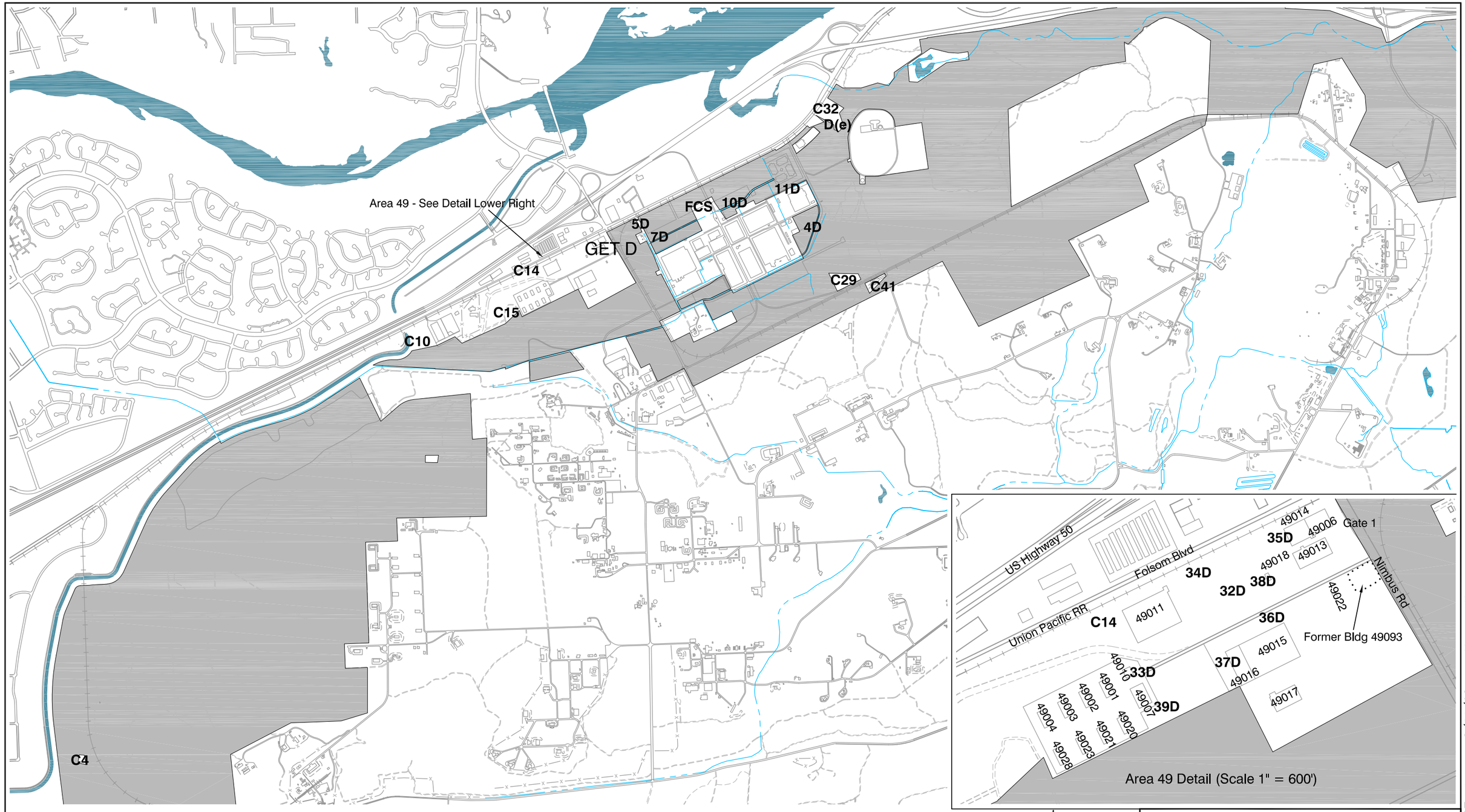

C32
D(e)
Area 49 - See Detail Lower Right
11D
10D
FCS
5D
7D
4D
GET D
C14
C15
C10
C29
C41
C4
US Highway 50
Folsom Blvd
Union Pacific RR
Nimbus Rd
Gate 1
49014
49006
35D
49018
49013
34D
32D
38D
49022
C14
49011
36D
Former Bldg 49093
49015
37D
49016
49017
49010
33D
49001
49002
49007
49003
49020
49004
49021
49023
49028
39D
Area 49 Detail (Scale 1" = 600')
EXPLANATION
C4 Site Location
Carveout Area
FCS Former Company Store
N
Scale: 1" = 2000'
0 1000 2000
AEROJET
Environmental Remediation
FIGURE 1-1
Location of Sites Included
In PGOU Solls RI/FS
SR10120644 FIGURE 1-1 8/11/08 Herron, Al

Source: Air Photo USA Georeferenced Satellite Photo

EXPLANATION

- Ditch Included in PGOU Soils RI/FS
- Underground Culvert Included in PGOU RI/FS
- Background Soil Leachate Sample Location
- Surface Water Flow Direction (2002)
- Superfund Site Boundary

Scale: 1" = 150'

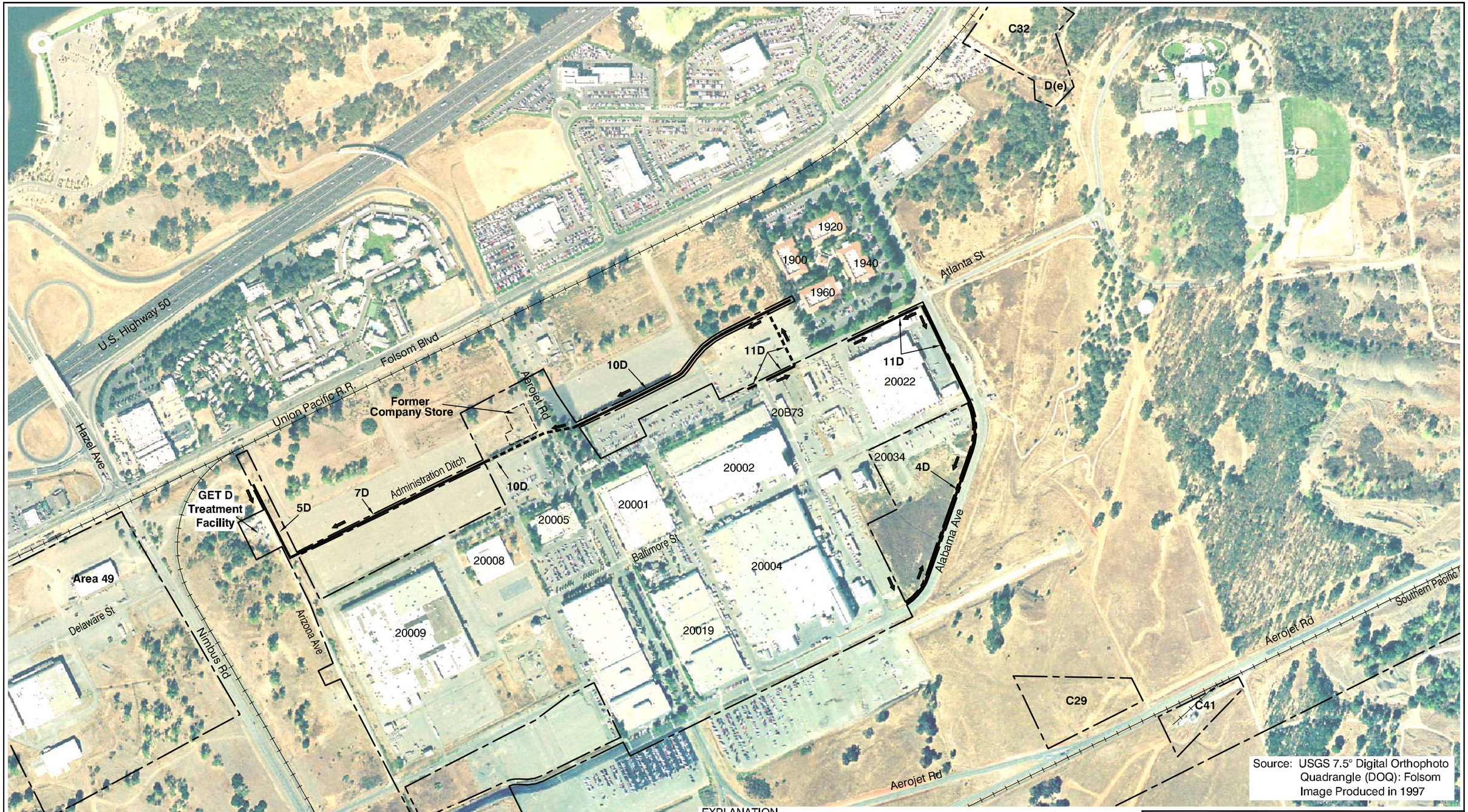
0 75 150

AEROJET
Environmental Remediation

FIGURE 3-1

Background Metals Leachate Sampling Locations Area 20

10/15/07 ah SR10120645



7/18/06 ah SR10120646

EXPLANATION

- Ditch Included in POU Soils RI/FS
- Underground Culvert Included in POU Soils RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/end of Potential Source Area Ditch

N

Scale: 1" = 150'

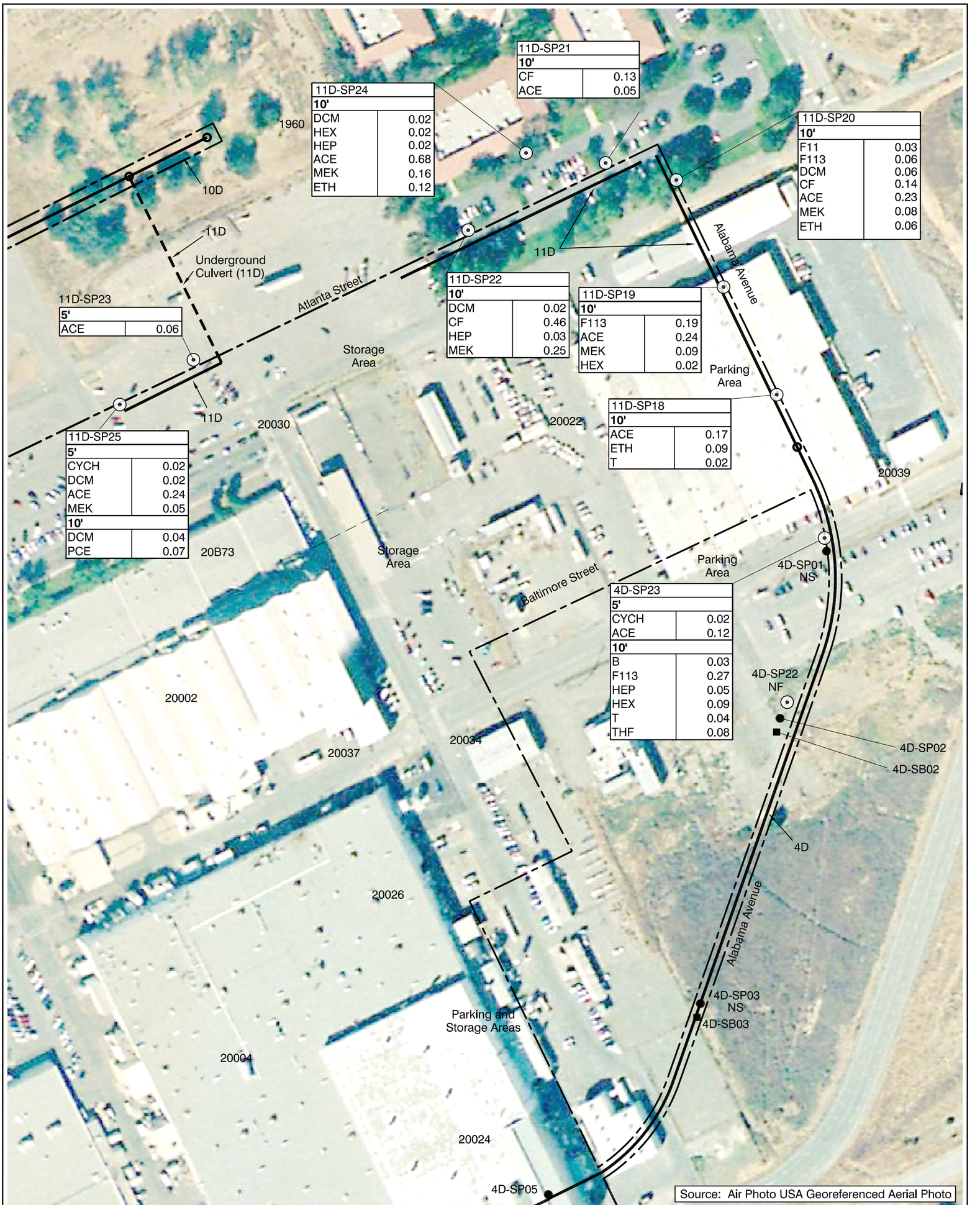
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-2

Location Map
Potential Source Sites 4D and 11D

7/19/06 ah SR10120647



EXPLANATION

- Soil Vapor Sample Location & ID
- Stage 1 RI Soil Vapor Sample Location
- Stage 1 RI Soil Sample Location
- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- NF — No Flow
- NS — Not Sampled
- Start/End of Potential Source Site Ditches

Chemical Abbreviations

ACE	Acetone	DCM	Dichloromethane	HEX	Hexane
B	Benzene	ETH	Ethanol	MEK	Methyl Ethyl Ketone
CF	Chloroform	F11	Freon 11	PCE	Tetrachloroethene
CYCH	Cyclohexane	F113	Freon 113	T	Toluene
		HEP	Heptane	THF	Tetrahydrofuran

Key to Chemical Data

Sample Depth	
5'	
ACE	0.05

Chemical Type — Concentration in Miilligrams per Cubic Meter (mg/m³)

Concentrations Above Screening Level are in Boldface

N

Scale: 1" = 150'

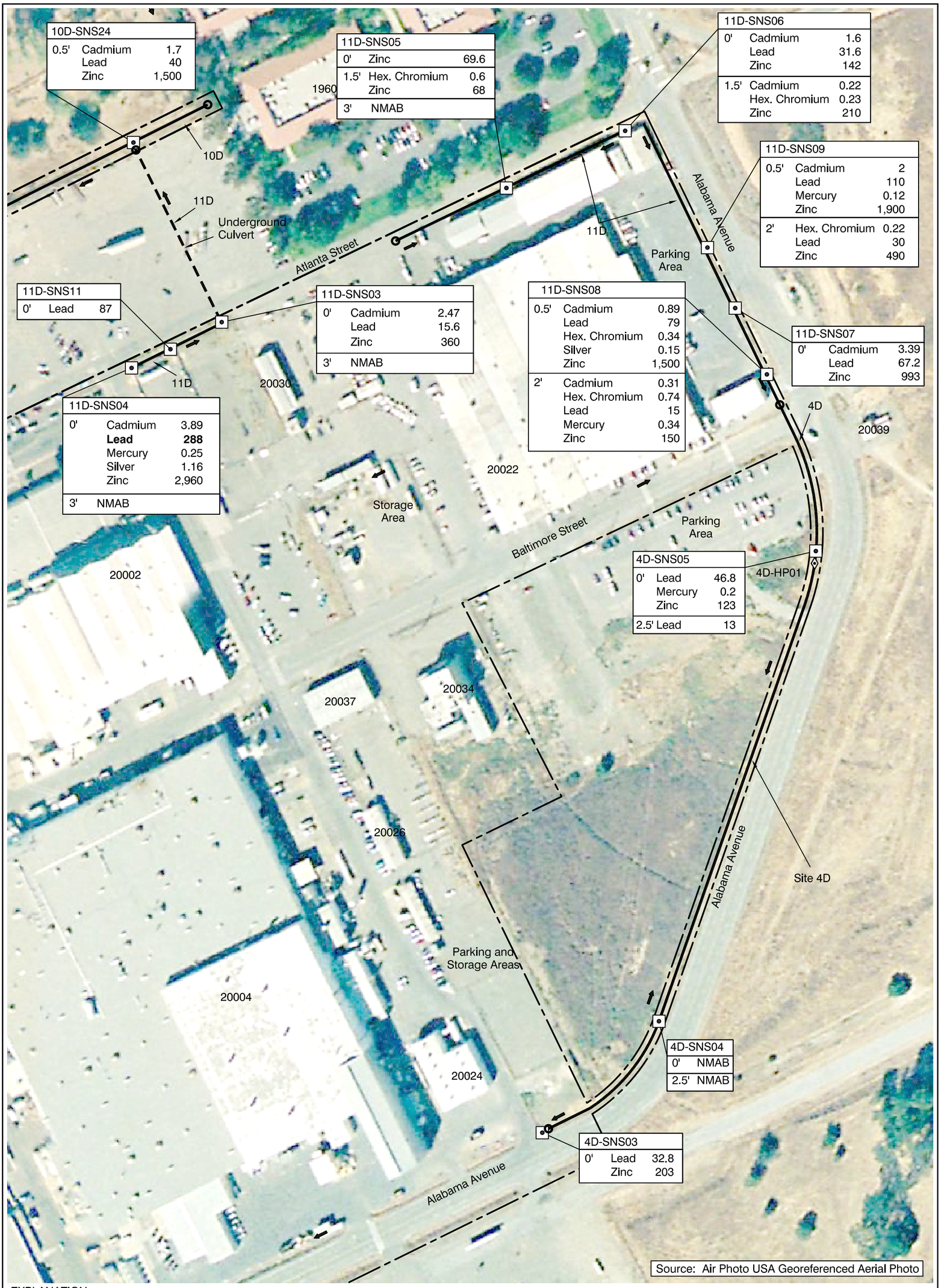
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-3

VOCs Detected In Soil Vapor Samples Potential Source Sites 4D and 11D

10/10/07 bg SR10120648



EXPLANATION

- Location of Surface/Near-Surface Soil Sample
- Location of Screening-Level Groundwater Sample
- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches

Concentrations reported in milligrams per kilogram (mg/kg).
Concentrations above residential PRG are shown in boldface.
NMAB = No Metals Above Background

N

Scale: 1" = 150'

0 75 150

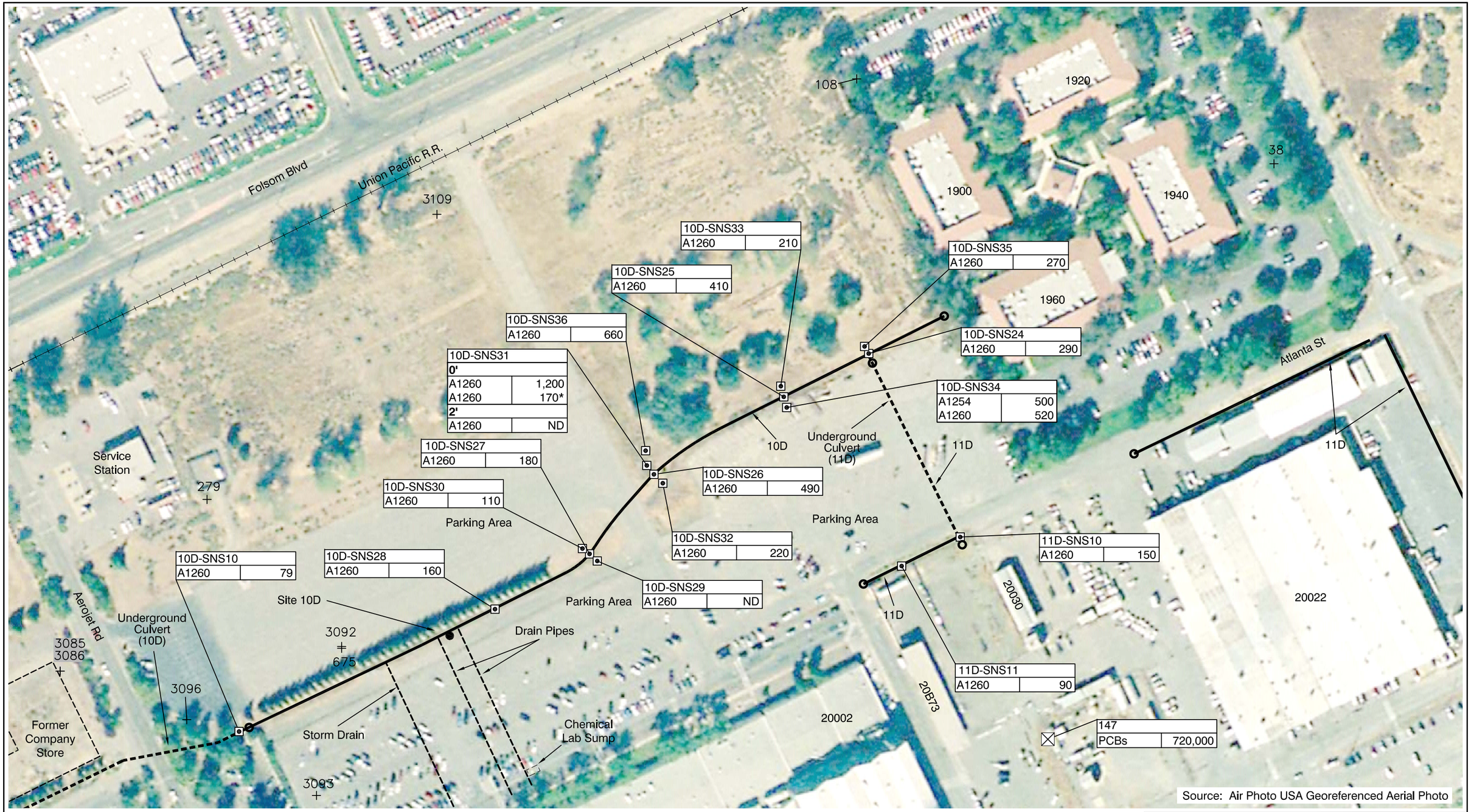
Concentrations Above Screening Levels are in Boldface

AEROJET
Environmental Remediation

FIGURE 4-4

Metals Detected Above Background in Surface Soil Samples Potential Source Sites 4D and 11D

10/10/07 bg SR10120649



EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches
- Recent Sampling Location
- Historical Sampling Location (1986)
- Monitor Well Location
- * Resampled 11/18/04

Key to Chemical Data

Sample ID	10D-SNS28	
Chemical Type	A1260	160

Concentration in Micrograms per Kilogram (µg/Kg)

A1254: Aroclor 1254
A1260: Aroclor 1260

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-5

PCBs Detected in Surface Soil and Bank Samples
Potential Source Sites 10D and 11D

10/10/07 bg SR10120650

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Monitor Well Location
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-6

Location Map
Potential Source Site 10D

10/10/07 bg SR10120651

10D-SP31	
10'	
T	0.02
X	0.06
TMB	0.02
HEX	0.02
ACE	0.21
MEK	0.07
ETH	0.1

10D-SP30	
10'	
HEP	0.02
ACE	0.34
MEK	0.12
ETH	0.31

10D-SP32	
10'	
ACE	0.25
MEK	0.11
ETH	0.10
THF	0.07

10D-SP33	
10'	
DCM	0.03
ACE	0.06
ETH	0.06

10D-SP34	
5'	
ACT	0.05
10'	
F113	0.15
DCM	0.03
THF	0.05

Folsom Blvd
Union Pacific R.R.
1920
1900
1940
1960
10D
11D
Atlanta St
Service Station
Parking Area
Parking Area
Parking Area
Aerojet Rd
Underground Culvert 10D
Drain Pipes
Former Company Store
Storm Drain
Chemical Lab Sump
20030
20022
20002
20B73
Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- Soil Vapor Sample Location & ID
- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches

Key to Chemical Data

Sample Depth	
5'	
Chemical Type: ACT	0.05

Concentration in Milligrams per Cubic Meter (mg/m^3)
Concentrations Above Screening Level are in Bold.

Chemical Abbreviations

ACE	Acetone	HEX	Hexane
DCM	Dichloromethane	MEK	Methyl Ethyl Ketone
ETH	Ethanol	T	Toluene
F113	Freon 113	THF	Tetrahydrofuran
HEP	Heptane	TMB	Trimethylbenzene
		X	Xylenes

N

Scale: 1" = 150'
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-7

VOCs Detected in Soil Vapor Samples
Potential Source Site 10D

10/10/07 bg SR10120652

SS10	
Cadmium	0.64
Hex. Chromium	0.62
Lead	13
Silver	0.31
Zinc	350

SNS10	
Cadmium	2.5
Lead	110
Mercury	0.57
Silver	8.4
Zinc	710

SNS08	
Cadmium	1.8
Lead	99
Mercury	0.26
Silver	4.1
Zinc	1,000

SNS07	
Cadmium	1.6
Lead	130
Mercury	0.41
Zinc	1,600

SNS06	
Cadmium	1.5
Hex. Chromium	11.7
Lead	33
Mercury	0.14
Zinc	540

SNS28	
Cadmium	2.2
Lead	39
Mercury	0.57
Silver	17
Zinc	770

10D-SNS26	
Cadmium	1.4
Lead	34
Mercury	0.07
Zinc	980

10D-SNS24	
Cadmium	1.7
Lead	40
Zinc	1,500

10D-SNS27	
Cadmium	1.7
Lead	51
Mercury	0.18
Zinc	1,100

SNS11	
Hex. Chromium	0.86
Lead	35
Mercury	0.16
Zinc	190

10D-SNS04	
Lead	28.2
Zinc	634

10D-SNS25	
Cadmium	1.7
Lead	33
Mercury	0.08
Zinc	1,000

SNS05	
Cadmium	3.1
Hex. Chromium	0.89
Lead	40
Mercury	1.9
Silver	24
Zinc	370

SB02		
2.5'	Cadmium	4.58
	Mercury	0.84
	Silver	1.63
	Zinc	78.4
5'	Cadmium	0.83
	Mercury	1.23
	Silver	0.7
7.5'	Mercury	0.05

AH01		
1'	Mercury	0.16
5'	Mercury	0.96
10'	NMAB	

SNS09	
Lead	13
Zinc	200

1920
1900
1940
1960
20030
20B73
20002
11D
Parking Area
Union Pacific R.R.
Folsom Blvd
Aerojet Rd
10D-SNS03
10D-SNS02
Bridge
10D-SNS01
Culvert
SNS16
FCS
Storm Drain
Drain Pipes

Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Surface Soil Sample Location
- Soil Boring Location
- * Resampled 11/18/04
- NMAB No Metals Above Background

Concentrations Reported in Milligrams per Kilogram (mg/Kg)
Concentrations Above Residential PRG are in Boldface

N

Scale: 1" = 150'

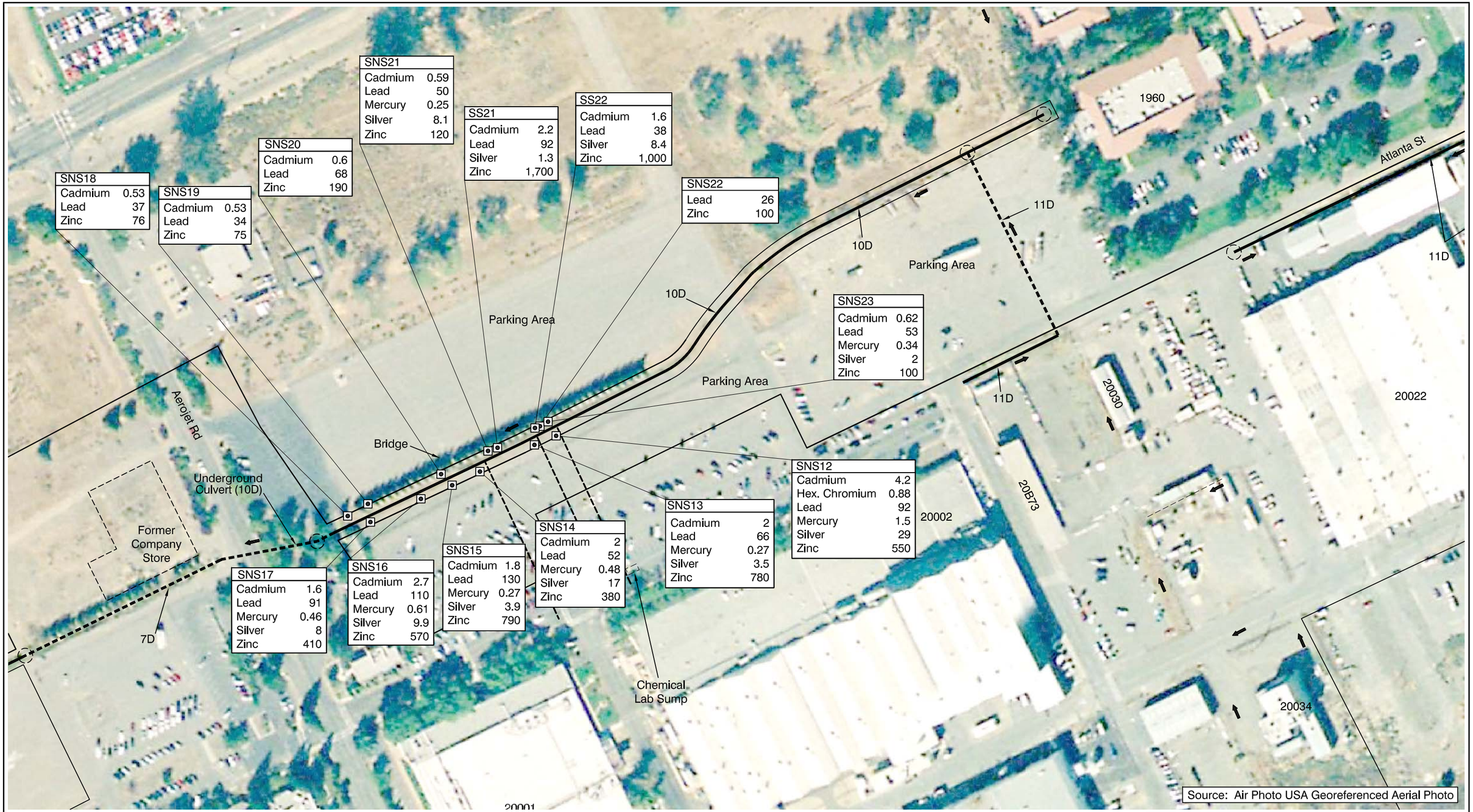
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-8

