	79-34-5	0 0024	0 0024	0 00039	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1,2-trichloroethane	79-00-5	0 006	0 006	0 00064	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1-dichloroethane	75-34-3	0 0024	0 0024	0 00035	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1-dichloroethene	75-35-4	0.0071	0.0071	0 00046	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,1-dichloropropene	563-58-6	0 006	0 006	0 00048	mg/kg	R	U	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2,3-trichlorobenzene	87-61-6	0.0024	0.0024	0 00039	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2,3-trichloropropane	96-18-4	0 024	0.024	0 00096	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2,4-trichlorobenzene	120-82-1	0 0024	0 0024	0 00033	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2,4-trimethylbenzene	95-63-6	0 0083	0.0083	0.00032	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2-dibromo-3-chloropropane	96-12-8	0 012	0.012	0 0009	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2-dibromoethane	106-93-4	0 0036	0 0036	0 00045	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2-dichlorobenzene	95-50-1	0 0024	0.0024	0 00032	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2-dichloroethane	107-06-2	0 0036	0 0036	0 0003	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,2-dichloropropane	78-87-5	0 0024	0 0024	0 00026	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,3,5-trimethylbenzene	108-67-8	0 0036	0.0036	0 00036	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,3-dichlorobenzene	541-73-1	0 0071	0 0071	0 00028	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,3-dichloropropane	142-28-9	0 0024	0 0024	0 00042	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1,4-dichlorobenzene	106-46-7	0.0024	0 0024	0 00026	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	1-chlorohexane	544-10-5	0 0036	0 0036	0 00049	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	2,2-dichloropropane	594-20-7	0 024	0 024	0 00051	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	2-butanone	78-93-3	0.14	0 14	0 002	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	2-chlorotoluene	95-49-8	0 0024	0 0024	0 00049	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	4-chlorotoluene	106-43-4	0 0036	0 0036	0 00045	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Acetone	67-64-1	0 00502	0 3	0 003	mg/kg	R	UJ	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Benzene	71-43-2	0 0024	0 0024	0.00029	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Bromobenzene	108-86-1	0 0024	0 0024	0 00027	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Bromochloromethane	74-97-5	0 0024	0 0024	0 00051	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Bromodichloromethane	75-27-4	0 0048	0 0048	0 00032	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Bromoform	75-25-2	0.0071	0 0071	0 00027	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Bromomethane	74-83-9	0 006	0 006	0 0011	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Carbon tetrachloride	56-23-5	0.012	0 012	0 00054	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Chlorobenzene	108-90-7	0 0024	0 0024	0.00029	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Chloroethane	75-00-3	0 006	0 006	0.00076	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Chloroform	67-66-3	0 0024	0 0024	0 00045	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Chloromethane	74-87-3	0 0083	0 0083	0 00074	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Cis-1,2-dichloroethene	156-59-2	0 0071	0 0071	0 00031	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Cis-1,3-dichloropropene	10061-01-5	0.006	0 006	0 00035	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Dibromochloromethane	124-48-1	0 0036	0 0036	0 00055	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Dibromomethane	74-95-3	0 012	0 012	0 00033	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Dichlorodifluoromethane	75-71-8	0 006	0.006	0 0009	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Ethylbenzene	100-41-4	0 0036	0 0036	0 00031	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Hexachlorobutadiene	87-68-3	0 006	0.006	0 00047	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Isopropylbenzene	98-82-8	0 0095	0 0095	0 00036	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	M,p-xylenes	136777-61-2	0 006	0 006	0 00055	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Methyl tert-butyl ether	1634-04-4	0 14	0 14	0 0002	mg/kg	U	U	SW8260	SS	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 S[illegible]stigation Soil Data Summary
Project No 768579[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Methylene chloride	75-09-2	0 00113	0 0024	0 00073	mg/kg	F	J	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	N-butylbenzene	104-51-8	0 006	0 006	0 00035	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	N-propylbenzene	103-65-1	0 0024	0 0024	0 00033	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Naphthalene	91-20-3	0 0024	0 0024	0 0011	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	O-xylene	95-47-6	0 006	0 006	0 00031	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	P-isopropyltoluene	99-87-6	0 0071	0 0071	0 00029	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Sec-butylbenzene	135-98-8	0 0083	0 0083	0 00035	mg/kg	U	UJ	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Styrene	100-42-5	0 0024	0 0024	0 00033	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Tert-butylbenzene	98-06-6	0 0083	0 0083	0 00033	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Tetrachloroethene	127-18-4	0 0083	0 0083	0 00031	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Toluene	108-88-3	0 006	0 006	0 00043	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Trans-1,2-dichloroethene	156-60-5	0 0036	0 0036	0 00033	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Trans-1,3-dichloropropene	10061-02-6	0 006	0 006	0.00041	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Trichloroethene	79-01-6	0 012	0 012	0 00035	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Trichlorofluoromethane	75-69-4	0 0048	0 0048	0 0011	mg/kg	R	UJ	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0005	REG	11-Apr-00	0	2	Vinyl chloride	75-01-4	0 011	0 011	0 0013	mg/kg	U	U	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Mercury	7439-97-6	0 12	0 12	0 0023	mg/kg	U	nv	MERCURY	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Mercury	7439-97-6	0 5	0 5	0 02	ug/L	U	nv	SPLP-MERCURY	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1,1,2-tetrachloroethane	630-20-6	0 0035	0 0035	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1,1-trichloroethane	71-55-6	0 0047	0 0047	0 00052	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1,2,2-tetrachloroethane	79-34-5	0 0024	0 0024	0.00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1,2-trichloroethane	79-00-5	0 0059	0 0059	0 00063	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1-dichloroethane	75-34-3	0 0024	0 0024	0.00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1-dichloroethene	75-35-4	0 0071	0 0071	0 00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,1-dichloropropene	563-58-6	0 0059	0 0059	0 00047	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2,3-trichlorobenzene	87-61-6	0 0024	0 0024	0 00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2,3-trichloropropane	96-18-4	0 024	0 024	0 00095	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2,4-trichlorobenzene	120-82-1	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2,4-trimethylbenzene	95-63-6	0 0082	0 0082	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2-dibromo-3-chloropropane	96-12-8	0 012	0 012	0 00088	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2-dibromoethane	106-93-4	0 0035	0 0035	0 00044	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2-dichlorobenzene	95-50-1	0 0024	0 0024	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2-dichloroethane	107-06-2	0 0035	0 0035	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,2-dichloropropane	78-87-5	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,3,5-trimethylbenzene	108-67-8	0 0035	0 0035	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,3-dichlorobenzene	541-73-1	0 0071	0 0071	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,3-dichloropropane	142-28-9	0 0024	0 0024	0 00041	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1,4-dichlorobenzene	106-46-7	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	1-chlorohexane	544-10-5	0 0035	0 0035	0 00048	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	2,2-dichloropropane	594-20-7	0.024	0 024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	2-butanone	78-93-3	0 14	0 14	0.002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	2-chlorotoluene	95-49-8	0 0024	0 0024	0 00048	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	4-chlorotoluene	106-43-4	0 0035	0 0035	0.00045	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Acetone	67-64-1	0 00408	0.29	0 0029	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Benzene	71-43-2	0 0024	0 0024	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Bromobenzene	108-86-1	0 0024	0 0024	0.00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Bromochloromethane	74-97-5	0 0024	0 0024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Bromodichloromethane	75-27-4	0 0047	0 0047	0.00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Bromoform	75-25-2	0 0071	0 0071	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Bromomethane	74-83-9	0 0059	0 0059	0.0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Carbon tetrachloride	56-23-5	0 012	0 012	0 00053	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Chlorobenzene	108-90-7	0 0024	0.0024	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Chloroethane	75-00-3	0 0059	0 0059	0.00075	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Chloroform	67-66-3	0 0024	0 0024	0.00044	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Chloromethane	74-87-3	0 0082	0 0082	0.00073	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Cis-1,2-dichloroethene	156-59-2	0 0071	0 0071	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Cis-1,3-dichloropropene	10061-01-5	0 0059	0 0059	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Dibromochloromethane	124-48-1	0 0035	0 0035	0 00055	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Dibromomethane	74-95-3	0 012	0 012	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Dichlorodifluoromethane	75-71-8	0 0059	0 0059	0 00089	mg/kg	U	nv	SW8260	SS	N	N

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Sanitary Sewer System Phase 2 [redacted]estigation Soil Data Summary
Project No 768579 [redacted]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Ethylbenzene	100-41-4	0 0035	0 0035	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Hexachlorobutadiene	87-68-3	0 0059	0 0059	0 00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH 15G1	BT0006	FD	11-Apr-00	0	2	Isopropylbenzene	98-82-8	0 0094	0 0094	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	M,p-xylenes	136777-61-2	0 0059	0 0059	0 00054	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Methyl tert-butyl ether	1634-04-4	0 14	0 14	0 0002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Methylene chloride	75-09-2	0.00113	0 0024	0 00072	mg/kg	F	nv	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	N-butylbenzene	104-51-8	0 0059	0.0059	0.00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	N-propylbenzene	103-65-1	0 0024	0 0024	0.00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Naphthalene	91-20-3	0 0024	0 0024	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	O-xylene	95-47-6	0 0059	0 0059	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	P-isopropyltoluene	99-87-6	0 0071	0 0071	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Sec-butylbenzene	135-98-8	0 0082	0 0082	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Styrene	100-42-5	0.0024	0 0024	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Tert-butylbenzene	98-06-6	0 0082	0.0082	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH 15G1	BT0006	FD	11-Apr-00	0	2	Tetrachloroethene	127-18-4	0 0082	0 0082	0.00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Toluene	108-88-3	0 0059	0 0059	0 00042	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Trans-1,2-dichloroethene	156-60-5	0 0035	0 0035	0.00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Trans-1,3-dichloropropene	10061-02-6	0 0059	0 0059	0 0004	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Trichloroethene	79-01-6	0 012	0 012	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Trichlorofluoromethane	75-69-4	0 0047	0 0047	0 0011	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15G1	BT0006	FD	11-Apr-00	0	2	Vinyl chloride	75-01-4	0.011	0 011	0 0012	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1,1,2-tetrachloroethane	630-20-6	0 0032	0 0032	0.00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1,1-trichloroethane	71-55-6	0 0043	0 0043	0.00047	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1,2,2-tetrachloroethane	79-34-5	0,0021	0 0021	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1,2-trichloroethane	79-00-5	0 0053	0 0053	0 00057	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1-dichloroethane	75-34-3	0 0021	0 0021	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1-dichloroethene	75-35-4	0 0064	0 0064	0 00041	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,1-dichloropropene	563-58-6	0 0053	0 0053	0 00043	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2,3-trichlorobenzene	87-61-6	0 0021	0 0021	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2,3-trichloropropane	96-18-4	0 021	0 021	0 00086	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2,4-trichlorobenzene	120-82-1	0 0021	0 0021	0 0003	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2,4-trimethylbenzene	95-63-6	0 0074	0 0074	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2-dibromo-3-chloropropane	96-12-8	0 011	0 011	0 0008	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2-dibromoethane	106-93-4	0 0032	0 0032	0 0004	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2-dichlorobenzene	95-50-1	0 0021	0 0021	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2-dichloroethane	107-06-2	0 0032	0 0032	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,2-dichloropropane	78-87-5	0 0021	0,0021	0.00023	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,3,5-trimethylbenzene	108-67-8	0 0032	0 0032	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,3-dichlorobenzene	541-73-1	0 0064	0 0064	0 00025	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,3-dichloropropane	142-28-9	0 0021	0 0021	0 00037	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1,4-dichlorobenzene	106-46-7	0 0021	0 0021	0 00023	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	1-chlorohexane	544-10-5	0 0032	0 0032	0 00044	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	2,2-dichloropropane	594-20-7	0,021	0 021	0.00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	2-butanone	78-93-3	0.13	0 13	0.0018	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	2-chlorotoluene	95-49-8	0 0021	0 0021	0 00044	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	4-chlorotoluene	106-43-4	0 0032	0 0032	0 00041	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Acetone	67-64-1	0 00712	0 27	0 0026	mg/kg	F	nv	SW8260	SS	N	Y
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Benzene	71-43-2	0 0021	0 0021	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Bromobenzene	108-86-1	0 0021	0,0021	0.00024	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Bromochloromethane	74-97-5	0 0021	0 0021	0 00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Bromodichloromethane	75-27-4	0 0043	0 0043	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Bromoform	75-25-2	0 0064	0 0064	0 00024	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Bromomethane	74-83-9	0 0053	0 0053	0 001	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Carbon tetrachloride	56-23-5	0 011	0 011	0 00048	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Chlorobenzene	108-90-7	0 0021	0 0021	0.00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Chloroethane	75-00-3	0 0053	0 0053	0 00068	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Chloroform	67-66-3	0 0021	0 0021	0 0004	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Chloromethane	74-87-3	0 0074	0 0074	0 00066	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Cis-1,2-dichloroethene	156-59-2	0 0064	0 0064	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Cis-1,3-dichloropropene	10061-01-5	0 0053	0 0053	0 00031	mg/kg	U	nv	SW8260	SS	N	N

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Sanitary Sewer System Phase 2 [illegible]stigation Soil Data Summary
Project No 76857[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Dibromochloromethane	124-48-1	0 0032	0 0032	0 00049	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Dibromomethane	74-95-3	0 011	0 011	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Dichlorodifluoromethane	75-71-8	0 0053	0 0053	0 00081	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Ethylbenzene	100-41-4	0 0032	0 0032	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Hexachlorobutadiene	87-68-3	0 0053	0 0053	0 00042	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Isopropylbenzene	98-82-8	0 0085	0 0085	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	M,p-xylenes	136777-61-2	0 0053	0 0053	0 00049	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Methyl tert-butyl ether	1634-04-4	0 13	0.13	0 00018	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Methylene chloride	75-09-2	0 0021	0 0021	0 00065	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	N-butylbenzene	104-51-8	0 0053	0 0053	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	N-propylbenzene	103-65-1	0 0021	0 0021	0 0003	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Naphthalene	91-20-3	0 0021	0 0021	0 00096	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	O-xylene	95-47-6	0 0053	0 0053	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	P-isopropyltoluene	99-87-6	0 0064	0 0064	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Sec-butylbenzene	135-98-8	0 0074	0 0074	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Styrene	100-42-5	0 0021	0 0021	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Tert-butylbenzene	98-06-6	0 0074	0 0074	0 0003	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Tetrachloroethene	127-18-4	0 0151	0 0074	0 00028	mg/kg		nv	SW8260	SS	N	Y
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Toluene	108-88-3	0 0053	0 0053	0 00038	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Trans-1,2-dichloroethene	156-60-5	0 0032	0 0032	0 0003	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Trans-1,3-dichloropropene	10061-02-6	0 0053	0 0053	0 00036	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Trichloroethene	79-01-6	0 00398	0 011	0 00031	mg/kg	F	nv	SW8260	SS	N	Y
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Trichlorofluoromethane	75-69-4	0 0043	0 0043	0 00096	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15J4	BT0008	REG	12-Apr-00	0	2	Vinyl chloride	75-01-4	0 0096	0 0096	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1,1,2-tetrachloroethane	630-20-6	0 0035	0 0035	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1,1-trichloroethane	71-55-6	0 0047	0 0047	0 00052	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1,2,2-tetrachloroethane	79-34-5	0 0024	0 0024	0 00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1,2-trichloroethane	79-00-5	0.0059	0 0059	0 00063	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1-dichloroethane	75-34-3	0 0024	0 0024	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1-dichloroethene	75-35-4	0 0071	0 0071	0 00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,1-dichloropropene	563-58-6	0 0059	0 0059	0 00047	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2,3-trichlorobenzene	87-61-6	0 0024	0 0024	0 00039	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2,3-trichloropropane	96-18-4	0 024	0 024	0 00095	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2,4-trichlorobenzene	120-82-1	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2,4-trimethylbenzene	95-63-6	0 0082	0 0082	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2-dibromo-3-chloropropane	96-12-8	0 012	0 012	0 00088	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2-dibromoethane	106-93-4	0.0035	0 0035	0 00044	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2-dichlorobenzene	95-50-1	0 0024	0 0024	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2-dichloroethane	107-06-2	0 0035	0 0035	0 00029	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,2-dichloropropane	78-87-5	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,3,5-trimethylbenzene	108-67-8	0 0035	0.0035	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,3-dichlorobenzene	541-73-1	0 0071	0 0071	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,3-dichloropropane	142-28-9	0 0024	0 0024	0 00041	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1,4-dichlorobenzene	106-46-7	0 0024	0 0024	0 00026	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	1-chlorohexane	544-10-5	0 0035	0 0035	0 00048	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	2,2-dichloropropane	594-20-7	0 024	0 024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	2-butanone	78-93-3	0 14	0.14	0 002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	2-chlorotoluene	95-49-8	0 0024	0 0024	0 00048	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	4-chlorotoluene	106-43-4	0 0035	0 0035	0 00045	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Acetone	67-64-1	0 00316	0 29	0 0029	mg/kg	J	nv	SW8260	SS	N	Y
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Benzene	71-43-2	0 0024	0.0024	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Bromobenzene	108-86-1	0 0024	0.0024	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Bromochloromethane	74-97-5	0 0024	0.0024	0 00051	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Bromodichloromethane	75-27-4	0 0047	0 0047	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Bromoform	75-25-2	0 0071	0.0071	0 00027	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Bromomethane	74-83-9	0 0059	0 0059	0 0011	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Carbon tetrachloride	56-23-5	0 012	0 012	0 00053	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Chlorobenzene	108-90-7	0 0024	0.0024	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Chloroethane	75-00-3	0 0059	0 0059	0 00075	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Chloroform	67-66-3	0 0024	0 0024	0 00044	mg/kg	U	nv	SW8260	SS	N	N