Metals Detected
Background in Soil Samples
Potential Source Site 10D

3/22/06 ah SR10120653



Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Area Ditches
- Surface Soil Sample Location
- * Resampled 11/18/04

Concentrations Reported in Milligrams per Kilogram (mg/Kg)
Metals Concentrations Above Residential PRG are in Boldface

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-9

Metals Detected Above Background in Bank Soil Samples Potential Source Site 10D

3/22/06 ah SR10120654

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Start/End of Potential Source Area Ditch
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Monitor Well Location
- Fence
- Location of Screening-Level Groundwater Sample
- Soil Vapor Extraction Well Location

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-10

Location Map
Potential Source Sites 5D, 7D,
Former Company Store and GET D

10/3/06 ah SR10120655

7D-SP15	
10'	
F113	0.61
TCA	0.04
TCE	0.17
PCE	**2.1**
HEX	0.02
ACE	0.62
MEK	0.13
ETH	0.09

7D-SP14	
10'	
DCM	0.02
F113	0.12
TCA	0.03
TCE	0.07
PCE	**0.79**
ACE	0.21
MEK	0.08
ETH	0.09

7D-SP13	
10'	
F113	2.6
CF	0.17
TCA	0.03
TCE	0.29
B	0.03
T	0.03
HEX	0.04
HEP	0.03
ACE	0.15
ETH	0.09
PCE	**1.7**

7D-SP12	
10'	
F113	14
CF	0.06
TCE	0.22
PCE	**1.1**
ACE	0.78
MEK	0.18
ETH	0.12

Folsom Blvd
Union Pacific RR
Former Plant Entrance
Aerojet Road
Former Location of Company Store
10D
7D-SP15
7D-SP15
7D-SP15
Parking Area
7D
5D
Low Area
GET D Treatment Facility
GETD-SV02
GETD-SV03
GETD-SV04
7D
Parking Area
20001
20006
20008
20009
Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- Soil Vapor Sample Location
- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Start/End of Source Area Ditch
- Surface Water Flow Direction (2002)
- Superfund Site Boundary

Key to Chemical Data

Sample Depth	
5'	
ACT	0.05

Chemical Type

Concentration in Milligrams per Cubic Meter (mg/m³)

Concentrations Above Screening Level are In Bold

Chemical Abbreviations

ACE	Acetone	HEX	Hexane
B	Benzene	MEK	Methyl Ethyl Ketone
CF	Chloroform	PCE	Tetrachloroethene
ETH	Ethanol	T	Toluene
F113	Freon 113	TCA	Trichloroethane
HEP	Heptane	TCE	Trichloroethylene

N

Scale: 1" = 150'

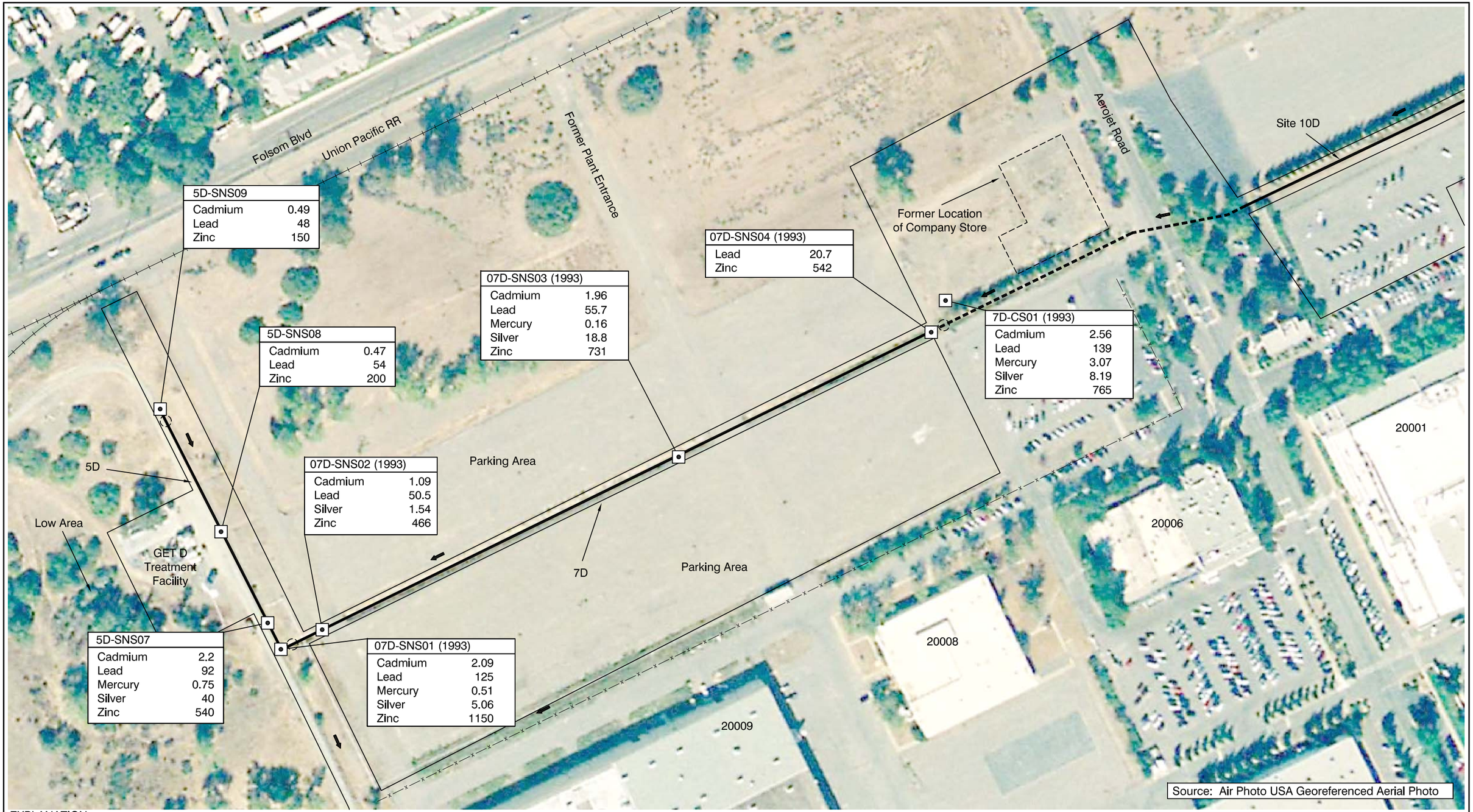
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-11

VOCs Detected in Soil Vapor Samples
Potential Source Sites 5D, 7D and GET D

10/10/07 bg SR10120656



EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Start/End of Potential Source Area Ditches
- Surface/Near Surface Soil Sample Location

Concentrations Reported in Milligrams per Kilogram (mg/Kg)
Concentrations Above Residential PRG are in Boldface

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-12

Metals Detected Above Background in Soil Samples Potential Source Sites 5D and 7D

11/9/07 ah SR10120657

EXPLANATION

- Ditch Included in PGOU Soils RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Start/end of Potential Source Area Ditch
- Monitor Well Location

Concentrations Reported in Micrograms per Liter (μg/L)

Chemical Abbreviations

CF	Chloroform
DCE	Dichloroethene
F113	Freon 113
PCE	Tetrachloroethene
TCE	Trichloroethylene

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-13

Constituents Detected In Perched Groundwater Samples Sites 5D, 7D and Former Company Store

10/10/07 bg SR10120658

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence

10 — Soil Vapor Concentration Isopleth in Milligrams per Cubic Meter (mg/m³)

10D-SP26 — Soil Vapor Sample Location

0.60 — Total VOC Concentration (mg/m³)(ND = Not Detected)

N

Scale: 1" = 150'

0 75 150

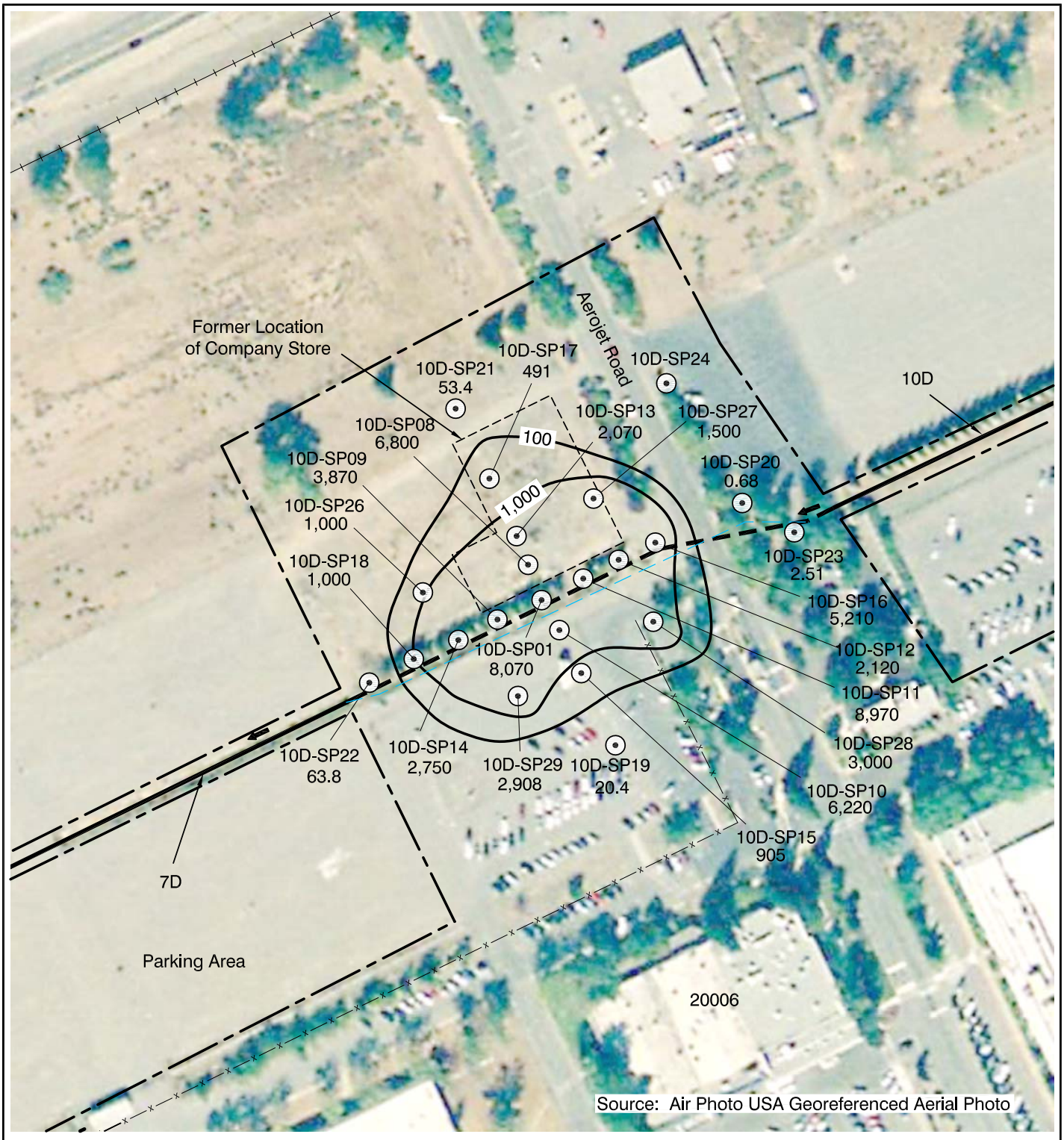
AEROJET
Environmental Remediation

FIGURE 4-15

Total VOC Concentrations (Less Freon 113) in 1992 Intermediate Soil Vapor Samples Former Company Store

FIGURE 4-15 8/19/08 Herron, Al

SR10120660



EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence

100 — Freon 113 Concentration Isopleth in Milligrams per Cubic Meter (mg/m³)

10D-SP26 — Soil Vapor Sample Location

1,000 — Freon 113 Concentration (mg/m³)

N

Scale: 1" = 150'

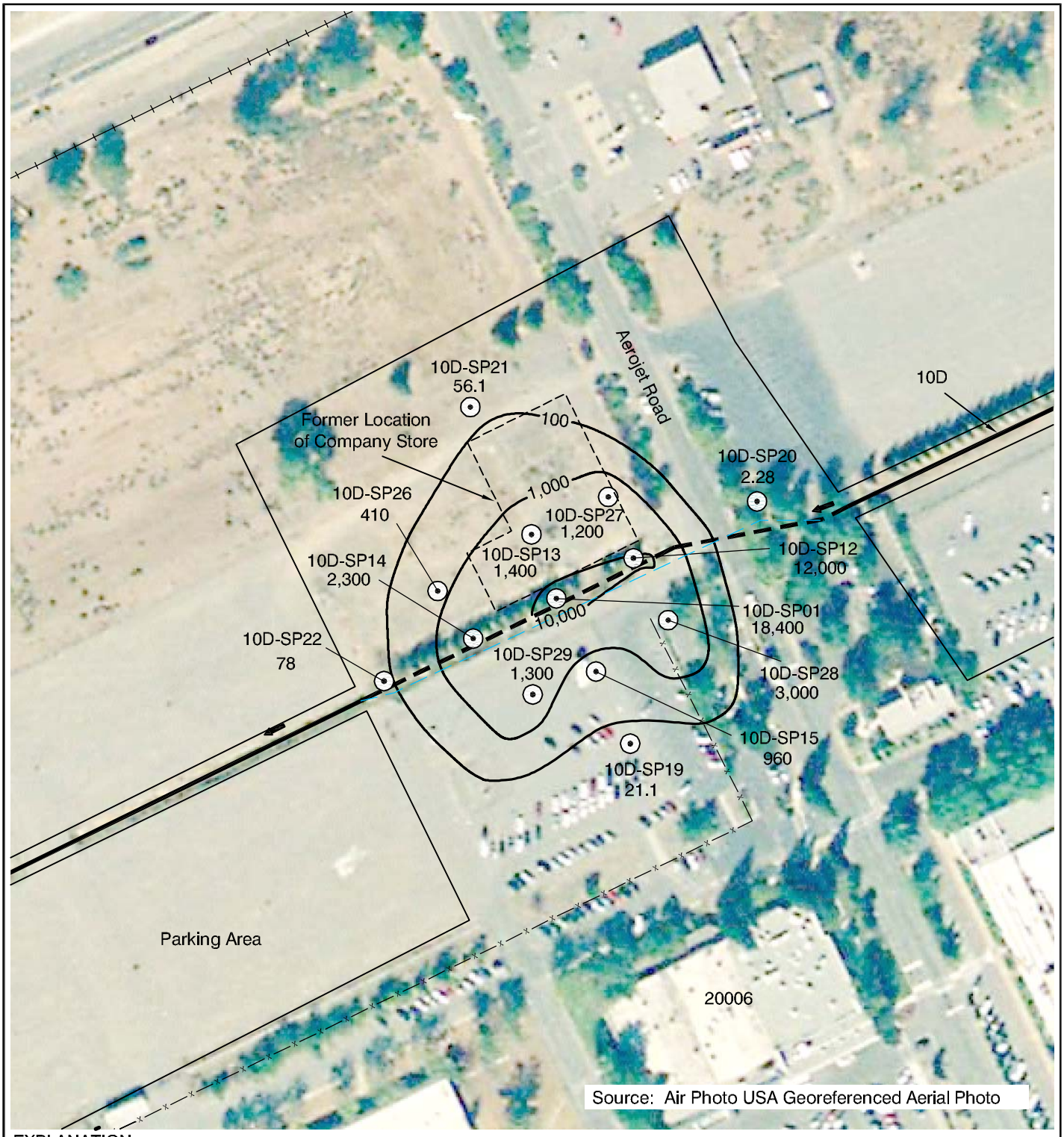
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-16

Freon 113 Concentrations In 1992
Shallow Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120661



EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- 100 — Freon 113 Concentration Isopleth in Milligrams per Cubic Meter (mg/m³)
- 10D-SP26 — Soil Vapor Sample Location
- 410 — Freon 113 Concentration (mg/m³)

N

Scale: 1" = 150'

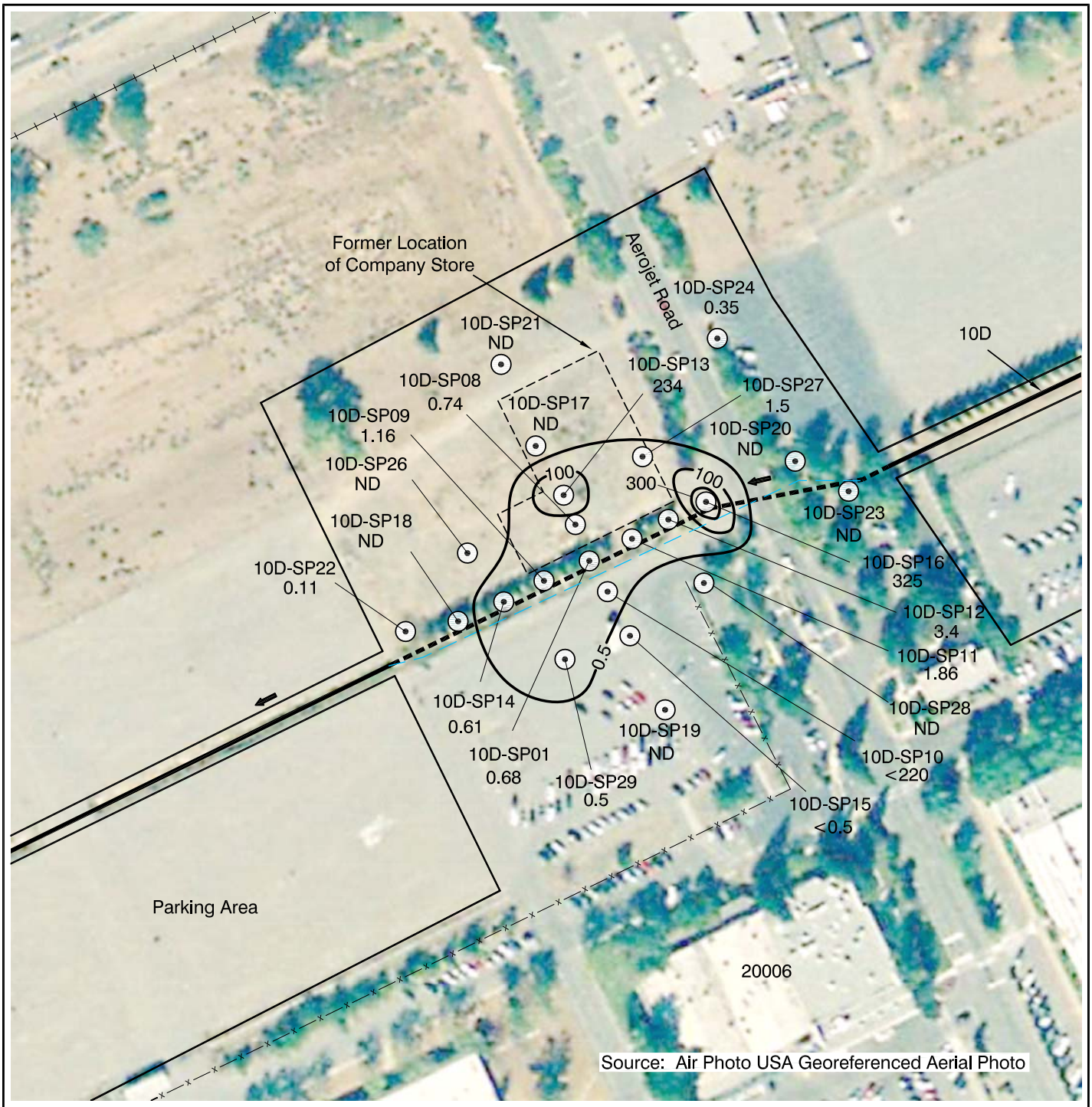
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-17

Freon 113 Concentrations in 1992 Intermediate Soil Vapor Samples Former Company Store

3/22/06 ah SR10120662



EXPLANATION

- Ditch Included in PGOU Soils RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- 100 — TCE Concentration Isopleth (mg/m³)
- 10D-SP26 — Soil Vapor Sample Location
- 2.0 — TCE Concentration in Milligrams per Cubic Meter (mg/m³)
- ND — Not Detected

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-18

TCE Concentrations In 1992
Shallow Soil Vapor Samples
Former Company Store

3/23/06 ah SR10120663

EXPLANATION

- Ditch Included in PGOU Soils RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- 0.5 — TCE Concentration Isopleth in Milligrams per Cubic Meter (mg/m³)
- 10D-SP12 — Soil Vapor Sample Location
- 3.36 — TCE Concentration (mg/m³)
- ND — Not Detected

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-19

TCE Concentrations In
1992 Intermediate Soil Vapor Samples
Former Company Store

3/23/06 ah SR10120664

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- FCS-SP16 Soil Vapor Sample Location and ID
- FCS-FLUX-1 Flux Chamber Sample Location and ID
- Monitor Well Location

N

Scale: 1" = 150'

0 75 150

Chemical Abbreviations

PCE Tetrachloroethene

Concentrations in Milligrams per Cubic Meter (mg/m^3)
ND = Not Detected Above Screening Levels
VOC= Volatile Organic Compounds

AEROJET
Environmental Remediation

FIGURE 4-20

VOC Concentrations Above Screening Levels
2003 Very Shallow Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120665

EXPLANATION

- Ditch Included in PGOU Soils RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Monitor Well Location
- FCS-SP17 Soil Vapor Sample Location and ID

Chemical Abbreviations

PCE	Tetrachloroethene
CF	Chloroform

Concentrations in Milligrams per Cubic Meter (mg/m^3)
ND = Not Detected Above Screeing Levels

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-21

VOC Concentrations Above Screening Levels
2003 Shallow Soil Vapor Samples
Former Company Store

3/26/03 ah SR10120666

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Monitor Well Location
- FCS-SP17 Soil Vapor Sample Location and ID

Chemical Abbreviations

PCE Tetrachloroethene
ACT Alpha-Chlorotoluene
ND = Not Detected Above Screening Levels
NC = Not Collected
VOC=Volatile Organic Compounds
Milligrams per Cubic Meter (mg/m^3)

N

Scale: 1" = 150'

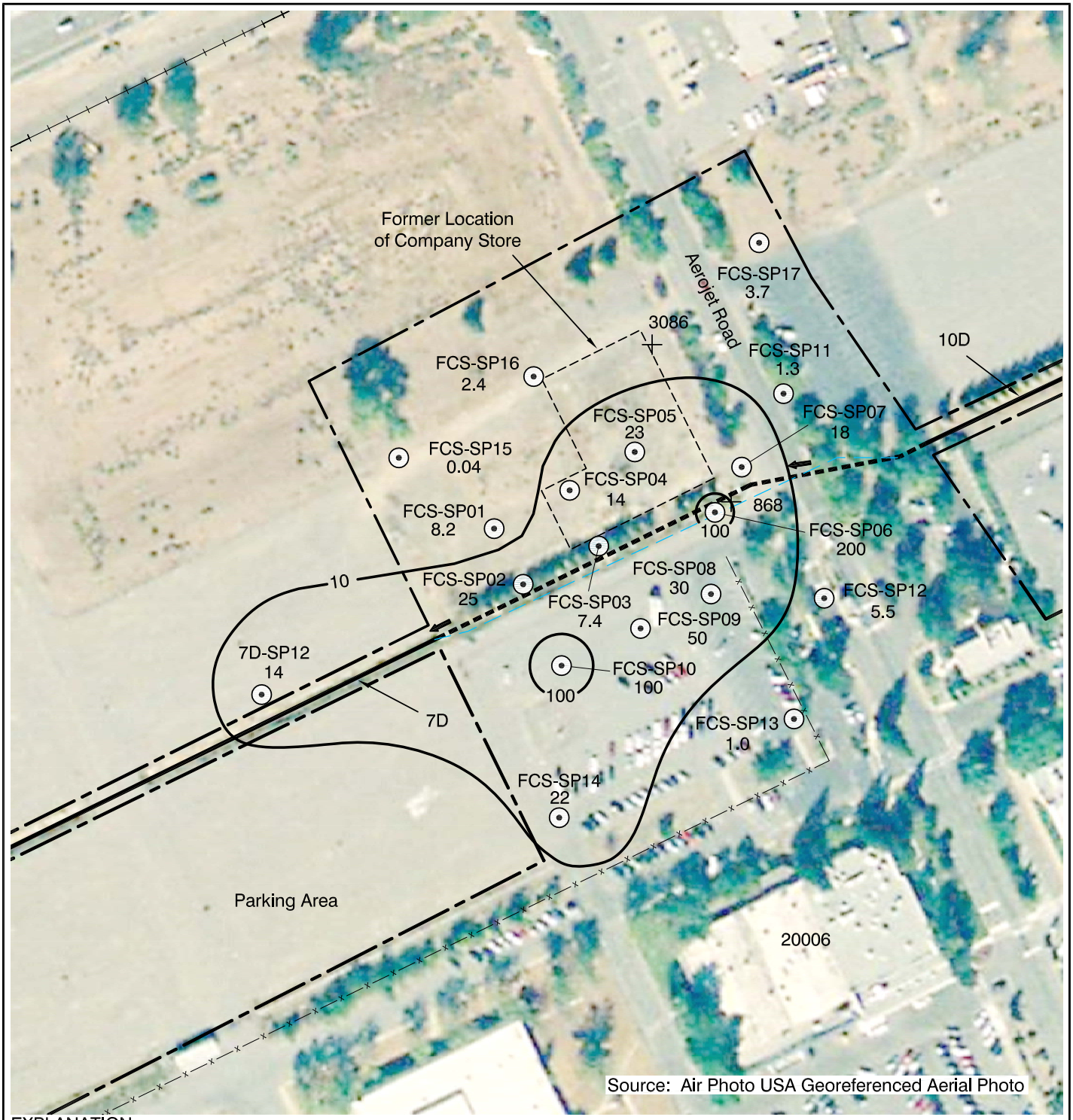
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-22

VOC Concentrations Above Screening Levels
2003 Intermediate Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120667



EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- 10 — Freon 113 Concentration Isopleth in Milligrams per Cubic Meter (mg/m^3)
- FCS-SP17 — Soil Vapor Sample Location and ID
- 25 — Freon 113 Concentration (mg/m^3)

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-23

Freon 113 Concentrations In 2003
Shallow Soil Vapor Samples
Former Company Store

3/23/06 ah SR10120668

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- 10 — Freon 113 Concentration Isopleth in Milligrams per Cubic Meter (mg/m³)
- FCS-SP17 — Soil Vapor Sample Location and ID
- 1,000 — Freon 113 Concentration (mg/m³)

NS = Not Sampled
NC = Not Collected
ND = Not Detected

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-24

Freon 113 Concentrations In 2003
Intermediate Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120669

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Monitor Well Location

FCS-SP17 — Soil Vapor Sample Location and ID

0.19 — TCE Concentration in Milligrams per Cubic Meter (mg/m^3)

ND — Not Detected

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-25

Trichloroethene (TCE) Concentrations In 2003
Shallow Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120670

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Monitor Well Location

FCS-SP17 — Soil Vapor Sample Location and ID

0.2 — TCE Concentration in Milligrams per Cubic Meter (mg/m^3)

ND — Not Detected

N

Scale: 1" = 150'

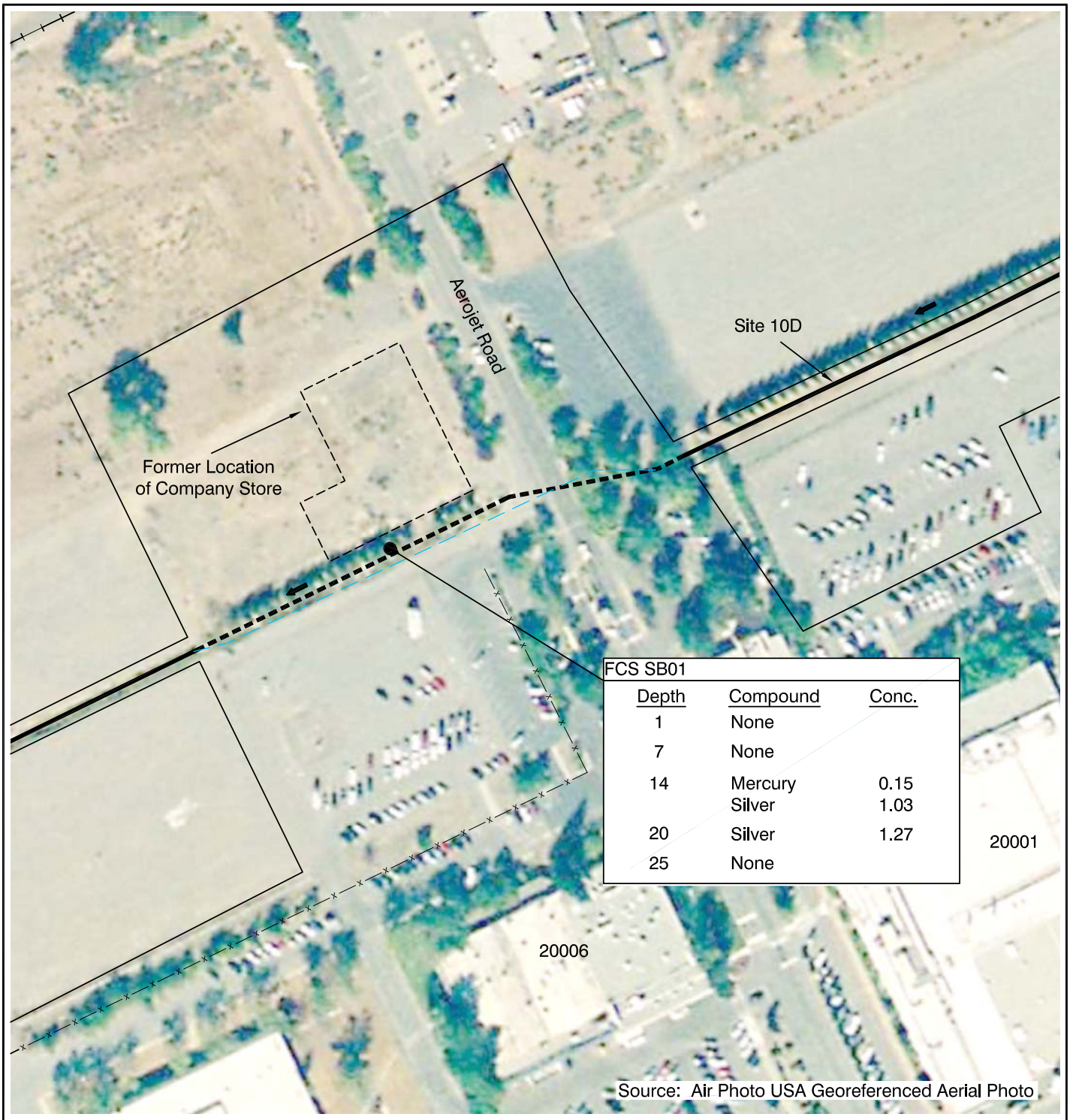
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-26

Trichloroethene (TCE) Concentrations In 2003
Intermediate Soil Vapor Samples
Former Company Store

10/10/07 bg SR10120671



EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Soil Boring Location

Concentrations Reported in Milligrams per Kilogram (mg/Kg)
Depth in Feet Below Ground Surface
Conc = Concentration

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-27

Metals Detected Above Background in Subsurface Soil Samples Former Company Store

3/27/06 ah SR10120672

EXPLANATION

Superfund Site Boundary

Site Divider

N

Scale: 1" = 150'

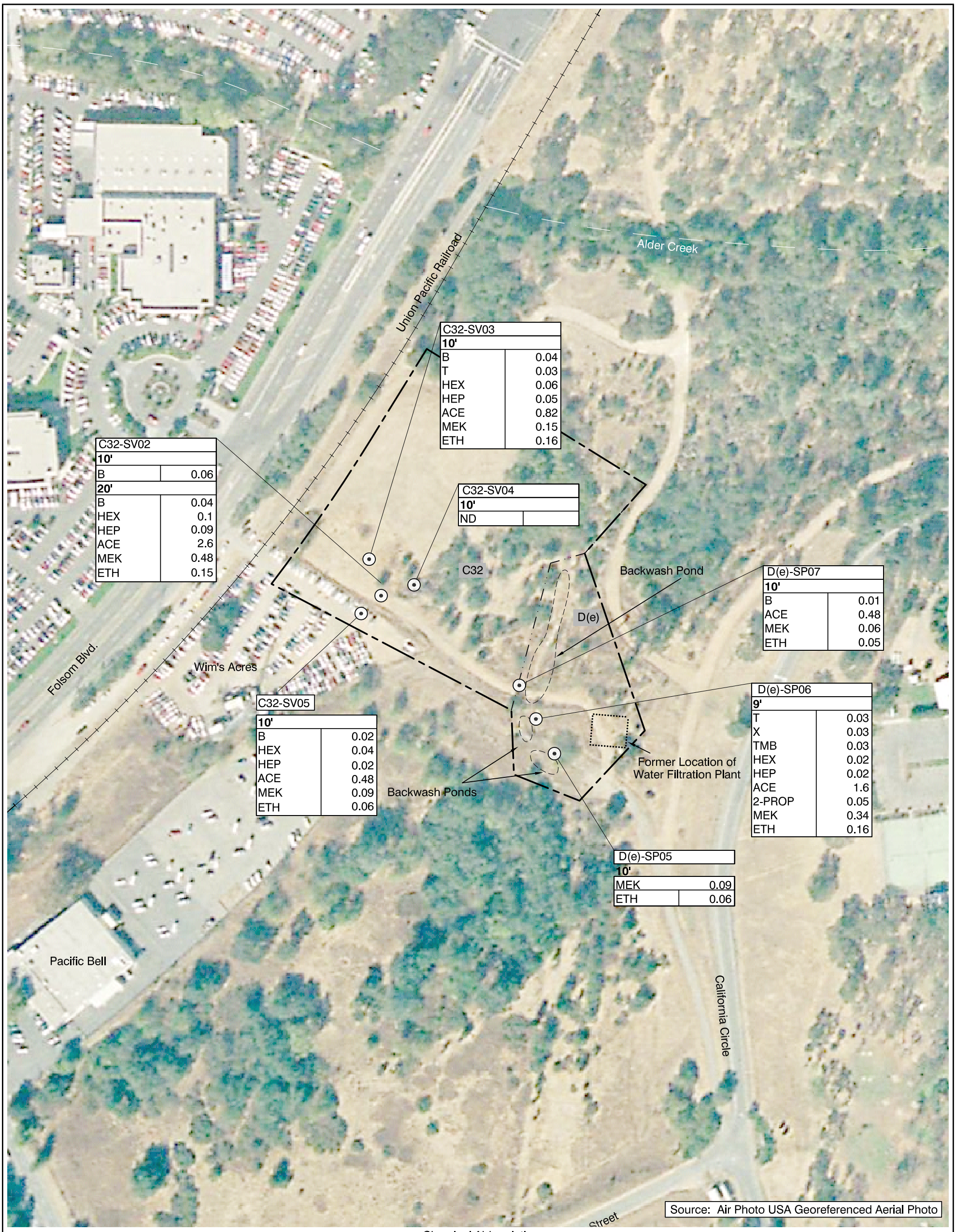
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-28

Location Map
Sites D(e) and C32

7/19/06 ah SR10120673



EXPLANATION

- Soil Vapor Sample Location
- Superfund Site Boundary
- Site Divider

Key to Chemical Data

Sample Depth

5'	
Chemical Type — ACE	0.05

Concentration in Milligrams per Cubic Meter (mg/m^3)

Concentrations Above Screening Levels are in Bold

Chemical Abbreviations

ACE	Acetone	MEK	Methyl Ethyl Ketone	VOC	Volatile Organic Compounds
ETH	Ethanol	2-PROP	2-Propanol		
F113	Freon 113	T	Toluene		
HEP	Heptane	TMB	Trimethyl Benzene		
HEX	Hexane	X	Xylenes		

N

Scale: 1" = 150'

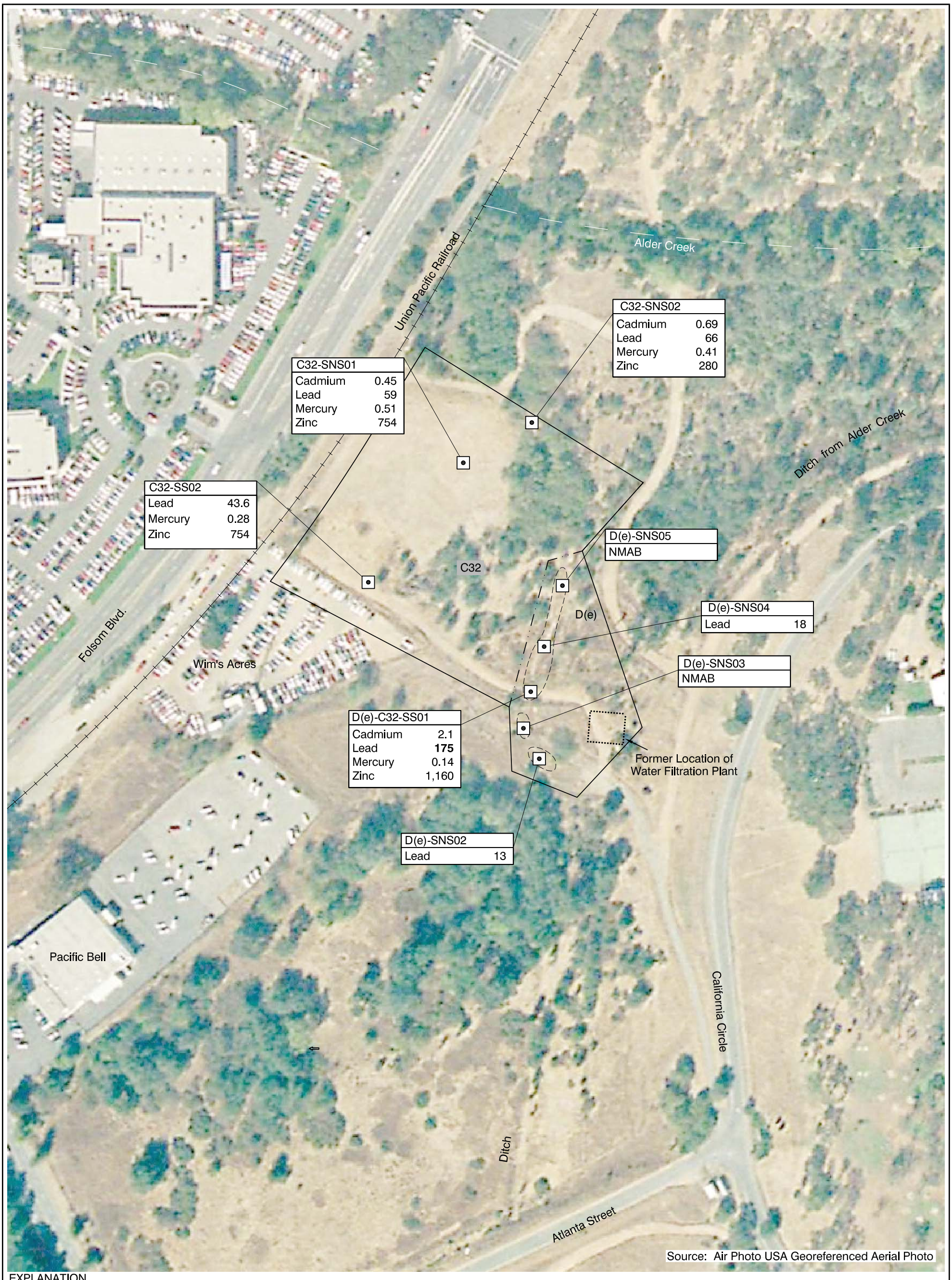
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-29

VOCs Detected In Soil Vapor Samples
Site D(e) and C32

10/10/07 bg SR10120674



EXPLANATION

- C32-SS02 Soil Sample Location
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Site Divider

Metal Concentrations Reported in milligrams per kilogram (mg/kg)

Only Metals Detected Above 90% UCL for Mean Background Levels are Listed

NMAB: No Metals Above Background Levels

Concentrations Above Residential PRG are in Boldface

N

Scale: 1" = 150'

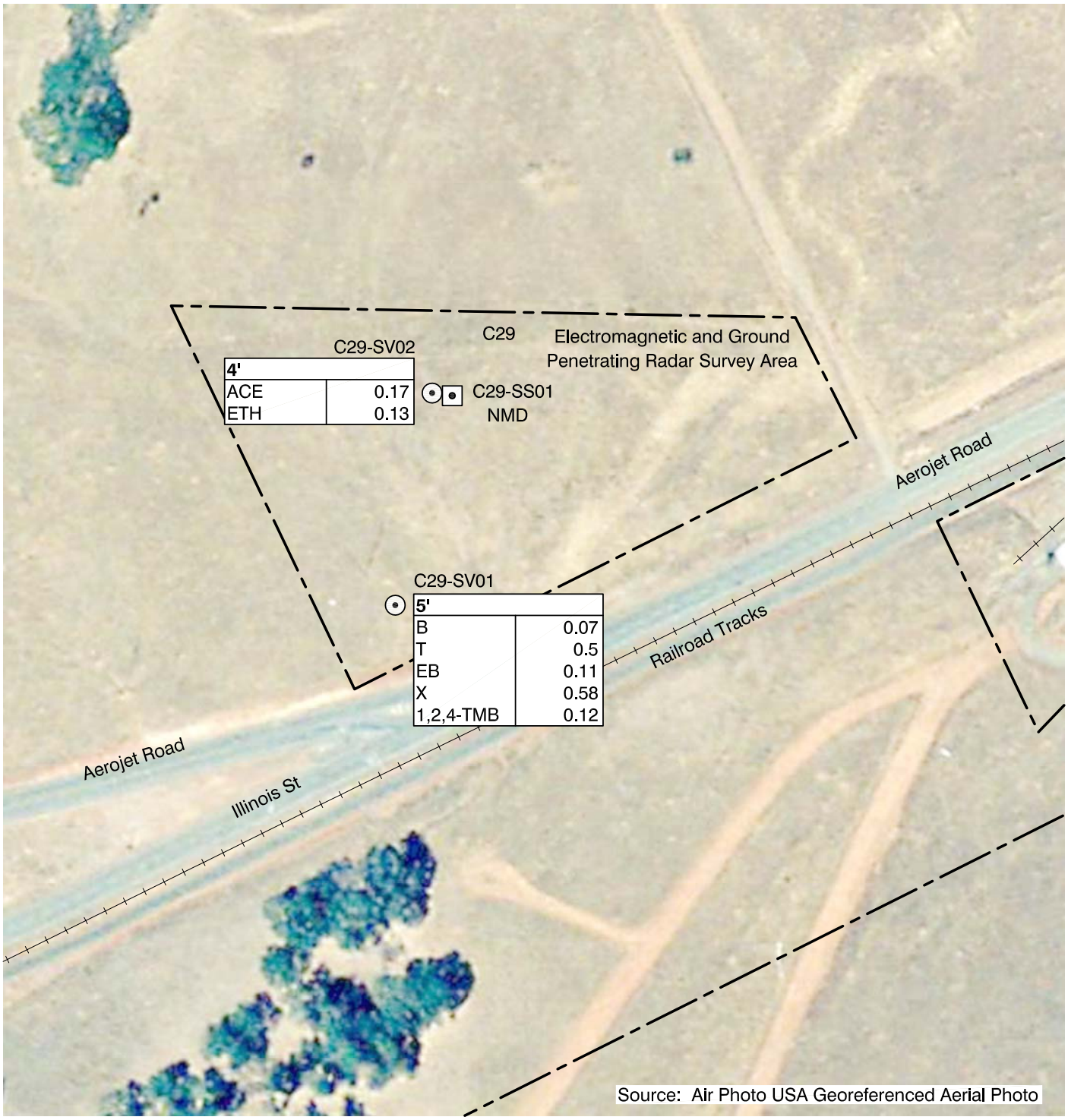
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-30

Metals Detected Above Background Site D(e) and C32

3/27/06 ah SR10120675



EXPLANATION

C29-SS01 — Soil Sample Location

C29-SV01 — Soil Vapor Sample Location

Superfund Site Boundary

Chemical Abbreviations

ACE	Acetone	T	Toluene
B	Benzene	TMB	Trimethylbenzene
EB	Ethylbenzene	X	Xylenes
ETH	Ethanol		

VOC Concentrations in Milligrams per Cubic Meter (mg/m^3)
NMD = No Metals Detected Above Background

N

Scale: 1" = 150'

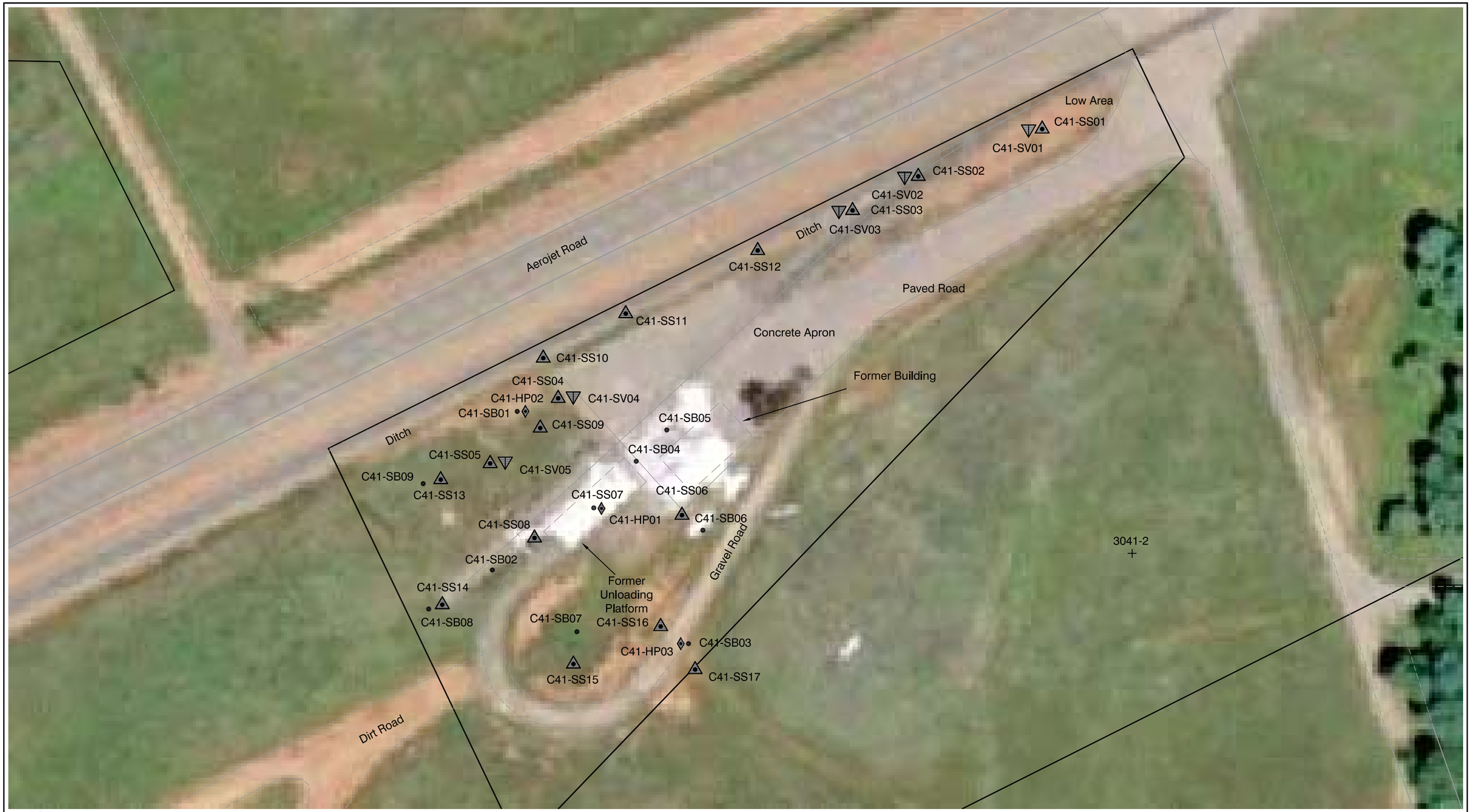
0 75 150

AEROJET
Environmental Remediation

FIGURE 4-31

Sampling Locations and Results
Site C29

3/27/06 ah SR10120676



LEGEND

- Soil Sampling Location
- Soil Boring Location
- Soil Vapor Sample Location
- Hydropunch Location
- Monitor Well
- Site C41 Boundary
- Railroad Track

N

Scale: 1" = 50'

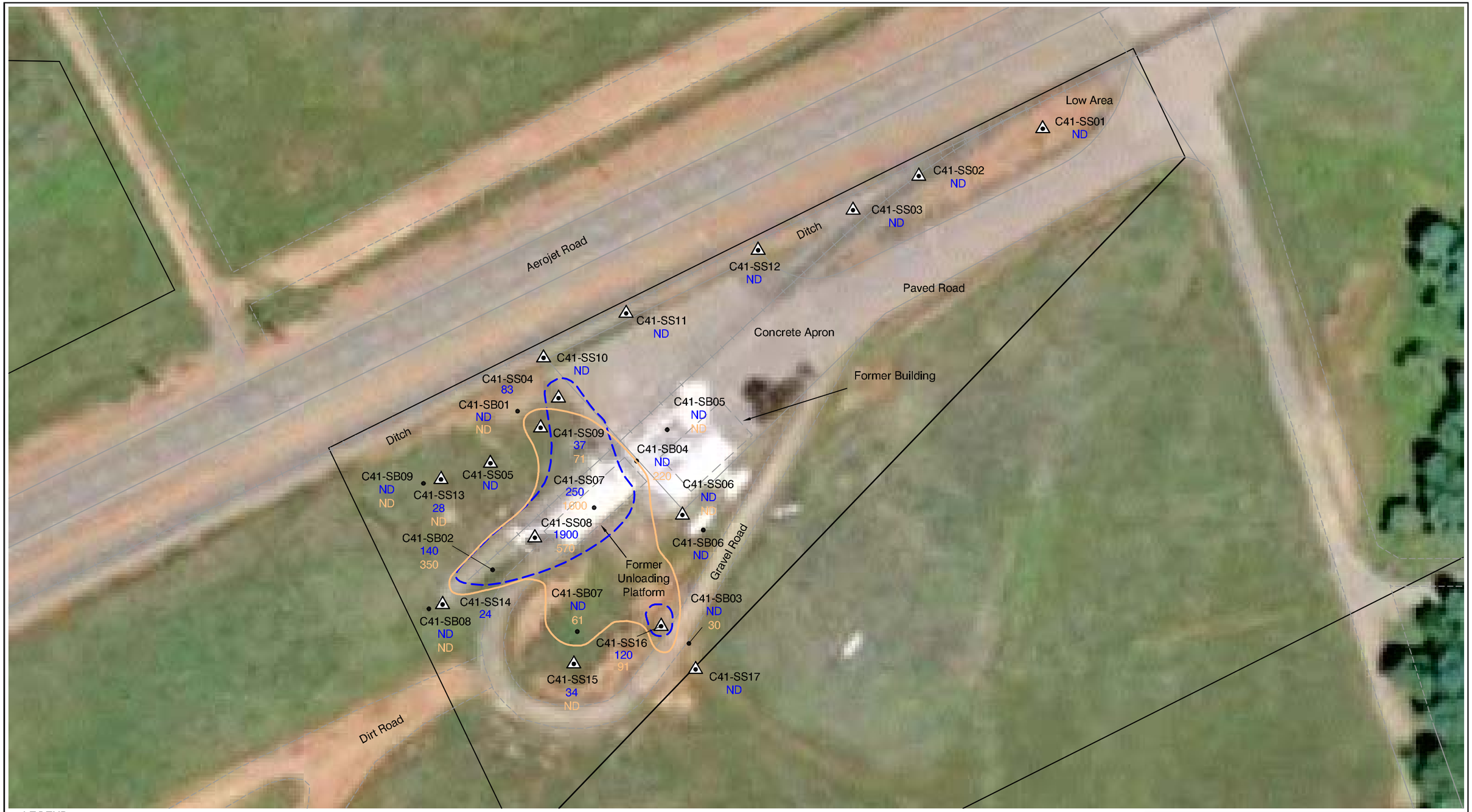
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-32

Sample Locations
Site C41

10/31/06 ah SR10120872



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 0 to 2 ft Below Ground Surface
- 570 Perchlorate Concentration at 5 ft Below Ground Surface
- ND Not Detected
- Extent of Perchlorate >60 µg/Kg at 0 to 2 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 5 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms/kilogram

N

Scale: 1" = 50'

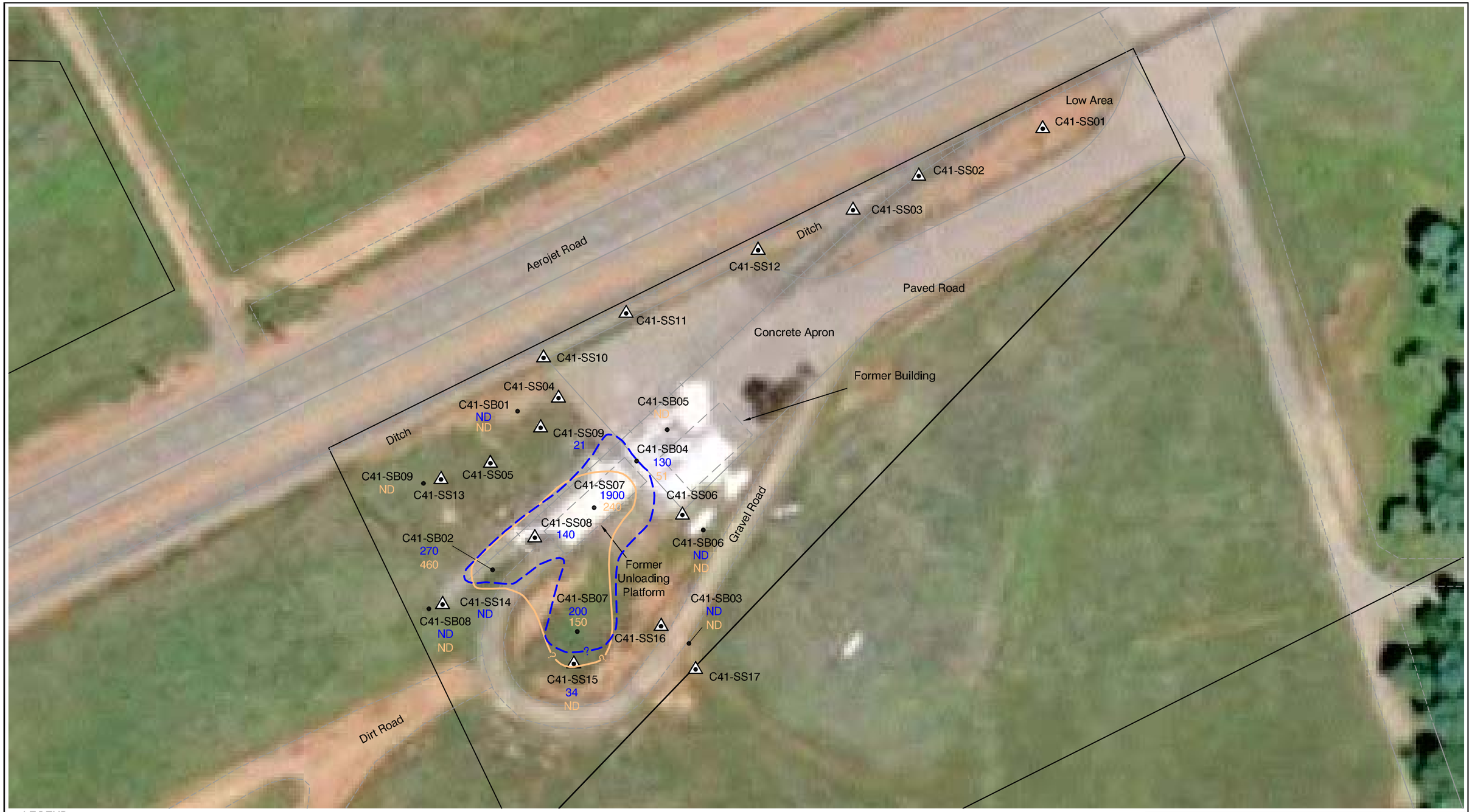
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-33