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Sanitary Sewer System Phase 2 [illegible]estigation Soil Data Summary
Project No 76857[illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Chloromethane	74-87-3	0 0082	0 0082	0 00073	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Cis-1,2-dichloroethene	156-59-2	0 0071	0 0071	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Cis-1,3-dichloropropene	10061-01-5	0 0059	0 0059	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Dibromochloromethane	124-48-1	0 0035	0 0035	0 00055	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Dibromomethane	74-95-3	0 012	0 012	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Dichlorodifluoromethane	75-71-8	0 0059	0 0059	0 00089	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Ethylbenzene	100-41-4	0 0035	0 0035	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Hexachlorobutadiene	87-68-3	0 0059	0 0059	0 00046	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Isopropylbenzene	98-82-8	0 0094	0 0094	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	M,p-xylenes	136777-61-2	0 0059	0 0059	0 00054	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Methyl tert-butyl ether	1634-04-4	0 14	0 14	0.0002	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Methylene chloride	75-09-2	0.0024	0 0024	0 00072	mg/kg	R	nv	SW8260	SS	N	Y
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	N-butylbenzene	104-51-8	0 0059	0 0059	0 00035	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	N-propylbenzene	103-65-1	0 0024	0 0024	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Naphthalene	91-20-3	0 0024	0 0024	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	O-xylene	95-47-8	0 0059	0 0059	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	P-isopropyltoluene	99-87-6	0 0071	0 0071	0 00028	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Sec-butylbenzene	135-98-8	0 0082	0 0082	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Styrene	100-42-5	0 0024	0 0024	0 00032	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Tert-butylbenzene	98-06-6	0.0082	0 0082	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Tetrachloroethene	127-18-4	0 0082	0 0082	0 00031	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Toluene	108-88-3	0 0059	0 0059	0 00042	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Trans-1,2-dichloroethene	156-60-5	0 0035	0 0035	0 00033	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Trans-1,3-dichloropropene	10061-02-6	0 0059	0.0059	0 0004	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Trichloroethene	79-01-8	0.012	0 012	0 00034	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Trichlorofluoromethane	75-69-4	0 0047	0.0047	0 0011	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	MH15E12	BT0010	REG	12-Apr-00	0	2	Vinyl chloride	75-01-4	0 011	0 011	0 0012	mg/kg	U	nv	SW8260	SS	N	N
768579-SSS	B1125N	BT0011	REG	14-Apr-00	0	2	Silver	7440-22-4	0 465	1 2	0 25	mg/kg	F	UJ	SILVER	SS	N	Y
768579-SSS	B1125N	BT0011	REG	14-Apr-00	0	2	Silver	7440-22-4	0 789	10	0 45	ug/L	F	J	SPLP-SILVER	SS	N	Y
768579-SSS	B1125N	BT0012	FD	14-Apr-00	0	2	Silver	7440-22-4	0 564	1.2	0.24	mg/kg	F	nv	SILVER	SS	N	Y
768579-SSS	B1125N	BT0012	FD	14-Apr-00	0	2	Silver	7440-22-4	0 833	10	0 45	ug/L	F	nv	SPLP-SILVER	SS	N	Y
768579-SSS	MHB12	BT0013	REG	14-Apr-00	0	2	Lead	7439-92-1	9 68	1 2	0 31	mg/kg		nv	LEAD	SS	N	Y
768579-SSS	MH56	BT0014	REG	27-Apr-00	0	2	Arsenic	7440-38-2	5 81	1.2	0 32	mg/kg			ARSENIC	SS	N	Y
768579-SSS	MH56	BT0014	REG	27-Apr-00	0	2	Arsenic	7440-38-2	2	2	1 5	ug/L	U	U	SPLP-ARSENIC	SS	N	N
768579-SSS	MH56	BT0015	FD	27-Apr-00	0	2	Arsenic	7440-38-2	6 54	1.2	0 31	mg/kg		nv	ARSENIC	SS	N	Y
768579-SSS	MH56	BT0015	FD	27-Apr-00	0	2	Arsenic	7440-38-2	3	2	1 5	ug/L		nv	SPLP-ARSENIC	SS	N	Y
768579-SSS	MH53	BT0016	REG	27-Apr-00	0	2	Cadmium	7440-43-9	0 2	0 11	0 045	mg/kg		nv	CADMIUM	SS	N	Y
768579-SSS	MH4	BT001B	REG	27-Apr-00	0	2	Cadmium	7440-43-9	1 63	0 11	0 043	mg/kg	M	J	CDAGCU	SS	N	Y
768579-SSS	MH4	BT001B	REG	27-Apr-00	0	2	Copper	7440-50-8	54 3	2 2	0 2	mg/kg	M	J	CDAGCU	SS	N	Y
768579-SSS	MH4	BT0018	REG	27-Apr-00	0	2	Silver	7440-22-4	0 91	1 1	0 23	mg/kg	F	J	CDAGCU	SS	N	Y
768579-SSS	MH4	BT0018	REG	27-Apr-00	0	2	Cadmium	7440-43-9	0 26	1	0 17	ug/L	F	U	SPLP-CDAGCU	SS	N	Y
768579-SSS	MH4	BT001B	REG	27-Apr-00	0	2	Copper	7440-50-8	4 85	10	1	ug/L	F	U	SPLP-CDAGCU	SS	N	Y
768579-SSS	MH4	BT001B	REG	27-Apr-00	0	2	Silver	7440-22-4	2 08	10	0 45	ug/L	F	U	SPLP-CDAGCU	SS	N	Y
768579-SSS	MH11F	BT0020	REG	10-Apr-00	0	2	Antimony	7440-36-0	0 677	1 2	0 28	mg/kg	F	nv	ANTIMONY	SS	N	Y
768579-SSS	MH19-1	BT0021	REG	26-Apr-00	0	2	Silver	7440-22-4	0 923	1 1	0 23	mg/kg	F	J	SILVER	SS	N	Y
768579-SSS	MH19-1	BT0021	REG	26-Apr-00	0	2	Silver	7440-22-4	2.07	10	0.45	ug/L	F	J	SPLP-SILVER	SS	N	Y
768579-SSS	MH19-1	BT0022	FD	26-Apr-00	0	2	Silver	7440-22-4	1 1	1 1	0 23	mg/kg		nv	SILVER	SS	N	Y
768579-SSS	MH19-1	BT0022	FD	26-Apr-00	0	2	Silver	7440-22-4	1 94	10	0.45	ug/L	F	nv	SPLP-SILVER	SS	N	Y
768579-SSS	MH11L	BT0023	REG	11-Apr-00	1	3	Silver	7440-22-4	1 27	1 2	0 25	mg/kg		nv	SILVER	SS	N	Y
768579-SSS	MHB8	BT0025	REG	27-Apr-00	0	2	Silver	7440-22-4	0 664	1 1	0 23	mg/kg	F	nv	SILVER	SS	N	Y
768579-SSS	MH15J6	BT0026	REG	12-Apr-00	0	2	Silver	7440-22-4	0 966	1 1	0 24	mg/kg	F	nv	SILVER	SS	N	Y
768579-SSS	MH15J6	BT0026	REG	12-Apr-00	0	2	Silver	7440-22-4	0 96	10	0.45	ug/L	F	nv	SPLP-SILVER	SS	N	Y
768579-SSS	15E425N	BT0027	REG	11-Apr-00	9	11	1,2,4-trimethylbenzene	95-63-6	0 0073	0 0073	0 00028	mg/kg	U	nv	TMB	SO	N	N
768579-SSS	15E425N	BT0027	REG	11-Apr-00	9	11	1,3,5-trimethylbenzene	108-67-8	0 0031	0 0031	0 00031	mg/kg	U	nv	TMB	SO	N	N
768579-SSS	B15A25W	BT0028	REG	14-Apr-00	8	10	1,2-dichlorobenzene	95-50-1	0 0024	0 0024	0 00031	mg/kg	U	nv	DCB	SO	N	N
768579-SSS	B15A25W	BT0028	REG	14-Apr-00	8	10	1,3-dichlorobenzene	541-73-1	0 0071	0 0071	0 00028	mg/kg	U	nv	DCB	SO	N	N
768579-SSS	B15A25W	BT0028	REG	14-Apr-00	8	10	1,4-dichlorobenzene	106-46-7	0 0217	0 0024	0 00028	mg/kg		nv	DCB	SO	N	Y
768579-SSS	MH46	BT0029	REG	27-Apr-00	21	22	Naphthalene	91-20-3	0 0021	0 0021	0 00096	mg/kg	U	nv	NAPHTHALENE	SO	N	N
768579-SSS	MH4	BT0030	REG	27-Apr-00	1 5	2 5	4,4'-dde	72-55-9	0 0038	0 0038	0 00017	mg/kg	U	U	DDE	SO	N	N
768579-SSS	MH4	BT0031	FD	27-Apr-00	1 5	2 5	4,4'-dde	72-55-9	0 0034	0 0034	0 00015	mg/kg	U	nv	DDE	SO	N	N