Perchlorate in Soil
0 to 5 Feet BGS
Site C41

10/30/06 ah SR10121549



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 10 ft Below Ground Surface
- 570 Perchlorate Concentration at 15 ft Below Ground Surface
- ND Not Detected
- Extent of Perchlorate >60 µg/Kg at 10 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 15 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms per kilogram

N

Scale: 1" = 50'

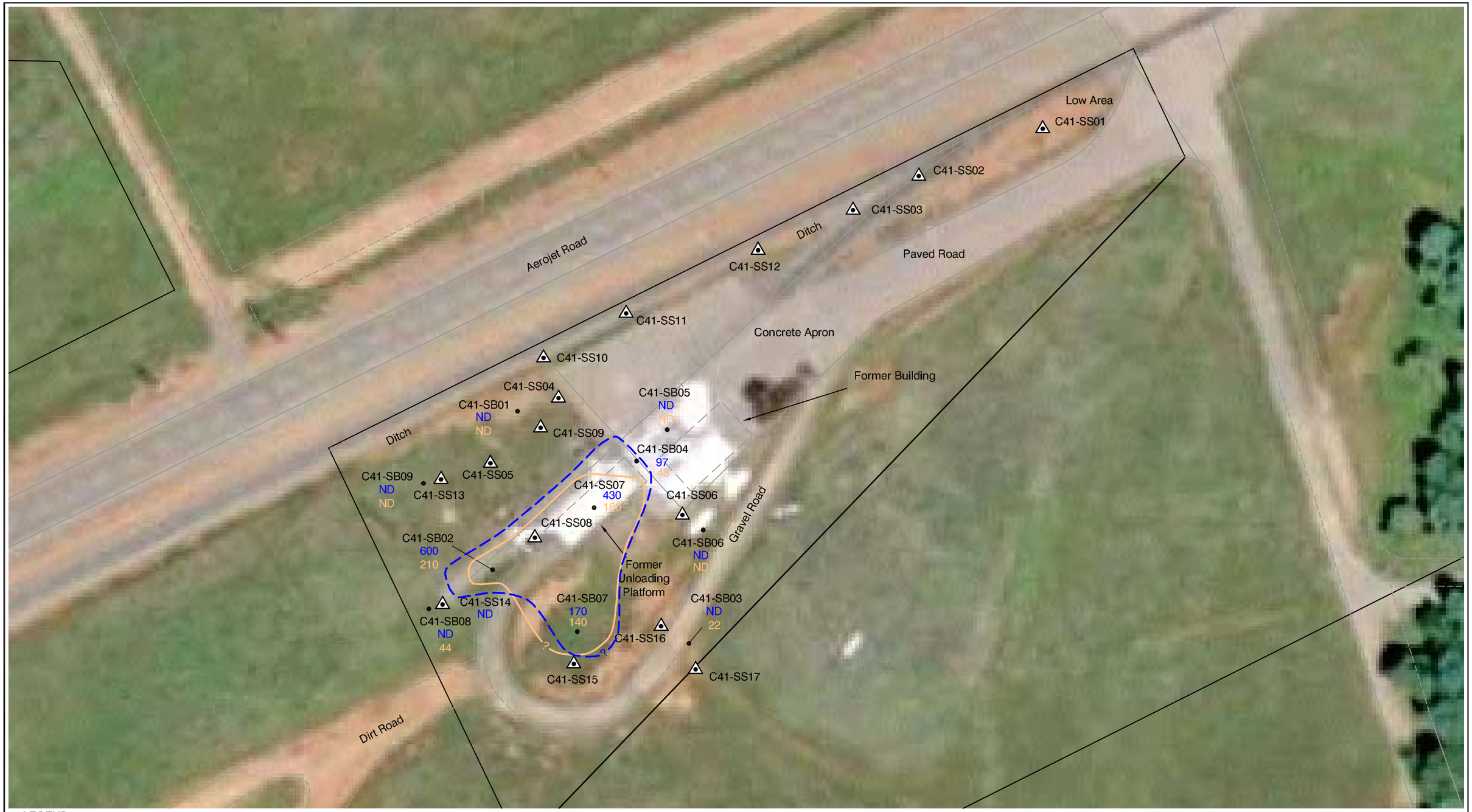
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-34

Perchlorate in Soil
10 and 15 Feet BGS
Site C41

11/13/06 ah SR10121550



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 20 ft Below Ground Surface
- 570 Perchlorate Concentration at 25 ft Below Ground Surface
- ND Not Detected
- Extent of Perchlorate >60 µg/Kg at 20 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 25 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms per kilogram

N

Scale: 1" = 50'

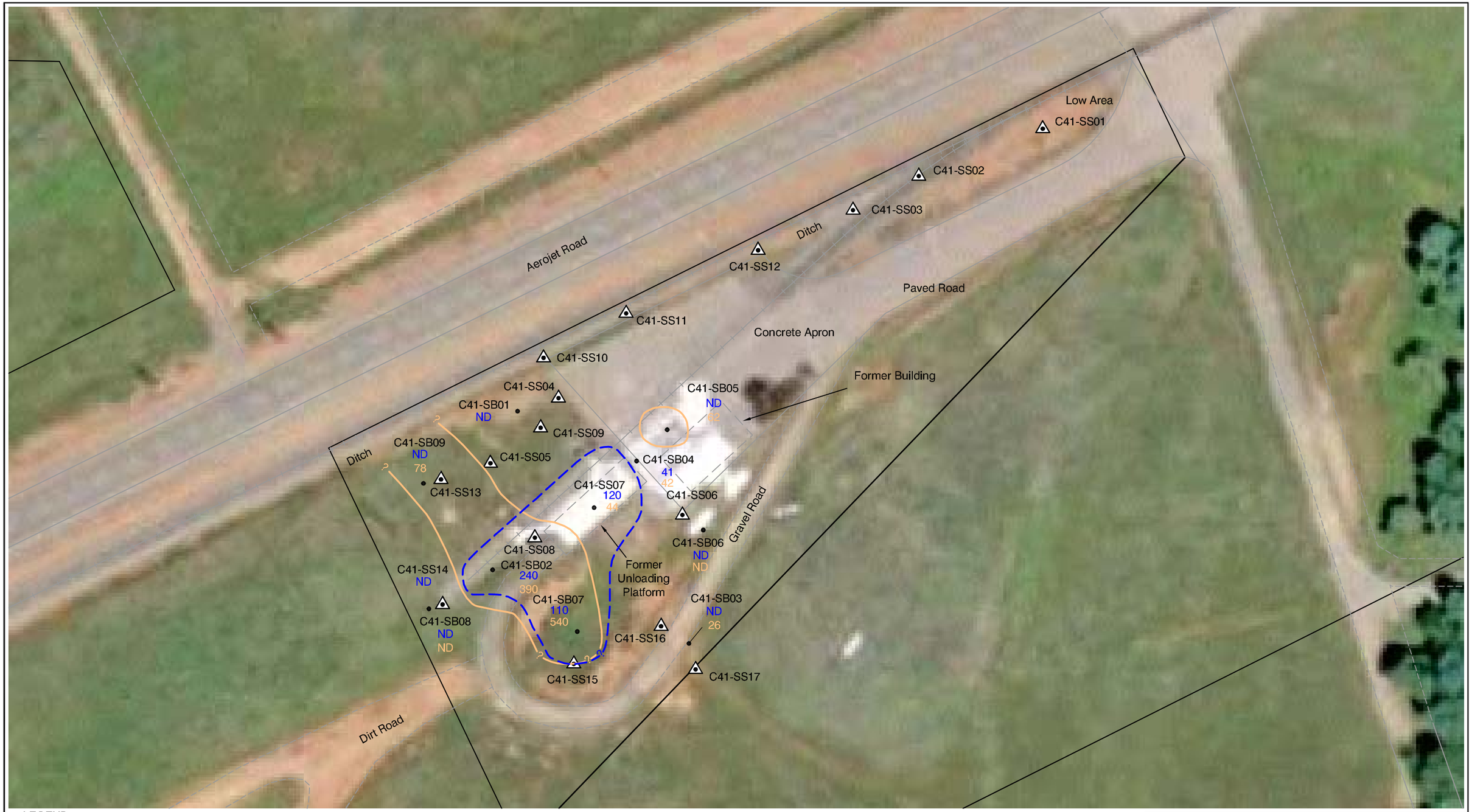
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-35

Perchlorate in Soil
20 and 25 Feet BGS
Site C41

11/13/06 ah SR10121551



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 30 ft Below Ground Surface
- 570 Perchlorate Concentration at 35 ft Below Ground Surface
- ND Not Detected
- Extent of Perchlorate >60 µg/Kg at 30 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 35 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms per kilogram

N

Scale: 1" = 50'

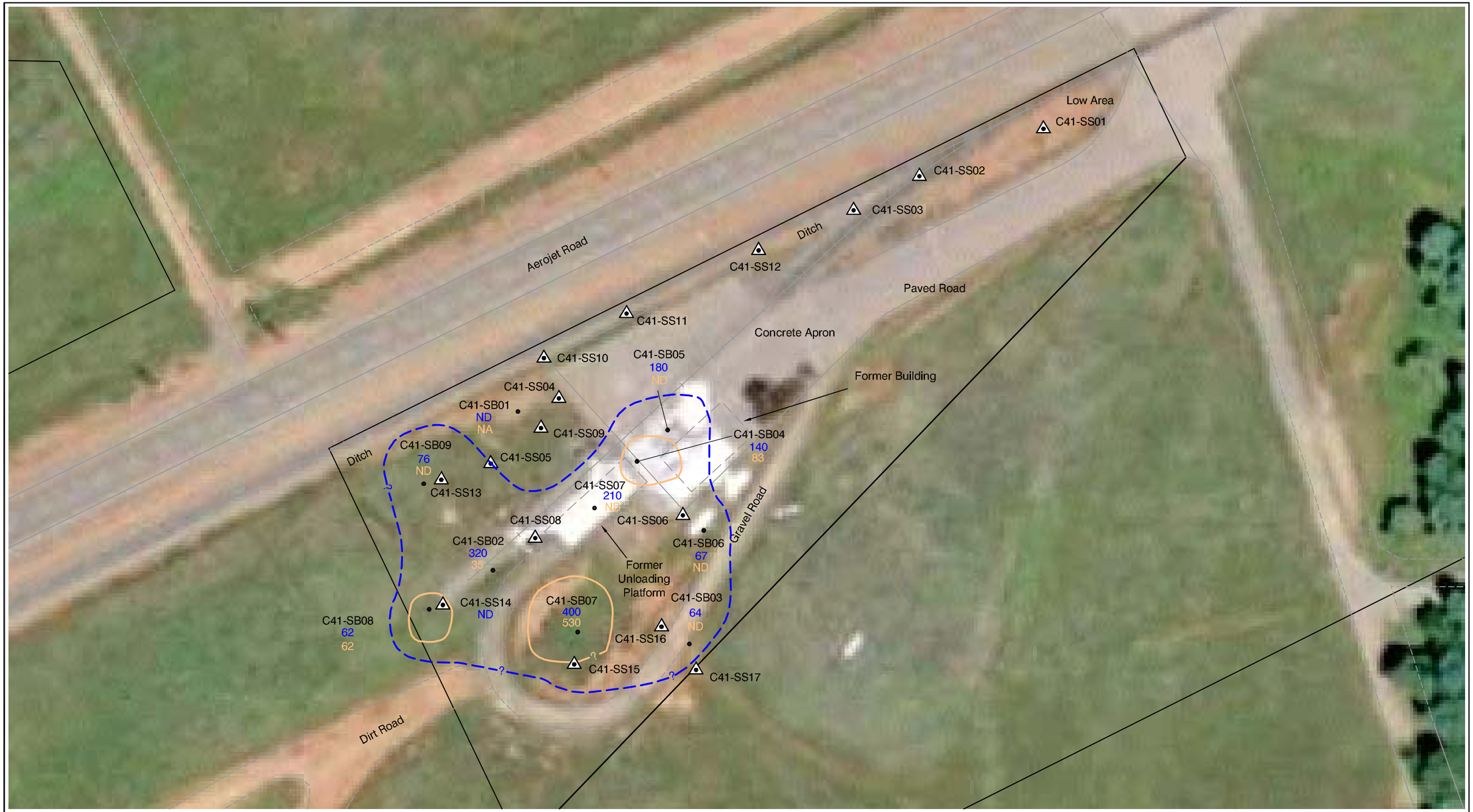
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-36

Perchlorate in Soil
30 and 35 Feet BGS
Site C41

11/13/06 ah SR10121552



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 40 ft Below Ground Surface
- 570 Perchlorate Concentration at 45 ft Below Ground Surface
- ND Not Detected
- NA Not Analyzed

- Extent of Perchlorate >60 µg/Kg at 40 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 45 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms per kilogram

N

Scale: 1" = 50'

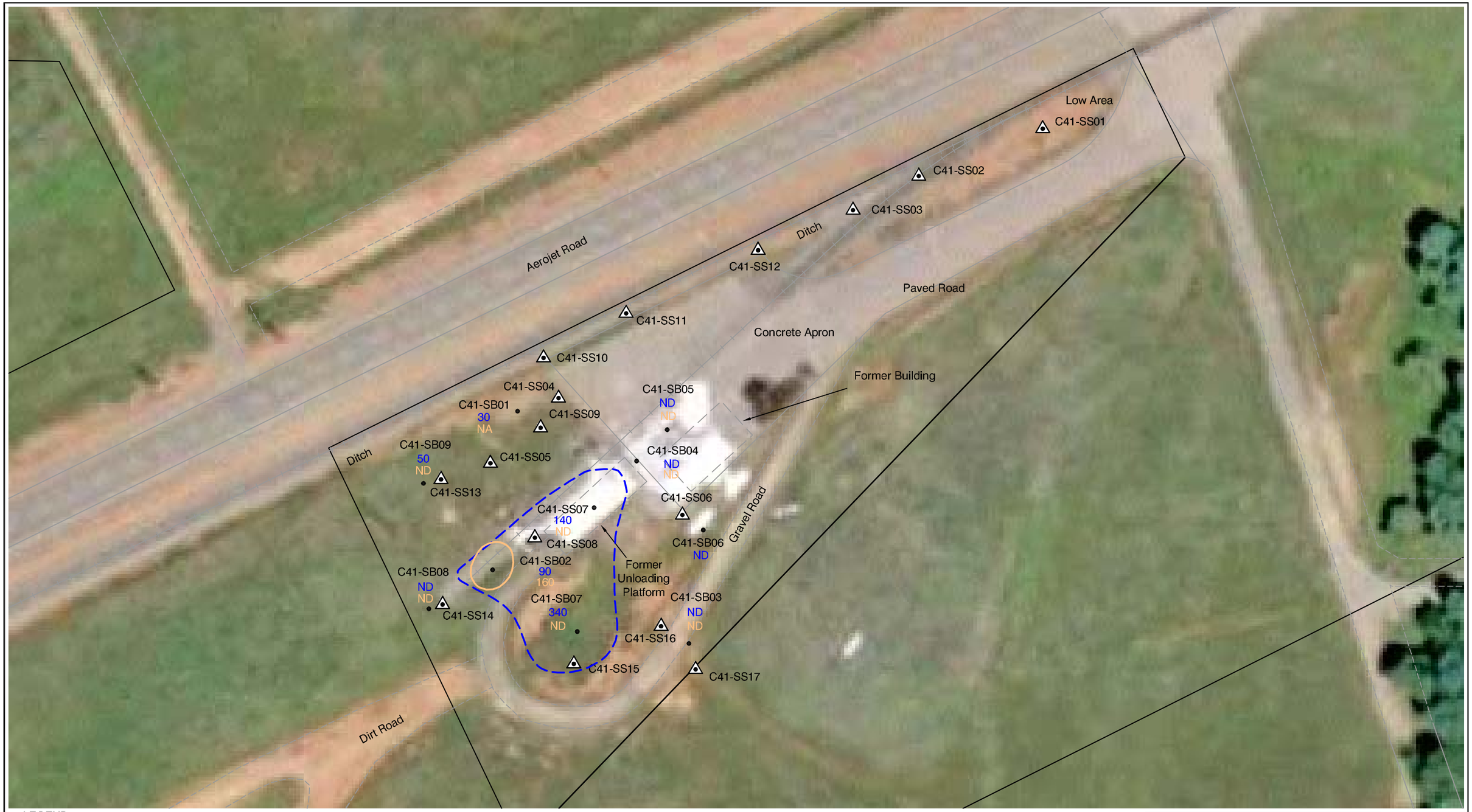
0 25 50

AEROJET
Environmental Remediation

FIGURE 4-37

Perchlorate in Soil
40 and 45 Feet BGS
Site C41

11/14/06 ah SR10121553



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 50 ft Below Ground Surface
- 570 Perchlorate Concentration at 55 ft Below Ground Surface
- ND Not Detected
- NA Not Analyzed

- Extent of Perchlorate >60 µg/Kg at 50 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 55 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track

µg/Kg = micrograms per kilogram

N

Scale: 1" = 50'

0 25 50

AEROJET
Environmental Remediation

FIGURE 4-38

Perchlorate in Soil
50 and 55 Feet BGS
Site C41

10/30/06 ah SR10121554

LEGEND

310 Hydropunch Location with Perchlorate Concentration in Micrograms per Liter (µg/L)

92 Monitor Well with Perchlorate Concentration (Feb/Mar 2005)

Site C41 Boundary

Railroad Track

N

Scale: 1" = 50'

0 25 50

AEROJET
Environmental Remediation

FIGURE 4-39

Perchlorate Concentrations in Groundwater
Site C41

3/1/07 ah SR10121555

Folsom Blvd

Union Pacific RR

Former Plant Entrance

Aerojet Road

10D

Former Location of Company Store

868

Underground Culvert (10D)

FCS-SVE2	
CF	5.9
F113	12
TCE	<0.5
PCE	2.9

FCS-SVE1	
CF	4.9
F113	33
TCE	1.1
PCE	4.9

20001

Parking Area

5D

Low Area

GET D Treatment Facility

42

7D

507

7D

Parking Area

20006

20008

20009

Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Start/End of Potential Source Site Ditches
- Monitor Well Location
- Soil Vapor Extraction Well Location

Concentrations Reported in Micrograms per Liter (µg/L)

Chemical Abbreviations

CF	Chloroform
DCE	Dichloroethene
F113	Freon 113
PCE	Tetrachloroethene
TCE	Trichloroethylene

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-40

Constituents Detected in Unconfined Groundwater Samples from Wells FCS-SVE1 and FCS-SVE2

SR10120677 FIGURE 4-40 8/18/08 Herron, Al

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Start/End of Potential Source Site Ditches
- Monitor Well Location

Concentrations are in Milligrams per Liter (mg/L)

N

Scale: 1" = 150'

0 75 150

AEROJET
Environmental Remediation

FIGURE 4-41

Dissolved Concentrations of Metals Detected in Groundwater Area 20

10/10/07 bg SR10120678

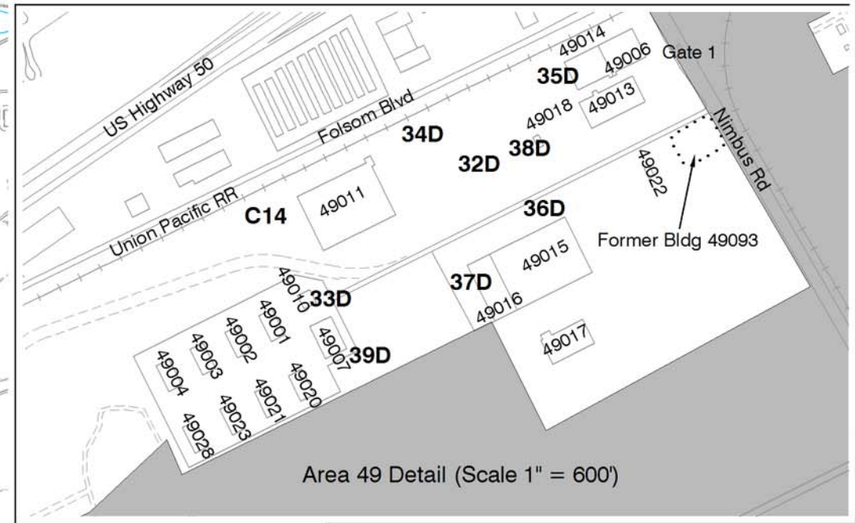
Area 49 - See Detail Lower Right

C14

C15

C10

C4



EXPLANATION

C4 Site Location

Carveout Area

N

Scale: 1" = 2000'

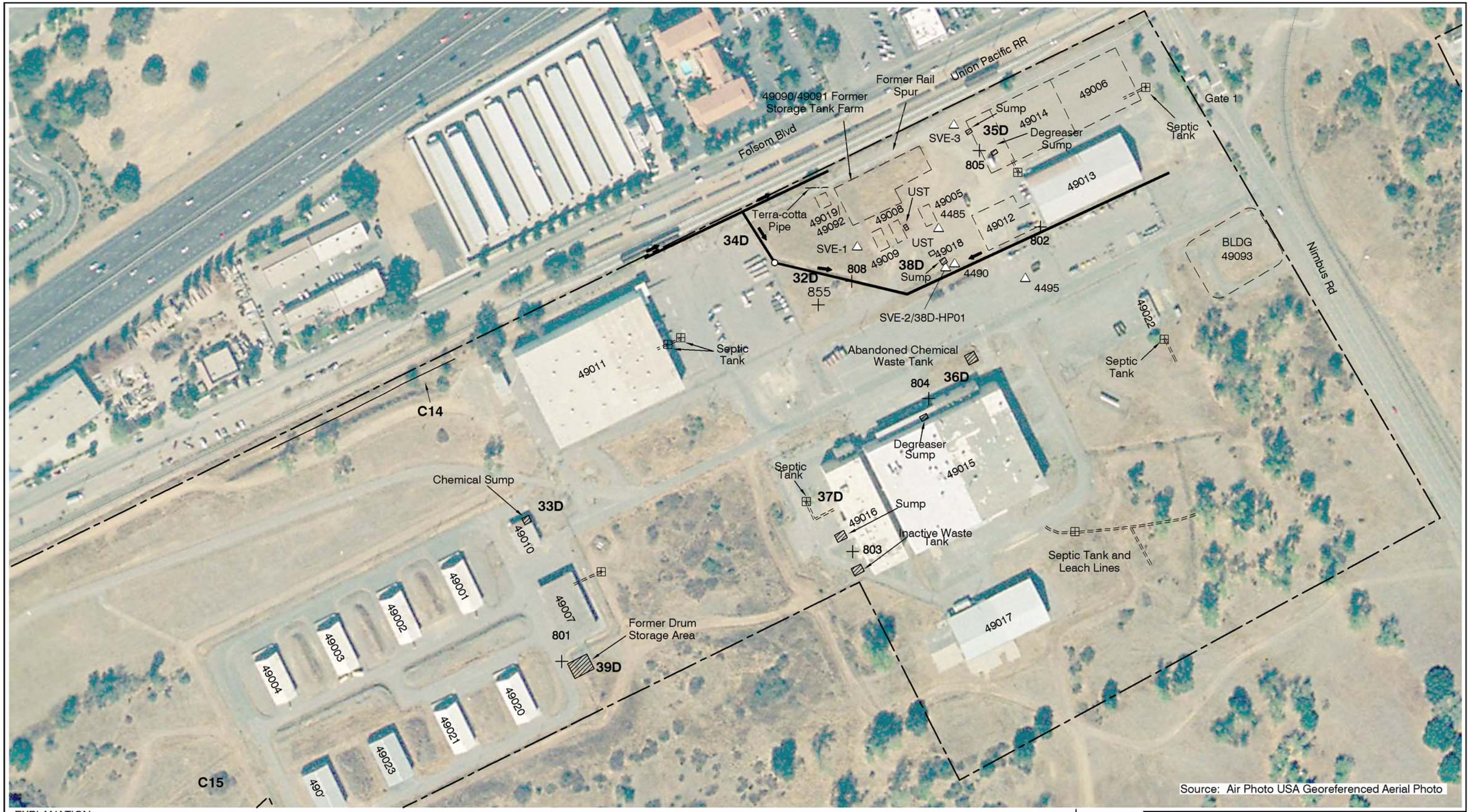
0 1000 2000

AEROJET
Environmental Remediation

FIGURE 5-1

Location Map
Sites in Area 49 and
Sites C4, C10, C14 and C15

3/27/06 ah SR10120679



EXPLANATION

- Open Ditch
- Start/End of Potential Source Site Ditch
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Former Location of Building
- Potential Source
- Monitor Well
- Soil Vapor Extraction Well
- Septic Tank and Leach Line

N

Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 5-2

Site Location and Drainage Map
Area 49

7/19/06 gh SR10120680

A49-LBP03	
0'	11
0.5'	6.5
1.0'	6.1

A49-LBP01	
0'	12
0.5'	7.6
1.0'	4.4

A49-LBP02	
0'	7.5
0.5'	8.1
1.0'	5.2

A49-LBP09	
0'	13
0.5'	12
1.0'	10

A49-LBP10	
0'	**31**
0.5'	**31**
1.0'	**32**

A49-LBP08	
0'	12
0.5'	7.9
1.0'	5.1

A49-LBP04	
0'	**36**
0.5'	**24**
1.0'	18

A49-LBP05	
0'	20
0.5'	18
1.0'	16

A49-LBP11	
0'	14
0.5'	5.5
1.0'	6

A49-LBP12	
0'	23
0.5'	18
1.0'	16

A49-LBP06	
0'	17
0.5'	20
1.0'	14

A49-LBP07	
0'	9.1
0.5'	9.8
1.0'	9.3

A49-LBP13	
0'	9.8
0.5'	8
1.0'	8.2

A49-LBP14	
0'	**15**
0.5'	7.9
1.0'	7.8

Folsom Blvd
Union Pacific RR
Former Rail Spur
Gate 1
Nimbus Rd
Sump
35D
49014
Degreaser Sump
49006
Septic Tank
49013
49012
UST
49005
49008
Terra-cotta Pipe
49019/ 49092
49090/49091 Former Storage Tank Farm
49009
UST
49018
38D
Sump
32D
34D
BLDG 49093
49022
Septic Tank
Septic Tank
49011
Abandoned Chemical Waste Tank
36D
A49-ASB01 ND
A49-ASB02 ND
Degreaser Sump
49015
37D
Septic Tank
Sump
49016
Inactive Waste Tank
Septic Tank and Leach Lines
Chemical Sump
33D
49010
49001
49007
49017
49002
49003
49004
Former Drum Storage Area
39D
49020
49021
49023
49026

Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- A49-LBP14 Lead-Based Paint Sampling Location
- ▲ A49-ASB01 Asbestos Sampling Location
- Superfund Site Boundary
- Former Location of Building
- Potential Source
- Septic Tank and Leach Line

Lead Concentrations are in Milligrams per Kilogram (mg/Kg)
Sample Depth in Feet Below Ground Surface
ND = Not Detected
Lead Concentrations Above Background Threshold Value of 23 mg/kg are in Boldface

N

Scale: 1" = 200'

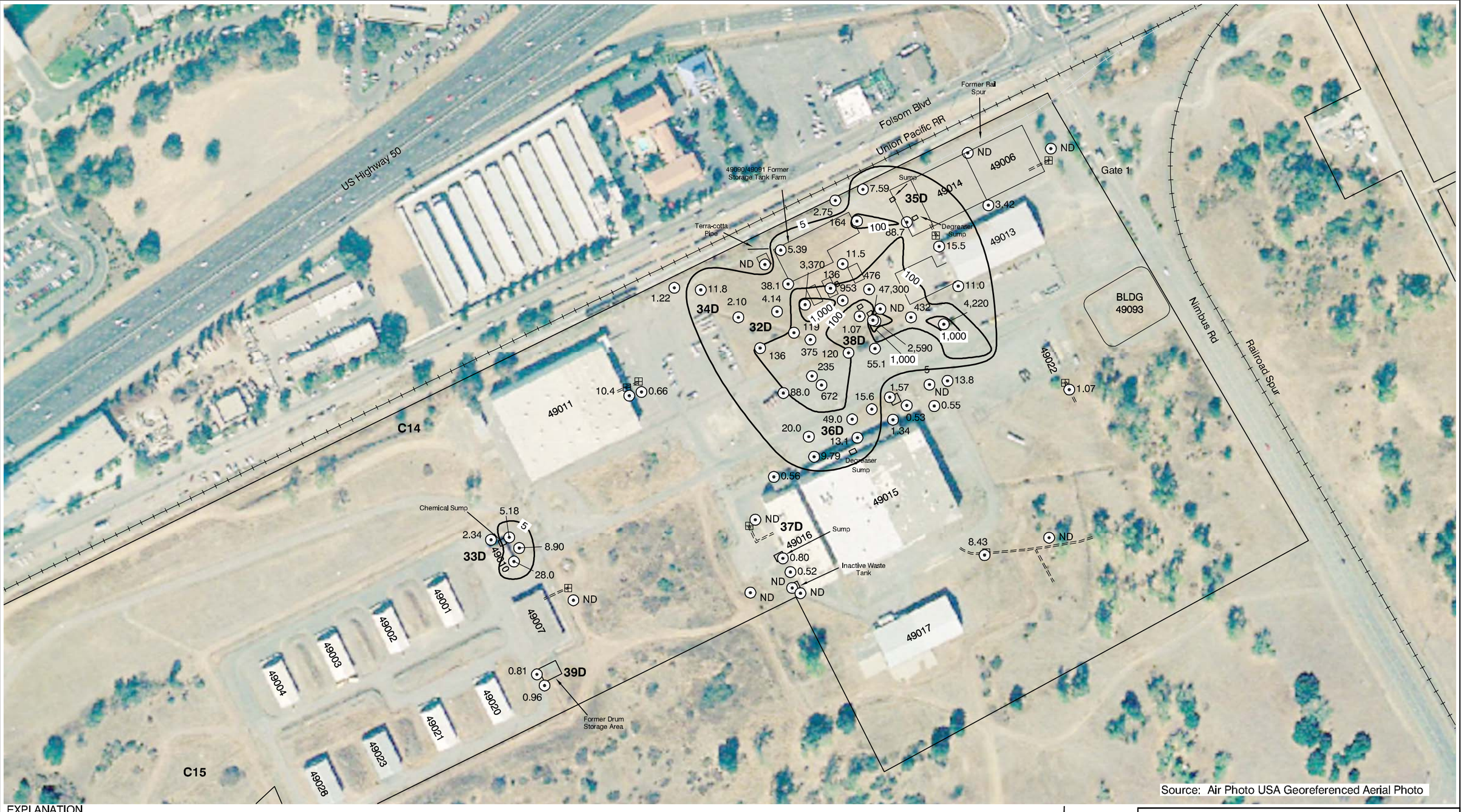
0 100 200

AEROJET
Environmental Remediation

FIGURE 5-3

Results of Lead-Based Paint and Asbestos Sampling Area 49

10/10/07 bg SR10120681



EXPLANATION

- Stage 1 RI Soil Vapor Sample Location
- 481 — Total VOC Concentration in Milligrams per Cubic Meter (mg/m³) (ND = Not Detected)
- Iso-concentration Contour
- Septic Tank and Leach Line
- Superfund Site Boundary
- Former Building Location

VOC=Volatile Organic Compounds

Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 5-4

Total VOC Concentrations in 1992
Shallow Soil Vapor Samples
Area 49

3/27/06 ah SR10120682

Folsom Blvd
Union Pacific RR
Former Rail Spur
49090/49091 Former Storage Tank Farm
1,000
16.4
49006
Gate 1
Sump
49014
35D
1,680
Degreaser Sump
412
65.5
6.97
100
49013
31
Terra-cotta Pipe
16.4
14.9
34D
481
71.9
1,000
BLDG 49093
Nimbus Rd
5.80
4,540
2,280
32D
38D
72.5
3,740
1,000
12.5
49022
49011
29.9
36.6
36D
64.0
C14
Degreaser Sump
49015
Chemical Sump
37D
Sump
49016
Inactive Waste Tank
49010
33D
49017
49001
49007
49002
49003
49004
39D
5.50
49020
49021
49023
Former Drum Storage Area
Source: Air Photo USA Georeferenced Aerial Photo

EXPLANATION

- ⊙ Stage 1 RI Soil Vapor Sample Location
- 481 Total VOC Concentration in Milligrams per Cubic Meter (mg/m³) (ND = Not Detected)
- Iso-concentration Contour
- ⊞== Septic Tank and Leach Line
- — – — Superfund Site Boundary
- Former Building Location

VOC=Volatile Organic Compounds

N

Scale: 1" = 200 '

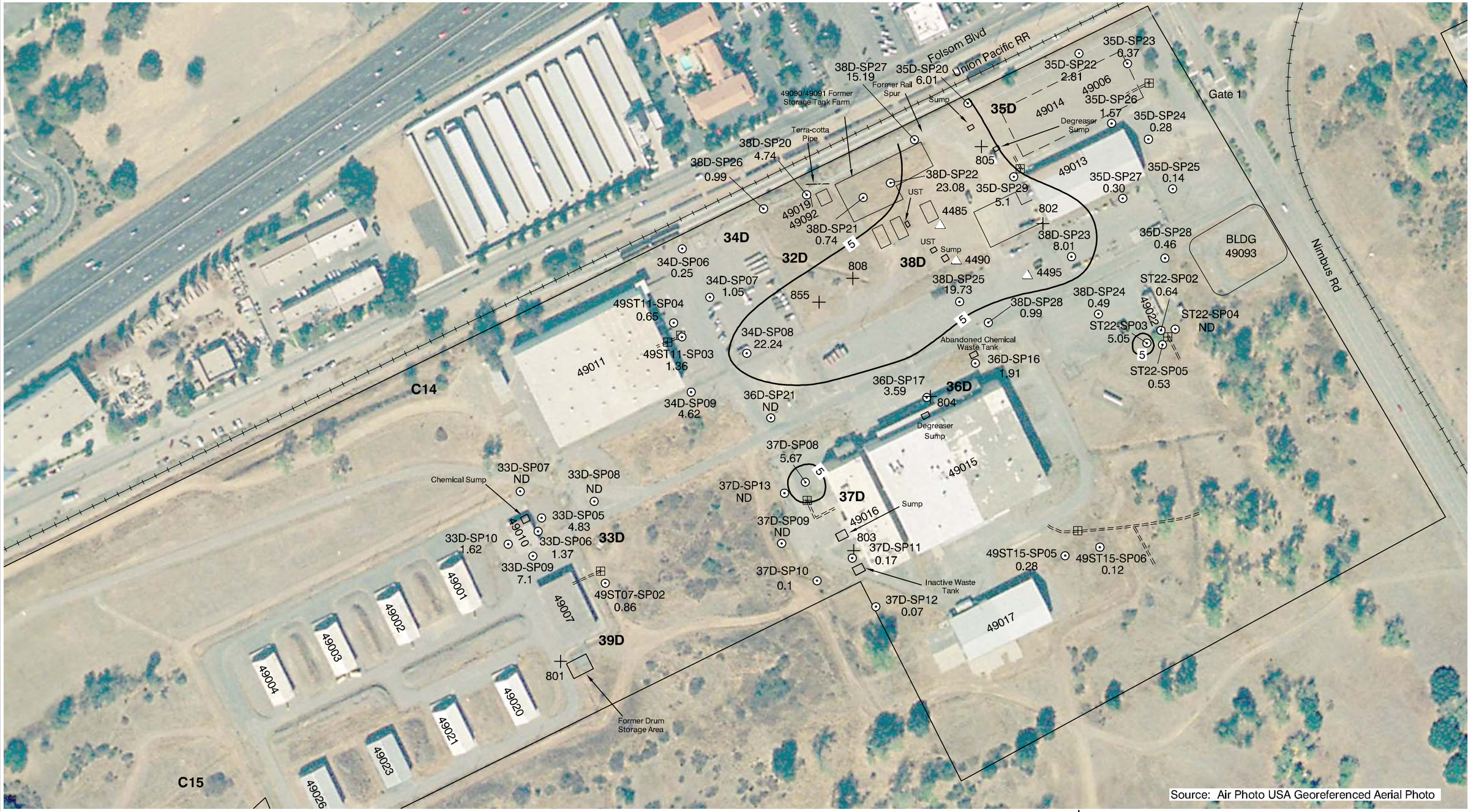
0 100 200

AEROJET
Environmental Remediation

FIGURE 5-5

Total VOC Concentrations In 1992 Intermediate Soil Vapor Samples Area 49

3/27/06 ah SR10120683



EXPLANATION

- 35D-SP29 ⊙ — Soil Vapor Sampling Location & ID
- 5.1 — Total VOC Concentration in Milligrams per Cubic Meter (mg/m³) (ND = Not Detected)
- —5— — Iso-Concentration Contour (mg/m³)
- ND — Not Detected Above the Method Detection Limits
- ⊞=== — Septic Tank and Leach Line
- — – — Superfund Site Boundary
- \+ — Monitor Well Location
- ◺ — Soil Vapor Extraction Well Location
- ⊏⊐ — Location of Former Building

VOC=Volatile Organic Compounds

N

Scale: 1" = 200'

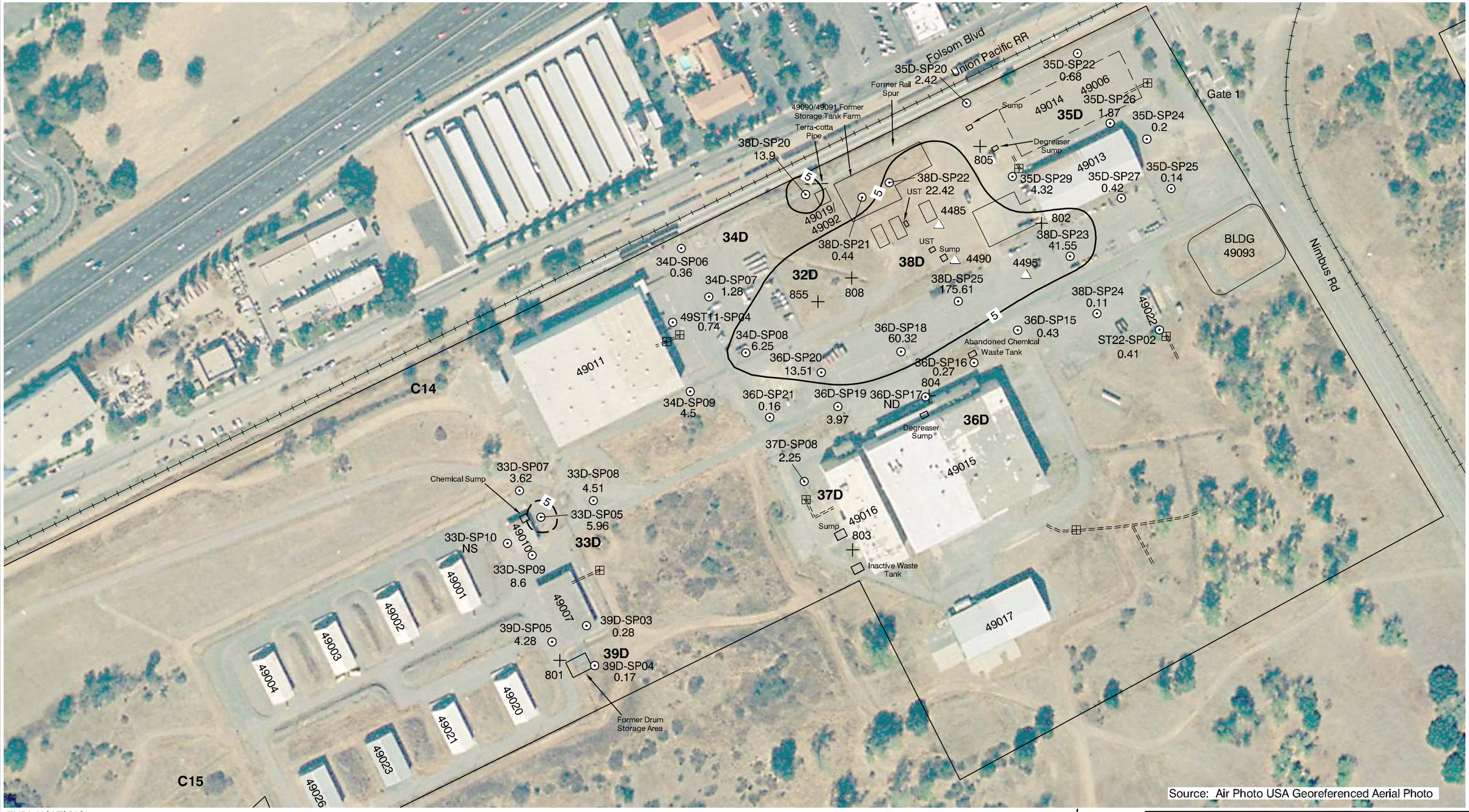
0 100 200

AEROJET
Environmental Remediation

FIGURE 5-6

Total VOC Concentrations In 2003
Shallow Soil Vapor Samples
Area 49

2/3/05 ah SR10102684



EXPLANATION

- 35D-SP29 — Soil Vapor Sampling Location & ID
- 5.1 — Total VOC Concentration in Milligrams per Cubic Meter (mg/m^3)
- —5— Iso-Concentration Contour (mg/m^3)
- ND — Not Detected Above the Method Detection Limits
- ⊞== — Septic Tank and Leach Line
- — - — Superfund Site Boundary
- + — Monitor Well Location
- Soil Vapor Extraction Well Location
- Location of Former Building

VOC=Volatile Organic Compounds

N

Scale: 1" = 200'

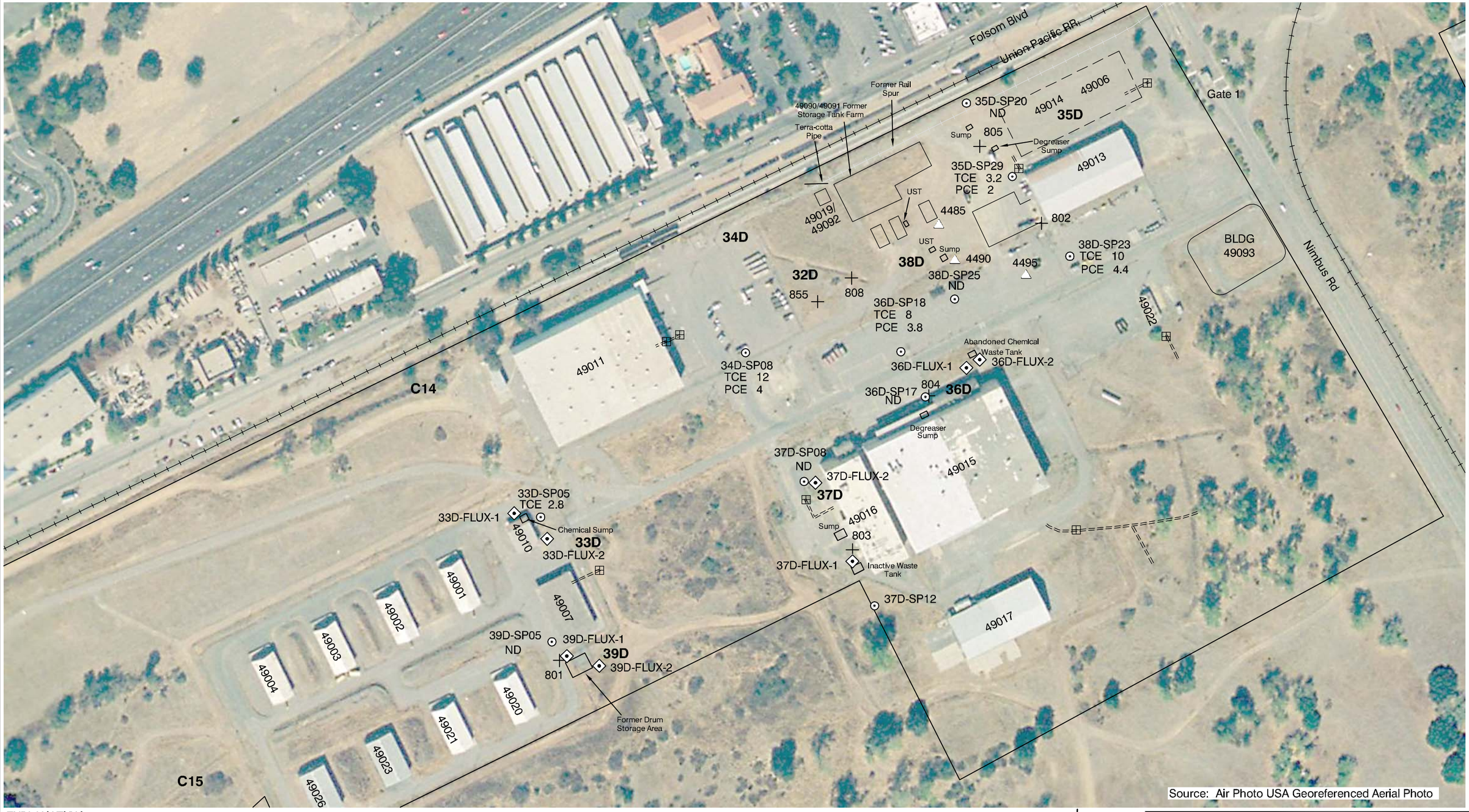
0 100 200

AEROJET
Environmental Remediation

FIGURE 5-7

Total VOC Concentrations In 2003
Intermediate Soil Vapor Samples
Area 49

3/27/06 ah SR10120685



EXPLANATION

- 35D-SP29 — Soil Vapor Sampling Location & ID 2003
- 5.1 — VOC Concentration in Milligrams per Cubic Meter (mg/m³)
- 33D-FLUX-1 — Flux Chamber Sampling Location & ID 2003
- ND — Not Detected Above the Screening Level
- Septic Tank and Leach Line
- Superfund Site Boundary
- Monitor Well Location
- Soil Vapor Extraction Well Location
- Location of Former Building

Chemical Abbreviations

TCE	Trichloroethene
PCE	Tetrachloroethene
VOC	Volatile Organic Compound

N

Scale: 1" = 200 ’

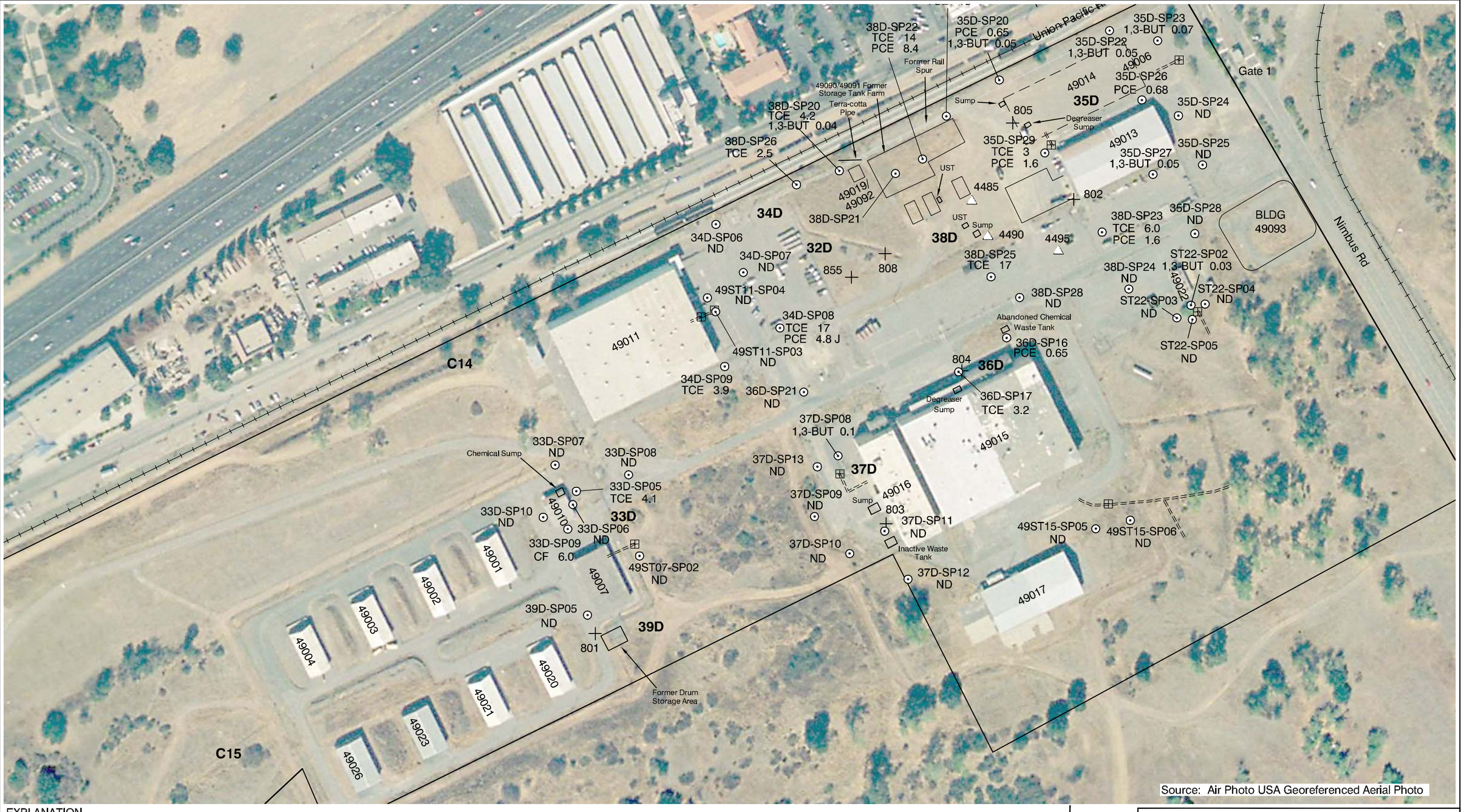
0 100 200

AEROJET
Environmental Remediation

FIGURE 5-8

VOC Concentrations Above Screening Levels
2003 Very Shallow Soil Vapor Samples
Area 49

3/27/06 ah SR10120686



EXPLANATION

35D-SP29	Soil Vapor Sampling Location & ID 2003
TCE 5.1	VOC Concentration in Milligrams per Cubic Meter (mg/m^3)
ND	No VOCs Detected Above Screening Level
⊞==	Septic Tank and Leach Line
— – —	Superfund Site Boundary
+	Monitor Well Location
△	Soil Vapor Extraction Well Location
[- - -]	Location of Former Building

Chemical Abbreviations

CF	Chloroform
TCE	Trichloroethene
PCE	Tetrachloroethene
VOC	Volatile Organic Compound

N

Scale: 1" = 200'

0 100 200

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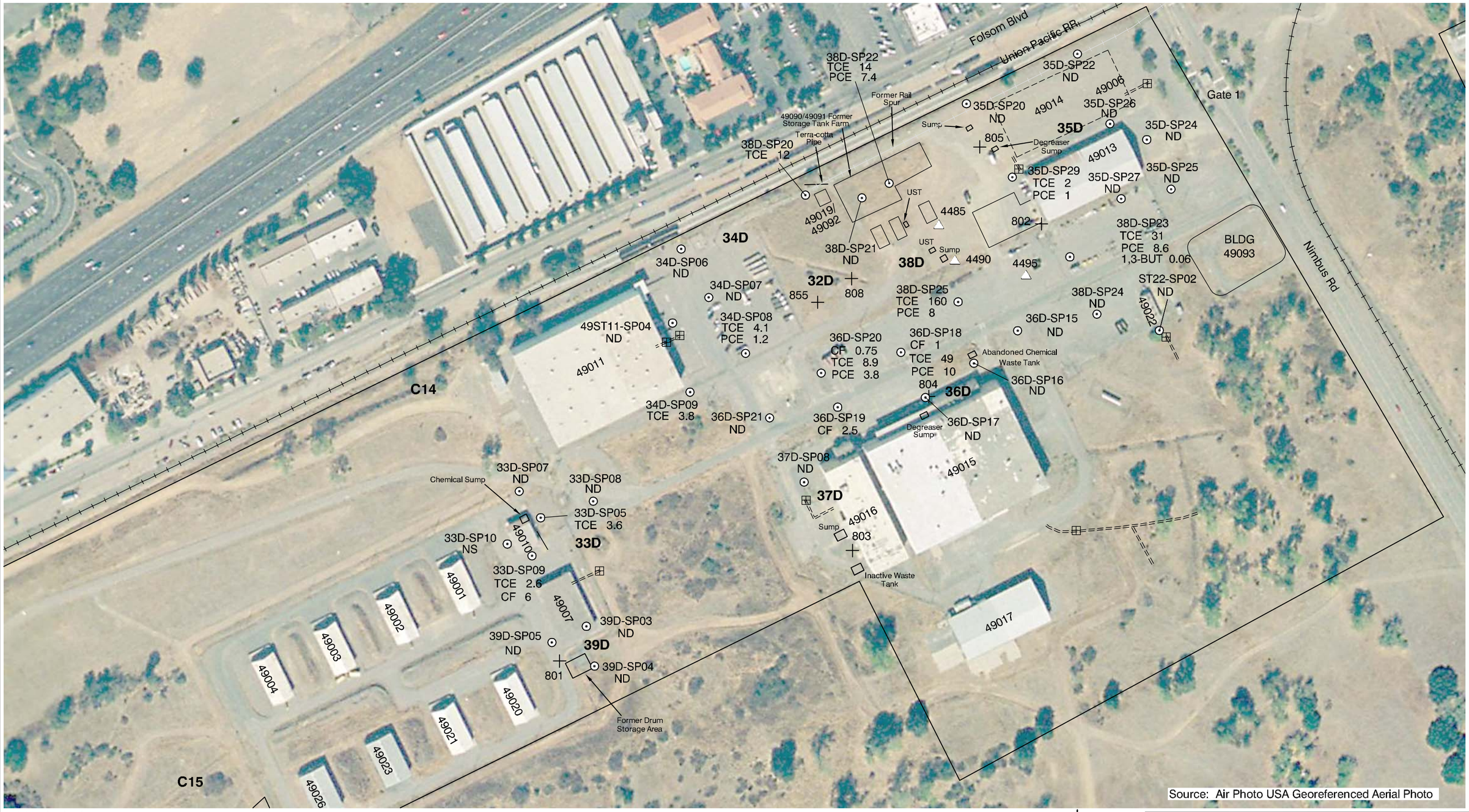
Environmental Remediation

FIGURE 5-9

VOC Concentrations Above Screening Levels
2003 Shallow Soil Vapor Samples
Area 49

3/27/06 ah SR10120687



EXPLANATION

- 35D-SP29 — Soil Vapor Sampling Location & ID (July 2003)
- TCE 5.1 — VOC Concentration in Milligrams per Cubic Meter (mg/m³)
- ND — No VOCs Detected Above the Screening Level
- NS — Not Sampled
- Septic Tank and Leach Line
- Superfund Site Boundary
- Monitor Well Location
- Soil Vapor Extraction Well Location
- Location of Former Building

Chemical Abbreviations

CF	Chloroform
PCE	Tetrachloroethene
TCE	Trichloroethene
VOC	Volatile Organic Compound

N

Scale: 1" = 200'