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Caswell AFB
Sanitary Sewer System Phase 2 S[illegible]tigation Soil Data Summary
Project No 768579 [illegible]y Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH11B	BT0032	REG	14-Apr-00	13	13 5	Naphthalene	91-20-3	0 012	0 012	0 0053	mg/kg	U	nv	TBBNAPH	SO	N	N
768579-SSS	MH11B	BT0032	REG	14-Apr-00	13	13 5	Tert-butylbenzene	98-06-6	0 622	0 041	0 0016	mg/kg	J	nv	TBBNAPH	SO	N	Y
768579-SSS	11C25N	BT0033	REG	10-Apr-00	15	17	Di-n-butyl phthalate	84-74-2	0 78	0.78	0 034	mg/kg	U	U	DBPHTH	SO	N	N
768579-SSS	11C25N	BT0033	REG	10-Apr-00	15	17	Silver	7440-22-4	0 97	1 1	0 23	mg/kg	F	J	SILVER	SO	N	Y
768579-SSS	11C25N	BT0033	REG	10-Apr-00	15	17	Silver	7440-22-4	6 37	10	0 45	ug/L	F	J	SPLP-SILVER	SO	N	Y
768579-SSS	11C25N	BT0034	FD	10-Apr-00	15	17	Di-n-butyl phthalate	84-74-2	0 71	0.71	0.032	mg/kg	U	nv	DBPHTH	SO	N	N
768579-SSS	11C25N	BT0034	FD	10-Apr-00	15	17	Silver	7440-22-4	5 98	10	0 45	ug/L	F	nv	SPLP-SILVER	SO	N	Y
768579-SSS	11C25N	BT0034	FD	10-Apr-00	15	17	Silver	7440-22-4	0 35	1	0 21	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH11E	BT0035	REG	10-Apr-00	16	17	Naphthalene	91-20-3	0.0021	0 0021	0.00095	mg/kg	U	nv	NAPHTHALENE	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Molybdenum	7439-98-7	2 47	3 2	0 067	mg/kg	F	J	MOLYBDENUM	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Molybdenum	7439-98-7	15	15	10	ug/L	U	U	SPLP-MOLYBDENUM	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1,1,2-tetrachloroethane	630-20-6	0 0032	0 0032	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1,1-trichloroethane	71-55-6	0 0042	0 0042	0 00046	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1,2,2-tetrachloroethane	79-34-5	0 0021	0 0021	0 00035	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1,2-trichloroethane	79-00-5	0 0053	0 0053	0 00056	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1-dichloroethane	75-34-3	0 0021	0 0021	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1-dichloroethene	75-35-4	0 0063	0 0063	0 00041	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,1-dichloropropene	563-58-6	0.0053	0 0053	0 00042	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2,3-trichlorobenzene	87-61-6	0 0021	0.0021	0 00035	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2,3-trichloropropane	96-18-4	0 021	0.021	0 00085	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2,4-trichlorobenzene	120-82-1	0 0021	0 0021	0 0003	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2,4-trimethylbenzene	95-63-6	0 0074	0.0074	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2-dibromo-3-chloropropane	96-12-8	0 011	0.011	0 00079	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2-dibromoethane	106-93-4	0 0032	0 0032	0.0004	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2-dichlorobenzene	95-50-1	0 0021	0.0021	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2-dichloroethane	107-06-2	0 0032	0 0032	0 00026	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,2-dichloropropane	78-87-5	0 0021	0 0021	0 00023	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,3,5-trimethylbenzene	108-67-8	0 0032	0 0032	0 00032	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,3-dichlorobenzene	541-73-1	0.0063	0 0063	0 00025	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,3-dichloropropane	142-28-9	0 0021	0 0021	0 00037	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1,4-dichlorobenzene	106-46-7	0.000295	0 0021	0 00023	mg/kg	F	UJ	SW8260	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	1-chlorohexane	544-10-5	0 0032	0 0032	0 00043	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	2,2-dichloropropane	594-20-7	0 021	0 021	0 00045	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	2-butanone	78-93-3	0 13	0.13	0 0017	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	2-chlorotoluene	95-49-8	0 0021	0 0021	0 00043	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	4-chlorotoluene	106-43-4	0 0032	0 0032	0 0004	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Acetone	67-64-1	0 0048	0 26	0 0026	mg/kg	F	U	SW8260	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Benzene	71-43-2	0 0021	0 0021	0 00025	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Bromobenzene	108-86-1	0 0021	0 0021	0 00024	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Bromochloromethane	74-97-5	0 0021	0 0021	0 00045	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Bromodichloromethane	75-27-4	0 0042	0 0042	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Bromoform	75-25-2	0 0063	0.0063	0 00024	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3.5	5	Bromomethane	74-83-9	0 0053	0 0053	0 001	mg/kg	R	UJ	SW8260	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Carbon tetrachloride	56-23-5	0 011	0.011	0.00047	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Chlorobenzene	108-90-7	0.0021	0 0021	0 00025	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Chloroethane	75-00-3	0 0053	0 0053	0.00067	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Chloroform	67-66-3	0 0021	0 0021	0 0004	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Chloromethane	74-87-3	0 0074	0 0074	0 00065	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Cis-1,2-dichloroethene	156-59-2	0 0063	0 0063	0 00027	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Cis-1,3-dichloropropene	10061-01-5	0 0053	0 0053	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Dibromochloromethane	124-48-1	0 0032	0.0032	0 00049	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Dibromomethane	74-95-3	0 011	0 011	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Dichlorodifluoromethane	75-71-8	0 0053	0 0053	0 0008	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Ethylbenzene	100-41-4	0 0032	0 0032	0 00027	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Hexachlorobutadiene	87-68-3	0 0053	0 0053	0 00042	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Isopropylbenzene	98-82-8	0 0084	0 0084	0 00032	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	M,p-xylenes	136777-61-2	0.0053	0 0053	0 00048	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Methyl tert-butyl ether	1634-04-4	0 13	0.13	0 00018	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Methylene chloride	75-09-2	0.0021	0 0021	0.00064	mg/kg	R	R	SW8260	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3.5	5	N-butylbenzene	104-51-8	0 0053	0 0053	0 00031	mg/kg	U	UJ	SW8260	SO	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 [illegible]estigation Soil Data Summary
Project No 76857[illegible]ery Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	N-propylbenzene	103-65-1	0 0021	0 0021	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Naphthalene	91-20-3	0.000653	0 0021	0 00095	mg/kg	F	UJ	SW8260	SO	N	Y
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	O-xylene	95-47-6	0 0053	0 0053	0 00027	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	P-isopropyltoluene	99-87-6	0 0063	0 0063	0 00025	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Sec-butylbenzene	135-98-8	0 0074	0 0074	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Styrene	100-42-5	0 0021	0 0021	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Tert-butylbenzene	98-06-6	0 0074	0 0074	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Tetrachloroethene	127-18-4	0 0074	0 0074	0 00027	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Toluene	108-88-3	0 0053	0 0053	0 00038	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Trans-1,2-dichloroethene	156-60-5	0 0032	0 0032	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Trans-1,3-dichloropropene	10061-02-6	0 0053	0 0053	0 00036	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Trichloroethene	79-01-6	0 011	0 011	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3 5	5	Trichlorofluoromethane	75-69-4	0 0042	0 0042	0 00095	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	MH75	BT0036	REG	14-Apr-00	3.5	5	Vinyl chloride	75-01-4	0 0095	0 0095	0.0011	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1,1,2-tetrachloroethane	630-20-6	0.0032	0 0032	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1,1-trichloroethane	71-55-6	0 0043	0 0043	0 00047	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1,2,2-tetrachloroethane	79-34-5	0 0022	0 0022	0 00035	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1,2-trichloroethane	79-00-5	0 0054	0 0054	0 00058	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1-dichloroethane	75-34-3	0 0022	0 0022	0 00031	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1-dichloroethene	75-35-4	0 0065	0 0065	0 00042	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,1-dichloropropene	563-58-6	0 0054	0 0054	0 00043	mg/kg	R	U	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2,3-trichlorobenzene	87-61-8	0 0022	0 0022	0 00035	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2,3-trichloropropane	96-18-4	0 022	0 022	0 00086	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2,4-trichlorobenzene	120-82-1	0 0022	0 0022	0 0003	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2,4-trimethylbenzene	95-63-6	0 0075	0 0075	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2-dibromo-3-chloropropane	96-12-8	0.011	0 011	0 00081	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2-dibromoethane	106-93-4	0 0032	0 0032	0 00041	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2-dichlorobenzene	95-50-1	0 0022	0 0022	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2-dichloroethane	107-06-2	0 0032	0 0032	0 00027	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,2-dichloropropane	78-87-5	0 0022	0 0022	0 00024	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,3,5-trimethylbenzene	108-67-8	0 0032	0 0032	0 00032	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,3-dichlorobenzene	541-73-1	0 0065	0 0065	0 00025	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,3-dichloropropane	142-28-9	0 0022	0 0022	0 00038	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1,4-dichlorobenzene	106-46-7	0 0022	0 0022	0 00024	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	1-chlorohexane	544-10-5	0 0032	0 0032	0 00044	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	2,2-dichloropropane	594-20-7	0 022	0 022	0.00046	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	2-butanone	78-93-3	0 00284	0 13	0.0018	mg/kg	F	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	2-chlorotoluene	95-49-8	0 0022	0 0022	0 00044	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	4-chlorotoluene	106-43-4	0 0032	0.0032	0 00041	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Acetone	67-64-1	0 01	0 27	0 0027	mg/kg	R	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Benzene	71-43-2	0 0022	0 0022	0 00026	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Bromobenzene	108-86-1	0 0022	0 0022	0 00025	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Bromochloromethane	74-97-5	0 0022	0 0022	0 00046	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Bromodichloromethane	75-27-4	0 0043	0 0043	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Bromoform	75-25-2	0 0065	0 0065	0 00024	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Bromomethane	74-83-9	0 0054	0 0054	0 001	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Carbon tetrachloride	56-23-5	0 011	0 011	0 00048	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Chlorobenzene	108-90-7	0 0022	0 0022	0 00026	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Chloroethane	75-00-3	0 0054	0 0054	0 00069	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Chloroform	67-66-3	0.0022	0.0022	0 00041	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Chloromethane	74-87-3	0 0075	0 0075	0 00066	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Cis-1,2-dichloroethene	156-59-2	0 00057	0 0065	0 00028	mg/kg	F	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Cis-1,3-dichloropropene	10061-01-5	0 0054	0 0054	0 00032	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Dibromochloromethane	124-48-1	0 0032	0.0032	0 0005	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Dibromomethane	74-95-3	0.011	0 011	0 00029	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Dichlorodifluoromethane	75-71-8	0 0054	0 0054	0 00082	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Ethylbenzene	100-41-4	0 000441	0.0032	0 00028	mg/kg	F	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Hexachlorobutadiene	87-68-3	0 0054	0 0054	0 00042	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Isopropylbenzene	98-82-8	0 0086	0 0086	0 00032	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	M,p-xylenes	136777-61-2	0 0054	0.0054	0 00049	mg/kg	U	U	SW8260	SO	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 [redacted]estigation Soil Data Summary
Project No 768571 [redacted]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Methyl tert-butyl ether	1634-04-4	0 13	0 13	0 00018	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Methylene chloride	75-09-2	0 00968	0 0022	0 00066	mg/kg		J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	N-butylbenzene	104-51-8	0 0054	0 0054	0 00032	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	N-propylbenzene	103-65-1	0 0022	0 0022	0 0003	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Naphthalene	91-20-3	0 0022	0 0022	0 00097	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	O-xylene	95-47-6	0 0054	0 0054	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	P-Isopropyltoluene	99-87-6	0 0065	0 0065	0 00026	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Sec-butylbenzene	135-98-8	0 0075	0 0075	0 00031	mg/kg	U	UJ	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Styrene	100-42-5	0 0022	0 0022	0 0003	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Tert-butylbenzene	98-06-6	0 0075	0 0075	0 0003	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Tetrachloroethene	127-18-4	0 0075	0 0075	0 00028	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Toluene	108-88-3	0 000548	0 0054	0 00039	mg/kg	F	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Trans-1,2-dichloroethene	156-60-5	0 0032	0 0032	0 0003	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Trans-1,3-dichloropropene	10061-02-6	0 0054	0 0054	0 00037	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Trichloroethene	79-01-6	0,00265	0,011	0 00031	mg/kg	F	J	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Trichlorofluoromethane	75-69-4	0 0043	0 0043	0 00097	mg/kg	R	UJ	SW8260	SO	N	Y
768579-SSS	11H25N	BT0037	REG	10-Apr-00	17	18	Vinyl chloride	75-01-4	0 0097	0 0097	0 0011	mg/kg	U	U	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1,1,2-tetrachloroethane	630-20-6	0 0034	0 0034	0 00033	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1,1-trichloroethane	71-55-6	0 0045	0 0045	0 0005	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1,2,2-tetrachloroethane	79-34-5	0 0023	0 0023	0 00038	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1,2-trichloroethane	79-00-5	0 0057	0 0057	0 00061	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1-dichloroethane	75-34-3	0 0023	0,0023	0 00033	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1-dichloroethene	75-35-4	0,0068	0 0068	0 00044	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,1-dichloropropene	563-58-6	0 007	0 0057	0 00045	mg/kg	R	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2,3-trichlorobenzene	87-61-6	0 0023	0 0023	0 00037	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2,3-trichloropropane	96-18-4	0 023	0 023	0 00091	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2,4-trichlorobenzene	120-82-1	0 0023	0 0023	0 00032	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2,4-trimethylbenzene	95-63-6	0 008	0 008	0 00031	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2-dibromo-3-chloropropane	96-12-8	0 011	0 011	0 00085	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2-dibromoethane	106-93-4	0 0034	0 0034	0 00043	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2-dichlorobenzene	95-50-1	0 0023	0 0023	0 0003	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2-dichloroethane	107-06-2	0 0034	0 0034	0 00028	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,2-dichloropropane	78-87-5	0 0023	0 0023	0 00025	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,3,5-trimethylbenzene	108-67-8	0 0034	0 0034	0 00034	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,3-dichlorobenzene	541-73-1	0 0068	0 0068	0 00027	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,3-dichloropropane	142-28-9	0 0023	0 0023	0 0004	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1,4-dichlorobenzene	106-46-7	0 0023	0 0023	0 00025	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	1-chlorohexane	544-10-5	0 0034	0,0034	0 00047	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	2,2-dichloropropane	594-20-7	0 023	0 023	0 00049	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	2-butanone	78-93-3	0 14	0 14	0 0019	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	2-chlorotoluene	95-49-8	0 0023	0 0023	0 00047	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	4-chlorotoluene	106-43-4	0 0034	0 0034	0 00043	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Acetone	67-64-1	0 00959	0 28	0 0028	mg/kg	F	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Benzene	71-43-2	0 0023	0 0023	0 00027	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Bromobenzene	108-86-1	0 0023	0 0023	0 00026	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Bromochloromethane	74-97-5	0 0023	0 0023	0 00049	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Bromodichloromethane	75-27-4	0 0045	0 0045	0 00031	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Bromoform	75-25-2	0 0068	0 0068	0 00026	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Bromomethane	74-83-9	0 0057	0 0057	0 0011	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Carbon tetrachloride	56-23-5	0 011	0 011	0 00051	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Chlorobenzene	108-90-7	0 0023	0 0023	0 00027	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Chloroethane	75-00-3	0 0057	0,0057	0 00073	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Chloroform	87-66-3	0 0023	0 0023	0 00043	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Chloromethane	74-87-3	0 008	0 008	0 0007	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Cis-1,2-dichloroethene	156-59-2	0 0068	0 0068	0 0003	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Cis-1,3-dichloropropene	10061-01-5	0 0057	0 0057	0 00034	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Dibromochloromethane	124-48-1	0 0034	0 0034	0 00053	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Dibromomethane	74-95-3	0 011	0 011	0 00031	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Dichlorodifluoromethane	75-71-8	0 0057	0 0057	0 00086	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Ethylbenzene	100-41-4	0,0034	0 0034	0 0003	mg/kg	U	nv	SW8260	SO	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 S[illegible]stigation Soil Data Summary
Project No 768579[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Hexachlorobutadiene	87-68-3	0 0057	0 0057	0 00045	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Isopropylbenzene	98-82-8	0 0091	0 0091	0 00034	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	M,p-xylenes	136777-61-2	0 00075	0 0057	0 00052	mg/kg	F	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Methyl tert-butyl ether	1634-04-4	0 14	0 14	0 0002	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Methylene chloride	75-09-2	0 00114	0 0023	0 00069	mg/kg	F	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	N-butylbenzene	104-51-8	0 0057	0 0057	0.00033	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	N-propylbenzene	103-65-1	0 0023	0 0023	0 00032	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Naphthalene	91-20-3	0 0023	0 0023	0 001	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	O-xylene	95-47-6	0 0057	0 0057	0 0003	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	P-isopropyltoluene	99-87-6	0 0068	0 0068	0 00027	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Sec-butylbenzene	135-98-8	0 008	0 008	0 00033	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Styrene	100-42-5	0 0023	0 0023	0 00031	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Tert-butylbenzene	98-06-6	0 008	0 008	0.00032	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Tetrachloroethene	127-18-4	0 008	0 008	0.0003	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Toluene	108-88-3	0 0057	0 0057	0 00041	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Trans-1,2-dichloroethene	156-60-5	0 0034	0 0034	0.00032	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Trans-1,3-dichloropropene	10061-02-6	0 0057	0 0057	0 00039	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Trichloroethene	79-01-6	0 000955	0.011	0.00033	mg/kg	F	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Trichlorofluoromethane	75-69-4	0 0045	0.0045	0 001	mg/kg	R	nv	SW8260	SO	N	Y
768579-SSS	11H25N	BT0038	FD	10-Apr-00	17	18	Vinyl chloride	75-01-4	0 01	0 01	0 0012	mg/kg	U	nv	SW8260	SO	N	N
768579-SSS	5225N	BT0040	REG	27-Apr-00	21	22	Silver	7440-22-4	0 991	1.2	0 25	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	5225N	BT0040	REG	27-Apr-00	21	22	Silver	7440-22-4	2 05	10	0 45	ug/L	F	nv	SPLP-SILVER	SO	N	Y
768579-SSS	MH11A	BT0044	REG	14-Apr-00	13	15	Silver	7440-22-4	0 513	1 1	0 23	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH11A	BT0044	REG	14-Apr-00	13	15	Silver	7440-22-4	0 789	10	0 45	ug/L	F	nv	SPLP-SILVER	SO	N	Y
768579-SSS	MH11C	BT0045	REG	10-Apr-00	16	18	Silver	7440-22-4	0 329	1 1	0 22	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH11C	BT0045	REG	10-Apr-00	16	18	Silver	7440-22-4	0 52	10	0 45	ug/L	F	nv	SPLP-SILVER	SO	N	Y
768579-SSS	MH11D	BT0046	REG	10-Apr-00	14	17	Manganese	7439-96-5	325	2 2	0 28	mg/kg		nv	MNAG	SO	N	Y
768579-SSS	MH11D	BT0046	REG	10-Apr-00	14	17	Silver	7440-22-4	0 742	1.1	0 23	mg/kg	F	nv	MNAG	SO	N	Y
768579-SSS	MH11D	BT0048	REG	10-Apr-00	14	17	Manganese	7439-96-5	751	3	1	ug/L		nv	SPLP-MNAG	SO	N	Y
768579-SSS	MH11D	BT0048	REG	10-Apr-00	14	17	Silver	7440-22-4	6 45	10	0 45	ug/L	F	nv	SPLP-MNAG	SO	N	Y
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Barium	7440-39-3	12 7	1 1	0 02	mg/kg		nv	BAMNAG	SO	N	Y
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Manganese	7439-96-5	356	2 2	0 28	mg/kg		nv	BAMNAG	SO	N	Y
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Silver	7440-22-4	0 35	1.1	0 23	mg/kg	F	nv	BAMNAG	SO	N	Y
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Barium	7440-39-3	5	5	1 8	ug/L	U	nv	SPLP-BAMNAG	SO	N	N
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Manganese	7439-96-5	2.04	3	1	ug/L	F	nv	SPLP-BAMNAG	SO	N	Y
768579-SSS	MH11D2	BT0047	REG	10-Apr-00	17	19	Silver	7440-22-4	2 14	10	0 45	ug/L	F	nv	SPLP-BAMNAG	SO	N	Y
768579-SSS	MH11D3	BT0048	REG	10-Apr-00	18	20	Barium	7440-39-3	21 2	1 1	0 019	mg/kg		nv	BAMNAG	SO	N	Y
768579-SSS	MH11D3	BT0048	REG	10-Apr-00	18	20	Manganese	7439-96-5	296	2 2	0 27	mg/kg		nv	BAMNAG	SO	N	Y
768579-SSS	MH11D3	BT0048	REG	10-Apr-00	18	20	Silver	7440-22-4	0 254	1.1	0 22	mg/kg	F	nv	BAMNAG	SO	N	Y
768579-SSS	15E25N	BT0050	REG	11-Apr-00	8	10	Manganese	7439-96-5	343	2 1	0 27	mg/kg		nv	MNAG	SO	N	Y
768579-SSS	15E25N	BT0050	REG	11-Apr-00	6	10	Silver	7440-22-4	0 251	1 1	0 22	mg/kg	F	nv	MNAG	SO	N	Y
768579-SSS	MH11I	BT0052	REG	10-Apr-00	16	18	Silver	7440-22-4	0 588	1 2	0 25	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH11D7	BT0053	REG	11-Apr-00	17 5	19 5	Cobalt	7440-48-4	1 76	11	0 053	mg/kg	F	nv	PBCO	SO	N	Y
768579-SSS	MH11D7	BT0053	REG	11-Apr-00	17.5	19 5	Lead	7439-92-1	3.18	1.1	0.29	mg/kg		nv	PBCO	SO	N	Y
768579-SSS	MH11D7	BT0053	REG	11-Apr-00	17.5	19.5	Cobalt	7440-48-4	18 6	8	0 2	ug/L		nv	SPLP-PBCO	SO	N	Y
768579-SSS	MH11D7	BT0053	REG	11-Apr-00	17 5	19 5	Lead	7439-92-1	50 3	5	1 2	ug/L		nv	SPLP-PBCO	SO	N	Y
768579-SSS	MH15J2	BT0054	REG	12-Apr-00	12	14	Mercury	7439-97-6	0 11	0.11	0.0021	mg/kg	U	nv	MERCURY	SO	N	N
768579-SSS	MH15J2	BT0054	REG	12-Apr-00	12	14	Selenium	7782-49-2	1 1	1.1	0 44	mg/kg	U	nv	SELENIUM	SO	N	N
768579-SSS	MH15J2	BT0054	REG	12-Apr-00	12	14	Mercury	7439-97-6	0 5	0.5	0 02	ug/L	U	nv	SPLP-MERCURY	SD	N	N
768579-SSS	MH15J2	BT0054	REG	12-Apr-00	12	14	Selenium	7782-49-2	5	5	1 6	ug/L	U	nv	SPLP-SELENIUM	SO	N	N
768579-SSS	MH15J4	BT0055	REG	12-Apr-00	12	14	Selenium	7782-49-2	1.1	1.1	0 44	mg/kg	U	nv	SELENIUM	SO	N	N
768579-SSS	MH11D5	BT0056	REG	11-Apr-00	16	18	Silver	7440-22-4	1	1	0 22	mg/kg	U	nv	SILVER	SO	N	N
768579-SSS	MH11DD	BT0057	REG	11-Apr-00	15	17	Silver	7440-22-4	0 889	1.1	0 24	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH11D4	BT0058	REG	11-Apr-00	15.5	17.5	Silver	7440-22-4	0.389	1	0 22	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH9B	BT0059	REG	12-Apr-00	10	12	Arsenic	7440-38-2	7.15	1.1	0 29	mg/kg		nv	ARSENIC	SO	N	Y
768579-SSS	925W	BT0060	REG	12-Apr-00	6	8	Arsenic	7440-38-2	2 88	1.1	0 31	mg/kg		J	ARAG	SO	N	Y
768579-SSS	925W	BT0060	REG	12-Apr-00	6	8	Silver	7440-22-4	0.448	1.1	0 24	mg/kg	F	J	ARAG	SO	N	Y
768579-SSS	925W	BT0060	REG	12-Apr-00	6	8	Arsenic	7440-38-2	6.3	2	1 5	ug/L			SPLP-ARSENIC	SO	N	Y
768579-SSS	925W	BT0060	REG	12-Apr-00	6	8	Silver	7440-22-4	7.89	10	0 45	ug/L	F	U	SPLP-SILVER	SO	N	Y
768579-SSS	925W	BT0061	FD	12-Apr-00	6	8	Arsenic	7440-38-2	6 38	1 2	0 31	mg/kg		nv	ARAG	SO	N	Y

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Carswell AFB
Sanitary Sewer System Phase 2 S[illegible]tigation Soil Data Summary
Project No 768579 [illegible]y Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	925W	BT0061	FD	12-Apr-00	6	8	Silver	7440-22-4	0 455	1 2	0 24	mg/kg	F	nv	ARAG	SO	N	Y
768579-SSS	925W	BT0061	FD	12-Apr-00	6	8	Arsenic	7440-38-2	5	2	1 5	ug/L		nv	SPLP-ARSENIC	SO	N	Y
768579-SSS	925W	BT0061	FD	12-Apr-00	6	8	Silver	7440-22-4	6 86	10	0 45	ug/L	F	nv	SPLP-SILVER	SO	N	Y
768579-SSS	15G125N	BT0062	REG	11-Apr-00	8	10	Silver	7440-22-4	1 1	1 1	0 22	mg/kg	U	nv	SILVER	SO	N	N
768579-SSS	MH15K	BT0063	REG	12-Apr-00	12	14	Silver	7440-22-4	0 532	1 1	0 24	mg/kg	F	nv	SILVER	SO	N	Y
768579-SSS	MH15J6	BT0064	REG	12-Apr-00	12	14	Manganese	7439-96-5	618	2 1	0 27	mg/kg		nv	MANGANESE	SO	N	Y
768579-SSS	MH35	BT0065	REG	10-May-00	13	15	Manganese	7439-96-5	441	2 2	0 28	mg/kg		nv	MANGANESE	SO	N	Y
768579-SSS	MH15S	BT0066	REG	27-Apr-00	10	12	Silver	7440-22-4	0 798	1 2	0 25	mg/kg	F	nv	SILVER	SO	N	Y