0 100 200

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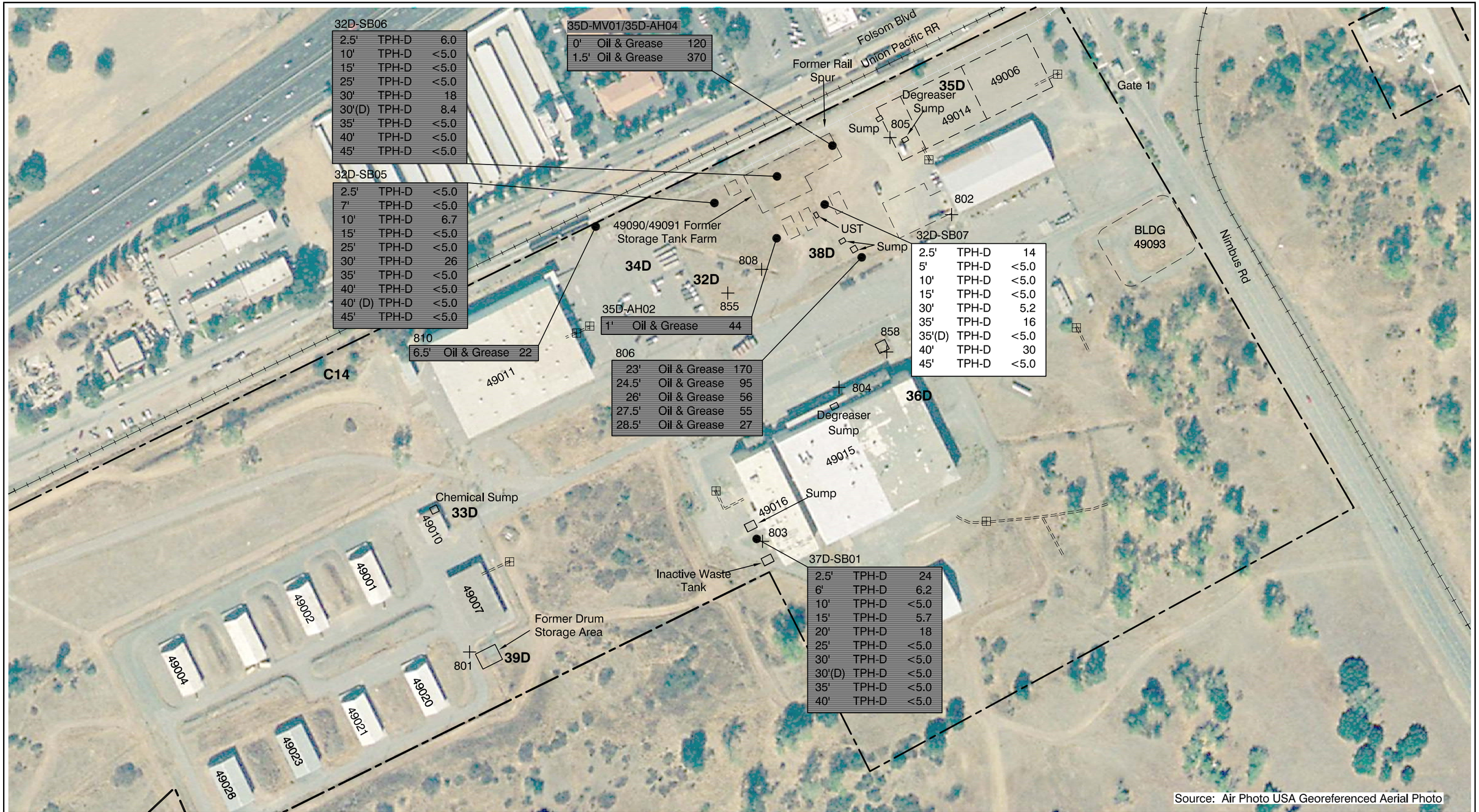
Environmental Remediation

FIGURE 5-10

VOC Concentrations Above Screening Levels
2003 Intermediate Soil Vapor Samples
Area 49

3/27/06 ah SR10120688



EXPLANATION

- Soil Boring Location
- Monitor Well Location
- Septic Tank and Leach Line
- Superfund Site Boundary
- Former Location of Building

Concentrations Reported in Milligrams per Kilogram (mg/kg)
Depth in Feet Below Ground Surface
(D) = Duplicate Sample
TPH-D = Total Petroleum Hydrocarbons as Diesel

N

Scale: 1" = 200'

0 100 200

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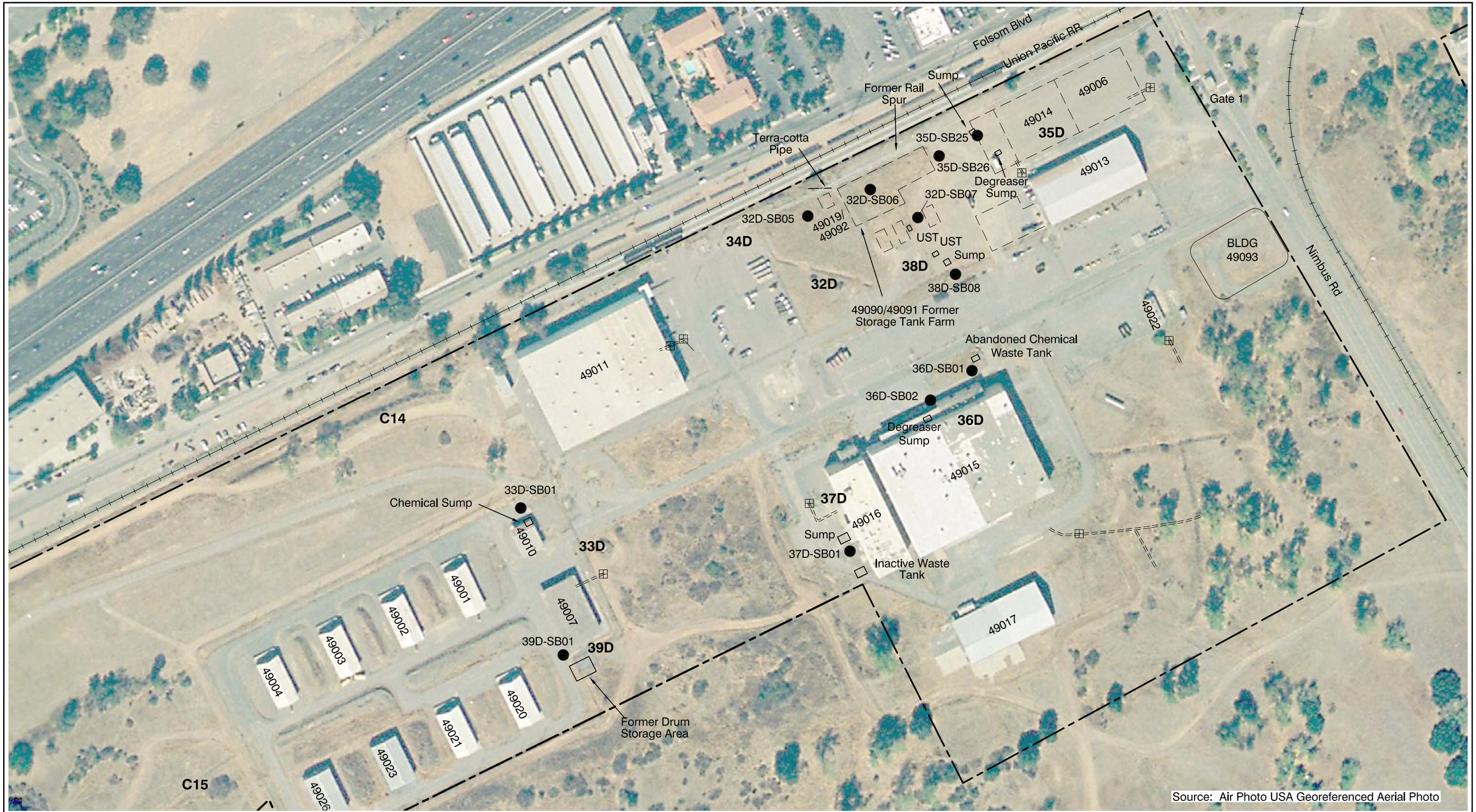
Environmental Remediation

FIGURE 5-11

Hydrocarbons In Subsurface Soil Samples Area 49

10/10/07 bg SR10120689



EXPLANATION

- Soil Boring Location
- Septic Tank and Leach Line
- Superfund Site Boundary
- Former Location of Building

N

Scale: 1" = 200'

0 100 200

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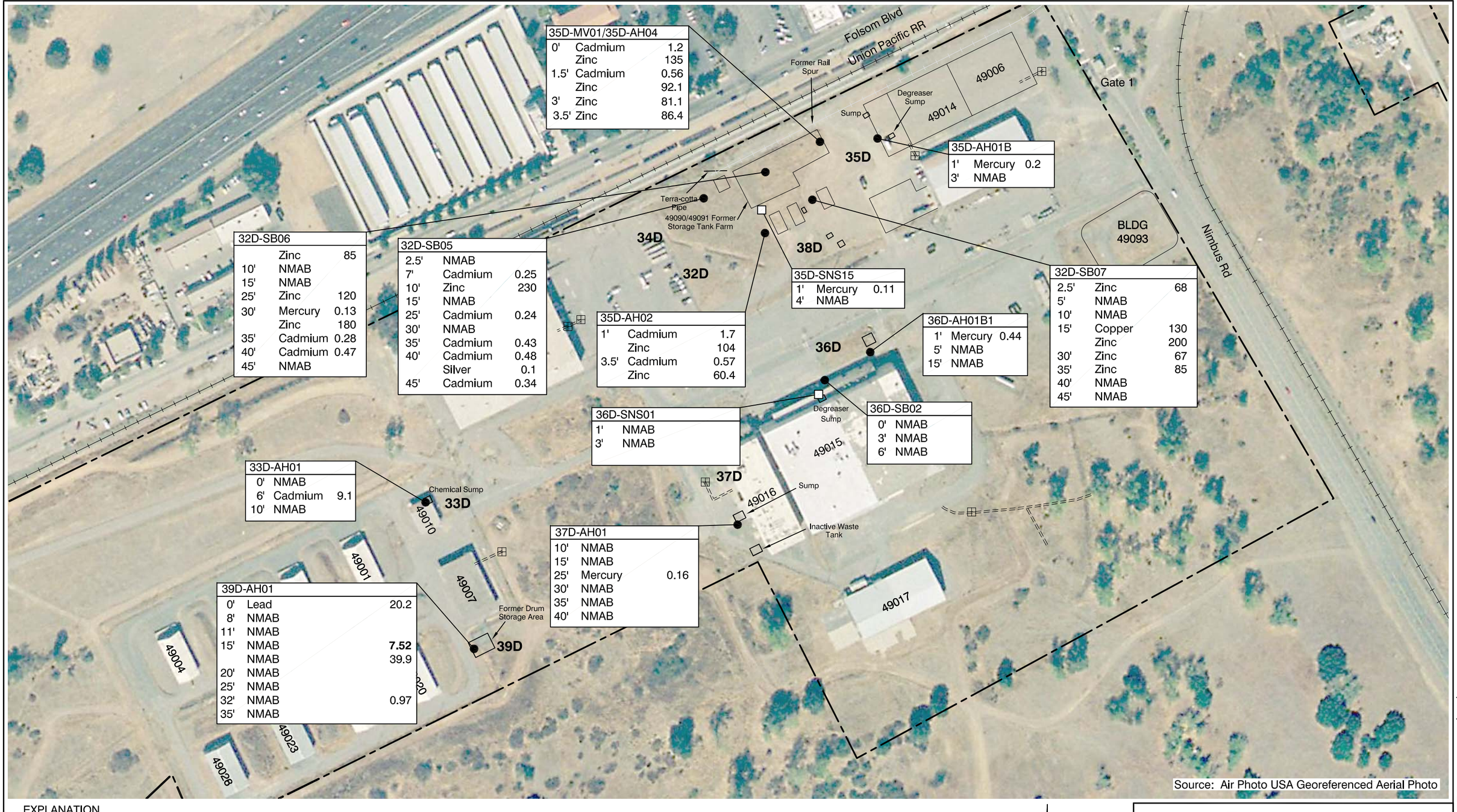
Environmental Remediation

FIGURE 5-12

Location of Soil Borings Sampled for Semivolatile Organic Compounds Area 49

10/10/07 bg SR10120690



EXPLANATION

- Soil Boring Location
- Surface/Near Surface Sample Location
- Septic Tank and Leach Line
- Superfund Site Boundary
- Former Location of Building

Concentrations are in milligrams per kilogram (mg/kg)
Depth in Feet Below Ground Surface

Metals Concentrations Above Residential PRGs are In Boldface

NMAB = No Metals Above Background

Scale: 1" = 200'
0 100 200

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Environmental Remediation

FIGURE 5-13

Metals Detected Above Background in Soil Samples Area 49

SR10120691 **FIGURE 5-13** 8/18/08 Herron, Al

4485**	
CF	1.2
DCE	23
DCA	0.84
TCA	2.0
TCE	130
PCE	40

802*	
DCE	7.2
TCE	24
PCE	33
Nitrate	17,000
Nitrite	62
ClO4	15

4495**	
DCE	210
TCA	7.5
TCE	450
PCE	8.3

EXPLANATION

- Monitor Well Location
- Soil Vapor Extraction Well Location
- Septic Tank and Leach Line
- Superfund Site Boundary
- Former Location of Building

Chemical Abbreviations

CF	Chloroform
ClO4	Perchlorate
DCA	Dichloroethane
DCE	Dichloroethene
TCA	Trichloroethane
TCE	Trichloroethene
PCE	Tetrachloroethene

UTS	Unable to Sample
UTL	Unable to Locate
*	Perched Groundwater Sample
**	Unconfined Groundwater Sample

Concentrations Reported in Micrograms per Liter (µg/L)

N

Scale: 1" = 200'

0 100 200

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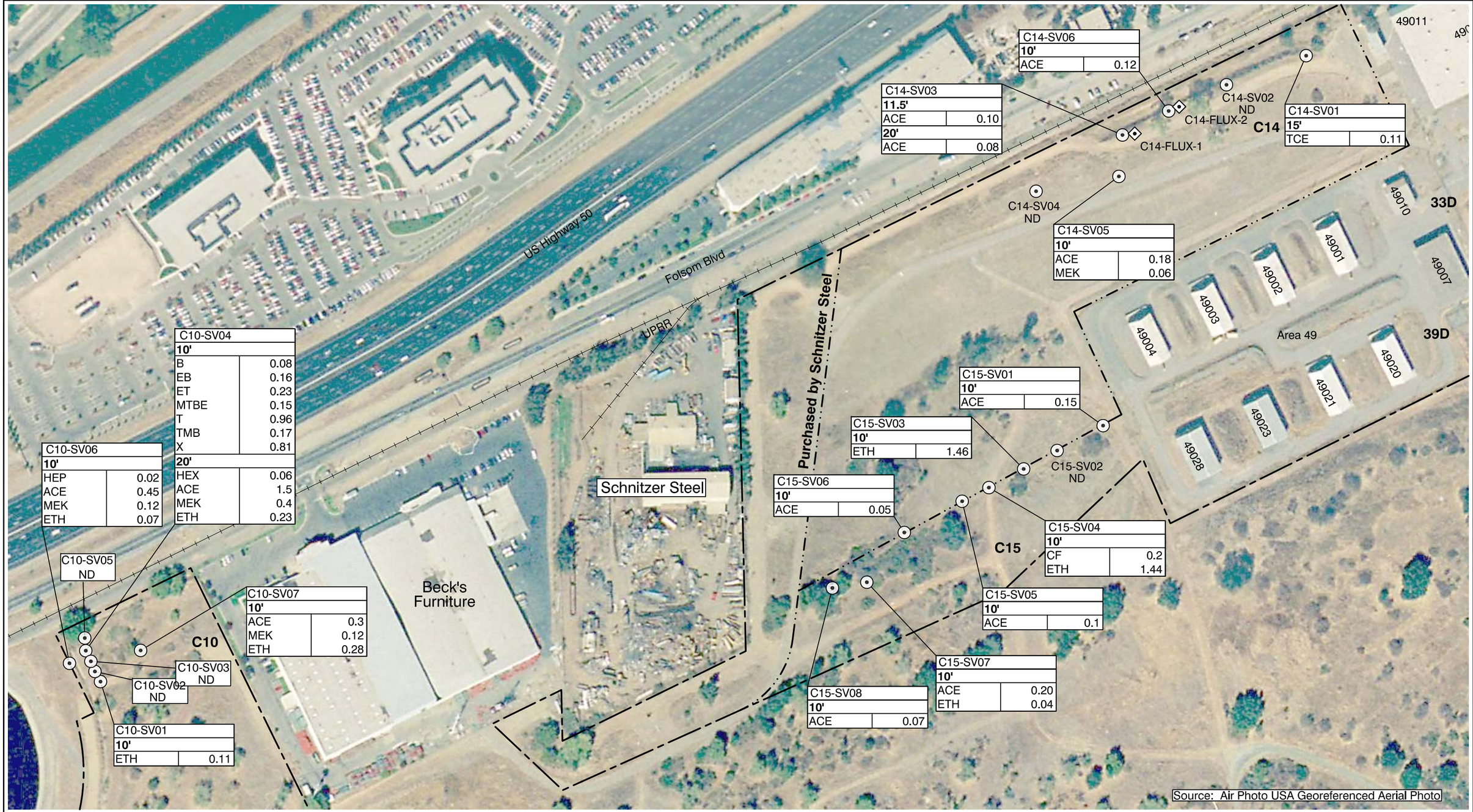
Environmental Remediation

FIGURE 5-14

Constituents Detected In Perched and Unconfined Groundwater Samples Area 49

10/10/07 bg SR10120692



EXPLANATION

- Soil Vapor Sample Location
- C14 Site Designation
- Flux Chamber Sample Location
- Superfund Site Boundary
- Site Divider

Key to Sample Data

Sample ID — C15-SV01
Sample Depth (feet BGS) — 10'
Constituent — ACE 0.15 — VOC Concentration in Micrograms per Cubic Meter (mg/m^3)

Concentrations Above Screening Levels are in Bold

Chemical Abbreviations

ACE	Acetone	HEX	Hexane
B	Benzene	MEK	Methyl Ethyl Ketone
EB	Ethylbenzene	MTBE	Methyl Tert Butyl Ether
ET	Ethyltoluene	TCE	Trichloroethylene
ETH	Ethanol	TMB	Trimethylbenzene
HEP	Heptane	X	Xylenes

N

Scale: 1" = 200'

0 100 200

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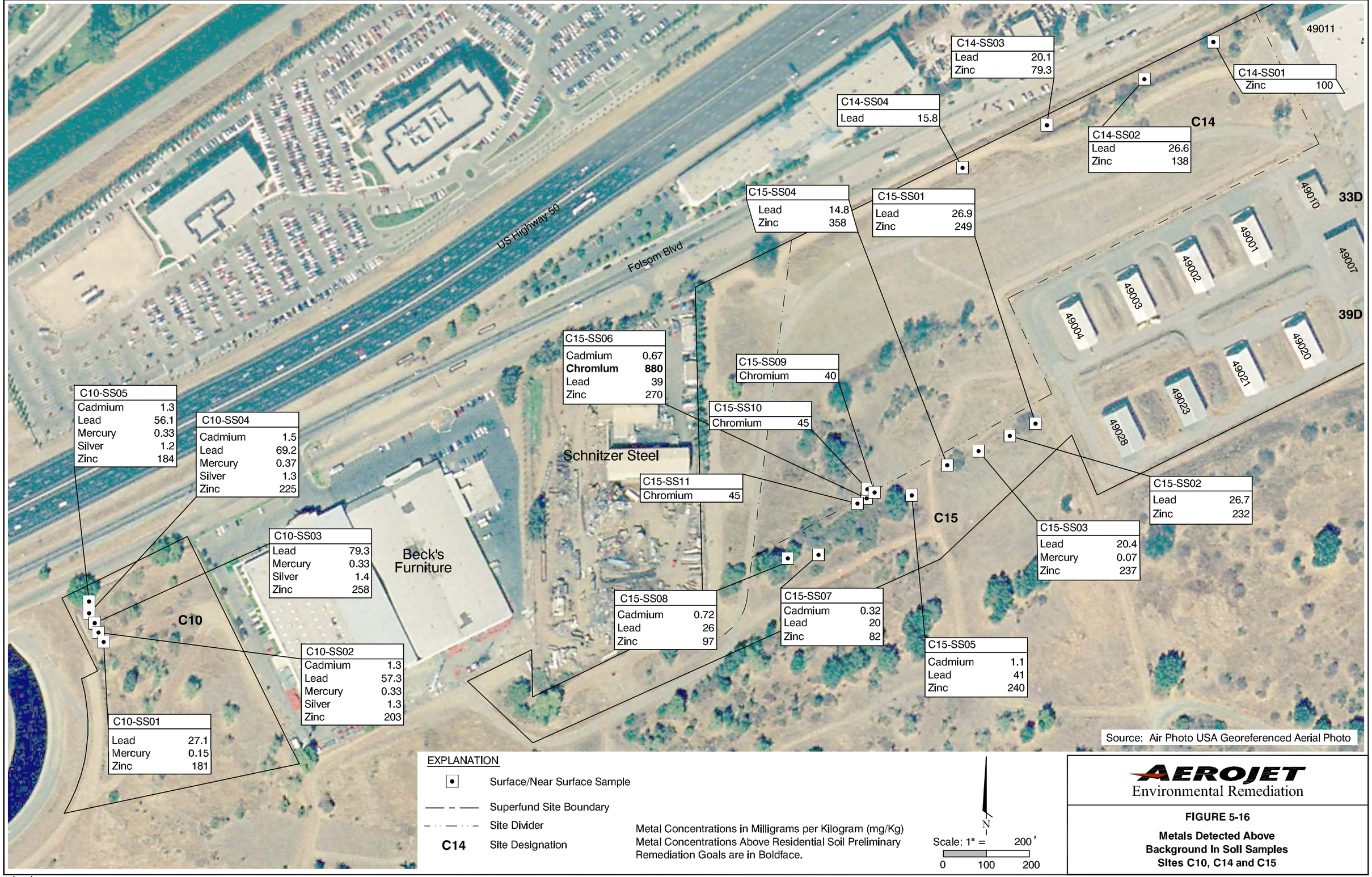
FIGURE 5-15

VOCs Detected in Shallow Soil Vapor Samples Sites C10, C14 and C15

7/18/06 ah SR10120693



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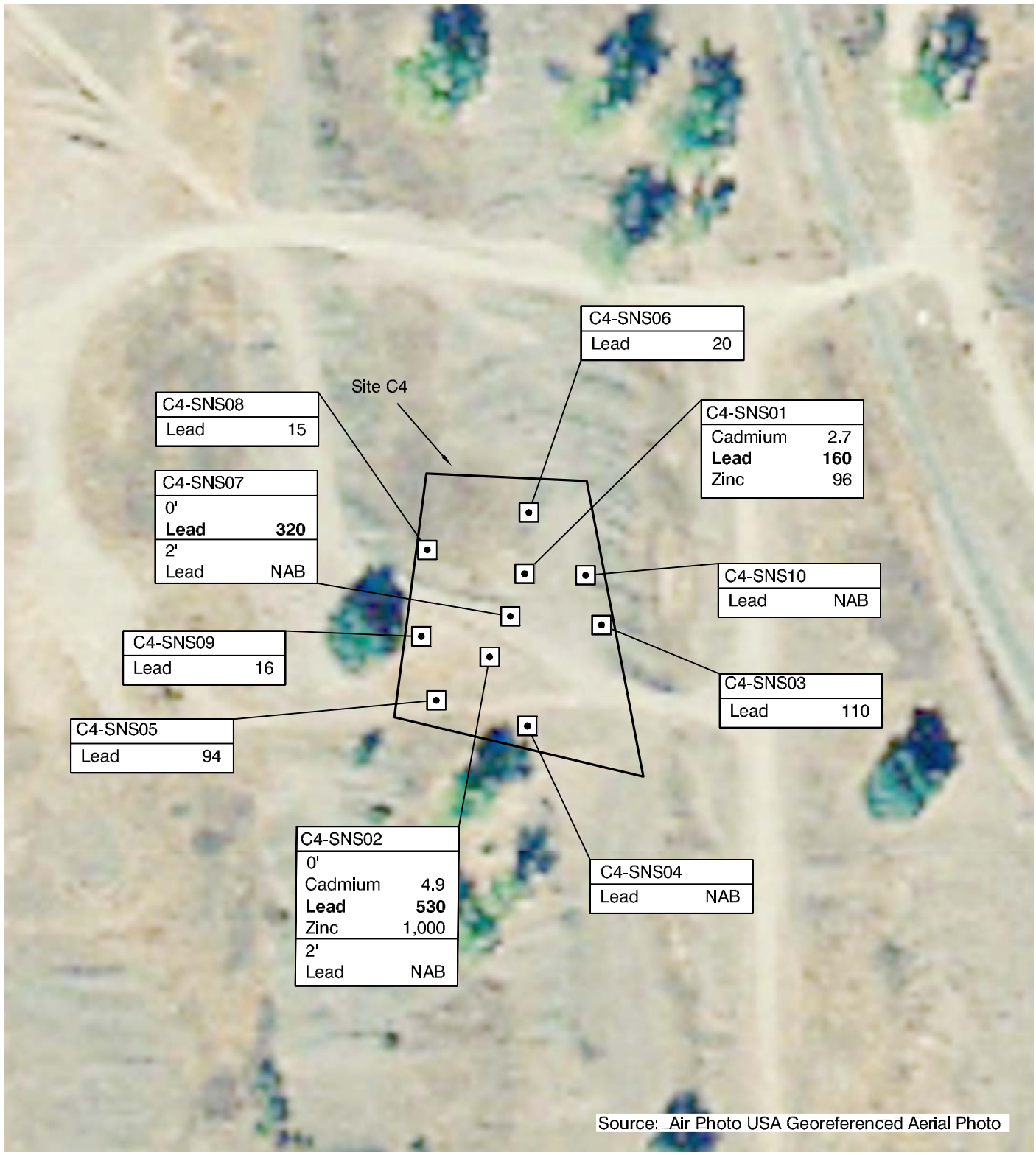
Environmental Remediation

FIGURE 5-16

Metals Detected Above Background In Soil Samples SItes C10, C14 and C15

3/28/06 ah SR10120694



EXPLANATION

Area of Surficial Trash and Debris

Surface Soil Sampling Location

NAB Not Above Background Level

Metal Concentrations in Milligrams per Kilogram (mg/Kg)
Metals Above Residential PRG are in Boldface

N

Scale: 1" = 100'

0 50 100

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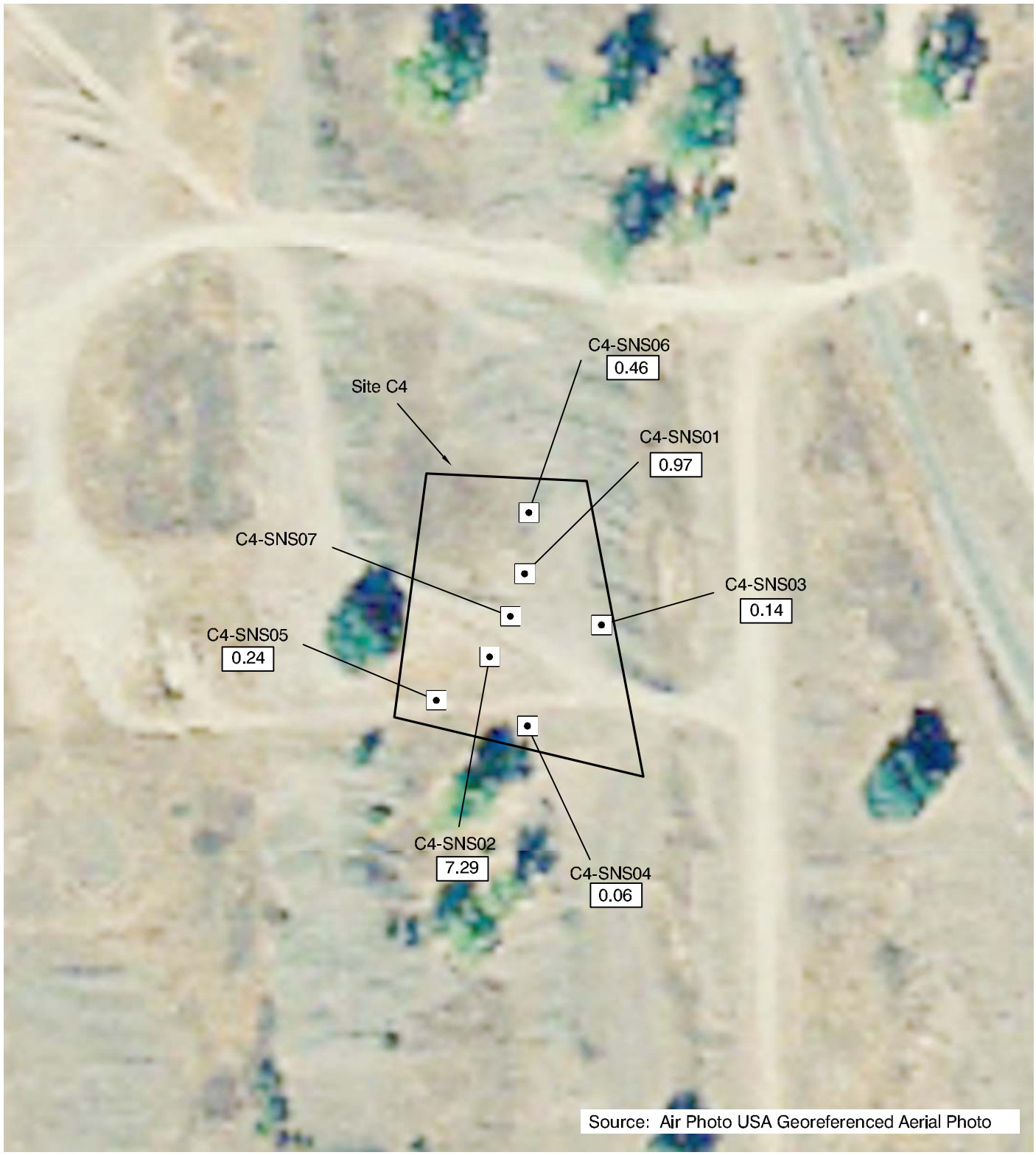
Environmental Remediation

FIGURE 5-17

Metals Detected Above Background in Surface Soil Samples
Site C4

3/28/06 ah SR10120695



EXPLANATION

Area of Surficial Trash and Debris

Surface Soil Sampling Location

0.24 Toxic Equivalent Quotient (TEQ) in Picograms per Gram (pg/g)

N

Scale: 1" = 100'

0 50 100

AEROJET
Environmental Remediation

FIGURE 5-18

Dioxin and Furans Analysis in Surface Soil Samples Site C4

3/28/06 ah SR10120696

Source Medium	Release Mechanism	Secondary Source	Secondary Release Mechanism	Exposure Medium	Exposure Route	Human Receptors: Future Onsite Resident	Current/ Future Offsite Resident	Current/ Future Onsite Comm/Ind Worker	Current/ Future Onsite Visitor/ Recreator [c]	Current Onsite Construction Worker	Future Onsite Construction Worker
Sumps and USTs; Drums and ASTs	Spills or Releases	Sediment [a]			Ingestion	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I
			Dust	Air	Inhalation	I	I	I	I	I	I
			Infiltration/ Percolation	Perched/ Regional Groundwater	See Figure 6-1B for Human Health Exposure Routes related to Treated and Untreated Groundwater						
			Runoff	Surface Water and Sediment [a]	Ingestion	I	I	I	I	I	I
					Inhalation	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I
				Fish/Shellfish	Ingestion	I	I	I	I	I	I
Ponds; Septic Tanks	Infiltration/ Percolation	Soil			Ingestion	C	I	C	Q	C	C
					Dermal Contact	C	I	C	Q	C	C
			Dust	Air	Inhalation	C	Q	C	Q	C	C
			Infiltration/ Percolation	Perched/ Regional Groundwater	See Figure 6-1B for Human Health Exposure Routes related to Treated and Untreated Groundwater						
			Runoff	Surface Water and Sediment [a]	Ingestion	I	I	I	I	I	I
					Inhalation	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I
				Fish/Shellfish	Ingestion	I	I	I	I	I	I
			Volatile Emissions (soil vapor)	Soil Vapor	Inhalation (Indoor)	C	I	C	I	I	I
					Inhalation (Outdoor)	C	Q	C	Q	C	C
			Plant Uptake	Garden Produce [b]	Ingestion	Q	I	I	I	I	I

Notes and Key:

a No sediment was identified in the potential source sites within Areas 20, 21 and 49. Samples collected within ditches were characterized as surface soil samples because they are 1) exposed (i.e., not covered by water); 2) dry (unsaturated); 3) sufficiently fine-grained such that they may become airborne; and 4) will be mixed in with shallow soil during site grading.

b Projected residential redevelopment at Aerojet is not likely to include land-intensive pathways, such as in-situ gardening. The naturally occurring soil at Aerojet is not suited for this type of activity. Significant land preparation activities (i.e., addition of topsoil and nutrients) would be required prior to growing fruits or vegetables.