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Carswell AFB
Sanitary Sewer System Phase 2 Site [redacted]tion Groundwater Data Summary
Project No 768579[redacted]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0.8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1.3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2 6	0 78	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,2-dichloropropane	78-87-5	0.5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1.2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Acetone	67-64-1	3.83	50	1.8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Bromochloromethane	74-97-5	0.5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2.1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Chlorobenzene	108-90-7	0.5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Chloromethane	74-87-3	1.3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	0 56	1 2	0 14	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0.14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1.1	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0.6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	O-xylene	95-47-8	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Sec-butylbenzene	135-98-8	1 3	1.3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Toluene	108-88-3	0 83	1 1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]tion Groundwater Data Summary
Project No. 768579 [illegible]ry Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP01	BT3001	REG	25-Apr-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0.8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1-dichloroethene	75-35-4	1 2	1.2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.8	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 8	0 8	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0.5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Acetone	67-64-1	2 82	50	1 8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Bromomethane	74-83-9	1.1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1.2	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Dibromochloromethane	124-48-1	0.6	0 6	0.29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Isopropylbenzene	98-82-6	0 5	0.5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	0 48	25	0.46	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0.6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	O-xylene	95-47-6	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Styrene	100-42-5	1	1	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Tert-butylbenzene	98-06-6	0 7	1 4	0 36	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Tetrachloroethene	127-18-4	1.4	1 4	0.2	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No. 76857[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Toluene	108-88-3	0 27	1 1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP02	BT3002	REG	26-Apr-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	0 33	1 3	0 23	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2.6	0 78	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1.2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3.5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	2-butanone	78-93-3	25	25	1.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Acetone	67-64-1	2.89	50	1 8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Benzene	71-43-2	0.5	0 5	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0.5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2.1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Chloroform	67-66-3	0 5	0.5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1 2	0.14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0.29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Isopropylbenzene	98-82-8	0.5	0 5	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Naphthalene	91-20-3	1	1	0.48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	O-xylene	95-47-6	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 768579[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Tert-butylbenzene	98-06-6	0 4	1 4	0 36	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Toluene	108-88-3	0 59	1 1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP03	BT3003	REG	25-Apr-00	0	0	Vinyl chloride	75-01-4	2 48	1 1	0 46	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0.7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0.5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,3-dichloropropane	142-28-9	0.5	0 5	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Chloromethane	74-87-3	1.3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	0.64	1.2	0 14	ug/L	J	nv	SW8260	GW	N	Y
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1.1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0.5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	N-butylbenzene	104-51-8	1.1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site, [illegible]ation Groundwater Data Summary
Project No 76857[illegible]ery Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Sec-butylbenzene	135-98-6	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Toluene	108-88-3	0.32	1 1	0 16	ug/L	J	nv	SW8260	GW	N	Y
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0.16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP04	BT3004	REG	26-Apr-00	0	0	Vinyl chloride	75-01-4	1 1	1.1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0.8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3.2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2-dibromoethane	106-93-4	0.6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-6	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	2,2-dichloropropane	594-20-7	3.5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	4-chlorotoluene	106-43-4	0.8	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Acetone	67-64-1	5 47	50	1 8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Benzene	71-43-2	0 21	0 5	0 17	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Bromomethane	74-83-9	1 1	1.1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0.5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Chloroform	87-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Chloromethane	74-87-3	1 3	1.3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	52.8	1.2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Dibromochloromethane	124-48-1	0.6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site In[illegible]tion Groundwater Data Summary
Project No 768579[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1.4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Tetrachloroethene	127-18-4	0 29	1 4	0 2	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Toluene	108-88-3	0 67	1.1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	22.8	0 6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Trichloroethene	79-01-6	24 2	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP05	BT3005	REG	25-Apr-00	0	0	Vinyl chloride	75-01-4	1.1	1.1	0.48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1.3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 8	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0.38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	2-butanone	78-93-3	25	25	1.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Acetone	87-64-1	50	50	1.8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Benzene	71-43-2	0.5	0 5	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Bromochloromethane	74-97-5	0.5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0.24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Chloroform	67-66-3	0 5	0 5	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Chloromethane	74-87-3	1 3	1 3	0.56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	11 1	1 2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0.2	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 76857[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	P-Isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Tetrachloroethene	127-18-4	1 01	1 4	0.2	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Toluene	108-88-3	0 5	1 1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	2 84	0 6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Trichloroethene	79-01-6	8 6	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP06	BT3006	REG	25-Apr-00	0	0	Vinyl chloride	75-01-4	1 1	1.1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0.8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1-dichloroethene	75-35-4	1 2	1.2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3.2	3.2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2.6	0.78	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0.23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	4-chlorotoluene	106-43-4	0 8	0.6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Acetone	67-64-1	5 41	50	1 8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Bromoform	75-25-2	1 2	1.2	0.45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Bromomethane	74-83-9	1 1	1.1	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Carbon tetrachloride	56-23-5	2.1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0.5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Chloroform	67-66-3	0 5	0.5	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 58	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1.2	0.14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0.25	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No. 76857[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	N-butylbenzene	104-51-8	1.1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	O-xylene	95-47-6	1.1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	P-isopropyltoluene	99-87-6	1.2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Tetrachloroethene	127-18-4	1.4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Toluene	108-88-3	0 28	1.1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP07	BT3007	REG	25-Apr-00	0	0	Vinyl chloride	75-01-4	1.1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0.8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1-dichloroethane	75-34-3	0 5	0.5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2,4-trimethylbenzene	95-63-6	1.3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2.6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0.15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1.2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,3-dichloropropane	142-28-9	0.5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	2-butanone	78-93-3	25	25	1.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Acetone	67-64-1	3 07	50	1 8	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Bromomethane	74-83-9	1 1	1.1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Cis-1,2-dichloroethene	156-59-2	77.1	1.2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0.14	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site I[illegible]ation Groundwater Data Summary
Project No 76857[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	N-butylbenzene	104-51-8	1.1	1.1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	P-isopropyltoluene	99-87-6	1 2	1.2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Tetrachloroethene	127-18-4	2 04	1 4	0 2	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Toluene	108-88-3	0 25	1 1	0 16	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Trans-1,2-dichloroethene	156-60-5	42 5	0 6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Trans-1,3-dichloropropene	10061-02-8	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Trichloroethene	79-01-6	76 5	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	SS-HP08	BT3008	REG	26-Apr-00	0	0	Vinyl chloride	75-01-4	1 1	1.1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14-W05	BT3011	REG	3-May-00	0	0	Antimony	7440-36-0	20	20	2 5	ug/L	U	nv	ANTIMONY	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Antimony	7440-36-0	20	20	2.5	ug/L	U	U	ANTIMONY	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0.5	0 5	0.25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1.2	0 27	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0.6	0 15	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0.7	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0.17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	2,2-dichloropropane	594-20-7	3.5	3.5	0 23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Bromochloromethane	74-97-5	0.5	0.5	0 19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	U	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [redacted]tion Groundwater Data Summary
Project No 768579[redacted]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1.2	1 2	0 14	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	R	UJ	SW8260	GW	N	Y
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Isopropylbenzene	98-82-8	0.5	0 5	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	N-butylbenzene	104-51-8	1.1	1 1	0 37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	P-isopropyltoluene	99-87-6	1.2	1 2	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 38	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Tetrachloroethene	127-18-4	1.4	1 4	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Toluene	108-88-3	1 1	1 1	0 16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3012	REG	4-May-00	0	0	Vinyl chloride	75-01-4	0.84	1 1	0 48	ug/L	J	J	SW8260	GW	N	Y
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Antimony	7440-36-0	20	20	2 5	ug/L	U	nv	ANTIMONY	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0.8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3.2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1.3	1.3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2-dichloroethane	107-06-2	0.7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3.5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Benzene	71-43-2	0 5	0.5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site In[illegible]tion Groundwater Data Summary
Project No 768579[illegible]y Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1 2	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0.14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Dibromochloromethane	124-48-1	0 8	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	N-butylbenzene	104-51-8	1.1	1.1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Naphthalene	91-20-3	1	1	0.48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	O-xylene	95-47-6	1.1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Toluene	108-88-3	1.1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0.6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	ST14MW24	BT3013	FD	4-May-00	0	0	Vinyl chloride	75-01-4	0 84	1 1	0 48	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	BGSMW01	BT3014	REG	2-May-00	0	0	Mercury	7439-97-6	0.5	0 5	0 02	ug/L	U	nv	MERCURY-W	GW	N	N
768579-SSS	GMI-22-05M	BT3015	REG	2-May-00	0	0	Antimony	7440-36-0	20	20	2 5	ug/L	U	nv	ANTIMONY	GW	N	N
768579-SSS	WITCTA006	BT3016	REG	4-May-00	0	0	Arsenic	7440-38-2	5 4	2	1 5	ug/L		nv	ARSENIC	GW	N	Y
768579-SSS	WITCTA009	BT3017	REG	4-May-00	0	0	Silver	7440-22-4	1 89	10	0 45	ug/L	F	nv	SILVER	GW	N	Y
768579-SSS	WITCTA015	BT3018	REG	4-May-00	0	0	Bis(2-ethylhexyl)phthalate	117-81-7	10	10	2 1	ug/L	U	U	BIS2EHP	GW	N	N
768579-SSS	WITCTA015	BT3019	FD	4-May-00	0	0	Bis(2-ethylhexyl)phthalate	117-81-7	3.43	11	2 2	ug/L	F	nv	BIS2EHP	GW	N	Y
768579-SSS	WITCTA021	BT3020	REG	3-May-00	0	0	Arsenic	7440-38-2	2	2	1 5	ug/L	U	nv	ARSENIC	GW	N	N
768579-SSS	WITCTA022	BG3002	REG	1-May-00	0	0	Beryllium	7440-41-7	0 19	3	0 035	ug/L	F	nv	BERYLLIUM	GW	N	Y
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0.8	0 39	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0.28	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0.5	0 18	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1.3	1 3	0 23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2-dibromoethane	106-93-4	0.6	0.6	0 15	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0.7	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0.5	0 5	0 22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,3-dichloropropane	142-28-9	0.5	0.5	0 17	ug/L	U	U	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [redacted]ation Groundwater Data Summary
Project No. 76857[redacted]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0.38	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	1-chlorohexane	544-10-5	1	1	0.26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	2,2-dichloropropane	594-20-7	3.5	3.5	0.23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	2-butanone	78-93-3	25	25	1.2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0.3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	4-chlorotoluene	106-43-4	0.6	0.6	0.26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Acetone	67-64-1	50	50	1.6	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Benzene	71-43-2	0.5	0.5	0.17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Bromobenzene	108-86-1	1	1	0.3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Bromochloromethane	74-97-5	0.5	0.5	0.19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0.25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Bromoform	75-25-2	1.2	1.2	0.45	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Bromomethane	74-83-9	1.1	1.1	0.25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Carbon tetrachloride	56-23-5	2.1	2.1	0.3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Chlorobenzene	108-90-7	0.5	0.5	0.24	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Chloroethane	75-00-3	1	1	0.22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Chloroform	67-66-3	0.5	0.5	0.19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Chloromethane	74-87-3	1.3	1.3	0.56	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1.2	1.2	0.14	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0.14	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Dibromochloromethane	124-48-1	0.6	0.6	0.29	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Dibromomethane	74-95-3	2.4	2.4	0.19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0.25	ug/L	R	UJ	SW8260	GW	N	Y
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Ethylbenzene	100-41-4	1	1	0.2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1.1	0.46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Isopropylbenzene	98-82-8	0.5	0.5	0.2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0.33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0.46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Methylene chloride	75-09-2	2	2	0.6	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	N-butylbenzene	104-51-8	1.1	1.1	0.37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	N-propylbenzene	103-65-1	1	1	0.26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Naphthalene	91-20-3	1	1	0.48	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	O-xylene	95-47-6	1.1	1.1	0.16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	P-isopropyltoluene	99-87-6	1.2	1.2	0.33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1.3	0.33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Styrene	100-42-5	1	1	0.2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Tert-butylbenzene	98-06-6	1.4	1.4	0.36	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Tetrachloroethene	127-18-4	1.4	1.4	0.2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Toluene	108-88-3	1.1	1.1	0.16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0.6	0.6	0.21	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0.16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Trichloroethene	79-01-6	1	1	0.17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0.46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA022	BT3021	REG	3-May-00	0	0	Vinyl chloride	75-01-4	0.72	1.1	0.48	ug/L	J	J	SW8260	GW	N	Y
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0.5	0.5	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1,1-trichloroethane	71-55-6	0.8	0.8	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0.8	0.8	0.39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0.28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1-dichloroethane	75-34-3	0.5	0.5	0.18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1-dichloroethene	75-35-4	1.2	1.2	0.27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0.21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2,3-trichloropropane	96-18-4	3.2	3.2	0.41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1.3	1.3	0.23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2.6	0.78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2-dibromoethane	106-93-4	0.8	0.6	0.15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2-dichloroethane	107-06-2	0.7	0.7	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,2-dichloropropane	78-87-5	0.5	0.5	0.12	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]gation Groundwater Data Summary
Project No 76857[illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1 2	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Dibromochloromethane	124-48-1	0.6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0.5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	P-isopropyltoluene	99-87-6	1.2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Sec-butylbenzene	135-98-8	0 33	1 3	0 33	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Tert-butylbenzene	98-06-6	2 13	1 4	0 36	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Tetrachloroethene	127-18-4	1 4	1.4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Toluene	108-88-3	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA024	BT3022	REG	2-May-00	0	0	Vinyl chloride	75-01-4	5.5	1.1	0 48	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0.5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 6	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1.2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0.21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3.2	0.41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2.6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0.6	0.15	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]gation Groundwater Data Summary
Project No 7685[illegible] [illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0.5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3.5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Benzene	71-43-2	0 5	0.5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Carbon tetrachloride	56-23-5	2.1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Chlorobenzene	108-90-7	0.5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	70 9	1.2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1.1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Isopropylbenzene	98-82-8	0.5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	M,p-xylenes	138777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	O-xylene	95-47-6	1.1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Tetrachloroethene	127-18-4	2 41	1 4	0 2	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Toluene	108-88-3	1.1	1 1	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	42 6	0 6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Trichloroethene	79-01-6	71.9	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA025	BT3023	REG	2-May-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0.8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site I[illegible]ation Groundwater Data Summary
Project No 788578[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Chlorobenzene	108-90-7	0 5	0.5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	2 08	1 2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	N-butylbenzene	104-51-8	1.1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Styrene	100-42-5	1	1	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Tert-butylbenzene	98-06-6	1.4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Tetrachloroethene	127-18-4	1.4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Toluene	108-88-3	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Trichloroethene	79-01-6	0 57	1	0.17	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA049	BT3024	REG	15-May-00	0	0	Vinyl chloride	75-01-4	0 52	1 1	0 48	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0.39	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	U	SW8260	GW	N	Y

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No. 7685[illegible] [illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0.6	0 15	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0.33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0.26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0.23	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	2-butanone	78-93-3	25	25	1.2	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0.26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Benzene	71-43-2	0.5	0 5	0.17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Bromochloromethane	74-97-5	0.5	0 5	0.19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0.25	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0.3	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Chlorobenzene	108-90-7	0.5	0 5	0.24	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Chloroethane	75-00-3	1	1	0.22	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	0 17	1 2	0.14	ug/L	F	J	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0.29	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0.19	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0.25	ug/L	U	UJ	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1 1	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0.16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1.3	0 33	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Tert-butylbenzene	98-06-6	2 31	1 4	0.36	ug/L	F	J	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Toluene	108-88-3	1.1	1 1	0 16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0.6	0.21	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Trichloroethene	79-01-6	1	1	0.17	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	U	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3025	REG	15-May-00	0	0	Vinyl chloride	75-01-4	0 81	1 1	0 48	ug/L	F	J	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No. 76857[illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	0 76	1	0 33	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	0 53	2	0 25	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2 6	0 76	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Benzene	71-43-2	0 5	0 5	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Bromomethane	74-83-9	1 1	1.1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2.1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0.24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	0 21	1 2	0 14	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0.14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Hexachlorobutadiene	87-68-3	0 64	1.1	0.46	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Isopropylbenzene	98-82-8	0.5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	0 84	25	0 46	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	N-butylbenzene	104-51-8	0 63	1 1	0.37	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Naphthalene	91-20-3	0 77	1	0 48	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	O-xylene	95-47-6	1.1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1.2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Sec-butylbenzene	135-98-8	0 39	1.3	0 33	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Tert-butylbenzene	98-06-6	2 23	1 4	0.36	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Toluene	108-88-3	1.1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Trichloroethene	79-01-6	1	1	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA050	BT3026	FD	15-May-00	0	0	Vinyl chloride	75-01-4	0 85	1 1	0 48	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0.25	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site I[illegible]ation Groundwater Data Summary
Project No 768857[illegible]ry Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1.3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	4-chlorotoluene	106-43-4	0.6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	0.18	1 2	0 14	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	N-butylbenzene	104-51-8	0 37	1.1	0 37	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Naphthalene	91-20-3	1	1	0.48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	O-xylene	95-47-6	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	P-isopropyltoluene	99-87-8	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Tert-butylbenzene	98-06-6	2	1 4	0 36	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Tetrachloroethene	127-18-4	1 4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Toluene	108-88-3	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0.6	0 8	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Trichloroethene	79-01-6	1	1	0 17	ug/L	U	nv	SW8260	GW	N	N

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Sanitary Sewer System Phase 2 Site [illegible]gation Groundwater Data Summary
Project No 7685[illegible] [illegible]ery Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA051	BT3027	REG	15-May-00	0	0	Vinyl chloride	75-01-4	2 43	1 1	0 48	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1.3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0.5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	2,2-dichloropropane	594-20-7	3.5	3.5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Bromochloromethane	74-97-5	0.5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Bromoform	75-25-2	1.2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Bromomethane	74-83-9	1.1	1.1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Carbon tetrachloride	56-23-5	2.1	2.1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Chloroform	67-66-3	0 5	0.5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Chloromethane	74-87-3	1.3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1.1	1.2	0 14	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Dibromomethane	74-95-3	2 4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Isopropylbenzene	98-82-8	0.5	0.5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	N-butylbenzene	104-51-8	1 1	1.1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	P-Isopropyltoluene	99-87-6	1 2	1.2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Tetrachloroethene	127-18-4	1.4	1 4	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Toluene	108-88-3	1.1	1.1	0.16	ug/L	U	nv	SW8260	GW	N	N

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Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 7685[illegible] [illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Trichloroethene	79-01-6	0 31	1	0 17	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA052	BT3028	REG	15-May-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1-dichloroethane	75-34-3	0.5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2,3-trichlorobenzene	87-61-8	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2 8	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Benzene	71-43-2	0.5	0 5	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Bromomethane	74-83-9	1 1	1.1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Chloroform	67-66-3	0 5	0.5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Chloromethane	74-87-3	1 3	1.3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	76 1	1 2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Dibromomethane	74-95-3	2.4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	N-butylbenzene	104-51-6	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	O-xylene	95-47-6	1 1	1.1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	P-isopropyltoluene	99-87-6	1.2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N

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Caraw[illegible] AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 76857[illegible] [illegible]very Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Tetrachloroethene	127-18-4	1 6	1 4	0 2	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Toluene	108-88-3	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	46 8	0 6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Trichloroethene	79-01-6	63 5	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA053	BT3029	REG	15-May-00	0	0	Vinyl chloride	75-01-4	1.1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0.8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,1-dichloropropene	583-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-6	2 6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2-dibromoethane	106-93-4	0.8	0.6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2-dichloroethane	107-06-2	0.7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0 6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0.3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0.56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	11 9	1.2	0 14	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Dibromomethane	74-95-3	2 4	2 4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1 1	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N

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Carswell AFB
Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 76857[illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1 3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1 4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Tetrachloroethene	127-18-4	1 93	1 4	0 2	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Toluene	108-88-3	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	3 75	0.6	0 21	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Trichloroethene	79-01-6	10 9	1	0 17	ug/L		nv	SW8260	GW	N	Y
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA054	BT3030	REG	16-May-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0.18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1-dichloroethene	75-35-4	1 2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2,3-trichlorobenzene	87-61-6	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-6	2 6	2 6	0 76	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0.7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,2-dichloropropane	78-87-5	0 5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,3-dichlorobenzene	541-73-1	1.2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,3-dichloropropane	142-28-9	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	2,2-dichloropropane	594-20-7	3 5	3 5	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	4-chlorotoluene	106-43-4	0 6	0.6	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Benzene	71-43-2	0 5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Bromoform	75-25-2	1 2	1 2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Bromomethane	74-83-9	1 1	1 1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Carbon tetrachloride	56-23-5	2.1	2.1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Chloromethane	74-87-3	1 3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1 2	1.2	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0.6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Dibromomethane	74-95-3	2.4	2.4	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Hexachlorobutadiene	87-68-3	1 1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Isopropylbenzene	98-82-6	0 5	0 5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	M,p-xylenes	136777-61-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Methylene chloride	75-09-2	2	2	0 6	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	N-butylbenzene	104-51-8	1 1	1 1	0 37	ug/L	U	nv	SW8260	GW	N	N

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Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 768575 [illegible]ery Order 0039

Site	Location	Sample No	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	N-propylbenzene	103-65-1	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Naphthalene	91-20-3	1	1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	O-xylene	95-47-6	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	P-isopropyltoluene	99-87-6	1 2	1 2	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Sec-butylbenzene	135-98-8	1 3	1.3	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Styrene	100-42-5	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Tert-butylbenzene	98-06-6	1 4	1.4	0 36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Tetrachloroethene	127-18-4	0 28	1 4	0 2	ug/L	F	nv	SW8260	GW	N	Y
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Toluene	108-88-3	1 1	1 1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0 6	0 6	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0 16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Trichloroethene	79-01-8	1	1	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WITCTA055	BT3031	REG	16-May-00	0	0	Vinyl chloride	75-01-4	1 1	1 1	0 48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1,1,2-tetrachloroethane	630-20-6	0 5	0 5	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1,1-trichloroethane	71-55-6	0 8	0 8	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1,2,2-tetrachloroethane	79-34-5	0 8	0 8	0 39	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1,2-trichloroethane	79-00-5	1	1	0 28	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1-dichloroethane	75-34-3	0 5	0 5	0 18	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1-dichloroethene	75-35-4	1.2	1 2	0 27	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,1-dichloropropene	563-58-6	1	1	0 21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2,3-trichlorobenzene	87-61-8	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2,3-trichloropropane	96-18-4	3 2	3 2	0 41	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2,4-trichlorobenzene	120-82-1	2	2	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2,4-trimethylbenzene	95-63-6	1 3	1 3	0 23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2-dibromo-3-chloropropane	96-12-8	2.6	2 6	0 78	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2-dibromoethane	106-93-4	0 6	0 6	0 15	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2-dichlorobenzene	95-50-1	1	1	0 37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2-dichloroethane	107-06-2	0 7	0 7	0 33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,2-dichloropropane	78-87-5	0.5	0 5	0 12	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,3,5-trimethylbenzene	108-67-8	0 5	0 5	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,3-dichlorobenzene	541-73-1	1 2	1 2	0 32	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,3-dichloropropane	142-28-9	0.5	0.5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1,4-dichlorobenzene	106-46-7	1	1	0 38	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	1-chlorohexane	544-10-5	1	1	0 26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	2,2-dichloropropane	594-20-7	3.5	3 5	0.23	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	2-butanone	78-93-3	25	25	1 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	2-chlorotoluene	95-49-8	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	4-chlorotoluene	106-43-4	0.6	0 6	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Acetone	67-64-1	50	50	1 8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Benzene	71-43-2	0.5	0 5	0 17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Bromobenzene	108-86-1	1	1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Bromochloromethane	74-97-5	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Bromodichloromethane	75-27-4	1	1	0 25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Bromoform	75-25-2	1 2	1.2	0 45	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Bromomethane	74-83-9	1 1	1.1	0.25	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Carbon tetrachloride	56-23-5	2 1	2 1	0 3	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Chlorobenzene	108-90-7	0 5	0 5	0 24	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Chloroethane	75-00-3	1	1	0 22	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Chloroform	67-66-3	0 5	0 5	0 19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Chloromethane	74-87-3	1.3	1 3	0 56	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Cis-1,2-dichloroethene	156-59-2	1.2	1.2	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Cis-1,3-dichloropropene	10061-01-5	1	1	0 14	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Dibromochloromethane	124-48-1	0 6	0 6	0 29	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Dibromomethane	74-95-3	2.4	2 4	0.19	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Dichlorodifluoromethane	75-71-8	1	1	0 25	ug/L	R	nv	SW8260	GW	N	Y
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Ethylbenzene	100-41-4	1	1	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Hexachlorobutadiene	87-68-3	1.1	1 1	0 46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Isopropylbenzene	98-82-8	0 5	0.5	0 2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	M,p-xylenes	138777-81-2	1	1	0 33	ug/L	U	nv	SW8260	GW	N	N

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Sanitary Sewer System Phase 2 Site [illegible]ation Groundwater Data Summary
Project No 768579 [illegible]very Order 0039

Site	Location	Sample No.	Sample Purpose	Sample Date	Start Depth (FT)	End Depth (FT)	Parameter	CAS No.	Result	Reporting Limit	Method Detection Limit	Units	Laboratory Qualifier	Validation Qualifier	User Test Panel	Sample Type	Filtered	Detect
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Methyl tert-butyl ether	1634-04-4	25	25	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Methylene chloride	75-09-2	2	2	0.8	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	N-butylbenzene	104-51-8	1.1	1.1	0.37	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	N-propylbenzene	103-65-1	1	1	0.26	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Naphthalene	91-20-3	1	1	0.48	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	O-xylene	95-47-6	1.1	1.1	0.16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	P-isopropyltoluene	99-87-6	1.2	1.2	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Sec-butylbenzene	135-98-8	1.3	1.3	0.33	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Styrene	100-42-5	1	1	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Tert-butylbenzene	98-06-6	1.4	1.4	0.36	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Tetrachloroethene	127-18-4	1.4	1.4	0.2	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Toluene	108-88-3	1.1	1.1	0.16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Trans-1,2-dichloroethene	156-60-5	0.6	0.6	0.21	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Trans-1,3-dichloropropene	10061-02-6	1	1	0.16	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Trichloroethene	79-01-6	1	1	0.17	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Trichlorofluoromethane	75-69-4	1	1	0.46	ug/L	U	nv	SW8260	GW	N	N
768579-SSS	WCHMHTA013	BT3033	REG	9-May-00	0	0	Vinyl chloride	75-01-4	1.1	1.1	0.48	ug/L	U	nv	SW8260	GW	N	N

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TAB

APPENDIX B

APPENDIX B

PHASE 3 SANITARY SEWER SYSTEM RFI FIELD SAMPLING PLAN PROCEDURES

B1.0 Field Operations

B1.1 Geologic Standards

The lithologic descriptions for consolidated materials (igneous, metamorphic, and sedimentary rocks) shall follow the standard professional nomenclature (Tennissen, 1983), with special attention given to describing fractures, vugs, solution cavities and their fillings or coatings, and any other characteristics affecting permeability. Colors shall be designated by the Munsell Color System.

The lithologic descriptions for unconsolidated materials (soils [engineering usage] or deposits) shall use the name of the predominant particle size (e.g., silt, fine sand, etc.). The dimensions of the predominant and secondary sizes shall be recorded using the metric system. The grain size and name of the deposit shall be accompanied by the predominant mineral content, accessory minerals, color, particle angularity, and any other characteristics. The clastic deposit descriptions shall include, as a supplement, symbols of the Unified Soil Classification System (USCS). The color descriptions shall be designated by the Munsell Color System.

The sedimentary, igneous, and metamorphic rocks and deposits shall be represented graphically by the patterns shown in Figure B-1. Columnar sections, well and boring logs, well construction diagrams, cross sections, and three-dimensional (3-D) diagrams shall use these patterns. Supplementary patterns shall follow Swanson, 1981. Geologic structure symbols shall follow 1989 American Geological Institute Data Sheets.

The scales for maps, cross sections, or 3-D diagrams shall be selected in accordance with the geologic and hydrologic complexity of the area and the purposes of the illustrations. Geophysical logs shall be run at a constant vertical scale of 1 inch equals 20 feet. When geophysical logs are superimposed on geologic logs, cross sections, or 3-D diagrams, the scales shall be the same. If defining geological conditions requires other scales, additional logs at those scales shall be provided.

For orientation, the cross sections shall show the northern end on the viewer's right. If the line of cross section is predominantly east-west, the eastern end is on the right. Maps shall be oriented

with north toward the top, unless the shape of the area dictates otherwise. Indicate orientation with a north arrow.

B1.2 Site Reconnaissance, Preparation, and Restoration Procedures

A request will be made by IT's principal investigator through the Air Force to "clear" all utility lines where there will be subsurface investigation. These areas shall be cleared by the Air Force or its designee for the presence of underground utilities. Utility locations will be determined using existing utility maps. NAS Fort Worth facility engineering personnel will clear utilities at intrusive sampling locations before issuing a digging permit. These will be updated in the field and are verified using a hand-held magnetometer or utility probe. Vehicle access routes to sampling locations shall be determined prior to any field activity. Caution tape and barricades will be used to delimit work areas. Personnel will be trained by NAS Fort Worth personnel before permitted access to flight line operations areas.

A designated decontamination area shall be provided for drilling rigs and equipment. The decontamination area shall be large enough to allow storage of cleaned equipment and materials prior to use, as well as to stage drums of decontamination waste. The decontamination area shall be lined with a minimum 6-mil heavy gauge plastic sheeting, and designed with a collection system to capture decontamination waters. Solid wastes shall be accumulated in 55-gallon drums or roll-off boxes and subsequently transported to a waste storage area designated by the Air Force. Smaller decontamination areas for personnel and portable equipment shall be provided as necessary. These locations shall include basins or tubs to capture decontamination fluids, which shall be transferred to a large accumulation tank as necessary. These designated areas of decontamination shall be arranged with NAS Fort Worth and AFBCA personnel prior to mobilization.

The contractor's field operation office will be established in that area designated by the AFBCA remedial project manager.

Each work site or sampling location shall be returned to its original condition when possible. Efforts shall be made to minimize impacts to work sites and sampling locations, particularly those in or near sensitive environments such as wetlands. Following the completion of work at a

site, all drums, trash, and other waste shall be removed. Decontamination and/or purge water and soil cuttings shall be transported to the designated locations as described in Section B1.11.

B1.3 Geophysical Surveys

No geophysical surveys will be performed as part of this investigation.

B1.4 Soil Gas Surveys

No volatile organic compound soil gas surveys will be performed as part of this investigation.

B1.5 Soil Probe Installations, Lithologic Sampling, Logging, and Abandonment

B1.5.1 Soil Probe Borings

The sanitary sewer system soil assessment will be performed with soil probe sample locations located along the length of the Base sanitary sewer system. Subsurface assessment of soil for the sanitary sewer system RFI will be performed with soil probe methods to define the vertical and horizontal extent of soils impacted from any releases of contaminants from the sanitary sewer system.

Soil probe assessment borings will be performed with decontaminated Geoprobe® or equivalent hydraulic equipment. Either a large bore (1.0625-inch inside diameter [ID]) or Maccro-core® (1.5-inch ID) soil sampler will be used with a polyethylene terephthalate (PET) or cellulose acetate butyrate (CAB) liner in the sample tube.

Soil probes will be advanced and samples collected continuously from the surface to the top of the groundwater table. The soil probe unit consists of a truck-mounted hydraulic-driven soil probe with steel probe rods, and assorted sampling equipment. A hydraulically driven hammer drill will penetrate paved or hard surfaces before continuous sampling begins. All parts of the soil probe assembly that contact soils will be decontaminated between each use.

Soil boring locations will be located as close to the buried sanitary sewer lines as possible without unreasonable risk of puncturing the line as determined by the accuracy of the utility field location. This will usually be within 2 to 3 feet from the centerline of the sanitary sewer or 2 feet

from the edge of a manhole or OWS structure. The field geologist will estimated the centerline of the sewer line based on the alignment of consecutive manholes straddling the sewer line sampling location and confirmation of the line location and its diameter on utility maps provided by the Air Force. During advancement of the boring, the field geologist will determine from recovered samples if the material has characteristics of select fill material or disturbed or undisturbed native material. Disturbed native material, created during installation of the line, may have erratic soil structure and artifacts such as angular limestone gravel clasts. The characteristics of the material will be noted on field logs (Attachment A). The data will be used to determine the acceptable locations for groundwater sampling.

Soil borings will be advanced by directly pushing the drive probe to 4 feet above the estimated water table based on historical groundwater elevations at the boring for the time if year when the sample is being collected. The soil will then be continuously sampled until either 2 feet above the water table where contaminated groundwater has previously been determined to exist or immediately above the water table where there is no evidence of previous groundwater contamination. The sample at the deepest point sampled but above groundwater will be sent for analysis. Please refer to tables in Sections 3.0 and 4.0 of this work plan for the required sample depths at each location.

The soil sample device has a retractable drive point that will allow driving the sampler to the calculated elevation above the groundwater table, releasing the drive point, and then continuing to drive the sampling tube across the selected soil simple interval. The probe unit then retracts the soil sampler to the surface where the soil sample is extracted from the sampling tube. The soil sample will be encased in a clear PET or CAB liner that will allow visual classification of the soil and collection of soil samples by the field geologist. The sleeve containing the selected soil sample will be capped with Teflon® tape and slip-on end caps.

Field screening will be accomplished by use of a PID measuring headspace vapors of selected portions of the soil sample. Soil samples will be placed in a sealable plastic bag with boring number, depth, and time marked on it, and the bagged sample allowed to adjust to ambient surface temperature. Headspace concentrations in the plastic bag will be checked by puncturing

the bag with a PID probe, measuring the headspace concentration in the bag, and recording the PID reading and time on the soil classification log in Attachment A.

Continuous soil sampling and logging of soils will be performed at subsurface soil sampling locations instead of grab sampling techniques at locations where a groundwater monitoring well will be installed. The monitoring well locations are shown on Figures 4-10 through 4-12 of the work plan. The soil probe will be advanced until suitable aquifer material for setting the probe is found or to probe refusal. Local changes in geologic conditions, such as unanticipated shallow bedrock or a shallow groundwater table elevation may result in the field geologist moving and resampling the subsurface soil sample location using continuous soil sampling techniques. This will be performed in order to collect additional stratigraphic data in the area; identify the groundwater table; identify the soil interval above the groundwater table for collection of an unsaturated soil sample; and to identify suitable aquifer material for monitoring well installation in the immediate area.