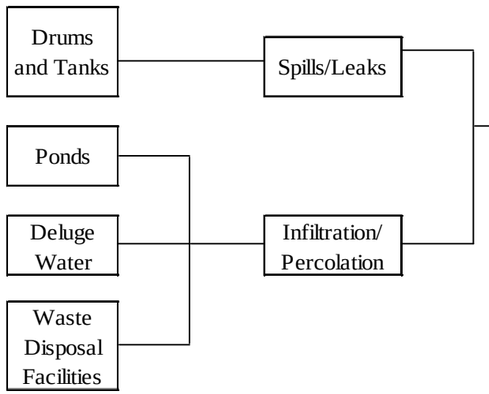
c Since a residential and/or commercial/industrial soil exposure will be evaluated for all the source sites, there is no need to quantify a separate visitor/recreational exposure. Exposures to fish on the Aerojet property are highly unlikely, and are dependent upon the presence of edible species that are of large enough size to be filleted.

ASTs	Above-ground Storage Tank	I	Incomplete exposure pathway
C	Complete exposure pathway evaluated quantitatively	USTs	Underground Storage Tank
Comm/Ind	Commercial/Industrial	Q	Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway

AEROJET
Environmental Remediation

FIGURE 6-1a
Conceptual Site Model PGOU Soil Exposure Pathways Human Receptors

SR10124189 **FIGURE 6-1a** 8/14/08 Herron, Al



Source Medium	Release Mechanism	Secondary Source	Secondary Release Mechanism	Exposure Medium	Exposure Route	Human Receptor: Future Onsite Resident	Current/ Future Offsite Resident	Current/ Future Onsite Comm/Ind Worker	Current/ Future Onsite Visitor/ Recreator [c]	Current Onsite Construction Worker	Future Onsite Construction Worker
Drums and Tanks, Ponds, Deluge Water, Waste Disposal Facilities	Spills/Leaks, Infiltration/ Percolation	Untreated Groundwater, Treated Groundwater [d]	Potable and Non-potable Use		Ingestion	H	H	I	I	I	I
					Inhalation	H	H	I	I	I	I
					Dermal Contact	H	H	I	I	I	I
			Short Term Excavation	Water in Trench [b]	Ingestion	I	I	I	I	Q	Q
					Inhalation	I	I	I	I	Q	Q
					Dermal Contact	I	I	I	I	Q	Q
			Volatile Emissions	Soil Vapor	Inhalation (Indoor)	C	C	C	I	I	I
					Inhalation (Outdoor)	Q	Q	Q	Q	Q	Q
			Plant Uptake	Garden Produce [a]	Ingestion	Q	Q	I	I	I	I
			Discharge to Surface Water	Surface Water and Sediment	Ingestion	Q	I	Q	Q	Q	Q
					Inhalation	I	I	I	I	I	I
					Dermal Contact	Q	I	Q	C	Q	Q
				Fish / Shellfish	Ingestion	Q	I	Q	Q	Q	Q

Notes and Key:

a Projected residential redevelopment at Aerojet is not likely to include land-intensive pathways, such as in-situ gardening. The naturally occurring soil at Aerojet is not suited for this type of activity. Significant land preparation activities (i.e., addition of topsoil and nutrients) would be required prior to growing fruits or vegetables.

b Although construction workers may briefly encounter the shallow water table in some OUs, construction activities in saturated trench conditions are generally avoided and dewatering is performed to avoid work in a wet and slippery trench. Dermal exposures to contaminants in trench water would be incomplete as steady state absorption and penetration of the skin is unlikely, given short exposure times.

c Recreational exposure will be evaluated on a site-specific basis; if a residential and/or commercial/industrial soil exposure has already been evaluated, there is no need to quantify a separate recreational exposure to soil unless the property may be transferred solely for recreational use. Exposures to fish on the Aerojet property are highly unlikely, and are dependent upon the presence of edible species that are of large enough size to be filleted.

d No discharge of treated groundwater to surface water bodies identified in PGOU.

C	Complete exposure pathway evaluated quantitatively
Comm/Ind	Commercial/Industrial
H	Hypothetically complete in absence of institutional controls
I	Incomplete exposure pathway
Q	Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway

AEROJET
Environmental Remediation

FIGURE 6-1b

Conceptual Site Model for the PGOU Groundwater Pathways for Human Health Groundwater Exposure Pathways for Human Receptors

SR10124190 **FIGURE 6-1b** 8/14/08 Herron, Al

Source Medium	Release Mechanism	Secondary Source	Secondary Release Mechanism	Exposure Medium	Exposure Route	Ecological Receptors																	
					Trophic Level →	Producers			Primary Consumers				Secondary Consumer							Tertiary Consumers			
					Functional Group/Feeding Guild →	Aquatic Vegetation	Trees/ Shrubs	Forbs/ Grasses	Soil Invertebrates/ Herbaceous Insects	Benthic and Aquatic Invertebrates	Herbivorous Mammals	Herbivorous/ Granivorous Birds	Snakes & Lizards	Turtles	Amphibians	Fish	Omnivorous/ Insectivorous Mammals	Omnivorous/ Insectivorous Birds	Water Fowl	Raptors	Piscivorous Mammals	Carnivorous Mammals	Piscivorous Birds
Sumps and USTs	Spills or Releases	Surface Water	Infiltration/ Percolation	Surface Water and Sediment[a]	Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Uptake[b]	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
				Perched/ Regional Groundwater	See Figure 6-1D for Ecological Exposure Routes related to Treated and Untreated Groundwater																		
			Surface transport	Surface Water and Sediment[a]	Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Uptake[b]	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
				Aquatic Food Chain	Ingestion	NE	-	-	-	NE	-	-	I	I	I	NE	I	I	I	I	I	-	I
Drums & ASTs					Ingestion	I	NE	NE	NE	I	C	C	Q	Q	Q	I	C	C	I	C	I	C	I
					Dermal Contact	I	NE	NE	NE	I	C	C	N	N	N	I	C	C	I	C	I	C	I
					Uptake[b]	I	C	C	C	I	-	-	-	-	-	-	-	-	-	-	-	-	-
			Dust	Air	Inhalation[c]	-	NE	NE	NE	I	N	N	N	N	N	I	N	N	N	N	N	N	N
Ponds			Infiltration/ Percolation	Perched/ Regional Groundwater	See Figure 6-1D for Ecological Exposure Routes related to Treated and Untreated Groundwater																		
	Infiltration/ Percolation	Soil	Runoff	Surface Water and Sediment[a]	Ingestion	NE	I	I	I	NE	C	C	Q	Q	Q	NE	C	C	C	C	C	I	C
					Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	C	N	C	N	C
					Uptake[b]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
Septic Tanks				Aquatic Food Chain	Ingestion	NE	-	-	-	NE	-	-	I	I	I	NE	I	I	I	I	I	-	I
			Volatile Emissions	Soil Vapor	Inhalation[c] (Indoor)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Inhalation[c] (Outdoor)	-	N	N	N	I	Q	I	Q	I	Q	I	Q	I	I	Q	I	Q	I
			Plant and Soil Invertebrate Uptake	Terrestrial Food Chain	Ingestion	-	NE	NE	NE	-	C	C	Q	I	Q	-	C	C	I	C	I	C	I

Notes:

a No sediment was identified in the potential source sites within Areas 20, 21 and 49. Samples collected within ditches were characterized as surface soil samples because they are 1) exposed (i.e., not covered by water); 2) dry (unsaturated); 3) sufficiently fine-grained such that they may become airborne; and 4) will be mixed in with shallow soil during site grading.

b Uptake applies only to plants, invertebrates, and fish and includes respiration, dermal uptake, and ingestion by these receptors.

c Inhalation includes vapor uptake by plants and respiration by invertebrates

ASTs Above-ground Storage Tank

USTs Underground Storage Tank

Designations:

C Complete exposure pathway evaluated quantitatively

I Incomplete exposure pathway

N Negligible or insignificant (though hypothetically potentially complete) pathway that will not be evaluated

NE Exposure route is evaluated as part of the uptake pathway

Q Qualitative (not quantitative) evaluation planned for this potentially complete exposure pathway

- Not applicable

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Environmental Remediation

FIGURE 6-1c

Conceptual Site Model for the PGOU Soil Exposure Pathways for Ecological Receptors

SR10124191 **FIGURE 6-1c** 8/14/08 Herron, Al

Source Medium	Release Mechanism	Secondary Source	Secondary Release Mechanism	Exposure Medium	Exposure Route	Ecological Receptors																		
					Trophic Level -	Producers			Primary Consumers				Secondary Consumer							Tertiary Consumer				
					Functional Group/Feeding Guild -	Aquatic Vegetation	Trees/ Shrubs	Forbs/ Grasses	Soil Invertebrates/ Herbivorous Insects	Benthic and Aquatic Invertebrates	Herbivorous Mammals	Herbivorous/ Granivorous Birds	Snakes & Lizards	Turtles	Amphibians	Fish	Omnivorous/ Insectivorous Mammals	Omnivorous/ Insectivorous Birds	Water Fowl	Raptors	Piscivorous Mammals	Carnivorous Mammals	Piscivorous Birds
Drums and Tanks	Spills & Leaks	Untreated Groundwater	Potable and Non-potable Use		Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Uptake[b]	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
			Short Term Excavation	Water in Trench	Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Uptake[b]	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ponds			Discharge to Soil	Soil	Ingestion	I	NE	NE	NE	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Dermal Contact	I	NE	NE	NE	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
					Uptake[b]	I	I	I	I	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deluge Water	Infiltration/ Percolation		Volatile Emissions	Soil Vapor	Inhalation[c] (Indoor)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Inhalation[c] (Outdoor)	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
		Treated Groundwater[a]	Plant Uptake	Terrestrial Food Chain	Ingestion	-	NE	NE	I	-	I	I	I	I	I	-	I	I	I	I	I	I	I
Waste Disposal Facilities			Discharge to Surface Water	Surface Water and Sediment	Ingestion	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
					Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
					Uptake[b]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
				Aquatic Food-Chain	Ingestion	NE	-	-	-	NE	-	-	I	Q	Q	NE	N	N	N	N	N	-	N

Notes:

a No discharge of treated groundwater to surface water bodies identified in PGOU.

b Uptake applies only to plants, invertebrates, and fish and includes respiration, dermal uptake, and ingestion by these receptors.

c Inhalation includes vapor uptake by plants and respiration by invertebrates

Designations:

C Complete exposure pathway evaluated quantitatively

I Incomplete exposure pathway

N Negligible or insignificant (though hypothetically potentially complete) pathway that will not be evaluated

NE Exposure route is evaluated as part of the uptake pathway

Q Qualitative (not quantitative) evaluation planned for this potentially complete exposure pathway

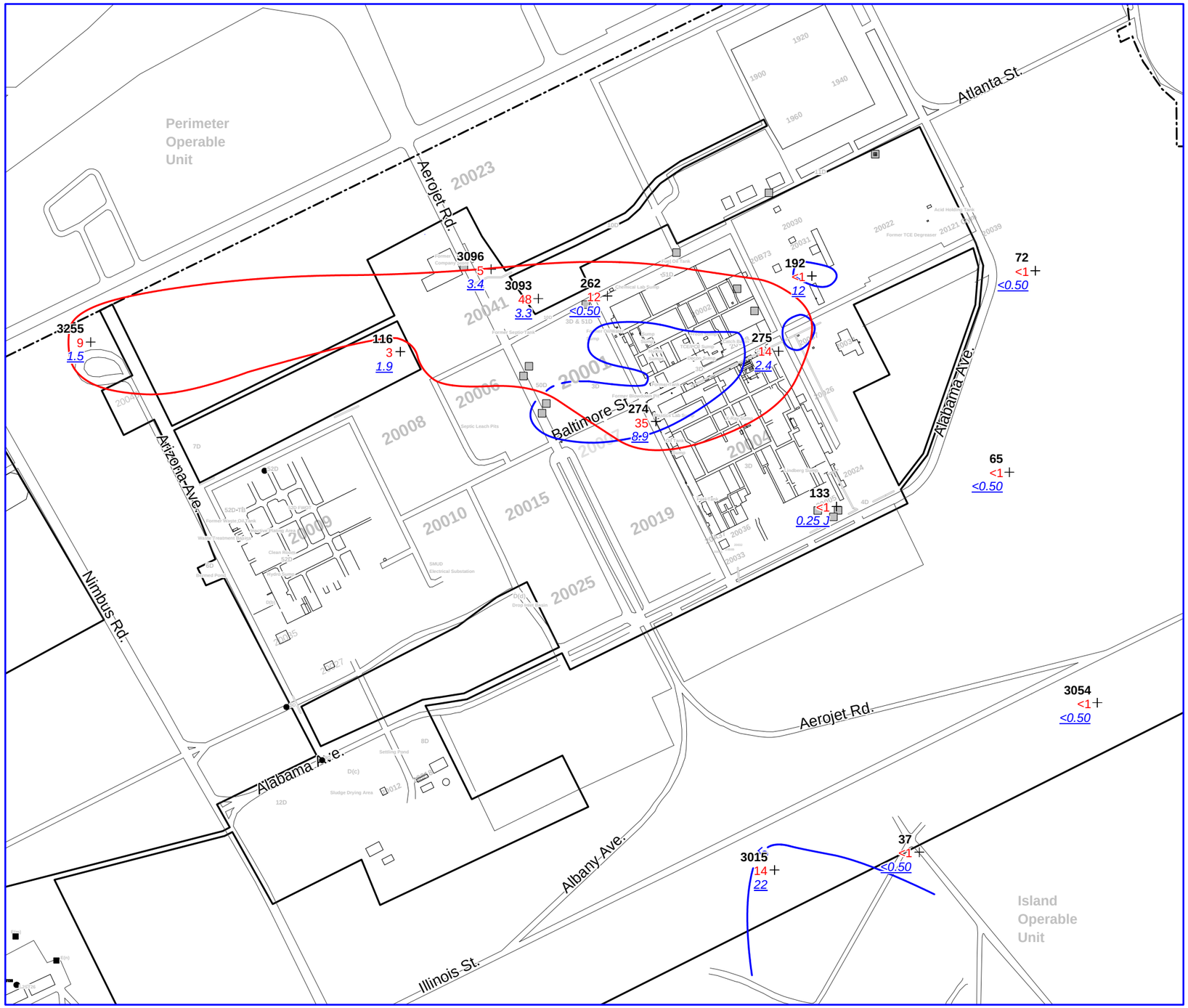
- Not applicable

AEROJET
Environmental Remediation

FIGURE 6-1d

Conceptual Site Model for the PGOU Soil Exposure Pathways for Ecological Receptors

SR10124192 **FIGURE 6-1d** 8/14/08 Herron, Al



Explanation

- 645 + — Monitoring Well Location and ID
- < 5 — Stage 1 RI PCE concentration (ug/l) (maximum in 1992)
- ≤ 5 — Most recent PCE concentration (ug/l) collected between October 2005 and October 2006

PCE: Tetrachloroethene

Stage 1 - Iso-concentration Contour (5 ug/l)

Most Recent - Iso-concentration Contour (5 ug/l)

Aerojet Property Boundary

Note: J = estimated value.
Only locations with both sets of data are posted

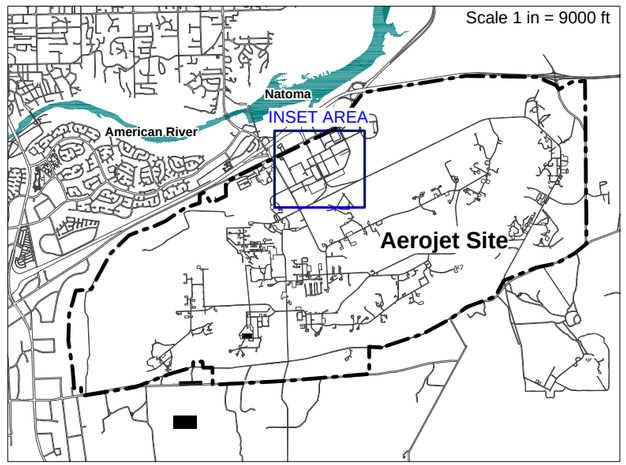
Consent Decree Boundary

20026 — Building

Septic Tank

5(d) — Source Area ID

Drainage Culvert



N

0 500 1,000
feet

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

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Figure 6-2
First Water-Bearing Zone
Comparison of Current and Stage 1 RI PCE Extents
Administration Area

C:\aerojet\bou rl\gis\admin area\0407\revisions\updated\FCG_AA_comp_Spr06a.WOR

SR10130598

EXPLANATION

- Soil Vapor Sample Location
- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU Soils RI/FS
- Start/End of Source Area Ditch
- Surface Water Flow Direction (2002)
- Superfund Site Boundary

Chemical Abbreviations

PCE Tetrachloroethene

Concentration in Milligrams per Cubic Meter (mg/m³)

Concentrations Above Protection of Groundwater Soil Vapor Screening Level are in Bold

N

Scale: 1" = 150'

0 75 150

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FIGURE 6-3

PCE Detected Above PGW SVSLS in Shallow Soil Vapor Potential Source Sites 7D & FCS

10/10/07 bg SR10130600

EXPLANATION

- Ditch Included in PGOU RI/FS
- Underground Culvert Included in PGOU RI/FS
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Fence
- Monitor Well Location
- FCS-SP17 Soil Vapor Sample Location and ID
- PGW Protraction of Groundwater
- SVSL Soil Vapor Screening Level

PCE Concentrations Above PGW SVSL are in Bold

Chemical Abbreviations

PCE Tetrachloroethene
ND = Not Detected Above Screening Levels
NC = Not Collected

N

Scale: 1" = 150'

0 75 150

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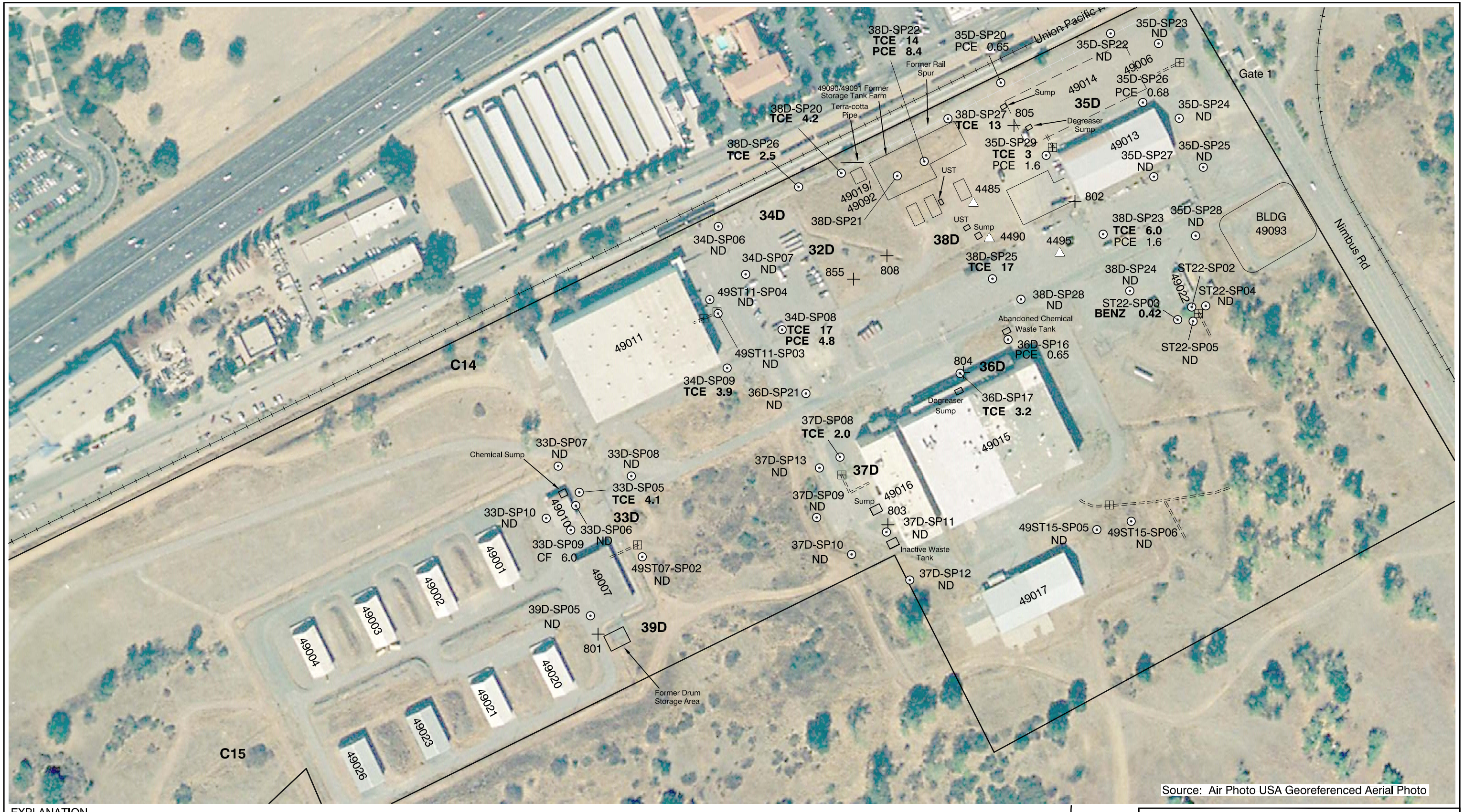
FIGURE 6-4

PCE Detected Above PGW SVSLS Screening Levels in Intermediate Soil Vapor Samples Former Company Store

10/10/07 bg SR10130601



EXPLANATION

35D-SP29 ⊙	Soil Vapor Sampling Location & ID 2003
TCE 5.1	VOC Concentration in Milligrams per Cubic Meter (mg/m³)
ND	No VOCs Detected Above Screening Level
⊞==	Septic Tank and Leach Line
—— – ——	Superfund Site Boundary
+	Monitor Well Location
△	Soil Vapor Extraction Well Location
⬚	Location of Former Building

Chemical Abbreviations

CF	Chloroform
TCE	Trichloroethene
PCE	Tetrachloroethene
VOC	Volatile Organic Compound
BENZ	Benzene
PGW	Protection of Groundwater
SVSL	Soil Vapor Screening Level

Concentrations Above PGW SVSLS are in Bold

N

Scale: 1" = 200'

0 100 200

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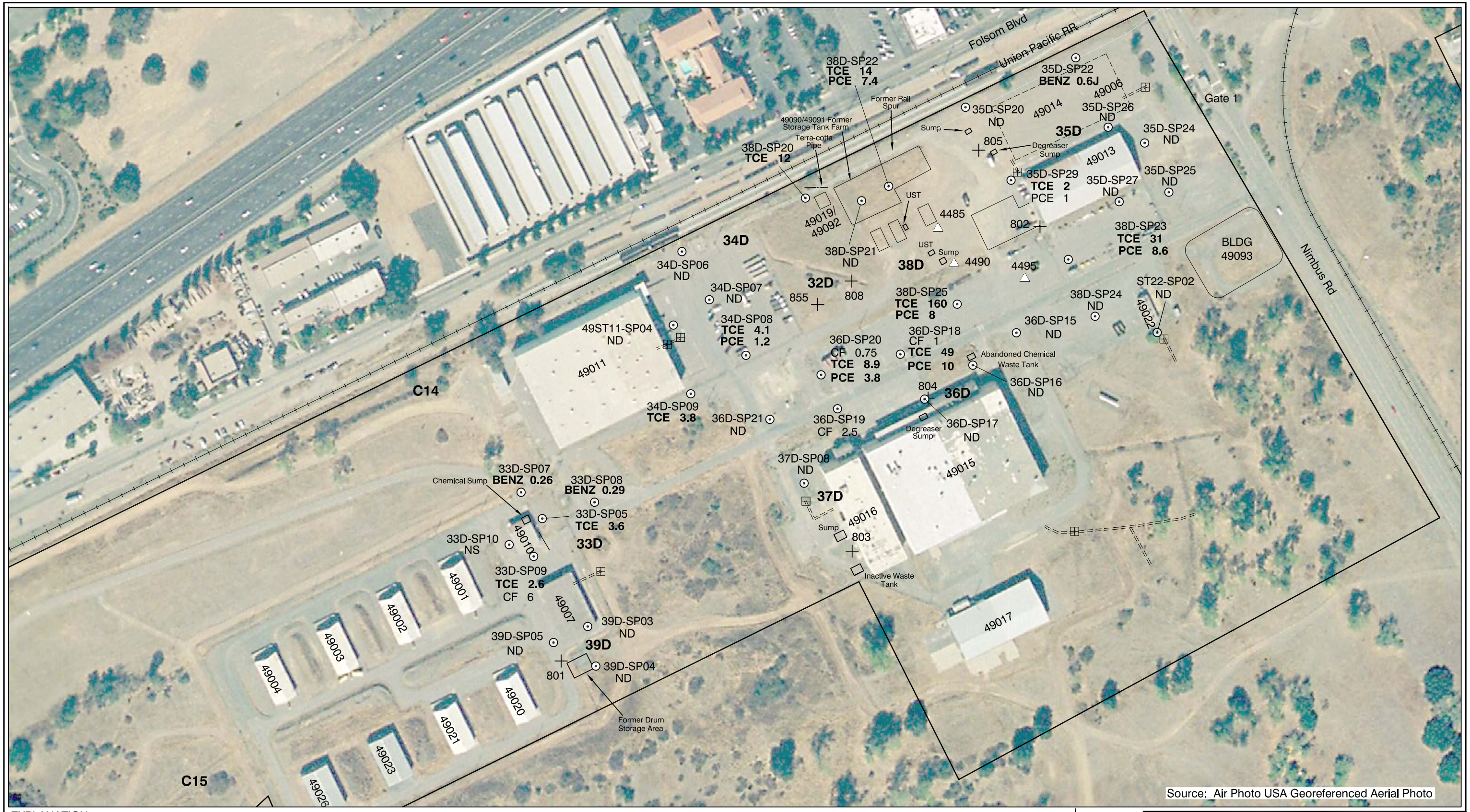
FIGURE 6-5