B1.5.2 Plugging and Abandonment

Completed soil probe and other borings will be abandoned by filling the boring with bentonite chips placed from total depth to the surface, tamping the chips in the boring with a rod, and hydrating the chips with potable water. The boring will be reinspected by the field geologist within 24 hours to determine if grouting of the boring is satisfactory and if additional grout materials may be needed. Borings located on paved surfaces will be capped with an asphaltic material plug.

At each sampling point in the hardened areas, a fully penetrating, 3- to 4-inch-diameter concrete core will be installed. The core bit will be cooled by water. To keep the work area clean, the water and concrete cuttings mixture will be collected by the operator. Upon completion of the sampling activities in the hardened areas, bentonite pellets/chips will be placed down the annulus of the boring to approximately 6 inches below the base of the concrete, followed by clean potable water to allow for hydration. After the bentonite pellets/chips have been allowed to hydrate for a minimum of 2 hours, the remainder of the cored sample location will be filled to grade with a mixture of 60 pounds of Sakrete and 94 pounds of Portland cement and allowed to dry. This mixture will give the concrete core a dry compressional strength of approximately 5,000 pounds

per square inch. Due to the small diameter of the concrete core, rebar will not be used to strengthen the location.

B1.6 Monitoring Wells

B1.6.1 Permanent Monitoring Well Installation

The hollow-stem auger method will be used to install monitoring wells required during the NAS Fort Worth sanitary sewer system RFI. All drilling equipment that will come in contact with the borehole or groundwater will be decontaminated in accordance with approved methods in Section B.1-10. A soil boring will be enlarged by over-reaming, if necessary, and completed as a monitoring well. The ID of the decontaminated over-reaming auger shall be at least 6 inches in outside diameter. Figure B-2 shows a general monitoring well design.

Well screens will be 2-inch ID Schedule 40 polyvinyl chloride (PVC) pipe with a 0.01-inch slot (No. 10) size with a threaded cap below the screen. The well screen will be steam-cleaned no more than 24 hours before installation and wrapped in uncontaminated plastic to protect its cleanliness until use. The condition of the well screen will be inspected by the geologist prior to its placement. Connections between the screen and well casing will be flush-threaded with no glue used to join casing. A direct measurement of the borehole depth by the use of a weighted tape will be made before screen placement. The depth, to the nearest tenth of a foot, will be recorded on the well construction log. The screen for monitoring wells will cover the full saturated thickness of the water bearing unit, but it will not exceed 10 feet in length. The top of the screened interval will extend a maximum of 2 feet above the top of the saturated interval for future potential remedial uses of the well. Screen length may be increased in the field in areas where the saturated thickness exceeds 10 feet, with concurrence from the AFCEE designated field representative.

The well casing will be 2-inch ID Schedule 40 PVC blank pipe with threaded connections. The well casing will extend from the top of the screen to approximately ground surface for a flush-mount style completion. The top of the well casing will be secured with a well cap to prevent entry of foreign objects during completion (Figure B-2).

After the screen is placed inside the augers, the filter pack will be placed between the screen and inner wall of the hollow-stem auger. The filter pack is to be placed in the well by tremie pipe in such a manner as to be distributed around the screen at a uniform height and density. For wells with a total depth shallower than 25 feet, however, the filter pack sand may be placed in the annulus between the well screen and the augers as the augers are withdrawn from the boring to allow the filter pack to slump against the side walls of the boring and prevent borehole caving.

The filter pack will extend a minimum of 2 feet and a maximum of 5 feet above the top of the well screen. The filter pack will consist of a washed, rounded 95 plus percent silicious aggregate, and will be free of lignite and chlorides. The filter pack sand for the wells will be 20/40 sized sand. The field geologist will inspect the filter pack prior to placement.

The bentonite seal will consist of at least 2 feet of bentonite above the filter pack and below the grout seal. The well construction will be designed so the bentonite is placed in a nontransmissive zone and effectively isolates the screened interval. The bentonite will be 100-percent sodium bentonite pellets and will be placed on top of the sand pack in the annular space between the well casing and the augers. The augers will be raised to allow the bentonite pellets to slump against the side walls of the boring. After the elevation of the top of the bentonite seal is confirmed by weighted tape, the bentonite pellets will be hydrated with potable water and well activity will cease for 2 hours to allow the bentonite to hydrate. After the hydration period, the top of the bentonite seal will be determined by direct measurement with a weighted tape and recorded on the well construction log.

Cement/bentonite grout will consist of portland cement and powdered sodium bentonite mixed to a 13.8 plus or minus 0.3 lbs/gal (5 percent mix) slurry weight. The grout will be pumped using a side discharge tremmie pipe until the grout returns to the surface. The level of the grout mixture will be left 1 foot bgs to allow installation of flush mount casing protectors.

Flush mount surface completions will be flush with the land surface if located on a paved surface. The casing protector will be located in the middle of a 4-by-4-foot by 4-inch-thick concrete pad that slopes away from the casing protector at 1/4 inch per foot. The identity of the

well shall be permanently marked on the well cover lid and the casing cap and secured by lock and key.

B1.6.2 Well/Piezometer Completion Diagrams

A completion diagram shall be submitted for each permanent monitoring well or piezometer installed. It shall include the following information: (1) well identification (this shall be identical to the boring identification described), (2) drilling method, (3) installation date(s), (4) elevations of ground surface and the measuring point notch, (5) total boring depth, (6) lengths and descriptions of the screen and casing, (7) lengths and descriptions of the filter pack, bentonite seal, casing grout, and any back-filled material, (8) elevation of water surface before and immediately after development, and (9) summary of the material penetrated by the boring.

Forms for these data are in Attachment A of this document.

B1.6.3 Monitoring Well Development

Each well will be developed using a decontaminated submersible pump, bottom discharge/filling bailer, or a surge block as soon as practical, but not sooner than 48 hours nor longer than 7 calendar days after placement of the internal cement/bentonite well grout seal. Prior to development, the static water level will be measured from the top of the casing and recorded. During purging, water throughout the entire water column will be removed by periodically raising and lowering the development equipment.

Well development will consist of evacuating water and surging the well until the groundwater produced is clear and the sediment thickness remaining in the well is less than 1 percent of the screen length. Representative groundwater is presumed to have been obtained when:

- A minimum of five casing volumes of water have been removed from the well.
- The water is clear to the unaided eye and is relatively free of suspended sediments. Turbidity measurements will not be taken.
- Field measurement of the water for pH is within 0.1 standard unit of the previous reading.

- Field measurement of the water specific conductivity is within 5 percent of the previous reading.
- Field measurement of the water temperature is within 1 °C of the previous reading.
- Field measurements will be recorded on the groundwater well development/purge log in Attachment A.

B1.6.4 Abandoning Monitoring Wells

All abandonment of monitoring wells shall be performed in accordance with state and local laws and regulations. If slurry is used, a mud balance and/or Marsh Funnel shall be used to ensure that the density (pounds per gallon) of the abandonment mud mixture conforms with the manufacturer's specification. All abandoned monitoring wells shall be checked 24 to 48 hours after mud/solid bentonite emplacement to determine whether curing is occurring properly. Additional curing specifications or QA checks recommended by the bentonite manufacturer and shall be followed. Additionally, if visible settling of greater than 1 inch has occurred, a sufficient amount of mud/solid bentonite shall be added to attain its initial level. These slurry/solid bentonite curing checks and any addition of mud/solid bentonite shall be recorded in the field logs.

B1.6.5 Temporary Sampling Device Installation (Optional)

Groundwater samples collected to define the extent of VOCs in the groundwater may be collected along sewer lines at selected sampling locations with a direct-push rig and a temporary reusable well point groundwater sample device. The temporary sampling device acts as a temporary monitoring well, allowing a one-time collection of a groundwater sample from the location for assessment purposes.

A groundwater sample will be collected at each sample location where the sewer system line or manhole is below the top of the groundwater table. Groundwater samples will be collected on the down gradient side of each sampling location, which is predominantly east to southeast. Soil boring data collected from the area will be used to assist the geologist in determining the depth to set the groundwater sampling device. The sampling device will be driven by the hydraulic rig

across the water table. The outer wall of the sampling device will be pulled upward, while the drive point that has a well screen attached to it remains in the aquifer material. The well screen will allow groundwater to flow through the screen and into hollow drive rods, allowing collection of groundwater samples with polyethylene sample tubing with a foot valve at its base to allow pumping of the groundwater to the surface with a rapid up and down motion of the tubing. The groundwater sample device will be purged by pumping to allow formation water into the sampler before the sample is collected.

B1.6.6 Temporary Monitoring Well Purging

Well development using the temporary sample device will require evacuation of groundwater from the well until the groundwater produced is relatively clear to slightly turbid and the sediment thickness remaining in the well is less than 10 percent of the screen length. Representative groundwater is presumed to have been obtained when:

- A minimum of five casing volumes of water have been removed from the sampling device.
- The water is relatively clear to the unaided eye and is relatively free of suspended sediments.
- Field measurement of the water for pH is within 0.1 standard unit of the previous reading.
- Field measurement of the water specific conductivity is within 5 percent of the previous reading.
- Field measurement of the water temperature is within 1 °C of the previous reading.

Field measurements will be recorded on the groundwater well development/purge log in Attachment A.

After collection of the groundwater sample, the sampling device and rods will be retrieved from the boring and the hole grouted. Plugging and abandonment procedures in Section B1.5.2 will be used to abandon these temporary wells.

B1.7 Aquifer Tests

No aquifer tests will be performed.

B1.8 Test Pit Excavation

No test pits will be installed.

B1.9 Surveying

All surveying locations of field activities shall be measured by a certified land surveyor as the distance in feet from a reference location that is tied to the state plane system. The surveys shall be third order (Urquhart, 1962). An XY-coordinate system shall be used to identify locations. The X-coordinate shall be the east-west axis; the Y-coordinate shall be the north-south axis. The reference location is the origin. All surveyed locations shall be reported using the state plane coordinate system. The surveyed control information for all data collection points shall be recorded and displayed in a table. The table shall give the X and Y coordinates in state plane coordinate values, the ground elevation, and the measuring point elevation if the location is a ground-water monitoring well. The elevation of all newly installed wells and piezometers shall be surveyed at the water level measuring point (notch) on the riser pipe. Include the elevation of the ground surface in the survey. Soil probe locations will be surveyed with elevation of the ground surface measured and recorded.

B1.10 Equipment Decontamination

B1.10.1 Nonsampling Equipment

A centrally located decontamination station will be established for decontamination of equipment. The decontamination station will include a pad on which the drilling rig, soil probe unit, and other large equipment, such as auger flights, can be steam-cleaned. The decontamination pad will be of a temporary construction. The decontamination pad will consist of two layers of minimum 6-mil high-density polyethylene plastic sheeting laid out on a level, firm surface. The pad edges will be built up with material (lumber or steel) to contain decontamination water. A collection sump will be furnished inside the pad to allow removal of the decontamination waters. Coordination with NAS Fort Worth personnel will be required to identify the location of the

decontamination station. Access to the decontamination station area will be controlled by caution tape, barricades, and warning signs.

The drill rigs and other equipment that could come in contact with the soil being investigated will be steam-cleaned between each hole. The general procedures for nonsampling equipment are as follows:

- Augers and other drilling equipment in contact with soil will be decontaminated before coming onto the NAS Fort Worth sanitary sewer RFI site and before leaving the site.

- Augers, bits, and rods will be decontaminated with high-pressure hot water, scrubbed with phosphate-free detergent, rinsed thoroughly by steam cleaning, and allowed to air dry.

- All casings, screens, and other downhole equipment will be steam-cleaned prior to installation and wrapped in plastic to prevent recontamination.

B1.10.2 Sampling Equipment

Field measurement equipment will be kept free of contamination. All reusable field equipment used to collect, handle, or measure samples shall be decontaminated before coming into contact with any sample. Brushes and soap will be used to remove dirt from equipment that comes into contact with soils.

The decontamination procedures for sampling equipment are as follows:

- Use potable water from a known source with a phosphate-free detergent to wash and brush soil from the sampling item.

- Rinse sampling item thoroughly with potable water; check item for any residual dirt, and rewash if necessary.

- Rinse item with ASTM Type II Reagent-grade deionized water.

- Rinse item with solvent (methanol) to remove residual organics. Follow with a deionized water rinse if fuels are encountered. Solvents will be pesticide grade or

better. A hexane rinse will only be used in highly contaminated areas where liquid wastes are present on the tools.

- Allow item to completely air-dry prior to any use. Cover item with uncontaminated plastic if it is not intended for immediate use.

B1.11 Waste Handling

The potential investigation waste types generated from work performed during field activities are:

- Drill cuttings and soil samples
- Developments and purge water from well installation and sampling
- Decontamination water
- Personnel protective equipment and decontamination equipment.

Procedures for disposal of these wastes will be coordinated with Base personnel. Analytical testing of these wastes may be required to characterize the waste for disposal. An analytical sample for VOCs, SVOCs, total petroleum hydrocarbons, and metals will be collected from each 50 cubic yards of investigation-derived waste soils to determine if the soils are hazardous by TNRCC Risk Reduction Standards and to subcontract disposal options. All decontamination fluid will be collected, contained in an appropriate vessel, properly labeled, and stored on-site at an approved storage facility at the Base. All soils generated during soil borings, well installation, and sampling activities will be collected, contained in drums or roll-off boxes, properly labeled, and stored on site until disposal or treatment is conducted. All drums will be clearly labeled with the contents, date of accumulation, location generated, and generator.

B1.12 Hydrogeological Conceptual Model

Modeling is not part of this project.

B2.0 Environmental Sampling

All purging and sampling equipment shall be decontaminated according to the specifications in Section B1.10 prior to any sampling activities and shall be protected from contamination until ready for use.

B2.1 Soil Sampling Procedures

B2.1.1 Surface Soil Sampling

Surface soil samples will be collected from the 0-to-1-foot interval. The surface soil samples will be collected with the direct-push rig in PET or CAB liners. If the samples cannot be collected due to either surface fill material or poor soil cohesiveness, a California modified shoe with brass liners will be driven through the interval in 6-inch increments with a slide hammer. The samples will be collected, described, logged, labeled, preserved, and stored for analyses.

Surface soil locations are at selected locations are shown in Figures presented in Chapters 3.0 and 4.0 of the work plan. The sample numbers are shown in Tables 3-1 and 4-5 of the work plan.

B2.1.2 Subsurface Soil Probe Sampling

Soil samples will be visually examined by a certified geologist experienced with the Base's lithology. Samples will be described in accordance with ASTM D-2487 (USCS) and the Munsell Color Chart. All information regarding soil texture, consistency, and color shall be recorded on drilling logs. Additional information recorded on the borehole log will be soil sampling location, the method of sampling, the percent recovery of the sample, the depth to first water encountered, and the results of field screening.

Field screening of the soil samples with a PID will provide qualitative information on the location of soils potentially impacted with petroleum hydrocarbons. Each sample collected from a boring will be observed for physical evidence of contamination, such as staining or presence of residues. The soil cores will be collected in clear PET or CAB liners of either 24 or 48 inches in length. The length will be determined in the field by the supervising geologist. The cores will

be visually examined through the clear liner for soil properties classification and visual hydrocarbon staining. The interval selected for soil analysis will be isolated from the rest of the core by cutting the sample (including the liner) from the rest of the core using a decontaminated knife. The ends of each sample tube will be covered with Teflon® tape and capped with a vinyl or polyethylene cap. The geologist will maintain detailed boring logs in conformance with standard operating procedures outlined in the QAPP. The soil probe rig will be decontaminated prior to collecting samples, and any part of the rig will be decontaminated that will contact a sample between boreholes.

The geologist will classify the soil by ASTM methods, including soil type, color, moisture, and firmness, and will note other soil characteristics such as staining. Additional information recorded on the borehole log will be soil sampling location, the method of sampling, the percent recovery of the sample, the depth to first water encountered, and the results of field screening. All hand soil sampling tools will be decontaminated between each use. Care will be taken not to touch the ends of the sleeves before capping. The exterior of the cap will be taped to the tube holding the sample, the sample will be labeled accordingly, and stored in a cooler at the site at 4°C before submittal to the laboratory for analysis.

PID readings for field screening will be taken at the exposed ends of the sample. The remaining portion of each sample will be placed in a resealable plastic bag for field screening. Each jar and bag will be marked with the boring number, depth of sample collected, and time of sample collection. Headspace concentrations in the plastic bags will be checked after 10 minutes by puncturing the bag with the PID probe, measuring the headspace concentration in the bag, and recording the PID reading and time on the borehole log.

The soil probe sample names, the number of samples to be collected at each location, the laboratory analysis, and QC samples to be collected are shown in Tables 3-1 and 4-5, respectively.

B2.2 Groundwater Sampling

Groundwater samples for laboratory analysis will be collected from temporary groundwater sampling points and any monitor wells installed at NAS Fort Worth during the Sanitary Sewer System RFI. Groundwater sample collection procedures will follow standard procedures

outlined in Section 5.0 of the QAPP addendum. Low flow groundwater sampling techniques will be utilized to collect samples from groundwater monitoring wells.

The air in the breathing zone will be checked with a PID each time a well cap is removed prior to monitoring well activity. Each well shall be inspected for signs of tampering or other damage. If tampering is suspected, it will be recorded on the Field Activity Daily Log, on the sampling form, and reported to the principal investigator. Wells that are suspected to have been tampered with will not be sampled until the matter has been cleared by the principal investigator or the project manager. Each well will be measured with an interface probe to collect water level data and to check for and measure light nonaqueous-phase liquid thickness. The forms of recording data are in Attachment A. The field geologist will calculate the volume of water for the well bore volume and the total for three well bore volumes of groundwater needed to purge the well.

Before the start of sampling activities, plastic sheeting will be placed on the ground surrounding the well. Remove any water in the well protective casing before venting and purging the well. Well purging will consist of evacuation of water until the groundwater has little visible turbidity (i.e., is clear) and the groundwater parameters (temperature, pH, and conductivity) have stabilized as defined in the following paragraphs. Purging and sampling of the wells will be performed in a manner that minimizes agitation of sediment in the well and formation. Equipment will not be allowed to free fall into the well.

The groundwater sample numbers, the number of analytical samples to be collected at each location, the laboratory analysis, and QC samples to be collected are shown on Tables 3-2 and 4-6 of the work plan. Field analytical tests and methods for groundwater samples are shown on Table 4-7.

In addition to the information required in Chapter 8.0, the following information shall be recorded each time a well is purged and sampled (forms are in Attachment A). This information shall be encoded in IRP Information Management System (IRPIMS) files when required: (1) depth to water before and after purging, (2) well bore volume calculation, (3) total depth of the monitor well as measured with a tape, (4) the condition of each well, including visual (mirror) survey, (5) the thickness of any nonaqueous layer, and (6) field parameters, such as pH, temperature, specific conductance, and turbidity.

B2.2.1 Water Level Measurement

An interface probe shall be used if a nonconductive nonaqueous-phase liquid (NAPL) is suspected in a monitoring well. The interface probe shall be used to determine the presence of light or dense NAPL, if any, during measurement of the groundwater level.

Water levels will be measured from the top of monitor well casing and recorded on the well sampling form. If well casings are not notched, measurements will be taken from the north edge of the top of the well casing, and a notch will be made with using a decontaminated metal file. Following water level measurement, the total depth of the temporary well point or monitoring well from the top of the casing will be determined using the electric water level indicator or the interphase probe (monitoring well) and recorded on the well sampling form. The water level depth will then be subtracted from the total depth of the well to determine the height of the water column present in the well casing. Groundwater field sampling forms are located in Attachment A. All water level and total depth measuring devices shall be routinely checked at least annually with a tape measure to ensure measurements are accurate.

The volume of a 1-foot section of the well borehole (F) can also be calculated using the formula:

$$F = \pi (D/2)^2 \times 7.48 \ gal/ft^3$$

where:

= 3.14

D = the inside diameter of the well borehole in feet.

B.2.2 Groundwater Sample Collection

Before collecting groundwater samples, the sampler will don clean, phthalate-free protective gloves. From monitoring wells, VOC samples will be collected first using disposable clear polyethylene tubing discharging directly into the sample container. Low flow sampling will use small positive displacement pumps. Samples to be analyzed for volatile or gaseous constituents

will not be withdrawn with pumps that exert a vacuum on the sample. Polyethylene tubing used for sample collection will be used once and then disposed of.

The sampler will establish a pump flow rate to minimize groundwater head drawdown low flow groundwater sampling procedures. After the flow rate is established, the sampler will monitor groundwater parameters of temperature, pH, dissolved oxygen, and conductivity and record the measurements on a groundwater sample collection log (Attachment A). Low flow sampling procedures will be conducted by the following methods:

- The sampling pump should be installed at the same depth in each well. Moderate sustained well yields of 5 gallons per minute are common and pumps will be set in the upper third of the saturated well screen due to low expected drawdown. If low-yielding wells are present in an area, then the pump should be positioned towards the bottom one-third of the saturated well screen.

- A pumping rate that minimizes drawdown in the well will be established. Initial purge rates will begin at 0.2 liter per minute (L/min). If the well drawdown is very low, the purge rate may be increase to up to 2.0 L/min. Well drawdown should not exceed one-third of the water column.

- A minimum of three casing volumes of water will be purged from the well.

- Purging a monitoring well will be considered complete where three casing volumes of water have been removed, and:

  - Field measurement of groundwater turbidity is less than or equal to 5 nephelometric turbidity unit (NTU) in one of three consecutive readings or three consecutive turbidity readings less than 10 NTUs are attained.

  - Field measurement of the water for pH is within 0.1 standard unit of the previous reading.

  - Field measurement of the water specific conductivity is within 5 percent of the previous reading.

  - Field measurement of the water temperature is within 1°C of the previous reading.

- Field measurement of the dissolved oxygen is within 0.3 milligrams per liter of the previous reading.

- Once the parameters stabilize and the purge is complete, the flow rate will be reduced to 100 milliliters per minute before collecting the groundwater sample.

If the parameters do not stabilize, the sample will be collected after a maximum of six well volumes have been removed, and the nonstabilizing parameters will be documented and brought to the task leaders attention. All field measurements of groundwater collected by low flow methods will be made with the instrument probes submerged in a flow cell.

An initial groundwater sample will be collected at least 24 hours after completion of monitoring well development. Subsequent samples may be collected when scheduled. A groundwater sample may not be collected until three well bore volumes have been removed and the listed field parameters have stabilized. The sample will then be collected immediately after the water level has recovered to 80 percent of its static level or 8 hours after completion of purging, whichever comes first. The field geologist will record measurements on a groundwater sample collection log (Attachment A) all pertinent information from the well being developed; the water level; the groundwater parameters measured after each well volume removed; and total volume removed.

VOC sample bottles will have been prepared by the laboratory with hydrochloric acid preservative. The sample will be collected from the bailer with a bottom discharge device down the side of a tilted sample vial to minimize volatilization. The sample vial will be filled until a meniscus is visible and immediately sealed. When the bottle is capped, it will be inverted and gently tapped to ensure no air bubbles are present in the vial. Vials with trapped air will be refilled until no bubbles are present in the vial. These samples will never be composited, homogenized, or filtered.

Following collection of VOC samples, remaining water samples will be collected in the following order: SVOCs, pesticides/PCBs (if collected at that location), metals, sulfate, nitrate, alkalinity (if biotechnical samples are collected at that location) and field analytical methods for ferrous iron, carbon dioxide, and sulfide. The pH of preserved sample will be checked by pouring a small amount of a non-VOC water sample onto pH paper. The paper will not touch the inside of the container. The preservation checks will be documented in the chain-of-custody

forms. One preserved VOC sample a day that will not be submitted for laboratory analysis will be checked with pH paper to verify proper preservation.

B2.3 Surface Water Sampling

There will be no surface water sampling.

B2.4 Sediment Sampling

There will be no sediment sampling.

B2.5 Soil Gas Sampling

There will be no soil gas sampling.

B2.6 Indoor Air Sampling

Indoor air sampling is not applicable to the project.

B2.7 Sample Handling

B2.7.1 Sample Containers

Sample containers are purchased precleaned and treated according to EPA specifications for the methods. Containers will be stored in clean areas to prevent exposure to fuels, solvents, and other contaminants. Amber glass bottles are used routinely where glass containers are specified in the sampling protocol.

B2.7.2 Sample Volumes, Container Types, and Preservation Requirements

Sample volumes, container types, and preservation requirements for the analytical methods performed on samples are listed in Section 5.0 of the QAPP.

B2.7.3 Sample QA/QC Requirements

These requirements are defined and specified in Section 4.4 of the QAPP.

B3.0 Field Measurements

B3.1 Parameters

Table 4-7 specified the parameters that will be field measured.

B3.2 Equipment Calibration and Quality Control

Equipment calibration requirements are specified in Section 4.3 of the QAPP.

B3.3 Equipment Maintenance and Decontamination

Preventative maintenance for equipment will be completed per Section 10.0 of the QAPP. Decontamination will be in accordance with that specified in Chapter B.1.10.

B3.4 Field Monitoring Measurements

B3.4.1 Groundwater Level Measurements

Water level measurements shall be taken in all wells to determine the elevation of the water table within a single 24-hour period prior to a sampling round or initial well development. These measurements shall be taken after all wells have been installed and developed and their water levels have completely recovered. Any conditions that may affect water levels shall be recorded in the field log.

Water level measurements may be taken with electric sounders, air lines, pressure transducers, or water level recorders (e.g., Stevens recorder). Devices that may alter sample composition shall not be used. All measuring equipment shall be decontaminated according to the specifications in Section B.1.10. Groundwater level shall be measured to the nearest 0.01 foot. Measurements will be taken to top of casing at the notched point.

Static water levels shall be measured prior to each time a well is sampled. If the casing cap is airtight, allow time prior to measurement for equilibration of pressures after the cap is removed. Repeat measurements until water level is stabilized.

B3.4.2 Light or Dense Nonaqueous-Phase Liquid Measurements

The thickness of light or dense NAPL in monitor wells shall be measured with an electronic interface probe. Hydrocarbon detection paste, or any other method that may affect water chemistry, shall not be used. When detected, the presence of NAPL materials shall be confirmed by withdrawing a sample with a clear, bottom-fill bailer.

B3.4.3 Groundwater Discharge Measurements

Groundwater discharge measurements shall be obtained during monitor well purging. Groundwater discharges may be measured with orifice meters, containers of known volume, in-line meters, flumes, or weirs, following the guidelines specified in the *Water Measurement Manual*, Bureau of Reclamation, 1967. If discharge measuring devices are upstream of sample collection points, the devices shall be decontaminated. Measurement devices shall be calibrated using containers of known volume.

B3.5 Field Performance and System Audits

The field performance and system audits, if conducted, will be completed as specified in Section 9.0 of the QAPP.

B4.0 Record Keeping

The contractor shall maintain field records sufficient to recreate all sampling and measurement activities and to meet all IRPIMS data loading requirements. The requirements listed in this section apply to all measuring and sampling activities. Requirements specific to individual activities are listed in the section that addresses each activity. The information shall be recorded on forms provided in Attachment A of this document with waterproof black indelible ink. These records shall be archived in an easily accessible form and made available to the Air Force upon request.

The following information shall be recorded for all field activities: (1) location, (2) date and time, (3) identity of people performing activity, and (4) weather conditions. For field measurements, the following shall be recorded: (1) the numerical value and units of each measurement, and (2) the identity of and calibration results for each field instrument. The specific records are specified in the QAPP.

The following additional information shall be recorded for all sampling activities: (1) sample type and sampling method, (2) the identity of each sample and depth(s), where applicable, from which it was collected, (3) the amount of each sample, (4) sample description (e.g., color, odor, clarity), (5) identification of sampling devices, and (6) identification of conditions that might affect the representativeness of a sample (e.g., refueling operations, damaged casing).

B5.0 References

A. T. Kearney, 1989, ***RCRA Facility Assessment, PR/VSI Report, Carswell Air Force Base, Fort Worth, Texas,*** March.

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Jacobs Engineering, 1995, ***Air Force Center for Environmental Excellence, Naval Air Station Fort Worth Joint Reserve Base, Full-Service Environmental Remediation, Quality Program Plan***, January.

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Tennissen, A. C., 1983, ***Nature of Earth Materials***, 2nd Ed., p. 204-348.

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FIGURES

Sediments and Sedimentary Rocks

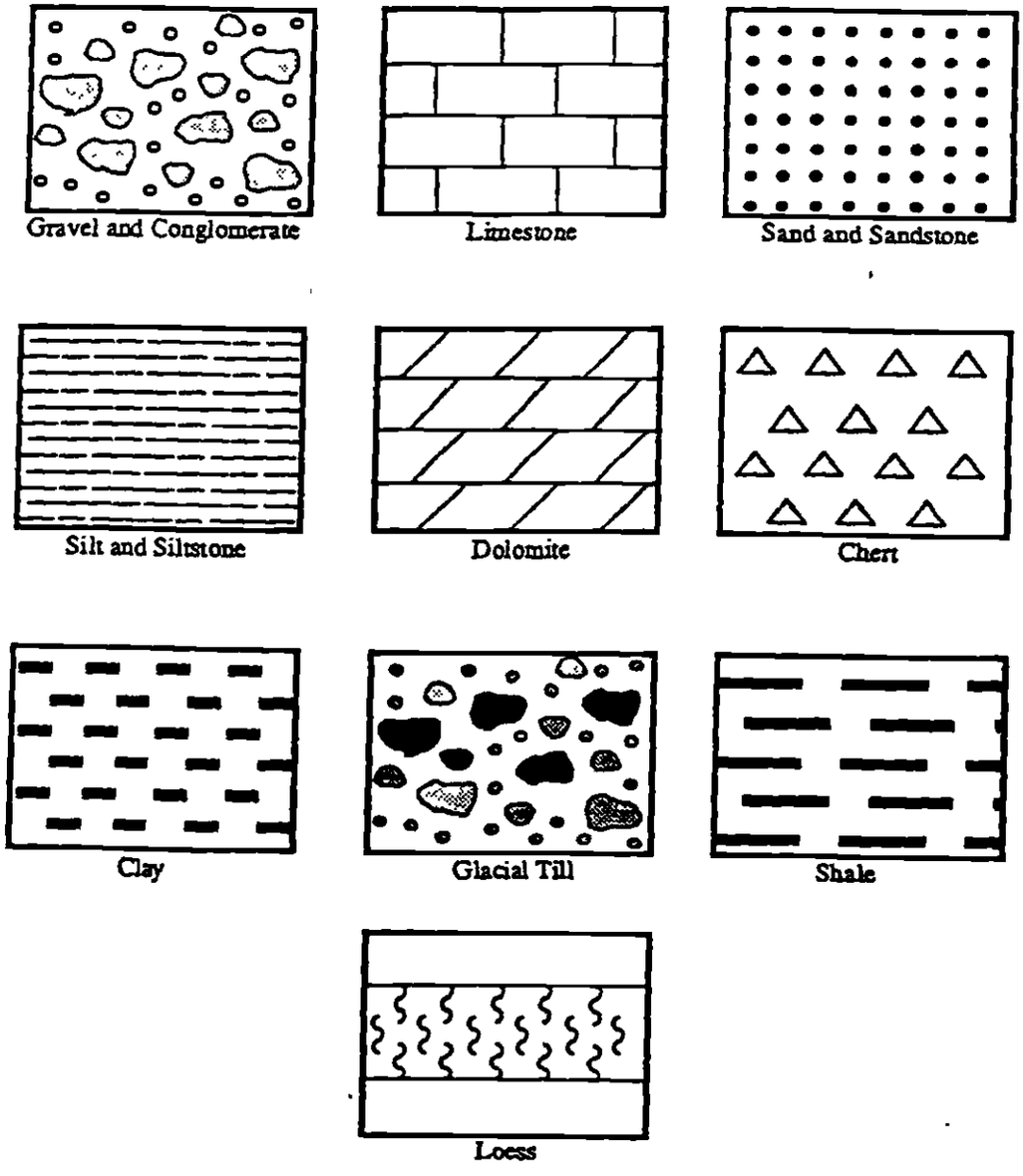

Figure B-1

Lithologic Patterns for Illustration

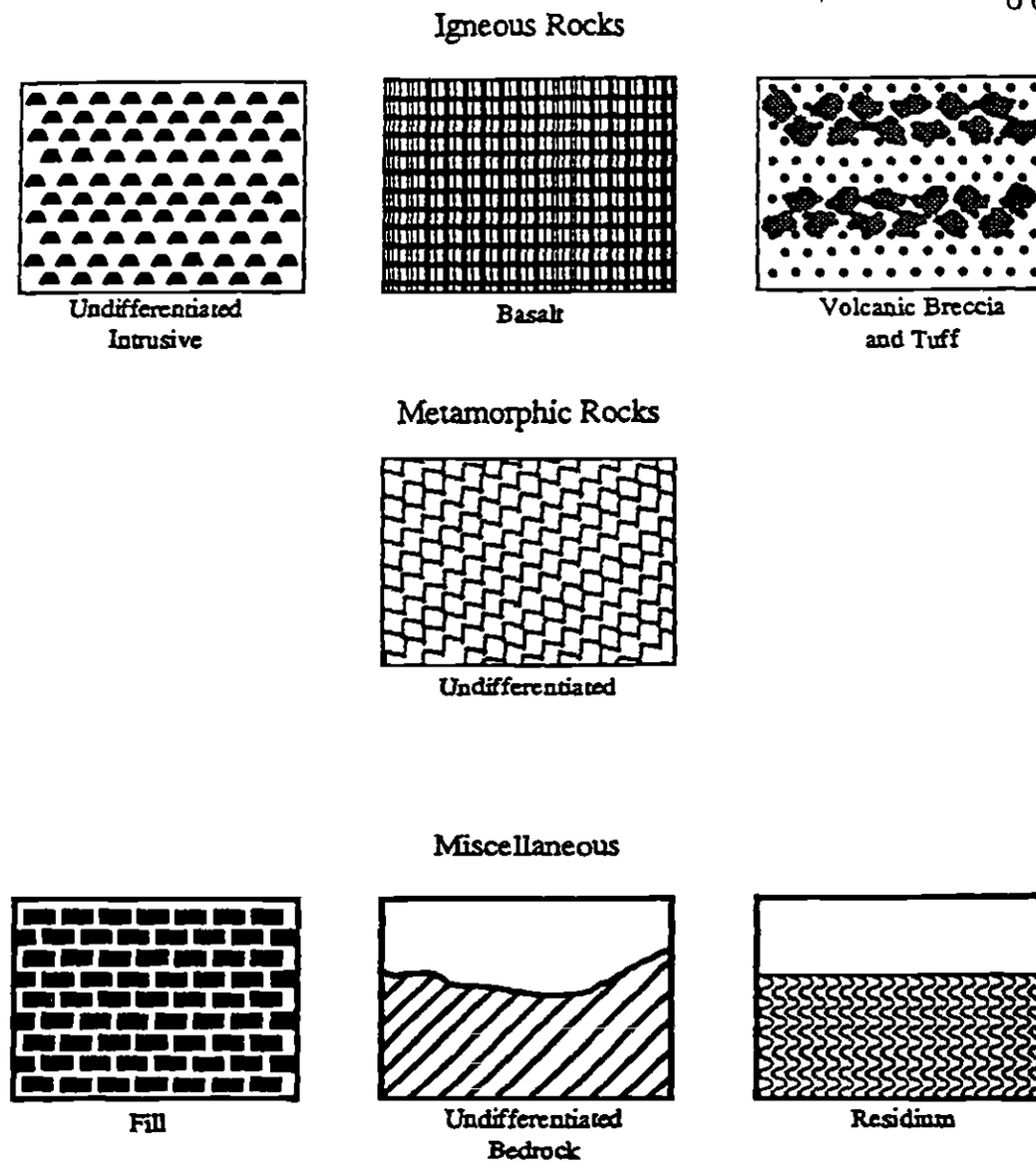

Figure B-1 (Continued)