VOC Concentrations Above PGW SVSLS in Shallow Soil Vapor Samples Area 49

3/27/06 ah SR10130602



EXPLANATION

35D-SP29	Soil Vapor Sampling Location & ID (July 2003)
TCE 5.1	VOC Concentration in Milligrams per Cubic Meter (mg/m³)
ND	No VOCs Detected Above the Screening Level
NS	Not Sampled
PGW	Protection of Groundwater
SVSL	Soil Vapor Screening Level
⊞===	Septic Tank and Leach Line
— - —	Superfund Site Boundary
+	Monitor Well Location
△	Soil Vapor Extraction Well Location
[- - -]	Location of Former Building

Chemical Abbreviations

CF	Chloroform
PCE	Tetrachloroethene
TCE	Trichloroethene
VOC	Volatile Organic Compound
BENZ	Benzene

Concentrations Above PGW SVSLS are in Bold

N

Scale: 1" = 200'

0 100 200

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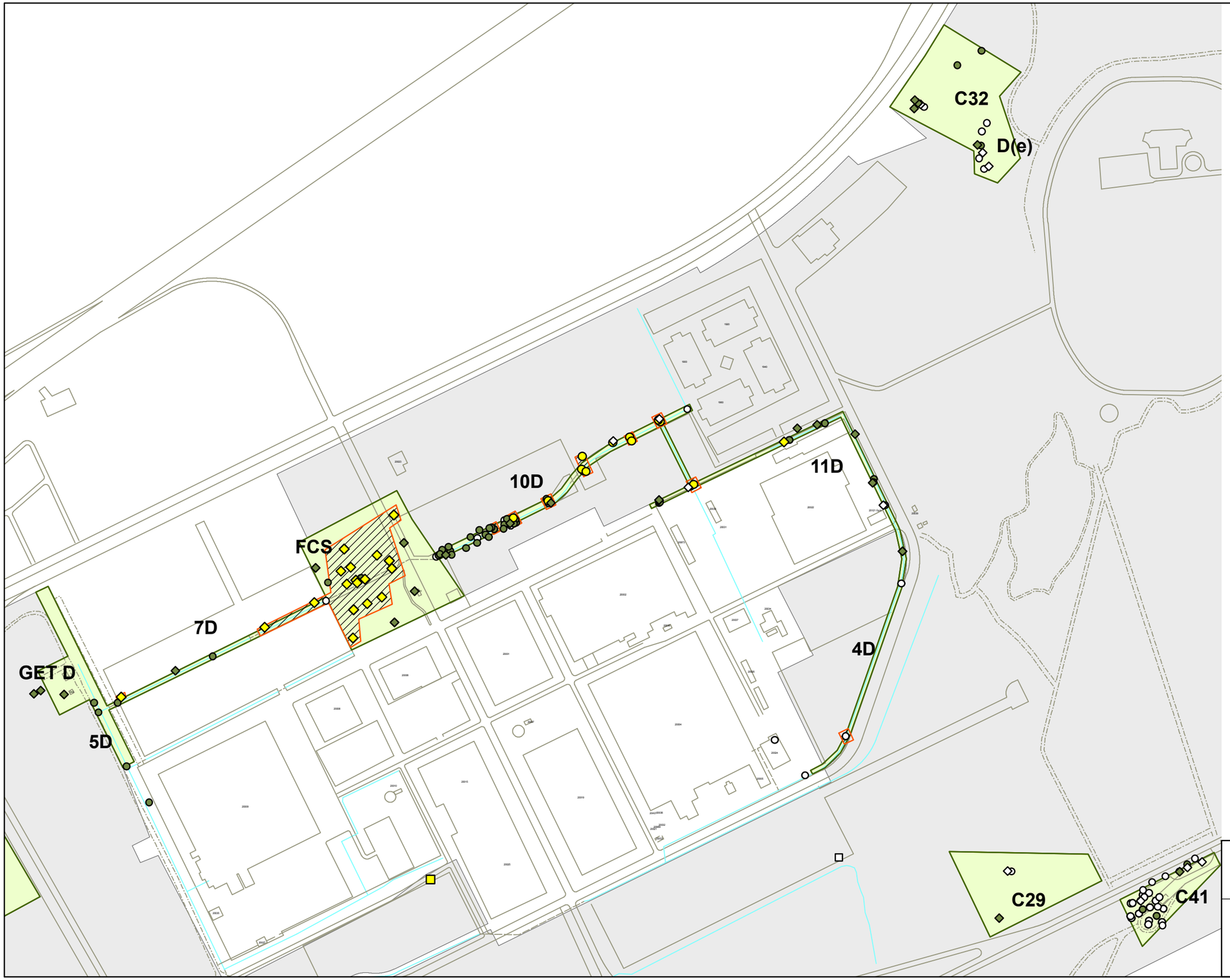
FIGURE 6-6

VOC Concentrations Above PGW SVSLS in Intermediate Soil Vapor Samples Area 49

3/27/06 ah SR10130603



Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

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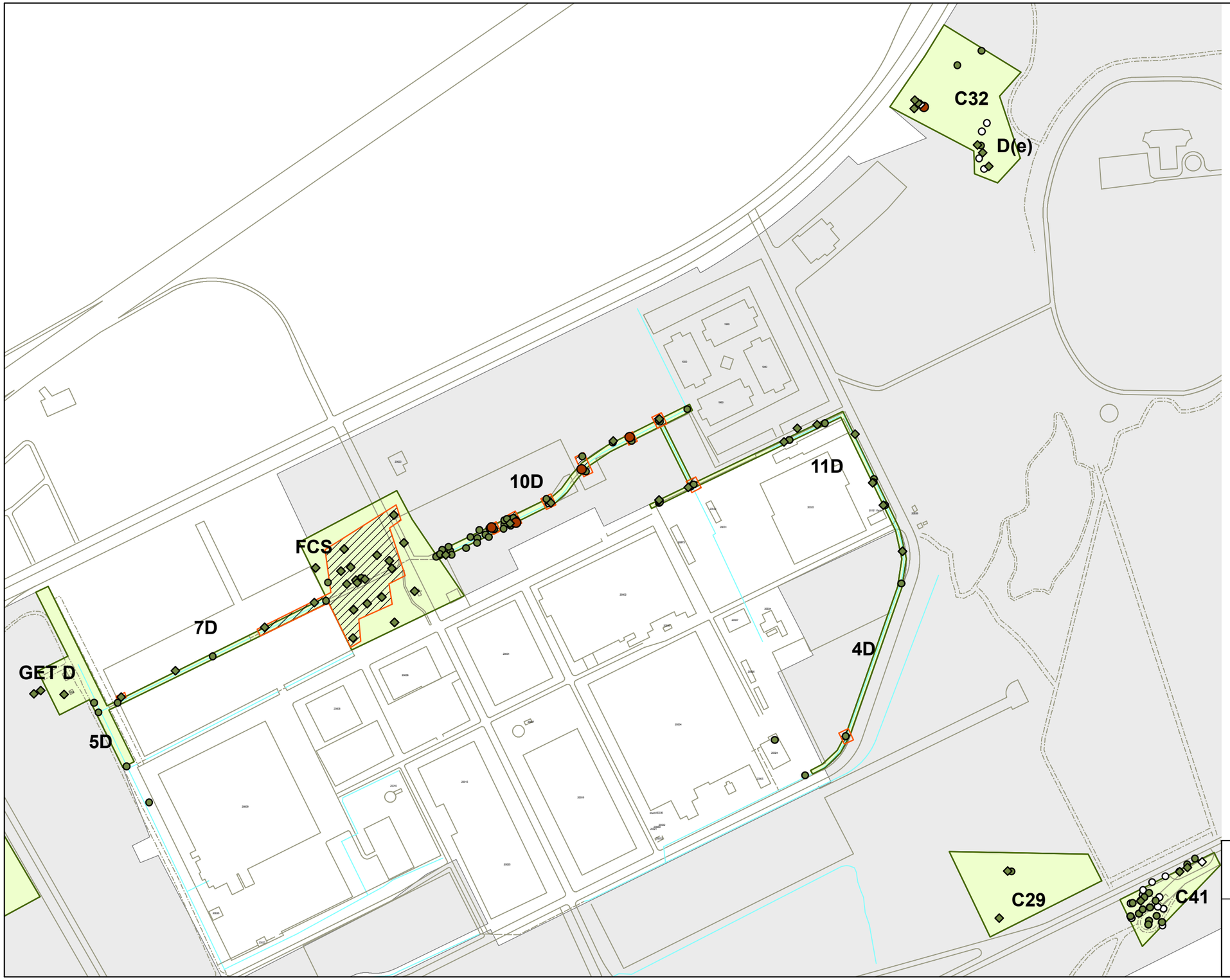
Environmental Remediation

Figure 7-1a

Residential
Cancer Risks – All Media
Areas 20 and 21



Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

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Environmental Remediation

Figure 7-1b

Residential
Non-Cancer Effects – All Media
Areas 20 and 21

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

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Environmental Remediation

Figure 7-2a

Commercial/Industrial Worker
Cancer Risks – All Media
Areas 20 and 21

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

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Environmental Remediation

Figure 7-2b

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Areas 20 and 21

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

AEROJET

Environmental Remediation

Figure 7-3a

Construction Worker
Cancer Risks – All Media
Areas 20 and 21

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 450 '

0 450 900

AEROJET

Environmental Remediation

Figure 7-3b

Construction Worker
Non-Cancer Effects – All Media
Areas 20 and 21

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

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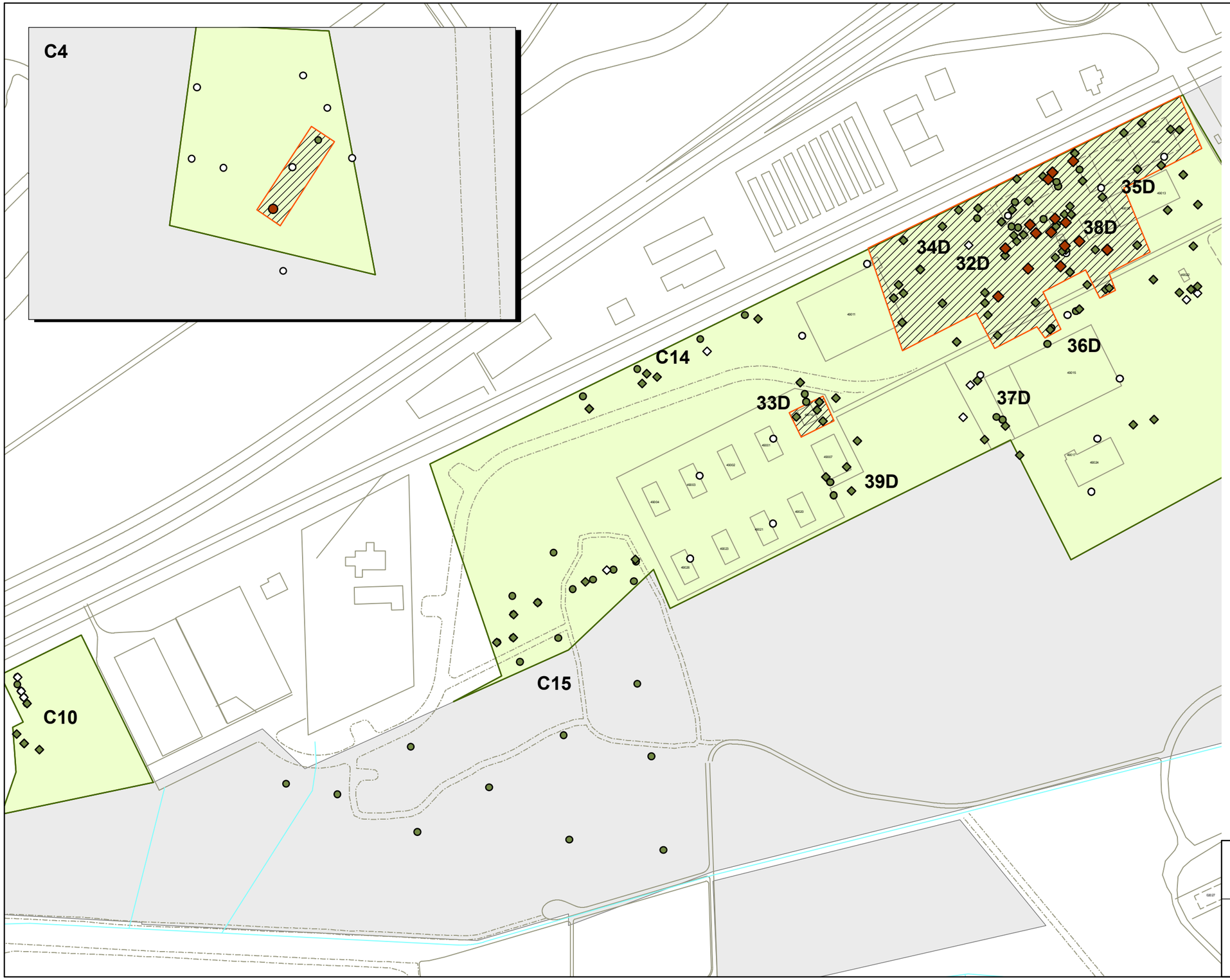
Environmental Remediation

Figure 7-4a

Residential
Cancer Risks – All Media
Area 49



Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

AEROJET

Environmental Remediation

Figure 7-4b

Residential
Non-Cancer Effects – All Media
Area 49

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

AEROJET

Environmental Remediation

Figure 7-5a

Commercial/Industrial Worker
Cancer Risks – All Media
Area 49

Legend

- **C4** Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

AEROJET

Environmental Remediation

Figure 7-5b

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Area 49

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

AEROJET

Environmental Remediation

Figure 7-6a

Construction Worker
Cancer Risks – All Media
Area 49

Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 350 '

0 350 700

AEROJET

Environmental Remediation

Figure 7-6b

Construction Worker
Non-Cancer Effects – All Media
Area 49

Legend

- **C4** Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 160 '

0 160 320

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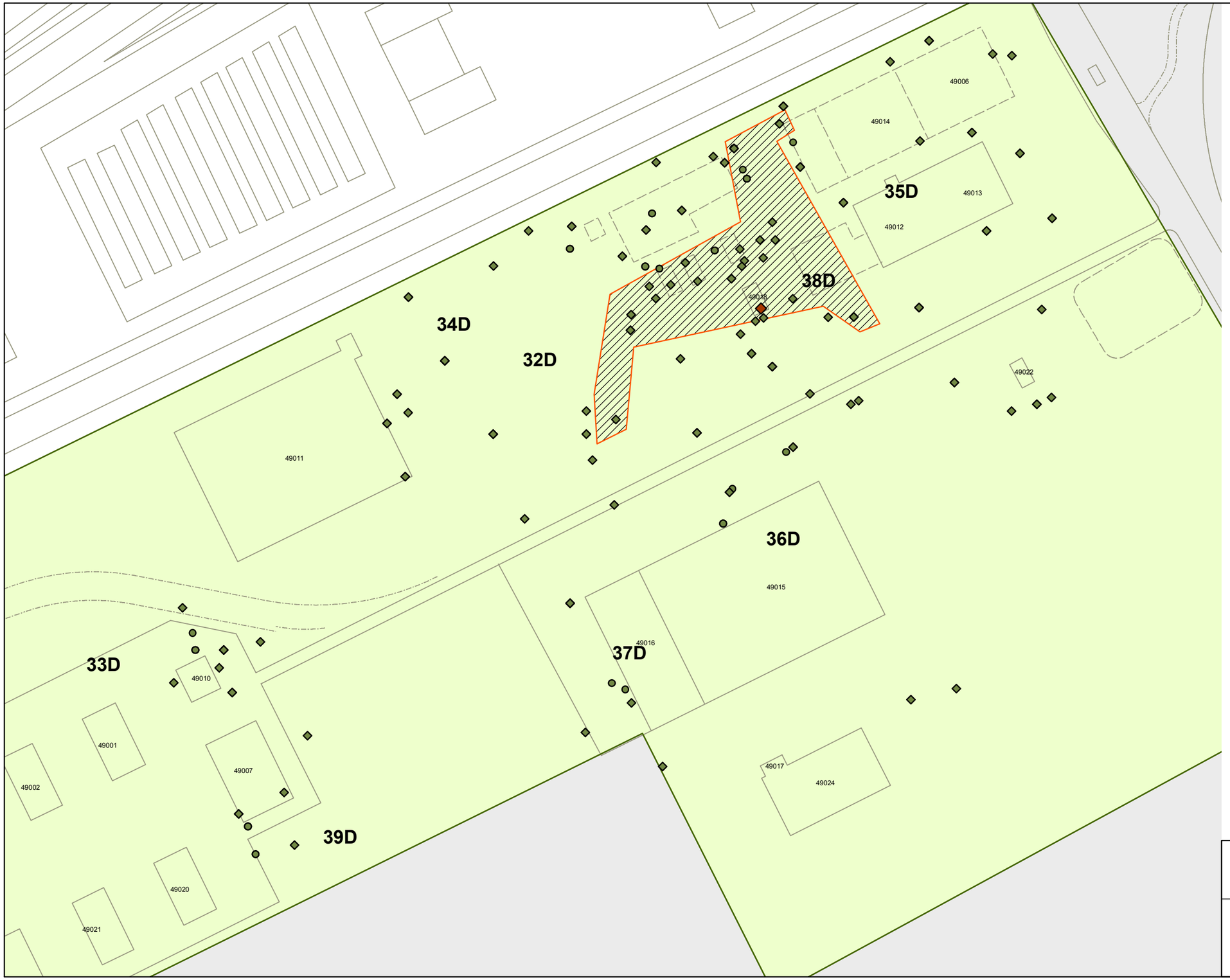
Environmental Remediation

Figure 7-7a

Maintenance Worker
Cancer Risks – All Media
Area 49



Legend

- C4 Site Location
- PGOU
- Carveout Area
- Area of Impact

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them.

N

1 " = 160 '

0 160 320

AEROJET

Environmental Remediation

Figure 7-7b

Maintenance Worker
Non-Cancer Effects – All Media
Area 49

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Monitor Well Location
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches
- Area of Excavation

N

Scale: 1" = 150'

0 75 150

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Environmental Remediation

FIGURE 7-8

Excavation Limits for Remedial Alternative A20-1C
Potential Source Sites 10D & 11D

10/10/07 bg SR10120651

EXPLANATION

- Ditch Included in POU RI/FS
- Underground Culvert Included in POU RI/FS
- Monitor Well Location
- Surface Water Flow Direction (2002)
- Superfund Site Boundary
- Start/End of Potential Source Site Ditches
- Area of Excavation

N

Scale: 1" = 150'

0 75 150

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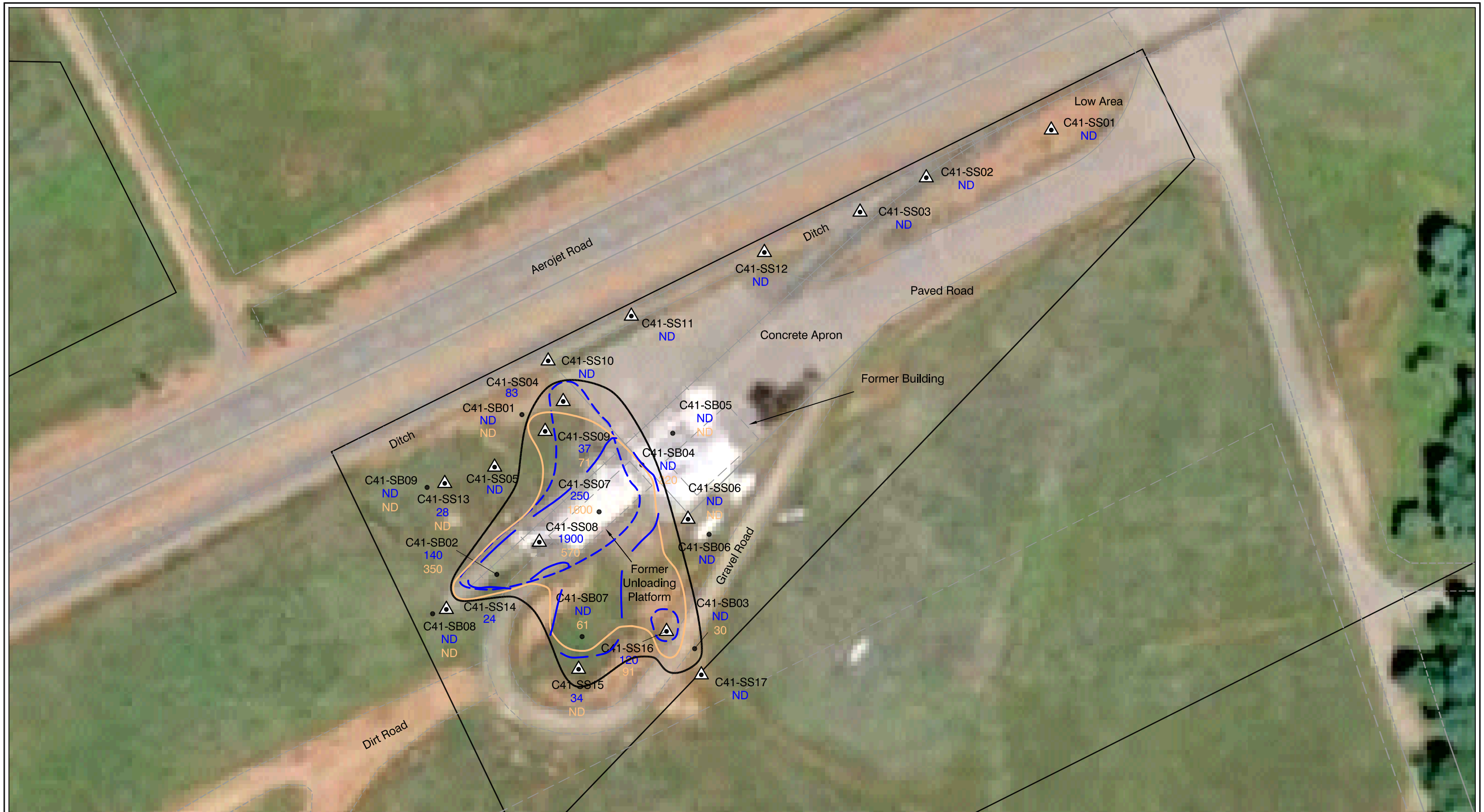
Environmental Remediation

FIGURE 7-9

Excavation Limits for Remedial Alternative A20-1B
Potential Source Sites 10D & 11D

10/10/07 bg SR10120651



LEGEND

- Soil Sampling Location
- Soil Boring Location
- 140 Perchlorate Concentration at 0 to 2 ft Below Ground Surface
- 570 Perchlorate Concentration at 5 ft Below Ground Surface
- ND Not Detected
- Extent of Perchlorate >60 µg/Kg at 0 to 2 ft Below Ground Surface
- Extent of Perchlorate >60 µg/Kg at 5 ft Below Ground Surface
- Site C41 Boundary
- Railroad Track
- Extent of Perchlorate >60 µg/Kg at 10 ft Below Ground Surface
- Estimated Area of Excavation

µg/Kg = micrograms/kilogram

N

Scale: 1" = 50'

0 25 50

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FIGURE 7-10

Excavation Limits for Remedial Alternative A20-3B
Site C41

10/30/06 ah SR10130605

EXPLANATION

- Consent Decree Boundary
- SVE Piping
- Fence
- Underground Culvert
- Road
- Railroad
- Soil Vapor Well
- 20009 Building
- Former Structure
- Extent of Cumulative Risk >1X10 $^{-6}$ from VOCs in Soil Vapor
- Extent of Paved/Capped Area

N

Scale: 1" = 100'

0 50 100

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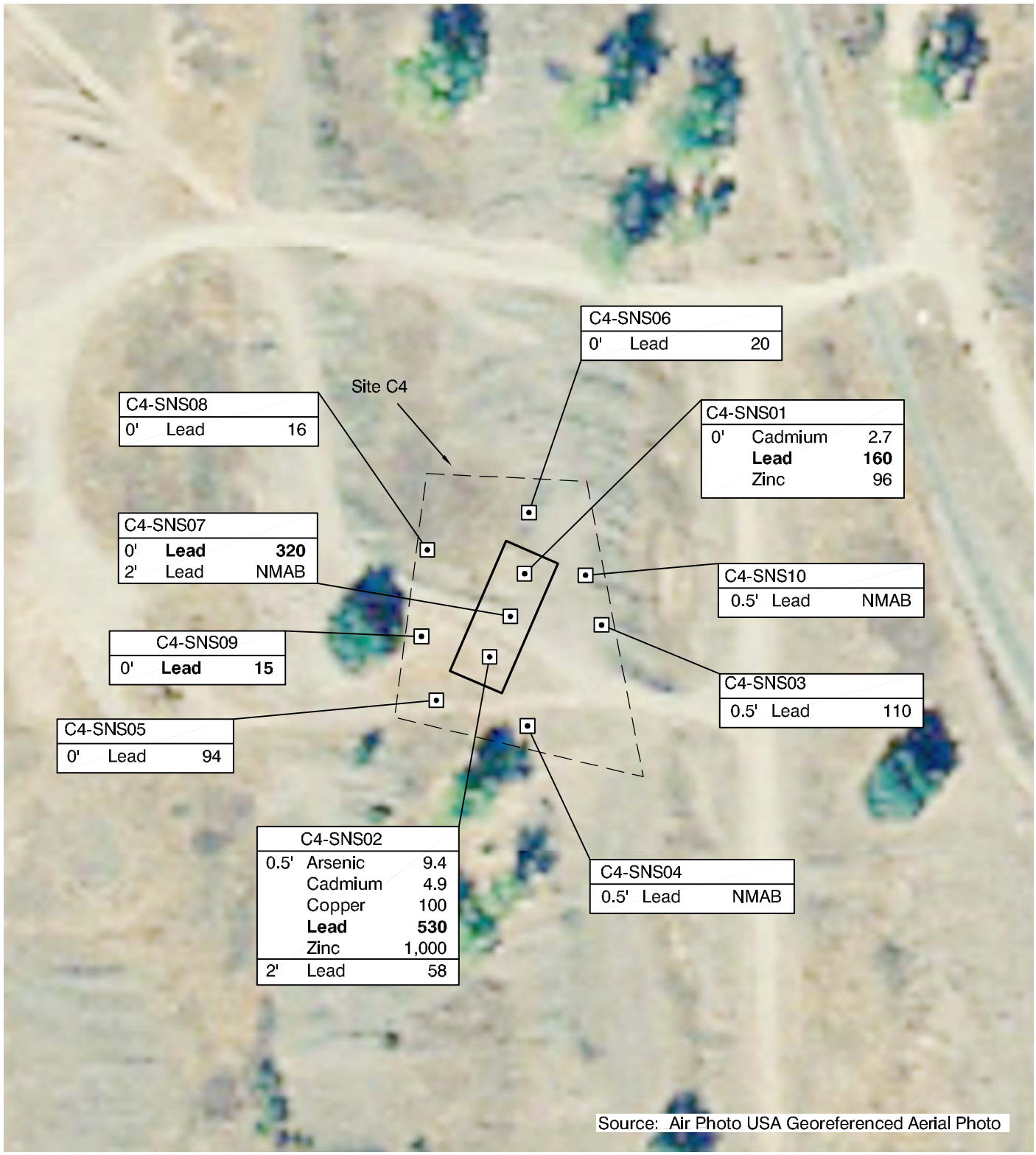
Environmental Remediation

FIGURE 7-11

Conceptual SVE System fpr SItes 32D,34D, 35D, and 38D Area 49

6\23\09 PR SR10121936



EXPLANATION

- Proposed Excavation Boundary
- Area of Surficial Trash and Debris
- Surface Soil Sampling Location
- NMAB No Metals Above Background Level

Only analytical results for metals above average background concentrations are presented.

Metal Concentrations in Milligrams per Kilogram (mg/Kg)
Metals Above Residential Screening Levels are in Boldface

N

Scale: 1" = 100'

0 50 100

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FIGURE 7-12

Excavation Limits for Remedial Alternative A49-3B
Site C4

3/28/06 ah SR10130606