Lithologic Patterns for Illustration

INTERNATIONAL TECHNOLOGY CORPORATION

(Not To Scale)

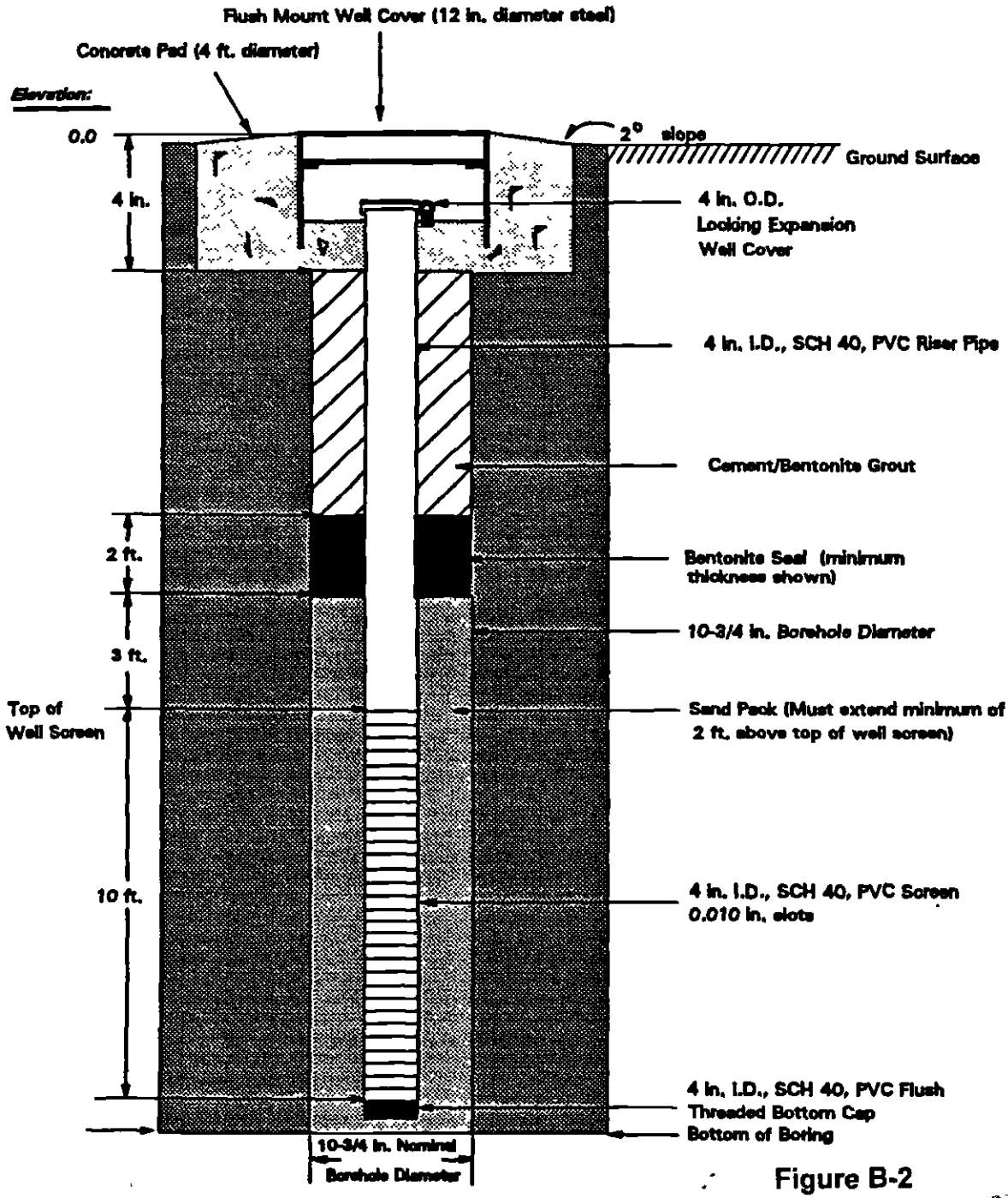

Figure B-2

Monitoring Well Design Prepared for:

NAVAL AIR STATION FORT WORTH
FORT WORTH, TEXAS

R:\CAD\WELL\BORING\WCD1.DWG/mw/2-20-87

ATTACHMENT A

FIELD FORMS

INTERNATIONAL TECHNOLOGY CORPORATION

New Location Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: _____

LOCATION ID: _____

LOCATION CLASSIFICATION: (Circle one) BH-borehole SL-surface location TP - test pit WL-well NA - not applicable _____(other)

Geohydrologic Flow Classification (Circle one) : U= Upgradient D=Downgradient C=Crossgradient O=On Site-within site boundaries B=background

LOCATION PROXIMITY (Circle one): I=Inside Site Boundary O=Outside Site Boundary

ELEVATION: _____

NORTH COORDINATE: _____

EAST COORDINATE: _____

ESTABLISHING COMPANY: ITC

DRILLING COMPANY: _____

CONSTRUCTION METHOD: (Circle one): DT-driven tube HA-hand augered CP - Cone Penetrometer NA-not applicable B - Bored or Augered SS-Solid Stem Auger HS-Hollow Stem Auger

EXCAVATING COMPANY: _____

DATE ESTABLISHED: ☐☐/☐☐/☐☐ (Date finished)

DEPTH: _____ (XXXX.XX in Feet)

BORING HOLE DIAMETER: _____(XX.XX in inches) Prepared by: _____

LOCATION DESCRIPTION: _____

INTERNATIONAL TECHNOLOGY CORPORATION

Lithologic Codes Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: _____

LOCATION ID: _____ ☐ EXISTING ☐ NEW

Logging Company Code: ITC **Log Date:** ☐☐/☐☐/☐☐ (MM/DD/YR)

Beginning Depth (XXX.XX in feet)	Ending Depth (XXX.XX in feet)	Lithology Code				ASTM Soil Classification Code				Stratigraphic Order			Visual Description

Gr undwater Well Development/Purge Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: _____ LOCATION ID: _____ (Well Number) Static Water Level: _____ ft Sample No.:_____

Target Purge Volume: _____ gal WELL DEPTH: _____ (ft from TOC) Well Casing Diameter: _____in. Total Volatiles (PID):_____

S/P	Date mmddyy	Time (24hr)	Purge Rate (gal /min)	Water Level (ft)	Volume purged (gal)	Temp °C	pH	Cond. _____	Turbidity (NTU)	Dissolved oxygen (mg/L)	Redox (mV)	Prepared By (Init.)	Water Description

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INTERNATIONAL TECHNOLOGY CORPORATION

Groundwater Elevation Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas

PROJECT: 768579

AIR FORCE INSTALLATION ID: CRSWL

Site ID	Location ID	Log Date (MM-DD-YY)	Log Time (HHMM)	Depth of Well (xxxx.xx)	Static Depth to Water (xxxx.xx)	Hnu (ppm)

KNOXVILLE DATA MANAGEMENT

INTERNATIONAL TECHNOLOGY CORPORATION

JULY 9,

PAGE _____ OF _____

Field Analysis Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579 AF INSTALLATION ID: CRSWL

Site ID	Location ID (Well No.)	Date (mm/dd/yy)	Time (hhmm)	Sample No.	Ferrous Iron (mg/L)		Sulfide (mg/L)		Carbon Dioxide (mg/L)					
					Result 1	Result 2	Result 1	Result 2	Drops	Test H, M, L	Calc Result 1	Drops	Test H, M, L	Calc Result 2

FIELD ANALYST: _____ SIGNATURE: _____

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INTERNATIONAL TECHNOLOGY CORPORATION

Soil Sample Collection Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: ______________

LOCATION ID: ______________________ SAMPLE #: ______________________________

LOG DATE: ____/____/____ LOG TIME: __________________________(HHMM)

BEGINNING DEPTH: ______ ENDING DEPTH: _______ LOG CODE: ITC LOCATION CLASS: SL PH BL TP BH

MATRIX: SO SQ SAMPLING METHOD: SS T G HA HP

Enter sample numbers for QA/QC samples associated to this sample:

Matrix Spike (MS): ________________ Matrix Spike Dup (SD): ________________

Field Dup(FD): ________________ Original (N): ________________

Material Blank (MB): ________________ Trip Blank (TB): ________________

Equipment Blank (EB): ________________ Ambient Blank (AB): ________________

COMMENTS: ____

____

SAMPLER(S): ________________________________ PREPARED BY: ______________________________

Layout/Site Diagram

- For Data Management Only -

SAMPLE /QC TYPE: ________________ LOT CONTROL #: ____________________

Chain-of-Custody: __________________ Air Bill # _________________________ Ship Date: ________________

Checked by : _______________ Date: ___________ Logged in by: ___________ Date: ___________

QAed by: _______________ Date: ___________ Filed by: ___________ Date: ___________

INTERNATIONAL TECHNOLOGY CORPORATION

Water Sample Collection Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: _____

LOCATION ID: _____ SAMPLE #: _____

LOG DATE: ____/____/____ LOG TIME: _____(HHMM)

BEGINNING DEPTH: _____ ENDING DEPTH: _____ LOG CODE: ITC LOCATION CLASS: WL PH TP SL WW CH

MATRIX: WG WS SAMPLING METHOD: B G HP SP

Enter sample numbers for QA/QC samples associated to this sample:

Matrix Spike (MS): _____ Matrix Spike Dup (SD): _____

Field Dup(FD): _____ Original (N): _____

Material Blank (MB): _____ Trip Blank (TB): _____

Equipment Blank (EB): _____ Ambient Blank (AB): _____

COMMENTS: _____

SAMPLER(S): _____ PREPARED BY: _____

Layout/Site Diagram

For Data Management Only

SAMPLE /QC TYPE: _____ LOT CONTROL #: _____

Chain-of-Custody: _____ Air Bill # _____ Ship Date: _____

Checked by : _____ Date: _____ Logged in by: _____ Date: _____

QAed by: _____ Date: _____ Filed by: _____ Date: _____

INTERNATIONAL TECHNOLOGY CORPORATION

QC Water Sample Collection Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
AIR FORCE INSTALLATION ID: CRSWL

SITE ID: _____

LOCATION ID: _____ SAMPLE #: _____

LOG DATE: ____/____/____ LOG TIME: _____(HHMM)

BEGINNING DEPTH: 0 ENDING DEPTH: 0 LOG CODE: ITC LOCATION CLASS: NA

MATRIX: WQ WH SAMPLING METHOD: NA

Enter sample numbers for QA/QC samples associated to this sample:

Matrix Spike (MS): _____ Matrix Spike Dup (SD): _____

Field Dup(FD): _____ Original (N): _____

Material Blank (MB): _____ Trip Blank (TB): _____

Equipment Blank (EB): _____ Ambient Blank (AB): _____

COMMENTS: _____

SAMPLER(S): _____ PREPARED BY: _____

Layout/Site Diagram

For Data Management Only

SAMPLE /QC TYPE: _____ LOT CONTROL #: _____

Chain-of-Custody: _____ Air Bill # _____ Ship Date: _____

Checked by : _____ Date: _____ Logged in by: _____ Date: _____

QAed by: _____ Date: _____ Filed by: _____ Date: _____

KNOXVILLE DATA MANAGEMENT

INTERNATIONAL TECHNOLOGY CORPORATI N

JULY 9, 1996

PAGE _____ OF _____

Field Analysis Log

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579
Soil Sample Analysis by Landtech GA-90

Site ID	Location ID	Date (mm/dd/yy)	Time (hhmm)	SAMPLE NO.	Methane (CH_4)		Carbon Dioxide (CO_2)		Oxygen (O_2)	
					RESULT 1	RESULT 2	RESULT 1	RESULT 2	RESULT 1	RESULT 2

FIELD ANALYST: _____ SIGNATURE: _____

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INTERNATIONAL TECHNOLOGY CORPORATION

Well Completion Information

Carswell Field D.O. 39 Sanitary Sewer System, NAS Fort Worth, Texas
PROJECT: 768579

LOCATION ID: _____

DATE INSTALLED: ☐☐/☐☐/☐☐ (MM/DD/YR)

WELL OWNER: USAF _____ (other) WELL TYPE: PZ MNW _____(other)

COMPLETION METHOD: GS S P ____ (other)

GEOLOGIC ZONE: A L C P S ? U W

SOLE SOURCE AQUIFER: NCSA _____ (other)

SEAL END DEPTH: _____ (XXXX.XX in feet) FILTER PACK LENGTH: _____ (XXX.XX in feet)

MEASURING PT ELEVATION (Top of Casing): _____ (XXXXX.XX)

TOTAL CASING DEPTH: _____ (XXX.XX in feet)

CASING INSIDE DIAMETER: _____*Should be smaller than the borehole diameter.

CASING MATERIAL: PVC SLS GLS _____(other)

SCREEN BEGINNING DEPTH: _____ (XXXX.XX is feet)

SCREEN LENGTH: _____ (XXX.XX in feet)

SCREEN SLOT SIZE: _____ (XXX.XX in inches)

SCREEN DIAMETER: _____ (XXX.XX in inches)

PERCENT OPEN AREA: _____ (XX.X)

REMARKS: _____

_____

_____

_____

Prepared By: _____

INTERNATIONAL TECHNOLOGY CORPORATION

VARIANCE LOG
CHRONOLOGICAL LIST OF PROJECT VARIANCES

PROJECT NUMBER _____ PAGE ____ OF ____

PROJECT NAME _____

DATE	VARIANCE GRANTED AND APPLICABLE DOCUMENT	RESPONSIBLE INDIVIDUAL

INTERNATIONAL TECHNOLOGY CORPORATION

VARIANCE FORM

VARIANCE NO. _____

PROJECT NO. _____ PAGE _____ OF _____

PROJECT NAME _____ DATE _____

VARIANCE (INCLUDE JUSTIFICATION)

APPLICABLE DOCUMENT:

CC:

REQUESTED BY _____ DATE _____

APPROVED BY _____ DATE _____
Project Manager

_____ DATE _____
Quality Assurance Officer

INTERNATIONAL TECHNOLOGY CORPORATION

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NONCONFORMANCE REPORT

NCR Number:	Project Name and Number:	Date:	Page_____ of _____

Nonconformance Description (include specific requirement violated):

Identified By: Date:

Root Cause of Nonconforming Condition:

Corrective Action to be Taken (include date when action(s) will completed):

To be Performed By: Anticipated Completion Date:

Action to be Taken to Preclude Recurrence:

To be Performed By: Anticipated Completion Date:

Acceptance By:_____ Date:_____ Acceptance By:_____ Date_____
Project Manager QA Officer

Corrective Actions Completed By and Date:	Verification Completed By and Date:

AL\9-92\QA\NCRRVO.FRM

INTERNATIONAL TECHNOLOGY CORPORATION

FIELD CALIBRATION LOG

Job Name: _____ Job No. _____

Checked By: _____ Date: _____ Instrument Source: ☐ IT Equipment ☐ Rental

Date/Time	Instrument Make/Model/Serial #/IT#	Calibrated By	Standard/Manuf./Lot #/ Cal. Method	Instrument Readings	Instrument Settings	Pass/Fail Description	Comments

Resolution for Instrument Failure _____

AL/9-92/QA/CALFDRVO.FRM

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IT TAILGATE SAFETY MEETING

Division/Subsidiary _____ Facility _____

Date _____ Time _____ Job Number _____

Customer _____ Address: _____

Specific Location _____

Type of Work _____

Chemicals Used _____

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment _____

Chemical Hazards _____

Physical Hazards _____

Emergency Procedures _____

Hospital / Clinic _____ Phone ( ) _____ Paramedic Phone ( ) _____

Hospital Address _____

Special Equipment _____

Other _____

ATTENDEES

NAME PRINTED	SIGNATURE

Meeting conducted by:

_____ NAME PRINTED _____ SIGNATURE

Supervisor _____ Manager _____

36-8-85

INTERNATIONAL TECHNOLOGY CORPORATION

FIELD ACTIVITY DAILY LOG

DATE			
NO.			
SHEET ___ OF ___			

PROJECT NAME | PROJECT NO.

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

VISITORS ON SITE:

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS.

WEATHER CONDITIONS:

IMPORTANT TELEPHONE CALLS:

IT PERSONNEL ON SITE:

SIGNATURE | DATE:

INTERNATIONAL TECHNOLOGY CORPORATION

FIELD CALIBRATION LOG

Job Name: _____ Job No. _____

Checked By: _____ Date: _____ Instrument Source: ☐ IT Equipment ☐ Rental

Date/Time	Instrument Make/Model/Serial #/IT#	Calibrated By	Standard/Manuf./Lot #/ Cal. Method	Instrument Readings	Instrument Settings	Pass/Fail Description	Comments

Resolution for Instrument Failure _____

_____

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FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE